University of Wollongong
Research Online

Faculty of Social Sciences - Papers | Faculty of Arts, Social Sciences & Humanities

2012

GP project: Process and impact evaluation

Ann Dadich
University of Western Sydney

Hassan Hosseinzadeh
University of Wollongong, hassanh@uow.edu.au

Penny Abbott
Universty of Western Sydney

Jenny Reath
Universty of Western Sydney

Follow this and additional works at: https://ro.uow.edu.au/sspapers

Part of the Education Commons, and the Social and Behavioral Sciences Commons

Recommended Citation

Dadich, Ann; Hosseinzadeh, Hassan; Abbott, Penny; and Reath, Jenny, "GP project: Process and impact evaluation" (2012). *Faculty of Social Sciences - Papers*. 2486.
https://ro.uow.edu.au/sspapers/2486

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au

GP project: Process and impact evaluation

Abstract

University of Western Sydney (UWS) was commissioned by the NSW Sexually Transmissible Infections Programs Unit (STIPU) to evaluate the General Practitioner (GP) Project in collaboration Prof. Usherwood and Dr Kang. The GP Project aimed to promote the delivery of evidence-based sexual healthcare within primary care in NSW; this was addressed through the development, promotion, and delivery of nine items tailored for NSW GPs and practice nurses (PNs). For GPs, the items include a double-sided A4-size STI Testing Tool; the online STI Resources for General Practice; a Drivetime Radio Medical CD, which included an interview related to STIs; the Online STI Testing Tool GP Training; an STI Active Learning Module (ALM) for General Practitioners; three sexual health articles in General Practice periodicals; and the Royal Australian College of General Practitioners (RACGP) Check booklet. For PNs, items included the Practice Nurse Postcard on pap smears and chlamydia, and Online STI Practice Nurse Training.

Keywords

project, gp, process, evaluation, impact

Disciplines

Education | Social and Behavioral Sciences

Publication Details

Dadich, A., Hosseinzadeh, H., Abbott, P. & Reath, J. (2012). GP project: Process and impact evaluation. Sydney, Australia: University of Western Sydney.

This report is available at Research Online: https://ro.uow.edu.au/sspapers/2486

University of Western Sydney

GP PROJECT:
PROCESS AND IMPACT EVALUATION

REPORT FOR
NSW STI PROGRAMS UNIT

Industry and Innovation Studies
Research Group, School of Business

School of Medicine

University of Western Sydney

Industry and Innovation Studies Research Group
School of Business

School of Medicine

University of Western Sydney
Locked Bag 1797
Penrith South DC, NSW 2751

© University of Western Sydney 2012

The views expressed in this publication do not represent any official position on the part of the University of Western Sydney, but are the views of the individual authors.

Ethical approval was received from the University of Western Sydney Human Research Ethics Committee (approval number: H8886).

Research Team

University of Western Sydney
Dr Ann Dadich
Prof. Jennifer Reath
Dr Penny Abbott
A/Prof. Wendy Hu
Dr Hassan Hosseinzadeh

University of Sydney
Prof. Timothy Usherwood
Dr Melissa Kang

Suggested Citation

Dadich, A., Hosseinzadeh, H., Abbott, P., & Reath, J. (2012). *GP project: Process and impact evaluation*. Sydney, NSW: University of Western Sydney.

Acknowledgments

The research team wishes to thank Dr Sara Rosenkranz for informing this project. The team also extends its appreciation to the GP Project Working Group, personnel from NSW Divisions of General Practice, the GPs, and the Practice Nurses, all of who generously gave their time to this evaluation. Their respective contributions helped to ensure this evaluation was thorough and culminated with valuable lessons to inform future efforts. Furthermore, their cooperation made this evaluation both possible and mutually rewarding.

Contact Details

Dr Ann Dadich
Industry and Innovation Studies (InIS) Research Group, School of Business
University of Western Sydney
Address: Locked Bag 1797
Penrith South DC NSW 2751
Telephone: +61 02 9685 9475
Facsimile: +61 02 9685 9593
Email: A.Dadich@uws.edu.au

Table of Contents

Chapter 1. Introduction 1
Research Aim and Questions 1
Report Outline 1
Chapter 2. GP Project 2
General Practitioners 2
Practice Nurses 8
Chapter 3. Review of the Literature 11
Chapter 4. Methodology 13
Process Evaluation 13
Impact Evaluation 15
Ethics Approval 19
Chapter 5. Results 20
Process Evaluation 20
Impact Evaluation 53
Chapter 6. Discussion 79
Research Questions 79
Limitations 85
Lessons 85
Chapter 7. Appendices 89
Chapter 8. References 155

Glossary[1]

ACCHS	Aboriginal Community Controlled Health Service
ACRRM	Australian College of Rural and Remote Medicine
ACSHM	Australasian Chapter of Sexual Health Medicine
ACSHP	Australasian College of Sexual Health Physicians
AH&MRC	Aboriginal Health & Medical Research Council
AHS	Area Health Service
AIDS	Acquired immune deficiency syndrome
ALM	Active learning module
AMS	Aboriginal medical service
AMRC	Aboriginal Medical Research Council
APNA	Australian Practice Nurses Association
ASHM	Australasian Society of HIV Medicine
BBI	Blood borne infection
BBV	Blood borne virus
CALD	Culturally and linguistically diverse
CD	Compact disc
CPD	Continuing professional development
FPA	Family Planning Association
FPNSW	Family Planning NSW
GP	General practitioner
GPNSW	General Practice NSW
HARP	HIV/AIDS and related programs
HAV	Hepatitis A virus
HBV	Hepatitis B virus
HBC	Hepatitis C virus
HIV	Human immunodeficiency virus
HNEAHS	Hunter New England Area Health Service
HPV	Human papilloma virus
MBS	Medicare Benefits Scheme
MSM	Men who have sex with men
NAAT	Nucleic Acid Amplification Test
NGO	Non-government organisation
NGU	Non-gonococcal urethritis
NiGP	Nursing in General Practice
NSCCH	Northern Sydney Central Coast Health
NSW STIPU	NSW STI Programs Unit
PCR	Polymerase chain reaction
PID	Pelvic inflammatory disease
PN	Practice nurse
RACGP	Royal Australian College of General Practitioners
RACGP QI&CPD	Quality improvement & continuing professional development
RCNA	Royal College of Nursing Australia
SHSOV	Sexual Health Society Of Victoria
SSWAHS	Sydney South West Area Health Service
STD	Sexually transmitted disease
STI	Sexually transmissible (or transmitted) infection
SWAHS	Sydney West Area Health Service
URL	Uniform resource locator
UWS	University of Western Sydney

[1] Plurals in this report are denoted with the suffix, s.

Executive Summary

Background

The University of Western Sydney (UWS) was commissioned by the NSW Sexually Transmissible Infections Programs Unit (STIPU) to evaluate the General Practitioner (GP) Project in collaboration Prof. Usherwood and Dr Kang. The GP Project aimed to promote the delivery of evidence-based sexual healthcare within primary care in NSW; this was addressed through the development, promotion, and delivery of nine items tailored for NSW GPs and practice nurses (PNs).

For GPs, the items include a double-sided A4-size STI Testing Tool; the online STI Resources for General Practice; a Drivetime Radio Medical CD, which included an interview related to STIs; the Online STI Testing Tool GP Training; an STI Active Learning Module (ALM) for General Practitioners; three sexual health articles in General Practice periodicals; and the Royal Australian College of General Practitioners (RACGP) Check booklet. For PNs, items included the Practice Nurse Postcard on pap smears and chlamydia, and Online STI Practice Nurse Training.

Methods

We evaluated both the process and impact of the GP Project using a mixed- methods approach, informed by both program logic and realistic evaluation models. We collected and analysed quantitative and qualitative data including: (a) document analysis; (b) a semi-structured focus group; (c) closed and open-item surveys; and (d) semi-structured interviews.

The process evaluation consisted of an analysis of project-related documents as well as consultation with nine members of the GP Project Working Group. The impact of the nine items was examined through a survey of 26 personnel affiliated with NSW Divisions of General Practice, 214 NSW GPs, and 217 NSW PNs. These surveys were complemented with interviews with nine GPs and ten PNs, purposively selected from survey respondents to further explore the impact of the items on clinical practices and preferred strategies to promote evidence-based sexual healthcare.

Findings

The findings of our research are reported in response to nine key research questions.

1. Was the methodological development of the resources rigorous?

We investigated the processes used in development of these items through document analysis and a focus group interview involving members of the NSW STIPU Working Group. To develop a suite of items, NSW STIPU convened a Working Group recruited on the basis of clinical expertise in primary care and sexual health; professional affiliations, roles, and networks; capacity to actively contribute to the Working Group; as well as a passion for and commitment to sexual health. Group membership also reflected gender and geographic balance. One issue identified by the Working Group as potentially impacting negatively on the GP Project was a lack of representation from the Aboriginal Health and Medical Research Council (AHMRC) and the Australian College of Rural and Remote Medicine (ACRRM). Though both organisations were invited, neither was able to join the Working Group; however, both were consulted during the GP Project and members of the Working Group with relevant experience advocated from these perspectives.

Our research indicated that a generally rigorous approach was used to develop the items, including use of evidence, access to clinical and educational expertise, reference to other relevant resources, and careful attention to the user-friendliness of the tools. The endorsement of the relevant stakeholders was usually sought and provided.

Promotion and delivery of the items were also well planned and comprehensive; however, when these were contracted to other providers, there was less information available describing these processes. Marketing included mass and targeted marketing as well as ambassador marketing. Although the focus group discussion revealed some concerns about the cost and perceived inefficiency of mass marketing the STI Testing Tool, as revealed in our impact evaluation, this tool was one of the more effective in the suite of items developed.

According to the Working Group, effective strategies to develop the GP Project included a clear focus on general practice, inclusion in the Working Group of professional leaders, and the iterative process of item development, which provided opportunities for the Working Group to learn as the project progressed.

One limitation of our process evaluation was the relatively poor documentation of decision making processes in relation to item development. This included detail of how evidence was sourced and included; how and why certain expertise was sourced; and decisions to incorporate or not to incorporate feedback. In particular, there was less evidence regarding the development of online items, perhaps because these were developed secondarily from other items.

2. *Was the content and format of the resources, clear, user-friendly and applicable to the target clinician and patient groups?*

The content and format of the items were highly regarded by the GPs and PNs who used them. The range of items with differing content, formats, and delivery modes, linked by common education aims, facilitated their use by GPs and PNs with different professional needs and interests, different learning styles, and in different circumstances. In particular, the STI Testing Tool and the Practice Nurse Postcard were highly valued for their content, format, and clinical usefulness.

3. *What was the awareness of the GP Project, its specific resources, and the resource content?*

Although the target groups, GPs and PNs, were not aware of the GP Project as an entity, there was awareness to a variable extent of individual items. Items that achieved the highest level of awareness amongst the GPs surveyed were the STI Testing Tool, the sexual health articles in the medical periodicals, and the Check booklet. When GPs were asked if they had actually used or read these items, these remained the most accessed items, though all items had been used by at least some respondents.

Fewer GP respondents were aware of the STI Resources for General Practice website. This is unfortunate as GPs who did use it reported it to be valuable. Additionally, there was a strong theme in both survey responses and in the interviews promoting electronic access to clinical support, GP education, and patient resources. Similarly, the STI ALM for General Practitioners was not accessed by large numbers of GPs; yet all who did so reported it to have aided their clinical practice.

Awareness and use of the Practice Nurse Postcard were relatively low. A larger number of PN respondents were aware of the Online STI Practice Nurse Training, yet few had used it. The interview data suggested that PNs believed they would have used the Practice Nurse Postcard if they had been aware of it and remained interested in accessing it or a similar resource.

This evaluation also sought to ascertain awareness about the GP Project within NSW Divisions of General Practice as they had a substantial role in promoting it. Our findings were influenced

by the apparent departure (since the project was implemented) of many of the staff responsible. Although the majority of the Division personnel who responded to the survey was aware of the STI Testing Tool, the Online STI Testing Tool GP Training, and the Practice Nurse Postcard, there was lesser awareness of the STI ALM for General Practitioners and the Online STI Practice Nurse Training. It is possible the STI Testing Tool was more heavily promoted by Division than other items, which may be a factor in its higher impact.

4. How successfully were the GP Project resources promoted and integrated into primary care?

A strength of the GP Project was the multimodal approach to disseminate sexual health information. Use of regularly accessed channels of information resulted in items like the sexual health articles, the Check booklet, the Drivetime Radio Medical CD for STI, and the Online STI Testing Tool GP Training, being accessed opportunistically during GPs' routine surveillance of educational material. Similarly, both PNs and GPs became aware of the items through attendance at conferences and educational events. This cross promotion of items was also evident as a means of raising GP awareness of the STI Testing Tool, which was clearly well promoted to GPs including through Divisions.

GP survey respondents reported the following items as particularly valuable in informing clinical practice – the STI ALM for General Practitioners, the online STI Resources for General Practice, the Check booklet, the Online STI Testing Tool GP Training. The interviews suggest that the STI Testing Tool may have been used initially by some GPs as a learning tool to integrate new knowledge into their practice after which it was used less often.

Endorsement by professional bodies was noted by GPs to increase their confidence in the items; similarly, authorship by a reputable organisation and clear referencing verified their reliability. The incorporation of key screening messages in the RACGP Preventive Health Guidelines was an outcome of the project perceived by the Working Group to provide ongoing professional endorsement and promotion in a way that would accord with the expressed GP views.

PN survey respondents suggest the Practice Nurse Postcard was less satisfactorily integrated into practice due to low awareness. However, interviewed PNs who were aware of this item reported it was integral to sexual healthcare and was also valued as a means of reinforcing the PN role. Integration into practice is likely to have been affected by the variety of PN roles within general practice. If a PN does not have a role in undertaking well women's checks, they are less likely to have taken notice of the Practice Nurse Postcard or integrated it into their practice, regardless of promotional efforts.

5. What was the participation rate in the training resources? What were the reactions to the training? Were the learning objectives met? Was the training method appropriate?

Of the three training resources produced in the GP Project, only the Check booklet achieved more than a fifty percent level of awareness amongst survey respondents, with more than half of those who were aware of this item also completing the booklet. Just over a quarter of respondents were aware of the Online STI Testing Tool GP Training and of those, less than a third used it, while just over ten percent of survey respondents were aware of the STI ALM for General Practitioners and less than a third of those completed all three modules. Despite this, those who had used the items largely considered them to be appropriate to their needs, easy to follow, and clinically useful.

The interviews supported the conclusion that some GPs highly value online training due to the convenience and case-based approach. For others however, face-to-face training was the

preferred mode of learning. Division personnel recommended an enhanced Division role in promoting these items including delivery of the STI ALM for General Practitioners.

The STI Testing Tool was an effective training resource according to GP interviewees, who reported its value in up-skilling themselves and instructing others. Similarly, PNs reported that the Practice Nurse Postcard was a useful prompt in consultations while integrating the new learning from reading, conferences, and other training into practice. These findings support NSW STIPU's incorporation of such practice support tools into training initiatives as a means of improving translation of learning into practice.

Approximately half of the PNs surveyed were aware of the Online STI Practice Nurse Training; however, less than a fifth had completed it. Those who had completed the training found the item well presented, though likely as a result of the variety of PN roles, fewer than half continued to use the information in their practice. The interviews suggested PN participation in the online training was also affected by a perceived lack of support from GPs within their practice.

Apart from limited awareness of their availability, the most common barriers to accessing those items that offered training were time pressures and competing training priorities – this was the case for both PNs and GPs. Findings indicated GPs and PNs are receptive to further sexual healthcare education. The challenge is to entice them to access training in a setting of competing education priorities and where many of them are unaware of available resources

6. How were the GP Project resources used?

The items were used for private study, to meet a clinical need within a consultation, and/or for teaching purposes. Survey respondents reported the STI Testing Tool improved their ability to raise the topic of STIs with patients and to order appropriate STI tests. It was also considered useful in guiding the management of STIs within a consultation if the GP had a clinical question, and was said to be time-saving, convenient, and particularly useful if a GP was managing an unfamiliar clinical scenario. It was usually accessed online, but some GPs reported keeping a copy on their desk. The online STI Resources for General Practice improved GP ability to locate appropriate resources for most respondents accessing this information. The sexual heath articles, the Check booklet, and the STI Testing Tool had all been used by some respondents to inform their own practice and to teach GP registrars or other GPs about sexual health.

The Practice Nurse Postcard was reported to inform chlamydia testing and management, and to improve sexual history taking. It also reported to improve PN confidence and performance within consultations, affirming the PN role. Some PNs showed the item to patients to explain why they were completing a sexual health check, thus gaining permission to proceed. The PNs also found the listed resources useful. There was a tendency to use a hard copy of this tool by interview participants, though electronic copies were preferred by some. The finding that some PNs were using the Practice Nurse Postcard as a patient education resource may indicate an unmet need for such a patient resource.

7. How could the promotion, content and delivery of the resources be improved?

The items appear to have been well promoted to GPs, particularly through well accepted educational channels and Division promotion. For ongoing use, online access was regarded as essential. Many GPs were not aware of the online availability of items including the STI Testing Tool; this represents a key area for improvement.

The PNs generally relied on the Australian Practice Nurses Association (APNA) to advertise and promote the items, though some indicated they would like increased support from Divisions,

possibly through practice visits. Improved online access, such as through the APNA website, was also recommended by PN interviewees. This evaluation provided evidence that, as well as improved promotion of resources and training to PNs, improved promotion of a PN role in sexual health within general practice was also needed. The strong role of PNs in chronic disease management was suggested by one PN as a rationale for enhancing PN knowledge and skills in sexual healthcare; it may also provide a means of promoting the PN role in sexual healthcare and increasing detection of STIs.

Most Division personnel who responded to the survey were aware of the STI Testing Tool, the Practice Nurse Postcard, the STI ALM for General Practitioners, and the Online STI Testing Tool GP Training. Suggestions for improved promotion included the use of a dedicated practice support officer, increased promotion at continuing professional development (CPD) events and, for the ALM, Division delivery of training. The reduced awareness of PN items (compared with the GP items) may indicate an area for improvement in future initiatives.

8. Of those clinic staff who used the resources and/or participated in the training did STI diagnosis and management practices improve, compared to those who didn't use them?

According to many GPs and PNs, their capacity to diagnose and manage STIs had improved following the use of the items. For respondents who completed the STI ALM for General Practitioners and the Online STI Practice Nurse Training, this included increased confidence in contact tracing. Improved confidence and performance in STI diagnosis and management as a result of the PN items was a particularly strong theme in the PN interviews.

9. What factors affected the impact of the resources and training on STI diagnosis and management practices?

The development and delivery of the items were of a high standard and achieved the project aim to a great extent. In particular, the expertise and engagement of the Working Group, the thorough and iterative processes of item development, and the multimodal nature of the items were key strengths of the GP Project.

Key factors identified in this evaluation as likely to have limited the impacted of these resources include less thorough promotion of the online items, and limited access by busy GPs and PNs to what were generally perceived to be effective resources. In addition, uncertainty around the PN role in sexual healthcare may have limited their awareness and usage of these resources.

Key Lessons and Implications

Key lessons from our evaluation of the GP Project are summarised below:

1. As confirmed by the effectiveness of the GP Project, a range of resources and modes of delivery is required to meet the varied needs of GPs and PNs in managing sexual health

2. Process evaluation is best planned from the outset of the project to ensure all relevant information is proactively gathered to inform this aspect of the evaluation

3. Enhanced promotion of the items is likely to improve their impact, particularly because those that were accessed were reported to be relevant and useful. This particularly applies to the online STI Resources for General Practice, in light of strong endorsement of online access to resources and the stated need for ongoing access to updated information. There is capacity for Divisions, if appropriately supported, to increase their outreach and practice support in sexual healthcare to PNs and GPs. For PNs, APNA was also recommended as a conduit for information

4. Dissemination of sexual health information should continue to occur through existing forums and resources well utilised by GPs and PNs to enable these clinicians to access resources and tools as part of their usual continuing professional development activities

5. Easily accessible online resources are required for busy clinicians. Furthermore, embedding this material into existing and well used electronic resources and clinical software programs is likely to enhance accessibility. This applies to management guidelines and consultation support tools as well as to patient education materials

6. Tools such as the STI Testing Tool and the Practice Nurse Postcard were particularly useful in embedding sexual health knowledge into clinical practice following other training. Information related to contact tracing was requested in future iterations of the STI Testing Tool

7. Clinicians preferentially seek current, evidence-based, clearly referenced resources that are endorsed by professional organisations

Chapter 1. Introduction

The UWS was commissioned by the NSW STIPU to evaluate the GP Project in collaboration Prof. Usherwood and Dr Kang. The GP Project aimed to promote the delivery of evidence-based sexual healthcare within primary care in NSW – this was addressed through the development, promotion, and delivery of nine resources tailored for NSW GPs and PNs. The following sections define the scope of this evaluation, and outline the structure of this report.

Research Aim and Questions

The **aim** of this project was to evaluate the GP Project, details of which follow. This was achieved by focusing on the following research **questions**:

1. Was the methodological development of the resources rigorous?
2. Was the content and format of the resources, clear, user-friendly and applicable to the target clinician and patient groups?
3. What was the awareness of the GP Project, its specific resources, and the resource content?
4. How successfully were the GP Project resources promoted and integrated into primary care?
5. What was the participation rate in the training resources? What were the reactions to the training? Were the learning objectives met? Was the training method appropriate?
6. How were the GP Project resources used?
7. How could the promotion, content and delivery of the resources be improved?
8. Of those clinic staff who used the resources and/or participated in the training did STI diagnosis and management practices improve, compared to those who didn't use them?
9. What factors affected the impact of the resources and training on STI diagnosis and management practices?

Report Outline

This report is structured as follows. Following this introductory chapter, Chapter 2 describes the GP Project in further detail. Chapter 3 presents a brief overview of the current state of knowledge regarding effective professional development activities for clinicians. Chapter 4 describes the research process employed to meet the overarching aim of this project – this includes a mixed-method process and impact evaluation of the GP Project. Chapter 5 presents the findings from this extensive research process. Through quantitative and qualitative analysis of the data, the process involved in the development of the GP Project and its impact on the target audience are described. This helps to verify the findings through data triangulation (McMurray, Pace, & Scott, 2004). Finally, Chapter 6 brings the report to conclusion, summarising the research process, key findings, and key lessons for policymakers, practitioners, and researchers.

Chapter 2. GP Project

The GP Project was developed to enhance evidence-based sexual healthcare within general practice. More specifically, its objectives were to:

1. Increase GP access to STI information, education and resources
2. Promote their understanding of contact tracing
3. Clarify referral pathways

To meet these objectives, a suite of nine resources was developed for GPs and PNs. A Working Group[2] comprised of 21 representatives of the following professional groups was responsible for the development of these resources:

1. NSW STIPU
2. General Practice NSW (GPNSW)
3. ACRRM
4. Australasian Society of Human immunodeficiency virus Medicine (ASHM)
5. Camperdown Sexual Health Service
6. Gosford Sexual Health Service
7. Human immunodeficiency virus (HIV)/ Acquired immune deficiency syndrome (AIDS) and Related Programs (HARP) units
8. Hunter New England Area Health Service (HNEAHS)
9. Newcastle Sexual Health Service
10. Parramatta Sexual Health Service
11. Port Macquarie Health Campus – HIV, Hepatitis C and Sexual Health Clinic
12. Sydney Sexual Health Service

Working Group members include managers and clinicians with particular interest in sexual health. Although demographic information was not available (for instance, current professional role, years of professional experience, qualifications, disciplinary interests, and professional networks, among others), the composition of the Working Group suggests the availability of relevant clinical expertise. There was no information available to account for the selection of these particular members; however, this was likely to be due to their clinical and/or pedagogical expertise.

The following section presents an overview of the nine items that constitute the GP Project – this includes seven resources for GPs and two for PNs.

General Practitioners

1. STI Testing Tool

STI Testing Tool is a double-sided A4 placard that guides sexual health consultations (see Figure 1). This includes the identification of at-risk patients; appropriate screening tests and the specimens required; appropriate ways to initiate and manage a sexual health consultation; a guide to documenting a brief sexual history; appropriate ways to broach contact tracing; as well as referral information.

[2] A representative the AHMRC was invited to participate in the initiative; however the organisation was not represented.

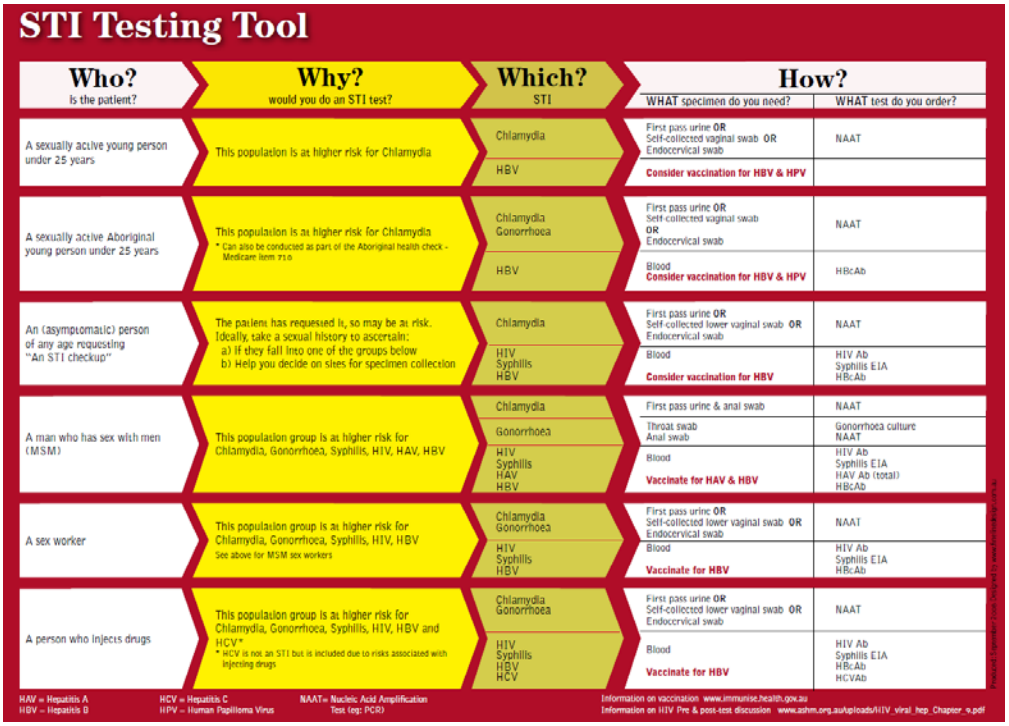


Figure 1: STI Testing Tool

2. STI Resources for General Practice

STI Resources for General Practice is an online portal that provides practitioners with ease of access to STI information (see Figure 2). It includes access to resources in the following domains via a hyperlink:

- STI testing
- Fact sheets
- Information on testing and contact tracing
- NSW campaign resources
- Resource kit for GPs on youth sexual health

Figure 2: STI Resources for General Practice

3. Drivetime Radio Medical CD for STI

The Drivetime Radio Medical CD for STI is an audio resource meeting the standards of the RACGP quality improvement and continuing professional development (QI&CPD) program (RACGP, 2010) (see Figure 3). It forms part of the Drivetime Radio Medical program – a regular audio CD series that is distributed to 21,000 GPs throughout Australia (Home Drivetime Radio, 2012). Hosted by Australian media personality, Dr John D'Arcy, edition #87 is over an hour in duration and includes a ten-minute interview titled, Getting STIs on the Agenda. In the interview Dr Chris Bourne, the Unit Head of NSW STIPU and an expert in sexual healthcare, focuses on the importance of and barriers to STI testing and encourages clinicians to use the STI Testing Tool.

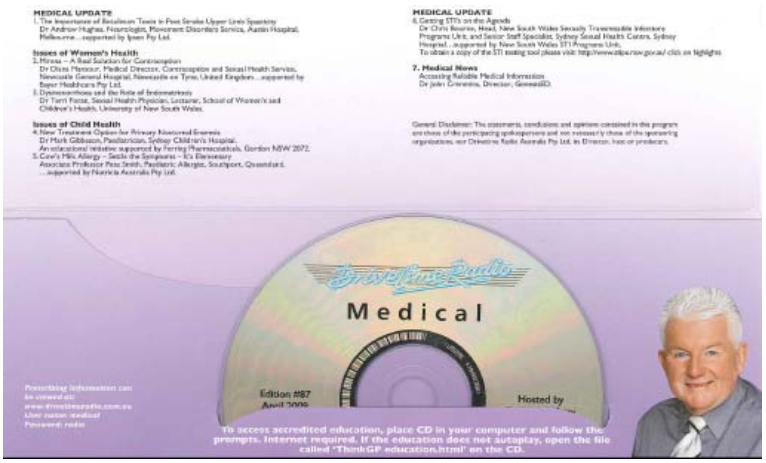


Figure 3: Drivetime Radio Medical CD for STI

4. Online STI Testing Tool GP Training

Developed and distributed by ThinkGP, a provider of online education to GPs and other healthcare providers, the aim of the Online STI Testing Tool GP Training is to improve GP confidence in STI testing (see Figure 4). The interactive course, which takes approximately sixty minutes to complete, includes seven clinical cases offering participants an opportunity to apply their skills and knowledge. These abilities are tested through the completion of questions after each clinical case, answers for which are also provided.

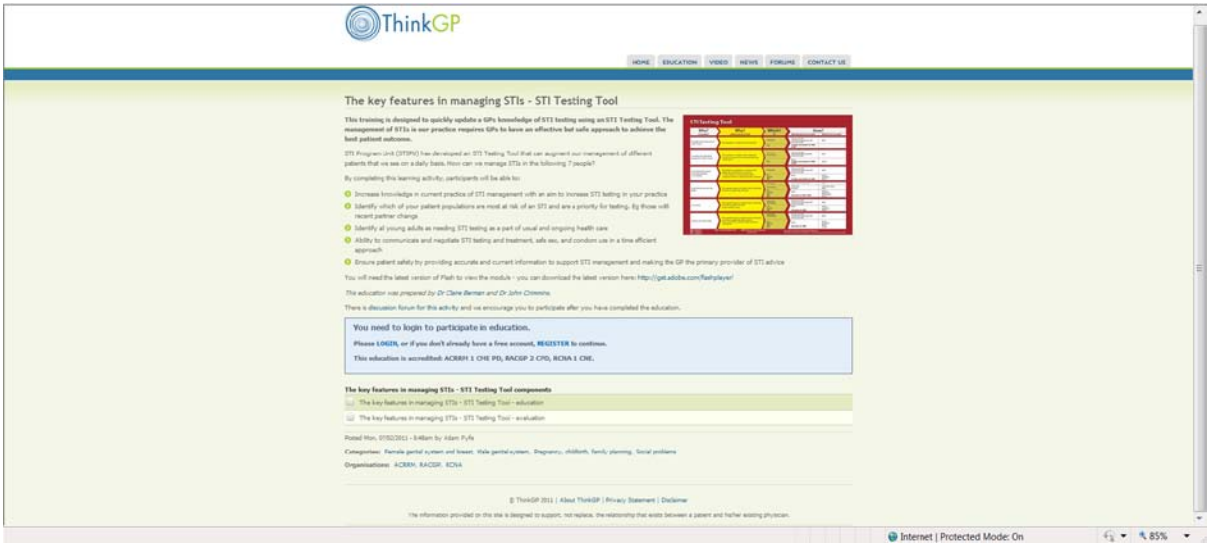


Figure 4: Online STI Testing Tool GP Training

Following course completion, participants are expected to have the ability to:

- Identify at-risk populations for STIs

- Diagnose and manage STIs
- Confidently engage patients in sexual health consultations
- Confidently engage patients in safe sex consultations
- Ensure patient safety by providing accurate and current information

5. Face-to-Face Active Learning Module: Sex... Need a Hand? STI Management for General Practice

Delivered in partnership with ASHM, the face-to-face ALM was developed to increase clinician confidence in sexual health consultations (see Figure 5). This was addressed by assembling three interactive educational modules to improve knowledge of, and clinical skills in STI management. Each 2 hour module has a particular focus and builds on the preceding module (see Table 1). Although participants are awarded four CPD points for completing one module, forty CPD points are awarded following completion of all three modules.

Figure 5: Face-to-Face ALM: Sex... Need a Hand? STI Management for General Practice

Table 1: ALM Objectives

	By the end of this session participants should:
Module 1: Basic STI information	• Be able to diagnose and treat common STIs • Be able to take a brief sexual history and feel comfortable about it • Be able to fit this into routine GP work
Module 2: Priority populations	• Have increased knowledge in STI management with an aim to increase STI testing • Be able to identify at-risk patient groups • Be able to identify all young adults as needing STI testing • Have increased ability to communicate and negotiate STI testing and treatment, safe sex, and condom use, efficiently • Be able to ensure patient safety by providing accurate and current information to support STI management
Module 3: Contact tracing	• Understand contact tracing • Know the legal requirements when there is an STI • Feel confident to initiate patient discussion on contact tracing

	By the end of this session participants should:
	• Be confident to support patients to disclose to their partner(s) • Ensure patient safety by knowing where to obtain further help with contact tracing

Premised on adult learning principles and research evidence related to continuing medical education for GPs (Cantillon & Jones, 1999; Shuval et al., 2007), the modules include formal presentations and interactive learning activities – namely, case studies, role-plays, and participant discussion. The ALM has a very strong case study orientation – it makes extensive use of explanatory case studies to reinforce participant understanding of key concepts and provides participants the opportunity to practice and refine their skill-set.

The ALM is delivered by sexual health specialists who have experience in the delivery of training programs. Trainers are guided by comprehensive guidelines, which include information on predisposing activities; learning styles, with particular reference to their advantages and disadvantages; adult learning principles; behaviour change, particularly among GPs; conducting role-plays; as well as the provision of feedback to participants.

6. Sexual Health Articles in the Australian Doctor and Medical Observer

In 2009, two articles were published in the publication, *Australian Doctor*, and in 2010, one article was published in the publication, *Medical Observer* (see Figure 6). Each aimed to promote sexual healthcare among GPs through the provision of information in credible periodicals that are tailored to, and accessed by the target audience. Furthermore, they were authored by credible peers, both of whom were members of the Working Group. Readers could earn two CPD points by completing an online quiz after reading the article titled, *Screening for sexually transmitted infections* – however, it is unclear whether CPD points were associated with the remaining two articles.

Figure 6: Sexual Health Articles

7. Check: Sexually Transmissible Infections

The Check booklet on STIs was developed in collaboration with the RACGP QI&CPD program (RACGP, 2010) (see Figure 7). Check is an independent learning program published monthly by

the RACGP on different health topics. It aims to increase GP confidence in the delivery of sexual healthcare, with particular reference to:

- Taking a sexual history
- STI testing
- Dealing with feelings of discomfort around sex
- STI screening
- Contact tracing
- Cultural sensitivities

The booklet includes seven clinical cases accompanied by questions and answers to enhance the learning experience. The booklet concludes with additional GP resources, including references to clinical resources and guidelines; patient information; and contact details for additional services.

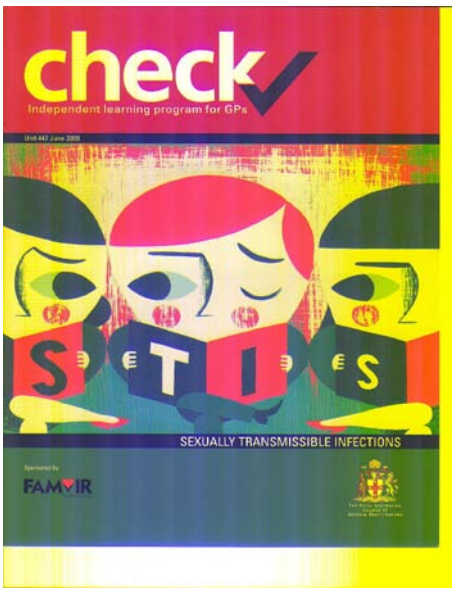


Figure 7: Check Booklet

Practice Nurses

8. Practice Nurse Postcard

The Practice Nurse Postcard was designed to promote the delivery of evidence-based sexual healthcare among PNs undertaking a preventative women's health check, including a pap smear (see Figure 8). This double-sided A4 placard provides: information on the preventative women's health check, including medical benefits scheme (MBS) item numbers; prompts to document a brief sexual history; information to support the management of chlamydia with information on priority populations, screening tests, treatment and prevention; and contact details for further resources and the SexualHealth Infoline.

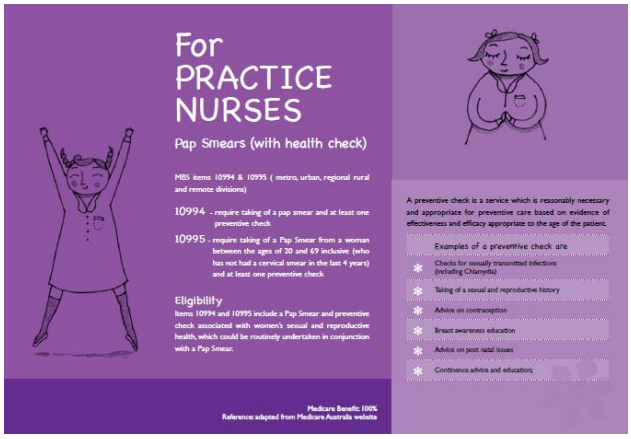


Figure 8: Practice Nurse Postcard

9. Online STI Practice Nurse Training

Developed in collaboration with both ASHM and APNA, the Online STI Practice Nurse Training is an interactive course offered by APNA that aims to increase evidence-based sexual healthcare among PNs (see Figure 9). More specifically, the training focuses on understanding and managing STIs, blood borne viruses (BBVs), HIV, as well as viral hepatitis (see Table 2). This information is conveyed and reinforced via text, illustrations, graphs, charts, clinical cases, and hyperlinks to additional resources, including academic journal articles and websites.

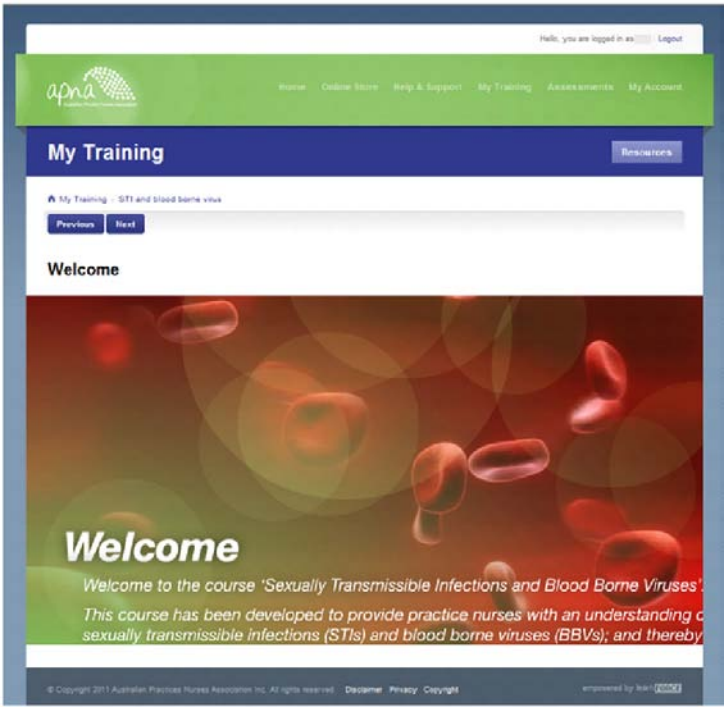


Figure 9: Online STI Practice Nurse Training

Table 2: Online STI Practice Nurse Training Content

Section	Content
1. Risk assessment and taking a sexual history	• Brief epidemiology of STIs and BBVs • Relevance of epidemiology to clinical practice • Priority populations for testing and treatment • Sexual health • Taking a brief sexual history • Significance of contact tracing

Section	Content
2. Sexually transmissible infections (bacterial) 3. STIs (viral and other)	• Update on bacterial and viral STIs • Current STI knowledge • Appropriate diagnostic tests • Managing STIs • Interpretation of test results • Contact tracing
4. BBVs	• Hepatitis B virus (HBV) • Hepatitis C virus (HCV) • HIV

The course, which takes approximately ninety minutes to complete, is free for NSW participants and available at a nominal fee to those outside NSW. While completing the course, participants can take pause and resume the course at a later time. At the end of each section, participants are presented with a summary of the section to reinforce key lessons.

Following course completion, participants are expected to have the ability to:

- Explain the relevance of epidemiology to clinical practice and locate local data
- Define the purpose and two methods of contact tracing
- Document brief sexual history
- Engage patients in safe sex consultations
- Identify appropriate diagnostic tests for common STIs and BBVs

These abilities are assessed through the completion of an assessment task comprised of twenty true-or-false items.

Chapter 3. Review of the Literature

Optimising clinician-use of evidence-based practice represents a significant challenge within healthcare services (D. Davis et al., 2003) – this includes primary care services. One of the key issues within primary care is to effectively and efficiently translate evidence from empirical research into patient care (Harrison, Dowswell, Wright, & Russell, 2010; Johnston & White, 2010; Kostopoulou, 2010; O'Donnell, 2004). Although research focused solely on primary care is limited, research suggests that clinician use of evidence-based practice is problematic (Bhattacharyya, Reeves, Garfinkel, & Zwarenstein, 2006; Grol & Grimshaw, 1999). For instance, thirty to forty percent of patients do not receive treatment in accordance with research evidence and twenty percent receive treatment that may be harmful (Grol, 2001; Schuster, McGlynn, & Brook, 1998). There are a myriad of reasons that contribute to this (Baker et al., 2010; Straus, Tetroe, & Graham, 2009); although it is not the purpose of this report to explicate these, research by Bowden and colleagues (2008) is noteworthy given its relevance to this scope of this evaluation. Following a cluster randomised controlled trial on chlamydia screening in general practice, the authors concluded that limited time, limited clinician understanding of associated benefits, and clinician concern about broaching sexual health with patients hindered clinician capacity to deliver evidence-based sexual healthcare. The limited use of evidence-based practice has significant consequences for patients, their communities, and the public purse (Straus, et al., 2009). This is largely because evidence-based practice is said to enhance quality patient care and optimise the allocation of limited resources (Dadich, 2010a, 2010b; DiClemente, Milhausen, McDermott Sales, Salazar, & Crosby, 2005).

The translation of evidence-based practice into clinical care is a complex, dynamic, and evolving process (Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004). To facilitate this process effectively and efficiently, international scholars have called for innovative methods (Flodgren et al., 2010), lessons for which might be garnered from extant research. For instance, a comprehensive review of extant literature suggests that most methods to help clinicians and practitioners to adopt evidence-based practices have the capacity to effect change – however, robust evidence of their effectiveness (and methods of action) is lacking (Dadich, 2010a). The review concluded that change is possible in the knowledge and skill-base of professionals and to a lesser extent, patient health outcomes. Methods of disseminating research evidence to enhance evidence-based practice that hold promise include:

- Educational interventions
- Electronic methods
- The leadership of credible and skilled colleagues
- Feedback mechanisms
- Discussion-based methods
- Financial incentives
- Guidelines
- Portfolios
- Simulations
- Visits by a trained individual to health professionals

While the evidence for effective methods remains inconclusive, it does not suggest that particular methods should be discontinued (Parkes, Hyde, Deeks, & Milne, 2001). Rather, there are 'no "magic bullets" for improving the quality of health care' (Oxman, Thomson, Davis, & Haynes, 1995, p. 1423). Bridging the divide between evidence-based practice and patient care appears to require a multimodal approach. This position has been endorsed by a number of authors, including Oxman and colleagues who offered the following illustrative description:

> It is helpful to draw an analogy between trials of interventions to improve the performance of health care professionals and drug trials.

> There are (arguably) no wonder drugs; often several medications are needed, along with lifestyle or environmental changes, to effect clinically important changes in health status. It is the same with the alteration of health professional performance: many interventions have modest or negligible practical effects when used alone. However, when coupled with other strategies the effects may be cumulative and significant (p. 1427).

Similarly, Grol and Grimshaw (2003) concluded, 'Different types of changes seem to need discrete types of interventions… research so far shows that none of the approaches is superior for all changes in all situations; we probably need them all' (pp. 1227-1229). Therefore, different methods are likely to be required for different purposes (including the target audience of the intervention). This view has been captured by Grol (2002) who has tabulated appropriate strategies according to developmental need.

In addition to the importance of multiple methods, the aforesaid review suggests that effective interventions that facilitate knowledge transfer are likely to (Dadich, 2010a):

- Assess and address the needs of the target group
- Be well-planned
- Be intensive
- Encourage active participation among the target group
- Be relevant to the clinical context
- Provide opportunities for ongoing professional development

Without a careful consideration of these lessons, the time, effort and resources used to identify and present evidence-based practice is likely to be in vain (D. A. Davis & Taylor-Vaisey, 1997).

Chapter 4. Methodology

This evaluation was informed by both the program logic model (Cooksy, Gill, & Kelly, 2001; McCawley, 1997; Wright & Ross, 2001) and realistic evaluation (Pawson & Tilley, 1997). The program logic model distinguishes five connected components of a program, initiative or project – namely, inputs, activities, outputs, outcomes, and impact (Hanley, 2010). When examining the relationship between them, realistic evaluation helps to ascertain 'what works, why it works, under what circumstances and for whom' (Muir et al., 2008, p. 3). Within this evaluation, the program logic model served to identify key elements of the GP Project and convey the relationship between these elements; realistic evaluation guided the critical examination of these relationships – this included the use of 'multiple methods and multiple data sources in the light of opportunity and need' (Pawson & Tilley, 2001, p. 323), and deciphering 'which mechanisms are relevant to produce optimum outcomes by context'.

Using a mixed methods research design, methods to collect quantitative and/or qualitative data included: (a) closed and open-item surveys, (b) semi-structured interviews, (c) a semi-structured focus group, and (d) document analysis. The surveys, interviews and focus group were used to consult with all key stakeholders – namely, relevant personnel of NSW STIPU; members of the Working Group; NSW Divisions of General Practice; as well as GPs and PNs affiliated with the Divisions. Appendix 1 presents the application of these methods to evaluate the process and impact of the nine items within the GP Project. The mixed methods design provided a basis for triangulation and allowed the items to be examined and conceptualised in different ways (Johnson & Onwuegbuzie, 2004). Although the process and impact evaluations were interrelated, they are presented separately for clarity.

Process Evaluation

Data Collection

A process evaluation was conducted to determine the procedures and decisions that shaped the development and implementation of the GP Project. This involved two complementary research methods – namely:

1. ***An analysis of over 350 project-related documents, including:***

    a. The GP Project Workplan, and various iterations during its development

    b. Information pertaining to the Working Group, including:

        i. Terms of reference and membership
        ii. Minutes of meetings
        iii. Situational analysis of STI management in the general practice
        iv. Notes from brainstorming sessions
        v. Presentations delivered to the Group

    c. Comparable resources

    d. Evidence used to inform the development of the GP Project

    e. Information pertaining to each of the nine GP Project items, including:

        i. Drafted versions
        ii. Feedback received from Working Group members
        iii. Feedback obtained through piloting
        iv. Correspondence to and from professional bodies regarding endorsement, including:

1. Australasian Chapter of Sexual Health Medicine (ACSHM)
2. Australasian College of Sexual Health Physicians (ACSHP)
3. ACRRM
4. GPNSW
5. RACGP

v. Promotional material tailored to different audiences

These documents were provided by NSW STIPU. Although most were in electronic form, some were received in paper-form. All were analysed prior to the focus group to identify gaps and inconsistencies, which were then discussed with focus group participants.

2. A focus group with self-selected members of the Working Group

All 21 members of the Working Group were invited to participate in a focus group to discuss the development, promotion, and delivery of the GP Project items (see Appendix 2). This invitation was initially extended during the course of monthly meetings with the Steering Committee and then via email to those who had expressed interest. Held at NSW STIPU, the focus group was co-facilitated by two members of the research team and transpired for approximately ninety minutes. To optimise participation, the focus group involved:

- Participants who were physically present (*n*=4)
- Participants who contributed to the discussion via teleconference (*n*=4)
- A participant who provided a written contribution after the focus group was facilitated, given their limited availability (*n*=1)

With consent of those present, the discussion was documented and digitally recorded for transcription. Notes were then prepared by both facilitators and analysed in conjunction with the transcript and the written contribution from one of the participants. Participants were not offered recompense for their contribution to this project.

These two methods were used to optimise the comprehensiveness of the material collected for the process evaluation (Robson, 2002).

Data Analysis

Document Analysis

The content of the documents was systematically examined to satisfy five key questions, two of which were segmented further for greater specificity (see Table 3). This process was aided by categorising document content accordingly.

Table 3: Document Analysis

Research Questions	Criteria
1. How rigorous was the methodological development?	
a. Was it informed by research evidence?	• Reference to clinical guidelines and/or • Reference to relevant publications
b. Was it informed by clinical expertise?	• Reference to clinical guidelines and/or • Incorporation of feedback from Working Group members and/or • Evidence of consultation with experts in this field
c. Was it informed by relevant resources?	• Comparability to relevant resources
2. How was the user-friendliness of the content and format determined?	• Incorporation of feedback from Working Group members and/or • Evidence of piloting and/or • Evidence of consultation with experts in this field
3. Which professional bodies endorsed the item?	• Endorsement letters and/or • Inclusion of logo of professional body
4. How was the item promoted?	• Evidence of promotional strategies
5. How was the item delivered?	
a. What were the modes of delivery?	• Evidence of delivery methods
b. Was the necessary technical assistance provided?	• Provision of administrative assistance and/or • Provision of materials and/or • Provision of personnel support

The chapter titled, Results presents findings from this process, which are summarised in Table 4.

Focus Group

Using an iterative process (Creswell, 1998), a member of the research team independently analysed and interpreted the transcription of the audio-recording – this was complemented by a review of the notes recorded by the two facilitators of the focus group. Guided by the scope and purpose of the focus group, this involved repeated exposure to the research material (Pomerantz & Fehr, 1997) to generate, develop and revise categories (Berg, 2001). The researcher then compared and contrasted constructed themes and synthesised interpretations.

Through the analytic phase of the project, the data were found to cluster around a number of core themes, as the participants described their perceptions and constructed their own meanings of situations during the focus group. Using a reflective, iterative process, theme content was then interrogated to explore relationships between and within the themes. The process enabled the researcher to engage in a systematic method of analysis using an eclectic process, whilst remaining open to alternative explanations for the findings (Creswell, 1998).

Impact Evaluation

Data Collection

An impact evaluation was conducted to determine the degree of influence of the GP Project on three cohorts: Project Officers affiliated with the NSW Divisions of General Practice whose brief includes the promotion of sexual healthcare, as well as GPs and PNs affiliated with these Divisions. This involved two complementary research methods – namely:

1. *Online surveys*

a. Project Officers

The Chief Executive Officer of each Division was informed of the project and evidence of support from GPNSW was provided. Following this, the Project Officer was invited to participate in the project. This involved the completion of an anonymous and a confidential online survey, which included both closed and open-ended items (see Appendix 3). When a Project Officer who was familiar with the GP Project was not available, the Chief Executive Officer was invited suggest an alternative respondent. In addition to demographic information, survey questions pertained to items within the GP Project that respondents were likely to be familiar with (given the promotion strategy used for each of the nine items) – these included:

i. STI Testing Tool
ii. Online STI Testing Tool GP Training
iii. Face-to-Face ALM: Sex… Need a Hand? STI Management for General Practice
iv. Practice Nurse Postcard
v. Online STI Practice Nurse Training

The purpose of the survey was to determine the degree of awareness of these items among respondents; promotional efforts by the Division; perceived importance of the items; and perceived capacity to promote sexual healthcare. Respondents were not offered recompense for their contribution to this project. Data were collected for five months (August 2011 to January 2012).

b. General Practitioners and Practice Nurses

Target samples of 250 GPs and 125 PNs were planned to be recruited via the Divisions. Informed by information on the primary care workforce in NSW (AIHW, 2011; Carne, Moretti, Smith, & Bywood, 2011), these figures were determined by assuming a response rate of 20 to 30 percent – as such, surveying 1,000 GPs was assumed to result in approximately 250 completed surveys and thus provide a 95 percent confidence interval with percentage estimates of approximately +/- 6 percentage points. Similarly, surveying 500 PNs was assumed to result in approximately 125 completed surveys and thus provide a 95 percent confidence interval with percentage estimates of approximately +/- 8.8 percentage points.

Due to recruitment difficulties, recruitment occurred in two stages; for clarity, these are described and justified as follows:

i. Purposive sampling

Thirteen of the 33 Divisions were purposively selected based on two criteria – namely, geography and the inclusion of Aboriginal Medical Services within the Division. Purposive sampling was used to optimise geographical diversity among respondents, and the representation of the clinicians who work with Aboriginal and Torres Strait Islander patients. Geographical representation was determined by classifying all Divisions into one of three categories according to their Remoteness Area (RA) classification – namely, RA 1&2 (which includes both major cities and

inner regional areas), RA 3&4 (which includes both outer regional and remote areas) and RA 5 (which includes very remote areas). The inclusion of an Aboriginal Medical Service was determined by data collated by GPNSW.

Project Officers from the selected 13 Divisions were invited to assist with recruitment; this involved including information about the project in an email to members, in the weekly Fax-Out, on the Division's website, in the Division's newsletter, and/or within continuing professional development sessions; Project Officers were provided with project briefs to aid this process.

Due to limited response rates, a member of the research team who is known to some Divisions telephoned some of the CEOs to elicit additional support. Although this helped to increase response rates within these Divisions, the response rate continued to be less than ideal for a continued period (three months). For this reason, the recruitment method was revised as follows.

ii. Population-based approach

1. Project Officers from the remaining 20 Divisions were invited to assist with the recruitment of GPs and PNs affiliated with the Division, as per the aforesaid methods

2. GPNSW was invited to assist with the recruitment of GPs and PNs by including project information in regular circulars that are distributed to NSW Divisions of General Practice

3. ThinkGP was invited to assist with the recruitment of GPs and PNs in NSW by including project information in its regular circulars that are distributed to members

Collectively, these methods increased the response rate – however, it is not possible to determine which was most (or least) effective, as an independent strategy.

Via these channels, GPs and PNs were invited to complete an anonymous and a confidential online survey, which included both closed and open-ended items (see Appendix 3). In addition to demographic information, the items pertained to all nine items within the GP Project. The purpose of the survey was to determine the degree of awareness of these items among GPs and PNs; use of the items; impact on clinical practice; perceived value of the items; perceived capacity to promote sexual health; and preferred learning styles. In recognition of their contribution to this project, respondents were offered hard copies of the *Australasian contact tracing manual* (ASHM, 2010), the *STI contact tracing tool for general practice* (NSW STIPU, 2011), and *HIV, viral hepatitis and STIs: A guide for primary care* (Bradford et al., 2008) – 65.4 percent of GP respondents and 67.7 percent of PN respondents requested these resources. Data were collected for five months (August 2011 to January 2012).

2. *Interviews with General Practitioners and Practice Nurses*

At the completion of the online survey, GPs and PNs were invited to participate in a semi-structured, confidential interview to further explore the impact of the GP Project on clinical practice. More specifically, questions clustered around the following themes (see Appendix 4):

- Use of the GP Project items
- Reasons for use and non-use
- Perceived value
- Influence on clinical practice
- Training needs and preferred learning styles
- Suggestions to improve the GP Project items

Of the survey respondents, 24.8 percent of GPs and 30.4 percent of PNs accepted the invitation to be interviewed. Informed by the demographic information collected via the survey, interviewees were selected to optimise diversity based on gender, age, years of clinical experience, Division affiliation, patient-base, and awareness of GP Project items.

Selected survey respondents were contacted and an interview time was scheduled. To optimise participant convenience, and for geographical reasons, interviews were conducted by telephone – this was particularly because of their limited availability. Prior to the interview, detailed project information was forwarded to each participant – so too was a consent form, which participants were asked to complete and return.

Each interview commenced with a reiteration of project details, with particular reference to its purpose, the way data would be managed and used, as well as the anonymity and confidentiality of project participants. Participants were also reminded that they could revoke consent at anytime without reason or consequence.

Initial interviews (n=5) were conducted by two members of the research team; this helped to ensure the suitability and clarity of the interview schedule. No revisions were made to the interview schedule. The remaining interviews (n=14) were conducted by one researcher.

Interviews transpired for approximately 60 minutes. At the consent of the interviewees, the interviews were documented and digitally recorded for transcription. Notes were then prepared by the interviewer(s) and analysed in conjunction with the transcript. In accordance with conventional practices of NSW STIPU, interviewees were offered monetary recompense for their contribution to this project.

