

Outcomes Framework and
supporting evidence for the
Pregnancy and Parenthood in
Young People Strategy in Scotland

We are happy to consider requests for other languages or formats. Please contact 0131 314 5300 or email nhs.healthscotland-alternativeformats@nhs.net

Authors

Joanna Teuton, Public Health Adviser, Evidence for Action, NHS Health Scotland

Ruth Johnston, Senior Health Improvement Programme Officer, NHS Health Scotland

Shirley Windsor, Organisational Lead, Public Mental Health, NHS Health Scotland

Citation

This report should be cited as: Teuton J, Johnston R, Windsor S. *Outcomes framework and supporting evidence for the Pregnancy and Parenthood in Young People Strategy in Scotland*. Edinburgh: NHS Health Scotland; 2016.

For further information about this publication please contact: Joanna Teuton, Public Health Adviser, Evidence for Action, NHS Health Scotland. Email: Joanna.teuton@nhs.net

Acknowledgements:

We are grateful to Professor Roger Ingram, Dona Milne and Lesley Walker for providing advice in the development of this paper, as well as the Pregnancy and Parenthood in Young People Strategy Steering Group for their input and support.

This outcomes framework was developed to inform the Scottish Government National Strategy on Pregnancy and Parenting in Young People.

Published by NHS Health Scotland

1 South Gyle Crescent
Edinburgh EH12 9EB

© NHS Health Scotland 2016

All rights reserved. Material contained in this publication may not be reproduced in whole or part without prior permission of NHS Health Scotland (or other copyright owners). While every effort is made to ensure that the information given here is accurate, no legal responsibility is accepted for any errors, omissions or misleading statements.

NHS Health Scotland is a WHO Collaborating Centre for Health Promotion and Public Health Development.

Contents

1	Introduction	2
2	Setting the context	2
3	Outcomes-focused approaches and resources for health improvement	3
4	The Pregnancy and Parenthood in Young People Strategy Outcomes Framework	4
	(i) The framework	4
	(ii) Development of the framework	5
	(iii) Evidence	6
5	Strategic Logic Model	8
6	Strand 1 – Leadership and accountability	9
7	Strand 2 – Giving young people more control	19
8	Strand 3 – Pregnancy in young people	52
9	Strand 4 – Parenthood in young people	61
10	References	75

1. Introduction

This paper describes the work on the Outcomes Framework for Pregnancy and Parenthood in Young People (PPYP) which was undertaken as part of the development of the Pregnancy and Parenthood in Young People Strategy. The outcomes framework comprises a strategic logic model and four detailed logic models corresponding to each of the strategic model's four strands.

The background to this work and the components of the outcomes framework, including the evidence and plausible theory to support the detailed models, are presented here. This is a working document and additional sources of highly processed evidence and any changes in our understanding of pregnancy in young people will be taken into account in further developments of the outcomes framework.

2. Setting the context

The Scottish Government has worked with Health Boards, Local Authorities, the Third Sector and young people to develop a National PPYP Strategy following on from the recommendations of the Scottish Parliament's Health and Sport Committee inquiry into teenage pregnancy in 2013¹. The Strategy emphasises the need for a holistic approach to tackling pregnancy in young people by considering those wider determinants that are key, not just for pregnancy but also for supporting young people more widely in relationships, education, attainment, training and employment.

The PPYP Outcomes Framework was designed to help with the development of the Strategy. It runs alongside other supporting papers such as a policy mapping, young people engagement report, an evaluability assessment, children's rights and wellbeing impact assessment and an equality impact assessment. The aim of supporting policy development in this way is to help make it more systematic, explicit and targeted. The outcomes framework has also been created to support and inform policy makers, planners, evaluators and researchers whose work involves, or is linked to, pregnancy and parenthood in young people. It may also help community

planning partners (and others) develop an outcomes-focused approach to planning and performance management in this area.

3. Outcomes-focused approaches and resources for health improvement

In the 2007 Scottish Budget, the Scottish Government set out a National Performance Framework (NPF) to guide public reporting on progress towards achieving the five cross-government strategic objectives: Healthier, Wealthier & Fairer, Safer & Stronger, Smarter and Greener². The NPF also sets out a range of national outcomes which sit below the strategic objectives against which the performance of public sector organisations will be assessed and publicly reported. The Scottish Government tasked NHS Health Scotland with providing resources (outcomes frameworks) to help people link local activities with the NPF and move to an outcomes-focused approach.

Logic models are a key component of outcomes frameworks. They outline the logical sequence of expected changes in achieving progress towards improved health and social outcomes. In effect they are a tool to clarify which activities can be undertaken and which population group(s) can be targeted to achieve a desired outcome. They also map out the time sequence in which the outcomes are likely to be achieved. These are referred to as short-, medium- and long-term outcomes.

- Long-term or strategic outcomes are concerned with population health outcomes.
- Medium-term outcomes are the determinants of these long-term outcomes and can include health behaviours, social, economic and physical environments which shape these behaviours or aspects of the environment with direct health consequences.
- Short-term outcomes are the more immediate results of service delivery.

Evidence informs the models where it is available, but is not a limiting factor. Where evidence (obtained from the sources indicated in section 4.3) is lacking or limited the models are informed by plausible theory.

Outcomes frameworks can be used or amended to fit local needs. They can help partners clarify the links between the outcomes of the services they provide and the shared outcomes that they are working with partners to achieve. They are not intended to be prescriptive about the services and interventions that should be provided locally. Local judgements should be exercised on the range of services that would be most appropriate and affordable in light of local circumstances and needs.

The process of developing an outcomes framework can also help identify and prioritise key elements or links in the model that should be either monitored or evaluated. Where there is strong evidence of effectiveness, monitoring may be sufficient. However, if there is more limited evidence of effectiveness then further evaluation may be warranted.

4. The Pregnancy and Parenthood in Young People Strategy Outcomes Framework

4.1 The framework

The purpose of the Pregnancy and Parenthood in Young People (PPYP) Strategy Outcomes Framework is to highlight key outcomes and identify activities, informed by both evidence and plausible theory, which can contribute to these outcomes. The actions aim to decrease the cycle of deprivation associated with pregnancy and support young parents with both health and care needs. They also aim to contribute to a more supportive and less stigmatising environment for young people, a reduction in pregnancy, and improved health and social wellbeing of young parents. The framework does not try to explain all of the interactions between activities and outcomes and therefore does not depict the full complexity of pregnancy in young people. Rather it attempts to clarify some of the key pathways to achieving the short-

term, medium-term and longer-term outcomes. Ultimately the framework is a resource for policy makers and planners to help them clarify what outcomes they want to achieve and what can be done to achieve those outcomes.