Interviews continued until data saturation (Coyne, 1997; Sandelowski, 1995) – this is in accordance with Marshall (1996) who advises, 'An appropriate sample size for a qualitative study is one that adequately answers the research question… this requires a flexible research design and an iterative, cyclical approach to sampling, data collection, analysis and interpretation' (p. 523). As such, sample size was determined by the analysis and the capacity of this analysis to unpack the phenomena under investigation (Patton, 1990).

These two methods were used to optimise the comprehensiveness of the material collected for the impact evaluation (Vaessen, 2010).

Data Analysis
Surveys

Data collected through the closed-item responses of the three online surveys were cleaned. Descriptive statistics were then calculated using only valid responses – this includes the calculation of percentages and means.

Akin to first-level coding (Schreiber & Noerager Stern, 2001), responses to each open-ended item were initially reviewed to identify key elements and concepts. Following this, elements and concepts were distilled into constructed themes, akin to axial coding (Charmaz, 2006).

Interviews

Using an iterative process (Creswell, 1998), four members of the research team independently analysed and interpreted the transcription of the audio-recordings. Guided by the scope and purpose of the interviews, this involved repeated exposure to the audio-files and the transcriptions (Pomerantz & Fehr, 1997) to generate, develop and revise categories (Berg, 2001). One member of the research team then compared and contrasted constructed themes and synthesised the interpretations generated by the four researchers.

Ethics Approval

This project was designed and conducted in accordance with the national statement on ethical conduct in human research (NHMRC ARC & AVCC, 2007). It was approved by the University of Western Sydney Human Research Ethics Committee in May 2010 (approval number H8886).

The researchers implemented a number of ethical safeguards. These include the use of an arms-length approach to identify potential participants; voluntary recruitment; informed consent; and opportunities to revoke consent at anytime. Furthermore, the researchers respected the confidentiality and privacy of all research participants.

Chapter 5. Results

Process Evaluation

Document Analysis[3]

1. STI Testing Tool

a. Methodological Rigour

An assessment of the documents provided suggests the development of the tool was rigorous. This was verified by minutes from Working Group meetings; drafted versions of the item; documented feedback from Working Group members; and correspondence to and from professional bodies. Detail is presented in following sections.

Research Evidence

The STI Testing Tool was premised on the *Clinical guidelines for the management of sexually transmissible infections among priority populations* (ACSHM, 2004). This is verified by its reference in the tool (*Draft 4.pdf*) as well as correspondence to ACSHM seeking endorsement. It is not clear from the document review however, exactly how these guidelines were used to guide the development of the tool.

A review of the documents indicates that the use of these guidelines was beneficial for two key reasons. First, it helped to ensure the accuracy of the tool, and second, it helped to enhance the perceived value of the tool among the target audience.

Clinical Expertise

Clinical expertise to develop the tool was primarily, if not solely sourced from the Working Group. This was aptly demonstrated by the various iterations that were circulated for comment with the tool clearly shaped by the recommendations offered by the Working Group. The extent of the revisions made suggests the Working Group was actively involved in its development and members were satisfied with the progress.

Despite documented evidence of the comments offered by the Working Group and their incorporation into the tool, there is no information to explain the rationale for particular developments. For instance, although the sections pertaining to Brief Sexual History and Contact Tracing were modified from drafts one to four, reasons for the iterations were not available. Furthermore, there is no information on the comments that were *not* incorporated, nor the justification for this.

Relevant Resources

A review of the documents provided suggests that one existing resource was considered by the Working Group when developing the STI Testing Tool – namely, the NSCCAHS chlamydia tool. The current format of the STI Testing Test – namely, its inclusion of the decision aide, suggests it was shaped by this resource.

b. User-Friendliness

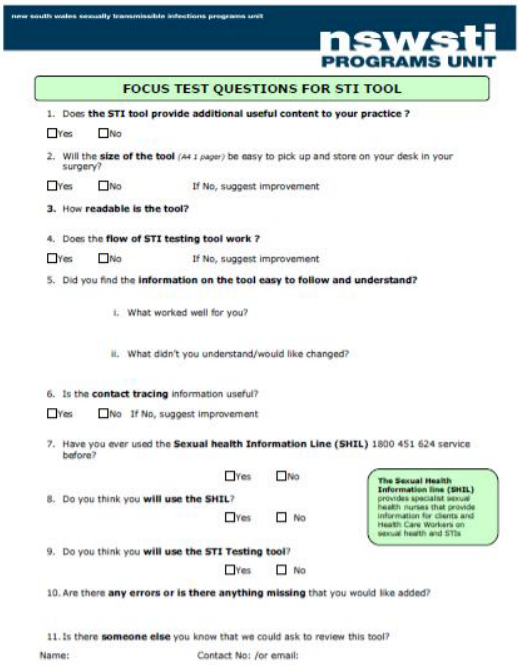
[3] Further evidence to verify the findings presented in this section is available on request.

The user-friendliness of the tool was a central tenet during its development. Consideration of the accessibility of clinical guidelines for the target audience featured strongly in early Working Group discussions.
The importance of user-friendliness is aptly demonstrated by efforts to actively consult with the target audience. The Working Group canvassed views throughout the state to determine the tool's capacity to translate evidence-based practice into clinical sexual healthcare. This was achieved by consulting two cohorts of GPs and nurses – those who are knowledgeable in evidence-based sexual healthcare, and those who are relatively less knowledgeable.

During the first stage, primary care clinicians affiliated with Family Planning NSW (FPNSW) were invited to pilot-test the tool and comment on its usability, efficiency, and elegance. Although not documented, the involvement of these clinicians might partly be due to their expertise in sexual healthcare; furthermore, FPNSW has five clinics throughout NSW.

Responses from the six participating clinicians suggest the tool was perceived to be convenient and practical, providing key information expediently in clinical practice (see Appendix 5, Table 24). However, some of the respondents were not familiar with the abbreviations noted on the tool – this might partly account for the explanatory notes within the final version. It is not possible to determine whether or how all feedback was addressed as the tool circulated to participating clinicians was not provided. Despite this, discussions within the Working Group suggest that user-friendliness was pivotal, and as such, most, if not all comments received were duly considered.

The second stage involved canvassing the views of primary care clinicians beyond FPNSW. To optimise diversity, clinicians were recruited via 'FPA, Went West Divisions, Greater Southern Divisions, AHMRC and North Coast Divisions' (*Minutes, 8th Feb. 2008.doc*). However, reasons for this selection were not documented, nor were the recruitment processes. Following these efforts, 39 clinicians were invited focus test the tool and review its usefulness, clarity, and intention to use the tool (see Figure 10).



new south wales sexually transmissible infections programs unit

nswsti PROGRAMS UNIT

FOCUS TEST QUESTIONS FOR STI TOOL

1. Does **the STI tool provide additional useful content to your practice ?**
☐Yes ☐No
2. Will the **size of the tool** *(A4 1 pager)* be easy to pick up and store on your desk in your surgery?
☐Yes ☐No If No, suggest improvement
3. How **readable is the tool?**
4. Does the **flow of STI testing tool work ?**
☐Yes ☐No If No, suggest improvement
5. Did you find the **information on the tool easy to follow and understand?**
   i. What worked well for you?
   ii. What didn't you understand/would like changed?
6. Is the **contact tracing** information useful?
☐Yes ☐No If No, suggest improvement
7. Have you ever used the **Sexual health Information Line (SHIL)** 1800 451 624 service before?
☐Yes ☐No
8. Do you think you **will use the SHIL**?
☐Yes ☐ No
9. Do you think you **will use the STI Testing tool**?
☐Yes ☐ No
10. Are there **any errors or is there anything missing** that you would like added?
11. Is there **someone else** you know that we could ask to review this tool?

The Sexual Health Information line (SHIL) provides specialist sexual health nurses that provide information for clients and Health Care Workers on sexual health and STIs

Name: Contact No: /or email:

Figure 10: STI Testing Tool: Focus Test Questions (*Questions.pdf*)

Results suggest that the respondents were generally content with the version of the tool they were provided (*Responses.xls*). More specifically, 82 to 85 percent were satisfied with the

content, size, and the flow of the information – furthermore, 70 percent intended to use the tool during the course of clinical practice. Many participants considered the justifications for testing useful as were the suggestions as to how to initiate a sexual health consultation. Respondents however suggested improvements in relation to both content and format.

It is not possible to determine whether or how all of this feedback was addressed. This is because the tool circulated to participating clinicians was not provided; furthermore, the revision process was not documented. However, the final version of the STI Testing Tool would suggest that some of the comments were incorporated. This is verified by the addition of gonorrhoea testing for Indigenous patients and the inclusion of explanatory notes for the abbreviations.

c. Endorsements

The tool was endorsed by ACRRM, ACSHM and the RACGP. Although the endorsement of GPNSW was sought, the outcome of this request was not documented. Prior to endorsement, ACRRM and the RACGP recommended modifications. It is not possible to determine whether or how all of this feedback was addressed, as the item submitted to these professional bodies was not provided. However, the final version of the STI Testing Tool would suggest that some of the comments were incorporated – notably, the addition of gonorrhoea testing for priority populations, and the reference to polymerase chain reaction (PCR) testing (see Figure 11).

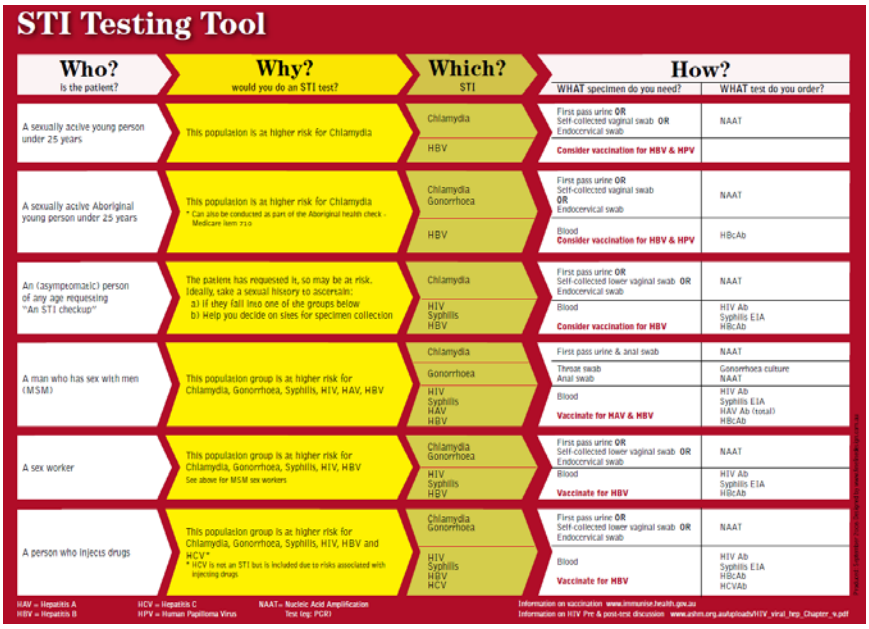


Figure 11: STI Testing Tool

d. Promotion

The Working Group was aware of the significance of promotion and thus identified several promotional channels in the work plan:

> An article in AFP making testing/treatment/protocols of STIs relevant to practice for GP…
>
> As GP divisions are providers as well as facilitators of GP education, an article is to be drafted for the GP divisions to be circulated by ANSWD…

> In all communications with GP surgeries the project must ensure that the project manager and practice nurses are involved (*Minutes, 23rd Nov. 2007.doc*).

Correspondingly, the tool was promoted using a multimodal approach to optimise impact. Guided by suggestions from 'SH [sexual health] directors… HARPM [HARP unit managers], AHMRC/AMS [Aboriginal medical services], Rural health nurses, [and] regional GP registrar trainers' (*Minutes, 31st Oct. 2008.doc*), promotional efforts included:

- An Indigenous health forum
- The Medical Observer articles
- A regular circular distributed by GPNSW to all NSW Divisions of General Practice
- A campaign letter issued by NSW STIPU and the RACGP to NSW GPs to 'help your work detecting and managing STIs' (*Letter Campaign.pdf*)
- Correspondence to:
  - All NSW Divisions of GP
  - HARP unit managers
  - A website hosted by Genesis Ed (now known as ThinkGP) – a provider of online education for GPs and other health professionals across Australia
  - A poster at the Australasian Sexual Health Conference

Additionally, the tool was to be promoted via the Nursing in General Practice (NiGP) newsletter, the RACGP NSW and ACT Colleague newsletter, and the ThinkGP newsletter. However, the documents available for review do not verify whether these channels were pursued.

In accordance with social marketing principles (Formoso, Marata, & Magrini, 2007; Kreuter & Wray, 2003; Stead, Gordon, Angus, & McDermott, 2009), the information prepared to promote the tool was largely engaging. Using credible ambassadors and agents, promotional efforts highlighted the clinical relevance of the tool and its potential value:

> The ***NEW*** *GP STI* testing tool is a simple, one-page, flow chart designed to help GPs decide which of their patients are at higher risk for STIs and provides tips on how to initiate and manage a sexual health consultation.
>
> 'The tool includes a list of priority populations for STIs, shows what specimen to collect and what tests to order. It also has a brief sexual history check list and links for help with contact tracing… Often being a good GP does not mean knowing everything – but knowing where to find out about everything' Bill Kefalas, General Practitioner, Kingswood, NSW.
>
> The tool was designed specifically for GPs based on current STI testing guidelines and includes a range of useful referral services, including the NSW sexual health information line- a telephone information service for GPs.
>
> The NEW STI testing tool can be downloaded from
>
> http://www.stipu.nsw.gov.au/pdf/FINAL_NSW-GPSexual_Health_Services_Tool_web.pdf
>
> For FREE hard copies to GPs, please contact_____from the NSW STI Unit on_____(*Article.doc*).

The methods of promotion appeared to align with the mode of promotion. For instance, given the audio-visual features of websites, Genesis Ed promoted the tool via a hyperlink to an interview during which clinicians discuss sexual healthcare, with reference to the tool.

e. Delivery

To optimise distribution to the target audience, the Working Group planned to disseminate the tool via different channels. These included:

- Direct mail to all GPs in NSW, 'citing key opinion leaders views about the use and importance of the tool' (*Products and Dissemination.doc*)
- Area Health Services (AHSs) that were offering 'ALM general practice programs'
- The NSW STIPU website, hyperlinks to which were to be issued to GPNSW and AHS Sexual Health Promotion Officers working with general practices
- NSW Sexual Health Info Line
- Electronic reminder systems, including existing clinical software programs

Evidence that all channels were pursued is limited. Although all NSW Divisions of GP were offered copies of the tool at no cost, recompensed for postage to GP members, and provided with follow-up contact details, evidence of circulation via the NSW Sexual Health Info Line or its incorporation into clinical software programs was not available. It therefore appears that there was limited capacity to deliver the tool as initially planned.

2. STI Resources for General Practice

There were no documents available for review pertaining to this item. As such, it is not possible to appraise: methodological rigour; the degree of user-friendliness; endorsements sought; the promotional efforts pursued; or delivery mechanisms.

3. Drivetime Radio Medical CD for STI

a. Methodological Rigour

The documents available for review suggest the development of the Drivetime Radio Medical CD for STI was somewhat rigorous. This is indicated by the guidelines used to develop the item, the preparation of the interview transcript, and its iterations. Detail is presented in following sections.

Research Evidence

There is limited evidence that the interview transcript for this item was informed by research evidence. Prior to the interview, background information was prepared to inform the host's introduction – this information included reference to prevalence rates and the implications associated with STIs. Although the sources of this information were not noted in the documents available for review, this item was endorsed by the RACGP QI&CPD program (RACGP, 2010).

Clinical Expertise

The use of clinical expertise to inform the development of this item is demonstrated in two key ways. First, the interviewee has extensive experience in sexual healthcare – however, the documents reviewed do not clarify how or why the interviewee was selected. Second, the transcript was reviewed by (at least) five individuals, including two personnel affiliated with NSW STIPU and two (external) members of the Working Group. Although eight individuals were invited to review the transcript, available documents do not reveal how or why these individuals were selected, or why three individuals did not review the document. Nevertheless, the incorporation of comments received suggests the use of clinical expertise.

Relevant Resources

The documents available for review do not specifically indicate the use of the relevant resources to inform the development of the Drivetime Radio Medical CD for STI. However, given this item is part of the Drivetime Radio Medical program (Home Drivetime Radio, 2012) and was guided by protocol (RACGP, 2010), it might be assumed that it was informed by existing audio resources – however, in the absence of documented evidence, it is not possible to determine which of these were most informative.

b. User-Friendliness

The documents available for review do not specifically indicate whether or how the user-friendliness of the Drivetime Radio Medical CD for STI was determined. However, given the Working Group is comprised of practicing primary care clinicians, it might be assumed that this process was implicit to the development of the item – however, in the absence of documented evidence, it is not possible to verify this.

c. Endorsements

As part of the RACGP Check program (RACGP, 2012), the Drivetime Radio Medical CD for STI was thus endorsed by the RACGP.

d. Promotion

The documents available for review do not specifically indicate the ways in which the Drivetime Radio Medical CD for STI was promoted. However, as part of the Drivetime Radio Medical program (Home Drivetime Radio, 2012), it might be assumed that this was the primary responsibility of Home Drivetime Radio – yet, there is no evidence to support this.

e. Delivery

The documents available for review do not specifically indicate the ways in which the Drivetime Radio Medical CD for STI was delivered. However, as part of the Drivetime Radio Medical program (Home Drivetime Radio, 2012), it might be assumed that it was delivered to GPs by Home Drivetime Radio as a complimentary resource. This would suggest that the audience for this item extended beyond NSW – however, this cannot be verified by available documents.

4. Online STI Testing Tool GP Training

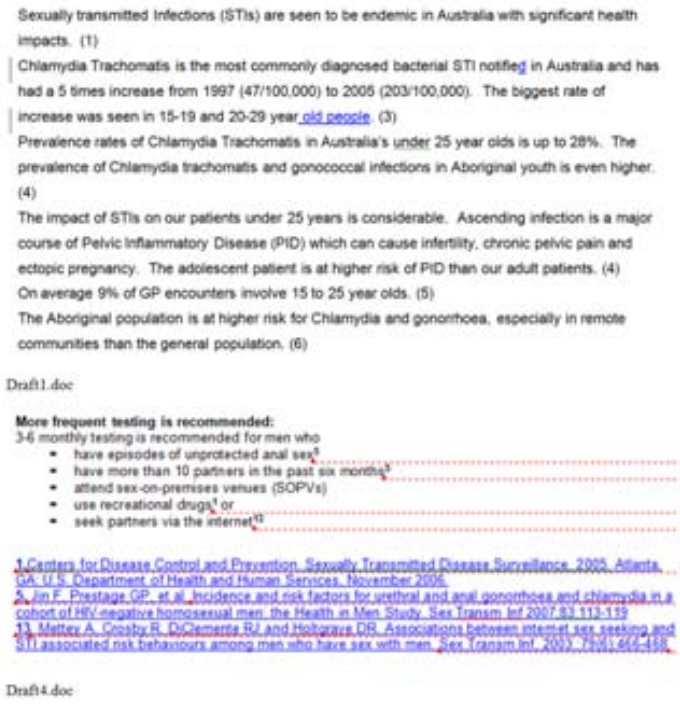
a. Methodological Rigour

A review of available documents reveals that the Online STI Testing Tool GP Training combines the STI Testing Tool and the ALM clinical cases. The development of these two items, which is discussed in the respective sections, was largely found to be methodologically rigorous – as such, the methodological rigour of the Online STI Testing Tool GP Training can be inferred. However, the documents pertaining to the development of the Online STI Testing Tool GP Training are limited and only include drafted versions. Minutes from Working Group meetings suggest there was no discussion of the development of this item. Further detail on this item is presented in the following section.

Research Evidence

The Online STI Testing Tool GP Training was largely based on evidence-based practice. This is indicated by reference to ten credible sources of information, all of which were cited

accordingly (see Figure 12). The use of research evidence is also confirmed by the incorporation of material sourced from the STI Testing Tool and the ALM, both of which were informed by research evidence (see respective sections).



Sexually transmitted Infections (STIs) are seen to be endemic in Australia with significant health impacts. (1)

Chlamydia Trachomatis is the most commonly diagnosed bacterial STI notified in Australia and has had a 5 times increase from 1997 (47/100,000) to 2005 (203/100,000). The biggest rate of increase was seen in 15-19 and 20-29 year old people. (3)

Prevalence rates of Chlamydia Trachomatis in Australia's under 25 year olds is up to 28%. The prevalence of Chlamydia trachomatis and gonococcal infections in Aboriginal youth is even higher. (4)

The impact of STIs on our patients under 25 years is considerable. Ascending infection is a major course of Pelvic Inflammatory Disease (PID) which can cause infertility, chronic pelvic pain and ectopic pregnancy. The adolescent patient is at higher risk of PID than our adult patients. (4)

On average 9% of GP encounters involve 15 to 25 year olds. (5)

The Aboriginal population is at higher risk for Chlamydia and gonorrhoea, especially in remote communities than the general population. (6)

Draft1.doc

More frequent testing is recommended:

3-6 monthly testing is recommended for men who

- have episodes of unprotected anal sex[8]
- have more than 10 partners in the past six months[9]
- attend sex-on-premises venues (SOPVs)
- use recreational drugs[1] or
- seek partners via the internet[10]

1.Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance, 2005. Atlanta, GA: U.S. Department of Health and Human Services; November 2006.

8. Jin F, Prestage GP, et al. Incidence and risk factors for urethral and anal gonorrhoea and chlamydia in a cohort of HIV-negative homosexual men: the Health in Men Study. Sex Transm Inf 2007;83:113-119

13. Mattey A, Crosby R, DiClemente RJ and Holtgrave DR. Associations between internet sex seeking and STI associated risk behaviours among men who have sex with men. Sex Transm Inf. 2003; 79(6):449-450.

Draft4.doc

Figure 12: Online STI Testing Tool GP Training: Use of Research Evidence

Clinical Expertise

Evidence that clinical expertise informed the Online STI Testing Tool GP Training was sourced solely from the seven drafted versions each of which demonstrates the incorporation of feedback from members of the Working Group (see Appendix 5, Table 25). Despite these demonstrations, the documents reviewed – including minutes from Working Group meetings – do not clarify the process by which clinical expertise guided the development of this item. More specifically, it is not possible to verify:

- Whether all members of the Working Group were invited to comment on drafted versions
- How and why clinical expertise was sourced beyond the Working Group
- Reasons why particular suggestions were (and were not) incorporated. Although clinical expertise was sought on the clinical case pertaining to men who have sex with men (MSM), not all suggestions were incorporated, nor are the reasons for not adopting some of the suggestions documented
- Reasons for changes that were *not* suggested by members of the Working Group

The seven drafted versions of this item reveal a number of changes that were not suggested by members of the Working Group (see Appendix 5, Table 26); however, no explanations were documented for these modifications. For example, although not included in the penultimate version, a graph on the prevalence of chlamydia, as well as the recommendations concerning vaccination for HBV and hepatitis A (HAV), were both included in the ultimate version without justification.

The draft of the course included audio and video files about STI testing and broaching the topic of STIs with patients; the former included a focus group discussion involving four clinicians with

expertise in sexual healthcare. However, there was no information on how or why these individuals were selected. The transcriptions of both the audio and video files were circulated to the Working Group for comment and feedback received was incorporated. However, the audio file of the focus group discussion was not included into the Online STI Testing Tool GP Training; furthermore, there was no explanation for this.

Relevant Resources

The documents available for review do not specifically indicate the use of the relevant resources to inform the development of the Online STI Testing Tool GP Training. As part of the ThinkGP Online Training program (Fyfe, 2010), it might be assumed that it was informed by existing programs – however, in the absence of documented evidence, it is not possible to determine which of these were most informative.

b. User-Friendliness

The documents available for review do not specifically indicate whether or how the user-friendliness of the Online STI Testing Tool GP Training was determined. However, given the Working Group is comprised of practicing primary care clinicians, it might be assumed that this process was implicit to the development of the item – however, in the absence of documented evidence, it is not possible to verify this.

c. Endorsements

According to the ThinkGP Online Training program (Fyfe, 2011), the Online STI Testing Tool GP Training is recognised by ACRRM (one CPD point upon completion); the RACGP (two CPD points upon completion); and the Royal College of Nursing Australia (RCNA) (one CPD point upon completion).

d. Promotion

The Online STI Testing Tool GP Training was promoted electronically via two key strategies – namely, website advertisements and email. Advertisements were displayed on both the ThinkGP website and the NSW STIPU website. Over 3,000 visitors to the former read the advertisement within a period of approximately seven and a half months (see Figure 13), while close to 5,000 visitors to the NSW STIPU website accessed a hyperlink to the training within a five-week period. These reports suggest considerable awareness about the Online STI Testing Tool GP Training – however, in the absence of further information (for instance, total visitors to either website within the suggested period, and type of visitor to these websites), it is difficult to ascertain the reach of these promotional messages, particularly to the target audience – NSW GPs.

Figure 13: Online STI Testing Tool GP Training: Promotion (*Evaluation 2011 09 – NSW GPs.pdf*)

The Online STI Testing Tool GP Training was also promoted via email. Two emails were composed by an unknown author and reviewed by (at least) eight individuals, including two personnel affiliated with NSW STIPU, two (external) members of the Working Group, and four additional individuals. Available documents do not reveal how or why these individuals were selected. Both emails were issued to members of ThinkGP – this would suggest that the audience for this item extended beyond primary care clinicians in NSW – however, this cannot be verified by available documents. The emails were issued consecutively before a NSW Health campaign to 'to raise awareness to help combat the rise sexually transmissible infections' (*STI Broadcast 2.doc*); however, the reason for this timing is not reported in the documents reviewed. The emails briefly describe the importance of sexual healthcare within primary care and refer readers to the STI Testing Tool and the NSW STIPU website. There is no mention of the Online STI Testing Tool GP Training in either email – furthermore, the documents reviewed do not account for this absence. Both emails include personal references to practicing GPs as well as representatives of the RACGP and NSW STIPU. The second email also includes reference to an academic refereed publication. Reference to credible peers and authoritative information might be assumed to enhance the impact of the message on the target audience – however, available documents do not account for these inclusions.

e. Delivery

As part of the ThinkGP Online Training program (Fyfe, 2010), the Online STI Testing Tool GP Training was delivered by ThinkGP in an online environment.

5. ALM

a. Methodological Rigour

A review of relevant documents suggests that the methodological development of the ALM was largely rigorous. This was indicated by minutes from Working Group meetings; drafted versions of the item; documented feedback received from Working Group members; and correspondence to and from professional bodies. Demonstrations of these are provided in this section.

Research Evidence

The ALM appears to be informed by evidence-based practice. This was indicated by reference to 37 reliable sources of information, including:

- Nine academic publications
- 14 guidelines and manuals
- Two placards published by government bodies
- Five scientific reports – for instance, the report of the Chief Officer of Health on Chlamydia (NSW Health, 2009)
- Seven websites established and maintained by government and professional bodies

Despite reference to these sources, details pertaining to this process are lacking. This is chiefly for three reasons. First, the process was not documented in the material provided – this includes the reason(s) for their use, as well as how and why information was selected and incorporated into the modules. Second, most of the sources were referenced collectively at the end of the modules and few were specifically cited within modules. And third, two of the publications, namely, the Australasian contact tracing manual (ASHM, 2006)[4] and the STIs and BBIs manual (AH&MRC, 2006) could not be sourced at time of evaluation. For these reasons, it

[4] A more recent version is now available (ASHM, 2010).

is not possible to verify with specificity the ways in which each of the aforesaid sources guided the development of the ALM.

However, there are several examples to confirm use of the evidence. Eight sources were cited in the module one; one source was cited in module two; and three websites were cited in the module three – this might be due to the respective foci of the modules, whereby module one required relatively greater reliance on authoritative information (see Appendix 5, Table 27). This is suggested by the inclusion of relatively more websites in module three to support contact tracing practices.

Clinical Expertise

In addition to the aforesaid publications, the ALM incorporated clinical expertise – this was sourced both within and beyond the Working Group. The use of this expertise to develop the ALM was demonstrated in two ways – namely, explicit requests for clinical and pedagogical advice to prepare the materials, as well as the circulation of drafted materials to the Working Group for comment. It is not possible to state whether all feedback, or all iterations of the ALM were available for review – this is particularly because comments pertaining to module three were not available and comments from only two Working Group members were provided. However, the material available suggests the ALM was shaped by contributions from the Working Group as indicated by the minutes. To facilitate the feedback process, information and key issues were tabulated for clarity (see Appendix 5, Table 28). Handwritten comments and tracked changes by Working Group members were mostly incorporated. However, there is limited, if any information available to account for the incorporation of some comments, and the omission of others. For instance, in reference to module one, one member noted the Indigenous population is six times more likely to contract a chlamydial infection – yet, this was not reflected within the relevant PowerPoint file (see *Chlamydia trachomatis* PowerPoint slide in Appendix 5, Table 28). Similarly, one member noted that throat specimens are 'not currently recommended' as a chlamydia test specimen – though, there was no reference to throat specimens within the module (see *Testing: NAAT* PowerPoint slide in Appendix 5, Table 28). Further evidence of contributions from the Working Group can be sourced from the minutes.

Relevant Resources

According to the minutes, this item was primarily based on ALMs developed by the Northern Sydney Central Coast Health (NSCCH), the Sydney West Area Health Service (SWAHS), and the Sydney South West Area Health Service (SSWAHS).

However, the documents provided for this analysis do not offer further detail on how these ALMs guided the development of this item. Further material from the NSCCH and the SWAHS was available for consideration; however, material from the SSWAHS was not provided. The comparability between the GP Project ALM and the two ALMs that were available for consideration is evidenced in four key ways – namely:

1. *Objectives*

Common objectives pertain to:

- Patient engagement
- Documenting sexual history
- STI testing and management, particularly for priority populations

2. Structure

All three ALMs are comprised of three modules, all of which transpire for approximately two hours each. Common areas across the three ALMs include:

- STI testing and management – with particular focus on prevalent STIs
- Priority populations, as per the clinical guidelines (ACSHM, 2004)
- Contact tracing

Unlike the NSCCH ALM, the SWAHS and GP Project ALMs do not appear to address safer sex tools and the stigma often associated with STIs.

3. Content

The content of all three ALMs was largely guided by the RACGP QA&CPD guidelines. This might partly explain content similarity. For instance, all three ALMs included an overview of STI syndromes, treatment, testing and contact management.

Yet, there are some differences in their content. Unlike the SWAHS and GP Project ALMs, the NSCCH ALM addressed safer sex tools and the reduction of the stigma often experienced by sex workers, MSM, people with HIV/AIDS, and injecting drug users. It appears that reference to Indigenous sexual health and HIV/AIDS management in general practice was relatively more explicit in the NSCCH and SWAHS ALMs, respectively, relative to the GP Project ALM. However, relative to its counterparts, the GP Project ALM was guided by seemingly clearer learning objectives; it explicitly addressed priority populations; and its content on contact tracing was very clear and comprehensive.

4. Format

All three ALMs were comprised three two-hour modules and, reflecting adult learning principles, were delivered through a mix of interactive learning methods. Each module contained a formal presentation followed by interactive learning activities and discussion time. The three ALMs included explanatory case studies and role-plays to reinforce participant understanding of key concepts and their capacity to translate these into clinical practice. Although the NSCCH ALM case studies were not provided for review, case studies featured strongly in both the SWAHS and GP Project ALMs (see Appendix 5, Table 29). However, those in the latter appeared to be relatively more comprehensive and reflected realistic patient presentations – two exemplars are provided to demonstrate this (see Appendix 5, Table 30). Furthermore, the GP Project ALM seemed to have a format that was relatively more comprehensible – for example, unlike the SWAHS ALM, it offered interrelated modules that were clearly linked, enabling participants to readily recognise how their knowledge and skills were being developed. This in turn offers greater capacity to meet participant needs.

b. User-Friendliness

Following an analysis of the documents provided for review, there appears to be little, if any evidence that the user-friendliness of the ALM was tested with the target audience prior to initial use. However, as it was informed by three existing ALMs, which had been presented to the target audience on multiple occasions, one can infer that the user-friendliness of the GP Project ALM was enhanced. This is partly verified by the evaluation of the ALM in eight areas. Following each module, participants in these areas were invited to complete an evaluation *pro forma*, which includes items in relation to the perceived value of the module – for instance, 'The session was delivered in an interactive style that engaged the group' (*EVALUATION*

FORMS.docx). The minutes do not report any subsequent revisions to the modules – as such, one might conclude that participants largely deemed the modules favourably. This is verified in one of the GPNSW STI quarterly reports:

> ASHM has also had great feedback from the first ALM that has been run at Campbelltown, Mod 1 was delivered on 27th July and the feedback from the division and presenter was excellent. Mod 2 and 3 will be delivered on 14th August and I'm looking forward to seeing the evaluations. They had 20 GP's and 2 PN attend which is great (*Qrtly Report, 3rd Sep. 2010.doc*).

Although user-friendliness was not explicitly reported on, the following should be noted as strategies likely to optimise the perceived value of the ALM among the target audience:

1. ALM delivery was observed and refined accordingly
2. Subsequent opportunities to revise the ALM were planned
3. As an interactive resource, the ALM encompasses inherent opportunities for trainers to elicit, and be guided by participant feedback

Collectively, these factors enhance the certainty of user-friendliness among the target audience.

c. Endorsements

The development of the ALM was guided by the RACGP QI&CPD guidelines. Following this, it was approved by the RACGP and endorsed by ACRRM.

d. Promotion

The documents provided reveal a clear promotional plan for the ALM. It was anticipated that the ALM would be promoted within eight NSW Divisions of GP. According to the social marketing strategy, channels for promotion were to include the media, GPNSW, GP Divisions, the RACGP, ACRRM, ACHSHM and GPNSW. To enhance the perceived value of the ALM to potential participants, the plan also included seeking endorsement from the RACGP, ACRRM, ACHSHM, and GPNSW. An examination of the documents provided suggests that the ALM was promoted in partnership with ASHM via NSW Divisions of GP, AHS HARP units, and sexual health clinics . This is also documented in Working Group minutes. Working Group documents indicate that the ALM was also advertised via ThinkGP. The ALM was promoted directly to all GPs and in partnership with local health network via flyers. The promotional message and plan was well-developed, highlighting the scope of the ALM and the associated CPD points. However, the documents provided did not confirm the use of planned channels, like Divisions' Friday Fax-Out. It is therefore not possible to comment on the viability of the promotional plan for the ALM.

e. Delivery

Working Group documents revealed that six ALMs were held by 2010 and two were planned for 2011. The delivery plan included a variety of technical and operational supports and considered geographical coverage.

According to the documents reviewed, the ALM was designed to enhance interagency collaboration. More specifically, it aimed to encourage Divisions to work with their AHS, including local sexual health clinics and HARP units, to deliver the training to GP members. However, the extent and types of interagency collaboration facilitated by the ALM could not be sourced from the documents provided.

ASHM was largely responsible for delivering the ALM and supporting AHSs to implement the resource in collaboration with their local Division. The role of ASHM included:

1. Promotion of the ALM at the Division level
2. Bookings
3. Liaising with the Division
4. Providing the predisposing and reinforcing activities to the potential participants
5. Administration including the printing and delivery of relevant materials
6. Allocation of CPD points
7. Arranging a trainer – however, it is not clear which party was responsible for training the trainers

Host Divisions were responsible for:

1. Providing an appropriate venue equipped with audiovisual equipment
2. Catering
3. Promotion to potential participants
4. Nominating a Project Officer to assist with delivery and liaise with ASHM

Unlike its counterparts from the NSCCH and the SWAHS, the GP Project ALM had clear and practical guidelines for trainers – one could surmise that this would facilitate consistency when delivered. The guidelines describe the ALM modules; predisposing activities for trainers; learning styles, with particular reference to their advantages and disadvantages; adult learning principles; conducting role-plays; as well as the provision of feedback to participants.

6. Sexual Health Articles

There were no documents available for review pertaining to this item. As such, it is not possible to appraise: methodological rigour; the degree of user-friendliness; endorsements sought; the promotional efforts pursued; or delivery mechanisms.

7. Check: Sexually Transmissible Infections

a. Methodological Rigour

An analysis of documents pertaining to the Check booklet largely suggests methodological rigour. This was verified by the number of drafted iterations and the availability documented feedback. However, minutes from Working Group meetings did not verify the developmental process. Further detail is presented in following sections.

Research Evidence

The booklet was informed by information on evidence-based practice. This was indicated by reference to 14 reliable sources including clinical guidelines, manuals, and refereed academic publications. Furthermore, relevant sources were cited accordingly (see Appendix 5, Table 31).

Clinical Expertise

Evidence that clinical expertise informed the Check booklet was sourced solely from drafted versions and comments offered by Working Group members. Minutes from Working Group meetings did not report the use of clinical expertise during the development of this item.

Working Group members reviewed and commented on drafted versions of the Check booklet (see Appendix 5, Table 32). Suggested modifications were largely instructive and incorporated

accordingly. However, many suggestions were not incorporated – furthermore, these decisions were not accounted for (see Appendix 5, Table 33). For instance, one member commented, 'Condoms are highly protective for most STIs but syphilis can be transmitted despite 100% condom use' – yet, this was not reflected within the booklet (see Appendix 5, Table 34, row 1). Similarly, another member noted that the rectal swab used for chlamydia PCR testing should be saline-moistened – however, the Check booklet reads, 'Chlamydia PCR is performed on a dry swab taken blind from the rectum' (see Appendix 5, Table 34, row 2).

It is not possible to quantify the degree of feedback from the Working Group that was (or was not) incorporated – this is because some of the changes to this item during the course of its development do not appear to be informed by documented feedback. Additionally, there is limited, if any documented information to explain why these changes were made.

Relevant Resources

The documents available for review do not specifically indicate the use of the relevant resources to inform the development of the Check booklet. However, given this item is part of the RACGP Check program (RACGP, 2012) and was guided by protocol (RACGP, 2010), it might be assumed that the content was informed by reliable resources and the format, by existing Check standards; however, in the absence of documented evidence, it is not possible to determine this with any certainty.

b. User-Friendliness

The documents available for review do not specifically indicate whether or how the user-friendliness of the Check booklet was determined. However, given the Working Group is comprised of practicing primary care clinicians, it might be assumed that this process was implicit to the development of the item. Also, the presentation of the material was likely to have been prescribed by RACGP guidelines for Check booklets – however, in the absence of documented evidence, it is not possible to verify this.

c. Endorsements

As part of the RACGP Check program (RACGP, 2012), the Check booklet was thus endorsed by the RACGP.

d. Promotion

The documents available for review do not specifically indicate the ways in which the Check booklet was promoted. However, as part of the RACGP Check program (RACGP, 2012), it might be assumed that this was the primary responsibility of the RACGP – yet, there is no evidence to support this.

e. Delivery

The documents available for review do not specifically indicate the ways in which the Check booklet was delivered. However, as part of the RACGP Check program (RACGP, 2012), it might be assumed that the RACGP delivered this resource free to GP members as part of their membership package.

8. Practice Nurse Postcard

a. Methodological Rigour

An analysis of documents pertaining to the Practice Nurse Postcard suggests the level of rigour during its development was moderate. This was demonstrated by minutes from Working Group meetings; drafted versions of the item; and documented feedback received from Working Group members. Relevant findings are presented in the following sections.

Research Evidence

The Practice Nurse Postcard was largely based on a fact sheet sourced from NSW Health regarding the diagnosis and management of chlamydia (NSW Health, 2007), which is duly referenced within the Postcard (see Appendix 5, Table 35). This would suggest that Postcard content conveys credible information.

Clinical Expertise

The development of the Postcard involved several iterations (see Appendix 5, Table 36). This might be partly due to the request for feedback from at least some of the Working Group members who hold clinical expertise. However, because of the limited detail within the documents available for review, it is not possible to confirm:

1. The individuals who were invited to review the drafted versions
2. The feedback they provided
3. The rationale for changes that were made
4. The rationale for changes that were not made

This is particularly the case for the clinical section on chlamydia within the Postcard.

Relevant Resources

The documents available for review do not specifically indicate the use of the relevant resources to inform the development of the Practice Nurse Postcard. However, given similarity between the Postcard and an existing resource the Working Group was cognisant of – namely, the Health Assessment for Refugees & Other Humanitarian Entrants, the use of this resource might be inferred. For instance, both items enumerate relevant MBS item numbers (see Appendix 5, Table 37). However, how and why this resource informed the development of the Practice Nurse Postcard was not explicitly documented.

b. User-Friendliness

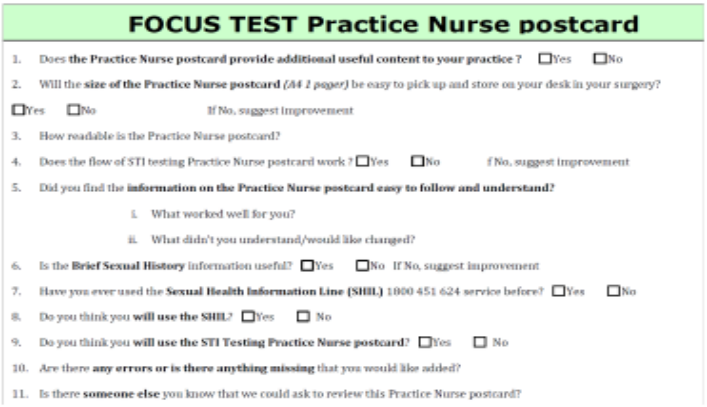
Determining the user-friendliness of the Postcard appeared to involve three phases. First, feedback on the first draft of the item was invited from (at least) two individuals. However, due to limited detail in the documents provided, it is not possible to ascertain why these individuals were selected, or whether they represented the target audience. Both individuals deemed the Postcard to be comprehensible – they 'love[d]… the design [and could]… see how this postcard will be a great reminder for [PNs]' (*Feedback FPA.htm*). This is particularly because 'The info… fits well with the 7C's' of communication (*filename removed for confidentiality*) – this suggests that, according to this individual, the Postcard was:

1. Clear
2. Concise
3. Concrete
4. Correct
5. Coherent
6. Complete
7. Courteous (Venable, 2011)

Second, the documents available for review suggest that focus testing was intended to gauge user-friendliness. This is indicated by a survey that includes items pertaining to utility, clarity, flow, and intelligibility (see Figure 14). There is limited evidence that focus testing was organised, or that survey results were analysed. Although (at least) five nurses were nominated to participate in focus testing – one of whom was a member of the Working Group, limited feedback is available from the focus group. However, according to an update of item development provided to HARP units, feedback received during focus testing was favourable:

> **Focus Test:**
>
> Bright colours
>
> A4-laminated card, clear easy to read font
>
> Important reminders for PN
>
> Information on MBS up to date and useful (*HARP HP Update.pdf*)

Yet, it is not possible to confirm these comments from the documents available for review.



FOCUS TEST Practice Nurse postcard

1. Does **the Practice Nurse postcard provide additional useful content to your practice ?** ☐Yes ☐No
2. Will the **size of the Practice Nurse postcard** *(A4 1 pager)* be easy to pick up and store on your desk in your surgery?

☐Yes ☐No If No, suggest improvement

3. How readable is the Practice Nurse postcard?
4. Does the flow of STI testing Practice Nurse postcard work ? ☐Yes ☐No if No, suggest improvement
5. Did you find the **information on the Practice Nurse postcard easy to follow and understand?**
   i. What worked well for you?
   ii. What didn't you understand/would like changed?
6. Is the **Brief Sexual History** information useful? ☐Yes ☐No If No, suggest improvement
7. Have you ever used the **Sexual Health Information Line (SHIL)** 1800 451 624 service before? ☐Yes ☐No
8. Do you think you **will use the SHIL?** ☐Yes ☐ No
9. Do you think you **will use the STI Testing Practice Nurse postcard?** ☐Yes ☐ No
10. Are there **any errors or is there anything missing** that you would like added?
11. Is there **someone else** you know that we could ask to review this Practice Nurse postcard?

Figure 14: Practice Nurse Postcard: Focus Test Questions (*Survey.doc*)

Third, the penultimate version of the Postcard was circulated for 'a final check over' (*filename removed for confidentiality*) to (at least) two individuals. Due to limited detail, it is not possible to ascertain why these individuals were selected, or whether they represented the target audience. Their feedback suggests that that no changes were required:

> Looks FANTASTIC – well done (*Feedback GPNSW.htm*).
>
> It looks Great, can't see any obvious mistakes (*filename removed for confidentiality*).

c. Endorsements

There is no evidence that formal endorsement from relevant bodies, like APNA, was sought. However, inclusion of both the GPNSW and FPNSW logos verify their support for this item.

d. Promotion

The promotional plan for this item included both *en masse* and targeted channels. The former involved the use of existing avenues to provide the target audience with a brief about the Postcard and contact details to place orders. These avenues included:

- HARP Health Promotion Update

- Australasian Sexual Health & HIV Nurses Association
- Distribution of 1,000 Postcards at an APNA conference
- NiGP newsletter
- Sexual and Reproductive Health Nursing Information Newsletter for Family Planning NSW
- Fax Out to members of the Outback Division

The latter three channels included the use of peer endorsement. A testimonial prepared by a NSW PN was incorporated, confirming the functional value of the Postcard:

> **Enclosed in this newsletter is the NEW Practice Nurse Pap Smear & Chlamydia Postcard** is a great new eye-catching resource designed specifically for practice nurses by NSW STI Programs Unit.
>
> 'Its handy size makes it easy for desktop placement & quick access. The Pap side has the nursing Pap smear and health check items explained in a quick easy to read format. As you know Chlamydia can be a silent, sexually transmitted disease which can lead to infertility if left untreated. Taking a sexual history can be an uncomfortable task for the patient & the nurse. The card not only helps prompt us to take a sexual history from our patients but also sets out the questions to ask. Following a set format helps us get the same information from each patient and can help overcome nerves of remembering which questions to ask. Chlamydia is easy to test and treat. The postcard also sets out the protocol for testing & treating Chlamydia. I think it's a winner.' Karen Booth – Practice Nurse – Leichhardt General Practice (*SARHNI 2008 12.pdf*).

Due to the limited information in the documents reviewed, it is not possible ascertain why a testimonial prepared by this clinician was chosen for inclusion.

Promotional activities were verified through contact with, and correspondence to (at least) 58 primary care clinicians (including GPs), practice managers, Division personnel, and personnel affiliated with relevant professional bodies, like APNA. However, it is unclear whether these individuals were contacted by NSW STIPU as part of a targeted campaign, or whether they responded to information they read – the latter would confirm the effectiveness of promotional efforts.

e. Delivery

The Postcard was planned for distribution via FPNSW and GPNSW; however, it is unclear whether this occurred. As noted in the preceding section, promotion of the Postcard included appropriate contact details for placing orders. This demonstrates the purposeful management of resources, including (but not limited to) the Postcards, postage, and staff time. Furthermore, staff absences were accommodated to help meet demand.

The effectiveness of these strategies to help meet demand might be inferred from postage numbers. The documents reviewed suggest that individuals were posted the number of Postcards requested; in some instances, individuals were issued with less or more than requested – consequently, although 1,125 Postcards were requested, 2,146 were issued – this represents an extra 1,021 items. This demonstrates the availability of adequate administrative support to distribute this item.

To expedite distribution – particularly in rural and remote areas, the Postcard was also available online. This was duly communicated in some of the promotional materials. However, the documents available for review do not stipulate:

1. Why the uniform resource locator (URL) was not included in all promotional materials
2. Number of visitors to the URL
3. Type of visitor

9. Online STI Practice Nurse Training

a. Methodological Rigour

The development of the Online STI Practice Nurse Training was moderately rigorous. This was suggested by drafted versions of course content and documented feedback. As indicated in the following sections, minutes from Working Group meetings included limited reference to the development of this item.

Research Evidence

The Online STI Practice Nurse Training appears to be informed by research evidence. This is suggested by reference to fifty reliable sources of information on evidence-based practice, including academic journal articles, authoritative guidelines and manuals, government reports, as well as websites maintained by government departments and professional bodies.

Despite reference to these sources, details pertaining to the development process are largely lacking. More specifically, the documents reviewed do not include descriptions of how or why these sources were used – similarly, there are no descriptions of sources that were considered, but not used. Furthermore, most of the fifty sources were referenced collectively at the end of each section and were not specifically cited within sections. For these reasons, it is not possible to verify the ways in which all of the aforesaid sources individually guided the development of the Online STI Practice Nurse Training. However, there are several examples to confirm their use in part – the most common reference being, the *HIV, viral hepatitis and sexually transmissible infections in Australia: Annual surveillance report* (National Centre in HIV Epidemiology and Clinical Research, 2010) (see Appendix 5, Table 38).

Clinical Expertise

The documents reviewed provide some evidence that clinical expertise shaped the development of the Online STI Practice Nurse Training. This evidence is solely sourced from the incorporation of feedback received from the Working Group on drafted material (see Appendix 5, Table 39). The various iterations of the item suggest the perceived value of the suggestions offered.

The documents available for review, including minutes from Working Group meetings, do not report on the developmental process. It is therefore not possible to reveal the rationale for decisions made. For example, some sections pertaining to chlamydia, syphilis, gonorrhoea and pelvic inflammatory disease (PID) were modified significantly from the third draft to the final version – however, explanations for this revision are not provided (see Appendix 5, Table 40). There is also limited, if any information to account for those suggestions that were not incorporated. For instance, in reference to the section on gonorrhoea notifications, one member of the Working Group suggested that a graph sourced from NSW Health be included – this suggestion was not adopted; instead, a graph sourced from the National Centre in HIV Epidemiology and Clinical Research (2007) was included without clarification for this decision (see Appendix 5, Table 41). Similarly, another member suggested that images be added to the section on chlamydia symptoms – this too was not adopted, nor is there reason for this decision.

Relevant Resources

The documents available for review do not specifically indicate the use of the relevant resources to inform the development of the Online STI Practice Nurse Training. As part of the APNA Online Training program (APNA, nd), it might be assumed that it was informed by existing programs – however, in the absence of documented evidence, it is not possible to determine which of these were most informative.

b. User-Friendliness

According to minutes from Working Group meetings, the Online STI Practice Nurse Training was pilot tested with PNs in two locations – namely, Orange and Armidale. The minutes report that this item was 'well' received by the seven participants in Orange:

> The first pilot of the Blood Borne Virus course for practice nurses was held on June 14, 2008. 7 practice nurses attended. The course evaluated well and a second pilot will be run in November in Armidale (*Minutes, 1st August 2008.doc*).

However, in the absence of further detail, it is not possible to:

- Determine why the two locations were selected
- Verify whether the participants were representative of NSW PNs
- Confirm the perceived user-friendliness of the item
- Identify suggestions offered by the participants
- Ascertain whether suggestions were incorporated accordingly

c. Endorsements

As part of the APNA Online Training program (APNA, nd), the Online STI Practice Nurse Training was thus endorsed by APNA.

d. Promotion

The documents reviewed verify that promotional strategies were considered, planned, and designed during the development of the Online STI Practice Nurse Training. Ideas were drafted and advertisements prepared (see Appendix 5, Table 42).

The key channel for the promotion of this item appeared to be the APNA website. However, there is limited, if any evidence to indicate whether this was the sole avenue considered to promote the item. Although an online advert was designed, there is no evidence to suggest it was used on additional websites. Furthermore, there is limited, if any evidence to verify why this avenue was the primary promotional channel.

The Online STI Practice Nurse Training was also promoted by ASHM. The organisation circulated flyers to Divisions requesting they be distributed to PN members, electronically and/or in paper form:

> Attached is the flyer (in both word and PDF format) ready for distribution for the upcoming 'Blood Borne Viruses and STIs workshop for Practice Nurses' to be held on Saturday 28 March. When speaking with you both in December 2008 I understand [name was removed for confidentiality] will be distributing the flyer to your large email list of practice nurses who you regularly distribute information to and if

> [name was removed for confidentiality] could distribute to all the other practice nurse coordinators in the surrounding divisions (Border Division, Southern GP Network, Murray Plains Division, Murrumbidgee Division) it would be greatly appreciated (*BBVs and STIs Workshop for Practice Nurses.htm*).

This approach appears to harness the use of interagency networks and optimise the efficient use of limited resources; it also offers opportunity for collaboration. However, these benefits cannot be verified by the documents reviewed.

e. Delivery

As part of the APNA Online Training program (APNA, nd), the Online STI Practice Nurse Training was delivered by APNA in an online environment.

Table 4: Process Evaluation Findings

GP Project Item	Process					Promotion	Delivery	
	Rigor of methodological development			User-Friendliness	Endorsement	Modes	Modes	Technical Assistance
	Research Evidence	Clinical Expertise	Relevant Resources					
1. STI Testing Tool	HLE	HLE	HLE	HLE	HLE	HLE	MLE	HLE
2. STI Resources for General Practice	NE	NE	NE	NE	NE	NE	NE	NE
3. Drivetime Radio Medical CD for STI	MLE	HLE	MLE	LLE	HLE	MLE	MLE	LLE
4. Online STI Testing Tool GP Training	HLE	HLE	LLE	LLE	MLE	HLE	HLE	NE
5. ALM	HLE	HLE	HLE	HLE	HLE	HLE	HLE	HLE
6. Sexual Health Articles	NE	NE	NE	NE	NE	NE	NE	NE
7. Check: Sexually Transmissible Infections	HLE	HLE	HLE	LLE	HLE	LLE	LLE	LLE
8. Practice Nurse Postcard	MLE	MLE	MLE	HLE	MLE	HLE	HLE	MLE
9. Online STI Practice Nurse Training	MLE	MLE	LLE	HLE	HLE	HLE	MLE	LLE

Legend:

HLE:	High-level evidence:	Substantial evidence available
MLE:	Medium-level evidence:	Satisfactory evidence available
LLE:	Low-level evidence:	Limited evidence available
NE:	No evidence:	No evidence available

Focus Group

Research Participants

Nine members of the Working Group were consulted. These included four staff members of NSW STIPU, four GP representatives – one of whom also represented the RACGP, and an Area Manager of HIV & Related Programs. The duration of their involvement in the GP Project differed – while some were involved from its inception in 2008, others had become involved only 12 months before the time of data collection. Although the roles assumed by these individuals were articulated and formalised by terms of reference (see Appendix 6), they each brought different areas of expertise and professional networks to the Working Group, as will be discussed in the following section.

Findings

Consultation with nine members of the Working Group helped to elucidate the process by which the GP Project was developed and the rationale for some of the decisions made during this process. Furthermore, it helped to identify key lessons to inform future initiatives. These are discussed in the following sections and verified by de-identified key excerpts.

Identification of Need

According to the participants, the impetus for the GP Project largely came from three key sources – namely, evidence borne from research, government policy, and professional experience. Participants were acutely aware of epidemiological data that reveal an increasing prevalence of STIs (CDCP, 2010; DHA, 2009; HPA, 2010; PHAC, 2010) – they were also aware that the provision of sexual healthcare is limited, particularly within primary care (Britt, Miller, Charles, Henderson, Bayram, Pan, et al., 2010; Britt, Miller, Charles, Henderson, Bayram, Valenti, et al., 2010; Burd, Nevadunsky, & Bachmann, 2006; Skelton & Mathews, 2001).

Participants were equally aware that primary care clinicians are being called to alleviate the strain on public health services – this includes sexual health clinics (DHA, 2010a). As stated in a NSW state government sexual health strategy, 'The size of some priority population groups is such that a strategic objective for specialist clinics and Area-based sexual health programs must be to work with general practice to reduce barriers to access' (NSW Health, 2006, p. 2). Government policy noted a need to enhance the capacity of GPs and PNs to promote sexual health, particularly among patients who are not part of the priority populations.

The need for the GP Project, as revealed by both research-evidence and government policy, was reinforced by professional experience. Participants described anecdotes that confirmed the growing need for sexual healthcare, which was juxtaposed by limited the knowledge and skills among primary care clinicians.

This was largely attributed to personal factors – like poor clinician interest in sexual healthcare, as well as systemic factors – like the dearth of GP training in this area.

Information Sources

The GP Project was largely shaped by information garnered from three key sources – namely, clinical practice guidelines, additional research-evidence, as well as relevant or comparable resources. To ensure the GP Project reflected current clinical evidence, the Working Group considered 'the only available guidelines we had at the time' – that is, the *Clinical guidelines for the management of sexually transmissible infections among priority populations* (ACSHM, 2004). To optimise their ease of use, key information was identified and collated:

> The guidelines for priority populations testing… were 84 pages… I pulled together the information out of the priority population guidelines.

Research-evidence was considered to help determine what constituted key information. For instance, although the Working Group was cognisant of the increasing prevalence of chlamydia, research-evidence suggested that other STIs also required their attention:

> The data was showing us that in fact gonorrhoea also needed to be tested.

According to the participants, the Working Group considered ways to optimise the efficient use of limited resources, including time. Aware that 'there was no point in reinventing… the wheel', efforts were also guided by relevant or comparable resources. This was aptly demonstrated in the development of the ALM, which was largely based on three existing ALMs developed by the NSCCH, the SWAHS, and the SSWAHS.

Group members received positive advice about these ALMs from those involved with their development and delivery; this was complemented by their own observations. Group members observed the facilitation of a module to better understand the ways in which GP-participants engaged with the material that was presented and discussed. This increased Working Group confidence in the capacity of the ALMs to promote sexual healthcare among primary care clinicians.

Content

The content of the GP Project items was chiefly guided by the key message championed by the GP Project – namely, the need to deliver sexual healthcare within general practice. This helped to ensure consistency within the suite of seemingly different items.

At times, determining item content was a complicated process. This was for two main reasons. First, there was a wealth of relevant clinical information to convey to primary care clinicians:

> The priority populations… whether to put them all in was the question.

Second, although the target audience had been identified, GPs do not represent a homogenous cohort. They include clinicians who are relatively *au fait* with evidence-based sexual healthcare, as well as those that are relatively less informed:

> There were clinical differences… For certain GPs or sexual health physicians… [we discussed] whether or not we consider vaccination, are we right that we should vaccinate for hepatitis or not, and do we test for everything? What tests do we actually use, what tests do we want on the tool?

It was therefore considered important to maintain focus on the overarching aim of the project. This helped to recognise typical clinical practices among GPs, and attend to their shared needs:

> I think the philosophy has always been STIs isn't a big hitting item for most people. We need to keep it short and we really tailored [to]… the central information people need to know, because previously things have been way too extensive – how to take a full sexual history and respond to all their sort of different behaviours… We really drilled down… The key point is… about testing. Get them to the testing issue quickly.

In their attempts to articulate and promulgate the key message, the Working Group was chiefly guided by two factors – namely, the drivers known to influence clinician behaviour as well as related resources. The participants indicated that the Working Group was cognisant of factors that influence clinician capacity to deliver sexual healthcare, like remuneration. The items were therefore devised to entice clinicians accordingly:

> With the nurses' tool – for the development of that, we were aware that the nurses gained more money for doing different things at different times for different people, so we used that as part of the strategy to develop the postcard.

Item content was also guided by related resources. In addition to the aforesaid ALMs, these included a postcard tailored to clinical needs of people from culturally and linguistically diverse backgrounds (CALD), as well as existing online training modules:

> There was a postcard for the multicultural community; testing in refugees had been released. Quite a succinct sort of tool and we based our design on that.

Although the Working Group was driven by a key message and guided by existing resources, the participants suggested that content development was an elaborate and, at times, a vexed process. It required *bona fide* consultation with relevant stakeholders as well as flexibility. For instance, despite the expertise of the Working Group, the GP Project required additional support to ensure the content of its items was suitable, unassailable, and culturally-appropriate:

> The STI tool, we worked with the Working Group only. When we did the training for the STI Tool and the online training for that tool, we approached NGOs [non-government organisations] that work with those target groups to ensure that the case studies… were appropriate… realistic and… accurate.

This suggests two key findings. First, it is important to identify relevant stakeholders; second (and perhaps of equal importance), it is important to identify when and how their expertise is solicited. This was cogently demonstrated when developing the STI Testing Tool. In accordance with the national strategy for Indigenous Australians (DHA, 2010b), the Working Group endeavoured to include clinical advice for GPs when supporting Indigenous patients – however, this process proved to be culturally-sensitive and required diplomacy and discretion:

> We actually had to meet with the AH&MRC to discuss how we were going to highlight the fact that Aboriginal young people needed to be tested… There were some very intense discussions about what they should and shouldn't be tested for.

Content development also required flexibility. According to the participants, it was an iterative, nonlinear process, whereby the cross-pollination of suggestions would yield different ideas. In accordance with group work theory (Groesbeck & Van Aken, 2001; Tuckman & Jensen, 1977), a concerted approach can give rise to collaborative advantage (Hansen & Nohria, 2004), and thus enhance the potential value of outputs:

> The individuals around the table representing different groups and having varied experiences probably prompted… the strategies and the ideas came forth.

However, joint work can also stymie progress. This may partly explain why the Working Group altered its developmental activities, which occurred between (rather than within) meetings:

> It was developed further within committee meetings. Every time we met, a new version came back. At that time we didn't do a lot of out-of-meeting work; we do a lot more of that now.

Furthermore, item development was viewed as an evolving process, rather than a static exercise. Although the Working Group was guided by a strategy and a timeframe, participants recognised the 'dynamic' nature of the GP Project and the importance of continued opportunities for reflective practice:

> For me, something like the STI Testing Tool as resource is an ongoing resource and I'm not sure if we realised it at the time, but the effects of that will be ongoing as opposed to just a particular project, just as the ALM and other things will be… It's the ongoing nature of it… that has the huge potential for it to become, eventually, as it trickles into GP-land, a tool that is used for education and is used… It starts to actually drip-feed as *the* resource that's going to be used to help inform testing within general practice.

Item content was therefore open to revision to optimise impact and ensure the key message was communicated consistently across the different items:

> We've just changed a little bit of the wording on the back… because the contact tracing tool has just gone out as well, to keep it in line with that. It's just one sentence, but it's actually the same wording.

Regular content revision also helped to ensure the GP Project reflected current government direction. For instance, despite plans to review the Practice Nurse Postcard, 'the Commonwealth government is ceasing [the associated Practice Nurse] Medicare numbers at the beginning of next year'.

Presentation and Delivery

According to the participants, the presentation and delivery of the items were purposely crafted to optimise and sustain impact. This was achieved by: (1) addressing some of the common drivers known to influence clinician behaviour; (2) addressing some of the idiosyncratic drivers within particular GP cohorts; and (3) drawing on existing resources. Each is addressed in turn.

According to the participants, GPs share a few common interests – notably, time management and professional development. Given the time-pressure associated with general practice (Sánchez López, Madrigal de Torres, Sánchez Sánchez, Puche, & Ontoso, 2010), the items were devised to facilitate just-in-time healthcare (Chueh & Barnett, 1997; McGowan, Hogg, Campbell, & Rowan, 2008; Winch & Henderson, 2009) – that is, to provide key information in a timely manner. As Davenport and Glaser (2002) have concluded, 'The key to success, we've found, is to bake specialized knowledge into the jobs of highly skilled workers – to make the knowledge so readily accessible that it can't be avoided' (p. 108). As such, the items were developed to be readily accessible to clinicians – both tangibly and cognitively. For instance, the GP Project includes online items that do not require storage and retrieval. Furthermore, according to the participants, the Working Group endeavoured to ensure that items were presented in a rational and commonsensical manner:

> There was a definite push and an agreement amongst the Group that whatever resource we developed needed to be both online and on paper to meet the general practice population and their wishes, and also to be succinct, logical, and easy to follow – [a] tool that one could refer to when presented with a patient. As you know, in general practice, we get patients of all sorts, but what would prompt us… and give us information very quickly and very succinctly… The STI Tool… enables you to have a quick glance [and] work out what you were going to order for what patient.

According to the participants, GPs also share an interest in professional development – particularly CPD points. Professional requirements compel GPs to 'maintain and improve the quality of care they provide to patients, and promote care to the community of the highest possible standard' (RACGP, 2010, p. 4). As such, the Working Group endeavoured to entice GP interest through use of the RACGP and ACRRM QI&CPD programs. Furthermore, given the

wealth of training opportunities with CPD points, their absence within the GP Project would have limited its impact:

> There's so much out there for GPs with points on it, you wouldn't do it without endorsement of the points.

The Working Group was also acutely aware of the diversity within the target audience. Participants noted variation in geographical location, career stages, preferred learning styles, as well as interest (or lack thereof) in sexual healthcare:

> You have three groups of GPs – those who want to get involved in sexual health, those who are a bit scared of it, and those who don't want anything at all to do with it.

The GP Project endeavoured to reflect this diversity. For this reason, the items are multimodal and tailored to particular GP cohorts:

> Advice from the committee… was that doctors learn in different ways. They want experiential learning, they want a piece of paper, they want a hard copy tool, or they want an online training, to do in the car, or while they're home on the computer. So we tried to appeal to all of those.
>
> I actually get the Drivetime CDs because in rural practice you often have lots of long distances to travel. So you can stick it in there and you can learn as you're driving.
>
> We needed to target different GP groups and different levels of GPs in different ways, because different GPs don't access all their learning in one avenue, so to only have one type of approach wouldn't meet a large number of general practitioners, so it was more like flooding the market… The Check one was specifically aimed really at the GP registrars, because it's a training tool that is used for study to lead up to the RACGP exams. I mean, it's used by general practitioners that are out as well, but that was the target for that.

To optimise the efficient use of limited resources and foster interagency partnerships, the Working Group drew on its network of organisations within the wider health sector. This was aptly demonstrated in the development of the ALM. The Working Group strategically designed self-contained, explanatory modules that could be delivered by other agencies without prerequisite training or exorbitant resources. This increased the likelihood of implementation and potential impact:

> The ALM… arose… as part of the discussion of the Group… If we could develop something that could easily be up taken by Divisions and by other groups that were giving information that was up to date… using adult learning principles and in a succinct and appropriate way, that the module could be picked up by anybody to increase people's sexual health awareness. So I think there was a purposeful intent behind developing the ALM around education.
>
> What the ALM has done is brought into play the sector, the health promotion sector and the HARP program sector to work with the Divisions, so… [that's a] key resource… in terms of linking and increasing our message getting out there, because it's been up to them… to deliver it. I mean, we did fund the first round of eight, but it's been up to them to deliver it… They take it away and they have to contact the Director and they have to contact the Division… So in a sense, they're delivering our message for us… in their own terms.

Translation into Practice

Translation of learning from the GP Project into practice was paramount to the Working Group. Participants spoke of maintaining a focus on making evidence-based sexual healthcare palatable, and therefore functional. The importance of translation was demonstrated in two primary ways – namely, the array of different items that form the GP Project, and the ways in which the items were assessed for functionality.

Cognisant of adult learning principles, the Working Group endeavoured to accommodate the different learning styles likely to be represented within the target audience. As such, the key message was communicated via a multimodal approach that encompassed didactic presentations, interactive discussion, and reflective practice. This helped to ensure the GP Project had the capacity to meet the varied educational needs of the target audience. In particular, the ALM was devised to promote translation of the learning into practice:

> The ALM… [is] a good example of how people actually have to actively engage with the resources that have been produced. It makes it real, because all the others are very individual. Get a tool delivered to me, I can read something in the news magazine, or I can do an individual online training thing, but it's not practice focused, it's theoretical. It's the reading and the looking and the reading and answering some questions. But in the ALM, there's a bit more of the, 'doing the next step'. 'How would this be like for you? What are your challenges?' And to verbalise it in front of your colleagues… and I think that helps consolidate the real life situation, or make it closer in terms of behaviour change anyway.

As this excerpt suggests, the Working Party was equally cognisant of the factors that help and hinder evidence-based sexual healthcare. Participants indicated the importance of devising resources that fit into the complexity of general practice. It was important to focus on the key message, convey it in a manner that was succinct and clinically relevant, and continually reinforce the key message.

To optimise translation into practice, the Working Group also tested some of the items with the target audience. For instance, the potential value of the ALM was determined by observing GP responses to, and engagement with similar modules. Similarly, clinician views were canvassed on the utility of the STI Testing Tool.

However, participants were mindful of the potential for bias in this process. They conceded that individuals who agreed to comment on the items were likely to be relatively knowledgeable in sexual healthcare. Although these individuals may be 'thinking about others as well because they know that it's not just for them', the value of the feedback received may be limited.

Although participants described how translation into practice was optimised for some items – principally, the STI Testing Tool, the ALM, and the Practice Nurse Postcard – there was little, if any discussion of others. These include the STI Resources for General Practice; the Drivetime Radio Medical CD for STI; the Online STI Testing Tool GP Training; the sexual health articles; the Check booklet; and the Online STI Practice Nurse Training. This might partly be because some of these items were developed by or through other organisations. For instance, the Check booklet adheres to the accepted practices of the RACGP – similarly, the sexual health articles align the styles of the Australian Doctor and the Medical Observer. However, this rationale cannot be confirmed by the focus group discussion.

Promotion

Through a discussion on the promotion of the GP Project, the participants revealed three key strategies that were used to raise clinician awareness of the items – these include mass marketing, targeted marketing, and ambassador marketing (Canali De Rossi, 2009; Evans, 2006). As will be revealed, most promotional efforts were focused on the STI Testing Tool and the ALM. The limited discussion on the remaining seven items might partly be attributed to the involvement of other organisations that were responsible for their development, delivery, and/or distribution, as was the case for the Check booklet and the two online training items.

Mass marketing was demonstrated by efforts that aimed to optimise distribution to the population of the target audience – namely, all GPs and PNs within NSW. For example, when possible, items were made available online and cross-referenced for cross-promotional purposes:

> Having [the STI Testing Tool]… online, the website attached to other tools that have been used, like the ALM or the information that was in the Medical Observer and the Australian Doctor was also useful – so it was about saturating.

Further to these, the STI Testing Tool was 'actively sent out to every GP in New South Wales, as traumatic as that was'. As the excerpt suggests, some of these mass marketing strategies were arduous and costly – furthermore, according to the participants, the approach had limited impact. This might partly explain the complementary use of other strategies, like targeted marketing:

> That's probably the one thing I wouldn't do again, sheerly for the cost. It's quite a high cost. And because the resources themselves are costly per item, once you get postage and packing and all of that on top, it becomes quite an expensive tool for someone to throw in the bin. So, that more targeted approach does work.

Targeted marketing was demonstrated by the purposeful selection of promotional strategies. Given the inefficiencies associated with mass marketing, the Working Group used narrower, yet concentrated channels to publicise some of the items; these included professional bodies that support primary care clinicians – like Divisions of General Practice – as well as relevant conferences:

> For things like the Practise Nurse tool… learning our lesson from the STI Tool, we utilised more nurse-centred groups, so talking [with]… GPNSW, using them and their Nursing in General Practise newsletter and those sorts of things. Utilising the Australian Practice Nurses Association – New South Wales nurses that had registered with them… so it's a bit more targeted… As the resources have gone on, they've been more targeted in their approach.
>
> We actually handed out a lot more of these [STI Testing Tools] at the AGPN conference and sexual health conferences and nursing conferences… That seems to be more targeted because you can have a discussion with them. And ASHM take our tools to GP trainings and those sorts of things as well, so it's very targeted.

As the excerpts suggest, targeted marketing can be beneficial for two main reasons. First, it can help to optimise the efficient use of limited resources – including (but not limited to) funds and staff time; second, it affords opportunities to personally engage with the target audience.

Participants also noted the benefit of ambassador marketing – that is, the use of credible agents (be they individuals or organisations) to endorse the items. For instance, the CEO of GPNSW

would 'send things around through our division or to some of our GPs' – such demonstrated support was thought to raise the profile of the GP Project. Similarly, participants asserted the value of College endorsement. The key message is stated in, and therefore reinforced by the *Guidelines for preventive activities in general practice*, otherwise known as the Red Book (RACGP, 2009). Although unrelated to Project activities, this endorsement proved to be 'powerful' for three prime reasons – first, the College represents 'Australia's largest professional general practice organisation' (RACGP, 2011, para. 1); second, its coverage is national; and third, the College has assumed part-responsibility for promulgating and continually reinforcing the key message:

> It made it into the RACGP Red Book… It's now their job to continue that information… It also references the STI Testing Tool in that book and… from a teaching point of view and an ongoing education of general practitioners who are linked with the RACGP, that being extremely useful as big bang-for-buck.

Participants identified ways that well-timed promotional efforts can be devised. To maximise impact, they recognised the synergy created when promotional efforts were dovetailed with other relevant activities. Linking the GP Project with other pertinent health promotion initiatives was considered to fortify and sustain the key message that NSW STIPU aimed to promote:

> The postcard… came at the time when there was a postcard for the multicultural community. Testing in refugees had been released.
>
> There's still this thing about it actually coming at a time when… other training is being provided so that they've got a link and an understanding about how that tool is to be used… That's the trick.

Given the demands of general practice, participants recognised the need to continually promote the GP Project and the items therein. This would help to ensure the target audience had timely access to the key message, and thus facilitate just-in-time healthcare (Chueh & Barnett, 1997; McGowan, et al., 2008; Winch & Henderson, 2009):

> Doctors are members of the community too and they want the information when they need to know it and that's not always when you send it to them. It's when they need to know that, that they go, 'Oh, there was a tool? Where can I get that?' And it's like, the light-bulb moment – 'I heard something at something, or someone told me something' and then you make a connection and then you get the tool, and then it sort of becomes more embedded in your practice.

Despite the use of mass marketing, targeted marketing, and ambassador marketing, participants recognised scope for improvement. They were cognisant that not all NSW GPs and PNs were aware of the items, let alone used them:

> We get feedback anecdotal every time we go do a specific training or involved in a training [*sic*] on STIs and we take the tool along, and half the GPs say they've never seen it before.

According to the participants, addressing this naiveté requires an approach that is multifaceted, continuous, and tailored:

> It actually is different for every tool when I look across the table. We've had to use different strategies for every tool and we've learned along the way.

Methodological Rigour

Reflecting on the development of the nine items, participants deemed the process to be methodologically rigorous. They indicated that this was collectively verified by Group efforts to identify need; source credible information; determine item content; ascertain appropriate presentation and delivery modes; verify usefulness to the target audience; and deliberate on effective and efficient promotional strategies:

> I suppose content and accuracy of information, I think that there's enough skill within the network and the focus testing and the groups that that's going to be fine; we don't really have a problem with that.

According to the participants, unassailable evidence of methodological rigour is endorsement from authoritative professional bodies:

> We understood that getting endorsement by the RACGP and ACCRM was going to be very useful once again about having the document have clout.

Despite the apparent rigour of the developmental process, participants identified two shortfalls – namely, the representation of the AH&MRC and ACCRM. The former promotes Indigenous health and champions the needs and interests of Aboriginal Community Controlled Health Services (ACCHS), while the latter advocates the 'unique scope and depth of clinical skills, knowledge and values that are required by practitioners working in rural and remote contexts' (ACRRM, 2012, para. 2). Participants spoke of repeated attempts to secure the involvement of both organisations, but to no avail:

> I'm sure there's a whole lot of groups that form with great ideas about how they will help general practice do whatever their baby is and ACCRM and RACGP need to look at… whether it's a useful investment of their time. I think what the group has been able to achieve is probably beyond what even the group would have expected.

As suggested by the aforesaid excerpt, the absence of these two organisations was not considered to significantly detract from the value of the GP Project. This might partly be because at least one member of the Working Group was a member of ACRRM and others were from rural backgrounds:

> Because I have an ACCRM-hat, although invited as a GP, I give feedback to ACCRM now.

However, to ensure the due representation of the Indigenous community, participants recommended that alternative options be considered in the future. These include the involvement of the Australian Indigenous Doctors' Association and/or an Indigenous GP from an ACCHS.

Participants were satisfied with the methodological rigour of the GP Project. Its items were largely deemed to be evidence-based; accessible to the target audience – both physically and cognitively; sufficiently resourced; and well promoted. As such, participants indicated, 'We wouldn't change what we did'.

Lessons

Despite few concerns with the development of the GP Project, participants revealed several lessons to inform future initiatives. Although not within the immediate scope of the focus group, they are itemised and discussed given their potential value:

1. *Focus*

Collectively, it appears that the achievements of the GP Project were largely attributed to the ability to maintain clear focus on its overarching aim. Explicit recognition of, and continued reflection on the key message, as well as the audience for this message, helped to ensure the items developed by the Working Group were appropriate, feasible, and consistent:

> This Working Group isn't trying to influence the behaviour of consumers of healthcare… The *operators* of healthcare is what we're trying to influence… We wouldn't be targeting… priority populations, because *our* population is GPs.

2. Representation

According to the participants, another key ingredient was 'appropriate representation' within the Working Group. The well-considered, purposeful selection of particular organisations and individuals signified a sound investment. The selection process appeared to be guided by both professional and personal qualities, including (but not limited to):

- Perceived expertise and/or experience in primary care and/or sexual health

> Having access to clinical [information]... there wasn't any sort of time delay and waiting for check-ups of information and those sorts of things, or for something that might have happened in GP-land that I wasn't sure about, just any sort of delay on getting that information.
>
> [She] was uniquely-placed in that her background was general practice and then moving into sexual health.

- Professional affiliation, with particular reference to organisational influence
- Professional networks

> One of the things that made it a successful project was the way [they]... got people around the table that represented general practice or those that were engaging with general practise around sexual health.

- Capacity to actively contribute to the GP Project

> We called it Working Groups for a reason. We wanted people to do the work rather than an Advisory Group, and I think that that's what works... If we send out an email for responses we get responses. So it's – you can't sit around and do nothing, you have to move forward with your action, and I guess it's a credit to the Group that people do actually take the time to respond thoughtfully or seek the information if they don't have it, so it makes the work move along.
>
> People would respond so quickly in very precious workspace, and I think prioritising and having that willingness is really the key.

- Passion and commitment to sexual healthcare

> Often you work in a committee and you see no bloody outcome for like years... You're a maniac. You don't stop!
>
> I think the group had a fair decent number of enthusiastic and passionate people, and that's actually probably what made the difference... I've never seen a group have such outcome in a short space of time.

- Demographic information to ensure a gender and a geographical balance

> We actually added people. I was really insistent on trying to get a male GP because we had a lot of female GPs that we knew were interested originally, and we got [him] on and I think he had a quality to add that was different and unique... It's hard to quantify that input.

Participants revealed that this selection process occurred well before the official inception of the GP Project. As the key government body in the sexual health sector, NSW STIPU strategically considered the composition of all the Working Groups established for its array of initiatives. This helped to manage limited resources – including time, and thus, manage interagency collaborations. According to participants, this bolstered the organisation's capacity to attain project aims and objectives:

> [She] was here at the beginning with [him] and we sat across with all the Working Groups... in the unit to look at... representation, discipline levels, who might be able to contribute to work within the projects, ranging from health promotion to clinicians to GPs... and we had to be conscious of people's time and what they could contribute and the levels of skill and knowledge... You could say that some serendipity in the way that the personalities got together is fine, but I suppose it was also a bit measured as well... [We considered] people who'd shown interest in the topic or skill around general practice... There was fertile ground.

As the GP Project Working Group evolved, NSW STIPU regularly reviewed Group composition to ensure 'all the right players at the table':

> You kept re-evaluating whether we had the correct make-up in the Group and who to add.

Given the time and effort contributed by Group members, it was important for personnel of NSW STIPU to manage these relationships, professionally and courteously. This was demonstrated by the way the suggestions and comments offered by Group members were welcomed and accommodated. The reciprocity between NSW STIPU and its partners fostered a healthy group dynamic and an environment conducive to *bona fide* (rather than token) consultation:

> There's also a respect you need to show for people who are on the Working Group and if you show it and consult with all of them respectfully and actually integrate actively and centre integrating that information into what you're doing, I think that feeds on itself as well. The members can then see that their contribution is actively taken up and it's run with, and I think that just sort of keeps the ball rolling very nicely.

3. *Leadership*

Participants suggested that strong leadership was an important element in the GP Project. It was revealed both officially and unofficially. The former included the appointment of the GPNSW CEO as the Chair of the Working Group – this was an explicit demonstration of organisational support for the GP Project and its role in primary care:

> We've had GPNSW as our Chair for the whole time the committee's been established and I think that's been really important.

The latter was demonstrated within the Group. Personnel of NSW STIPU propelled Group efforts and helped to maintain momentum:

> Having [her] as a centre-pin to push us and drive discussions and also coordinate any tweaking that was required.

4. *Reflective Practice*

Participants spoke of a reflective approach to the development of the GP Project. This was demonstrated in three interrelated ways. First, the items were not developed *en masse*, but rather, using an iterative approach. This opened opportunities for experimentation and learning, which informed the shape of remaining items:

> We do actually learn from the things we've done before.

> Having an idea from within the group about what might work, but not being frightened to approach groups such as the RACGP and say, 'We've got this great idea' and try and sell them the idea. It does actually work.

Second, the items were regularly reviewed and refined. This helped to ensure the GP Project remained evidence-based and user-friendly:

> Being web-based... there can be tweaking of it... if strategies change or guidelines change.

Third, participants spoke of the items as interconnected parts, rather than as discrete entities. Their description of the nine items and the way they were developed reflected an iterative process through which structure was created by regular discussion (Redmond, 2004; Schön, 1991; Wilkinson, 1996). It was therefore difficult for some participants to refer to items in isolation, as the whole was deemed to greater than the sum of its parts:

> I think that it's really hard to say which one worked better than others because they're all multilayered and intersected.

Impact Evaluation

Surveys: Division Personnel

This section presents findings from an online survey of personnel from NSW Divisions of General Practice who were responsible for promoting the GP Project. The purpose of the survey was to determine the degree of awareness of these items among respondents; promotional efforts by the Division; perceived importance of the items; and perceived capacity to promote sexual healthcare. Analysis of survey responses includes descriptive statistics of responses to closed-items, and thematic analysis of open-items. All frequencies are calculated based on valid responses, unless otherwise stated.

Respondents

Univariate analyses of the data on socio-demographic characteristics indicated that respondents were affiliated with 26 (of 33) Divisions (see Table 5). Most respondents were female (81.8%), and half of the respondents had held their position for up to five years (50.0%). Over one-third of the respondents held a managerial position within their Division (38.5%).

Table 5: Division Respondents' Socio-Demographic Characteristics (*n*=26)

Characteristics	Frequency	%
Sex		
Male	4	18.2
Female	18	81.8
Current Position		
Manager	10	38.5
Project / Program Officer	5	19.3
Education Officer	3	11.5
Executive Officer	3	11.5
Practice Support	3	11.5
Program Coordinator	2	7.7
Tenure		
1-5 yrs	13	50.0
6-10 yrs	10	38.5
> 10 yrs	3	11.5

Key Findings

1. STI Testing Tool

a. Use

A vast majority of respondents were aware of this item (84.6%) (see Table 6). The largest proportions became aware of the item via GPNSW (57.7%) and/or NSW STIPU (30.8%). Most respondents indicated that their Division promoted this item (95.5%), the largest proportions of whom reported the use of articles in Division publications (57.7%), email (42.3%), and/or mail distributed to members (34.6%).

b. Impact

A great majority of respondents agreed or strongly agreed that the information received helped them to:

- Understand the importance of this item (100.0%)
- Promote it (100.0%)
- Field queries (61.9%)

c. Open-Ended Responses

Respondents indicated that the promotion of this item could be improved by:

- Preparing desktop flipcharts
- Incorporating the item into clinical software programs

- Promoting the item during CPD events
- Ensuring online availability
- Regularly updating the content of the item

Respondents also indicated that the delivery of the tool could be improved by employing a designated Project Officer and circulating systematic reminders in newsletters received by the target audience.

Table 6: STI Testing Tool

Awareness and Use	Frequency	%	Impact	Frequency	%
Aware of item			**Understood significance of item**		
Yes	22	84.6	Strongly agree / Agree	21	100.0
No	4	15.4	**Understood promotional methods**		
Source of information re item			Strongly agree / Agree	21	100.0
GP Division	3	11.5	**Able to field queries**		
STIPU	8	30.8	Strongly agree / Agree	13	61.9
GPNSW	15	57.7	Neutral	8	38.1
APNA	2	7.7			
Colleague	2	7.7			
Website	1	3.8			
Division promotion					
No	1	4.5			
Yes	21	95.5			
Fax out	4	15.4			
Mail out	9	34.6			
Email	11	42.3			
Article	15	57.7			
Workshop	6	23.1			

2. Online STI Testing Tool GP Training

a. Use

Most respondents were aware of this item (65.2%) (see Table 7). The largest proportions became aware of the item via GPNSW (46.2%) and/or NSW STIPU (19.2%). Most respondents indicated that their Division promoted this item (68.2%), the largest proportions of whom reported the use of email (30.8%) and/or articles in Division publications (34.6%).

b. Impact

Most respondents agreed or strongly agreed that the information received helped them to:

- Understand the importance of this item (60.0%)
- Promote it (71.4%)
- Field queries (60.0%)

c. Open-Ended Responses

Respondents indicated that the promotion of this item could be improved through regular inclusion in Division newsletters and by employing a designated Project Officer within the Division.

Table 7: Online STI Testing Tool GP Training

Awareness and Use	Frequency	%	Impact	Frequency	%
Aware of item			**Understood significance of item**		
Yes	15	65.2	Strongly agree / Agree	11	60.0
No	8	34.8	Neutral	3	20.0
Source of information re			**Understood promotional**		

Awareness and Use	Frequency	%	Impact	Frequency	%
item			**methods**		
GP Division	3	11.5	Strongly agree / Agree	10	71.4
STIPU	5	19.2	Neutral	4	28.6
GPNSW	12	46.2	**Able to field queries**		
APNA	1	3.8	Strongly agree / Agree	9	60.0
Colleague	1	3.8	Neutral	6	40.0
Website	3	11.5			
Division promotion					
No	7	31.8			
Yes	15	68.2			
Fax out	2	7.7			
Mail out	2	7.7			
Email	8	30.8			
Article	9	34.6			
Workshop	4	15.4			
Unsure	1	3.8			

3. ALM

a. Use

Approximately half of the respondents were aware of this item (52.2%) (see Table 8). The highest proportions became aware of the item via GPNSW (34.6%) and/or NSW STIPU (30.8%). Most respondents indicated that their Division promoted this item (54.5%), the largest proportions of whom reported the use of email (29.6%), workshops (23.1%), and/or articles in Division publications (19.2%).

b. Impact

Most respondents agreed or strongly agreed that the information received helped them to:

- Understand the importance of this item (91.7%)
- Promote it (90.9%)
- Field queries (66.7%)

c. Open-Ended Responses

Respondents indicated that the promotion of this item could be improved through promotion during CPD events and contacting Divisions to facilitate the training.

Table 8: ALM

Awareness and Use	Frequency	%	Impact	Frequency	%
Aware of item			**Understood significance of item**		
Yes	12	52.2	Strongly agree / Agree	11	91.7
No	11	47.8	Neutral	1	8.3
Source of information re item			**Understood promotional methods**		
STIPU	8	30.8	Strongly agree / Agree	10	90.9
GPNSW	9	34.6	Neutral	1	9.1
APNA	1	3.8	**Able to field queries**		
Website	2	7.7	Strongly agree / Agree	8	66.7
Division promotion			Neutral	4	33.3
No	10	45.5			
Yes	12	54.5			
Fax out	3	11.5			
Mail out	1	3.8			
Email	7	26.9			
Article	5	19.2			
Workshop	6	23.1			
Unsure	1	3.8			

4. Practice Nurse Postcard

a. Use

Most respondents were aware of the item (65.2%) (see Table 9). The highest proportions became aware of the item via GPNSW (42.3%) and/or NSW STIPU (26.9%). Half of the respondents indicated that their Division promoted this item (50.0%), the largest proportions of whom reported the use of mail to members (23.1%).

b. Impact

Most respondents agreed or strongly agreed that the information received helped them to:

- Understand the importance of this item (92.3%)
- Promote it (92.3%)
- Field queries (76.9%)

c. Open-Ended Responses

Respondents indicated that the promotion of this item could be improved through promotion during CPD events and by employing a designated Project Officer within the Division. Respondents also noted that delivery of the item could be improved by requesting Program Officer assistance during their visits to the practices of GP Division members.

Table 9: Practice Nurse Postcard

Awareness and Use	Frequency	%	Impact	Frequency	%
Aware of item			**Understood significance of item**		
Yes	15	65.2	Strongly agree / Agree	12	92.3
No	8	34.8	Neutral	1	7.7
Source of information re item			**Understood promotional methods**		
GP Division	2	7.7	Strongly agree / Agree	12	92.3
STIPU	7	26.9	Neutral	1	7.7
GPNSW	11	42.3	**Able to field queries**		
APNA	2	7.7	Strongly agree / Agree	10	76.9
Colleague	1	3.8	Neutral	3	23.1
Website	2	7.7			
Unsure	1	3.8			
Division promotion					
No	11	50.0			
Yes	11	50.0			
Fax out	1	3.8			
Mail out	6	23.1			
Email	2	7.7			
Article	4	15.4			
Workshop	3	11.5			
Unsure	1	3.8			

5. Online STI Practice Nurse Training

a. Use

Just over one-third of the respondents were aware of the item (38.1%) (see Table 10), the largest proportion of whom became aware of the item via GPNSW (30.8%). Approximately one-third of the respondents indicated that their Division promoted this item (31.8%), the largest proportions of whom reported the use of email (19.2%) and/or articles in Division publications (19.2%).

b. Impact

Most respondents agreed or strongly agreed that the information received helped them to:

- Understand the importance of this item (71.4%)

- Promote it (75.0%)
- Field queries (62.5%)

c. Open-Ended Responses

Respondents indicated that the promotion of this item could be improved by regularly promotion by APNA and in newsletters tailored to the target audience.

Table 10: Online STI Practice Nurse Training

Awareness and Use	Frequency	%	Impact	Frequency	%
Aware of item			**Understood significance of item**		
Yes	8	38.1	Strongly agree / Agree	5	71.4
No	13	61.9	Neutral	2	28.6
Source of information re item			**Understood promotional methods**		
STIPU	2	7.7	Strongly agree / Agree	6	75.0
GPNSW	8	30.8	Neutral	2	25.0
APNA	3	11.5	**Able to field queries**		
Colleague	1	3.8	Strongly agree / Agree	5	62.5
Website			Neutral	3	37.5
Division promotion					
No	15	68.2			
Yes	7	31.8			
Email	5	19.2			
Article	5	19.2			
Workshop	1	3.8			

6. Project Support

Most respondents indicated that they received good or adequate support during the GP Project (62.3%), with the remainder suggesting the support was adequate (37.5%).

Surveys: General Practitioners

This section presents findings from an online survey of NSW GPs to examine their experiences with the seven items of the GP Project tailored to GPs. This includes descriptive statistics of responses to closed-items, and thematic analysis of open-items. All frequencies are calculated based on valid responses, unless otherwise stated.

Respondents

Univariate analyses of the data on socio-demographic characteristics indicated that most of the respondents were female (54.1%), and most graduated in Australia (57.2%) (see Table 11). The highest proportion of respondents was between 36 and 45 years of age (31.8%). On average, respondents had 15.4 years of GP experience and a considerable percentage of them consulted patients in a language other than English (40.1%). The highest proportions of respondents were affiliated with the Central Sydney GP Network (9.3%), the Macarthur Division of GP (9.3%), and Wentwest (8.4%); over ten percent of respondents were affiliated with more than one Division (10.3%). Close to ten percent of respondents worked within an ACCHS (8.9%). Most respondents worked in a teaching practice (57.5%) and about one-fifth were GP registrars (20.7%). Most respondents worked with up to five GPs (59.1%) and PNs (71.7%) in their primary practice. For most respondents (77.5%), ten to fifty percent of patients were under 25 years of age; for the vast majority of respondents (81.6%), fewer than fifty percent of patients were from CALD backgrounds. For most respondents, Indigenous patients represented less than one percent of their patients (54.5%).

Given the profile of NSW GPs (Carne, et al., 2011), the demographic characteristics suggest that the survey respondents were not representative of this cohort. This is because NSW GPs are mostly male (63.1%); approximately one-third are over 55 years of age (31.6%); and very few practice in an ACCHS (1.2%). The fact that the survey respondents were unrepresentative of NSW GPs may be due to the population-based recruitment approach (as opposed to purposive sampling) and/or the voluntary nature of participation. Nevertheless, the respondents represented diverse geographical locations (as indicated by Division affiliation) and supported diverse patient populations, including Indigenous patients, young patients, and patients from CALD backgrounds.

Table 11: GP Respondents' Socio-Demographic Characteristics (*n*=214)

Characteristics	Frequency	%	Characteristics	Frequency	%
Sex			**Work at teaching practice**		
Male	95	45.9	Yes	123	57.5
Female	112	54.1	No	83	38.8
Age			**GP Registrar**		
26-35 yrs	33	15.4	Yes	42	20.7
36-45 yrs	68	31.8	No	161	79.3
46-55 yrs	63	29.4	**GPs at Primary Practice**		
Over 56 yrs	50	23.4	1-5	123	59.1
Country of Graduation			6-10	70	33.7
Australia	119	57.2	>10	15	7.2
Overseas	89	42.8	**PNs at Primary Practice**		
Consultation Language			0	45	22.3
English only	125	59.0	1-5	153	71.7
English and a non-English language	87	40.1	>6	4	2.0
Affiliation*			**Indigenous Patients**		
Central Sydney	20	9.3	<1%	116	54.5
GP Access	11	5.1	1-5%	62	29.1
Macarthur Division of GP	20	9.3	5-20%	17	8.0
Riverina Division	12	5.6	>20%	11	5.2
Wentwest	18	8.4	Unsure	7	3.3
Unsure	11	5.1	**CALD Patients**		
Affiliated with > 1 Division			<10%	81	38.2
Yes	22	10.3	10-50%	92	43.4

Characteristics	Frequency	%	Characteristics	Frequency	%
No	189	88.3	>50%	32	15.1
Work at AMS			Unsure	7	3.3
Yes	19	8.9	**Patients < 25 years**		
No	193	90.2	<10%	25	11.7
			10-50%	165	77.5
			>50%	16	7.5
			Unsure	7	3.3

** Those with more than a 5% response rate are reported*
Note: Respondents' mean length of experience as a GP was 15.4 yrs (SD=12.1)

Key Findings

1. STI Testing Tool

a. Use

Most respondents were aware of this item (61.7%) (see Table 12). The largest proportions became aware of the item via their Division of General Practice (27.0%) and/or educational events (27.0%). A great majority used the item (71.7%) and found it extremely or very useful (64.8%). Most respondents who used the item agreed or strongly agreed that it was: clear and easy to follow (90.0%); and/or provided information at a level appropriate to their needs (88.9%). More than one-third always or often used the item in their practice (39.6%).

b. Impact

Most respondents who used this item agreed or strongly agreed that it assisted their clinical practice (85.6%). A great majority of respondents who used this item indicated that their ability to raise the topic of STIs with patients had improved (68.5%), as did their ability to order appropriate STI tests (80.0%). Subsequent to using this item, over one-third of respondents contacted a sexual health clinic in relation to a patient (34.1%).

c. Open-Ended Responses

According to respondents who were aware of, but did not use this item, factors that influenced their decision included a perceived lack of need, limited access to the item, time constraints, and limited familiarity with the item.

Respondents who used this item indicated that it could be improved by:

- Ensuring online availability
- Incorporating the item into clinical software programs
- Regularly updating its content
- Including contact tracing information
- Including website addresses to patient information
- Regularly promoting the item
- Occasionally distributing hard copies

Respondents who used this item indicated that their ability to use it was hindered by limited access. More specifically, respondents could not readily locate the item when required, and/or they failed to remember its availability. These (and other) factors were exacerbated by workload.

Respondents who used this item preferred to access it electronically. Although hard copies were appreciated, respondents appeared to prefer access via email and/or clinical software programs.

Table 12: STI Testing Tool

Awareness and Use	Frequency	%	Impact	Frequency	%
Aware of item			**Assists with clinical**		

Awareness and Use	Frequency	%	Impact	Frequency	%
			practice		
Yes	132	61.7	Strongly agree / Agree	77	85.6
No	82	38.3	Neutral	13	14.4
Source of information re item			**Improved ability to raise the topic of STIs with patients**		
GP Division	31	27.0	Strongly agree / Agree	61	68.5
Educational event	31	27.0	Neutral	26	29.2
Colleague	12	10.4	Strongly disagree / Disagree	2	2.2
STIPU / Professional body	15	13.0	**Improved ability to order appropriate STI tests**		
Website	12	10.4	Strongly agree / Agree	73	80.0
Unsure	14	12.2	Neutral	17	18.9
Item used			Strongly disagree / Disagree	1	1.1
Yes	91	71.7	**Subsequent contact with:**		
No	36	28.3	Sexual Health InfoLine		
Perceived usefulness			Yes	13	14.3
Extremely / Very useful	59	64.8	No	65	71.4
Useful	31	34.1	Unsure	13	14.3
Not very / at all useful	1	1.1	Sexual health clinic		
Frequency of use			Yes	31	34.1
Always / Often	36	39.6	No	48	52.7
Sometimes	32	35.2	Unsure	12	13.2
Occasionally / Never	21	23.1			
Unsure	2	2.2			
Clear and easy to follow					
Strongly agree / Agree	81	90.0			
Neutral	8	8.9			
Strongly disagree / Disagree	1	1.1			
Provides appropriate information					
Strongly agree / Agree	80	88.9			
Neutral	9	10.0			
Strongly disagree / Disagree	1	1.1			

2. STI Resources for General Practice

a. Use

Over ten percent of respondents were aware of this item (15.3%), the largest proportion of whom became available of it via their Division (36.7%) (see Table 13). Most of the respondents who were aware of the item used it (60.0%) – of these, most agreed or strongly agreed that: the layout and design were appropriate (88.3%); it provided the information they required (82.4%); and/or it helped to locate appropriate information (83.3%). About one-half of those who used this item considered it to be extremely or very useful (55.6%); and about one-half indicated that they sometimes used the item during clinical practice (52.9%).

b. Impact

Most respondents who used this item agreed or strongly agreed that it assisted their clinical practice (94.4%). About ten percent of respondents who used this item had subsequent contact with the Sexual Health InfoLine (11.1%).

c. Open-Ended Responses

Respondents who used this item indicated that it could be improved by:

- Regularly updating its content
- Including practical advice – rather than guidelines – to inform clinical practice

- Promoting the item via email

Respondents who used this item indicated that their ability to use it was hindered by limited access and time constraints.

Respondents who used this item preferred to access it electronically. Although hard copies were appreciated, respondents appeared to prefer access via email and/or clinical software programs.

Table 13: STI Resources for General Practice

Awareness and Use	Frequency	%	Impact	Frequency	%
Aware of item			**Assists with clinical practice**		
Yes	32	15.3	Strongly agree / Agree	17	94.4
No	177	84.7	Strongly disagree / Disagree	1	5.6
Source of information re item			**Improved ability to locate appropriate resources**		
GP Division	11	36.7	Strongly agree / Agree	15	83.3
Educational event	6	20.0	Neutral	2	11.1
Colleague	3	10.0	Strongly disagree / Disagree	1	5.6
STIPU / Professional body	7	23.3	**Subsequent contact with:**		
Website	3	10.0	Sexual Health InfoLine		
Item used			Yes	2	11.1
Yes	18	60.0	No	10	55.6
No	12	40.0	Unsure	6	33.3
Perceived usefulness					
Extremely / Very useful	10	55.6			
Useful	7	38.9			
Unsure	1	5.6			
Frequency of use					
Always / Often	4	23.5			
Sometimes	9	52.9			
Occasionally / Never	4	23.5			
Unsure	1	3.8			
Appropriate layout and design					
Strongly agree / Agree	15	88.3			
Neutral	3	16.7			
Provides appropriate information					
Strongly agree / Agree	14	82.4			
Neutral	1	5.9			
Strongly disagree / Disagree	2	11.8			

3. Drivetime Radio Medical CD for STI

a. Use

Over one-third of respondents were aware of this item (38.6%) – of these, over one-third had used the item (37.2%) (see Table 14). Over one-half of the respondents who used the item considered it to be useful (57.8%).

b. Impact

Less than half of the respondents who used this item reported that their knowledge of sexual health had improved (47.4%).

c. Open-Ended Responses

According to respondents who were aware of, but did not use this item, time constraints were considered to be a key barrier.

Respondents who used this item indicated that it could be improved by:

- Incorporating the item into clinical software programs
- Linking the item to the RACGP QI&CPD program (RACGP, 2010)
- Ensuring availability as an MP3 file for greater usability
- Ensuring the audio material is presented in an interesting, rather than monotonous style
- Providing greater detail

Respondents who used this item indicated that their ability to use it was hindered by time constraints and limited access to the equipment required.

Respondents who used this item preferred to access it electronically. Although hard copies were appreciated, respondents appeared to prefer access via email and/or as an MP3 file.

Table 14: Drivetime Radio Medical CD for STI

Awareness and Use	Frequency	%	Impact	Frequency	%
Aware of item			**Improved knowledge***		
Yes	80	38.6	Strongly agree / Agree	18	47.4
No	127	61.4	Neutral	5	13.2
Item used			Strongly disagree / Disagree	9	23.7
Yes	29	37.2	Unsure	6	15.8
No	40	51.3			
Unsure	9	11.5			
Perceived usefulness*					
Extremely / Very useful	11	28.9			
Useful	11	28.9			
Not very / at all useful	9	23.7			
Unsure	7	18.4			

** Percentages calculated based on valid responses including respondents who were 'unsure' whether the item was used – this is because some of these respondents responded to subsequent items*

4. Online STI Testing Tool GP Training

a. Use

Less than one-quarter of the respondents were aware of this item (23.4%), the largest proportion of whom became aware of the item via a website (27.3%) (see Table 15). Of those who were aware of the item, less than one-third used it (28.3%). Of these, over two-thirds found the item extremely or very useful (66.7%) and many used the lessons learnt during clinical practice always or often (41.7%). They found the item provided information at a level appropriate to their needs (83.3%) and the item was deemed to be clear and easy to follow (83.3%).

b. Impact

Most respondents who used this item agreed or strongly agreed that it: aided clinical practice (83.3%); improved their ability to raise the topic of STIs with patients (81.8%); and/or improved their ability to order appropriate STI tests (83.3%). After using this item, about one-third of respondents had subsequent contact with a sexual health clinic in relation to a patient (33.3%).

c. Open-Ended Responses

According to respondents who were aware of, but did not use this item, the key barriers were said to include time constraints, workload, the increasing number of online training opportunities, and limited internet access, particularly in rural areas. Respondents indicated a preference to receive advice about online training opportunities via email.

Table 15: Online STI Testing Tool GP Training

Awareness and Use	Frequency	%	Impact	Frequency	%
Aware of item			**Assists with clinical practice**		
Yes	48	23.4	Strongly agree / Agree	10	83.3
No	157	76.6	Neutral	1	8.3
Source of information re item			Unsure	1	8.3
GP Division	10	22.7	**Improved ability to raise the topic of STIs with patients**		
Educational event	10	22.7	Strongly agree / Agree	9	81.8
Colleague	6	13.6	Neutral	1	9.1
STIPU / Professional body	5	11.4	Unsure	1	9.1
Website	12	27.3	**Improved ability to order appropriate STI tests**		
Unsure	1	2.3	Strongly agree / Agree	10	83.3
Item used			Neutral	1	8.3
Yes	13	28.3	Unsure	1	8.3
No	33	71.7	**Subsequent contact with:**		
Perceived usefulness			Sexual Health InfoLine		
Extremely / Very useful	8	66.7	Yes	2	16.7
Useful	3	25.0	No	9	75.0
Unsure	1	8.3	Unsure	1	8.3
Frequency of use			Sexual health clinic		
Always / Often	5	41.7	Yes	4	33.3
Sometimes	4	33.3	No	7	58.3
Occasionally / Never	2	16.7	Unsure	1	8.3
Unsure	1	8.3			
Clear and easy to follow					
Strongly agree / Agree	10	83.3			
Neutral	1	8.3			
Unsure	1	8.3			
Provides appropriate information					
Strongly agree / Agree	10	83.3			
Neutral	1	8.3			
Unsure	1	8.3			

5. ALM

a. Use

Just over ten percent of respondents were aware of this item (12.4%), the highest proportion of whom became aware of it via their Division (47.4%) (see Table 16). Of those who were aware of this item, less than one-third completed all three modules (29.2%). All of those who completed the three modules found them extremely or very useful (42.9%), and over half considered the information clear and easy to follow (57.1%). All of those who completed the modules agreed they would recommend the ALM to colleagues, and a large majority used the information within their clinical practice (85.7%).

b. Impact

All of those who completed the three modules indicated that the ALM aided clinical practice (100.0%). Most of these respondents agreed or strongly agreed that it improved their:

- Ability to document a brief sexual history (83.3%)
- Ability to identify patients at-risk of STIs (83.3%)
- Ability to identify appropriate STI tests (83.3%)
- Ability to diagnose and treat common STIs (85.7%)
- Ability to raise contact tracing with patients (100.0%)
- Awareness of their responsibilities around contact tracing (71.4%)

- Ability to perform contact tracing (100.0%)

After completing all three modules, less than half of the respondents had subsequent contact with a sexual health clinic (42.9%) or the Sexual Health Infoline (42.9%).

c. Open-Ended Responses

According to respondents who were aware of, but did not use this item, time constraints were said to be the key barrier.

Table 16: ALM

Awareness and Use	Frequency	%	Impact	Frequency	%
Aware of item			**Assists with clinical practice***		
Yes	25	12.4	Strongly agree / Agree	7	100.0
No	176	87.6	**Improved ability to document brief sexual history***		
Source of information re item			Strongly agree / Agree	5	83.3
GP Division	9	47.4	Neutral	1	16.7
Educational event	2	10.5	**Improved ability to identify at-risk patients***		
Colleague	4	21.1	Strongly agree / Agree	5	83.3
STIPU / Professional body	1	5.3	Neutral	1	16.7
Website	3	15.8	**Improved ability to identify appropriate STI tests***		
Unsure			Strongly agree / Agree	5	83.3
Modules completed			Strongly disagree / Disagree	1	16.7
Module 1 only	3	12.5	**Improved ability to diagnose and treat common STIs***		
All 3 modules	7	29.2	Strongly agree / Agree	6	85.7
None	14	58.3	Neutral	1	14.3
Perceived usefulness*			**Improved ability to raise contact tracing with patients***		
Extremely / Very useful	3	42.9	Strongly agree / Agree	7	100.0
Useful	4	57.1	**Improved awareness of responsibilities around contact tracing***		
Frequency of use*			Strongly agree / Agree	5	71.4
Always / Often	2	28.6	Neutral	2	28.6
Sometimes	4	57.1	**Subsequent contact with:**		
Occasionally / Never	1	14.3	Sexual Health InfoLine		
Clear and easy to follow*			Yes	3	42.9
Strongly agree / Agree	4	57.1	No	1	14.3
Neutral	1	14.3	Unsure	3	42.9
Strongly disagree / Disagree	2	28.6	Sexual health clinic		
Format aided respondents' learning*			Yes	3	42.9
Strongly agree / Agree	6	85.7	No	3	42.9
Neutral	1	14.3	Unsure	1	14.3
Recommend to colleagues*					
Yes	7	100.0			

** Percentages calculated based on respondents who completed all 3 modules*

6. Sexual Health Articles

a. Use

More than half of the respondents read the articles (58.5%), the largest proportion of whom found them to be extremely or very useful (48.3%) (see Table 17). Most respondents who read

the articles agreed or strongly agreed that they addressed areas they needed to familiarise with (71.6%), and were clear and easy to follow (79.3%).

b. Impact

Most of the respondents who read the articles indicated that their knowledge of the topics addressed improved (71.8%).

Table 17: Sexual Health Articles

Awareness and Use	Frequency	%	Impact	Frequency	%
Read at least one article			**Improved knowledge**		
Yes	117	58.5	Strongly agree / Agree	84	71.8
No	83	41.5	Neutral	19	16.2
Perceived usefulness			Strongly disagree / Disagree	9	7.7
Extremely / Very useful	56	48.3	Unsure	5	4.3
Useful	39	33.6			
Not very / at all useful	10	8.6			
Unsure	11	9.5			
Clear and easy to follow					
Strongly agree / Agree	92	79.3			
Neutral	16	13.8			
Strongly disagree / Disagree	3	2.6			
Unsure	5	4.3			
Addressed key areas					
Strongly agree / Agree	83	71.6			
Neutral	16	13.8			
Strongly disagree / Disagree	10	8.6			
Unsure	7	6.0			

7. Check: Sexually Transmissible Infections

a. Use

Approximately one-half of the respondents were aware of this item (50.5%), the largest proportion of whom became aware of it via a professional body (45.2%) (see Table 18). More than half of these respondents read or completed the Check booklet (53.5%). Of these respondents, most found it extremely or very useful (71.7%) and most deemed the format to be appropriate (88.5%) and easy to follow (92.5%). Over one-third of those who read or completed the item always or often used the information they learnt during clinical practice (39.6%) and most recommended it to colleagues (92.5%).

b. Impact

Most of the respondents who read or completed the item agreed or strongly agreed that it:

- Aided clinical practice (86.8%)
- Improved their ability to document a brief sexual history (88.5%)
- Improved their ability to diagnose and manage STIs (90.2%)
- Improved their understanding of cultural sensitivities when discussing STIs (83.0%)

c. Open-Ended Responses

According to respondents who were aware of, but did not use this item, time constraints were said to be the key barrier.

Table 18: Check Booklet

Awareness and Use	Frequency	%	Impact	Frequency	%
Aware of item			**Assists with clinical practice**		
Yes	101	50.5	Strongly agree / Agree	46	86.8

Awareness and Use	Frequency	%	Impact	Frequency	%
No	99	46.3	Neutral	4	7.5
Source of information re item			Strongly disagree / Disagree	2	3.8
GP Division	18	21.4	Unsure	1	1.9
Educational event	6	7.1	**Improved ability to document brief sexual history**		
Colleague	12	14.3	Strongly agree / Agree	46	88.5
Professional body	38	45.2	Neutral	5	9.6
Website	6	7.1	Strongly disagree / Disagree	1	1.9
Unsure	4	4.8	**Improved understanding of clinical features, diagnosis, and management of STIs**		
Item used			Strongly agree / Agree	46	90.2
Yes	54	53.5	Neutral	3	5.9
No	47	46.5	Strongly disagree / Disagree	2	3.9
Unsure	9	11.5	**Improved understanding of cultural sensitivities**		
Perceived usefulness			Strongly agree / Agree	44	83.0
Extremely / Very useful	36	71.7	Neutral	8	15.1
Useful	14	26.4	Strongly disagree / Disagree	1	1.9
Not very / at all useful	1	1.9			
Frequency of use					
Always / Often	21	39.6			
Sometimes	19	35.8			
Occasionally / Never	12	22.7			
Unsure	1	1.9			
Clear and easy to follow*					
Strongly agree / Agree	49	92.5			
Neutral	4	7.5			
Appropriate layout and format					
Strongly agree / Agree	36	88.5			
Neutral	6	11.5			
Recommend to colleagues					
Yes	49	92.5			
No	2	3.8			
Neutral	2	3.8			

Surveys: Practice Nurses

This section presents findings from an online survey of NSW PNs to examine their experiences with the two items of the GP Project tailored to PNs. This includes descriptive statistics of responses to closed-items, and thematic analysis of open-items. All frequencies are calculated based on valid responses, unless otherwise stated.

Respondents

Univariate analyses of the data on socio-demographic characteristics indicated that most respondents were female (93.9%) and most graduated in Australia (86.9%) (see Table 19). The highest proportion of respondents was between 41 and 50 years of age (35.5%). On average, respondents had seven years of experience as a PN, and just over ten percent consulted patients in a language other than English (11.1%). The highest proportions of respondents were affiliated with the Macarthur Division of GP (14.7%), the Riverina Division of GP (6.0%), and the Murrumbidgee GP Network 5.5%). Less than ten percent of respondents worked within an ACCHS (8.1%). Most worked with one to two other PNs (57.5%) and/or one to five GPs (62.8%) in their primary practice. For most respondents (59.5%), ten to fifty percent of patients were under 25 years of age; for about three quarters of the respondents (75.2%), fewer than fifty percent of patients were from CALD backgrounds. For almost three quarters of the respondents, Indigenous patients represented less than five percent of their patients (74.6%).

In the absence of detailed demographic data on the profile of NSW PNs (Carne, et al., 2011), it is difficult to ascertain whether the survey respondents were representative of this cohort. However, data on the gender and age of all NSW registered nurses would suggest that the survey respondents were not entirely representative of this cohort. This is because, although NSW registered nurses are mostly female (89.6%) (akin to the survey respondents), approximately one-fifth are over 55 years of age (21.2%), which differs from the survey respondents. This may be due to the population-based recruitment approach (as opposed to purposive sampling) and/or the voluntary nature of participation. Nevertheless, the respondents represent diverse geographical locations (as indicated by Division affiliation) and supported diverse patient populations, including Indigenous patients, young patients, and patients from CALD backgrounds.