The framework covers a broad range of activities and evidence, some of which go beyond that described in the PPYP Strategy but are linked with other policy areas. They are included here for completeness. The outcomes framework presents a snapshot of what is currently known about pregnancy and parenthood in young people. This should be reviewed and updated to reflect changes in the evidence and our understanding. This is particularly important since external factors such as a deteriorating economic environment may have an impact on the population and it would be important to be sensitive to any changes that take place.

4.2. Development of the framework

A collaborative approach was adopted while developing the framework. Key stakeholders were invited to a 'brain storming' session in June 2014 to capture initial ideas for outcomes for the framework and actions which might contribute to those outcomes. The process was overseen by the PPYP Steering Group, which comprised individuals involved in or with links to pregnancy in young people and young parents, from the Scottish Government, Local Authorities, Health Boards and the Third Sector. Highly processed evidence was reviewed in relation to the key pathways. A draft logic model with supporting evidence was then sent out for wider consultation and to experts for peer review and was revised in light of ongoing discussion and consultation.

The strategic logic model (page 9) defines four areas of focus. These are:

Strand 1 – Leadership and accountability

Strand 2 – Giving young people more control

Strand 3 – Pregnancy in young people

Strand 4 – Parenthood in young people

More detailed logic models for each of these strands illustrate the actions outlined in the PPYP Strategy. These also include the short-, medium- and long-term outcomes they are likely to contribute to and the key pathways through which this would logically be achieved. These pathways are referred to as 'links' and are numbered in the models and described in the text. An overview of the available highly processed evidence and plausible theory which informed these actions, as well as broader actions which would contribute to these outcomes, is provided. The evidence largely focuses on the effectiveness of interventions and initiatives which are likely to contribute to the outcomes in the pathways. Where the evidence draws on research looking at the views of or interventions for vulnerable or disadvantaged young people this is included as a Health Inequalities Impact Assessment (HIIA) note.

4.3. Evidence

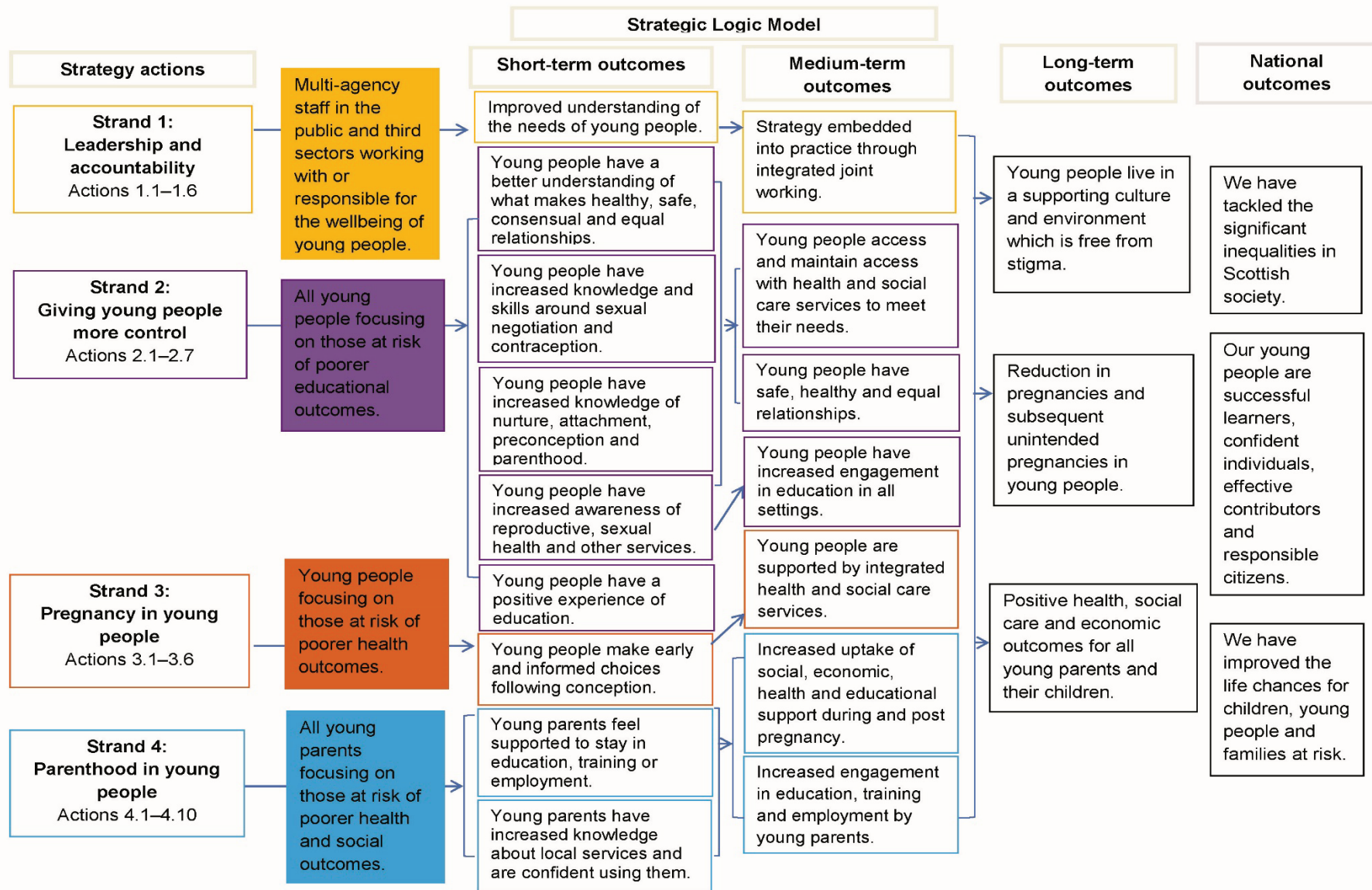
The evidence and/or evidence-informed recommendations used to inform the logic models has been drawn primarily from a number of key health-related sources and was collated between August 2014 and July 2015. It does not represent a comprehensive critical review of all the available evidence. These sources are:

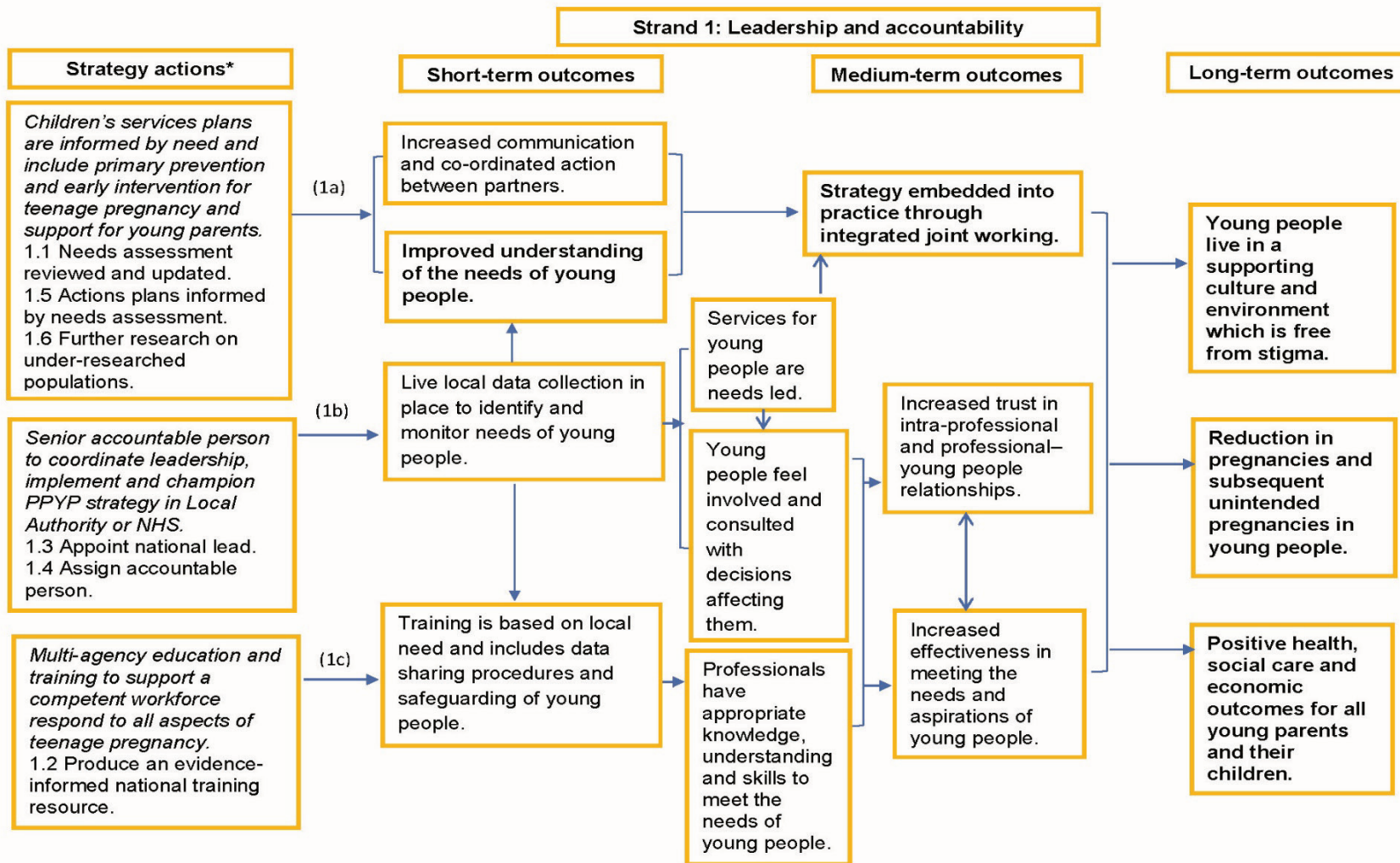
- National Institute for Health and Care Excellence (NICE) public health guidance (and relevant NHS Health Scotland Commentaries / Scottish Perspectives)
- NICE Clinical Guidelines
- NICE and Health Development Agency (HDA) public health briefings
- Publications from the World Health Organization (WHO)
- Key systematic reviews identified largely through the Cochrane Collaboration, the Evidence for Policy and Practice Information and Coordinating Centre (EPPI) and the Campbell Collaboration
- Key reviews and evaluation reports commissioned by the Scottish Government, the UK Government and national organisations and collaborators.

We have called this information 'highly processed evidence'. Highly processed evidence summarises high-quality international research (including from Scotland and the rest of the UK where this is available) that has been quality assured. As such

it is less subject to bias and therefore we can be more confident that the findings are reliable. However, limitations and caveats in the evidence base remain. For details of the limitations of the research examined in reviews please consult the original sources. As a consequence of the international nature of the research and limited highly processed evidence based on UK studies, much of the evidence is drawn from evaluations of studies in North America and other countries where the health, social care and education systems are different to those in Scotland. Where the evidence is largely from outside Scotland the applicability of the evidence to the Scottish context should be considered carefully as results may not replicate in a different context.

For a variety of reasons we do not always have 'good evidence' from these sources. This lack of highly processed evidence, however, does not necessarily mean there is no link between two components in a logic model, nor that evidence of effectiveness does not exist. The research may not have been done or findings may not have been reported or reviewed alongside other similar studies. Lack of highly processed evidence should not necessarily prevent us from acting if there is plausible theory or emerging practice to explain the links in the models. However, we may proceed with more caution than where there is good highly processed evidence in place.





* The actions are linked to those outlined in the strategy. The evidence covers a broad range of actions that could also contribute to the outcomes. The outcomes in bold are from the strategic logic model to highlight the links.

Rationale for Strand 1: Leadership and accountability

This section should be read in conjunction with the 'Leadership and accountability' detailed model of the PPYP Outcomes Framework (page 10). The actions outlined in the PPYP Strategy to support strong leadership and accountability are highlighted below. However, the evidence overview covers a broader range of actions which contribute to the outcomes.

Children's Services Plans between Local Authorities, NHS and other service providers should include teenage pregnancy primary prevention and early intervention, support for young parents, and should be informed by live data and the views of young people.

Link through the outcomes (1a)

Local services relating to pregnancy in young people and young parents are developed in a more comprehensive and integrated way through shared Children's Services Plans which are informed by live, local data and the views of young people. This will contribute to increased communication and coordinated action between partners and an improved understanding of the needs of young people. This in turn will contribute to the strategy being embedded into practice through an integrated, joined-up approach.

Strategy actions

- 1.1 Local needs assessments for young people should be reviewed and updated to reflect the actions in the strategy.
- 1.5 Action plans are in place to address the outcomes of the needs assessment and pathways in place that take account of data collecting protocols and data sharing practices.
- 1.6 Assess and commission further research around particular groups of young parents (such as young fathers, young parents with disabilities and young parents who have experienced the care system) to examine in more detail what support they may require.

Senior accountable person is identified for coordinating leadership, implementation and championing PPYP Strategy in Local Authority or NHS.

Link through the outcomes (1b)

In order to achieve increased buy-in by partners to reducing pregnancy in young people and support for young parents, an accountable person should be identified to drive forward implementation at a local level and link with all sectors (NHS, Local Authorities and Third Sector agencies). This will ensure that local data is collected and used to inform service development and workforce capacity building. This will contribute to services being needs-led, training based on local needs, and young people feeling more involved with decisions affecting them. This will in turn contribute to greater trust within professions and services as well as between professions/services and young people. This will contribute in the longer term to a decrease in stigma towards pregnancy and parenthood in young people, and staff working more effectively to support the needs of young people.