Table 19: PN Respondents' Socio-Demographic Characteristics (*n*=217)

Characteristics	Frequency	%	Characteristics	Frequency	%
Sex			**GPs at Primary Practice**		
Male	13	6.1	1-5	130	62.8
Female	201	93.9	6-10	50	24.2
Age			>10	27	13.0
20-30 yrs	27	12.4	**PNs at Primary Practice**		
31-40 yrs	40	18.5	1-2	119	57.5
41-50 yrs	77	35.5	3-5	67	32.4
51-60 yrs	62	28.6	6-10	204	10.12.0
Over 60 yrs	11	5.1	**Indigenous Patients**		
Country of Graduation			<1%	94	44.1
Australia	186	86.9	1-5%	30	30.5
Overseas	28	13.1	5-20%	17	8.0
Consultation Language			>20%	14	6.6
English only	192	88.9	Unsure	23	10.8
English and a non-English language	24	11.1	**CALD Patients**		
Affiliation*			<10%	104	48.6
Central Coast Division	10	4.6	10-50%	57	26.6
GP Access	10	4.6	>50%	40	18.7
Macarthur Division of GP	32	14.7	Unsure	13	6.1
Murrumbidgee	12	5.5	**Patients < 25 years**		
Riverina Division of GP	13	6.0	<10%	56	26.0
Work at AMS			10-50%	128	59.5
Yes	17	8.1	>50%	16	7.4

Characteristics	Frequency	%	Characteristics	Frequency	%
No	194	91.9	Unsure	15	7.1

** Those with more than a 5% response rate are reported*
Note: Respondents' mean length of experience as a PN was 7 yrs (SD=7.6)

Key Findings

1. Practice Nurse Postcard

a. Use

Over a third of respondents were aware of this item (38.2%) (see Table 20). The largest proportions of respondents became aware of the item via their Division (35.7%) and/or educational events (30.0%). Most of the respondents who were aware of the item used it (63.5%); of those, more than half found the item useful (51.1%). A great majority who used the item agreed or strongly agreed that the design was appropriate (87.0%) and easy to follow (87.0%). More than one-third of users reported that they sometimes used the postcard during clinical practice (34.0%).

b. Impact

Most respondents who used this item agreed or strongly agreed that it helped their clinical practice (63.0%). Most indicated that their knowledge of chlamydia treatment and prevention had improved (67.4%), as did their ability to:

- Undertake and claim for pap smears and preventative checks (63.8%)
- Identify patients who should be tested for chlamydia (76.6%)
- Test for chlamydia (68.9%)
- Document a brief sexual history (72.3%)

After using this item, approximately one-quarter of the respondents contacted the NSW Sexual Health Infoline (24.4%) or a sexual health clinic (27.7%) in relation to a patient.

c. Open-Ended Responses

According to respondents who were aware of, but did not use this item, key barriers included a perceived lack of need; underrating the item; limited access to the item; and limited relevance to current role.

Respondents who used this item indicated that it could be improved by:

- Using brighter colours
- The incorporation of Indigenous art
- Easing the ordering process
- Translating the item into other languages
- Condensing it to a one-sided postcard
- Regularly updating its content
- Wider promotion and distribution
- Regular prompting

Respondents who used this item indicated that limited access and unfamiliarity with the ordering process hindered their ability to use it. These respondents preferred to access the item electronically. Although hard copies delivered to general practices was suggested, respondents mostly favoured email access.

Table 20: Practice Nurse Postcard

Awareness and Use	Frequency	%	Impact	Frequency	%
Aware of item			**Assists with clinical**		

Awareness and Use	Frequency	%	Impact	Frequency	%
			practice		
Yes	83	38.2	Strongly agree / Agree	29	63.0
No	134	61.8	Neutral	11	23.9
Source of information re item			Strongly disagree / Disagree	6	13.0
GP Division	25	35.7	**Improved ability to undertake and claim for pap smears and preventative checks**		
Educational event	21	30.0	Strongly agree / Agree	30	63.8
Colleague	3	4.3	Neutral	14	29.8
STIPU	6	8.6	Strongly disagree / Disagree	3	6.4
Professional body	4	5.7	**Improved ability to identify who should be tested for chlamydia**		
Website	7	10.0	Strongly agree / Agree	36	76.6
Unsure	4	5.7	Neutral	7	14.9
Item used			Strongly disagree / Disagree	4	8.5
Yes	47	63.5	**Improved ability to test for chlamydia**		
No	27	36.5	Strongly agree / Agree	31	68.9
Perceived usefulness			Neutral	10	22.2
Extremely / Very useful	21	34.7	Strongly disagree / Disagree	4	8.9
Useful	24	51.1	**Improved ability to document brief sexual history**		
Not very / at all useful	2	4.3	Strongly agree / Agree	34	72.3
Frequency of use			Neutral	10	21.3
Always / Often	14	29.8	Strongly disagree / Disagree	3	6.4
Sometimes	16	34.0	**Improved knowledge of chlamydia treatment and prevention**		
Occasionally / Never	16	34.0	Strongly agree / Agree	31	67.4
Unsure	1	2.1	Neutral	11	23.9
Appropriate layout and design			Strongly disagree / Disagree	4	8.7
Strongly agree / Agree	40	87.0	**Subsequent contact with:**		
Neutral	5	10.9	Sexual Health InfoLine		
Strongly disagree / Disagree	1	2.2	Yes	11	24.4
Clear and easy to follow			No	29	64.4
Strongly agree / Agree	40	87.0	Unsure	5	11.1
Neutral	5	10.9	Sexual health clinic		
Strongly disagree / Disagree	1	2.2	Yes	13	27.7
			No	31	66.0
			Unsure	3	6.4

2. Online STI Practice Nurse Training

a. Use

Approximately half of the respondents were aware of this item (50.2%) (see Table 21). The largest proportions became aware of it via a professional body (31.4%), a website (29.1%), and/or their Division (22.1%). Less than one-fifth of the respondents who were aware of the item completed it (18.7%); of these, more than half found it extremely or very useful (64.7%). Most respondents who completed the item agreed or strongly agreed that the course design was appropriate (75.0%) and easy to follow (82.40%). More than forty percent of those who completed the item reported that they used always or often used the information learned in their practice (41.2%).

b. Impact

Most respondents who completed this item agreed or strongly agreed that it helped their clinical practice (82.4%). Most cited improvement in the following domains:

- Documenting a brief sexual history (87.5%)
- Identifying patients at-risk of STIs (81.3%)
- Performing contact tracing (62.5%)
- Consulting patients about STI testing, treatment, and prevention (70.6%)

A vast majority agreed or strongly agreed that their learning needs were met by this item (88.2%). Relatively few respondents who completed the item had subsequent contact with the NSW Sexual Health Infoline (11.8%), though more contacted a sexual health clinic (35.3%).

c. Open-Ended Responses

Several respondents who were aware of, but had not completed the item indicated an intention to do so – some for instance, were in the process of completion. However, key barriers included cost and limited time. Time constraints also hindered respondent capacity to use the information learnt within clinical practice.

Respondents who had completed this item indicated that it could be improved by linking it to online orientation programs.

These respondents preferred to receive advice about the item via email, including electronic correspondence from APNA.

Table 21: Online STI Practice Nurse Training

Awareness and Use	Frequency	%	Impact	Frequency	%
Aware of item			**Assists with clinical practice**		
Yes	104	50.2	Strongly agree / Agree	14	82.4
No	103	49.8	Neutral	3	17.6
Source of information re item			**Improved confidence to document brief sexual history**		
GP Division	19	22.1	Strongly agree / Agree	14	87.5
Educational event	4	4.7	Neutral	2	12.5
Colleague	4	4.7	**Improved ability to identify at-risk patients**		
STIPU	3	3.5	Strongly agree / Agree	13	81.3
Professional body	27	31.4	Neutral	2	12.5
Website	25	29.1	Strongly disagree / Disagree	1	6.3
Unsure	4	4.7	**Improved ability to perform contact tracing**		
Item completed			Strongly agree / Agree	10	62.5
Yes	17	18.7	Neutral	3	18.8
No	74	81.3	Strongly disagree / Disagree	1	6.3
			Unsure	2	12.5
Perceived usefulness			**Improved ability to consult patients about testing, treating and preventing STIs**		
Extremely / Very useful	11	64.7	Strongly agree / Agree	12	70.6
Useful	6	35.3	Neutral	4	23.5
Frequency of use			Unsure	1	5.9
Always / Often	7	41.2	**Subsequent contact with:**		
Sometimes	6	35.3	Sexual Health InfoLine		

Awareness and Use	Frequency	%	Impact	Frequency	%
Occasionally / Never	4	23.5	Yes	2	11.8
			No	14	82.4
			Unsure	1	5.9
Appropriate layout and design			Sexual health clinic		
Strongly agree / Agree	12	75.0	Yes	6	35.3
Neutral	3	18.8	No	10	58.8
Strongly disagree / Disagree	1	6.3	Unsure	1	5.9
Clear and easy to follow					
Strongly agree / Agree	14	82.4			
Neutral	3	17.6			
Learning needs were met					
Strongly agree / Agree	15	88.2			
Neutral	2	11.8			

Interviews

Research Participants

Semi-structured interviews were undertaken with nine GPs and ten PNs to further understand the impact of the GP Project. GP and PN survey respondents who expressed an interest in the interview were purposefully selected on the basis of familiarity with project items and demographic information – this helped to optimise diversity in perspectives contributed to this evaluation.

Of the nine GPs interviewed:

- Seven were female
- Their ages ranged from 31 to sixty years, with six participants over 46 years of age
- On average, they had practiced as a GP for over 15 years (15.8 years)
- Six were affiliated with Sydney-based Divisions of General Practice
- Three were international medical graduates
- One worked in an ACCHS
- For all except one participant, less than twenty percent of their patients were Indigenous Australians
- For six participants, less than ten percent of their patients were from CALD backgrounds
- Approximately ten to fifty percent of their patients were under 25 years of age

Of the ten PNs interviewed:

- All were female
- Their ages ranged from twenty to sixty years, with eight participants over forty years of age
- On average, they had practiced as a PN for over ten years (10.1 years)
- Three were affiliated with Sydney-based Divisions of General Practice
- Nine received their training in Australia
- One worked in an ACCHS
- Less than twenty percent of their patients were Indigenous Australians
- For six participants, approximately ten to fifty percent of their patients were from CALD backgrounds
- For half of the participants, approximately ten to fifty percent of their patients were under 25 years of age

Findings

The analysis of the interview transcripts was guided by the following research questions:

- Which resources were used, why, how, and what was the perceived impact on clinical practice?
- What barriers hindered the use of the items?
- How could the items be improved with regard to content, format, promotion, and delivery?

It is important to note that when GPs and PNs discussed their low awareness or use of the items, they were in many cases also reflecting on their use of educational resources in general. Many of these themes are thus likely to hold relevance to a variety of professional education and practice support materials aimed at primary care clinicians.

General Practitioners

Which resources were used, why, how, and what was the perceived impact on clinical practice?
A variety of items were used by the participants, with no clear preference indicated – items included the STI Testing Tool, the Drivetime Radio Medical CD for STI, the Online STI Testing Tool GP Training, the sexual health articles, and the Check booklet. Participants were not aware of the STI Resources for General Practice, nor had they completed the ALM.

Participants largely used these items for the following reasons:

1. Continuous professional development
Most participants became familiar with the items as part of their usual reading or study on various health topics; their learning in sexual health was therefore a result of professional life-long learning practice, rather than targeted study. This applied to the Drivetime Radio Medical CD for STI, the Online STI Testing Tool GP Training, the sexual health articles, and the Check booklet. Similarly, awareness and subsequent use of the STI Testing Tool was in several cases because of their usual CPD activities. They reported having learnt about this item at conferences or workshops, or when reading medical periodicals:

> Probably because they come in the mail and I tend to open those.

The convenience of automatically receiving or being invited to participate in these activities made them accessible and convenient. Several participants reported they usually accessed as many of a particular type of resource as possible because it suited their habits and learning style:

> I usually check with the ThinkGP and I just look at all the courses that they provide online.
>
> I read all of the ones in the Medical Observer and the Australian Doctor.

Item preference varied widely among participants. For example, some found online training too time-consuming, while others valued its convenience and thoroughness. One participant queried the independence of the information presented on the Drivetime Radio Medical CD for STI, and for this reason chose not to use this item; another found this the most valuable resource as he could listen to it while driving. The motivations for accessing the items were largely to remain an up-to-date and skilled clinician via efficient and/or pragmatic methods.

2. Self-directed learning
Several participants indicated that they specifically sought sexual health resources and training. This was largely because of self-identified learning needs and/or a particular interest in sexual health. Two participants indicated that they used the STI Testing Tool regularly when first received to up-skill themselves in STI screening. One participant reported that he made an intensive effort to increase his skill-base in sexual health by attending face-to-face training, completing online training, and using the STI Testing Tool when he left his post in a hospital and began working in the community.

Some participants indicated they were already familiar with sexual health and therefore had a lower perceived need for information. Although they still tended to review some items for revision and interest, they were less likely to complete training:

> It's something that I see a lot of, and it's also something that I feel very comfortable with, so I guess I try and read up on it when I can.
>
> A lot of that was background knowledge to me anyway, so I haven't had to refer to it all that often, but once or twice on occasions.

3. Clinical need

The STI Testing Tool was deemed very useful in guiding sexual health consultations; it was considered to be time-saving and convenient:

> If I hadn't had the tool, I would have rang the sexual health clinic for the information that I would require or look in the guidelines or talk to a colleague... But it's there so I don't have to run around looking… or talking to people.

> I found that really easy to use and I just usually hide it under my mouse pad. It's under that and if I just forget something, I just check with that.

The STI Testing Tool was particularly useful when consulting patients with less common clinical scenarios:

> It's probably useful for populations that I don't see as often. So like sex work or something like that….Not for the average person that I deal with but, more like those populations that I don't deal with much within my practice.

4. GP teaching

Several items were used to support the training of registrars or colleagues – these included the STI Testing Tool, the sexual health articles, and the Check booklet.

Most participants were unable to specifically state how the items changed their practice, possibly in part due to the time that had elapsed since they accessed them. They reported that the items had enhanced their knowledge and skills in sexual healthcare. Several participants emphasised that sexual healthcare was merely one part of their daily work and that their clinical approach remained similar, yet their skills needed to remain current and this is where the items changed practice.

Despite using the GP Project items, contact tracing remained an area perceived to be difficult by several GPs. This was particularly the case when a patient relationship was not well established:

> I think for patients that you see regularly, GPs are in a prime position to do contact tracing, and it's really clear and easy for some infections. I think it gets harder for GPs when you see the one-off patient… It's not necessarily one hundred percent clear how far back you need to go with tracing for things like syphilis.

Appropriately targeted STI screening was the only specific practice change reported by the participants and was largely consequent to the STI Testing Tool. This item provided a quickly accessible prompt to ordering the appropriate screening tests for patient groups less commonly consulted in general practice. One participant noted that since using the item, she had increased her opportunistic testing of high-risk groups for chlamydia and had also reduced screening low-risk groups for BBVs. She indicated this was likely to result in health system cost savings.

What barriers hindered the use of the items?

1. Competing training priorities

The usual reason given by GPs for not accessing the items was that they had limited time and had chosen to do other training or reading instead. This applied to GPs with a particular interest in sexual health as well as other GPs who considered sexual health was not a particular area of expertise:

> There's just so many different things out there. Sometimes it's a bit overwhelming... You have to be a bit selective, I guess... I also try and do training in things that I might not be as good at.

2. Limited confidence

Participants were reluctant to use an item if they had limited trust in it, doubted its evidence-base, or queried its currency:

> I'm not confident about the editorial process and the desire to sell me something.
>
> Generally, it would be things that I know are good quality. For example, therapeutic guidelines or a GP textbook.

3. Limited access

Some participants could not readily access clinician or patient resources, particularly at the moment they were required during a patient consultation. They advised they would like to use the STI Testing Tool, but could no longer locate it. Notwithstanding some preferences for paper-based items, most participants wanted prompt electronic access to the items:

> Make it easily available… on the computer desktop, so we just click on it.

4. Limited awareness

None of the participants were aware of the STI Resources for GPs website.

How could the items be improved with regard to content, format, promotion, and delivery?

1. Variety

Participants had different preferred learning styles and therefore required information in a variety of formats. Some favoured face-to-face learning, while others opted for online education. Different modes also helped to meet different clinician needs. For example, succinct guides were practical in the context of a patient consultation; however, enhancing clinician skills required further detail. Participants recommended that items should aim to balance key information that is readily accessible, with additional detail that involved further study. This might be achieved by clearly categorising information, presenting it in an easily digestible summary, and/or by including links to further study:

> As long as there is a link to where you can get more information if you want more detail, rather than just giving all the detail at the start, because not everyone wants a lot of detail.

Despite varied opinion on item presentation, participants prioritised ease of access. This could be facilitated by the internet and/or incorporation into commonly used resources, like clinical software programs:

> I think at the moment we've got two GP populations... one who quite like hard copies and the other who likes to be paperless. So I actually think both it's useful at the moment. I think increasingly as surgeries are moving towards paperless it would be very useful to have it like a template that can be imported like into a MD, for example.

2. Sexual health promotion

According to the participants, patient education resources facilitated sexual healthcare; however, these resources were sometimes difficult to access. This view was supported by the PN participants who indicated that patient education resources contributed to sexual healthcare within primary care.

3. Tailored resources

Given the specific needs of primary care clinicians, participants indicated that items be practical, relevant, and succinct. A case-based approach was particularly valued.

4. Reliable

Participants suggested that the items should be clearly current and referenced – this helped to verify their reliability. Endorsement from authoritative bodies offered reassurance that the information is evidence-based and independent. However, the information also required regular review.

5. Content

According to the participants, they required information on commonly managed sexual health issues, as well as information on rarer conditions (like HIV) or patient groups seldom consulted (like sex workers and MSM). One participant highlighted the need to provide education on common conditions about which there are misconceptions or limited clinician knowledge about its management, like the herpes simplex.

Screening recommendations were particularly valued by the participants. It was suggested that local population health level information, which may impact screening and management, would be useful.

> I think that GPs want to know... simple features, what population should you be screening, how do you screen them, how do you treat the people who are positive, who do you have to contact trace...if you don't what to do with the patient, who can you call?
>
> Some statistics as well to know how the rate is going in Australia of the STIs; is it increasing, decreasing? But we need to know in numbers, some statistics to tell us because we don't know how it's going" (Be)

6. Sexual health promotion

Receiving items electronically was considered to be a valuable way to increase access and use. It was also recommended that items be promoted locally through, for instance, local GP meetings. Several participants recommended the STI Testing Tool be updated and promoted again, and that its simplicity should be emphasised.

Practice Nurses

Which resources were used, why, how, and what was the perceived impact on clinical practice?

Seven of the ten participants had used the Practice Nurse Postcard and two had completed the Online STI Practice Nurse Training. Two participants had confused the GP Project items for other resources that were not related to the GP Project and they were not familiar with the items – as such, they spoke of resources and training in general terms.

The participants had varying roles within their respective practices. Some had a major role in delivering well woman's checks, sexual health screening, and sexual health education; others consulted patients after referral from the GP to deliver sexual health resources or organise specimen collection, during which time opportunistic education was provided. The PN role in chronic disease management sometimes required an understanding of sexual health and STIs. However, some participants had a limited role in sexual healthcare.

The Practice Nurse Postcard was said to improve the confidence of PNs. Many had assumed responsibility for well women's checks and recognised a need for additional support to ensure

they completed preventative checks accordingly. Participants suggested that the item provided useful support subsequent to face-to-face education, helping to translate lessons into practice.

The Practice Nurse Postcard helped to validate the PN role in sexual healthcare. It was used to advise colleagues, including GPs, of their potential role in sexual healthcare. The item was also shown to patients to outline the PN role in well woman's checks. It was used to inform and prepare the patient and to gain permission to proceed with the consultation:

> I can't tell you the excitement when I got it... I'm saying to all these people at work, 'Look, it shows you the MBS numbers, it shows you this is what you've got to use when people haven't had a pap smear for this long, that long, and we have to look at these things and we have to do this and it's my responsibility to do this, this and this'.... If the patients are a little bit uncomfortable, I can show them the resources.

The Medicare item numbers listed on the item, the contact telephone numbers, and URLs were also useful components of the item, and cited as reasons for keeping it close at hand.

The Practice Nurse Postcard was used to guide the well women's checks, prompting PNs through the consultation. It also helped to explain the consultation to patients:

> It's... a checklist that you could go through to make sure that you've ticked off everything that should be done with a patient when they're with you.

In an unexpected use, several participants reported that they used the Practice Nurse Postcard as a patient resource:

> I also put a copy in the doctor's surgery so that ladies can keep them and take them away with them.

The Online STI Training for Practice Nurses was completed by two participants, both of whom found it to be useful. It was largely accessed because it was free, easy to access, convenient, and could be completed within their own time. Furthermore, the content was deemed to be relevant to the clinical context.

What barriers hindered the use of the items?

The main barriers that hindered use of the Practice Nurse Postcard included limited awareness and a limited role in sexual healthcare within the practice:

> The Postcard doesn't come into it much anymore... my role has diminished.

Participants who did not access the Online STI Training for Practice Nurses cited limited time, work commitments, and competing training priorities as the key barriers. For some, sexual health was a topic of interest, yet was less relevant to their daily work – as such, it was not considered to be a priority. This was sometimes due to limited personal interest and/or limited support from the practice:

> They encouraged me to do the course, but then wouldn't allow me to do the work.

How could the items be improved with regard to content, format, promotion, and delivery?

Interview data supported the need for a new version of the Postcard to be released. As pointed out by interviewees, it will need the Medicare item numbers removed. It would be useful if content could be expanded beyond chlamydia to other STIs. A similar tool for use with male patients was requested. It was also suggested that the Postcard include advice on how to order further copies. It was felt the format and style should remain unchanged.

According to some participants, the Practice Nurse Postcard required further promotion, as did the role of PNs in sexual healthcare. Suggestions included the APNA website, conferences, events commonly attended by PNs, as well as through Divisions. Similarly, practice support visits were said to be an effective way to promote the item and remind GPs of potential role of PNs in sexual healthcare. There was some concern that the loss of Medicare item numbers specifically supporting PNs to complete well women's checks meant that increased marketing of this role was required and this should form part of future promotion efforts.

To optimise PN access to resources and training, participants suggested that they be free and accessible. Access could be increased by ensuring a multimodal approach – this could include face-to-face training, online training, periodical articles, and practice visits.

According to the participants, additional promotion was needed to increase interest in, awareness of, and the uptake of training opportunities and resources. They suggested that promotion be directed at both PNs and GPs – it was said the latter might help to affirm the role of PNs in sexual healthcare.

> To be honest in our city, you know, we don't have a prevalence of STIs.
>
> It's probably due to the nurses thinking it's not their role. It's up to the GP. Or they don't take it as their role because they don't think that they have sufficient training in approaching the topic with their patients.

Chapter 6. Discussion

This project comprised a mixed-method process and impact evaluation of the GP Project – an initiative of the NSW STIPU to promote the delivery of evidence-based sexual healthcare within primary care in NSW. This was addressed through the development, promotion, and delivery of nine items tailored for NSW GPs and PNs.

The process evaluation consisted of an analysis of project-related documents as well as consultation with nine members of the GP Project Working Group. The impact of the nine items was examined through a survey of 26 personnel affiliated with NSW Divisions of General Practice, 214 NSW GPs, and 217 NSW PNs. These surveys were complemented with interviews with nine GPs and ten PNs, purposively selected from survey respondents to further explore the impact of the items on clinical practices and preferred strategies to promote evidence-based sexual healthcare.

Following the previous chapter in which evaluation results were presented, the following section responds to the research questions that guided this project.

Research Questions

1. Was the methodological development of the resources rigorous?

The findings of the document analysis and focus group provide evidence that a rigorous development process occurred in the development of most of the items. A major strength of the development of the items was the extensive clinical expertise of the Working Group, which informed and reviewed items throughout their development. The Working Group was carefully selected to include representation from key organisations, and the wide and complementary expertise provided by members was maintained through the life of the GP Project.

Some items were developed following an extensive review of evidence, expert guidance, and/or pilot testing. The STI Testing Tool for GPs and the Practice Nurse Postcard in particular went through multiple iterations and a rigorous development process. Some items were developed according to the requirements of existing educational modalities; as such, the main role of the GP Project was to ensure the clinical material was evidence-based, appropriately targeted, and used high quality teaching cases – this was demonstrated by the Online STI Testing Tool GP Training and the Check booklet. The STI ALM for General Practitioners relied heavily on the clinical expertise of the Working Group in its development.

2. Was the content and format of the resources, clear, user-friendly and applicable to the target clinician and patient groups?

The content and format of the items were highly regarded by the GPs and PNs who used them. It is a strength of the GP Project that, for GPs, a range of items of differing content, formats and delivery modes was developed, linked by a key message.

The STI Testing Tool and the Practice Nurse Postcard were highly valued for their content, their format, and their applicability for many GPs and PNs. Much of the data collected for this evaluation pertained to these two items.

STI Testing Tool

Most GPs responding to the survey (61.7%) were aware of the STI Testing Tool and had used it (71.7%). It was considered clear and easy to follow (90%) and provided information at a level appropriate to GP needs (88.9%). The two areas of its content on which feedback was specifically sought in the survey supported the effectiveness of the content and format in informing better sexual health practice. GPs reported the STI Testing Tool had impacted their

clinical practice (85.6%), particularly in terms of increasing their ability to undertake appropriate screening for STIs (80%) and to broach the topic of STIs in consultations (68.5%). The STI Testing Tool's usefulness and applicability was further explored in the interviews. The content was deemed highly relevant, both because it related to commonly seen health problems within general practice, as well as providing clear management guidelines for less common STIs and for some patient groups who were less commonly seen by many GPs, such as sex workers. The format was valued for presenting information clearly and concisely and in a logical step-wise style.

Practice Nurse Postcard

Fewer PN respondents were aware of the Practice Nurse Postcard (38.2%) – of these, approximately fifty percent had used it (51.1%). Survey respondents believed the design was appropriate (87%) and the information was easy to follow (87%). The content and format were reported to be effective in improving user ability to complete well women's checks (63%), test for chlamydia (76.6%), document a brief sexual history (72.3%), and/or improve user knowledge of chlamydia treatment and prevention (67.4%). The interviews supported this positive view of the item's format and content and its subsequent impact on clinical practice. The format was considered user-friendly and the checklist style was effective. The content was perceived as evidence-based, relevant, and validated the PN role in sexual healthcare. The limited awareness and use of this item among the PN respondents is of concern and influences the reliability of reported findings. However, it appears to have been useful for most of the PNs who used it and interview evidence suggested it was extremely useful for those PNs who had a stronger role in sexual healthcare.

Other Resources

One of the key messages from the evaluation is that a range of different resources, formats, and delivery styles is required to reach a large number of clinicians and meet their sexual healthcare needs. The Practice Nurse Postcard and STI Testing tool contained succinct, checklist-style information, which was useful in supporting PN and GP consultations and in translating knowledge and skills gained in sexual health training into practice. Items with more detailed content and different formats delivered through different channels were also valuable to many PNs and GPs who contributed to this evaluation, and reported to be clear, user-friendly, and applicable to them and the patients they supported.

3. What was the awareness of the GP Project, its specific resources, and the resource content?

The interviews suggested that, although GPs and PNs were largely unfamiliar with the GP Project, they were aware of individual items that were developed and disseminated through the GP Project.

GP Awareness

Items with the highest level of awareness in the survey were the STI Testing Tool (61.7%), the sexual health articles in Australian Doctor and Medical Observer (58.5%), and the Check booklet (50.5%). When GPs were asked if they had used these items, they remained the most accessed, though all items had been used by at least some respondents.

A low proportion of GP respondents were aware of the online STI Resources for General Practice (15.3%). This is unfortunate given the strong theme in the interviews that easy electronic access to clinical support, GP education, and patient resources would be useful, as confirmed by those who used this item.

PN Awareness

Awareness of the Practice Nurse Postcard was relatively low (38.2%), with less than two-thirds of these individuals reporting that they had used it (63.5%). A larger number of respondents (50.2%) were aware of the Online STI Practice Nurse Training, but few had used it. The interviews suggested that PNs believed they would have used the Practice Nurse Postcard if they had been aware of it and were still interested in accessing it or a similar resource.

Division Awareness

This evaluation also sought to ascertain the awareness of the GP Project at the level of the NSW Divisions of General Practice as they were responsible for promoting the GP Project. One difficulty and potential source of bias in this evaluation was the length of time that has passed since the GP Project was initiated. At the level of the Divisions, this was of particular importance as many of the responsible personnel were no longer affiliated with the Divisions. Of the 26 Division personnel who responded to the survey, most were aware of the STI Testing Tool (84.6%), the Online STI Testing Tool GP Training (65.2%), and the Practice Nurse Postcard (65.2%). Fewer were aware of the STI ALM for General Practitioners (52.2%), possibly because not all Divisions delivered this training, and the Online STI Practice Nurse Training (38.1%). There appears to be reasonable awareness and understanding of the STI Testing Tool and the Practice Nurse Postcard, with respondents agreeing they understood their significance. It is possible the STI Testing Tool was more heavily promoted at the Division level than other items, which may be one of the reasons for its subsequent higher impact.

4. How successfully were the GP Project resources promoted and integrated into primary care?

One of the strengths of the GP Project was the use of existing, well utilised primary care educational channels for disseminating the items. This helped respondents to access the items opportunistically during routine surveillance of educational material – this was the case for the sexual health articles, the Check booklet, the Drivetime Radio Medical CD for STI, and the online STI Testing Tool GP Training. During the interviews, some GPs also stated this is how they became aware of the STI Testing Tool. It is clear that both PNs and GPs became aware of GP Project items through attendance at conferences and educational events, another example of appropriate, well targeted promotion.

The STI Testing Tool for GPs also seems to have been satisfactorily promoted to GPs, given the relatively high awareness among survey respondents. The interviews suggest that this item may have been used initially by some GPs as a learning tool to integrate new knowledge into their practice, after which it was no longer needed.

During the interviews, GPs noted that their confidence in the items was bolstered by endorsement from professional bodies, authorship by a reputable organisation, and/or clear referencing to verify content reliability. Focus group participants suggested that the incorporation of key screening messages in the RACGP Preventive Health Guidelines was a key outcome, providing continued endorsement and promotion in a way that would accord with the expressed GP views.

The PN survey responses suggest the Practice Nurse Postcard was less satisfactorily integrated into practice due to low awareness, and would benefit from more promotion in the future. On the other hand, the item was highly valued by some of the PNs interviewed; they reported it had become integral to sexual healthcare and was also valued as a means of reinforcing their role in general practice.

5. What was the participation rate in the training resources? What were the reactions to the training? Were the learning objectives met? Was the training method appropriate?

Survey data suggest that relatively few respondents accessed the items that offered training. Those who did largely considered them to be useful. However, it is difficult to draw strong conclusions from the evaluation. This is because the respondents do not constitute representative samples of all primary care clinicians in NSW; furthermore, relatively few respondents completed the items that offered training and responded to all the relevant questions.

Only ten GP respondents had completed at least one of the three modules of the STI ALM for General Practitioners. This is likely to be because this item was delivered by only a few Divisions. These respondents stated it was useful and the format aided learning. Another intensive training experience was offered by the Online STI Testing Tool GP Training, which was completed by 13 respondents; similarly, it was well received. The interviews supported the conclusion that some GPs value online training due to the convenience and case-based approach, while others favour face-to-face training as a mode of learning. To increase awareness of, and access to these training opportunities, Division personnel recommended an enhanced Division role in their promotion and, in the case of the STI ALM for General Practitioners, its delivery.

According to some GP interviewees, the STI Testing Tool is an effective training resource; it can be used for up-skilling themselves or instructing others, rather than as an ongoing practice support tool. This item allowed them to translate sexual health education garnered elsewhere into clinical care. Similarly, PNs reported that they initially learnt about the Practice Nurse Postcard in conferences and through the Online STI Practice Nurse Training, and subsequently used it as a prompt in consultations, thereby integrating their sexual healthcare knowledge and skills into practice. These findings emphasised that developing and incorporating simple practice support tools into wider training initiatives are an effective way to enhance the training and translate learning into practice. That this was factored into the GP Project is a notable strength and is likely to be a useful strategy for future training initiatives.

Apart from limited awareness of their availability, the most common barriers to accessing those items that offered training were time pressures and competing training priorities – this was the case for both PNs and GPs. The interviews suggested that PN participation in the Online STI Practice Nurse Training was also affected by limited support from the GPs within their practice. Findings indicated GPs and PNs are receptive to further sexual healthcare education. The challenge is to entice them to access training in a setting of competing education priorities and where many of them are unaware of available resources.

6. How were the GP Project resources used (when, why, how often)?

According to most GP survey respondents, the GP items fulfilled their intended purpose. The STI Testing Tool was said to improve the ability to raise the topic of STIs with patients (68.5%) and improve the ability to order appropriate STI tests (80%). The online STI Resources for General Practice improved the ability to locate appropriate resources (83.3%). The other training resources for GPs were also considered to have achieved their aims. The Practice Nurse Postcard was reported to be effective in informing chlamydia testing and management, as well as improving PN ability to document patient sexual history.

How the resources were used was explored in depth in the GP and PN interviews.

GP Use

GPs had different reasons for using the items. Some accessed the items as part of their usual commitment to remaining up to date as clinicians because sexual healthcare was an integral part of general practice. One GP reported he undertook the training to acquire CPD points for professional accreditation purposes. Some GPs had a particular interest in sexual healthcare and preferentially sought resources; others accessed the items because of a self-identified learning need in that area.

The items were used for private study, to meet a clinical need within a consultation, and/or for teaching purposes. The STI Testing Tool was considered very useful in guiding STI management within a consultation, especially if the GP had a clinical question. It was said to be time-saving and convenient and particularly useful if a GP was managing an unfamiliar clinical scenario. It was usually accessed online; however, some GPs reported keeping a copy on their desk. The sexual heath articles, the Check booklet, and the STI Testing Tool had all been used by some respondents to teach GP registrars or other GPs about sexual health.

No GPs reported using the resources, including the STI Testing Tool, on an ongoing basis. For some, this was because of perceived competence. Others suggested they no longer had the item easily to hand, though would like to still have it and were unsure how to access it.

PN Use

The Practice Nurse Postcard was used to improve PN confidence and performance within consultations. This item appeared to be of particular benefit to PNs who had a strong role in sexual healthcare. One of its main benefits was that it affirmed the PN role within sexual health consultations. PNs showed the item to patients to explain why they were performing a sexual health check and/or a pap smear, thus gaining permission to proceed. It had an important prompting role to ensure a complete and comprehensive consultation. The PNs also found the contact numbers and resource list on the item useful. There was a tendency among PN interviewees to use a hard copy, though electronic copies were preferred by some.

Some PNs used the Practice Nurse Postcard as a patient education resource, providing it to patients during consultations. Given the scope of this evaluation, the value of this practice for patients is uncertain. However, the perceived value of this item suggests the potential for a companion Postcard tailored to patients.

7. How could the promotion, content and delivery of the resources be improved?

Most Division personnel who responded to the survey were aware of the STI Testing Tool, the Online STI Testing Tool GP Training, the STI ALM for General Practitioners, and the Practice Nurse Postcard. Some suggested that the promotion of GP Project items would be bolstered by a dedicated practice support officer, as well as increased promotion at CPD events. In general, there appeared to be less awareness of the PN items than the GP items at the level of the Division; this represents a potential area for improvement in future initiatives.

PNs

This evaluation provided evidence that greater promotion of the PN role in sexual healthcare is likely to promote sexual healthcare in general practice. When item promotion was explored with PN interviewees, they generally relied on APNA to advertise and promote resources on different topics. Some PNs would like increased sexual healthcare support from Divisions, possibly through practice visits, and believe this would increase the promotion and delivery of resources. Improved online access, such as through the APNA website, was also recommended.

The potential to improve item promotion aligns with the potential to promote the PN role in sexual healthcare. It appears there could be greater recognition of the PN role by Divisions, GPs,

and PNs themselves. This is supported by the finding that PN use of the items was hindered by the perception that PNs have a limited role in sexual healthcare. If a PN was not involved in well women's checks, they were unlikely to find the Practice Nurse Postcard helpful.

Some PNs gave as an example that they had a stronger role in chronic disease management in their practices than in sexual healthcare and thus this training was a higher priority for them. One PN indicated that the role of PNs in chronic disease management meant they needed to be skilled in sexual healthcare because conditions were sometimes identified while preparing patient care plans. This suggests the PN role in sexual healthcare may be bolstered by stressing the significance of sexual healthcare to PNs while preparing patient care plans. This is particularly important since the Medicare item numbers that specifically promoted the PN role in well women's checks have since been removed.

GPs

The items appear to have been well promoted to GPs, particularly through targeting well utilised channels of GP education, including the Divisions. Item delivery appeared to be adequate in the initial phases of the GP Project; however, ongoing ready access when needed is where most improvements might be made. For ongoing use of the items, online access was regarded as essential complemented by periodic promotions of item availability– this was suggested by the finding that several GPs were unsure how they could access the STI Testing Tool again, despite its online availability.

8. Of those clinic staff who used the resources and/or participated in the training did STI diagnosis and management practices improve, compared to those who didn't use them (in the short and long-term)?

Survey responses reveal perceived improvement in GP and PN capacity to diagnosis and manage STIs, consequent to using the items. Some GP interviewees advised that contact tracing was not a GP role but should be patient-driven or completed by specialised sexual health services. The items that offered training did not appear to have increased interest in contact tracing in these individual GPs.

Improved confidence and capacity to diagnose and manage STIs consequent to using the PN items was a particularly strong theme in the PN interviews. There were repeated references to the effectiveness of the Practice Nurse Postcard in giving PNs both increased authority and capacity to become more involved in sexual healthcare and this appeared to be a long-term gain. Following changes to Medicare item numbers, PNs who used this item requested a revised version be disseminated to ensure continued use.

9. What factors affected the impact of the resources and training on STI diagnosis and management practices?

The development and delivery of the items were of a high standard and largely achieved the project aim. In particular, the expertise and engagement of the Working Group, the thorough and iterative processes of item development, and the multimodal nature of the items were key strengths of the GP Project.

Key factors identified in this evaluation as likely to have limited the impact of these items include limited awareness of the online items; limited access by time-poor GPs and PNs; organisational issues, like the perceived and assumed roles of GPs and PNs; as well as perceived patient comfort with sexual health consultations.

Limitations

Despite the potential value of these results, the following limitations deserve mention.

Online surveys

This evaluation was conducted at a time of considerable reform within the Australian primary care sector. This hindered the capacity of some Divisions to respond to the survey and/or assist with the recruitment of GPs and PNs.

Due to poor response rates, the sampling method was modified from purposive sampling to a population-based approach during the course of the evaluation. As such, eligible participants were not randomly selected from the Divisions. Therefore, the results of this study are unlikely to generalise to all GPS or PNs in NSW.

Impact data were collected through an online self-administered questionnaire and results might be influenced by social desirability. Given the nature of data collection, it is not possible to verify that respondents contributed to the survey once – however, repeated participation is unlikely given the absence of incentives beyond some otherwise free resources to complete the survey. Furthermore, it cannot be guaranteed all respondents are NSW-based.

Despite the inclusion of images to prompt respondents as they completed the survey, the interviews revealed that some respondents had confused the GP Project items for other resources that were not related to the GP Project, and as such, they were not familiar with the items. This suggests that some respondents may have responded to survey items incorrectly.

Process evaluation

Process evaluation was conducted after the development of the items and providing the research group with all necessary information proved to be very challenging. As such, findings from the document analysis are likely to be incomplete. Documentation pertaining to item development was not systematically maintained from the commencement of the GP Project – consequently, there was limited evidence of the developmental process – for instance, minutes from Working Group meetings contained little detail of discussions between stakeholders that informed the resources.

Interviews and focus groups

Despite pilot testing the interview schedule, recall hindered the capacity of some interviewees to describe the ways in which items were used and/or inform clinical practice. Focus group participants were involved in the GP Project for various periods and had different levels of involvement; it is therefore unlikely that the findings from this process will reflect the views of all members of the Working Group.

Lessons

1. A range of resources and modes of delivery is required to meet the varied needs of GPs and PNs in managing sexual health

The evaluation suggests that the GP Project largely met its aim to develop a range of resources delivered in varied ways. The GP Project was planned in recognition of the fact that clinicians, both GPs and PNs, are a highly variable group in terms of their knowledge of, skills in, and attitudes towards sexual health; their preferred learning styles; and their preferred methods of accessing resources. Therefore, a range of resources and different delivery modes were required to optimise reach and influence clinical practice. Although this was demonstrated among the GP items, it was less so for the PN items.

Implications

- An increased range of resources and training options are required to target different PN needs
- The underlying principle of developing a range of resources with different modes of delivery should be used in ongoing educational initiatives

2. Limited awareness of training opportunities and resources hindered the impact of some resources and increased promotion is required

Generally, the items were well received. However, some that were reported to be highly useful did not appear to be well known to most GPs and PNs. This was particularly the case for the online STI Resources for General Practice. No information was available to evaluate the way in which this item was developed or promoted. Given that GPs in this evaluation did request easily accessed online resources, improved promotion of this item may be of value to GPs. Similarly, the STI ALM for General Practitioners was also underutilised item, largely because this item was only delivered in select Divisions. Division personnel indicated a preference for a greater role in its delivery.

The impact of the Practice Nurse Postcard is likely to have been increased by improved promotion. Although Division personnel reported that they were aware of, and promoted this item, relatively few PN respondents were aware of it. Given that PN interviewees considered it a practical resource, increased promotion may be of value to PNs.

Implications

- The perceived value of the online STI Resources for General Practice cannot be determined due to poor awareness and subsequent usage by survey respondents. Further research and planning of how to integrate such resources into primary care is required
- Promotion of PN items via APNA may improve their use among PNs
- If appropriate supported, Divisions may be well placed to increase their outreach to PNs and promote sexual healthcare

3. Dissemination of sexual health information should occur through existing forums and resources well utilised by GPs and PNs

Both GPs and PNs reported that it was common for them to access items as part of their usual CPD activities. In many cases, this was self-directed learning unconnected to professional body accreditation requirements (such as CPD points), but part of a professional commitment to lifelong learning. There was a tendency to access certain resources or learning opportunities repeatedly on a number of topics and sexual healthcare was accessed opportunistically. This applied to the Drivetime Radio Medical CD for STI, the Online STI Testing Tool GP Training, the sexual health articles, the Check booklet, and the Online STI Practice Nurse Training. The capacity of the GP Project to use these educational channels – and thereby facilitate opportunistic access among clinicians, is a particular strength of this initiative.

Implications

- Items to promote sexual healthcare should continue to target commonly accessed GP and PN educational channels

4. Easily accessible online resources are required for the busy clinician

Due to time pressures and the competing demands of general practice, it is important that items can be readily accessed. This applies to clinical guidelines, as well as clinician and patient

resources. The importance of accessibility is somewhat reflected in the online STI Resources for General Practice. GP interviewees suggested that online desktop resources were required so they may be accessed during patient consultations. Yet, relatively few GPs were aware of or used this item. The resources that GPs reported to be most embedded into their daily practice included the electronic Therapeutic Guidelines (eTG) and clinical software programs. Otherwise, GPs tended to perform searches in conventional search engines to source information expeditiously.

Implications

- The effectiveness of online portals – like the STI Resources for General Practice. GP, warrants further examination, with consideration of improved marketing and facilitation of access
- The potential to integrate items into existing technologies warrants consideration

5. The STI Testing Tool and the Practice Nurse Postcard were useful to embed sexual health knowledge into clinical practice following other training

The STI Testing Tool and Practice Nurse Postcard seemed to enable clinicians to translate knowledge and skills acquired elsewhere into clinical practice. As useful prompts, they appeared to strengthen their learning and allowed them to integrate new knowledge into patient care.

Implications

- Providing simple practice support tools during intensive training opportunities may facilitate and sustain knowledge translation – however, this warrants further study

6. Enhancement of PN role in sexual health is likely to be valuable

The evaluation suggests that the usefulness of the Practice Nurse Postcard varied according to the role of the PN in their general practice. Some PNs are responsible for well women's health checks, sexual health screening, and patient education within their practice; others are not. For PNs with a strong sexual health role, such as those working in rural areas and with male GPs, the Practice Nurse Postcard was highly valued. It increased their capacity to complete well women's checks and incorporate sexual healthcare within these checks. Most notably, the item was said to validate their clinical role to patients and GPs. For some PNs who did not have a strong role in sexual healthcare, the Practice Nurse Postcard is likely to have been less useful. Furthermore, some GP and PN interviewees suggested that PNs have a limited role in sexual healthcare.

Implications

- Recognition of the highly variable role that PNs assume in sexual healthcare is highly relevant to the development, promotion, and delivery of future items
- The Practice Nurse Postcard helped to increase confidence in, and ability to conduct STI screening through a checklist-approach and validation of the PN role
- Following changes to Medicare item numbers, the Practice Nurse Postcard requires revision
- The PN role in sexual healthcare might be bolstered by marketing this role to Divisions, GPs, PNs, and patients
- The perceived value of the Practice Nurse Postcard suggests the potential value of a companion Postcard tailored to patients, explaining the PN role in sexual healthcare and well women's checks

7. Contact tracing is a potential area for further GP development

No survey item investigated GP confidence in, attitudes towards, or changes in contact tracing practices. However, the interviews suggested this remained an area where GPs may require additional support. Some GPs suggested they had limited confidence in this area; furthermore, some did not consider it to be the role of the GP.

Implications

- Further investigation of how to increase the confidence and capacity of GPs to perform contact tracing is required

8. Clinicians seek resources to remain up to date; as such, items require repeated review, endorsement, and release

GPs and PNs accessed items to ensure that their knowledge and skills were current. Thus, it was essential to many respondents that the information provided was clearly evidence-based, endorsed by the appropriate professional body, and/or contained current information.

Implications

- Regular releases of updated sexual healthcare items are likely to be essential to their ongoing use and integration into practice

9. Sexual healthcare initiatives and their evaluation would be strengthened by a robust theoretical and methodological framework that commences at project inception

Process and impact evaluation represent equally important components of evaluation studies. Although the latter can be determined following project completion, the former requires careful deliberation from the outset. The importance of this was revealed during the course of this evaluation, whereby limited information was available for document analysis. Despite the wealth of documents, they did not always capture the ways in which each item was conceived, deliberated, developed, revised, tested, disseminated, and translated into sexual healthcare. As such, findings from the document analysis are unlikely to portray the richness of the process, and/or the tireless efforts and passion that Working Group members contributed to the GP Project.

Implications

- To optimise the effectiveness and efficiencies of future initiatives, a robust yet flexible theoretical and methodological framework is required to facilitate a formative, a process, an impact, as well as an impact evaluation. This will help to reveal: project inputs; activities; outputs; outcomes; impact; the context required to optimise project effectiveness and/or efficiencies; the information required to capture the aforesaid elements; ways to capture this information; the timing for collating the information; how the information should be interpreted; who is best placed to interpret the information; and the implications associated with the findings for policy development, clinical practice, public health, and research
- A template that encompasses the aforesaid elements will help to ensure a systematic approach to evaluation

Chapter 7. Appendices

Appendix 1: Research Design

Evaluation	Research Question	Data Source	Data Collection Method			
			Document Analysis	*Focus Group*	*Survey*	*Interview*
Process	1. Was the methodological development of the resources rigorous?	• GP Project Workplan • Working Group information • Relevant resources • Evidence sourced • GP Project item information • Promotional material	✓			
		• NSW STIPU personnel and GP Working Group		✓		
Impact	2. Was the content and format of the resources, clear, user-friendly and applicable to the target clinician and patient groups?	• GPs • PNs			✓	✓
	3. What was the awareness of the GP Project, its specific resources, and the resource content?	• Project Officers			✓	
		• GPs • PNs			✓	✓
Impact	4. How successfully were the GP Project's resources promoted and integrated into primary care?	• Project Officers			✓	
		• GPs • PNs			✓	✓
Impact	5. What was the participation rate in the training resources? What were the reactions about the training? Were the learning objectives met? Was the training method appropriate?	• GPs • PNs			✓	✓

Evaluation	Research Question	Data Source	Data Collection Method			
			Document Analysis	*Focus Group*	*Survey*	*Interview*
Impact	6. How were the 'GP project's' resources used?	• GPs • PNs			✓	✓
Process and Impact	7. How could the promotion, content and delivery of the resources be improved?	• GP Project Workplan • Working Group information • Relevant resources • Evidence sourced • GP Project item information • Promotional material	✓			
		• NSW STIPU personnel and GP Working Group		✓		
		• Project Officers			✓	
		• GPs • PNs			✓	✓
Impact	8. Of those clinic staff who used the resources and/or participated in the training did STI diagnosis and management practices improve, compared to those who didn't use them?	• GPs • PNs			✓	✓
Impact	9. What factors affected the impact of the resources and training on STI diagnosis and management practices?	• GPs • PNs			✓	✓

Appendix 2: Focus Group Schedule

Methodological Development

1. What informed the development of the GP Project items – why were these sources of information used?

2. How did the Working Group determine the content of the items – why were these approaches taken?

3. How did the Working Group determine the way the items were presented – why were these approaches taken?

4. How did the Working Group ensure the items were useful to GPs or PNs?

5. Reflecting on the development of the items:

    a. What helped this process?
    b. What hindered this process – which strategies might help to overcome these barriers?
    c. How robust do you think the items are – why do you say this?
    d. In hindsight, what could have been done differently to develop the items – why do you say this?

Promotion and Delivery

1. How were the GP Project items promoted – why were these approaches taken?

2. How effective or efficient were these approaches – why do you say this?

3. How were the items delivered – why were these approaches taken?

4. How effective or efficient were these approaches – why do you say this?

5. Reflecting on the promotion and delivery of the items:

    a. What helped this process?
    b. What hindered this process – which strategies might help to overcome these barriers?

6. In hindsight, what could have been done differently to:

    a. Promote the items – why do you say this?
    b. Deliver the items – why do you say this?

Appendix 3: Online Survey

The GP Project Evaluation Online Survey

Welcome to the GP Project Evaluation online survey!

What's the GP Project?

- An initiative of the NSW Sexually Transmissible Infections Programs Unit (STIPU) to support general practice to manage STIs within their practice

Who's evaluating the GP Project?

- A research team from the University of Western Sydney (UWS) is conducting the evaluation

What's involved?

- It is anonymous and and confidential

- It will take no more than 10-15 minutes to complete

- By completing, you consent to the information being used for reporting purposes

What's in it for me?

- All GPs and Practice Nurses who complete the survey and provide their postal address will receive a copy of:

- Australasian Contact Tracing Manual 2010
- HIV, Viral Hepatitis and STIs – A Guide for Primary Care publication
- The STI contact tracing tool

To receive the publications, please leave your postal address in the box which will appear on the completion of the survey.

What will happen to the survey responses?

- Survey responses will be reported at a collective level, ensuring that all respondents remain anonymous

Does the project have ethics approval?

- This evaluation has received clearance from the UWS Human Research Ethics Committee (HREC Registration #: H8888)

- If you have any complaints about the ethical conduct of this research, you may contact the Ethics Committee through the Office of Research Services via:

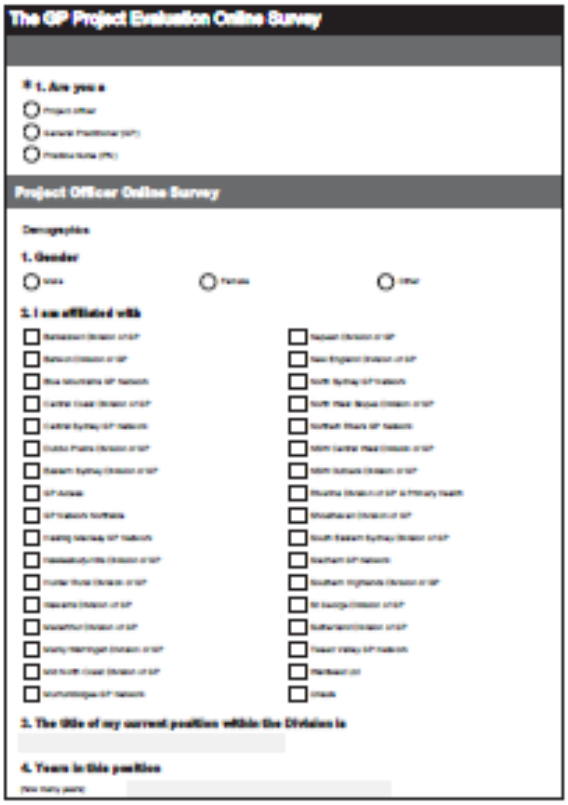
Tel:+61 2 4736 0239
Fax:+61 2 4736 0013
Email:humanethics@uws.edu.au

For more information please contact:

Dr Hassan Hosseinzadeh on 02 4620 3837 or email H.Hosseinzadeh@uws.edu.au
Dr Ann Dadich on 02 9685 0478 or email A.Dadich@uws.edu.au
Dr Penny Abbott on 02 4620 3882 or email P.Abbott@uws.edu.au

To participate in this survey please click on the 'Next' button

Page 1



The GP Project Evaluation Online Survey

* 1. Are you a

Project Officer

General Practitioner (GP)

Practice Nurse (PN)

Project Officer Online Survey

Demographics

1. Gender

Male

Female

Other

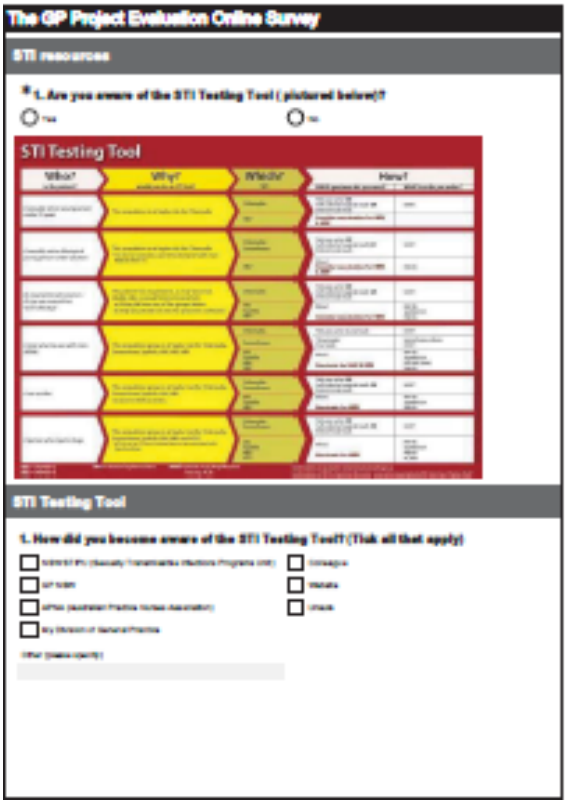
2. I am affiliated with

3. The title of my current position within the Division is

4. Years in this position

(Not many years)

Page 2



The GP Project Evaluation Online Survey

STI resources

* 1. Are you aware of the STI Testing Tool (pictured below)?

Yes

No

STI Testing Tool

Who?

Why?

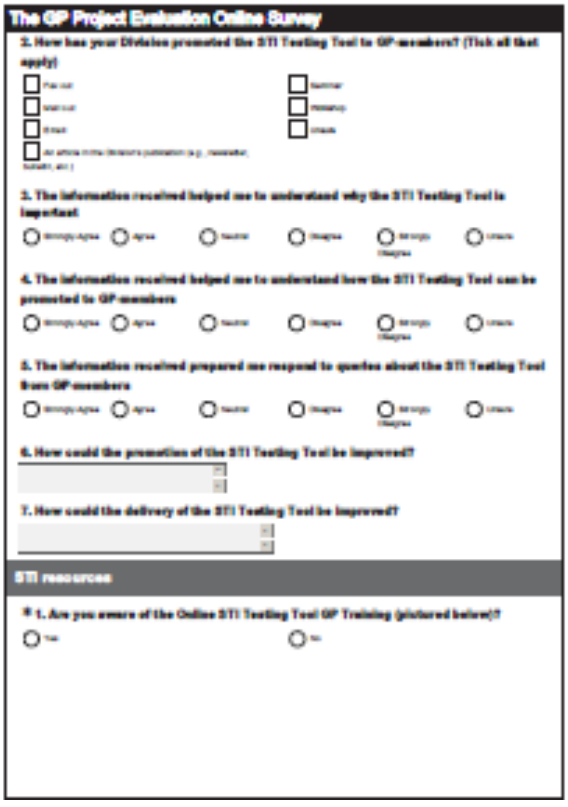
Which?

How?

STI Testing Tool

1. How did you become aware of the STI Testing Tool? (Tick all that apply)

Other (please specify)



The GP Project Evaluation Online Survey

2. How has your Division promoted the STI Testing Tool to GP-members? (Tick all that apply)

3. The information received helped me to understand why the STI Testing Tool is important

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

Unsure

4. The information received helped me to understand how the STI Testing Tool can be promoted to GP-members

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

Unsure

5. The information received prepared me respond to queries about the STI Testing Tool from GP-members

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

Unsure

6. How could the promotion of the STI Testing Tool be improved?

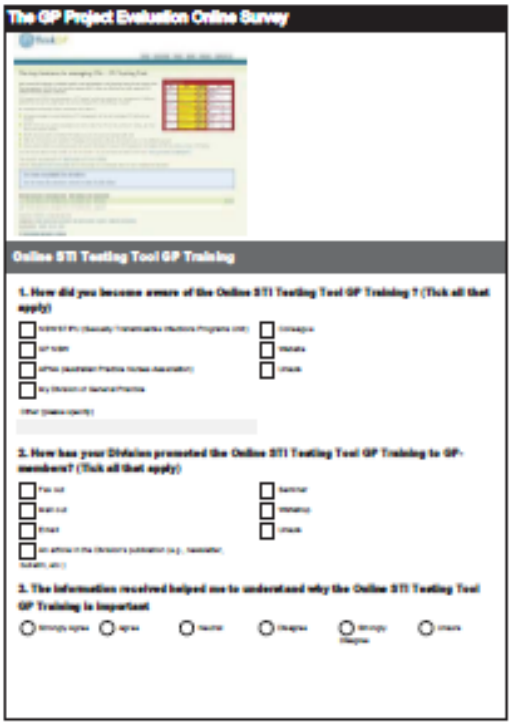
7. How could the delivery of the STI Testing Tool be improved?

STI resources

* 1. Are you aware of the Online STI Testing Tool GP Training (pictured below)?

Yes

No


The GP Project Evaluation Online Survey

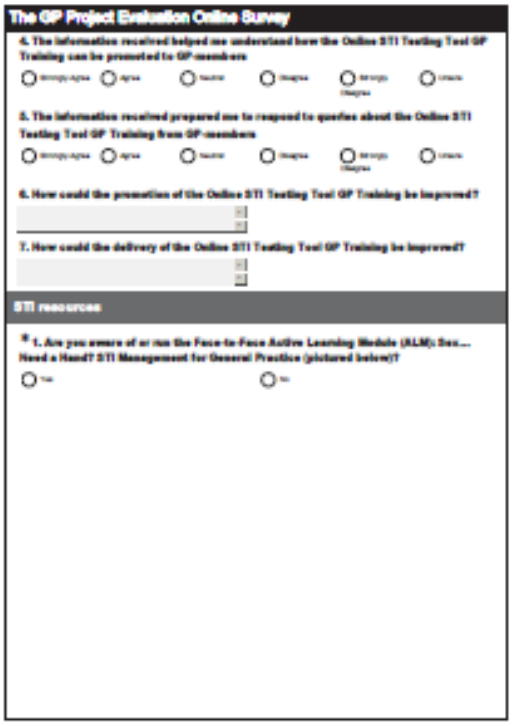
Online STI Testing Tool GP Training

1. How did you become aware of the Online STI Testing Tool GP Training ? (Tick all that apply)

2. How has your Division promoted the Online STI Testing Tool GP Training to GP-members? (Tick all that apply)

3. The information received helped me to understand why the Online STI Testing Tool GP Training is important

Page 5


The GP Project Evaluation Online Survey

4. The information received helped me understand how the Online STI Testing Tool GP Training can be promoted to GP-members

5. The information received prepared me to respond to queries about the Online STI Testing Tool GP Training from GP-members

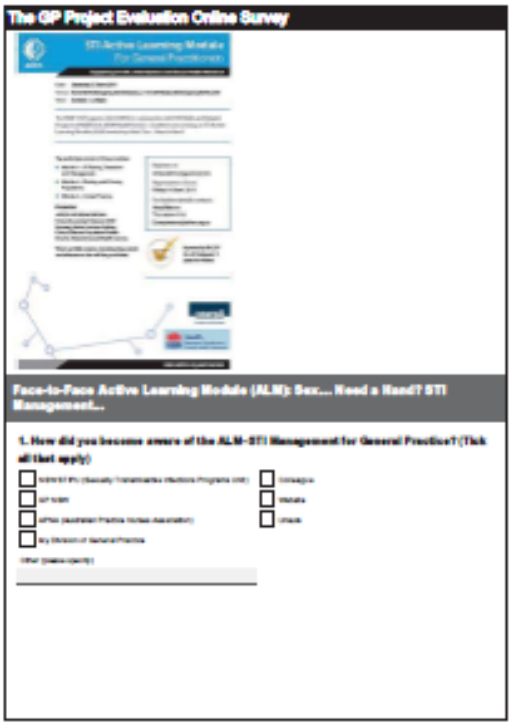
6. How could the promotion of the Online STI Testing Tool GP Training be improved?

7. How could the delivery of the Online STI Testing Tool GP Training be improved?

STI resources

* 1. Are you aware of or run the Face-to-Face Active Learning Module (ALM): Sex... Need a Hand? STI Management for General Practice (pictured below)?

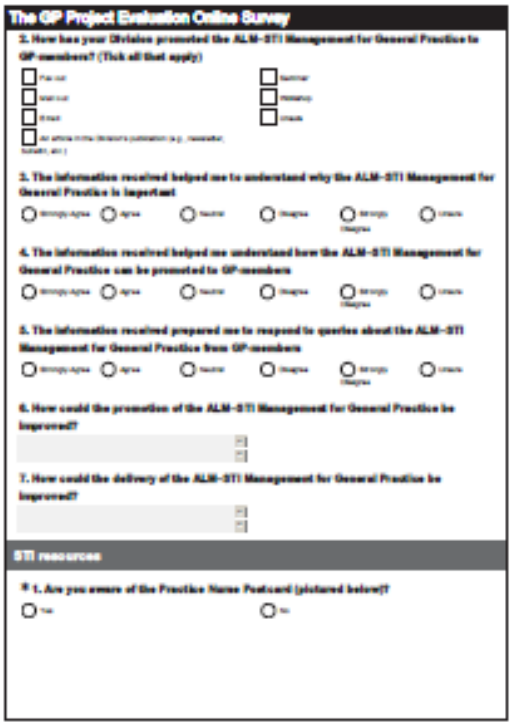
Page 6


The GP Project Evaluation Online Survey

Face-to-Face Active Learning Module (ALM): Sex... Need a Hand? STI Management...

1. How did you become aware of the ALM-STI Management for General Practice? (Tick all that apply)

Page 7


The GP Project Evaluation Online Survey

2. How has your Division promoted the ALM-STI Management for General Practice to GP-members? (Tick all that apply)

3. The information received helped me to understand why the ALM-STI Management for General Practice is important

4. The information received helped me understand how the ALM-STI Management for General Practice can be promoted to GP-members

5. The information received prepared me to respond to queries about the ALM-STI Management for General Practice from GP-members

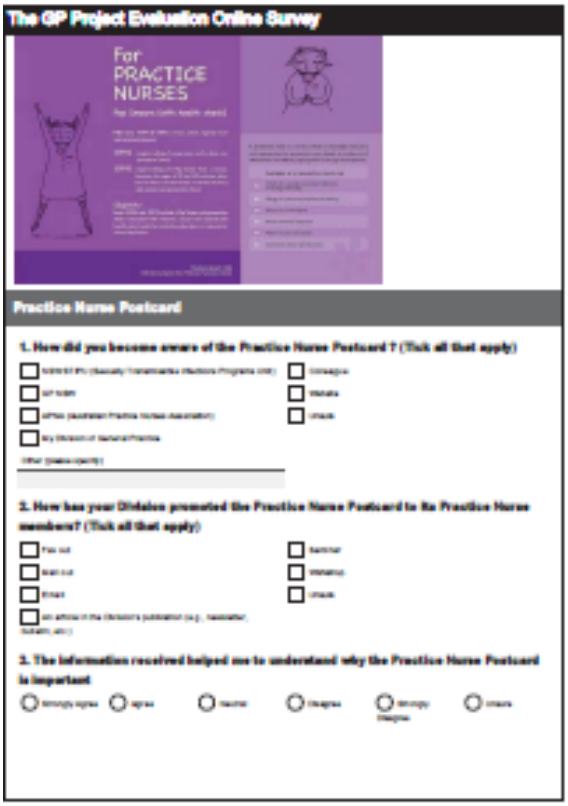
6. How could the promotion of the ALM-STI Management for General Practice be improved?

7. How could the delivery of the ALM-STI Management for General Practice be improved?

STI resources

* 1. Are you aware of the Practice Nurse Postcard (pictured below)?

Page 8


The GP Project Evaluation Online Survey

For PRACTICE NURSES

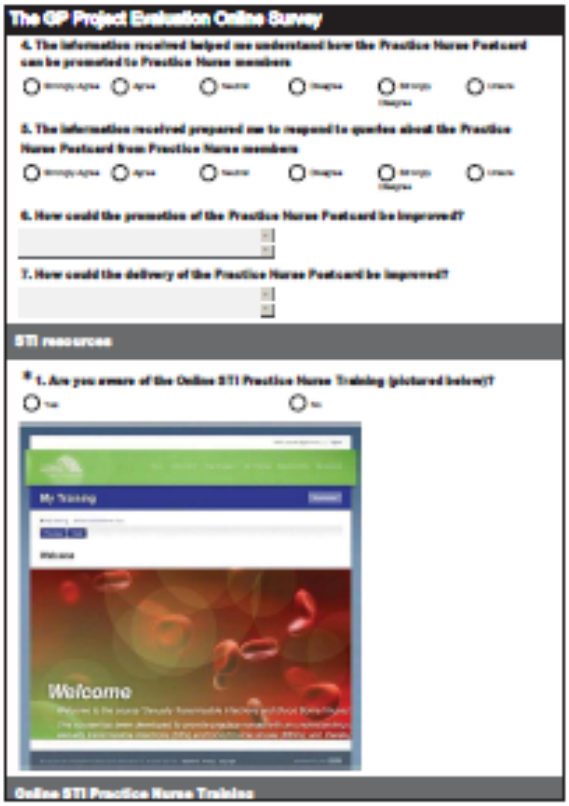
Practice Nurse Postcard

1. How did you become aware of the Practice Nurse Postcard ? (Tick all that apply)

2. How has your Division promoted the Practice Nurse Postcard to its Practice Nurse members? (Tick all that apply)

3. The information received helped me to understand why the Practice Nurse Postcard is important

Page 9


The GP Project Evaluation Online Survey

4. The information received helped me understand how the Practice Nurse Postcard can be promoted to Practice Nurse members

5. The information received prepared me to respond to queries about the Practice Nurse Postcard from Practice Nurse members

6. How could the promotion of the Practice Nurse Postcard be improved?

7. How could the delivery of the Practice Nurse Postcard be improved?

STI resources

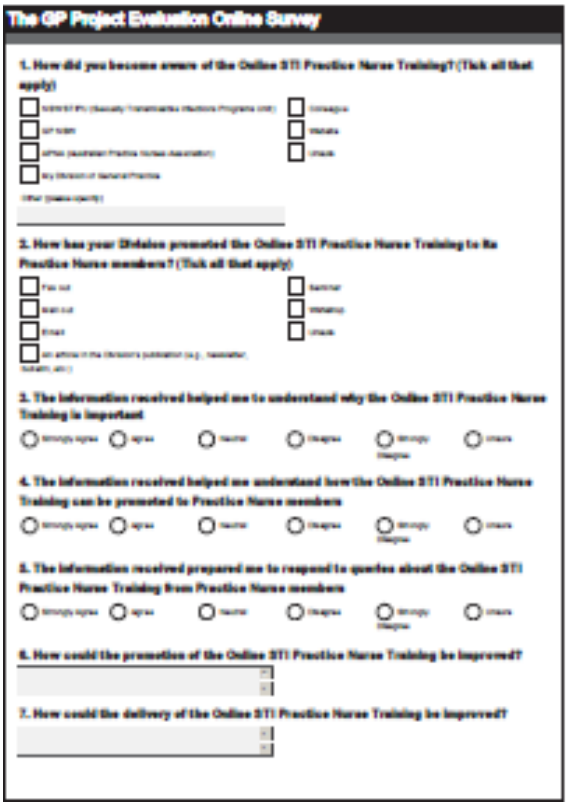
*1. Are you aware of the Online STI Practice Nurse Training (pictured below)?

My Training

Welcome

Online STI Practice Nurse Training

Page 10


The GP Project Evaluation Online Survey

1. How did you become aware of the Online STI Practice Nurse Training? (Tick all that apply)

2. How has your Division promoted the Online STI Practice Nurse Training to its Practice Nurse members? (Tick all that apply)

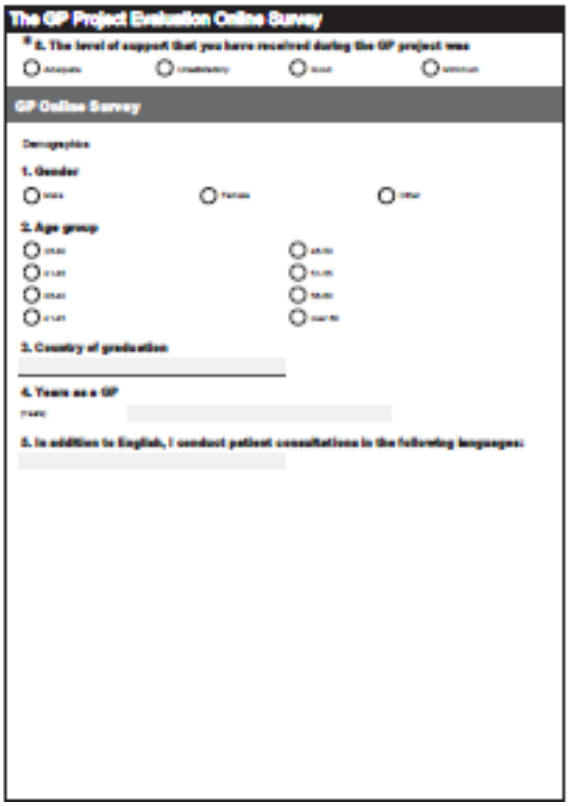
3. The information received helped me to understand why the Online STI Practice Nurse Training is important

4. The information received helped me understand how the Online STI Practice Nurse Training can be promoted to Practice Nurse members

5. The information received prepared me to respond to queries about the Online STI Practice Nurse Training from Practice Nurse members

6. How could the promotion of the Online STI Practice Nurse Training be improved?

7. How could the delivery of the Online STI Practice Nurse Training be improved?


The GP Project Evaluation Online Survey

*8. The level of support that you have received during the GP project was

GP Online Survey

Demographics

1. Gender

2. Age group

3. Country of graduation

4. Years as a GP

5. In addition to English, I conduct patient consultations in the following languages:

The GP Project Evaluation Online Survey

6. I am affiliated with

7. Postcode of my primary practice

8. Do you work at Aboriginal Medical Services (AMS) or Aboriginal Health Services ?

9. Is your practice a teaching practice ?

10. I am a GP Registrar

11. Number of GPs at my primary practice

12. Number of Practice Nurses at my primary practice

Page 13

The GP Project Evaluation Online Survey

13. To the best of my knowledge the percentage of patients I see who are Aboriginal or Torres Strait Islander is

14. To the best of my knowledge the percentage of patients I see who are from culturally and linguistically diverse backgrounds is

15. To the best of my knowledge the percentage of patients I see who are under 25 years of age are

STI Resources

*** 1. Are you aware of the STI Testing Tool (pictured below)?**

STI Testing Tool

Page 14

The GP Project Evaluation Online Survey

1. How did you become aware of the STI Testing Tool?

2. Have you used the STI testing tool?

3. How useful is the STI Testing Tool?

4. How frequently do you use the STI Testing Tool?

5. Since using the STI Testing Tool, have you contacted the NSW Sexual Health Infoline?

6. Since using the STI Testing Tool, have you contacted a sexual health clinic about a patient?

7. The STI Testing Tool assists me in my daily work as a clinician

8. The STI Testing Tool provides information at a level appropriate to my needs

9. It is clear and easy to follow

The GP Project Evaluation Online Survey

10. After using the STI Testing Tool, my ability to raise the topic of STIs with my patients has improved

11. After using the STI Testing Tool, my ability to order appropriate STI tests has improved

12. How could the usefulness of the STI Testing Tool be improved?

13. Are there any barriers preventing you from using the information from the STI Testing Tool?

14. The ways I prefer to receive the STI Testing Tool are:

STI Resources

*** 1. Are you aware of STI Resources for GP (pictured below)?**

The GP Project Evaluation Online Survey

STI Resources for GP

1. How did you become aware of the STI Resources for GP?

2. Have you used the STI Resources for GP?

3. How frequently do you use the STI Resources for GP?

Page 17

The GP Project Evaluation Online Survey

4. How useful is the STI Resources for GP?

5. Since using the STI Resources for GP, have you contacted the NSW Sexual Health Infoline?

6. The STI Resources for GP assists me in my daily work as a clinician

7. The STI Resources for GP provides access to what I need

8. Its layout and design are appropriate

9. After using the STI Resources for General Practice, My ability to find appropriate resources for STIs has improved

10. How could the usefulness of the STI Resources for GP be improved?

11. Are there any barriers preventing you from using the information from the STI Resources for GP?

12. The ways I prefer to receive the STI Resources for GP are:

STI Resources

* 1. Are you aware of Drive Time Radio Compact Disc (CD) for STI [Medical Update: Getting STIs on the Agenda] (pictured below)?

Page 18

The GP Project Evaluation Online Survey

Drive Time Radio Compact Disc (CD) for STI

1. Have you listened to the Drive Time Radio CD for STI?

2. How useful is the Drive Time Radio Compact Disc (CD) for STI?

3. After listening to the Drive Time Radio CD for STI, my knowledge of the topics addressed in this resources has improved

4. How could the usefulness of the Drive Time Radio CD for STI be improved?

5. Are there any barriers preventing you from using the information from the Drive Time Radio CD for STI?

6. The ways I prefer to receive the Drive Time Radio CD for STI are:

The GP Project Evaluation Online Survey

STI Resources

* 1. Are you aware of Online STI Testing Tool GP Training (pictured below) ?

Online STI Testing tool GP Training

1. How did you become aware of the Online STI Testing Tool GP Training?

* 2. Have you completed the Online STI Testing Tool GP Training?

3. If you have not completed the Online STI Testing Tool GP Training, please outline the barriers or reasons.

Online STI Testing Tool GP Training

The GP Project Evaluation Online Survey

1. How useful is the Online STI Testing Tool GP Training?

2. How frequently do you use information from the online STI Testing Tool train?

3. Since completing the Online STI Testing Tool GP Training, have you contacted the NSW Sexual Health Infoline?

4. Since completing the Online STI Testing Tool GP Training, have you contacted a sexual health clinic about a patient?

5. The online STI Testing Tool Training assists me in my daily work as a clinician

6. The online STI Testing Tool Training provides information at a level appropriate to my needs

7. It is clear and easy to follow

8. After completing the Online STI Testing Tool GP Training, my ability to raise the topic of STIs with my patients has improved

9. After completing the Online STI Testing Tool GP Training, my ability to order appropriate STI tests has improved

10. How could the usefulness of the Online STI Testing Tool GP Training be improved?

The GP Project Evaluation Online Survey

11. Are there any barriers preventing you from using the information from the Online STI Testing Tool GP Training?

12. The ways I prefer to receive the Online STI Testing Tool GP Training are:

STI resources

* 1. Are you aware of Face-to-Face Active Learning Module (ALM): Sex.... Need a Hand? STI Management for General Practice (pictured below)?

ALM

The GP Project Evaluation Online Survey

1. How did you become aware of the ALM – STI Management for General Practice?

* 2. Which modules have you completed of the ALM – STI Management for General Practice?

3. If you have not completed any modules of the ALM, please outline the barriers or reasons.

The Module 1 of the ALM -STI Management for General Practice

You mentioned that you have completed the module 1 (Sexually transmissible infections for General Practice) of the ALM. Please answer the following questions.

1. How useful is the Module 1 (Sexually transmissible infections for General Practice) of the ALM ?

2. How frequently do you use information from the Module 1 (Sexually transmissible infections for General Practice) of the ALM ?

3. Since completing the Module 1 (Sexually transmissible infections for General Practice) of the ALM, have you contacted the NSW Sexual Health Infoline?

4. Since completing the Module 1 (Sexually transmissible infections for General Practice) of the ALM, have you contacted a sexual health clinic about a patient?

The GP Project Evaluation Online Survey

5. Having undertaken the Module 1 (Sexually transmissible infections for General Practice) of the ALM assists me in my daily work as a clinician.

6. The module's design assisted my learning (e.g., the use of PowerPoint presentations, case studies, etc.).

7. The information was presented in a way that was clear and easy to follow.

8. After completing the Module 1 of the ALM, my ability to diagnose and treat common STIs has improved.

9. After completing the Module 1 of the ALM, I am more confident in my ability to take a brief sexual history.

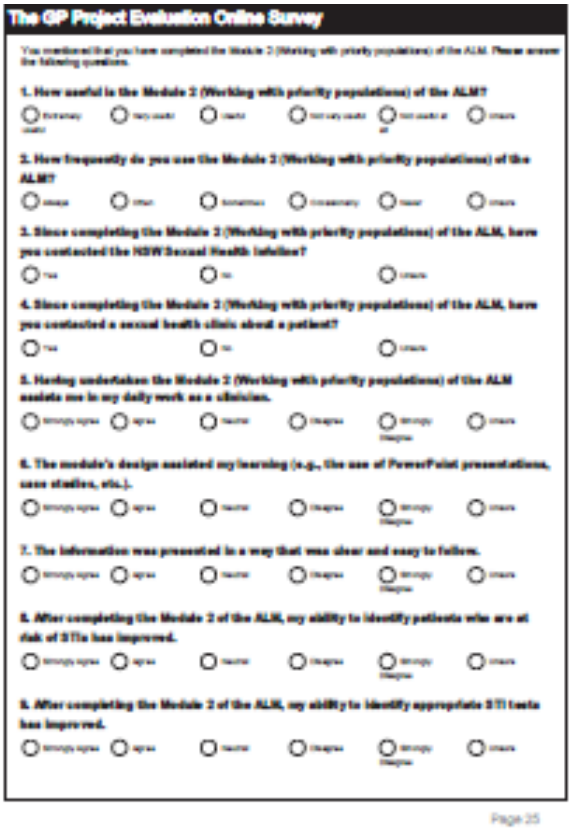
10. How could the usefulness of the Module 1 (Sexually transmissible infections for General Practice) of the ALM be improved?

11. Are there any barriers preventing you from using the information from the Module 1 of the ALM?

12. The ways I prefer to receive the Module 1 of the ALM are:

* 13. Do you recommend the Module 1 of the ALM to your colleagues?

The Module 2 of the ALM -STI Management for General Practice



The GP Project Evaluation Online Survey

You mentioned that you have completed the Module 2 (Working with priority populations) of the ALM. Please answer the following questions.

1. How useful is the Module 2 (Working with priority populations) of the ALM?

2. How frequently do you use the Module 2 (Working with priority populations) of the ALM?

3. Since completing the Module 2 (Working with priority populations) of the ALM, have you contacted the NSW Sexual Health Infoline?

4. Since completing the Module 2 (Working with priority populations) of the ALM, have you contacted a sexual health clinic about a patient?

5. Having undertaken the Module 2 (Working with priority populations) of the ALM assists me in my daily work as a clinician.

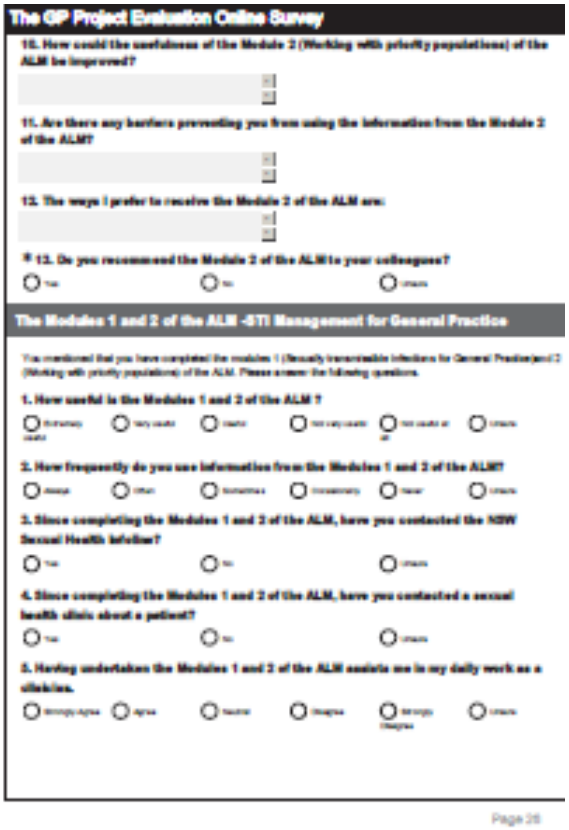
6. The module's design assisted my learning (e.g., the use of PowerPoint presentations, case studies, etc.).

7. The information was presented in a way that was clear and easy to follow.

8. After completing the Module 2 of the ALM, my ability to identify patients who are at risk of STIs has improved.

9. After completing the Module 2 of the ALM, my ability to identify appropriate STI tests has improved.

Page 25



The GP Project Evaluation Online Survey

10. How could the usefulness of the Module 2 (Working with priority populations) of the ALM be improved?

11. Are there any barriers preventing you from using the information from the Module 2 of the ALM?

12. The ways I prefer to receive the Module 2 of the ALM are:

* 13. Do you recommend the Module 2 of the ALM to your colleagues?

The Modules 1 and 2 of the ALM -STI Management for General Practice

You mentioned that you have completed the modules 1 (Sexually transmissible infections for General Practice)and 2 (Working with priority populations) of the ALM. Please answer the following questions.

1. How useful is the Modules 1 and 2 of the ALM ?

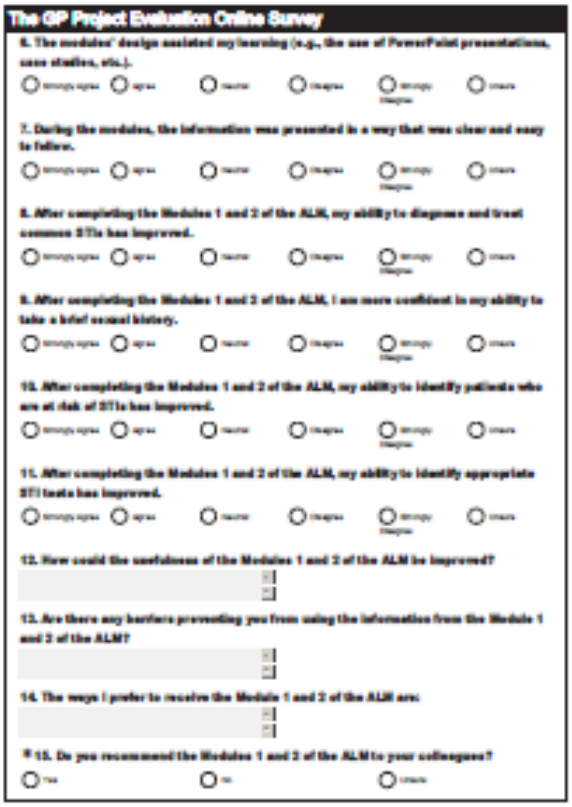
2. How frequently do you use information from the Modules 1 and 2 of the ALM?

3. Since completing the Modules 1 and 2 of the ALM, have you contacted the NSW Sexual Health Infoline?

4. Since completing the Modules 1 and 2 of the ALM, have you contacted a sexual health clinic about a patient?

5. Having undertaken the Modules 1 and 2 of the ALM assists me in my daily work as a clinician.

Page 26



The GP Project Evaluation Online Survey

6. The modules' design assisted my learning (e.g., the use of PowerPoint presentations, case studies, etc.).

7. During the modules, the information was presented in a way that was clear and easy to follow.

8. After completing the Modules 1 and 2 of the ALM, my ability to diagnose and treat common STIs has improved.

9. After completing the Modules 1 and 2 of the ALM, I am more confident in my ability to take a brief sexual history.

10. After completing the Modules 1 and 2 of the ALM, my ability to identify patients who are at risk of STIs has improved.

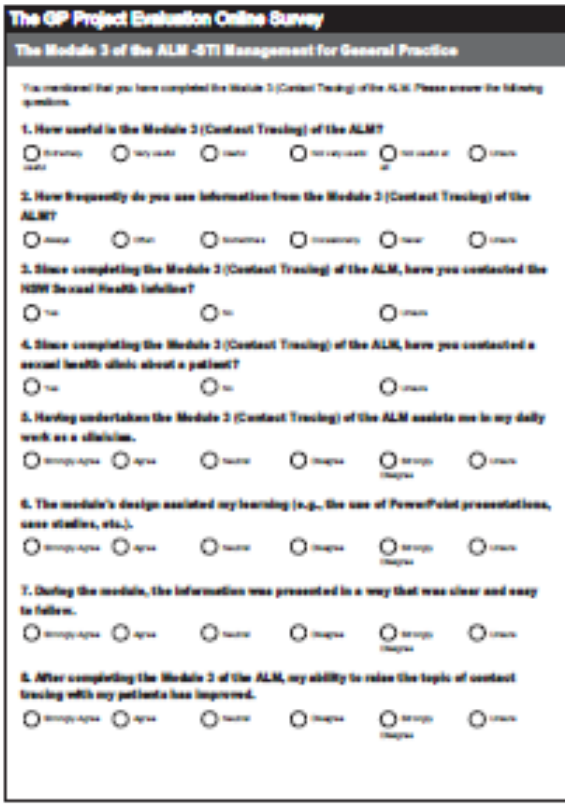
11. After completing the Modules 1 and 2 of the ALM, my ability to identify appropriate STI tests has improved.

12. How could the usefulness of the Modules 1 and 2 of the ALM be improved?

13. Are there any barriers preventing you from using the information from the Module 1 and 2 of the ALM?

14. The ways I prefer to receive the Module 1 and 2 of the ALM are:

* 15. Do you recommend the Modules 1 and 2 of the ALM to your colleagues?



The GP Project Evaluation Online Survey

The Module 3 of the ALM -STI Management for General Practice

You mentioned that you have completed the Module 3 (Contact Tracing) of the ALM. Please answer the following questions.

1. How useful is the Module 3 (Contact Tracing) of the ALM?

2. How frequently do you use information from the Module 3 (Contact Tracing) of the ALM?

3. Since completing the Module 3 (Contact Tracing) of the ALM, have you contacted the NSW Sexual Health Infoline?

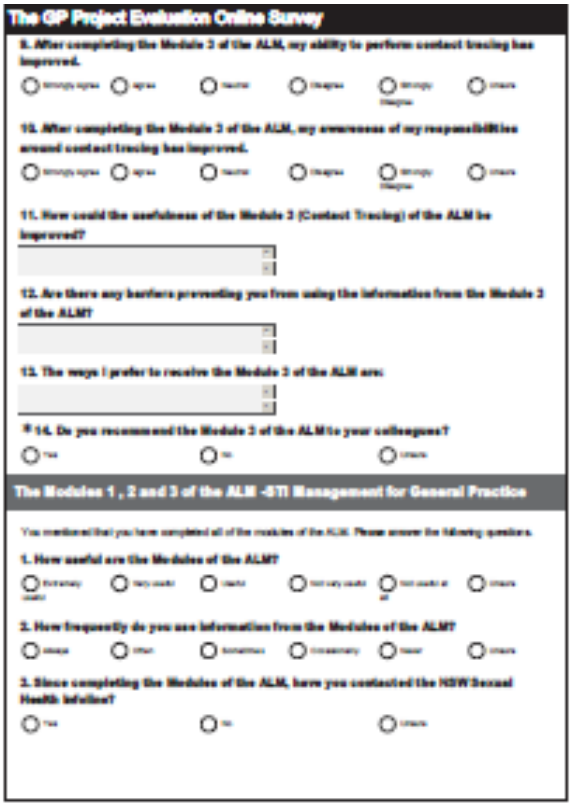
4. Since completing the Module 3 (Contact Tracing) of the ALM, have you contacted a sexual health clinic about a patient?

5. Having undertaken the Module 3 (Contact Tracing) of the ALM assists me in my daily work as a clinician.

6. The module's design assisted my learning (e.g., the use of PowerPoint presentations, case studies, etc.).

7. During the module, the information was presented in a way that was clear and easy to follow.

8. After completing the Module 3 of the ALM, my ability to raise the topic of contact tracing with my patients has improved.



The GP Project Evaluation Online Survey

9. After completing the Module 2 of the ALM, my ability to perform contact tracing has improved.

10. After completing the Module 2 of the ALM, my awareness of my responsibilities around contact tracing has improved.

11. How could the usefulness of the Module 2 (Contact Tracing) of the ALM be improved?

12. Are there any barriers preventing you from using the information from the Module 2 of the ALM?

13. The ways I prefer to receive the Module 2 of the ALM are:

* 14. Do you recommend the Module 2 of the ALM to your colleagues?

The Modules 1 , 2 and 3 of the ALM -STI Management for General Practice

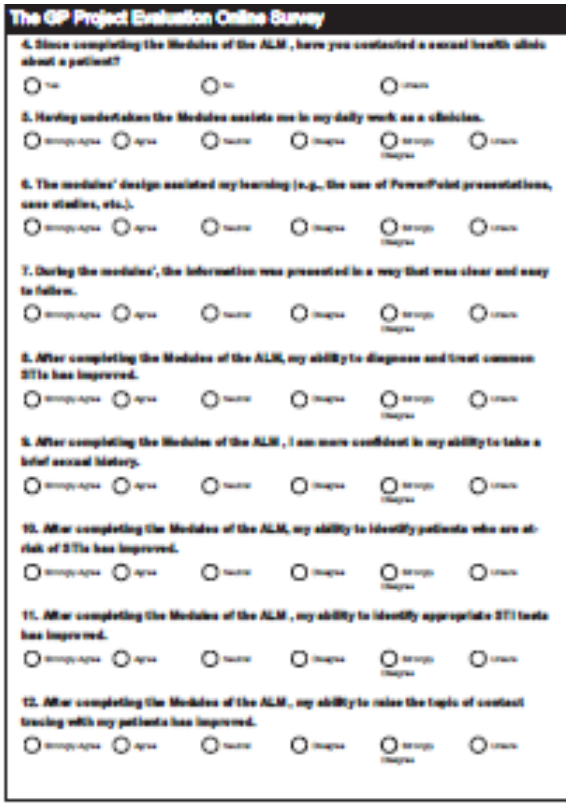
You mentioned that you have completed all of the modules of the ALM. Please answer the following questions.

1. How useful are the Modules of the ALM?

2. How frequently do you use information from the Modules of the ALM?

3. Since completing the Modules of the ALM, have you contacted the NSW Sexual Health Infoline?

Page 29



The GP Project Evaluation Online Survey

4. Since completing the Modules of the ALM , have you contacted a sexual health clinic about a patient?

5. Having undertaken the Modules assists me in my daily work as a clinician.

6. The modules' design assisted my learning (e.g., the use of PowerPoint presentations, case studies, etc.).

7. During the modules', the information was presented in a way that was clear and easy to follow.

8. After completing the Modules of the ALM, my ability to diagnose and treat common STIs has improved.

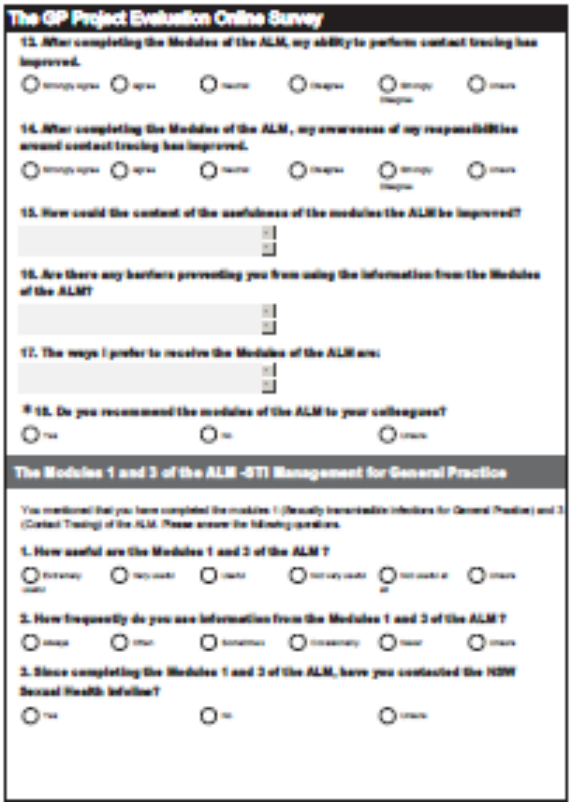
9. After completing the Modules of the ALM , I am more confident in my ability to take a brief sexual history.

10. After completing the Modules of the ALM, my ability to identify patients who are at-risk of STIs has improved.

11. After completing the Modules of the ALM , my ability to identify appropriate STI tests has improved.

12. After completing the Modules of the ALM , my ability to raise the topic of contact tracing with my patients has improved.

Page 30



The GP Project Evaluation Online Survey

13. After completing the Modules of the ALM, my ability to perform contact tracing has improved.

14. After completing the Modules of the ALM , my awareness of my responsibilities around contact tracing has improved.

15. How could the content of the usefulness of the modules the ALM be improved?

16. Are there any barriers preventing you from using the information from the Modules of the ALM?

17. The ways I prefer to receive the Modules of the ALM are:

* 18. Do you recommend the modules of the ALM to your colleagues?

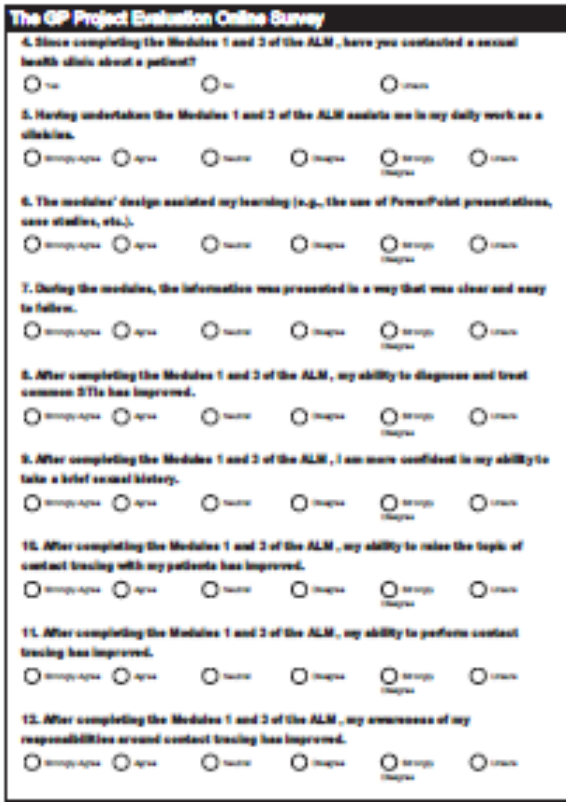
The Modules 1 and 3 of the ALM -STI Management for General Practice

You mentioned that you have completed the modules 1 (Sexually transmissible infections for General Practice) and 3 (Contact Tracing) of the ALM. Please answer the following questions.

1. How useful are the Modules 1 and 3 of the ALM ?

2. How frequently do you use information from the Modules 1 and 3 of the ALM ?

3. Since completing the Modules 1 and 3 of the ALM, have you contacted the NSW Sexual Health Infoline?



The GP Project Evaluation Online Survey

4. Since completing the Modules 1 and 3 of the ALM , have you contacted a sexual health clinic about a patient?

5. Having undertaken the Modules 1 and 3 of the ALM assists me in my daily work as a clinician.

6. The modules' design assisted my learning (e.g., the use of PowerPoint presentations, case studies, etc.).

7. During the modules, the information was presented in a way that was clear and easy to follow.

8. After completing the Modules 1 and 3 of the ALM , my ability to diagnose and treat common STIs has improved.

9. After completing the Modules 1 and 3 of the ALM , I am more confident in my ability to take a brief sexual history.

10. After completing the Modules 1 and 3 of the ALM , my ability to raise the topic of contact tracing with my patients has improved.

11. After completing the Modules 1 and 3 of the ALM , my ability to perform contact tracing has improved.

12. After completing the Modules 1 and 3 of the ALM , my awareness of my responsibilities around contact tracing has improved.

The GP Project Evaluation Online Survey

12. How could the usefulness of the Modules 1 and 2 of the ALM be improved?

14. Are there any barriers preventing you from using the information from the Module 1 and 2 of the ALM?

15. The ways I prefer to receive the Module 1 and 2 of the ALM are:

* 16. Do you recommend the Modules 1 and 2 of the ALM to your colleagues?

Yes | No | Unsure

The Modules 2 and 3 of the ALM -STI Management for General Practice

You mentioned that you have completed the Modules 2 (Working with priority populations) and 3 (Contact Tracing) of the ALM. Please answer the following questions.

1. How useful are the Modules 2 and 3 of the ALM?

Extremely useful | Very useful | Useful | Not very useful | Not useful at all | Unsure

2. How frequently do you use information from the Modules 2 and 3 of the ALM?

Always | Often | Sometimes | Occasionally | Never | Unsure

3. Since completing the Modules 2 and 3 of the ALM, have you contacted the NSW Sexual Health Infoline?

Yes | No | Unsure

4. Since completing the Modules 2 and 3 of the ALM , have you contacted a sexual health clinic about a patient?

Yes | No | Unsure

5. Having undertaken the Modules assists me in my daily work as a clinician.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Unsure

6. The modules' design assisted my learning (e.g., the use of PowerPoint presentations, case studies, etc.).

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Unsure

The GP Project Evaluation Online Survey

7. During the modules, the information was presented in a way that was clear and easy to follow.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Unsure

8. After completing the Modules 2 and 3 of the ALM, my ability to identify patients who are at-risk of STIs has improved.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Unsure

9. After completing the Modules 2 and 3 of the ALM , my ability to identify appropriate STI tests has improved.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Unsure

10. After completing the Modules 2 and 3 of the ALM , my ability to raise the topic of contact tracing with my patients has improved.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Unsure

11. After completing the Modules 2 and 3 of the ALM , my ability to perform contact tracing has improved.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Unsure

12. After completing the Modules 2 and 3 of the ALM , my awareness my responsibilities around contact tracing has improved.

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Unsure

13. How could the usefulness of the Modules 2 and 3 of the ALM be improved?

14. Are there any barriers preventing you from using the information from the Module 2 and 3 of the ALM?

15. The ways I prefer to receive the Module 2 and 3 of the ALM are:

* 16. Do you recommend the Modules 2 and 3 of the ALM to your colleagues?

Yes | No | Unsure

The GP Project Evaluation Online Survey

STI resources

* 1. Have you read any of the sexual health articles (pictured below) published in the Australian Doctor and/or Medical Observer magazines ?

Yes | No

Sexual Health Articles in the Australian Doctor and Medical Observer

1. How useful was the information from the sexual health articles published in the Australian Doctor and/or Medical Observer?

Extremely useful | Very useful | Useful | Not very useful | Not useful at all | Unsure

2. Sexual health articles published in the Australian Doctor and/or Medical Observer covered what I need to know

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Unsure

3. Sexual health articles published in the Australian Doctor and/or Medical Observer were clear and easy to follow

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Unsure

4. After reading sexual health articles published in the Australian Doctor and/or Medical Observer, my knowledge of the topics addressed in this resources has improved

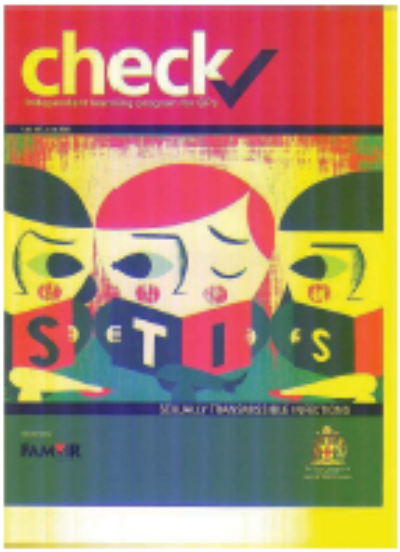
Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Unsure

STI resources

The GP Project Evaluation Online Survey

* 1. Are you aware of Check Program: Sexually Transmissible Infections (pictured below)?

Yes | No



The Check Program: Sexually Transmissible Infections

The GP Project Evaluation Online Survey

1. How did you become aware of the Check Program: Sexually Transmissible Infections ?

2. Have you read or completed Check Program: Sexually Transmissible Infections?

3. If you have not read or completed the Program, please outline the barriers or reasons.

Check Program: Sexually Transmissible Infections

You mentioned that you have completed Check Program: Sexually Transmissible Infections . Please answer the following questions.

1. How useful was the Check: Sexually Transmissible Infections?

2. How frequently do you use information from the Check: Sexually Transmissible Infections?

3. The Check: Sexually Transmissible Infections assists me in my daily work as a clinician.

4. Its layout and format were appropriate.

5. It was clear and easy to follow.

The GP Project Evaluation Online Survey

6. After reading or completing the Check: Sexually Transmissible Infections, my understanding of the clinical features, diagnosis and management of STIs has improved.

7. After reading or completing the Check: Sexually Transmissible Infections, I am more confident in my ability to take a brief sexual history.

8. After reading or completing the Check: Sexually Transmissible Infections, my understanding of the role of cultural sensitivities when discussing STIs has improved.

9. Are there any barriers preventing you from using the information from the Check Program?

10. Do you recommend the Check program to your colleagues?

Practice Nurses Online Survey

Demographics

1. Gender

2. Age group

3. Country of graduation

4. Years as a Practice Nurse

The GP Project Evaluation Online Survey

5. In addition to English, I conduct patient consultations in the following languages:

6. I am affiliated with

7. Postcode of my primary practice

8. Do you work at Aboriginal Medical Services (AMS) or Aboriginal health services?

9. Number of Practice Nurses at your primary practice

10. Number of GPs at your primary practice

11. To the best of my knowledge, the percentage of patients I see who are Aboriginal or Torres Strait Islander is

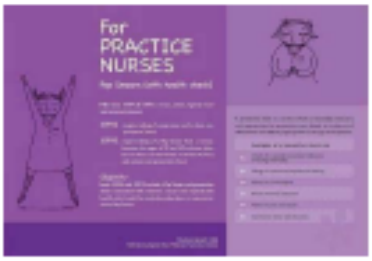
The GP Project Evaluation Online Survey

12. To the best of my knowledge, the percentage of patients I see who are from culturally and linguistically diverse backgrounds is

13. To the best of my knowledge, the percentage of patients I see who are under 25 years of age are

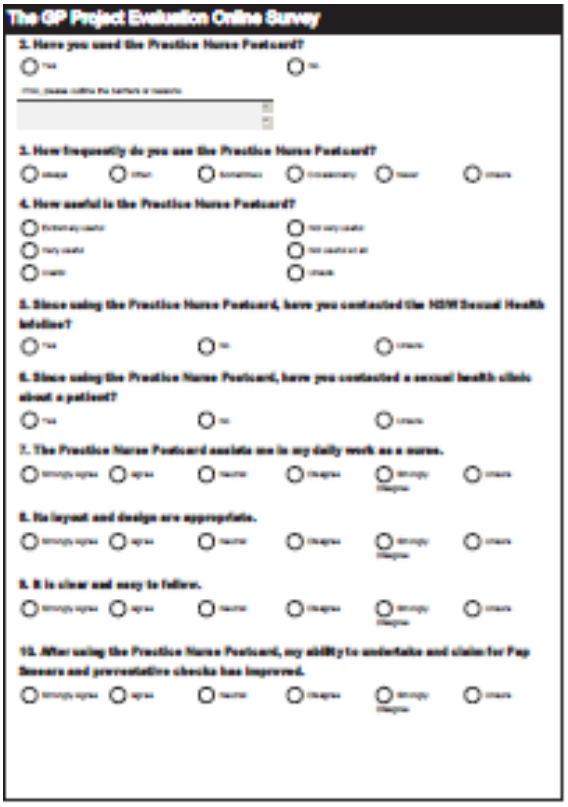
STI resources

1. Are you aware of the Practice Nurse Postcard (pictured below)?



Practice Nurse Postcard

1. How did you become aware of the Practice Nurse Postcard?



The GP Project Evaluation Online Survey

2. Have you used the Practice Nurse Postcard?

3. How frequently do you use the Practice Nurse Postcard?

4. How useful is the Practice Nurse Postcard?

5. Since using the Practice Nurse Postcard, have you contacted the NSW Sexual Health Infoline?

6. Since using the Practice Nurse Postcard, have you contacted a sexual health clinic about a patient?

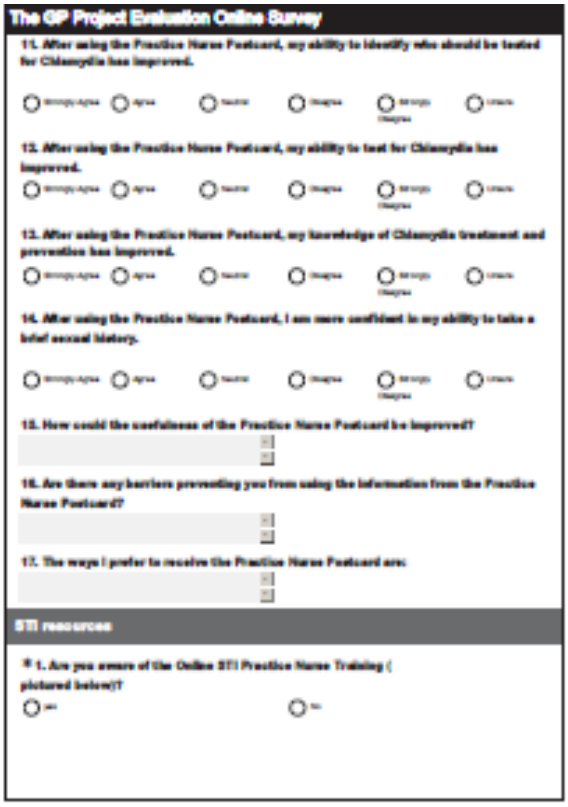
7. The Practice Nurse Postcard assists me in my daily work as a nurse.

8. Its layout and design are appropriate.

9. It is clear and easy to follow.

10. After using the Practice Nurse Postcard, my ability to undertake and claim for Pap Smears and preventative checks has improved.

Page 41



The GP Project Evaluation Online Survey

11. After using the Practice Nurse Postcard, my ability to identify who should be tested for Chlamydia has improved.

12. After using the Practice Nurse Postcard, my ability to test for Chlamydia has improved.

13. After using the Practice Nurse Postcard, my knowledge of Chlamydia treatment and prevention has improved.

14. After using the Practice Nurse Postcard, I am more confident in my ability to take a brief sexual history.

15. How could the usefulness of the Practice Nurse Postcard be improved?

16. Are there any barriers preventing you from using the information from the Practice Nurse Postcard?

17. The ways I prefer to receive the Practice Nurse Postcard are:

STI resources

* 1. Are you aware of the Online STI Practice Nurse Training (pictured below)?

Page 42

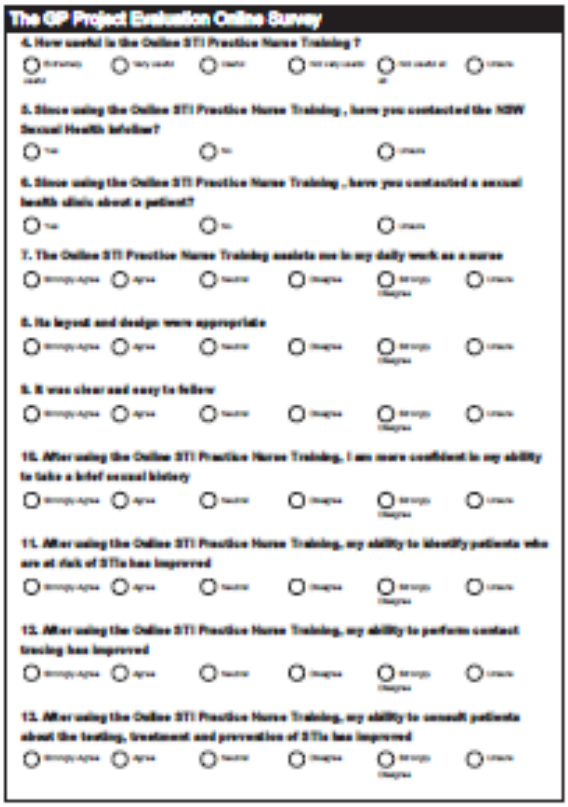
The GP Project Evaluation Online Survey

Online STI Practice Nurse Training

1. How did you become aware of the Online STI Practice Nurse Training ?

2. Have you completed the Online STI Practice Nurse Training?

3. How frequently do you use information from the Online STI Practice Nurse Training ?



The GP Project Evaluation Online Survey

4. How useful is the Online STI Practice Nurse Training ?

5. Since using the Online STI Practice Nurse Training , have you contacted the NSW Sexual Health Infoline?

6. Since using the Online STI Practice Nurse Training , have you contacted a sexual health clinic about a patient?

7. The Online STI Practice Nurse Training assists me in my daily work as a nurse

8. Its layout and design were appropriate

9. It was clear and easy to follow

10. After using the Online STI Practice Nurse Training, I am more confident in my ability to take a brief sexual history

11. After using the Online STI Practice Nurse Training, my ability to identify patients who are at risk of STIs has improved

12. After using the Online STI Practice Nurse Training, my ability to perform contact tracing has improved

13. After using the Online STI Practice Nurse Training, my ability to consult patients about the testing, treatment and prevention of STIs has improved

The GP Project Evaluation Online Survey

14. After using the Online STI Practice Nurse Training, my learning needs were met

◯ Strongly Agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Strongly Disagree ◯ Unsure

15. How could the usefulness of the Online STI Practice Nurse Training be improved?

16. Are there any barriers preventing you from using the information from the Online STI Practice Nurse Training?

17. The ways I prefer to receive the Online STI Practice Nurse Training are:

Invitation to Interview

1. The research team is keen to learn more about your views on the GP project and how it can be improved. Voluntary confidential interviews will be conducted by our research team. Your time (30-60 minutes) will be reimbursed.

To register your interest, please provide your details below. A research team member will contact you in the first week of September.

Name, Email Address and Phone number

2. To receive a copy of the

1. 2010 Australasian Contact Tracing Manual,
2. NSW STI Contact Tracing Tool for General Practice and HIV,
3. Viral Hepatitis and STIs – A Guide for Primary Care

please provide your postal address below:

Appreciation

Thank you!

You have now completed the online survey. Please click on the "Done" button before leaving the survey.

Appendix 4: Interview Schedule

1. I understand that you have used or accessed [refer to background info]

    a. Why these items?
    b. In what ways have you used them?
    c. How useful were the items that you used – why do you say this?

2. I understand that you didn't use the other items [refer to background info]

    a. Why weren't they used?
    b. Would you have used them if you knew about them?

3. Since using or accessing these items, have you changed your practice in any way in relation to sexual healthcare (e.g., broaching the subject of sexual health, documenting sexual history, managing patient sexual health including contraception, immunisation, and the testing of STIs – be it the type of test(s) or the frequency of testing)?

    a. Describe an example

        i. What was the context?
        ii. Who else was involved?
        iii. What did you do?
        iv. How did this differ from what you would have done previously?
        v. What factors enabled this change?
        vi. What happened?
        vii. In what ways was this a good / bad outcome?
        viii. What helped to change these practices?

4. Since using or accessing these items, in what ways has your practice not changed in relation to sexual healthcare – why do you think this is the case?

    a. Describe an example
    b. What factors hindered change in these areas?