Strategy actions

- 1.3 A National Lead will be appointed to provide national leadership and to help drive implementation of the Strategy.
- 1.4 Assign an accountable person to provide leadership and coordination for the Strategy.

Evidence/plausible theory

Summary

Children's Services Plans

- The Children and Young People (Scotland) Act 2014 places a duty on each local authority and relevant health board to jointly prepare a Children's Services Plan which is informed by live and local data.³

Views of young people

- There is highly processed evidence that young people identify a range of personal and service-based factors which influence their access to contraceptive and antenatal services.^{4, 5, 6}
- NICE Public Health Guidance 51 and Clinical Guidelines 110 recommend that contraceptive and antenatal services are informed by the views of young people, young parents and local data.^{7, 8}
- NICE Clinical Guideline 110 recommends the development of coordinated and comprehensive contraceptive service and antenatal services and greater partnerships working to improve access to antenatal services.⁸
- Review level evidence suggests that young parents have varied preferences in relation to their health, social and educational needs.⁹ More coordinated services may help them to access appropriate information and advice to make choices appropriate to their needs and circumstances.

HIIA Note:

The evidence specifically includes research on the views of young people who were socially disadvantaged and excluded as well as young parents.

Children's Services Plans

Part 3 of the Children and Young People (Scotland) Act 2014³ introduces new planning and reporting duties to a range of public bodies. It places overarching responsibility for the development of plans for services that safeguard, support and promote the wellbeing of children and young people jointly with Local Authorities and Health Boards. The Act places a duty on each Local Authority and the relevant Health Board to jointly prepare a Children's Services Plan for the area of the Local Authority, covering a three-year period. Children's Services Plans should be prepared with a view to providing local children's and related services in a way which:

- best safeguards, supports or promotes the wellbeing of children
- ensures that any action to meet needs is taken at the earliest appropriate time and that, where appropriate, action is taken to prevent needs arising
- is most integrated from the point of view of the recipients

- constitutes the best use of available resources.

In order to ensure that Children's Services Plans, developed as part of the Children and Young People (Scotland) Act 2014, are meeting the needs of young people they should be informed by live local data. The use of local data is essential for understanding local circumstance in relation to pregnancy and parenthood in young people. Where appropriate, agencies should share data and assess risk as part of a joined-up strategy to understand the needs of the local population – i.e. young parents, and those potentially at risk of a pregnancy at a young age. The data sharing through the Children and Young People (Scotland) Act 2014 will aid strategic planning and will help the provision of integrated services that meet the needs of their users.

Views of young people

There is highly processed evidence that young people and young parents experience a range of barriers when accessing sexual and reproductive health, antenatal, and other health and social services. This highlights the need to take the views of young people into account in developing services.

Personal and service based barriers that influence young people's decision to use sexual health services generally and school based or school link services include^{4, 5}

- embarrassment about discussing sex and using services
- perceptions of trust and legitimacy of services
- concerns about the attitudes of staff
- perceptions about the physical environment of sexual health services
- accessibility, visibility and flexibility of services.

Factors which discourage young people and young parents from accessing antenatal services include⁶:

- being overwhelmed by the involvement of multiple agencies
- unfamiliarity with care services
- practical problems making attendance at antenatal services difficult

- difficulties communicating with healthcare staff
- anxieties about attitudes of healthcare staff.

NICE Public Health Guidance 51 recommends:

- Contraceptive services for young people should be informed by local data and the voice of young people. Regional and local data on contraception uptake and sexual health inequalities, as well as local service provision, activity and capacity, across sectors, should be collected and disseminated and used to inform an action plan, setting out organisational responsibility for local services for young people, including those who are socially disadvantaged.
- Coordinated and comprehensive contraceptive services are developed and delivered. This includes ensuring priorities and targets are based on local need and using a collaborative evidence-based commissioning process to ensure that comprehensive services are developed. Joint commissioning of services should also include comprehensive referral pathways, across termination, maternity, genito-urinary medicine, pharmacy and other relevant health, social care and children's services and should cover youth and community services, education and Third Sector organisations.⁷

NICE Clinical Guideline 110 recognises the need for many young pregnant women to access a range of services across health and social care and highlights the importance of effective communication between agencies to ensure women have their needs met through best use of all available services and support. The guidance⁸ recommends:

- Local data is used to tailor services to meet the needs of pregnant women with complex social factors (including pregnant young women)
- Young pregnant women are involved in the development of antenatal care through monitoring their experience of care and engaging them in determining local needs and how these may be met
- Partnership working with local education authorities and third sector organisations to contribute to improved access to and continuing contact with antenatal services.

Young parents have a wide range of social, health and educational needs (including housing, childcare, engaging in education and employment). A review of UK qualitative studies suggests that they have varied preferences in relation to these needs.⁹ It is plausible that a more coordinated service could contribute to young parents being able to access the range of appropriate information and advice to make choices appropriate to their needs and circumstance.

Multi-agency education and training to support a competent workforce respond to all aspects of teenage pregnancy.

Link through the outcomes (1c)

Multi-agency education and training is developed and informed by evidence, local data and the views of young people. This will result in training, based on local need, being delivered across the range of different services working with children and young people. This will contribute to staff across all sectors having the appropriate knowledge, attitudes and skills to understand and meet the needs of young people. This in turn will contribute to staff working more effectively to meet the needs and aspirations of young people and greater intra-professional relationships and greater trust between professionals and young people.

It must be recognised that the action is dependent on local decisions around use of resources and priorities for training based on local need. It is also dependent upon the capacity of services and staff to deliver in this field (e.g. staffing levels and workforce planning, allocation of workloads).

Strategy actions

- 1.2 A national training resource produced based on the evidence around young people at risk of pregnancy, linking with wider issues and practical actions for supporting young people.

Evidence/plausible theory

Summary

Training and education

- There is review-level evidence to suggest that attitudes of staff can act as a barrier for young people to access reproductive and sexual health, antenatal and maternity services.^{4, 5, 6, 10}
- Review-level evidence and WHO and NICE guidance suggest that staff training is a key factor in successful delivery of reproductive and sexual health, antenatal and other service provision for young people.^{5, 7, 8, 11, 12}
- Review-level evidence suggests that staff training, monitoring, and support and supervision is important for effective delivery of Relationships Sexual Health and Parenthood and social and emotional wellbeing programmes for young people.^{13, 14, 15}

HIIA Note:

The evidence specifically includes research on the views of young people who were socially disadvantaged and excluded, as well as young parents.

Training and education

Sexual and reproductive health services

There is review-level evidence that the attitudes of staff and the way in which young people are treated by staff is a barrier to young people accessing sexual health, antenatal and maternity services.^{4, 5, 6, 10} This is consistent with evidence that young people identify staff attitudes and communication as important aspects of effective healthcare provision more generally.¹⁶

The importance of a competent workforce and staff training is a consistent finding from reviews of service provision.

- A review of reviews of sexual health services for young people identified non-judgemental staff with suitable interpersonal skills and training to work with young people as a key area for consideration in developing services.¹¹

- A systematic review of school based and school linked services identified access to continuing professional development for staff as one of the principles that should inform service development.⁵
- A review of youth friendly services in primary care suggests that staff training is associated with improved access to services by young people.¹⁷

Guidance from WHO and NICE recommends appropriate training and supervision for those delivering services for young people.

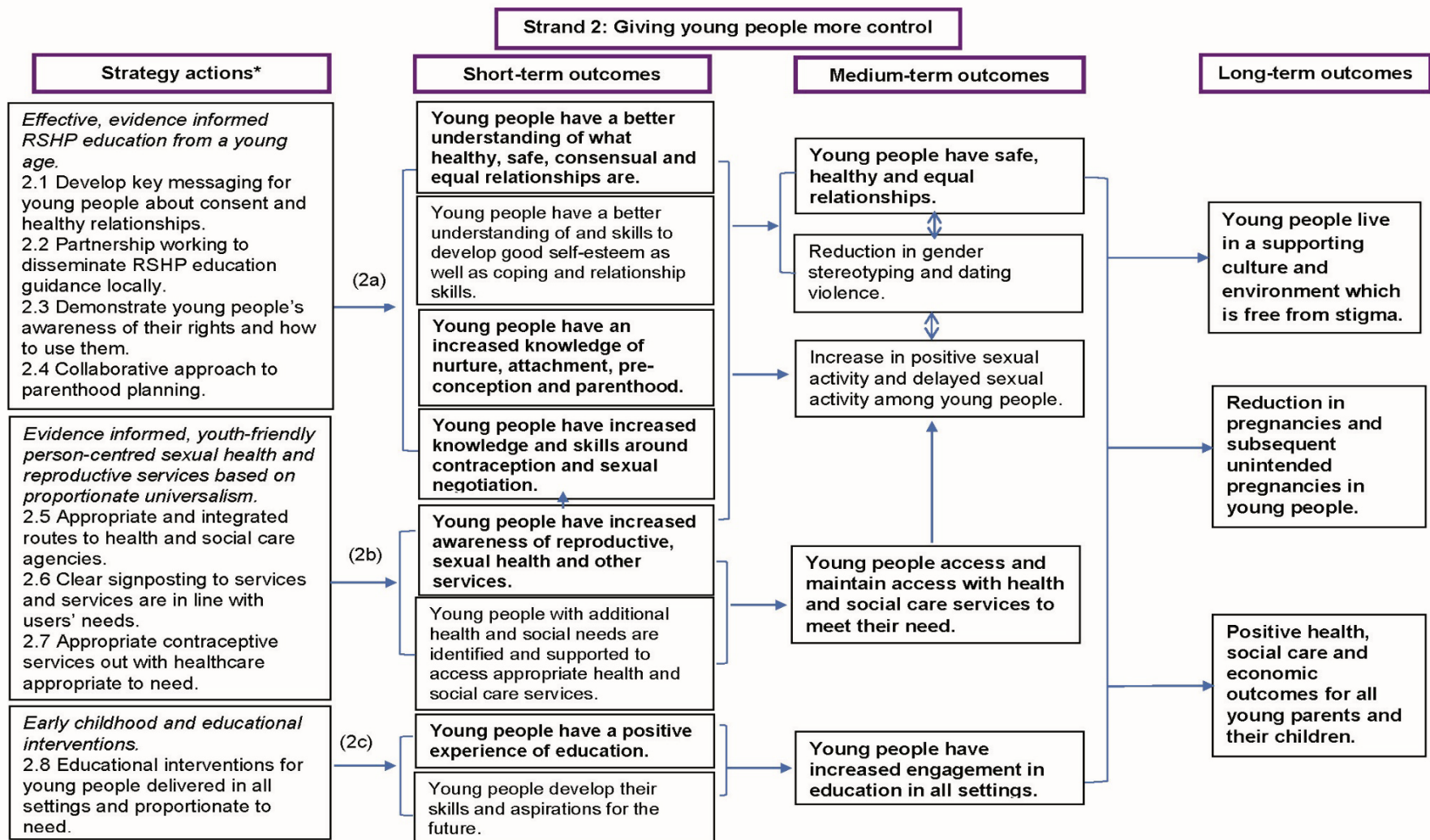
- [The WHO framework for development of adolescent-friendly health services](#) states that one component of effective services for young people is the provision of care providers who have the required competencies.¹²
- [NICE Public Health Guidance 51](#) recommends that training and support is provided for all staff involved in the management and provision of contraceptive services for young people. This training should include training on contraceptives; sensitivity to and communication with young people, particularly those who are socially disadvantaged and from vulnerable groups or different ethnic and faith communities; confidentiality and child protection issues; and awareness of referral pathways. The guidance also highlights the need for systems to monitor the maintenance of skills and experience.⁷
- [NICE Clinical Guideline 110](#) on pregnancy and complex social factors recommends training on multi-agency needs assessment as well as national guidance on information sharing and specific training in relation to safeguarding and consent.⁸

Relationship, Sexual Health and Parenthood (RSHP) education and social and emotional wellbeing

A competent and confident workforce emerges as a theme in a number of reviews of Sex and relationship education (SRE) programmes in all settings.

- A review of SRE programmes concluded that delivery by trained educators is a key characteristic of effective programmes.¹³
- A review of common characteristics of effective SRE indicated that training, monitoring, supervision and support of educators is one of the key characteristics of successful curriculum-based SRE programmes.¹⁴

NICE [Public Health Guidance 20](#) on social and emotional wellbeing in secondary education recommends training and continuing professional development for all practitioners in education, health, social care and the Third Sector who work with young people, in order to ensure the workforce has the knowledge, understanding and skills to support the social and emotional wellbeing of young people.¹⁵



* The actions are linked to those outlined in the strategy. The evidence covers a broad range of actions that could also contribute to the outcomes. The outcomes in bold are from the strategic logic model to highlight the links.

Rationale for Strand 2: Giving young people more control

This section should be read in conjunction with the 'Giving young people more control' detailed model of the PPYP Outcomes Framework (page 20). It focuses on the contribution of relationship, sexual health and parenthood (RSHP) education, building positive relationships and sexual wellbeing; reproductive and sexual health service provision across all settings; and educational interventions proportionate to need. The actions outlined in the PPYP strategy to support giving young people more control are highlighted below. However, the evidence overview covers a broader range of actions which contribute to the outcomes.

Relationship, sexual health and parenthood (RSHP) education and supporting positive relationships and sexual wellbeing.