5. What would you like to change about your current approach when consulting patients about sexual health?

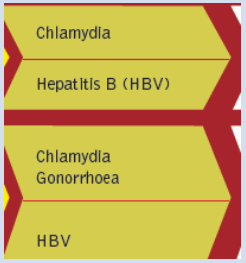
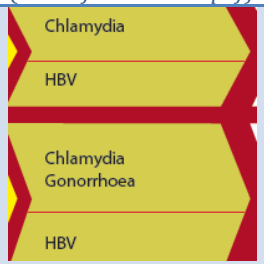
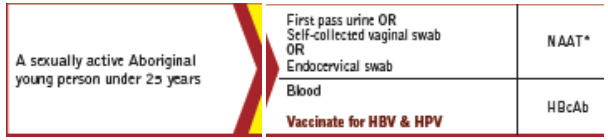
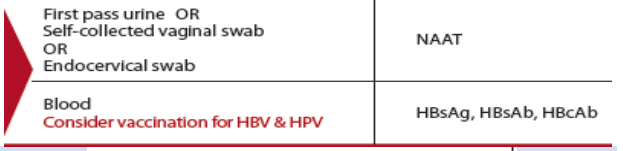
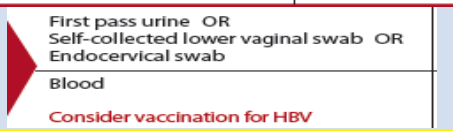
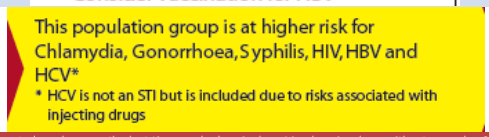
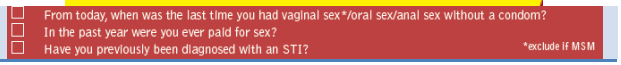
    a. What would help you to make these changes?
    b. What would hinder you from making such changes?

6. How could the resources and training be improved?

    a. Which promotional or delivery strategies could be used?
    b. Should the content be updated – if so, how?

Appendix 5: Process Evaluation

Table 22: STI Testing Tool: Use of Clinical Expertise

Material Circulated to Working Group	Feedback Received (*Suggestions - Meeting 2008 08 01.doc*)	Final (*STITT final version.pdf*)
	In 3rd column "Which STI" – can we change **ALL** HBV to Hepatitis B (HBV)	 Although this suggestion was not incorporated, abbreviations were noted as follows: HAV = Hepatitis A HBV = Hepatitis B
	Remove blood, Remove HBcAb , Replace "vaccinate for HBV & HPV" with Consider vaccination for HBV & HPV	
	Replace "vaccinate for HBV & HPV" with Consider vaccination for HBV & HPV	
* HCV is not an STI. It is included due to associated risks with injecting.	Please change it to *HCV is not an STI but is included due to risks associated with injecting drugs	
The asterisk in From today, when was…	Should say underneath the whole list *exclude if MSM	

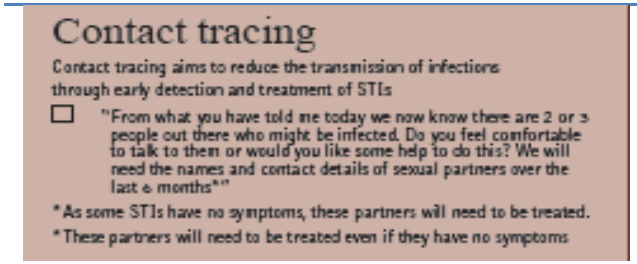
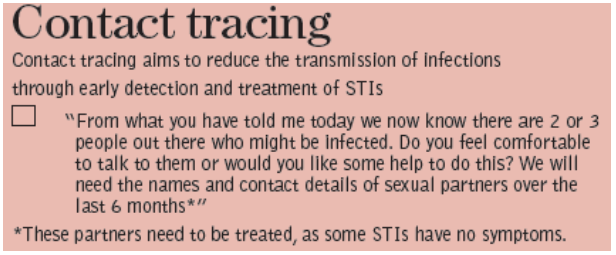
Material Circulated to Working Group	Feedback Received (*Suggestions - Meeting 2008 08 01.doc*)	Final (*STITT final version.pdf*)
 *As some STIs have no symptoms, these partners will need to be treated. *These partners will need to be treated even if they have no symptoms.	Remove above and CHANGE TO *These partners need to be treated, as some STIs have no symptoms.	

Table 23: STI Testing Tool Iterations

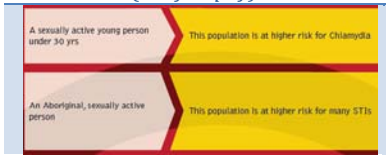
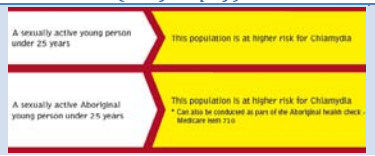
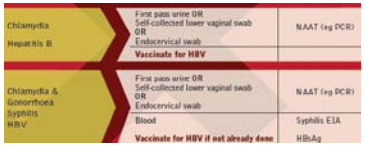
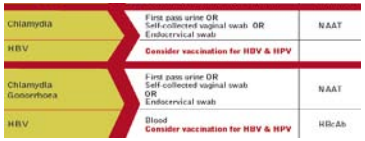
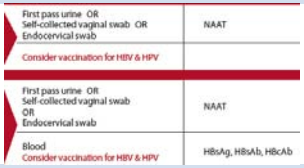
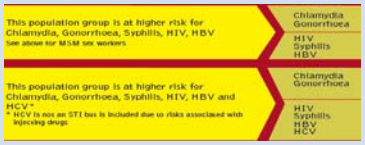
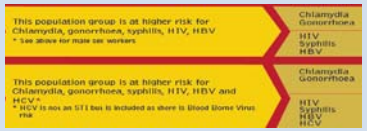
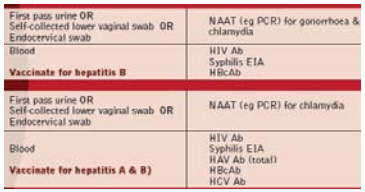
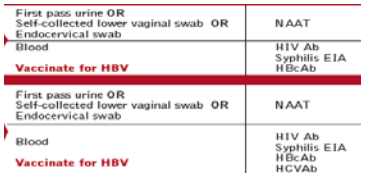
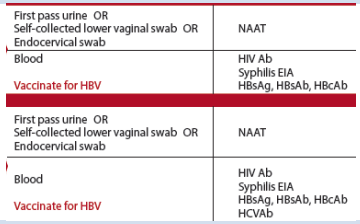
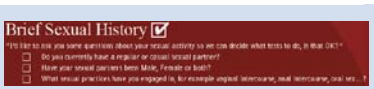
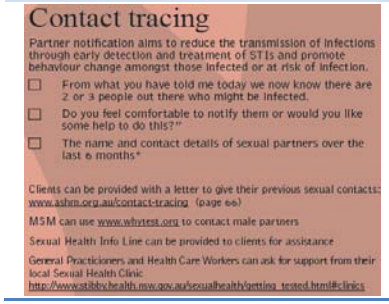
Draf1 (*Draft 1.pdf*)	Draft2 (*Draft 2.pdf*)	Draft 3 (*Draft 3.pdf*)	Draft 4 (*Draft 4.pdf*)	Final (*STITT final version.pdf*)
		No change	No change	No change
			No change	
				No change
		No change	No change	
				No change
				No change

Table 24: STI Testing Tool: Use of Clinical Expertise – Clinician Feedback (*FPA Feedback.pdf*)

STI Testing Tool:	Comments:
Appearance, Size (think GP surgery)	Size appropriate unattractive colour scheme
Language Used (e.g. are you familiar with all the abbreviations such as HBV, HAV, NAAT)	not familiar but worked out abbreviations.
Ease of Use	Yes.
Useful Clinical advice (e.g. does it contain all the information you need/ does it contain things you don't need?)	Brief Sexual history - questions appropriate, easy to follow – Very useful. maybe info on treatments. ??
Would you use it in practice?	Yes
What Changes would you make?	font, colour

? throat swab for chlamydia

STI Testing Tool:	Comments:
Appearance, Size (think GP surgery)	Appropriate.
Language Used (e.g. are you familiar with all the abbreviations such as HBV, HAV, NAAT)	Yes, but 'PCR' used more commonly than 'NAAT'.
Ease of Use	Good.
Useful Clinical advice (e.g. does it contain all the information you need/ does it contain things you don't need?)	Appropriate
Would you use it in practice?	Yes
What Changes would you make?	None.

STI Testing Tool:	Comments:
Appearance, Size (think GP surgery)	OK
Language Used (e.g. are you familiar with all the abbreviations such as HBV, HAV, NAAT)	OK
Ease of Use	OK
Useful Clinical advice (e.g. does it contain all the information you need/ does it contain things you don't need?)	repetitive but does focus high risk ppl
Would you use it in practice?	yes
What Changes would you make?	

STI Testing Tool:	Comments:
Appearance, Size (think GP surgery)	Needs to standout more
Language Used (e.g. are you familiar with all the abbreviations such as HBV, HAV, NAAT)	Too much writing NAAT?
Ease of Use	Poor colour choice
Useful Clinical advice (e.g. does it contain all the information you need/ does it contain things you don't need?)	Too much info.
Would you use it in practice?	No – Might be OK for GPs
What Changes would you make?	

STI Testing Tool:	Comments:
Appearance, Size (think GP surgery)	Needs to standout more
Language Used (e.g. are you familiar with all the abbreviations such as HBV, HAV, NAAT)	Too much writing NAAT?
Ease of Use	Poor colour choice
Useful Clinical advice (e.g. does it contain all the information you need/ does it contain things you don't need?)	Too much info.
Would you use it in practice?	No – Might be OK for GPs
What Changes would you make?	

STI Testing Tool:	Comments:
Appearance, Size (think GP surgery)	Needs different colours to stand out clearly better.
Language Used (e.g. are you familiar with all the abbreviations such as HBV, HAV, NAAT)	No. What is NAAT??
Ease of Use	Too Busy!!!
Useful Clinical advice (e.g. does it contain all the information you need/ does it contain things you don't need?)	Take out Doing "Self collected swab" for Chlamydia??? If not Delete what about Gonorrhoea for ATSI
Would you use it in practice?	Probably not GPs
What Changes would you make?	Size OK, Text needs to be larger, Perhaps GP's like put on small neat desk. Otherwise will become lost under other papers, Perhaps to right on desk.

(2) Why HBV for all?

(3) What about gonorrhoea in aboriginal

Table 25: Online STI Testing Tool GP Training: Use of Clinical Expertise

Material Circulated to Working Group	Feedback Received	Final
Not available	The following 6 cases will help allow you to practice using a newly developed practice tool – STI testing tool – developed by the NSW STI programs Unit (NSW STIPU) and NSW State Health. The STI testing tool is available within this educational module or by linking to www.stipu.nsw.gov.au (*Draft 1.doc*)	STI testing tool The following 7 cases will help you practice using a newly developed - STI testing tool – developed by the NSW STI Programs Unit (NSW STIPU). The STI testing tool is available within this educational module via the notes button (top right), or by linking to www.stipu.nsw.gov.au
Not available	"Ron now is a good time to discuss sexually transmissible infections (STIs) we are offering chlamydia testing to all sexually active people under 25 years. It is a quick and simple urine test .How about we do a test now and I will book you in for the results to chat more?" (*Draft 1.doc*)	"Ron now is a good time to discuss sexually transmissible infections (STIs) we are offering chlamydia testing to all sexually active people under 25 years. It is a quick and simple urine test. How about we do a test now and I will book you in for the results to chat more?"
Not available	How do you test Ron for Chlamydia? ☐ A penile swab and order a PCR test (WRONG) ☐ A penile swab and order culture and sensitivity for c trachomatis (WRONG) ☐ A mid stream urine and order Nucleic Acid Amplification Tests (NAAT) (WRONG) ☐ A first pass urine and order Nuclei Acid Amplification Tests (NAAT) (CORRECT) ☐ A first pass urine and order culture and sensitivity for Chlamydia (WRONG) (*Draft 2.doc*)	How do you test Ron for Chlamydia? ○ A penile swab and order a PCR test ○ A penile swab and order culture and sensitivity for c trachomatis ○ A mid stream urine and order Nucleic Acid Amplification Tests (NAAT) ✓ A first pass urine and order Nuclei Acid Amplification Tests (NAAT) ○ A first pass urine and order culture and sensitivity for Chlamydia
Not available	Suggested Response: • Talk about risk reduction in future sexual activities such as condom use and repeat testing. If the test is positive, re- test in 3 months. Explain This is not a test of cure, it is to see if Ron has been re-infected. • (*Draft 2.doc*)	Close Suggestions Talk about risk reduction in future sexual activities such as condom use and repeat testing. If the test is positive, re- test in 3 months. This is not a test of cure, it is to see if Ron has been re-infected.
Consultation 2 Paula is a young Aboriginal girl who has recently moved to the city from Walgett. She has commenced early childhood studies at TAFE. She is sexually active and has come for her first Pap smear, her first. There are no symptoms of an STI. (*Draft 1.doc*)	**Consultation 2** Paula is a young Aboriginal ~~girl~~ woman who has recently moved to the city from Walgett. She has commenced early childhood studies at TAFE. She is sexually active and has come for her first Pap smear ~~, her first~~. There are no symptoms of an STI. (*Draft 4.doc*)	Case 2 - Paula Paula is a young Aboriginal woman who has recently moved from a rural country town. She has commenced early childhood studies at TAFE. She is sexually active and has come for her first Pap smear. There are no symptoms of an STI.
Not available	Muz is currently single and has had 3 different sexual partners in the past 3 months and six in the past 12 months. All his partners are female and have been both casual and regular Partners. In some of the casual encounters he has not used condoms. There is no history of STIs in the past, but the last doctor contact was 4 years ago for Hep B immunisation. (*Draft 1.doc*)	Muz is currently single and has had 3 different sexual partners in the past 3 months and six in the past 12 months. All his partners are female and have been both casual and regular partners. In some of the casual encounters he has not used condoms. There is no history of STIs in the past, but the last doctor contact was 4 years ago for Hep B immunisation.
Not available	Recommend The recommended treatment for Chlamydia is • Azithromycin 1 gram daily as a single dose • Advise Murray that he needs to have no sexual contact for a minimum of 7 days after treatment. • Murray's partners over the last 6 months will need to be contacted. (put in link to ASHM letter) (*Draft 1.doc*)	The recommended treatment for Chlamydia is: • Azithromycin 1 gram daily as a single dose • Advise Murray that he needs to have no sexual contact for a minimum of 7 days after treatment • Murray's partners over the last 6 months will need to be contacted. www.letthemknow.com.au
Not available	~~Therese~~ Therese's results are negative for Chlamydia, ~~Gonorrhoea~~ Gonorrhoea, Syphilis and HIV. There are no antibodies to HBV detected, so a HBV booster is recommended as Therese had a full course of HBV immunisation 3 years previously. Her Pap smear 12 months ago showed early LSIL changes with HPV detected, recommend a pap smear in 12 months time. Recall attended in notes or on computer as per practice standard (*Draft 2.doc*)	Therese's results are negative for Chlamydia, Gonorrhoea, Syphilis and HIV. There are no antibodies to HBV detected, so a HBV booster is recommended as Therese had a full course of HBV immunisation 3 years previously. Her Pap smear 12 months ago showed early LSIL changes with HPV detected, recommend a pap smear in 12 months time. Recall attended in notes and/or on computer as per practice standard.

Material Circulated to Working Group	Feedback Received	Final
Not available	**Suggested Answer** Annual testing for men who have sex with men in the previous year. ~~More frequent testing is recommended (3-6 monthly) for men who have more than 10 partners in the past 6 months~~ **More frequent testing is recommended:** 3-6 monthly testing is recommended for men who • have episodes of unprotected anal sex5 • have more than 10 partners in the past six months5 • attend sex-on-premises venues (SOPVs) • use recreational drugs5 or • seek partners via the internet5,9 (*Draft 3.doc*)	Annual testing for men who have sex with men in the previous year. **More frequent testing is recommended:** 3-6 monthly testing is recommended for men who • have episodes of unprotected anal sex (8) • have more than 10 partners in the past six months5 • attend sex-on-premises venues (SOPVs) • use recreational drugs (7) or • seek partners via the internet (9)

Table 26: Online STI Testing Tool GP Training: Modifications not informed by Documented Feedback

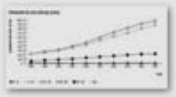
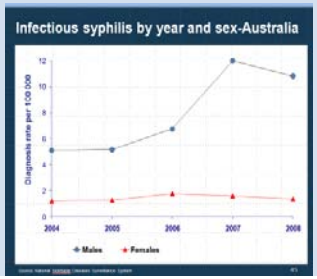
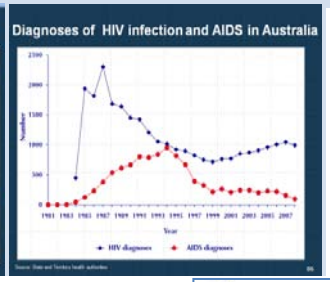
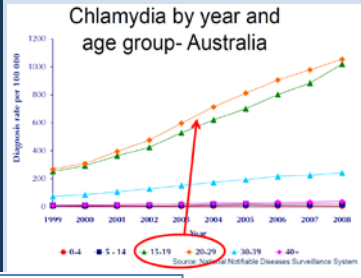
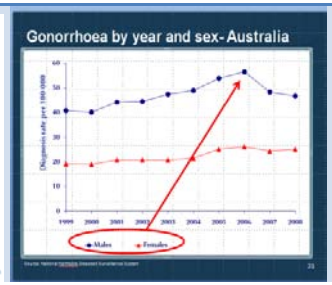
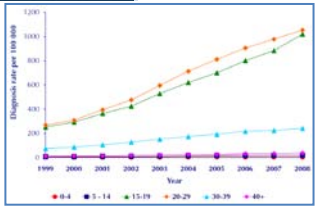
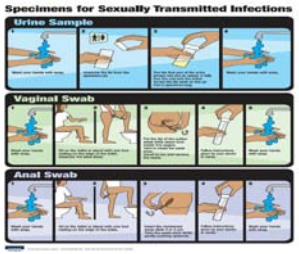
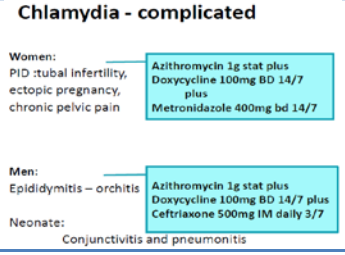
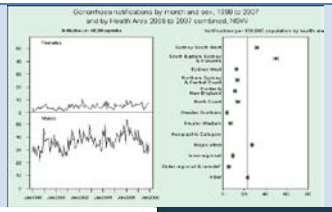
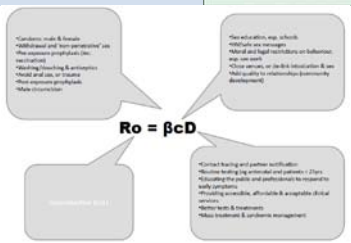
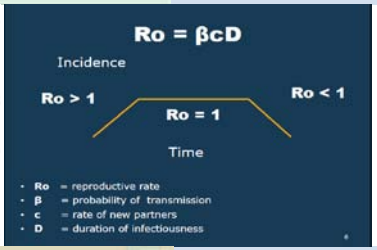
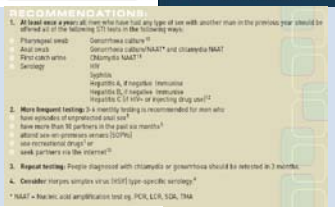
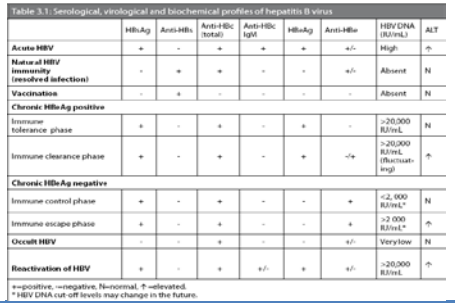
Draft 7	Online STI Testing Tool GP Training
Background Sexually transmitted Infections (STIs) are seen to be endemic in Australia with significant health impacts. (1) Chlamydia Trachomatis is the most commonly diagnosed bacterial STI notified in Australia and has had a 5 times increase from 1997 (47/100,000) to 2005 (203/100,000). The biggest rate of increase was seen in 15-19 and 20-29 year old people. (3) Prevalence rates of Chlamydia Trachomatis in Australia's under 25 year olds is up to 26%. The prevalence of Chlamydia trachomatis and gonococcal infections in Aboriginal youth is even higher. (4) The impact of STIs on our patients under 25 years is considerable. Ascending infection is a major course of Pelvic Inflammatory Disease (PID) which can cause infertility, chronic pelvic pain and ectopic pregnancy. The adolescent patient is at higher risk of PID than our adult patients. (4)	**Background** Sexually transmitted infections (STIs) are seen to be endemic in Australia with significant health impacts. (1) Prevalence rates of Chlamydia Trachomatis in Australia's under 25 year olds is up to 26%. The prevalence of Chlamydia trachomatis and gonococcal infections in Aboriginal youth is even higher. (4) The impact of STIs on our patients under 25 years is considerable. Ascending infection is a major course of Pelvic Inflammatory Disease (PID) which can cause infertility, chronic pelvic pain and ectopic pregnancy. The adolescent patient is at higher risk of PID than our adult patients. (4) 
Suggested Answer Annual testing for men who have sex with men in the previous year. **More frequent testing is recommended:** 3-6 monthly testing is recommended for men who ▪ have episodes of unprotected anal sex5 ▪ have more than 10 partners in the past six months5 ▪ attend sex-on-premises venues (SOPVs) ▪ use recreational drugs1 or ▪ seek partners via the internet13	Annual testing for men who have sex with men in the previous year. **More frequent testing is recommended:** 3-6 monthly testing is recommended for men who ▪ have episodes of unprotected anal sex (8) ▪ have more than 10 partners in the past six months5 ▪ attend sex-on-premises venues (SOPVs) ▪ use recreational drugs (7) or ▪ seek partners via the internet (9) Also suggest vaccination for HBV & HAV.

Table 27: ALM: Use of Research Evidence

Information Source	Module	Evidence of Use
HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia: Annual surveillance report (National Centre in HIV Epidemiology and Clinical Research, 2009)	1	   
	2	
Specimens for sexually transmitted infections **(NSW STIPU, 2009a)**	1	
National management guidelines for sexually transmissible infections (SHSOV, 2008) Australasian contact tracing manual **(ASHM, 2006a)**	1	

Information Source	Module	Evidence of Use
Report of the Chief Officer of Health on Chlamydia (NSW Health, 2009)	1	
STI transmission dynamics (Donovan, 2007)	1	 
STI testing guidelines for MSM (STIs in Gay Men Action Group, 2008)	1	
Australian immunisation handbook (DHA, 2008) B positive – All you wanted to know about hepatitis B: A guide for primary care providers (Matthews & Robotin, 2008)	1	In Australia, it is estimated that 90,000 to 160,000 people with HBV chronic infection in Australia. **Most at risk:** Individuals at high risk of HBV in developed countries are those who immigrated from high or intermediate prevalence countries , China, Vietnam and other countries in Asia and Pacific Islands, account for more than a half of chronic HBV infections (see next slide). Higher rates of chronic HBV infection are also observed in Indigenous populations, injecting drug users and men who have sex with men. **Symptoms:** Acute illness, - fever jaundice , malaise, anorexia, vomiting, abdominal pain, myalgia, dark urine, light stools and some jaundice. **Transmitted:** Sharing injecting equipment, needle stick injury, tattooing, sexual contact, vertical transmission, child to child through open sores or wounds, breastfeeding, nosocomial transmission in overseas health care facilities with unsatisfactory infection control procedures **Period of infectivity:** is several weeks prior til onset of illness to the end of the period of acute illness. HBV vaccination uptake in at-risk populations and HBV treatment uptake among infected populations are both low. The risk of developing chronic hepatitis B infection is highest in those who acquire hepatitis B virus  Table 3.1: Serological, virological and biochemical profiles of hepatitis B virus +=positive, -=negative, N=normal, ↑ =elevated. * HBV DNA cut-off levels may change in the future.

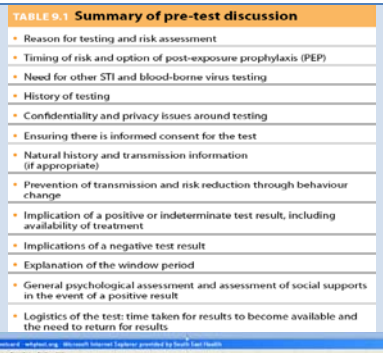
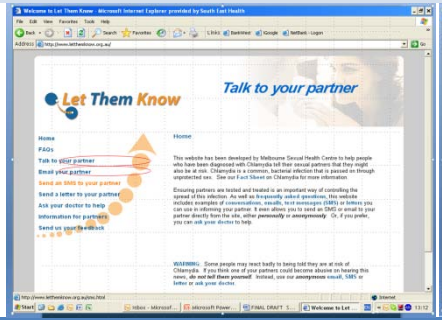
Information Source	Module	Evidence of Use
HIV, viral hepatitis and STIs: A guide for primary care (Bradford, et al., 2008)	1	
Let them know (MSHC, 2010) Why test (AFAO, 2010b) Drama downunder (AFAO, 2010a)	3	

TABLE 9.1 Summary of pre-test discussion

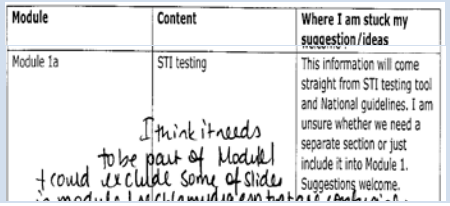
- Reason for testing and risk assessment
- Timing of risk and option of post-exposure prophylaxis (PEP)
- Need for other STI and blood-borne virus testing
- History of testing
- Confidentiality and privacy issues around testing
- Ensuring there is informed consent for the test
- Natural history and transmission information (if appropriate)
- Prevention of transmission and risk reduction through behaviour change
- Implication of a positive or indeterminate test result, including availability of treatment
- Implications of a negative test result
- Explanation of the window period
- General psychological assessment and assessment of social supports in the event of a positive result
- Logistics of the test: time taken for results to become available and the need to return for results

Table 28: ALM: Use of Clinical Expertise*

Material Circulated to Working Group	Feedback Received	Final
Resources • Guidelines for preventive activities in general practice (RACGP 'Red Book' Taskforce, 2005) • National management guidelines for sexually transmissible infections (SHSOV, 2008) • Clinical guidelines for the management of sexually transmissible infections among priority populations (ACSHM, 2004) • Australasian contact tracing manual **(ASHM, 2006a)** • HIV, viral hepatitis and STIs: A guide for primary care (Bradford, et al., 2008) • STI testing tool **(NSW STIPU, 2009b)**	(these all need to be properly referenced with elinks if possible) (*Draft 1.doc, 12th Sep. 2008*)	Module 1: References and resources STI TESTING TOOL – 1 Page http://www.stipu.nsw.gov.au/pdf/FINAL_NSW-GPSexual_Health_Services_Tool_web.pdf National Management guidelines for STI (2008). Sexual Health Society of Victoria. http://www.rnshc.org.au/Guidelines/NationalManagementGuidelinesForSTIs/tabid/278/Default.aspx ASHM - HIV, viral hepatitis and STIs – a guide for primary care providers http://www.ashm.org.au/images/publications/monographs/hiv%20viral%20hepatitis%20and%20stis%20a%20guide%20for%20primary%20care/hiv_viral_hepatitis_and_stis_whole.pdf RACP ACSHM 2004 Clinical Guidelines for the Management of STI in Priority Populations http://www.racp.edu.au/page/about-the-racp/structure/australasian-chapter-of-sexual-health-medicine MSM Testing Guidelines 2008: Sexually Transmitted Infection Testing Guidelines for Men who have Sex with Men (MSM) AHMRC -Sexually Transmissible Infections (STIs) and Blood Borne Infections (BBIs) Manual 2006 http://www.ahmrc.org.au/Downloads/Publication/AHMRC%20Manual%2011.pdf Australasian Contact Tracing Manual ASHM 2006 www.ashm.org.au/contact-tracing Module 2: References and resources ASHM - HIV, viral hepatitis and STIs – a guide for primary care providers http://www.ashm.org.au/images/publications/monographs/hiv%20viral%20hepatitis%20and%20stis%20a%20guide%20for%20primary%20care/hiv_viral_hepatitis_and_stis_whole.pdf RACP ACSHM 2004 Clinical Guidelines for the Management of STI in Priority Populations http://www.racp.edu.au/page/about-the-racp/structure/australasian-chapter-of-sexual-health-medicine MSM Testing Guidelines 2008: Sexually Transmitted Infection Testing Guidelines for Men who have Sex with Men (MSM) AHMRC -Sexually Transmissible Infections (STIs) and Blood Borne Infections (BBIs) Manual 2006 http://www.ahmrc.org.au/Downloads/Publication/AHMRC%20Manual%2011.pdf ASHM 2004 HIV Management in Australasia: a guide for clinical care. http://www.ashm.org.au/hiv-management/ STI TESTING TOOL – 1 Page http://www.stipu.nsw.gov.au/pdf/FINAL_NSW-GPSexual_Health_Services_Tool_web.pdf Module 3: References and resources

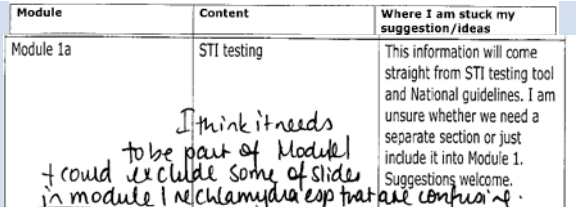
Material Circulated to Working Group	Feedback Received	Final
		ASHM 2006 Australasian Contact Tracing Manual http://www.ashm.org.au/uploads/File/aust-contact-tracing.pdf Contact Tracing Guidelines for the Sexually Transmitted Diseases and Blood Borne Viruses 2005 NSW Health Policy Directive http://www.health.nsw.gov.au/policies/PD/2005/PD2005_184.html STI TESTING TOOL – 1 Page http://www.stipu.nsw.gov.au/pdf/FINAL_NSW-GPSexual_Health_Services_Tool_web.pdf National Management guidelines for STI (2008). Sexual Health Society of Victoria. http://www.mshc.org.au/Guidelines/NationalManagementGuidelinesForSTIs/tabid/278/Default.aspx ASHM - HIV, viral hepatitis and STIs – a guide for primary care providers http://www.ashm.org.au/images/publications/monographs/hiv%20viral%20hepatitis%20and%20stis%20a%20guide%20for%20primary%20care/hiv_viral_hepatitis_and_stis_whole.pdf

Module 1



Module	Content	Where I am stuck my suggestion/ideas
Module 1a	STI testing	This information will come straight from STI testing tool and National guidelines. I am unsure whether we need a separate section or just include it into Module 1. Suggestions welcome.

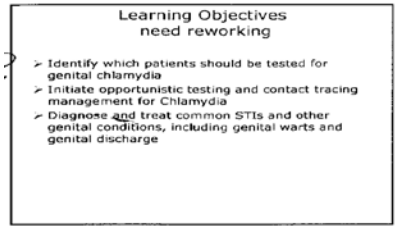
I think it needs to be part of Module 1 + could exclude some of slides in module 1 re Chlamydia esp trat are confusing.



Module	Content	Where I am stuck my suggestion/ideas
Module 1a	STI testing	This information will come straight from STI testing tool and National guidelines. I am unsure whether we need a separate section or just include it into Module 1. Suggestions welcome.

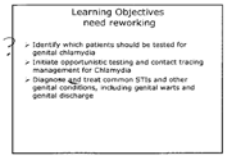
I think it needs to be part of Module 1 + could exclude some of slides in module 1 re Chlamydia esp trat are confusing.

Module 1 refers to the National management guidelines for sexually transmissible infections (SHSOV, 2008), but does not explicitly refer to the STI testing tool (NSW STIPU, 2009b)



Learning Objectives
need reworking

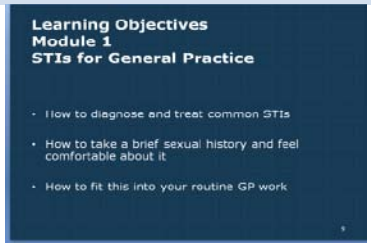
- Identify which patients should be tested for genital chlamydia
- Initiate opportunistic testing and contact tracing management for Chlamydia
- Diagnose and treat common STIs and other genital conditions, including genital warts and genital discharge



Learning Objectives
need reworking

- Identify which patients should be tested for genital chlamydia
- Initiate opportunistic testing and contact tracing management for Chlamydia
- Diagnose and treat common STIs and other genital conditions, including genital warts and genital discharge

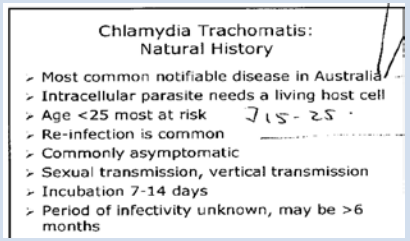
- Diagnose + treat common STI's
- Initiate opportunistic testing + contact tracing + treatment for Chlamydia
- Increase knowledge in diagnosis + management of genital warts + genital d/c.



Learning Objectives
Module 1
STIs for General Practice

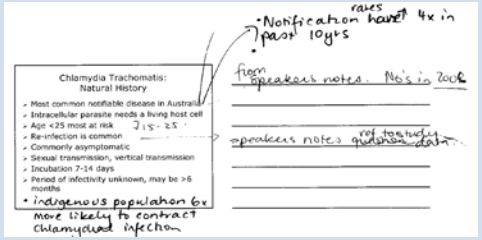
- How to diagnose and treat common STIs
- How to take a brief sexual history and feel comfortable about it
- How to fit this into your routine GP work

(*Module_1_GP_Basic_STI_Information_Final.pptx*)



Chlamydia Trachomatis:
Natural History

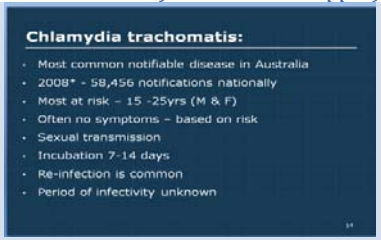
- Most common notifiable disease in Australia
- Intracellular parasite needs a living host cell
- Age <25 most at risk 15-25
- Re-infection is common
- Commonly asymptomatic
- Sexual transmission, vertical transmission
- Incubation 7-14 days
- Period of infectivity unknown, may be >6 months



Chlamydia Trachomatis:
Natural History

- Most common notifiable disease in Australia
- Intracellular parasite needs a living host cell
- Age <25 most at risk 15-25
- Re-infection is common
- Commonly asymptomatic
- Sexual transmission, vertical transmission
- Incubation 7-14 days
- Period of infectivity unknown, may be >6 months
- indigenous population 6x more likely to contract Chlamydial infection

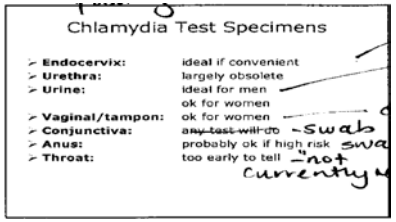
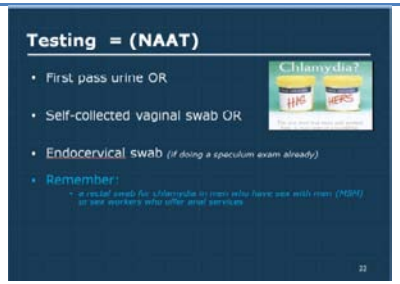
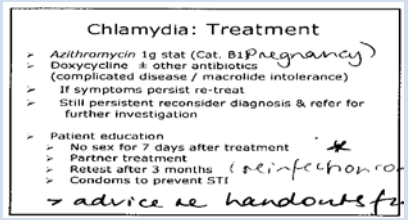
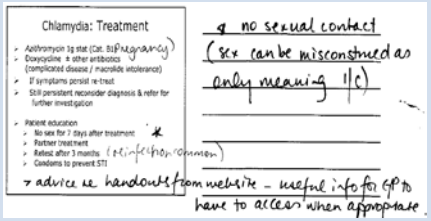
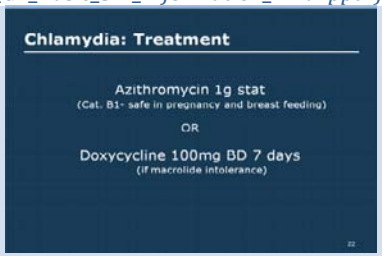
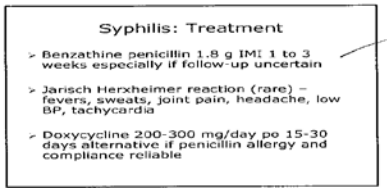
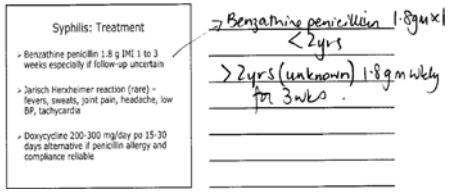
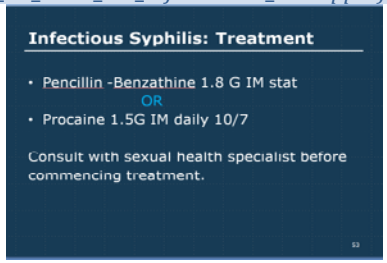
- Notification rates have 4x in past 10yrs
- from speakers notes. No's in 2008
- speakers notes ref to study guidelines data

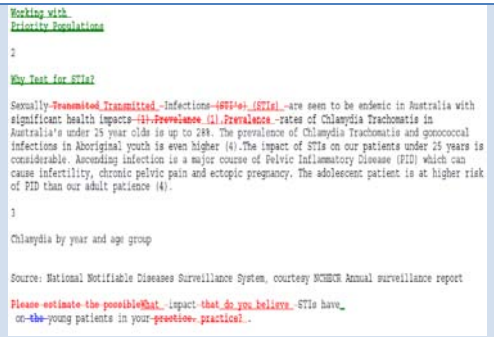
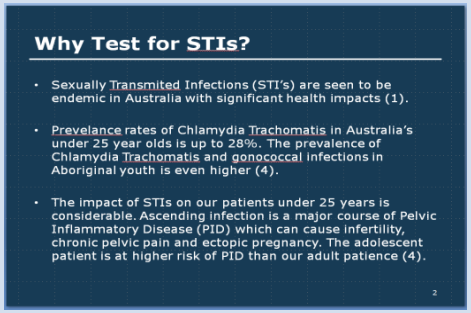
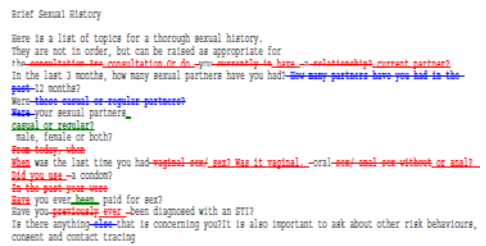
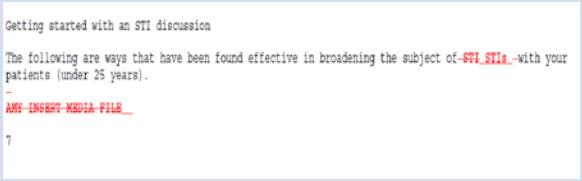
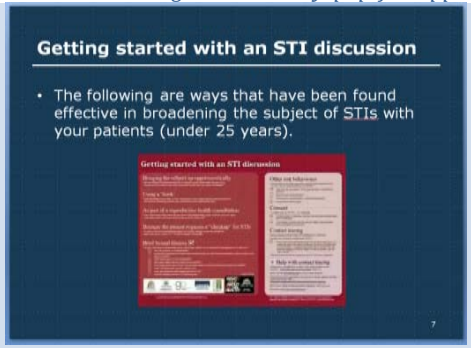


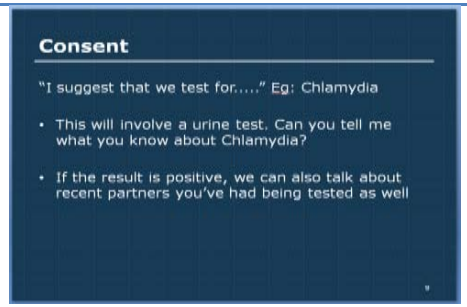
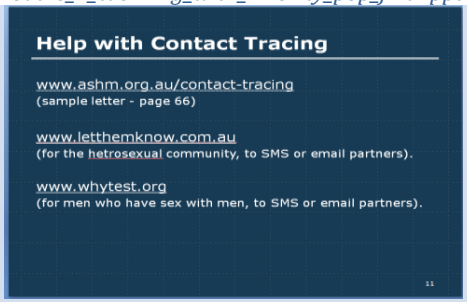
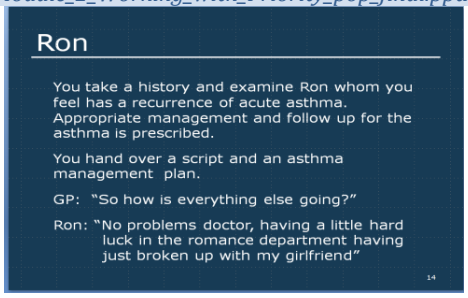
Chlamydia trachomatis:

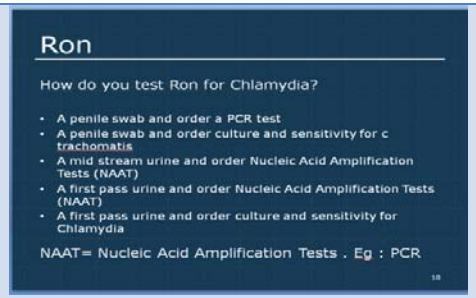
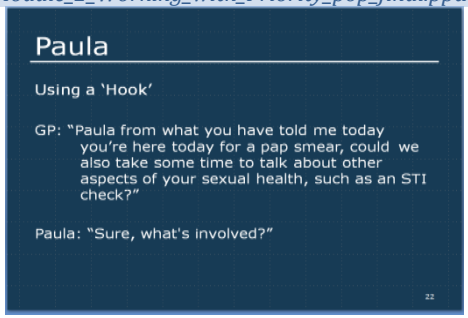
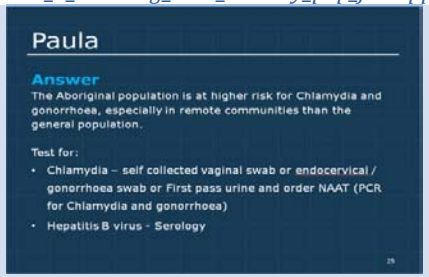
- Most common notifiable disease in Australia
- 2008* - 58,456 notifications nationally
- Most at risk – 15 -25yrs (M & F)
- Often no symptoms – based on risk
- Sexual transmission
- Incubation 7-14 days
- Re-infection is common
- Period of infectivity unknown

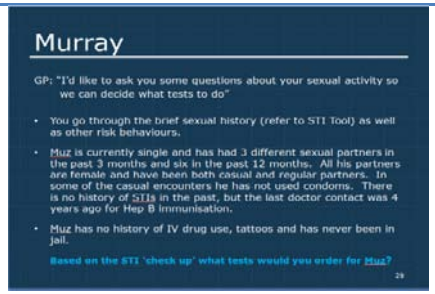
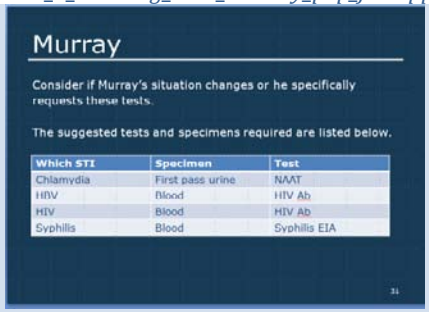
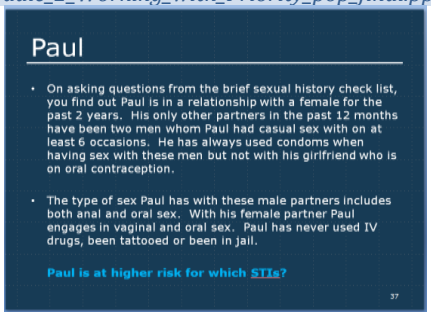
(*Module_1_GP_Basic_STI_Information_Final.pptx*)

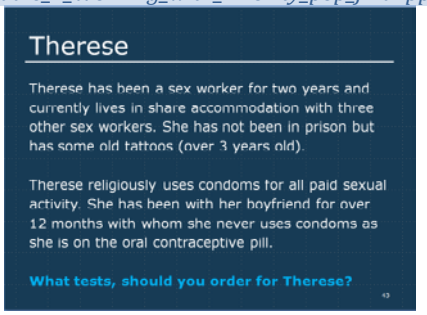
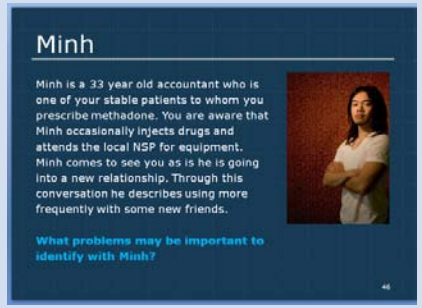
Material Circulated to Working Group	Feedback Received	Final
		 (*Module_1_GP_Basic_STI_Information_Final.pptx*)
		 (*Module_1_GP_Basic_STI_Information_Final.pptx*)
		 (*Module_1_GP_Basic_STI_Information_Final.pptx*)
Module 2		
Working with priority populations: • Aboriginal people • Sex workers • Gay and other homosexually active men (MSM) • People living with HIV • Injecting drug users • Young people	Working with priority populations: • Aboriginal people • Sex workers • Gay and other homosexually active men (MSM) • People living with HIV • ~~Injecting drug users~~ People who inject drugs • Heterosexuals with recent partner change • Young people (*Draft 1.doc, 12th Sep. 2008*)	Not provided

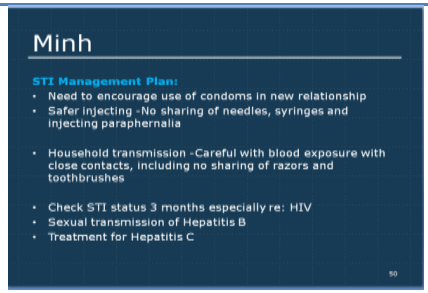
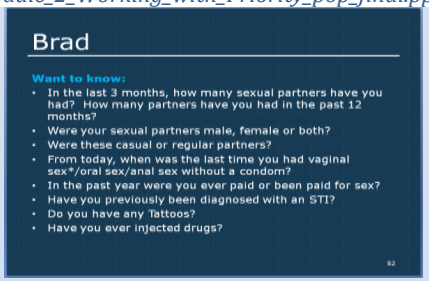
Material Circulated to Working Group	Feedback Received	Final
Not available	 (*Module 2.pdf*)	 (*Module_2_Working_with_Priority_pop_final.pptx*)
Not available	 (*Module 2.pdf*)	(*Module_2_Working_with_Priority_pop_final.pptx*)
Not available	 (*Module 2.pdf*)	 (*Module_2_Working_with_Priority_pop_final.pptx*)

Material Circulated to Working Group	Feedback Received	Final
Not available	Consent "I suggest that we test for....." ~~Eg: ChlamydiaThis e.g. chlamydiaThis~~ will involve a urine test. Can you tell me what you know about ~~Chlamydia?If chlamydia?If~~ the result is positive, we can also talk about recent partners you've had being tested as well1 (*Module 2.pdf*)	 (*Module_2_Working_with_Priority_pop_final.pptx*)
Not available	Help with Contact Tracing www.ashm.org.au/contact-tracing (sample letter - page ~~66)~~ ~~Check link~~ ~~www.letthemknow.com.au 66)~~www.letthemknow.com.au – (for the hetrosexual community, to SMS or email partners).www.whytest.org (for men who have sex with men, to SMS or email partners).. (*Module 2.pdf*)	 (*Module_2_Working_with_Priority_pop_final.pptx*)
Not available	Ron You take a history and examine Ron whom you feel has a recurrence of acute asthma. ~~Appropriate management and follow up for the The~~ asthma is ~~prescribed. managed appropriately~~ You hand over a script and an asthma management~~—~~plan. GP: "So how is everything else going?" Ron: "No problems doctor, having a little hard luck in the romance ~~department having department. I just broken broke~~ up with my girlfriend"" (*Module 2.pdf*)	 (*Module_2_Working_with_Priority_pop_final.pptx*)

Material Circulated to Working Group	Feedback Received	Final
Not available	Ron How do you test Ron for ~~Chlamydia?A chlamydia?A~~ penile swab and order ~~a PCR test NAAT (PCR test)~~ A penile swab and order culture and sensitivity for ~~c trachomatis chlamydia~~ A mid stream urine and order ~~Nucleic Acid Amplification Tests (NAAT) NAAT~~ A first pass urine and order ~~Nucleic Acid Amplification Tests (NAAT) NAAT~~ A first pass urine and order culture and sensitivity for ~~Chlamydia chlamydia~~ NAAT= Nucleic Acid Amplification ~~Tests . Testz .~~ Eg ~~: PCR PCR~~ ~~PCR= polymerase chain reaction~~ (*Module 2.pdf*)	 (*Module_2_Working_with_Priority_pop_final.pptx*)
Not available	Paula Using a 'Hook'GP: "Paula from what you have told me today ~~you're here today for a pap~~ ~~well as the~~ pap smear, could ~~we also we~~ take some ~~time time~~ to talk about other ~~aspects aspects~~ of your ~~sexual sexual~~ health, such as an STI ~~check?"Paula: "Sure, what's involved?" check?"Paula: "ok, what does that involve?"~~ (*Module 2.pdf*)	 (*Module_2_Working_with_Priority_pop_final.pptx*)
Not available	Paula Answer The Aboriginal population is at higher risk ~~than the general population~~ for ~~Chlamydia and chlamydia and~~ gonorrhoea, especially in remote ~~communities than the general population~~ ~~communities.Test for:~~ ~~Test for:~~ ~~Chlamydia -~~ ~~gonorrhoea and chlamydia chlamydia~~ self collected vaginal swab ~~PCR~~ or endocervical ~~/ PCR and~~ gonorrhoea ~~endocervical~~ swab ~~or First~~ ~~OR~~ ~~First~~ pass urine ~~and order~~ NAAT (PCR for ~~Chlamydia chlamydia~~ and gonorrhoea) Hepatitis B virus - Serology (*Module 2.pdf*)	 (*Module_2_Working_with_Priority_pop_final.pptx*)

Material Circulated to Working Group	Feedback Received	Final
Not available	Murray GP: "I'd like to ask you some questions about your sexual activity so we can decide what tests to do"You go through the brief sexual history (refer to STI Tool) as well as and other risk behaviours. Muz is currently single and single. He has had 3 different sexual partners in the past 3 months and six months: 6 in the past 12 months. All his partners are female and have been both casual and regular partners. In some of the casual encounters he has not used condoms. There is no history of STIs in the past, but the past. Muz last saw a doctor contact was 4 years ago for Hep B immunisation. vaccination Muz has no history of IV drug use, tattoos or piercings and has never been in jail. Based on the STI 'check up' what tests would you order for Muz?? (*Module 2.pdf*)	 (*Module_2_Working_with_Priority_pop_final.pptx*)
Not available	 (*Module 2.pdf*)	 (*Module_2_Working_with_Priority_pop_final.pptx*)
Not available	Paul On asking questions fromUsing the brief sexual history check list, you find out Paul is in a relationship with a female for the past 2 years. year heterosexual relationship. He only He has had 2 other partners in the past 12 months have been two men months, both male whom Paul had casual sex with on at least 6 occasions. He has always used condoms when having sex with these men but not with his girlfriend who is on oral contraception. takes the OCP. The type of sex Paul has with these male partners includes both anal and oral sex. sex with his male partners. With his female partner Paul engages in vaginal and oral sex. Paul has never used IV drugs, been tattooed tattooed, pierced or been in jail. Paul is at higher risk for which STIs?? (*Module 2.pdf*)	 (*Module_2_Working_with_Priority_pop_final.pptx*)

Material Circulated to Working Group	Feedback Received	Final
Not available	'check up', up' which is done about every 3 3 months or so. Therese regularly months. Therese smokes '25 25 cigarettes a day and occasionally injects and occasionally injects methamphetamine which she enjoys doing with her boyfriend. Therese Therese is a 26 year old woman who is employed in a brothel brothel. and She comes to you for an STI STI (*Module 2.pdf*)	 (*Module_2_Working_with_Priority_pop_final.pptx*)
Not available	Therese Therese has been a sex worker for two years and currently lives in share accommodation with three other sex workers. She has not been in prison but and has some old tattoos (over 3 years old).Therese religiously uses condoms 100% for all paid sexual activity. She has been with her boyfriend for over 12 months with whom she never uses condoms as she is on the oral contraceptive pill.What pill. She doesn't have any other partners.What tests, should you order for Therese? (*Module 2.pdf*)	 (*Module_2_Working_with_Priority_pop_final.pptx*)
Not available	Minh Minh is a heterosexual 33 year old old accountant who is one of your stable patients to whom you on methadone. prescribe methadone. You are aware that that Minh occasionally injects drugs and attends the local NSP for equipment. equipment. Minh comes to see you as is he is going into a new relationship. Through this relationship. Through this conversation he describes describes using more frequently with some new friends. What problems may be important to identify with Minh? (*Module 2.pdf*)	 (*Module_2_Working_with_Priority_pop_final.pptx*)

Material Circulated to Working Group	Feedback Received	Final
Not available	Minh STI Management Plan: ~~Need to encourage~~ Encourage use of condoms in new relationship ~~Safer~~ Discuss safe injecting ~~-No sharing of needles, syringes and injecting paraphernaliaHousehold~~ Household transmission -Careful with blood exposure with close contacts, including no sharing of razors and toothbrushesCheck STI status ~~3 months especially re: HIV~~ ~~Sexual transmission of Hepatitis B regularly depending on risk~~ ~~Treatment for~~ Discuss Hepatitis C Low risk sexual transmission treatment C (*Module 2.pdf*)	 (*Module_2_Working_with_Priority_pop_final.pptx*)
Not available	Brad Want to know: In the last 3 months, how many sexual partners have you had? ~~-How many partners have you had in What about -~~the past 12 months? Were your sexual partners male, female or both? Were these casual or regular partners? ~~From today, when~~ When was the last time you had vaginal ~~sex*/oral sex/oral~~ -sex/anal sex? Did you use a condom? When was the last sex without a condom? ~~In the past year were~~ Have you ever paid or been paid for sex? Have you previously been diagnosed with an STI? Do you have any ~~Tattoos?~~ tattoos or piercings? Have you ever injected drugs?? (*Module 2.pdf*)	 (*Module_2_Working_with_Priority_pop_final.pptx*)
Not available	Brad Annual testing for men who have sex with men in the previous year.More frequent testing (3-6 monthly) is recommended ~~for: if:~~ ~~3-6 monthly testing is recommended for men who~~ have episodes of unprotected anal sex have more than 10 partners in the past six months attend sex-on-premises venues (SOPVs) use recreational drugs or seek partners via the ~~internetWhat internet3 monthly syphilis testing is recommended for HIV+ MSMWhat~~ other information would you discuss with Brad?? (*Module 2.pdf*)	 (*Module_2_Working_with_Priority_pop_final.pptx*)

** Unless otherwise indicated, filenames are removed for confidentiality*

Table 29: ALM: Case Studies*

SWAHS ALM (*Case Histories.doc*)	GP Project ALM (*summarised from Module 2.pptx and Module 3 v2.pptx*)
Opportunistic testing of a young man	Opportunistic testing of a young man
Opportunistic testing of a young woman	Opportunistic testing of a young Aboriginal woman
Contact testing and treatment	STI check and Chlamydia
Genital warts	Sexual history, HIV pre-test discussion, post-exposure prophylaxis, and STI testing for men who have sex with men
STI check and genital herpes	STI check for sex workers
Genital discharges and dermatoses	Hepatitis and STI risks among injecting drug user
Sexual history, HIV pre-test discussion, post-exposure prophylaxis, and STI testing for men who have sex with men	HIV among men who have sex with men
HIV and syphilis among people from endemic regions	Chlamydia and contact tracing
General practice and the HIV-positive patient	Vaginal discharge and contact tracing
	Unsafe sex practices and contact tracing
	HIV and contact tracing

** NSCCH ALM case studies not provided*

Table 30: ALM: Case Study Exemplars

SWAHS ALM (*Case Histories.doc*)	GP Project ALM (*Module 3 Worksheet.docx*)
Case 1: Claire, a 22 year-old student, presents requesting a prescription for OCP. In an alternative encounter, Claire mentions that she has had some breakthrough bleeding in the last 2 months for the first time.	Max has just returned from a business trip. He comes to your practice, not his usual family practice reporting a penile discharge. His history reveals that a few days before he was given oral sex by a woman for whom he bought drinks and dinner. He stated that he felt safe because he did not have intercourse. He says that on his return to Sydney he had unprotected sexual intercourse with his wife. You diagnose him with gonorrhoea. He does not wish to tell his wife.

Table 31: Check Booklet: Use of Research Evidence

Information Source	Evidence of Use (*Check Program.pdf*)
1. National management guidelines for sexually transmissible infections (SHSOV, 2008)	routinely performed (see *Answer 3*). Serological testing for chlamydia is not of any clinical use in the diagnosis of acute genital chlamydia infection.[1]
2. Therapeutic guidelines – antibiotic (Antibiotic 14 Expert Group, 2008)	Syphilis can be treated with either benzathine penicillin 1.8 g intramuscularly as a single dose or procaine penicillin 1.5 g intramuscularly daily for 10 days. If the patient is penicillin allergic and desensitisation is unfeasible, oral doxycycline 100 mg twice per day for 14 days may be used. Nidhish should be assessed clinically at 1 week after treatment ends for resolution of symptoms. Thereafter, repeat serology should be performed at 3 months, then 3 monthly until 1 year has elapsed since treatment. The aim is to observe the RPR titre fall four-fold within 6 months. For Nidhish, this means it has to fall to at least 1:4 within 6 months, and remain so at 1 year post-treatment. If this occurs, he may be discharged from follow up.[2]
3. Australasian contact tracing manual (ASHM, 2006a)	Eight months is based on well defined periods: a maximum 90 day incubation period plus 5 week duration of primary syphilis plus 10 week latency between primary and secondary phases and a maximum of 6 weeks of secondary syphilis symptoms.[3]
4. A guide to taking a sexual history (CDCP, nd)	• make sure you are familiar with sexual history taking.[4]
5. Chernesky and colleagues (2003)	A first void urine (FVU) sample can be used to test for chlamydia and gonorrhoea, utilising a highly sensitive and specific PCR test. First void urine is the first part of the urinary stream. It does not have to be taken first thing in the morning and the patient does not need to have held urine for a period of time.[5]
6. Sexually transmissible infections strategy 2006-2009(NSW Health, 2006)	Routine screening for heterosexual men or women should include chlamydia testing but may not include testing for gonorrhoea unless they are considered to be at risk from the history.[6]
7. Rose and colleagues (2007)	Asymtomatic patients can be asked to collect swabs themselves. This is not appropriate in symptomatic patients. Such tests include self collected high vaginal and rectal swabs for chlamydia and gonorrhoea PCR testing. Clear instructions need to be given to the patient[7] (see *Figure 1*).
8. Dayan and Sheary (2005)	Diagnosis of herpes infection is made clinically and via a swab of lesions present. As Maryanne is asymptomatic, a diagnosis cannot be made. She should be told what symptoms of herpes to look out for and reassured that many people with herpes infection will never suffer from clinical herpes.[8]

9. Scoular (2002)	The mainstay of herpes simplex virus (HSV) clinical diagnosis remains PCR testing from a clinical lesion (blister or ulcer). In this circumstance the nucleic acid tests give a sensitivity of 86–100% and a specificity of 90–97%.[9]
10. Ratnam and colleagues (2007)	The mainstay of herpes simplex virus (HSV) clinical diagnosis remains PCR testing from a clinical lesion (blister or ulcer). In this circumstance the nucleic acid tests give a sensitivity of 86–100% and a specificity of 90–97%.[9] Serology is available and will detect antibodies to HSV. A positive test suggests infection but cannot diagnose clinical disease.[9,10]
11. Cunningham and colleagues (2006)	Seropositivity for HSV is common. The Australian population prevalence is estimated at 12% for HSV2 and 76% for HSV1.[11]
12. Fitzhugh and Heller (2008)	infection, eg. chlamydia. Conversely a normal Pap test does not exclude a cervical infection as the sensitivity of a Pap test to diagnose STIs is poor.[12]
13. Guidelines for preventive activities in general practice (RACGP, 2005)	As per the 'red book' guidelines[13] you would ask John about: • smoking • nutrition • alcohol • physical activity • mood (depression risk) • sexual history.
14. HIV management in Australasia (ASHM, 2006b)	• the preferred manner of giving HIV test results and the legal requirements[14] • important points that should be discussed when HIV testing is proposed and the legal requirements around this[14]

Table 32: Check Booklet: Use of Clinical Expertise

Material Circulated to Working Group	Feedback Received	Final
	Nidhish, a 24 year old Indian man who has lived in Australia for 3 years, presents with fevers, night sweats, widespread myalgia and arthralgia, anorexia and headaches. Symptoms have been present for two weeks or so. He is not on any medications whatsoever and has no comorbidities. (*Draft 1.doc*)	Nidhish, aged 24 years, is an Indian man who has lived in Australia for 3 years. He presents with 2 weeks of fever, night sweats, and aches and pains. He has been 'off his food' and complains of mild headaches. He is not taking any medications and has no significant past history.
	seropositivity for HSV is common (The Australian population prevalence is estimated at 76% ~~12%~~ for HSV1~~1~~ and 12% ~~76%~~ for HSV 2[7]) and this does not necessarily predict that the patient will have any clinical manifestations. (*Draft 1.doc*)	Seropositivity for HSV is common. The Australian population prevalence is estimated at 12% for HSV2 and 76% for HSV1.[11]
	It does NOT have to be taken ~~1st~~ first thing in the morning and the patient does not need to have held urine for a period of time[1]. (*Draft 2.doc*)	It does not have to be taken first thing in the morning and the patient does not need to have held urine for a period of time.[5]
	Rectal swabs are not essential for women who have receptive anal sex. Although anal sex is being reported more commonly among heterosexuals, if an STI were present, it would most likely be concurrent with urethral/cervical infection. Therefore urethral/cervical swabs are sufficient to detect and treat rectal STIs in women. (*filename removed for confidentiality*)	Rectal swabs are not essential for women who have receptive anal sex. Although anal sex is being reported more commonly among heterosexuals, if an STI was present, it would most likely be concurrent with urethral/cervical infection. Therefore urethral/cervical swabs are sufficient to detect rectal STIs in women.
	~~screening for~~ This unit of **check** looks at sexually transmissible infections (STIs) with clinical scenarios related to ~~acute presentations of~~ STIs, sexual history taking, collection of specimens, giving results, and dealing with feelings of discomfort and cultural sensitivities around sex and STIs. symptoms and (*Comments.pdf*)	This unit of **check** looks at sexually transmissible infections (STIs), with clinical scenarios related to symptoms and screening for STIs, sexual history taking, collection of specimens, giving results, and dealing with feelings of discomfort and cultural sensitivities around sex and STIs.
	Miriam Grotowski, BMed, FRACGP, DipPsych (Ed), is a GP in Tamworth, NSW, and a GP visiting medical officer at Sexual Health HNEAHS. Miriam is a S100 HIV prescriber and member of ~~[redacted]~~ and The Aboriginal Sexual Health Advisory Committee ~~[author check if this is ASHAC]~~ the Ministerial Advisory Committee on HIV/AIDS, STI. Bill Kefalas, MSBS, is Research Fellow and Clinical Tutor, Department of General Practice, Western Clinical School, The University of Sydney, and a general practice supervisor, Wentwost, Sydney (*Comments.pdf*)	Miriam Grotowski, BMed, FRACGP, DipPsych (Ed), GP in Tamworth, NSW, and GP visiting medical officer at Sexual Health HNEAHS. Miriam is an S100 HIV prescriber and a member of the Ministerial Advisory Committee on HIV/AIDS and STIs, and The Aboriginal Sexual Health Advisory Committee
	Syphilis: EIA Positive FTA-Ab Positive TPPA Positive ~~VDRL~~ RPR Reactive 1:64 HIV antigen/antibody ~~Positive~~ "results pending" (*Comments.pdf*)	**Syphilis:** EIA Positive FTA-Ab Positive TPPA Positive RPR Reactive 1:64 HIV antigen/antibody Results pending
	Nidhish should have rectal swabs for gonorrhoea and chlamydia, a pharyngeal swab for gonorrhoea and a first catch urine for chlamydia ~~and gonorrhoea~~[1] (*Figure 1*). (*Comments.pdf*)	Nidhish should have rectal swabs for gonorrhoea and chlamydia, a pharyngeal swab for gonorrhoea and a first catch urine for chlamydia[1] (*Appendix 1*).

Material Circulated to Working Group	Feedback Received	Final
	Test results confirm current infection with syphilis. You are able to diagnose secondary syphilis as Nidhish has a reactive ~~VDRL~~ RPR and a rash, constitutional symptoms and lymphadenopathy. Serology indicates past infection with EBV, CMV. Nidhish may be infected with HIV. ELISA is used for initial HIV antigen/antibody screening in Australia. A western blot ~~is needed~~ will be performed to confirm positive ELISA results. If the western blot is positive, this could explain the lymphopaenia in Nidhish's case. (*Comments.pdf*)	Test results confirm current infection with syphilis. You are able to diagnose secondary syphilis as Nidhish has a reactive RPR and a rash, constitutional symptoms and lymphadenopathy. Serology indicates past infection with EBV and CMV. Nidhish may be infected with HIV. Enzyme linked immunosorbent assay (ELISA) is used for initial HIV antigen/antibody screening in Australia. A western blot will be performed to confirm positive ELISA results. If the western blot is positive, this could explain the lymphopaenia in Nidhish's case.
	days may be used. Nidhish should be assessed clinically at 1 week after treatment ends for resolution of symptoms ~~and repeat serology~~. Thereafter, repeat serology should be performed ~~monthly for 6 months~~ at 3 months, then 3 monthly until 1 year has elapsed since treatment. The aim is to observe (*Comments.pdf*)	days may be used. Nidhish should be assessed clinically at 1 week after treatment ends for resolution of symptoms. Thereafter, repeat serology should be performed at 3 months, then 3 monthly until 1 year has elapsed since treatment. The aim is to observe the RPR titre fall four-
	secondary syphilis symptoms.[3] ~~Nidhish requires a secondary test (such as~~ If a western blot) confirms ~~for~~ HIV infection ~~and~~ an appropriate referral ~~if this is positive~~ should be made. **Feedback** (*Comments.pdf*)	If a western blot confirms HIV infection, an appropriate referral should be made. **Feedback**
	Syphilis has been labelled 'the great imitator' as it can mimic other diseases. Similarly, HIV can also present in a myriad of different ways. When either infection is diagnosed, the other should be tested for. ~~The ideal treatment for syphilis is daily procaine penicillin for 10 days, however, the inconvenience risks noncompliance, benzathine penicillin is often substituted~~. Contact tracing and follow up can be referred to the local sexual health clinic (see *Resources*). (*Comments.pdf*)	Syphilis has been labelled 'the great imitator' as it can mimic other diseases. Similarly, HIV can also present in a myriad of different ways. When either infection is diagnosed, the other should be tested for. Contact tracing and follow up can be referred to the local sexual health clinic (see *Resources*).
	'type of sex' overseas (where?), who with, what was involved and whether condoms were used. This is important as the epidemiology of gonorrhoea and other STIs will vary among populations from country to country ~~eg. sex with~~ eg. sex with a girl met at a bar in Thailand (without condoms) will be of greater HIV risk than sex with a casual female partner in Australia (*Comments.pdf*)	overseas (where?), who with, what type of sex was involved and whether condoms were used. This is important as the epidemiology of gonorrhoea and other STIs will vary among populations from country to country, eg. sex with a girl met at a bar in Thailand (without condoms) will be of greater HIV risk than sex with a casual female partner in Australia

Material Circulated to Working Group	Feedback Received	Final
	• Male partners/female partners: Has Jim ever had sex with a man? When, where (overseas, Australia, sex on premises venues, beats), who (casual or regular partner?), what was involved (oral, anal – receptive or insertive?), condom use. Gender of sexual partners may be a delicate issue, and may not always equate to sexuality or sexual orientation. Jim may have sex with men occasionally yet still identify as 'straight' or heterosexual. Questions surrounding Jim's two most recent partners may not capture this information. ~~Recent outbreaks~~ of syphilis, chlamydia and gonorrhoea in men who have sex with men (MSM) ~~have been~~ reported in Australia and overseas. Risk of contact with an STI may be influenced also by how and where men meet sexual partners, eg. via the internet, or at bars and clubs. This may also impact on contact tracing. 'Higher rates' 'are currently (*Comments.pdf*)	• Male partners/female partners: has Jim ever had sex with a man? When, where (overseas, Australia, sex on premises venues, 'beats'?), who (casual or regular partner?), what was involved (oral, anal – receptive or insertive?), condom use. Gender of sexual partners may be a delicate issue, and may not always equate to sexuality or sexual orientation. Jim may have sex with men occasionally yet still identify as 'straight' or heterosexual. Questions surrounding Jim's two most recent partners may not capture this information. Higher rates of syphilis, chlamydia and gonorrhoea in men who have sex with men (MSM) have recently been reported in Australia and overseas. Risk of contact with an STI may be influenced also by how and where men meet sexual partners, eg. via the internet, or at bars and clubs. This may also impact on contact tracing.
	• make sure you are familiar with sexual history taking.[4] Patients will be able to sense if you are uncomfortable with the topic or language, and this may be misinterpreted, ~~thus~~ influencing their answers and (*Comments.pdf*)	• make sure you are familiar with sexual history taking.[4] Patients will be able to sense if you are uncomfortable with the topic or language, and this may be misinterpreted and influence their answers
	Asymtomatic patients can be asked to collect swabs themselves. This is not appropriate in symptomatic patients. Such tests include self collected high vaginal and rectal swabs for chlamydia PCR testing. Clear instructions need to be given to the patient.[7] ~~and~~ and gonorrhoea (*Comments.pdf*)	Asymtomatic patients can be asked to collect swabs themselves. This is not appropriate in symptomatic patients. Such tests include self collected high vaginal and rectal swabs for chlamydia and gonorrhoea PCR testing. Clear instructions need to be given to the patient[7] (see *Figure 1).*
	The mainstay of HSV clinical diagnosis remains PCR testing from a clinical lesion (blister or ulcer). In this circumstance the nucleic acid tests give a sensitivity of 86–100% and a specificity of 90–97%. Serology is available and will detect antibodies to herpes simplex virus (HSV). ~~The specificity and sensitivity of this test.~~[9] A positive test suggests infection but cannot diagnose clinical disease. Seropositivity for HSV is common. The Australian population prevalence is estimated at 12% for HSV2 and 76% for HSV1.[10] This does not necessarily predict that the patient will have any clinical manifestations. Serology may be useful in certain situations such as in counselling discordant couples, but the limitations of the test to predict disease or even transmission must be discussed with the patient first. i.e. reverse HSV2 = 12%. HSV1 = 76%. (*Comments.pdf*)	The mainstay of herpes simplex virus (HSV) clinical diagnosis remains PCR testing from a clinical lesion (blister or ulcer). In this circumstance the nucleic acid tests give a sensitivity of 86–100% and a specificity of 90–97%.[9] Serology is available and will detect antibodies to HSV. A positive test suggests infection but cannot diagnose clinical disease.[9,10] Seropositivity for HSV is common. The Australian population prevalence is estimated at 12% for HSV2 and 76% for HSV1.[11] This does not necessarily predict that the patient will have any clinical manifestations. Serology may be useful in certain situations such as in counselling discordant couples, but the limitations of the test to predict disease or even transmission must be discussed.

Material Circulated to Working Group	Feedback Received	Final
	A. Chlamydia test and confirmation of vaccination status for Hep A/B and ~~HBV~~ is recommended. A brief sexual history should be taken to identify other risks. B. No specific test. Conduct brief sexual history as outlined on STIPU STI testing tool (see *Case 1, Figure 1*). The task is to ~~test for~~ risks for chlamydia, gonorrhoea and syphilis, HIV, HPV and HBV/HAV. Important questions to ask include: • nationality of sex partner • sex of partner • types of sex practiced • number of sex partners • condom use • vaccination history for ~~HBV~~, HBV/HAV. B HPV (for women) "assess" HPV (for women) (*Comments.pdf*)	A. Chlamydia test and confirmation of vaccination status for Hep A/B and HPV (for women) is recommended. A brief sexual history should be taken to identify other risks. B. No specific test. Conduct brief sexual history as outlined on STIPU STI testing tool (see *Appendix 1*). The task is to assess for risks for chlamydia, gonorrhoea and syphilis, HIV (for women), HPV and HBV/HAV. Important questions to ask include: • nationality of sex partner • sex of partner • types of sex practiced • number of sex partners • condom use • vaccination history for HPV (for women), HBV/HAV
	Cultures may not be appropriate in remote locations or where the time to testing at the laboratory is too long. In these situations, consider PCR testing (*Comments.pdf*)	Cultures may not be appropriate in remote locations or where the time to testing at the laboratory is too long. In these situations, consider PCR testing.

Table 33: Check Booklet: Modifications not informed by Documented Feedback

Draft (*Draft 2.doc*)	Final
Nidhish, a 24 year old Indian man who has lived in Australia for 3 years presents with fevers, night sweats, widespread myalgia and arthralgia, anorexia and headaches. Symptoms have been present for two weeks or so. He is not on any medications whatsoever and has no comorbidities. He says that he has occasionally had all of these symptoms, not necessarily together, but now they are constant and unremitting. On specific questioning about possible exposures to infection, Nidhish says that he has not been overseas for years. He has had no recent contact with any ill people. He admits that he has had 'risky sex' with a casual male partner recently but refuses to give further details. Nidhish's headaches are vague in site and characteristics, but there are no features of raised intracranial pressure. It is the night sweats and arthralgias / myalgias which bother him most. Examination reveals a febrile (38.3) man, hydrated with widespread lymphadenopathy. There is no hepatosplenomegaly. Throat and mouth clear. There is no meningism. Cardiorespiratory examination is unremarkable. Cranial and peripheral nerve examination is normal. Genitalia normal. His weight is similar to his previous reading, at 58 kg.	Nidhish, aged 24 years, is an Indian man who has lived in Australia for 3 years. He presents with 2 weeks of fever, night sweats, and aches and pains. He has been 'off his food' and complains of mild headaches. He is not taking any medications and has no significant past history. Nidhish denies recent overseas travel and has had no recent contact with any ill people. He admits that he has had 'risky sex' with a casual male partner recently but refuses to give further details. He has not lost any weight. On examination he has a fever of 38.3°C and widespread lymphadenopathy but no hepatosplenomegaly. He is well hydrated, and examination of the ear, nose, throat and mouth is unremarkable. There is no meningism. Cardiovascular, respiratory, and central and peripheral nervous system and genital examinations are normal. He weighs 58 kg.
John, an 18 year old male comes to you for advice about a sports related knee injury. During the consultation, John tells you he is leaving home to begin University in Sydney. You have known John's family since you moved to this small town 20 years ago. In fact, you delivered John. You're friends with his parents and attend the same church. John has been a very healthy child and you have not seen him for a while.	John, aged 18 years, attends for removal of sutures from a simple laceration to his arm which occurred at football training last week. The wound is healing well and you remove the sutures and apply a simple dressing. While you are doing this, John tells you he is leaving home in a month to start university in the city. You have known John's family since you moved to this small town 20 years ago. In fact, you delivered John. You are friends with his parents and attend the same church. John has been a very healthy child and you have not seen him for a while. He says that he will be living with friends in a share house. It will be the first time John has lived independently. You wonder about his life skills and risks associated with his new living situation.
1. What further information do you need? (Type of sport, nature of injury, previous injuries) Further information. John tells you he is travelling to Sydney to study sports science and will be living with friends in a share house. It will be the first time John has lived independently. You wonder about John's life skills and risks associated with his new living situation.	**Question 1** What further information would you elicit to assess John's risks for preventable illness and injury in his new city life? _____ _____

Draft (*Draft 2.doc*)	Final	
	Answer 1 As per the 'red book' guidelines[13] you would ask John about: • smoking • nutrition • alcohol • physical activity • mood (depression risk) • sexual history.	

Table 34: Check Booklet: Clinical Expertise not Used

Feedback Received	Final
This information will give an indication of sexual activity, risk of sexually transmitted infections (STIs) and possible transmission of syphilis and rate of partner change. It may also aid in partner notification and contact tracing. Condoms are highly protective for most STIs but ~~Although~~ syphilis can be transmitted despite 100% condom use~~, this is not the case with many other STIs.~~ (*Draft 1.doc*)	This helps to get an indication of sexual activity, rate of partner change, risk of STIs and possible transmission of gonorrhoea to other partners including condom use. This will help in diagnosis, partner notification and contact tracing
Anyone having receptive anal sex (male or female) should also be offered a rectal testing for chlamydia by PCR and for a gonorrhoea culture as appropriate[2]. This simply involves taking a saline-~~dry~~ moistened swab blind from the rectum and processing for Chlamydia PCR or gonorrhoea culture as above[3]. (*Draft 1.doc*)	Rectal swabs should also be offered to men having receptive anal sex for chlamydia by PCR and for a gonorrhoea culture as appropriate. Rectal swabs may be self collected (*Figure 1*). Chlamydia PCR is performed on a dry swab taken blind from the rectum. Once again, liaise with your local laboratory service regarding gonorrhoea culture.[1]
Serological tests are available for HIV (antibody/antigen), syphilis, herpes simplex virus, and hepatitis B. Serological testing for Chlamydia is not of any clinical use in the diagnosis of acute genital chlamydia infection[3]. (*Draft 1.doc*)	Serological tests are available for HIV (antibody/antigen), syphilis, herpes, and hepatitis B. Herpes serology is not routinely performed (see *Answer 3*). Serological testing for chlamydia is not of any clinical use in the diagnosis of acute genital chlamydia infection.[1]
An FVU (first void urine) sample can be used to test for Chlamydia and gonorrhoea, utilising a highly sensitive and specific PCR test. *First* void urine is simply the first part of the urinary stream when you are seeing the patient. (*Draft 1.doc*)	A first void urine (FVU) sample can be used to test for chlamydia and gonorrhoea, utilising a highly sensitive and specific PCR test. First void urine is the first part of the urinary stream.
She should, however, be told what clinical signs of herpes to look out for, whilst reassuring her that many people will never ~~suffer~~ havefrom clinical herpes[6]. (*Draft 2.doc*)	. She should be told what symptoms of herpes to look out for and reassured that many people with herpes infection will never suffer from clinical herpes.[8]

Feedback Received	Final
He uses the local gay and lesbian community organisation's website for up to date health messages. He is aware of the higher rates of HIV in some countries and amongst men who have sex with men. He states he is relieved you know about his sexual history and has been reassured by your assurances regarding confidentiality. (*Draft 2.doc*)	He uses the local gay and lesbian community organisation's website for up-to-date health messages. He says he is relieved you know about his sexual history and is reassured by your assurances regarding confidentiality.
Your local Public Health Unit and Sexual Health Clinic can assist you with ~~difficult cases.~~ ~~Any cases of s~~syphilis, HIV or Gonorrhoea cases which ~~should be sent to your local Sexual Health Clinic. The contact tracing issues are often~~ may be more complex and the risk to pPublic hHealth the greatest. (*Draft 2.doc*)	Your local public health unit and sexual health clinic can assist you with difficult cases (see *Resources*). Any cases of syphilis, HIV or gonorrhoea can be sent to your local sexual health clinic; the contact tracing issues can be complex and the risk to public health the greatest.
John, an 18 year old ~~20yo~~ male comes to your for advice about a sports related knee injury. During the consultation, John tells you he is leaving home to begin University in Sydney.~~before travelling to Thailand in his Uni holidays.~~ You have known John's ~~and his~~ family since you moved to this small town 20 years ago. In fact, you delivered John. You're friends with his parents and attend the same church. John has been a very healthy child and you have not seen him for a while. (*filename removed for confidentiality*)	John, aged 18 years, attends for removal of sutures from a simple laceration to his arm which occurred at football training last week. The wound is healing well and you remove the sutures and apply a simple dressing. While you are doing this, John tells you he is leaving home in a month to start university in the city.

Table 35: Practice Nurse Postcard: Use of Research Evidence

Fact Sheet: Chlamydia (NSW Health, 2007)

What is Chlamydia?

Chlamydia is a sexually transmissible infection. It is caused by bacteria. Many people who are infected with the bacteria do not have symptoms but can still transmit it. Chlamydia can affect the urethra (the urine passage), cervix (the neck of the womb), rectum, anus, throat, and eyes. If chlamydia is not properly treated it can cause serious complications.

In women complications include:

- pelvic inflammatory disease (PID). This is when the reproductive organs that are situated in the pelvis become inflamed
- pelvic adhesions and chronic pelvic pain
- infertility due to damage to the fallopian tubes (by scar tissue)
- eptopic pregnancy (when the pregnancy develops in the fallopian tubes instead of in the uterus).

In men complications include:

- recurrent urethritis
- epididymitis (which involves the tube to the testes).

In women and men complications include:

- arthritis
- conjunctivitis and uveitis (eye inflammation)
- proctitis (inflammation of the rectum).

What are the symptoms?

Symptoms can occur within 2-14 days after infection. However, a person may have chlamydia for months, or even years, without knowing it.

In women
If a woman has chlamydia, she may notice:

- cramps or pain in the lower abdomen
- menstrual changes (that is, changes with her periods)
- pain when passing urine
- bleeding or pain during or after sex
- a change in her vaginal discharge.

In men
If a man has chlamydia, he may notice:

- a discharge from the penis
- pain when passing urine
- swollen and sore testicles.

In men and women
Infection of the anus can occur but usually goes unnoticed. Occasionally it can cause anal pain or discharge.

How is it spread?

Chlamydia is spread by having sex with someone who has the infection.

Who is at risk?

The people who are most at risk of catching chlamydia are:

- young sexually active men and women
- anyone who has recently changed sexual partners
- anyone who has recently had another sexually transmitted infection.

How is it prevented?

Using a condom for vaginal or anal sex prevents chlamydia and other sexually transmitted infections. If you have chlamydia you should tell all your sexual partners over the last six months to see a doctor or your local sexual health clinic for testing and treatment.

How is it diagnosed?

Chlamydia can be diagnosed by your local doctor or sexual health clinic. The doctor will take a urine sample, or a swab from the urethra, cervix, or anus. The sample or swab will then be tested for chlamydia at a laboratory.

How is it treated?

Chlamydia is easily cured by antibiotics. It is important to see your doctor or sexual health clinic to get tested and treated. If the symptoms return, return to your doctor or sexual health clinic.

It is important that you finish the entire course of antibiotics, even after the symptoms resolve, as the chlamydia bacteria may not have been totally killed. It is also important not to have sex for at least 7 days after the treatment begins, because the infection can still be spread.

What is the public health response?

Laboratories are required to notify cases of chlamydia to the local public health unit. Data on the incidence of chlamydia are used for public health planning. The doctor will work with the patient to identify contacts who may need to be tested and treated. The doctor can seek help from the local sexual health service.

Postcard

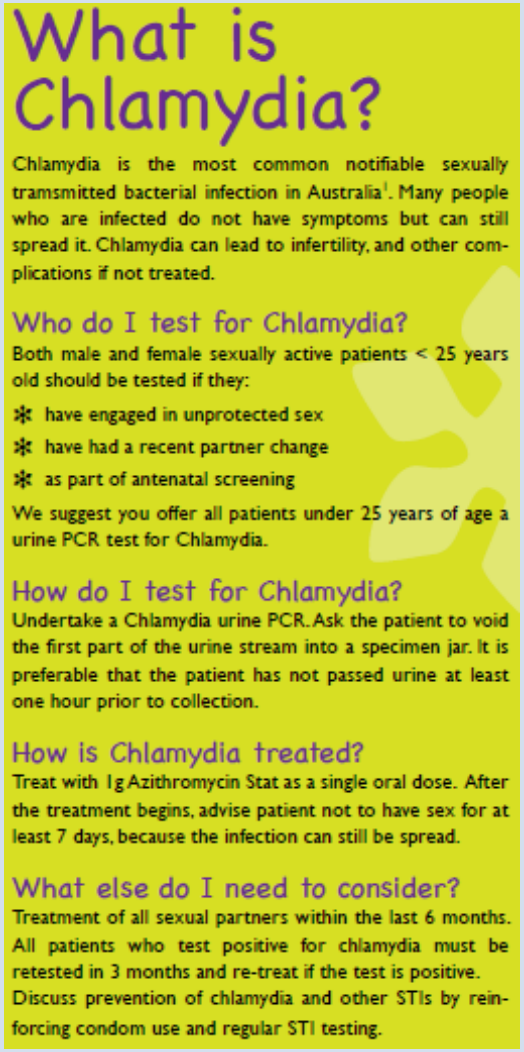
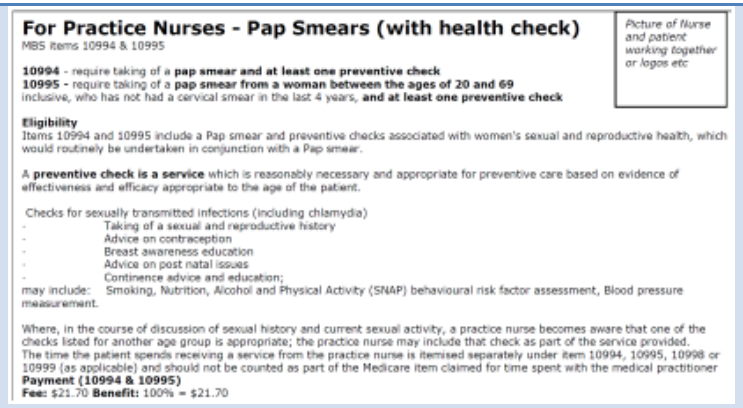


Table 36: Practice Nurse Postcard: Iterations

Front



For Practice Nurses - Pap Smears (with health check)
MBS items 10994 & 10995

Picture of Nurse and patient working together or logos etc

10994 - require taking of a **pap smear and at least one preventive check**
10995 - require taking of a **pap smear from a woman between the ages of 20 and 69** inclusive, who has not had a cervical smear in the last 4 years, **and at least one preventive check**

Eligibility
Items 10994 and 10995 include a Pap smear and preventive checks associated with women's sexual and reproductive health, which would routinely be undertaken in conjunction with a Pap smear.

A **preventive check is a service** which is reasonably necessary and appropriate for preventive care based on evidence of effectiveness and efficacy appropriate to the age of the patient.

Checks for sexually transmitted infections (including chlamydia)
- Taking of a sexual and reproductive history
- Advice on contraception
- Breast awareness education
- Advice on post natal issues
- Continence advice and education;

may include: Smoking, Nutrition, Alcohol and Physical Activity (SNAP) behavioural risk factor assessment, Blood pressure measurement.

Where, in the course of discussion of sexual history and current sexual activity, a practice nurse becomes aware that one of the checks listed for another age group is appropriate; the practice nurse may include that check as part of the service provided. The time the patient spends receiving a service from the practice nurse is itemised separately under item 10994, 10995, 10998 or 10999 (as applicable) and should not be counted as part of the Medicare item claimed for time spent with the medical practitioner
Payment (10994 & 10995)
Fee: $21.70 **Benefit:** 100% = $21.70

(*Draft 2.doc*)

For Practice Nurses - Pap Smears (with health check)
MBS items 10994 & 10995

Picture of Nurse and patient working together or logos etc

10994 - require taking of a **pap smear and at least one preventive check**
10995 - require taking of a **pap smear from a woman between the ages of 20 and 69** inclusive, who has not had a cervical smear in the last 4 years, **and at least one preventive check**

Eligibility
Items 10994 and 10995 include a Pap smear and preventive checks associated with women's sexual and reproductive health, which would routinely be undertaken in conjunction with a Pap smear.

A **preventive check is a service** which is reasonably necessary and appropriate for preventive care based on evidence of effectiveness and efficacy appropriate to the age of the patient.

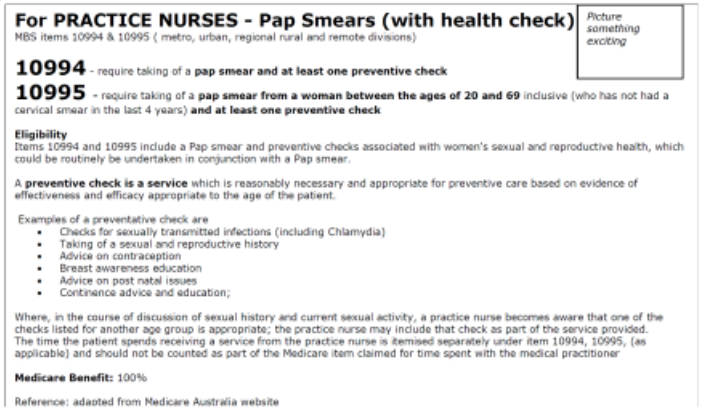
Examples of a preventative check are
- Checks for sexually transmitted infections (including chlamydia)
- Taking of a sexual and reproductive history
- Advice on contraception
- Breast awareness education
- Advice on post natal issues
- Continence advice and education;

Where, in the course of discussion of sexual history and current sexual activity, a practice nurse becomes aware that one of the checks listed for another age group is appropriate; the practice nurse may include that check as part of the service provided. The time the patient spends receiving a service from the practice nurse is itemised separately under item 10994, 10995, 10998 or 10999 (as applicable) and should not be counted as part of the Medicare item claimed for time spent with the medical practitioner

Payment (10994 & 10995)
Fee: $21.70 **Benefit:** 100% = $21.70

Reference: adapted from Medicare Australia website

(*Draft 3.doc*)



For PRACTICE NURSES - Pap Smears (with health check)
MBS items 10994 & 10995 (metro, urban, regional rural and remote divisions)

Picture something exciting

10994 - require taking of a **pap smear and at least one preventive check**

10995 - require taking of a **pap smear from a woman between the ages of 20 and 69** inclusive (who has not had a cervical smear in the last 4 years) **and at least one preventive check**

Eligibility
Items 10994 and 10995 include a Pap smear and preventive checks associated with women's sexual and reproductive health, which could be routinely be undertaken in conjunction with a Pap smear.

A **preventive check is a service** which is reasonably necessary and appropriate for preventive care based on evidence of effectiveness and efficacy appropriate to the age of the patient.

Examples of a preventative check are
- Checks for sexually transmitted infections (including Chlamydia)
- Taking of a sexual and reproductive history
- Advice on contraception
- Breast awareness education
- Advice on post natal issues
- Continence advice and education;

Where, in the course of discussion of sexual history and current sexual activity, a practice nurse becomes aware that one of the checks listed for another age group is appropriate; the practice nurse may include that check as part of the service provided. The time the patient spends receiving a service from the practice nurse is itemised separately under item 10994, 10995, (as applicable) and should not be counted as part of the Medicare item claimed for time spent with the medical practitioner

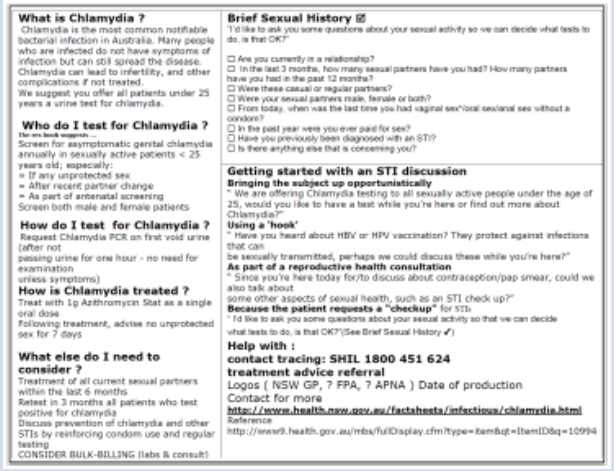
Medicare Benefit: 100%

Reference: adapted from Medicare Australia website

(*Draft 4.doc*)

(Final: *PracticeNurses_Postcard_Web.pdf*)

Back



What is Chlamydia ?
Chlamydia is the most common notifiable bacterial infection in Australia. Many people who are infected do not have symptoms of infection but can still spread the disease. Chlamydia can lead to infertility, and other complications if not treated.
We suggest you offer all patients under 25 years a urine test for chlamydia.

Who do I test for Chlamydia ?
Screen for asymptomatic genital chlamydia annually in sexually active patients < 25 years old; especially:
= If any unprotected sex
= After recent partner change
= As part of antenatal screening
Screen both male and female patients

How do I test for Chlamydia ?
Request Chlamydia PCR on first void urine (after not passing urine for one hour - no need for examination unless symptoms)

How is Chlamydia treated ?
Treat with 1g Azithromycin Stat as a single oral dose
Following treatment, advise no unprotected sex for 7 days

What else do I need to consider ?
Treatment of all current sexual partners within the last 6 months
Retest in 3 months all patients who test positive for chlamydia
Discuss prevention of chlamydia and other STIs by reinforcing condom use and regular testing
CONSIDER BULK-BILLING (labs & consult)

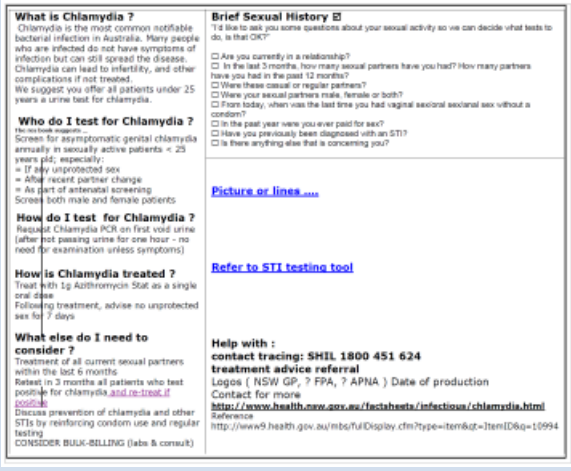
Brief Sexual History ☑
"I'd like to ask you some questions about your sexual activity so we can decide what tests to do. Is that OK?"

☐ Are you currently in a relationship?
☐ In the last 3 months, how many sexual partners have you had? How many partners have you had in the past 12 months?
☐ Were these casual or regular partners?
☐ Were your sexual partners male, female or both?
☐ From today, when was the last time you had vaginal sex/oral sex/anal sex without a condom?
☐ In the past year were you ever paid for sex?
☐ Have you previously been diagnosed with an STI?
☐ Is there anything else that is concerning you?

Getting started with an STI discussion
Bringing the subject up opportunistically
" We are offering Chlamydia testing to all sexually active people under the age of 25, would you like to have a test while you're here or find out more about Chlamydia?"
Using a 'hook'
" Have you heard about HBV or HPV vaccination? They protect against infections that can be sexually transmitted, perhaps we could discuss these while you're here?"
As part of a reproductive health consultation
" Since you're here today for/to discuss about contraception/pap smear, could we also talk about some other aspects of sexual health, such as an STI check up?"
Because the patient requests a "checkup" for STIs
" I'd like to ask you some questions about your sexual activity so that we can decide what tests to do. Is that OK?"(See Brief Sexual History ✓)

Help with :
contact tracing: SHIL 1800 451 624
treatment advice referral
Logos (NSW GP, ? FPA, ? APNA) Date of production
Contact for more
http://www.health.nsw.gov.au/factsheets/infectious/chlamydia.html
Reference
http://www9.health.gov.au/mbs/fullDisplay.cfm?type=item&qt=ItemID&q=10994

(*Draft 1.doc*)



What is Chlamydia ?
Chlamydia is the most common notifiable bacterial infection in Australia. Many people who are infected do not have symptoms of infection but can still spread the disease. Chlamydia can lead to infertility, and other complications if not treated.
We suggest you offer all patients under 25 years a urine test for chlamydia.

Who do I test for Chlamydia ?
Screen for asymptomatic genital chlamydia annually in sexually active patients < 25 years old; especially:
= If any unprotected sex
= After recent partner change
= As part of antenatal screening
Screen both male and female patients

How do I test for Chlamydia ?
Request Chlamydia PCR on first void urine (after not passing urine for one hour - no need for examination unless symptoms)

How is Chlamydia treated ?
Treat with 1g Azithromycin Stat as a single oral dose
Following treatment, advise no unprotected sex for 7 days

What else do I need to consider ?
Treatment of all current sexual partners within the last 6 months
Retest in 3 months all patients who test positive for chlamydia and re-treat if positive
Discuss prevention of chlamydia and other STIs by reinforcing condom use and regular testing
CONSIDER BULK-BILLING (labs & consult)

Brief Sexual History ☑
"I'd like to ask you some questions about your sexual activity so we can decide what tests to do, is that OK?"

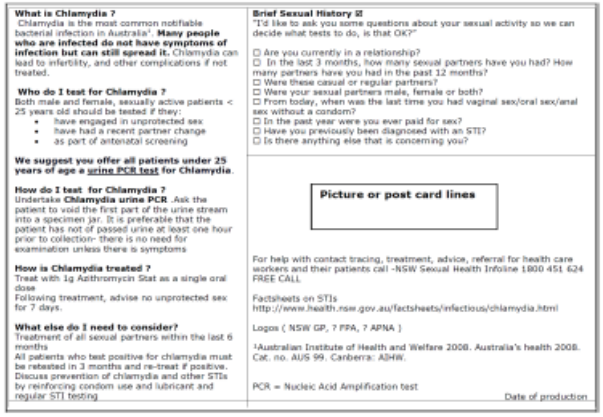
☐ Are you currently in a relationship?
☐ In the last 3 months, how many sexual partners have you had? How many partners have you had in the past 12 months?
☐ Were these casual or regular partners?
☐ Were your sexual partners male, female or both?
☐ From today, when was the last time you had vaginal sex/oral sex/anal sex without a condom?
☐ In the past year were you ever paid for sex?
☐ Have you previously been diagnosed with an STI?
☐ Is there anything else that is concerning you?

Picture or lines ....

Refer to STI testing tool

Help with :
contact tracing: SHIL 1800 451 624
treatment advice referral
Logos (NSW GP, ? FPA, ? APNA) Date of production
Contact for more
http://www.health.nsw.gov.au/factsheets/infectious/chlamydia.html
Reference
http://www9.health.gov.au/mbs/fullDisplay.cfm?type=item&qt=ItemID&q=10994

(*Draft 3.doc*)



What is Chlamydia ?
Chlamydia is the most common notifiable bacterial infection in Australia'. **Many people who are infected do not have symptoms of infection but can still spread it.** Chlamydia can lead to infertility, and other complications if not treated.

Who do I test for Chlamydia ?
Both male and female, sexually active patients < 25 years old should be tested if they:
- have engaged in unprotected sex
- have had a recent partner change
- as part of antenatal screening

We suggest you offer all patients under 25 years of age a urine PCR test for Chlamydia.

How do I test for Chlamydia ?
Undertake **Chlamydia urine PCR** .Ask the patient to void the first part of the urine stream into a specimen jar. It is preferable that the patient has not of passed urine at least one hour prior to collection- there is no need for examination unless there is symptoms

How is Chlamydia treated ?
Treat with 1g Azithromycin Stat as a single oral dose
Following treatment, advise no unprotected sex for 7 days.

What else do I need to consider?
Treatment of all sexual partners within the last 6 months
All patients who test positive for chlamydia must be retested in 3 months and re-treat if positive.
Discuss prevention of chlamydia and other STIs by reinforcing condom use and lubricant and regular STI testing

Brief Sexual History ☑
"I'd like to ask you some questions about your sexual activity so we can decide what tests to do, is that OK?"

☐ Are you currently in a relationship?
☐ In the last 3 months, how many sexual partners have you had? How many partners have you had in the past 12 months?
☐ Were these casual or regular partners?
☐ Were your sexual partners male, female or both?
☐ From today, when was the last time you had vaginal sex/oral sex/anal sex without a condom?
☐ In the past year were you ever paid for sex?
☐ Have you previously been diagnosed with an STI?
☐ Is there anything else that is concerning you?

Picture or post card lines

For help with contact tracing, treatment, advice, referral for health care workers and their patients call -NSW Sexual Health Infoline 1800 451 624 FREE CALL

Factsheets on STIs
http://www.health.nsw.gov.au/factsheets/infectious/chlamydia.html

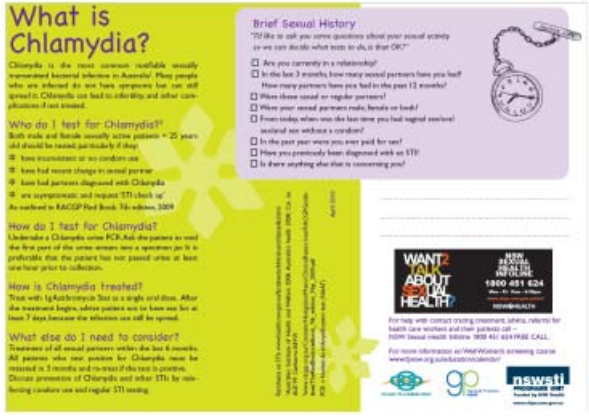
Logos (NSW GP, ? FPA, ? APNA)

[1]Australian Institute of Health and Welfare 2008. Australia's health 2008. Cat. no. AUS 99. Canberra: AIHW.

PCR = Nucleic Acid Amplification test

Date of production

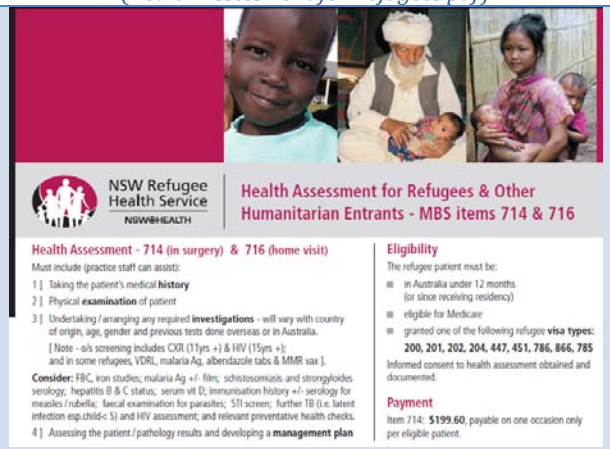
(*Draft 4.doc*)



(Final: *PracticeNurses_Postcard_Web.pdf*)

Table 37: Practice Nurse Postcard: Relevant Resources

Health Assessment for Refugees & Other Humanitarian Entrants
(*Health Assessment for Refugees.pdf*)



NSW Refugee Health Service
NSW HEALTH

Health Assessment for Refugees & Other Humanitarian Entrants - MBS items 714 & 716

Health Assessment - 714 (in surgery) & 716 (home visit)

Must include (practice staff can assist):

1] Taking the patient's medical **history**

2] Physical **examination** of patient

3] Undertaking / arranging any required **investigations** - will vary with country of origin, age, gender and previous tests done overseas or in Australia.

[Note - o/s screening includes CXR (11yrs +) & HIV (15yrs +); and in some refugees, VDRL, malaria Ag, albendazole tabs & MMR vax].

Consider: FBC, iron studies; malaria Ag +/- film; schistosomiasis and strongyloides serology; hepatitis B & C status; serum vit D; immunisation history +/- serology for measles / rubella; faecal examination for parasites; STI screen; further TB (i.e. latent infection esp.child< 5) and HIV assessment; and relevant preventative health checks.

4] Assessing the patient / pathology results and developing a **management plan**

Eligibility

The refugee patient must be:

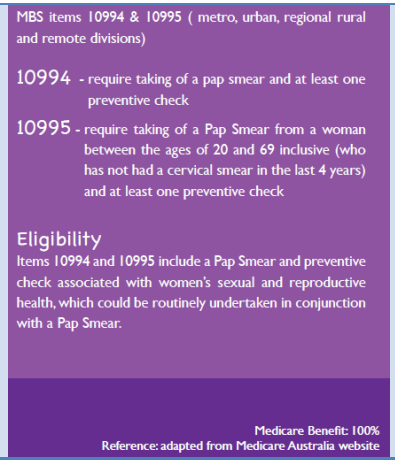
- in Australia under 12 months (or since receiving residency)
- eligible for Medicare
- granted one of the following refugee **visa types: 200, 201, 202, 204, 447, 451, 786, 866, 785**

Informed consent to health assessment obtained and documented.

Payment

Item 714: **$199.60**, payable on one occasion only per eligible patient.

Practice Nurse Postcard



MBS items 10994 & 10995 (metro, urban, regional rural and remote divisions)

10994 - require taking of a pap smear and at least one preventive check

10995 - require taking of a Pap Smear from a woman between the ages of 20 and 69 inclusive (who has not had a cervical smear in the last 4 years) and at least one preventive check

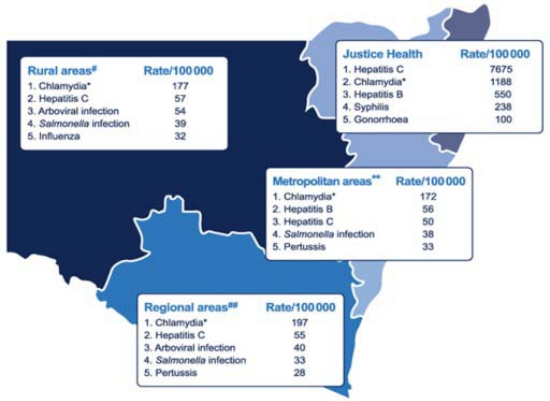
Eligibility

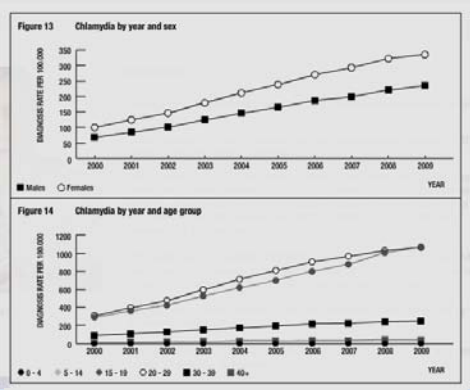
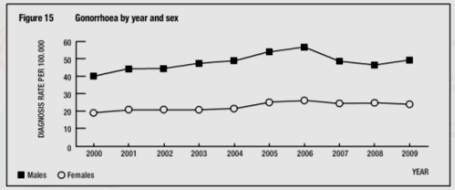
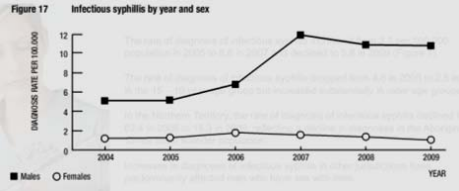
Items 10994 and 10995 include a Pap Smear and preventive check associated with women's sexual and reproductive health, which could be routinely undertaken in conjunction with a Pap Smear.

Medicare Benefit: 100%
Reference: adapted from Medicare Australia website

Table 38: Online STI Practice Nurse Training: Use of Research Evidence

Source	Section	Evidence of Use
Public health Australia (Lawson, 1991)	Risk assessment and taking a sexual history: What is epidemiology?	The term epidemiology literally means the study of whole communities as it provides a view of whole population's health.
Guidelines for preventive activities in general practice (RACGP, 2009)	Risk assessment and taking a sexual history: The red book	The new Guidelines for preventive activities in general practice (The Red Book) 7th Edition 2009 – have been changed to include all sexually active people, MSM*, infected partners and people requesting an asymptomatic check up.
Sexually transmissible infections strategy 2006-2009 (NSW Health, 2006)	Risk assessment and taking a sexual history: Who are the priority populations?	Based on the surveillance data and epidemiology the following populations have been identified by NSW Health ad priority population for STI interventions: • Aboriginal people • Gay and other MSM • Sex workers • People with HIV/AIDS • Young people' and Homosexuals with recent partner change
Sexually transmissible infections strategy 2006-2009 (NSW Health, 2006)	Risk assessment and taking a sexual history: Local area epidemiology	Information is collected in a variety of ways. At the local level information is sent from all clinical services, including General Practice to public health unit. It is then stored and collated by NSW Health and is freely available from the NSW Health website. Other good contacts for local data are your local public health unit and the HIV and Related Programs (HARP) unit.
Notifiable diseases database (NDD) (NSW Health, nd)	Risk assessment and taking a sexual history: Five most commonly reported notifiable infections	This figure shows the five most commonly reported notifiable infections by geographical area of residence at the time of notification in NSW, 2007

Source	Section	Evidence of Use
		
Australasian contact tracing manual (ASHM, 2006a)	Risk assessment and taking a sexual history: Why contact trace	The process of identifying relevant contacts of a person with an infectious disease and ensuring that they are aware of their exposure
Factsheet: Chlamydia (NSW Health, 2007)	STIs (bacterial): Chlamydia trachomatis	• Notifications of Chlamydia have consistently risen since notification began in 1998; • Chlamydia was the most frequently notified communicable disease in NSW in 2009, with 62,613 newly diagnosed cases; • Among males, the population rate of reported diagnoses per 100 000 population more than doubled between 2000 and 2004, from 68.8 to 145.7 and increased further to 234.5 in 2009. (Figure 1) Among females, the rate of chlamydia diagnoses more than doubled from 100.5 in 2000 to 211.4 in 2004, and increased by 40% to 334.6 in 2009; • Increasing rates of diagnosis of chlamydia were reported in all States and Territories. The increases were greatest in the 20 – 29 and 15 – 19 year age groups, which accounted for 80% of the annual number (Figure 2); • Age and sex specific patterns of diagnosis may have been influenced by differential testing rates.

Source	Section	Evidence of Use
HIV, viral hepatitis and sexually transmissible infections in Australia: Annual surveillance report (National Centre in HIV Epidemiology and Clinical Research, 2010, p. 15)	STIs (bacterial): Chlamydia trachomatis	
HIV, viral hepatitis and sexually transmissible infections in Australia: Annual surveillance report (National Centre in HIV Epidemiology and Clinical Research, 2010, p. 16)	STIs (bacterial): Neisseria gonorrhoea	
HIV, viral hepatitis and sexually transmissible infections in Australia: Annual surveillance report (National Centre in HIV Epidemiology and Clinical Research, 2010, p. 16)	STIs (bacterial): Syphilis	
National management guidelines for sexually transmissible infections (SHSOV, 2008)	STIs (viral and other): Simplex virus-HSV	Recurrence • Must start therapy within 24 hours; • Aciclovir (B3) 800 mg TDS for 2 days; • Famciclovir (B1) 500mg stat followed by 250mg doses for 3 doses; • Valaciclovir (B3) 500 mg bd for 3 days; • Suppressive therapy - continuous; • Frequent or severe outbreaks or HIV positive; • Reduces transmission in sero-discordant couples by approx 50%.