Link through the outcomes (2a)

For young people to have healthy, safe, consensual, equal relationships they need effective, evidence informed relationship, sexual health and parenthood (RSHP) education from a young age. This should be wide ranging and include education about relationship violence and abuse, social and emotional wellbeing, sex and relationships and parenthood and parenting. This will contribute to improved knowledge, attitudes and skills to engage in equitable, safe and consensual relations as well as increased knowledge of nurture, attachment and parenthood from preconception through to parenting. This will in turn contribute to young people engaging in safe, healthy and equal relationships including positive sexual behaviour, reductions in gender stereotyping and dating violence as well as enabling young people to make informed choices about parenthood. This will ultimately contribute to a reduction in pregnancies and subsequent unintended pregnancy in young people, and improved health and social outcomes for young people.

Strategy actions:

- 2.1 Develop key messaging to promote understanding of consent and healthy relationships in young people.

- 2.2 Demonstrate partnership working to disseminate RSHP education guidance locally.
- 2.3 Demonstrate how young people are aware of their rights and how they are acting on them.
- 2.4 Implement a collaborative approach to preparation for future parenthood including an understanding of the parent's impact on a child's development.

Evidence/plausible theory

Summary

Primary and secondary prevention programmes to reduce relationship violence and abuse

- Limited highly processed evidence was identified for the effectiveness of programmes to address gender-based inequalities and violence. While some primary prevention approaches are promising, there is not currently sufficient evidence to recommend any particular adolescent dating violence-prevention programme over another.¹⁸

Promoting social and emotional wellbeing

- The evidence base and recommendation for interventions to address the social and emotional wellbeing of children and young people in schools have been developed by NICE. Further details can also be found in the [Outcomes Framework for Scotland's Mental Health Improvement Strategy](#).¹⁹

Relationship, sexual health and parenthood (RSHP) education

Comprehensive SRE

- There is good evidence that comprehensive sex and relationship education (SRE) programmes delivered in a range of settings are effective in contributing to positive sexual behaviour and there is no evidence that they increase sexual risk behaviour.^{13, 14, 20, 21, 22}
- Few studies have examined the impact on pregnancy; however a small number of studies have found a positive impact.^{21, 22} Programmes that are multimodal and incorporate education, skills building and condom promotion may reduce pregnancy and sexual activity.²²

- Comprehensive programmes are more likely to be successful if they include a theoretical basis, are delivered by trained professionals and provide specific content focusing on sexual risk reduction. The available evidence points to a number of common characteristics that are associated with the effectiveness of interventions in terms of the development, content and delivery of SRE programmes.^{13, 14}

Parental involvement in SRE

- Evidence suggests that family structure and connectedness, parental monitoring and parental attitudes and values about sex are associated with sexual behaviour among adolescents.²³
- There is good evidence that school, home and community based SRE programmes which involve parents can have a positive impact on young people's knowledge and attitudes and can improve parent-child communication.^{23, 24}
- There is reasonable evidence to suggest that programmes with a more intensive parent component can have a positive impact on child-parent interactions.²³
- There is a limited body of highly processed evidence about the effectiveness of programmes including a parenting component in reducing sexual risk behaviour. Programmes that are intensive and focus on parental monitoring or regulation are the most promising.^{14, 23, 24}

Peer-led interventions

- There is promising but mixed evidence about the effectiveness of peer-led SRE programmes. Poor implementation of programmes may explain the mixed results.^{13, 25, 26}

Abstinence programmes

- The effectiveness of abstinence-based programmes is inconclusive. Better quality studies suggest these programmes are not effective in reducing sexual activity or pregnancy.^{13, 14, 20}

Whole school and multiple setting interventions

- A small number of studies indicate that general health education programmes which involve a community component are effective in reducing sexual risk

behaviour. Promising evidence from one study suggests that a whole-school approach may reduce sexual risk behaviour in the longer term.^{13, 14, 27}

Parenthood programmes

No highly processed evidence was identified about the effectiveness of parenthood programmes on improving knowledge around parenting, delaying pregnancy and improving health and social outcomes for parents and children in the long term.

Primary and secondary prevention programmes to reduce relationship violence and abuse

Overall, there is limited highly processed evidence about primary prevention programmes for relationship violence and abuse for young people.¹⁸

Of particular relevance is a Scottish study, of moderate quality, which evaluated the Respect programme and reported mixed results. Improvements were noted in knowledge of respect, communication, equality and power. However, attitudes to gender stereotyping and perceptions of harassment and violence (including sexual violence) against women showed less improvement.¹⁸

There is promising evidence from programmes in North America. The US programme Safe Dates is a universal adolescent dating violence prevention programme aimed at 11–18 year-olds. A randomised controlled trial (RCT) showed reductions in physical and sexual dating violence at four-year follow-up.²⁸ Forth R: Skills for youth relationships programme is a Canadian curriculum-focused programme including information for parents and a student-led schools committee. It aims to address personal safety and injury prevention, healthy growth and sexuality and substance use through promoting healthy, non-violent relationship skills. An RCT found levels of physical dating violence were approximately 2.5 times greater among boys in the control group compared with the intervention group and an increase in condom use was found among males, but not females, compared with controls at 30-month follow-up.²⁷

While some primary prevention approaches are promising, there is not currently sufficient evidence to recommend any particular adolescent dating violence prevention programme over another.¹⁸

There is moderate evidence that secondary prevention programmes targeted at young people designated as being at high risk of domestic violence and abuse can improve knowledge, attitudes towards violence and gender roles, and interpersonal outcomes. However, there is no evidence that either primary or secondary prevention interventions lead to a lasting change in perpetrator violence. Findings from some studies are equivocal and in others behavioural change has not been included as an indicator of outcome within evaluations.¹⁸

Promoting social and emotional wellbeing

NICE have developed public health guidance about how social and emotional wellbeing should be delivered in primary and secondary education. The application of this guidance in the Scottish context can be found in the [NHS Health Scotland Commentaries on NICE Public Health Guidance 12](#)²⁹ and the [NHS Health Scotland Scottish Perspective on NICE Public Health Guidance 20](#)¹⁵. Further information can also be found in the [Outcomes Framework for Scotland's Mental Health Improvement Strategy](#).¹⁹

Relationship, Sexual Health and Parenthood (RSHP) education

Comprehensive SRE

The evidence is drawn from evaluations of a large number of SRE programmes which cover a wide range of issues including information on contraception and safer sex practices and delay in addition to abstinence. Many also provide accurate information about and access to contraception and sexual health services.

Much of the evidence about SRE in schools is based on evaluations of programmes implemented for those in secondary education and there is limited highly processed evidence about the effectiveness of curriculum-based SRE programmes delivered in primary education.³⁰

There is good evidence from reviews and meta-analyses of a large number of studies to suggest that comprehensive SRE delivered in schools, community settings and health clinics (or in multiple settings) can contribute to reductions in sexual risk behaviour. This includes delaying when young people choose to have sex for the first time; reducing how often they have sex, and increasing the likelihood of having protected sex (in particular using a condom). These programmes can also contribute to improved knowledge, attitudes and skills in relation to sexual health. There is no evidence that comprehensive sex and relationship programmes increase sexual risk behaviour.^{13, 14, 20, 21} While much of the evidence is based on research from the USA, where the cultural and educational context is different to the UK, it does include a small body of good-quality evaluations of SRE programmes in the UK.

Fewer studies have examined the impact of SRE on pregnancy.^{21, 22} A review of interventions aimed at reducing unintended pregnancy suggests there is reasonable evidence from a small number of studies that multicomponent interventions which include education, skills building and promotion of contraception can reduce rates of unintended pregnancy.²²

Programmes are wide ranging and vary in terms of the outcomes they influence and the size of their impact. While it is not clear which programme characteristics influence effectiveness, there is reasonable evidence from a number of systematic reviews¹³ to suggest that comprehensive programmes are more likely to be effective if they:

- have a theoretical basis
- are delivered by trained health educators
- provide specific content focusing on sexual risk reduction.

A review of common characteristics of effective programmes concluded that 17 characteristics are associated with more effective programmes.¹⁴ These fall into three categories:

- how programme curricula are developed
- the content of the curriculum (goals and objectives; teaching methods)
- the implementation of programmes.

Community based interventions

There is good evidence from five systematic reviews and one meta-analysis that interventions and programmes delivered in a range of community settings can have a positive impact on sexual risk behaviours, in particular condom use and pregnancy.²⁴ There is also moderate evidence from a small body of research that group-based education and/or skills-based programmes delivered in a community setting can have an impact on attitudes towards and knowledge and understanding of sexual health. They may also have a positive impact on sexual behaviour, in particular condom use, in the short term.

The evidence from a review of reviews²⁴ suggests effective components of community based interventions are similar to those of programmes more generally and include being:

- theoretically based
- tailored to the target population
- implemented by trained facilitators
- based on diverse content
- delivered using a wide variety of methods.

Parental involvement in SRE programmes

Evidence suggests that aspects of family structure, family connectedness, parental monitoring, and parental attitudes and values about sex are associated with sexual behaviour among adolescents.²³

A review of parental involvement in SRE suggests there is good evidence that school, home and community based programmes involving a parenting component

can have a positive impact on young people's knowledge and attitudes and can improve parent–child communication and child–parent interaction.^{23, 24} The extent to which these programmes contribute to positive sexual behaviour is unclear due to the limited number of studies looking at behavioural outcomes.²³

There is limited but promising evidence that community based programmes with a significant parenting component (more than 25% of the programme) can have a positive impact on sexual behaviour.²³ There is also promising evidence from two studies that programmes addressing multiple risk behaviours may contribute to improved sexual health behaviour. However, evidence of impact was mixed, with positive impacts for some behaviours and none for others.²⁴

The available evidence suggests that sexual health programmes that are more intensive and promote parental monitoring or regulation and help parents to model the behaviour they want their children to follow may be the most promising in terms of reducing sexual risk behaviour.^{14, 23, 24}

The potential to develop parent–child attachment may also be achieved through early childhood interventions.

Peer-led interventions

A number of reviews have examined the effectiveness of peer-led SRE programmes. While some studies have found promising results, the quality of studies and mixed findings make it difficult to draw clear conclusions about the effectiveness of these programmes. The reviews suggest that many peer-led programmes were not well implemented and this may explain the findings. They suggest that peer education programmes should be informed by peer education guidance such as the [European guidelines for youth AIDS peer education](#) .^{13, 25, 26}

Abstinence programmes

Abstinence-only programmes promote sexual abstinence as the only means to avoid adverse sexual health outcomes. They do not promote safer-sex strategies or information on contraception. Most, if not all, abstinence-only programmes include a message of delay until marriage.

Systematic reviews and a meta-analysis of US abstinence-based programmes suggest that the evidence is inconclusive about their effectiveness in reducing sexual activity. They note that there is a smaller body of high-quality evidence and that the better quality studies suggest these programmes have no effect on frequency of sexual activity. The available evidence also indicates that these programmes have no impact on reducing the number of sex partners or unprotected sex, or on increasing condom and hormonal contraceptive use.^{13, 14, 20}

Whole school and multiple setting interventions

There is review-level evidence, based on three reasonable quality studies, that curriculum based general health education programmes delivered in secondary schools with an intensive community based component (Aban Aya and Reach for Health programmes) may have a positive impact on preventing sexual risk behaviour. The extent to which general health education curriculum-based programmes impact on sexual health knowledge and attitudes is unclear as only two studies of mixed quality examined these outcomes.^{13, 14, 27}

A recent environmental scan found promising evidence from one good-quality study that a whole-school intervention (the Gatehouse project) may have an impact on sexual risk behaviour in the longer term. This programme focused on building a sense of security and trust, enhancing communication and social connectedness and building a sense of positive regard through participation in aspects of school life. The initial evaluation at three-year follow-up found no effect on sexual health behaviour. However, a further evaluation, four years post intervention (one year after the intervention had ended), found a significant reduction in early initiation of sex and marked risky behaviour (a composite variable of substance use, antisocial behaviour and sexual intercourse). This evidence suggests that it may take some years for

changes in the school approach to become established and make an impact on risk behaviour.²⁷

Parenthood programmes

No highly processed evidence was identified. However it is plausible that education about future parenthood will empower young people to make more informed choices about whether and when they would wish to become a parent in the future. This is particularly important for young people who have not been parented themselves.

Sexual and reproductive health services

The long-term aims of service provision include reducing unintended pregnancy and meeting the health and social care needs of young people. However, it is not always possible or appropriate to evaluate all service-based interventions in terms of their impact on these outcomes. Instead services are often evaluated in terms of the short-term outcomes described in the models, such as increasing knowledge about, and access to, services, products and information. They are also evaluated in terms of medium-term outcomes such as changes in sexual risk or other behaviours.

Link through the outcomes (2b)

To ensure that health and social care services meet the needs of young people, sexual health and reproductive services should be evidence informed, person centred and universal, but proportionate to need and relevant and accessible to young people. This will contribute to young people having a greater awareness of, and confidence to access, reproductive, sexual health and other services. This in turn will contribute to young people accessing and maintaining contact with services and having increased knowledge and skills about contraception and sexual negotiation, and to an increase in positive sexual behaviour and delayed sexual activity. Youth-friendly and person-centred services will also contribute to an increase in the number of young people with additional and health and social needs being identified and supported to access appropriate health and social care and

contribute to young people accessing and maintaining access with appropriate health and social care services to meet their needs. Both these outcomes will ultimately contribute to a reduction in pregnancies and subsequent unintended pregnancies in young people, and improved health, social care and economic outcomes for young people.