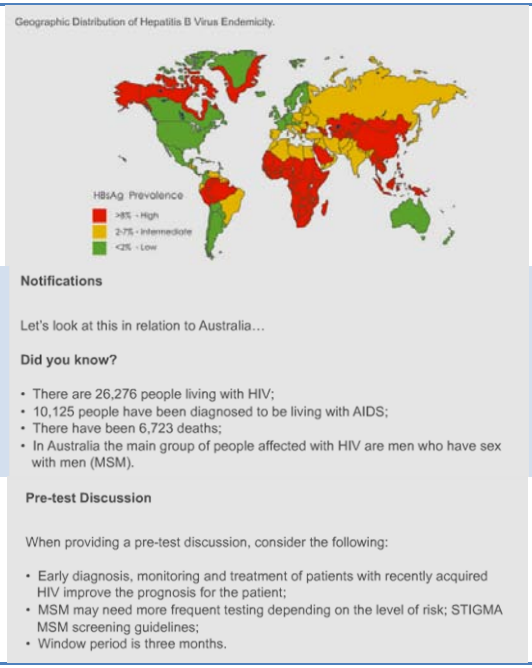
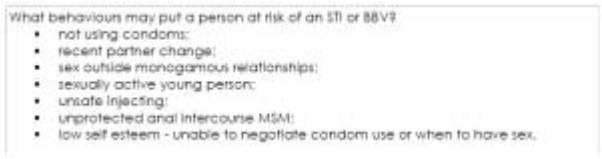
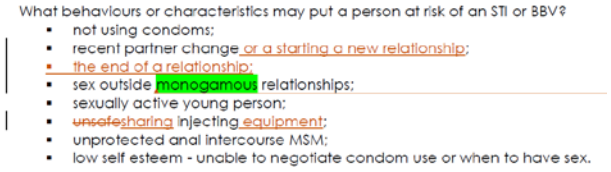
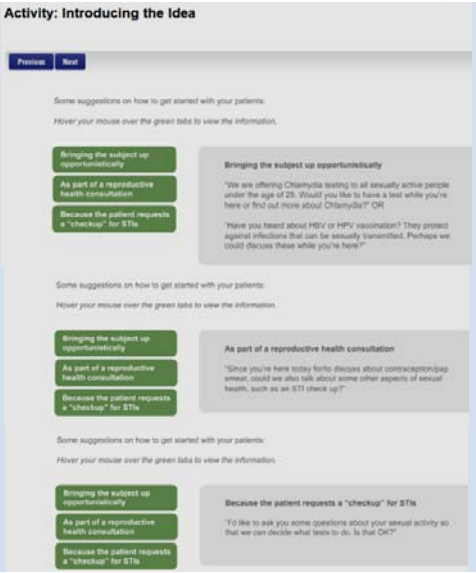
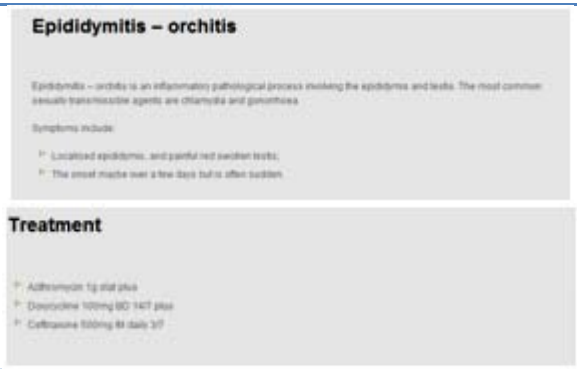
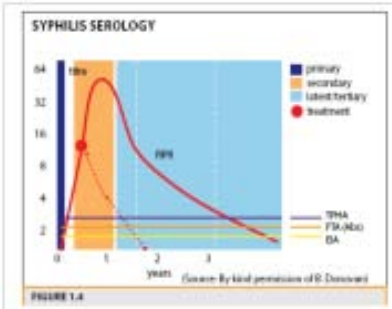
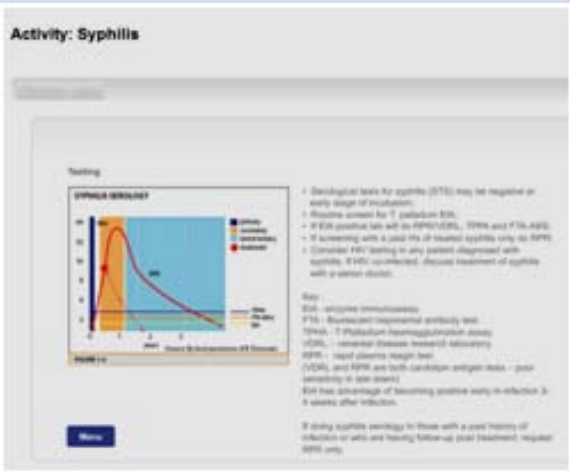
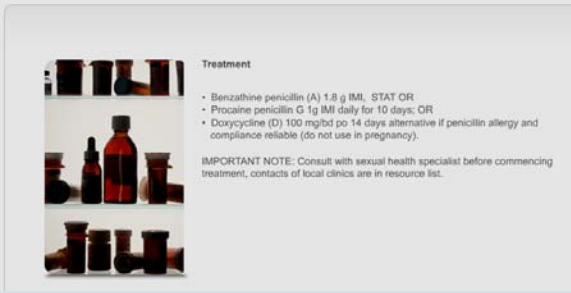
Source	Section	Evidence of Use
Geographic distribution of chronic HBV infection (Fix, Locarnini, & Peters, 2007, p. 22)	BBVs: HBV	
HIV, viral hepatitis and sexually transmissible infections in Australia: Annual surveillance report (National Centre in HIV Epidemiology and Clinical Research, 2007)	BBVs: HIV	
National HIV testing policy (DHA, 2006)	BBVs: HIV	

Table 39: Online STI Practice Nurse Training: Use of Clinical Expertise

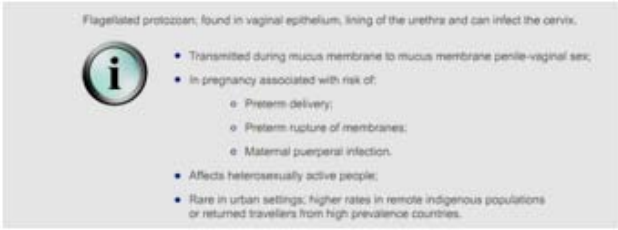
Material Circulated for Comment	Feedback Received	Final
Relevance to clinical practice • Identification of risk factors and appropriate testing for asymptomatic disease; • Plan patient education for prevention of STIs (e.g. Talking to young people about Chlamydia); • Provide a holistic approach to patient care (e.g. including STI prevention in travel vaccination and contraceptive consults). (*Course 5th June 2009.doc*)	**Relevance to clinical practice** Surveillance data and epidemiology informs practice by • Identificat~~ion of~~ risk factors and appropriate testing for asymptomatic infection; • Identifying those most at risk to assist in targeted testing, education and health promotion. ~~Plan patient education for prevention of STIs~~ (e.g. ~~Talking~~Testing all sexually active ~~to young~~ people under 25 about Chlamydia); • Provide a holistic approach to patient care (e.g. When people from the various target groups present to your practice (for example ~~including STI prevention~~ testing and prevention messages in travel vaccination and contraceptive consults). Example: The new Guidelines for preventive activities in general practice (The Red Book) 7th Edition 2009 – have been changed to include all sexually active people, MSM, infected partners and people requesting an asymptomatic check up. This policy reflects the changing epidemiology and supports general practice and practice nurses in their management of STIs within their practice. (*Course 16th September 2009.doc*)	**What is the relevance of epidemiological to clinical practice?** Previous Next Surveillance data and epidemiology informs practice by: • Identifying risk factors and appropriate testing for asymptomatic infections; • Identifying those most at risk to assist in targeted testing, education and health promotion, e.g. testing all sexually active people under 25 about Chlamydia; • Providing a holistic approach to patient care when people from the various target groups present to your practice, e.g. including STI testing and prevention messages in travel vaccination and contraceptive consults. **The Red Book** The new Guidelines for preventive activities in general practice (The Red Book) 7th Edition 2009 – have been changed to include all sexually active people, MSM*, infected partners and people requesting an asymptomatic check up. This policy reflects the changing epidemiology and supports general practice and practice nurses in their management of STIs within their practice. *Men who have sex with men.
Priority populations The following population have been identified by NSW Health as priority population for STI interventions. Your following local area data will show what's happening in your area. *(Reference: NSW Health STI strategy 2006 -2009)* • Aboriginal people; • gay and other homosexually active men; • sex workers; • people with HIV/AIDS; • people who inject drugs; • young people; and • heterosexuals with recent partner change. (*Course 5th June 2009.doc*)	**Who are the p~~P~~riority populations ?** Based on the surveillance data and epidemiology ,The following population have been identified by NSW Health as priority population for STI interventions. ~~Your following local area data will show what's happening in your area.~~ *(Reference: NSW Health STI strategy 2006 -2009)* • Aboriginal people; • gay and other homosexually active men; • sex workers; • people with HIV/AIDS; • people who inject drugs; • young people; and • heterosexuals with recent partner change. (*Course 2nd December 2009 B.docx*)	**Who are the priority populations?** Previous Next (*Course 16th September 2009.doc*)
Let's check! So now we know the relevance of epidemiology to clinical practice and where to locate local data, we now need to be able to transfer this knowledge into our practice. Using this background knowledge, we can better articulate the importance of contact tracing and explain safe sex and prevention. Part of this involves taking a brief sexual history. But how do you approach a patient to do this? Let's look at how to do this next. (*Course 5th June 2009.doc*)	So now we know the relevance of epidemiology to clinical practice and where to locate local data, we now need to be able to transfer this knowledge into our practice. Using this background knowledge, we can better ~~articulate~~ understand and explain the importance of ~~contact tracing and~~ testing and treatment for STIs ~~explain safe sex~~ and -STI prevention. Part of ~~the~~ testing for STIs may involves taking a brief sexual history and contact tracing. ~~But how do you approach a patient to do this?~~ Let's look at how to do this next. (*Course 16th September 2009.doc*)	**Knowledge into Practice** Previous Next So now we know the relevance of epidemiology to clinical practice and where to locate local data. **How do we transfer this knowledge into our practice?** Using this background knowledge, we can better understand and explain the importance of testing and treatment for STIs and STI prevention. Part of testing for STIs may involve taking a brief sexual history and contact tracing. *Let's look at how to do this next…*

Material Circulated for Comment	Feedback Received	Final
 What behaviours may put a person at risk of an STI or BBV? • not using condoms; • recent partner change; • sex outside monogamous relationships; • sexually active young person; • unsafe injecting; • unprotected anal intercourse MSM; • low self esteem - unable to negotiate condom use or when to have sex. (*Course 5th June 2009.doc*)	 What behaviours or characteristics may put a person at risk of an STI or BBV? • not using condoms; • recent partner change or a starting a new relationship; • the end of a relationship; • sex outside monogamous relationships; • sexually active young person; • unsafesharing injecting equipment; • unprotected anal intercourse MSM; • low self esteem - unable to negotiate condom use or when to have sex. (*Course 8th December 2009.doc*)	 **Behaviours and Characteristics** What behaviours or characteristics may put a person at risk of an STI or BBV? • Not using condoms; • Recent partner change or starting a new relationship; • The end of a relationship; • Sex outside monogamous relationships; • Sexually active young person; • Sharing injecting equipment; • Unprotected anal intercourse MSM; • Low self esteem - unable to negotiate condom use or when to have sex.
 Introducing the idea Some suggestions on how to get started with your patients: • "To get a comprehensive view of the health of our patients, we always ask questions about sexual behaviours. Is this OK?" • "This practice/clinic is asking all our patients about safe sex this month. Can I ask you about your sexual behaviour?" (Reference: SESIAHS S.A.F.E tool) (*Course 5th June 2009.doc*)	 **Introducing the idea** Some suggestions on how to get started with your patients: • **Bringing the subject up opportunistically** " We are offering Chlamydia testing to all sexually active people under the age of 25. would you like to have a test while you're here or find out more about Chlamydia?" • **Using a 'hook'** " Have you heard about HBV or HPV vaccination? They protect against infections that can be sexually transmitted, perhaps we could discuss these while you're here?" • **As part of a reproductive health consultation** " Since you're here today for/to discuss about contraception/pap smear, could we also talk about some other aspects of sexual health, such as an STI check up?" • **Because the patient requests a "checkup" for STIs** " I'd like to ask you some questions about your sexual activity so that we can decide what tests to do. Is that OK?"(See Brief Sexual History ✓)~~"To get a comprehensive view of the health of our patients, we always ask questions about sexual behaviours. Is this OK?"~~ ~~• "This practice/clinic is asking all our patients about safe sex this month. Can I ask you about your sexual behaviour?"~~ ~~(Reference: SESIAHS S.A.F.E tool)~~ (*Course 16th September 2009.doc*)	 **Activity: Introducing the Idea** Previous Next Some suggestions on how to get started with your patients: *Hover your mouse over the green tabs to view the information.* Bringing the subject up opportunistically As part of a reproductive health consultation Because the patient requests a "checkup" for STIs **Bringing the subject up opportunistically** "We are offering Chlamydia testing to all sexually active people under the age of 25. Would you like to have a test while you're here or find out more about Chlamydia?" OR "Have you heard about HBV or HPV vaccination? They protect against infections that can be sexually transmitted. Perhaps we could discuss these while you're here?"
 Here are some questions Jane could ask Derek: • How often do you use condoms? • Where would you get condom? • Some people carry condoms with them, what do you think about that? • Where would you carry condoms? (*Course 5th June 2009.doc*)	 Here are some questions Jane could ask Derek: • How often do you use condoms? • Where would you get condom? Chemist , convenience store or petrol station • Some people carry condoms with them, what do you think about that? • Where would you carry condoms? • In your wallet, car or pocket ? • Why carry condoms? (*Course 16th September 2009.doc*)	 Here are some questions Jane could ask Derek: • How often do you use condoms? • Where do you get your condoms? (Chemist , convenience store or petrol station) • Some people carry condoms with them. What do you think about that? • Where would you carry condoms? (In your wallet, car or pocket?) • Why carry condoms?

Material Circulated for Comment	Feedback Received	Final
Not available	Plan for the unexpected and always carry condoms Assume anyone could have an STI, so always use condoms and lube Share the fun of putting on the condom and keeping safe sex Having safe sex means looking after your self Looking after your partner because it's the right thing to do Look after your mates by having condoms to give your friends Look after your future so you can have a fun and health sex life • **Brief intervention:** The most effective means of influencing behaviour change is through highlighting patient's motivations, avoiding argument, amplifying patient's ambivalence and increasing self-efficacy. • **Provide information:** Offer suggestions and recommendations based on what the patient has talked about with you, include written information. (*Course 16th September 2009.doc*)	• Plan for the unexpected and always carry condoms; • Assume anyone could have an STI, so always use condoms and lube; • Share the fun of putting on the condom and keeping safe sex; • Having safe sex means carrying condoms and looking after yourself; • Looking after your partner because it's the right thing to do; • Look after your mates by having condoms to give your friends; • Look after your future so you can have a fun and healthy sex life.
Not available	Note:The term 'partner notification' has sometimes been used synonymously with contact tracing in the context of HIV however the term has not achieved broad acceptance as the term 'partner' excludes needle-sharing contacts, transfusion recipients and children born to infected women. For the purpose of this education we will use contact tracing. (*Course 2nd December 2009 B.docx*)	**Note:** The term 'partner notification' has sometimes been used synonymously with contact tracing in the context of HIV; however, the term has not achieved broad acceptance as the term 'partner' excludes needle-sharing contacts, transfusion recipients and children born to infected women. For the purpose of this education we will use the term contact tracing.
STIs Sexually Transmitted Infection (STI) is another name for STD. The name STI is sometimes preferred because there are a few STDs, such as Chlamydia, that can infect a person without causing any actual disease (that is, unpleasant symptoms). Someone without symptoms may not think of themselves as having a disease, but they may still have an infection that needs treating. (*Course 5th June 2009.doc*)	**WWhat are sexually ~~transmitted~~transmissible ~~disease~~infections (~~STDs~~)?** Sexually ~~transmitted~~transmissible ~~disease~~infections (~~STDS~~STIs) are ~~disease~~infections that are passed from one person to another ~~(that is transmitted)~~ during ~~sex~~sex. ~~There are at least 25 different sexually transmitted~~ These infections are be spread through sexual contact including vaginal, anal and oral sex. ~~diseases with a range of different symptoms. These diseases may be spread through vaginal, anal and oral sex.~~ ~~Most sexually transmitted disease will only affect you if you have sexual contact with someone who has an STD. However, there are some infections, for example scabies, which are referred to as STDs because they are most commonly transmitted sexually, but which can also be passed on in other ways.~~ (*Course 8th December 2009.doc*)	**What are sexually transmissible infections?** Sexually transmissible infections (STIs) are infections that are passed from one person to another during sex. These infections are spread through sexual contact including vaginal, anal and oral sex.

Material Circulated for Comment	Feedback Received	Final
Not available	**Epididymitis – orchitis** Epididymitis – orchitis is an inflammatory pathological process involving the epididymis and testis. The most common sexually transmissible agents are chlamydia and gonorrhoea. Symptoms include • Localised epididymis, and painful red swollen testis • The onset maybe over a few days but is often sudden **Treatment** Azithromycin 1g stat plus Doxycycline 100mg BD 14/7 plus Ceftriaxone 500mg IM daily 3/7 (*Course.doc*)	
Not available	 • Serological tests for syphilis (STS) may be negative at early stage of incubation; • Routine screen for T. pallidum EIA; • If EIA positive lab will do RPR/VDRL, TPPA and FTA-ABS; • If screening with a past Hx of treated syphilis only do RPR; • Consider HIV testing in any patient diagnosed with syphilis. If HIV co-infected, discuss treatment of syphilis with a senior doctor. Key : EIA - enzyme immunoassay. FTA - flourescent treponemal antibody test. TPHA - T Palladium haemagglutination assay. VDRL – venereal disease research laboratory. RPR - rapid plasma reagin test. (VDRL and RPR are both cardiolipin antigen tests – poor sensitivity in late latent) EIA has advantage of becoming positive early in infection 2-4 weeks after infection. If doing syphilis serology in those with a past history of infection or who are having follow-up post treatment request RPR only. **Treatment** • Benzathine penicillin (A) 1.8 g IML STAT OR • Procaine penicillin G 1g IMI daily for 10 days; OR • Doxycycline (D) 100 mg/bd po 14 days alternative if penicillin allergy and compliance reliable (do not use in pregnancy). IMPORTANT NOTE: Consult with sexual health specialist before commencing treatment, contacts of local clinics are in resource list.	 

Material Circulated for Comment	Feedback Received	Final
	(*Course.doc*)	

Not available	Trichomonas Vaginalis
	• Flagellated protozoan, found in vaginal epithelium, lining of the urethra and can infect the cervix
	• Transmitted during mucus membrane to mucus membrane penile-vaginal sex
	• In pregnancy associated with risk of:
	  • preterm delivery;
	  • preterm rupture of membranes and
	  • maternal puerperal infection.
	• Affects heterosexually active people
	• Rare in urban settings; Higher rates in remote indigenous populations or returned travellers from High prevalence countries
	Trichomonas Vaginalis' Symptoms
	• Often asymptomatic in both sexes
	• Can cause symptomatic infection in women; this is rare in men
	• When cervix infected see 'strawberry cervix' on exam
	• Symptoms rare in men
	• Difficult to test for trichomonas in men therefore treat partners presumptively
	
	(From images supplied by C. Mania-Pramanik (Picture Bitch.)
	(*Course 12th August 2009.doc*)
		

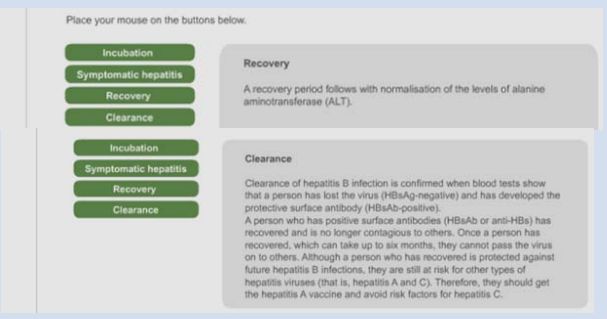
3. **Recovery:** Recovery from an acute hepatitis B infection is confirmed when blood tests show that a person has lost the virus (HBsAg-negative) and has developed the protective surface antibody (HBsAb-positive). A person who has positive surface antibodies (HBsAb or anti-HBs) has recovered and is no longer contagious to others. Once a person has recovered, which can take up to six months, they cannot pass the virus on to others. Although a person who has recovered is protected against future hepatitis B infections, they are still at risk for other types of hepatitis viruses (that is, hepatitis A and C). Therefore, they should get the hepatitis A vaccine and avoid risk factors for hepatitis C. 4. **Clearance:** Hepatitis B surface antigen clearance and development of Hepatitis B surface antibodies. (*Course 5th June 2009.doc*)	3. **Recovery:** A recovery period follows with normalisation of the levels of alanine aminotransferase (ALT) ~~**Recovery from an acute hepatitis B infection is confirmed when blood tests show that a person has lost the virus (HBsAg-negative) and has developed the protective surface antibody (HBsAb-positive). A person who has positive surface antibodies (HBsAb or anti-HBs) has recovered and is no longer contagious to others. Once a person has recovered, which can take up to six months, they cannot pass the virus on to others. Although a person who has recovered is protected against future hepatitis B infections, they are still at risk for other types of hepatitis viruses (that is, hepatitis A and C). Therefore, they should get the hepatitis A vaccine and avoid risk factors for hepatitis C.~~ 4. **Clearance:** **Clearance of hepatitis** B infection is confirmed when blood tests show that a person has lost the virus (HBsAg-negative) and has developed the protective surface antibody (HBsAb-positive). A person who has positive surface antibodies (HBsAb or anti-HBs) has recovered and is no longer contagious to others. Once a person has recovered, which can take up to six months, they cannot pass the virus on to others. Although a person who has recovered is protected against future hepatitis B infections, they are still at risk for other types of hepatitis viruses (that is, hepatitis A and C). Therefore, they should get the hepatitis A vaccine and avoid risk factors for hepatitis C. ~~Hepatitis B surface antigen clearance and development of Hepatitis B surface antibodies.~~ (*Course 12th August 2009.doc*)	
How is HIV transmitted? • HIV is present in body fluids of infected people, such as blood, semen, vaginal fluids and breastmilk; • Passed on by sexual contact or any activity that allows a bodily fluid to enter the blood stream; • Synergy with other STIs. (Synergy refers to an increased level of infectiousness due to increase in viral shedding; increase susceptibility to HIV from the break in mucosal barriers and an increase in the number of target cells at the site.) (*Course 5th June 2009.doc*)	**How is HIV transmitted?** • HIV is present in body fluids of infected people, such as blood, semen, vaginal fluids and breastmilk; • Passed on by sexual contact or any activity that allows a bodily fluid to enter the blood stream; •More likely to be transmitted when other STIs are present ~~Synergy with other STIs. (Synergy refers to an increased level of infectiousness due to increase in viral shedding; increase susceptibility to HIV from the break in mucosal barriers and an increase in the number of target cells at the site.)~~ (*Course 12th August 2009.doc*)	

Table 40: Online STI Practice Nurse Training: Modifications not informed by Documented Feedback

Draft (*Course.doc*)	Final
Chlamydia	

Testing, Screening and Management of an STI: Chlamydia

- Chlamydia Trachomatis is the most commonly notifiable STI in Australia.
- Chlamydia usually has no symptoms and overwhelmingly affects people aged under 29 years. People aged under 25 years are most at risk.
- Chlamydia is easy to test for as part of a routine health check, and treatment is simple.
-

- Testing is the key:
- Normalise a Chlamydia test as part of routine testing especially:
  - If client is under the age of 25;
  - If client or partner has symptoms;
  - If client has had a partner change in last 12 months;
  - If client has had a previous Chlamydia infection;
  - If client requests a test;
  - If client has had unprotected sex or opportunistic test within the last seven days;
- NAAT (PCR) on Cervical swab, or first catch urine* or self collected swabs (vaginal/anal);
- Assume Chlamydia in epididymitis, PID & NGU.
- A urine test for Chlamydia can be done any time of day.

*A first catch urine is the first 10-30 mls of the urine stream, at any time of the day.

Treatment and Management

Azithromycin 1g stat
(Cat. B1- safe in pregnancy and breast feeding); OR
Doxycycline 100mg BD 7/7
(If macrolide intolerance)

Contact Tracing

- Sexual partners from the past 3 months should be tested/treated to reduce pool of infection and re-infection;
- The **index case*** can inform their partners themselves or the practitioner can inform partners to maintain confidentiality of index case;
- Follow up 1 week later with the patient for results, symptoms review and to ensure adherence to treatment and contact tracing;
- A test of cure is only recommended for pregnant women only at 4-6 weeks after treatment;
- It is recommend to retest anyone with a positive chlamydia result after 3 months to exclude or treat a re-infection.

*index case = person diagnosed with infection

Testing, Screening and Management of an STI: Chlamydia

- Chlamydia Trachomatis is the most commonly notifiable STI in Australia
- Chlamydia usually has no symptoms and overwhelmingly affects people aged under 29 years. People aged under 25 years are most at risk
- Chlamydia is easy to test for as part of a routine health check, and treatment is simple.

Treatment and Management

Azithromycin 1g stat
(Cat. B1- safe in pregnancy and breast feeding); OR *Doxycycline 100mg BD 7/7*
(If macrolide intolerance)

Patient Education

- No sex for 7 days after treatment; (includes oral, anal and vaginal sex)
- Partners from past 6 months to also have treatment;
- Retest in 3 months;
- Condoms to prevent STI.

Contact Tracing

- Sexual partners from the past 6 months should be tested/treated to reduce pool of infection and re-infection;

- The **index case*** can inform their partners themselves or the practitioner can inform partners to maintain confidentiality of index case.

*index case = person diagnosed with infection.

Draft (*Course.doc*)	Final
Gonorrhoea	
Notifications http://www.health.nsw.gov.au/publichealth/chorep/com/com_chlamnot_ahs.asp Case reports of gonorrhoea began to increase in the second half of the 1990s and appear to have stabilised at a relatively high level. The total number of notifications decreased slightly in 2007 compared with 2006. Of the 1,368 cases notified in NSW in 2007, 84.9% were male. As in previous years, for the period 2005 to 2007 notification rates were highest in the South Eastern Sydney & Illawarra (age-adjusted rate 32.1 per 100,000 population) and Sydney South West (age-adjusted rate 33.9 per 100,000) health areas.	 **Notifications** Case reports of gonorrhoea began to increase in the second half of the 1990's and appear to have stabilised to a relatively high level. The population rate of diagnosis of gonorrhoea increased by about 22% among males and by 13% among females from 2000 to 2004 whereas from 2005 to 2009, the rate declined by 10% in males and by 5% among females (Figure 1). The decline in the rate of diagnosis occurred first in the 15 – 19 year age group in 2006 and was followed in 2007 by a decline in the 20 – 29 and 30 – 39 year age groups.
PID	
PID symptoms include: • Recent risk factors for contracting an STI; • Patient under 35; • Past history STI; • Gradual onset of pain; • Ill defined pain; • Few or no systemic symptoms; • Abnormal vaginal discharge; • Irregular menstrual bleeding; • No associated gastrointestinal tract symptoms; • No urinary tract symptoms or very mild; • Tender lower abdominal on palpation with adnexal or cervical motion tenderness on bimanual examination.	PID symptoms include: • Gradual onset of pain; • Ill defined pain; • Few or no systemic symptoms; • Abnormal vaginal discharge; • Irregular menstrual bleeding; • No associated gastrointestinal tract symptoms; • No urinary tract symptoms or very mild; • Lower abdominal tenderness on palpation with adnexal or cervical motion tenderness on bimanual examination.
Syphilis	
Notifications http://www.health.nsw.gov.au/publichealth/chorep/com/com_chlamnot_ahs.asp Rates of syphilis notifications increased dramatically at the end of 2006 and in 2007, predominantly in men. The age-adjusted rate for infectious syphilis increased from 3.3 per 100,000 in men to 12.1 per 100,000 in men in 2007. This reflected in particular an outbreak largely affecting gay and other homosexually active men residing in metropolitan Sydney. For the period 2005 to 2007, notification rates for infectious syphilis were highest in the South Eastern Sydney and Illawarra health area and highest in major cities compared to inner regional and outer regional and remote areas.	 **Notifications** The rate of diagnosis of infectious syphilis increased from 3.2 per 100 000 population in 2005 to 6.6 in 2007 and declined to 5.8 in 2009 (Figure 1). The rate of diagnosis of infectious syphilis dropped from 4.6 in 2005 to 2.5 in 2009 in the 15 – 19 year age group but increased substantially in older age groups. In the Northern Territory, the rate of diagnosis of infectious syphilis declined from 62.4 in 2006 to 15.3 in 2009, reflecting a decline in diagnoses in the Aboriginal and Torres Strait Islander population. Increases in diagnoses of infectious syphilis in other jurisdictions have predominantly affected men who have sex with men.

Table 41: Online STI Practice Nurse Training: Clinical Expertise not Used

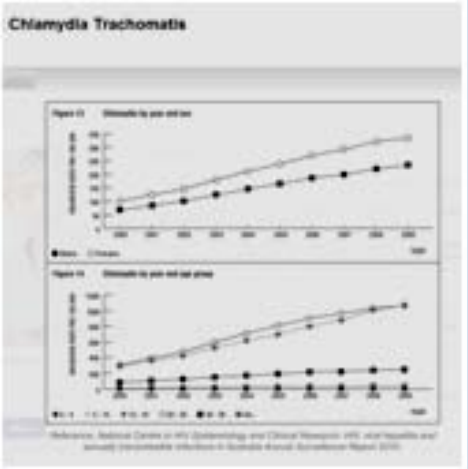
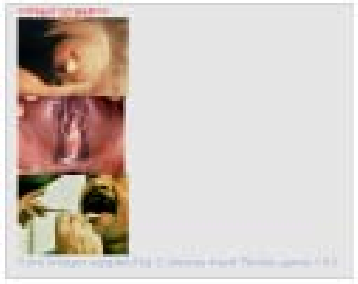
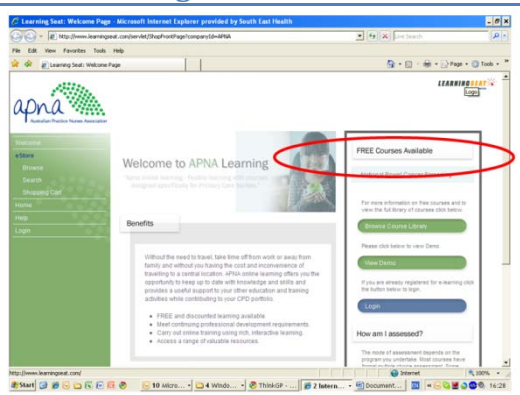
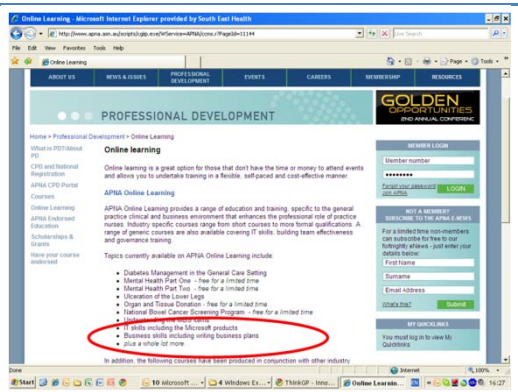
Drafted Material (*Course 12th August 2009.doc*)	Final
Gonorrhoea notifications Gonorrhoea Notifications Include notifications graph image from link below http://www.health.nsw.gov.au/publichealth/chorep/com/com_chlamnot_ans.asp 	
Chlamydia symptoms Women / Men Most often asymptomatic / Often asymptomatic May have / May have vaginal discharge / Tingling at end of penis Dysuria / Dysuria Pelvic pain & dyspareunia / Clear milky white discharge Post-coital & inter-menstrual bleeding / Epididymitis can occur but relatively rare compared to PID 	

Table 42: Online STI Practice Nurse Training: Promotion





(*Advert Ideas.docx*)

'Promotional material for the PN training has been written'
(*Minutes 16th April 2010.doc*)

(*Advert Online.pdf*)

Appendix 6: NSW STIPU General Practice Sexual Health Services Project

Terms of Reference and Membership
August 2007

1. BACKGROUND

The NSW STI Strategy 2006-2009 states that GPs are usually the first, and in many cases the only, direct point of contact for most people in regard to sexual health services, diagnosing 55% of STIs and blood borne viruses compared with 8% diagnosed in publicly funded sexual health services.

A key reason for many people seeking sexual health advice from GPs is a symptom or sign of infection, however, the asymptomatic nature of most STIs mean that many cases go undetected. GPs, in addition to diagnosing and treating symptomatic cases, play a key role in sexual health promotion during regular consultations to identify asymptomatic cases and promote individual risk reduction strategies.

A number of policies and programmes have been implemented by NSW Health to enhance GP involvement in sexual health. A range of Area Health Services and non-government organisations are involved in GP training and support to further the involvement general practice in sexual services.

Identified needs
NSW Health has identified an opportunity to enhance existing GP involvement in STI service delivery by helping to coordinate efforts in: identifying GP STI service support needs, assisting Area Health Services to promote and/or provide that support to GPs as required and, where appropriate, to directly provide support to GPs to further the objectives of the NSW STI Strategy 2006-2009.

Based on epidemiological information, behavioural risk factors, access and equity considerations and the National and State policy framework, the project identifies Aboriginal people, gay and other homosexually active men, young people, sex workers, people living with HIV/AIDS, people who inject drugs and, heterosexuals with recent partner change as priority populations.

2. ROLE

This Working Group has been established to inform and support the development and implementation of project activities working with General Practice. The Working Group will meet quarterly to discuss and advise on issues that will enhance project outcomes.

The specific objectives of the General Practice Sexual Health Services Project are to:

1. Support sexual health service provision by general practitioners by ensuring access to education and training projects.

2. Support sexual health service provision by general practitioners by ensuring access to information and education resources.

3. Improve communication of Area Health Service referral pathways and options available to general practitioners.

Project monitoring and evaluation will be included to ensure outcomes are measured, documented and that lessons learned are shared.

3. OPERATION

The Working Group will:

- make recommendations on matters regarding project activities to further the aims and objectives of the project
- make recommendations to improve the quality of the project
- meet in Sydney Hospital, or another agreed location
- be chaired by CEO Alliance NSW Division
- conduct its activities in accordance with the rules and regulations of the NSW Health System

The NSW STI Programs Unit will:

- provide secretariat support by preparing agendas, minutes, the distribution of minutes and reference papers and support follow-up on matters raised on behalf of the Chair
- report regularly on project plans and implementation
- provide any relevant information necessary for the Working Group to perform their duty including relevant information from other forums and working groups

4. MEMBERSHIP

There is no expectation that the Working Group will be representative in nature, however; the Working Group membership shall include individuals from a range of professional backgrounds and regional Areas who are able to provide expert advice on General Practice Sexual Health delivery.

Membership will be for the term of the NSW STI Strategy 2006-2009.

The Working Group will co-opt new members as necessary during their term.

5. LINES OF COMMUNICATION

The General Practice Sexual Health Services Working Group reports to STIPU Advisory Group through the Chair.

Important related forums for ensuring regular information exchange include: STIPU GP Working Group, STIPU HIV/STI Social Marketing Working Group, HARP Managers meetings, Directors of Sexual Health Services meetings, AIDS Branch, NSW MACHSTI, NSW MACHSTI Health Promotion sub-committee, ASHAC.

6. FREQUENCY OF MEETINGS

The Working Group will meet at least four times per year. Meeting dates will be set annually in advance.

7. REVISION AND AMENDMENTS

The Working Group will review these Terms of Reference annually.

Terms of Reference Ratified

Signature of Chairperson: _____

Print Name: _____

Date ratified: _____

Chapter 8. References

ACRRM (Australian College of Rural and Remote Medicine). (2012, 10th Feb.). About ACRRM Retrieved 13th Feb., 2012, from https://www.acrrm.org.au/about-acrrm

ACSHM (Australasian Chapter of Sexual Health Medicine). (2004). Clinical guidelines for the management of sexually transmissible infections among priority populations. Sydney, NSW: RACP (Royal Australian College of Physicians).

AFAO (Australian Federation of AIDS Organisations). (2010a). Drama downunder Retrieved 31st Jan., 2012, from http://www.thedramadownunder.info/introduction/

AFAO (Australian Federation of AIDS Organisations). (2010b). Why test Retrieved 31st Jan., 2012, from http://www.whytest.org/postcards/index.phd

AH&MRC (Aboriginal Health & Medical Research Council). (2006). Sexually transmissible infections (STIs) and blood borne infections (BBIs) manual (Seventh ed.). Surry Hills, NSW: AH&MRC (Aboriginal Health & Medical Research Council).

AIHW (Australian Institute of Health and Welfare). (2011). Nursing and midwifery labour force 2009 *AIHW bulletin number 90*. Canberra, ACT: AIHW (Australian Institute of Health and Welfare).

Antibiotic 14 Expert Group. (2008). Therapeutic guidelines - Antibiotic. West Melbourne, VIC: Therapeutic Guidelines Ltd.

APNA (Australian Practice Nurses Association). (nd, 9th Mar.). Welcome to APNA online learning *APNA online learning* Retrieved 13th Mar., 2012, from http://apna.e3learning.com.au/

ASHM. (2006). Australasian contact tracing manual. In B. Donovan, D. Bradford, S. Cameron, D. Conway, E. Coughlan, L. Doyle & R. Franklin (Eds.), (Third ed.). Darlinghurst, NSW: ASHM (Australasian Society for HIV Medicine).

ASHM (Australasian Society for HIV Medicine). (2006a). Australasian contact tracing manual. In B. Donovan, D. Bradford, S. Cameron, D. Conway, E. Coughlan, L. Doyle & R. Franklin (Eds.), (Third ed.). Darlinghurst, NSW: ASHM (Australasian Society for HIV Medicine).

ASHM (Australasian Society for HIV Medicine). (2006b). HIV management in Australasia: A guide for clinical care. Darlinghurst, NSW: ASHM (Australasian Society for HIV Medicine).

ASHM (Australasian Society for HIV Medicine). (2010). Australasian contact tracing manual. Darlinghurst, NSW: ASHM (Australasian Society for HIV Medicine).

Baker, R., Camosso-Stefinovic, R., Gillies, C., Shaw, E. J., Cheater, F., Flottorp, S., & Robertson, N. (2010). Tailored interventions to overcome identified barriers to change: Effects on professional practice and health care outcomes: Cochrane Database of Systematic Reviews.

Berg, B. L. (2001). *Qualitative research methods for the social sciences* (Fourth ed.). Needham Heights, MA: Allyn and Bacon.

Bhattacharyya, O., Reeves, S., Garfinkel, S., & Zwarenstein, M. (2006). Designing theoretically-informed implementation interventions: Fine in theory, but evidence of effectiveness in practice is needed. *Implementation Science, 1*(1). doi: 10.1186/1748-5908-1-5

Bowden, F. J., Currie, M. J., Toyne, H., McGuiness, C., Lim, L. L., Butler, J. R., & Glasgow, N. J. (2008). Screening for chlamydia trachomatis at the time of routine pap smear in general practice: A cluster randomised controlled trial. *Medical Journal of Australia, 188*(2), 76-80.

Bradford, D., Dore, G., Grulich, A., Hoy, J., Kidd, M., McCoy, R., . . . Strasser, S. (Eds.). (2008). *HIV, viral hepatitis and STIs: A guide for primary care*. Darlinghurst, NSW: ASHM (Australasian Society for HIV Medicine).

Britt, H., Miller, G. C., Charles, J., Henderson, J., Bayram, C., Pan, Y., . . . Fahridin, S. (2010). General practice activity in Australia 2009-10 *General practice series*. Canberra, ACT: AIHW (Australian Institute of Health and Welfare).

Britt, H., Miller, G. C., Charles, J., Henderson, J., Bayram, C., Valenti, L., . . . Chambers, T. (2010). General practice activity in Australia 2000-01 to 2009-10: 10 year data tables *General practice series*. Canberra, ACT: AIHW (Australian Institute of Health and Welfare).

Burd, I., Nevadunsky, N., & Bachmann, G. (2006). Impact of physician gender on sexual history taking in a multispecialty practice. *Journal of Sexual Medicine, 3*(2), 194-200.

Canali De Rossi, L. (2009, 8th Jul.). The brand ambassador marketing model guide Retrieved 5th Jan., 2012, from http://www.masternewmedia.org/the-brand-ambassador-marketing-model-guide/

Cantillon, P., & Jones, R. (1999). Does continuing medical education in general practice make a difference? *British Medical Journal, 318*, 1276-1279.

Carne, A., Moretti, C., Smith, B., & Bywood, P. (2011). Summary data report of the 2009-2010 annual survey of Divisions of General Practice. Adelaide, SA: Primary Health Care Research & Information Service, Department of General Practice, Flinders University, and Australian Government Department of Health and Ageing.

CDCP (Centers for Disease Control and Prevention). (2010). Trends in sexually transmitted diseases in the United States: 2009 national data for gonorrhea, chlamydia and syphilis. Atlanta, GA: CDCP (Centers for Disease Control and Prevention).

CDCP (Centers for Disease Control and Prevention). (nd). A guide to taking a sexual history. Atlanta, GA: US DHHS (Department of Health and Human Services).

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. London: Sage Publications.

Chernesky, M., Jang, D., Chong, S., Sellors, J., & Mahony, J. (2003). Impact of urine collection order on the ability of assays to identify Chlamydia trachomatis infections in men. *Sexually Transmitted Diseases, 30*(4), 345-347.

Chueh, H., & Barnett, G. O. (1997). "Just-in-time" clinical information. *Academic Medicine, 72*(6), 512-517.

Cooksy, L. J., Gill, P., & Kelly, P. A. (2001). The program logic model as an integrative framework for a multimethod evaluation. *Evaluation and Program Planning, 24*(2), 119-128.

Coyne, I. T. (1997). Sampling in qualitative research: Purposeful and theoretical sampling; merging or clear boundaries? *Journal of Advanced Nursing, 26*(3), 623-630.

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications.

Cunningham, A. L., Taylor, R., Taylor, J., Marks, C., Shaw, J., & Mindel, A. (2006). Prevalence of infection with herpes simplex virus types 1 and 2 in Australia: A nationwide population based survey. *Sexually Transmitted Infections, 82*(2), 164-168.

Dadich, A. (2010a). From bench to bedside: Methods that help clinicians use evidence-based practice. *Australian Psychologist, 45*(3), 197-211.

Dadich, A. (2010b). Transferring knowledge to the providers and users of health and mental healthcare services. *International Journal of Learning and Change, 4*(2), 119-146.

Davenport, T. H., & Glaser, J. (2002). Just-in-time delivery comes to knowledge management. *Harvard Business Review, 80*(7), 107-111.

Davis, D., Evans, M., Jadad, A., Perrier, L., Rath, D., Ryan, D., . . . Zwarenstein, M. (2003). The case for knowledge translation: Shortening the journey from evidence to effect. *British Medical Journal, 327*, 33-35.

Davis, D. A., & Taylor-Vaisey, A. L. (1997). Translating guidelines into practice: A systematic review of theoretic concepts, practical experience and research evidence in the adoption of clinical practice guidelines. *Canadian Medical Association Journal, 157*(4), 408-416.

Dayan, L., & Sheary, B. (2005). Herpes simplex virus serology in an asymptomatic patient. *Australian Family Physician, 34*(12), 1043-1046.

DHA (Department of Health and Ageing). (2006). National HIV testing policy. Canberra, ACT: DHA (Department of Health and Ageing).

DHA (Department of Health and Ageing). (2008). Australian immunisation handbook (Nineth ed.). Canberra, ACT: DHA (Department of Health and Ageing).

DHA (Department of Health and Ageing). (2009, 29th May). Young people and STIs Retrieved 10th Jan., 2010, from http://www.sti.health.gov.au/internet/sti/publishing.nsf/Content/young

DHA (Department of Health and Ageing). (2010a). Second national sexually transmissible infections strategy 2010-2013. Canberra, ACT: DHA (Department of Health and Ageing).

DHA (Department of Health and Ageing). (2010b). Third national Aboriginal and Torres Strait Islander blood borne viruses and sexually transmissible infections strategy 2010-2013. Canberra, ACT: DHA (Department of Health and Ageing).

DiClemente, R. J., Milhausen, R., McDermott Sales, J., Salazar, L. F., & Crosby, R. A. (2005). A programmatic and methodologic review and synthesis of clinic-based risk-reduction interventions for sexually transmitted infections: Research and practice implications. *Seminars in Pediatric Infectious Diseases, 16*(3), 199-218. doi: 10.1053/j.spid.2005.04.009

Donovan, B. (2007). STI transmission dynamics. Sydney, NSW: University of New South Wales.

Evans, W. D. (2006). How social marketing works in health care. *British Medical Journal, 332*(7551), 1207-1210.

Fitzhugh, V. A., & Heller, D. S. (2008). Significance of a diagnosis of microorganisms on pap smear. *Journal of Lower Genital Tract Disease, 12*(1), 40-51.

Fix, O. K., Locarnini, L. A., & Peters, M. G. (2007). Virology and clinical management of hepatitis B and HIV coinfection. *PRN Notebook, 11*(4), 20-27.

Flodgren, G., Parmelli, E., Doumit, G., Gattellari, M., O'Brien, M.A.,, Grimshaw, J., & Eccles, M. P. (2010). Local opinion leaders: Effects on professional practice and health care outcomes: Cochrane Database of Systematic Reviews.

Formoso, G., Marata, A. M., & Magrini, N. (2007). Social marketing: Should it be used to promote evidence-based health information? *Social Science & Medicine, 64*(4), 949-953.

Fyfe, A. (2010, 22nd Apr.). About ThinkGP Retrieved 13th Mar., 2012, from http://thinkgp.com.au/about

Fyfe, A. (2011, 7th Feb.). The key features in managing STIs - STI testing tool. *Pregnancy, childbirth, family planning* Retrieved 13th Mar., 2012, from http://thinkgp.com.au/education/pregnancy-childbirth-family-planning

Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: Systematic review and recommendations. *Milbank Quarterly, 82*(4), 581-629.

Groesbeck, R., & Van Aken, E. M. (2001). Enabling team wellness: Monitoring and maintaining teams after start-up. *Team Performance Management, 7*(1/2), 11-20.

Grol, R. (2001). Successes and failures in the implementation of evidence-based guidelines for clinical practice. *Medical Care, 39*(8 Suppl. 2), II46–II54.

Grol, R. (2002). Changing physicians' competence and performance: Finding the balance between the individual and the organization. *Journal of Continuing Education in the Health Professions, 22*(4), 244-251.

Grol, R., & Grimshaw, J. (1999). Evidence-based implementation of evidence-based medicine. *Joint Commission Journal on Quality Improvement, 25*(10), 503-513.

Grol, R., & Grimshaw, J. (2003). From best evidence to best practice: Effective implementation of change in patients' care. *Lancet, 362*(9391), 1225-1230.

Hanley, M. (2010). Using the program logic model to evaluate e-learning Retrieved 24th Sep., 2010, from http://michaelhanley.ie/elearningcurve/using-the-program-logic-model-to-evaluate-e-learning/2010/07/06/

Hansen, M. T., & Nohria, N. (2004). How to build collaborative advantage. *MIT Sloan Management Review, 46*(1), 22-30.

Harrison, S., Dowswell, G., Wright, J., & Russell, I. (2010). General practitioners' uptake of clinical practice guidelines: A qualitative study. *Journal of Health Service Research and Policy, 8*(3), 149-153.

Home Drivetime Radio. (2012, 9th Mar.). Drivetime radio medical Retrieved 13th Mar., 2012, from http://www.drivetimeradio.com.au/med.php

HPA (Health Protection Agency). (2010). Infection reports: Rise in new diagnoses of sexually transmitted infections (UK, 2009). *Health Protection Report, 4*(34).

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher, 33*(7), 14-26.

Johnston, K. L., & White, K. M. (2010). Using the theory of planned behaviour as a process evaluation tool in randomised trials of knowledge translation strategies: A case study from UK primary care. *Implementation Science, 5*, 71.

Kostopoulou, O. (2010). Diagnosis of difficult cases in primary care. *Journal of Health Service Research and Policy, 15*(Supp.1), 71-74.

Kreuter, M. W., & Wray, R. J. (2003). Tailored and targeted health communication: Strategies for enhancing information relevance. *American Journal of Health Behavior, 27*(3), S227-S232.

Lawson, J. S. (1991). *Public health Australia: An introduction*. Sydney, NSW: McGraw-Hill.

Marshall, M. N. (1996). Sampling for qualitative research. *Family Practice, 13*(6), 522-525.

Matthews, G., & Robotin, M. (Eds.). (2008). *B positive - All you wanted to know about hepatitis B: A guide for primary care providers* (Nineth ed.). Darlinghurst, NSW: ASHM (Australasian Society for HIV Medicine).

McCawley, P. F. (1997). The logic model for program planning and evaluation *University of Idaho Extension*. Idaho: University of Idaho.

McGowan, J., Hogg, W., Campbell, C., & Rowan, M. (2008). Just-in-time information improved decision-making in primary care: A randomized controlled trial. *PLoS One, 3*(11), e3785.

McMurray, A. J., Pace, R. W., & Scott, D. (2004). *Research: A commonsense approach*. Southbank, VIC: Thomson Social Science Press.

MSHC (Melbourne Sexual Health Centre). (2010, Apr. 2011). Let them know Retrieved 31st Jan., 2012, from http://www.letthemknow.org.au/

Muir, K., McDermott, S., Katz, I., Patulny, R., Flaxman, S., & Gendera, S. (2008). Independent evaluation of headspace:The National Youth Mental Health Foundation: Evaluation plan. Sydney, NSW: SPRC (Social Policy Research Centre), University of New South Wales.

National Centre in HIV Epidemiology and Clinical Research. (2007). HIV, viral hepatitis and sexually transmissible infections in Australia: Annual surveillance report. In A. McDonald (Ed.). Sydney, NSW: National Centre in HIV Epidemiology and Clinical Research, University of New South Wales and AIHW (Australian Institute of Health and Welfare).

National Centre in HIV Epidemiology and Clinical Research. (2009). HIV, viral hepatitis and sexually transmissible infections in Australia: Annual surveillance report. Sydney, NSW: National Centre in HIV Epidemiology and Clinical Research, University of New South Wales.

National Centre in HIV Epidemiology and Clinical Research. (2010). HIV, viral hepatitis and sexually transmissible infections in Australia: Annual surveillance report. Sydney, NSW: National Centre in HIV Epidemiology and Clinical Research, University of New South Wales.

NHMRC (National Health and Medical Research Council) ARC (Australian Research Council), & AVCC (Australian Vice-Chancellors' Committee). (2007). National statement on ethical conduct in human research. Canberra, ACT: Australian Government.

NSW Health. (2006). Sexually transmissible infections strategy 2006-2009. Sydney, NSW: NSW Health.

NSW Health. (2007, 28th Nov.). Factsheet: Chlamydia Retrieved 23rd Jan., 2012, from http://www.health.nsw.gov.au/factsheets/infectious/chlamydia.html

NSW Health. (2009). Report of the Chief Officer of Health: Chlamydia Retrieved 28th May, 2009, from http://www.health.nsw.gov.au/publichealth/chorep/com/com_chlamnot_ahs.asp

NSW Health. (nd). Guides and caveats for interpreting infectious diseases data (NSW data) Retrieved 13th Mar., 2012, from http://www.health.nsw.gov.au/data/diseases/caveats.asp

NSW STIPU (Sexually Transmissible Infections Programs Unit). (2009a). Specimens for sexually transmitted infections. Sydney, NSW: NSW STIPU (Sexually Transmissible Infections Programs Unit).

NSW STIPU (Sexually Transmissible Infections Programs Unit). (2009b). STI testing tool. Sydney, NSW: NSW STIPU (Sexually Transmissible Infections Programs Unit).

NSW STIPU (Sexually Transmissible Infections Programs Unit). (2011). STI contact tracing tool for general practice. Sydney, NSW: NSW STIPU (Sexually Transmissible Infections Programs Unit).

O'Donnell, C. A. (2004). Attitudes and knowledge of primary care professionals towards evidence-based practice: A postal survey. *Journal of Evaluation in Clinical Practice, 10*(2), 197-205.

Oxman, A. D., Thomson, M. A., Davis, D. A., & Haynes, R. B. (1995). No magic bullets: A systematic review of 102 trials of interventions to improve professional practice. *Canadian Medical Association Journal, 153*, 1423-1431.

Parkes, J., Hyde, C., Deeks, J., & Milne, R. (2001). Teaching critical appraisal skills in health care settings (Review): Cochrane Database of Systematic Reviews.

Patton, M. Q. (1990). *Qualitative evaluation and research methods* (Second ed.). Newbury Park, CA: Sage Publications.

Pawson, R., & Tilley, N. (1997). *Realistic evaluation*. London: Sage Publications.

Pawson, R., & Tilley, N. (2001). Realistic evaluation bloodiness. *American Journal of Evaluation, 22*(3), 317-324.

PHAC (Public Health Agency of Canada). (2010). Reported cases of notifiable STI from January 1 to June 30, 2009 and January 1 to June 30, 2010 and corresponding annual rates for the years 2009 and 2010. Ontario: PHAC (Public Health Agency of Canada).

Pomerantz, A., & Fehr, B. J. (1997). Conversation analysis: An approach to the study of social action as sense making practices. In T. A. Van Dijk (Ed.), *Discourse as social interaction*. London: Sage Publications.

RACGP (Royal Australian College of General Practitioners). (2010). *QI&CPD program: Quality improvement & continuing professional development program 2011-2013 triennium: 2011-2013 triennium handbook*. South Melbourne, VIC: RACGP (Royal Australian College of General Practitioners).

RACGP (Royal Australian College of General Practitioners). (2011, 22nd Aug.). About the Royal Australian College of General Practitioners Retrieved 11th Jan., 2012, from http://www.racgp.org.au/about

RACGP (Royal Australian College of General Practitioners). (2012, 9th Mar.). What is *check*? Retrieved 13th Mar., 2012, from http://www.racgp.org.au/check

RACGP (Royal Australian College of General Practitioners) 'Red Book' Taskforce. (2005). *Guidelines for preventive activities in general practice* (Sixth ed.). South Melbourne, VIC: RACGP (Royal Australian College of General Practitioners).

RACGP (Royal Australian College of General Practitioners) 'Red Book' Taskforce. (2009). *Guidelines for preventive activities in general practice* (Seventh ed.). South Melbourne, VIC: RACGP (Royal Australian College of General Practitioners).

Ratnam, S., Severini, A., Zahariadis, G., Petric, M., & Romanowski, B. (2007). The diagnosis of genital herpes - Beyond culture: An evidence-based guide for the utilization of polymerase chain reaction and herpes simplex virus type-specific serology. *Canadian Journal of Infectious Diseases & Medical Microbiology, 18*(4), 233-240.

Redmond, B. (2004). *Reflection in action: Developing reflective practice in health and social services*. Aldershot: Ashgate Publishing.

Robson, C. (2002). *Real world research: A resource for social scientists and practitioner-researchers* (Second ed.). Oxford, UK: Blackwell Publishers.

Rose, S. B., Lawton, B. A., Bromhead, C., Macdonald, E. J., & Lund, K. A. (2007). Self-obtained vaginal swabs for PCR chlamydia testing: A practical alternative. *Australian & New Zealand Journal of Obstetrics & Gynaecology, 47*(5), 415-418.

Sánchez López, M. C., Madrigal de Torres, M., Sánchez Sánchez, J. A., Puche, J. F., & Ontoso, E. A. (2010). What do general practitioners think about evidenced-based medicine? A study with focus groups. *Primary / Spanish Society of Family Medicine and Community, 42*(10), 507-513.

Sandelowski, M. (1995). Sample size in qualitative research. *Research in Nursing & Health, 18*(2), 179-183.

Schön, D. A. (1991). *The reflective practitioner: How professionals think in action*. Aldershot: Ashgate.

Schreiber, R. S., & Noerager Stern, P. (2001). *Using grounded theory in nursing*. New York, NY: Springer Publishing Company.

Schuster, M. A., McGlynn, E. A., & Brook, R. H. (1998). How good is the quality of health care in the United States? *Milbank Quarterly, 76*(4), 517-563.

Scoular, A. (2002). Using the evidence base on genital herpes: Optimising the use of diagnostic tests and information provision. *Sexually Transmitted Infections, 78*(3), 160-165.

SHSOV (Sexual Health Society Of Victoria). (2008). National management guidelines for sexually transmissible infections (Seventh ed.). Melbourne, VIC: SHSOV (Sexual Health Society Of Victoria).

Shuval, K., Berkovits, E., Netzer, D., Hekselman, I., Linn, S., Brezis, M., & Reis, S. (2007). Evaluating the impact of an evidence-based medicine educational intervention on primary care doctors' attitudes, knowledge and clinical behaviour: A controlled trial and before and after study. *Journal of Evaluation in Clinical Practice, 13*(4), 581-598. doi: 10.1111/j.1365-2753.2007.00859.x

Skelton, J., & Mathews, P. (2001). Teaching sexual history taking to health care professionals in primary care. *Medical Education, 35*, 603-608.

Stead, M., Gordon, R., Angus, K., & McDermott, L. (2009). A systematic review of social marketing effectiveness. *Health Education, 107*(2), 126-191.

STIs in Gay Men Action Group. (2008, Apr. 2011). STI testing guidelines for MSM Retrieved 31st Jan., 2012, from http://www.stigma.net.au/stitesting.html

Straus, S. E., Tetroe, J., & Graham, I. (2009). Defining knowledge translation. *Canadian Medical Association Journal, 181*(3-4), 165-168.

Tuckman, B. W., & Jensen, M. A. C. (1977). Stages of small-group development revisited. *Group & Organization Management, 2*(4), 419-427.

Vaessen, J. (2010). Challenges in impact evaluation of development interventions: Opportunities and limitations for randomized experiments. Antwerpen: Institute of Development Policy and Management.

Venable, M. (2011, 16th Sep.). The 7 Cs of effective communication in your online course Retrieved 12th Feb., 2012, from http://www.onlinecollege.org/2011/09/16/the-7-cs-of-effective-communication-in-your-online-course/

Wilkinson, J. (1996). Definition of reflective practice. In S. Hinchliff (Ed.), *Dictionary of nursing* (Seventeenth ed.). Edinburgh: Churchill Livingstone.

Winch, S., & Henderson, A. J. (2009). Making cars and making health care: A critical review. *Medical Journal of Australia, 191*(1), 28-29.

Wright, L., & Ross, J. W. (2001). The logic model: An A-to-Z guide to training development, implementation, and evaluation. *Training and Development in Human Services*, 153-167.