Strategy actions:

- 2.5 Develop appropriate and integrated routes into other health and social agencies to respond to the health and social care needs of young people.
- 2.6 Provide young people with clear signposting to services. Service responses are in line with the user group, reviewed on a regular basis and additional steps are being taken to reach out to non-attenders.
- 2.7 Determine the appropriate provision of contraceptive services outwith the health environment, dependent on the needs of the local population.

Evidence/plausible theory

Summary

Youth-friendly services

- There is review-level evidence that young people experience a range of personal and service barriers to accessing services.^{4, 16}
- NICE and WHO guidance recommends the provision of youth-friendly services.^{7, 12}
- There is review-level evidence that youth-friendly services increase access to services, and limited but promising evidence that youth-friendly services may contribute to reduced sexual risk behaviour.¹⁷

Tailored services for socially disadvantaged young people

- Proportionate universalism is an important contributor to reducing health inequalities and NICE Public Health Guidance recommends tailoring sexual health services for socially disadvantaged young people.⁷

- There is review-level evidence that targeted outreach programmes, some specifically targeting socially disadvantaged young people, can increase access to services.³¹
- There is some evidence from the USA that targeted intensive community based interventions which include sexual health services are effective in improving sexual behaviour and reducing pregnancy; however transferability to the UK is questionable.³²
- There is limited highly processed evidence about interventions specifically targeting looked-after and accommodated young people, homeless young people and young people from various black and ethnic minority communities. Interventions targeting multiple risk behaviours and needs may be most appropriate for homeless young people.^{24, 33, 34}

Contraceptive services

- Review-level evidence from qualitative research indicates that young people have gaps in their knowledge about sexual activity and contraception – including emergency contraception (EC) and where to access contraception.⁴
- Review-level evidence suggests that outreach services may increase access to and maintained contact with sexual health services, although the extent to which this impacts on sexual health behaviour and pregnancy is unclear.³¹
- There is inconsistent evidence about the effectiveness of comprehensive multi-component programmes. Some evidence suggests they may be effective in reducing pregnancy but that the provision of Long Acting Reversible Contraception (LARC) was the most important factor.³¹
- Review-level evidence suggests that interventions that include discussion and demonstration of condoms are effective in engaging young people in services and increasing use of condoms, and that some interventions that use additional services to increase contraceptive use may be effective.³¹
- There is strong evidence that LARC is the most effective and cost-effective form of contraception. NICE guidance outlines a range of recommendations for the provision of LARC.³⁵

School based / linked health services

- Systematic reviews suggest there is reasonable evidence that school-based or school-linked health services may contribute to reduced levels of sexual

activity and delay sexual initiation and are not associated with increased sexual activity. However there is a relatively small body of high quality research.^{5, 36} There is good evidence that on-site dispensing of condoms is associated with greater provision of condoms, though impact on use has not been fully evaluated.^{5, 36}

- There is good evidence to suggest that a range of personal and service-based factors influence access to and use of school based / linked health services by young people.^{5, 37}
- Based on the available evidence, key characteristics have been proposed to inform service development and evaluations.⁵

Community based interventions

- There is promising evidence that Carrera, an intensive community based youth development programme, may be effective in reducing pregnancy and improving sexual behaviour. A UK adaptation of this model reported negative impacts, though these may be explained by the weak study design and poor implementation fidelity.³²

HIA note:

The evidence includes research on the views of and programmes targeting socially disadvantaged young people and those from particularly vulnerable populations.

Person-centred services

Young people at increased risk of unintended pregnancy tend to have complex social needs and therefore require a range of health and social services.³⁸ It is plausible that a person-centred approach within sexual and reproductive health services will help to identify these needs, tailor appropriate actions and thereby reduce the risk of unintended pregnancy.

[The Healthcare Quality Strategy for NHSScotland](#) outlines the health services' commitment to reducing inequalities, eliminating discrimination and protecting

human rights.³⁹ It aims to achieve this through recognising and valuing diversity, promoting a person-centred approach and involving people in the design and delivery of healthcare.

Youth-friendly services

A review of views of young people identified a range of factors that influence their access to sexual health services.⁴ These include:

- lack of knowledge of and trust in services
- beliefs about services
- accessibility issues
- appointment times
- concerns about anonymity and confidentiality
- the physical environment of services
- the nature of consultations
- access to respectful and non-judgemental staff
- costs
- anxiety.

A review, drawing on both quantitative and qualitative research, found that young people value accessibility, staff attitudes, communication, guidance-driven care, an age-appropriate environment and involvement in health care as particularly important for health service provision.¹⁶

Drawing on the best available evidence and a rights-based approach to healthcare, the World Health Organization (WHO) promotes adolescent-friendly services based on the principles of accessibility, acceptability, equity, appropriateness and effectiveness.¹²

There is review-level evidence that the provision of youth-friendly services in primary care is associated with improved access to services. The review suggests there is a more limited body of research examining the impact of youth-friendly services on

health outcomes or the relative effectiveness of different models. There is promising evidence from three studies of mixed quality that youth-friendly sexual and reproductive health services may reduce sexual risk behaviour.¹⁷ The review also suggests that training for service providers can improve performance in addressing youth health issues (see Strand 1).

[NICE Public Health Guidance 51](#) recommends that young people have access to dedicated young people's contraceptive services which are appropriate to their needs, are comprehensive, timely, flexible and accessible and meet recognised criteria for youth-friendly services such as '[You're Welcome](#)', the Department of Health's quality criteria for young people friendly health services.⁷

Tailored services for socially disadvantaged young people

Socially excluded young women are at increased risk of early unintended teenage pregnancy. This includes young people who are in poverty and/or living in areas of deprivation; in or leaving care; homeless; truanting or excluded from school or who perform poorly at school; involved in crime; children of teenage parents, and children from some ethnic minority groups.³⁸

Proportionate universalism is the principle that services should be universal and inclusive but that additional and tailored support should be offered to those who are socially disadvantaged or find it difficult (due to their faith or other factors) to access services.⁴⁰ The evidence suggests that proportionate universalism is important in reducing health inequalities.^{41, 42} It is plausible that additional tailored and targeted services for vulnerable populations at increased risk of teenage pregnancy will contribute to an increase in positive sexual behaviours in these populations and in the longer term a reduction in unintended teenage pregnancy.

Recent reviews of interventions in healthcare and educational settings to encourage young people, particularly those who were socially disadvantaged, to use contraceptives and contraceptive services noted that many of the studies did not include information about socio-economic status or ethnicity. Therefore drawing conclusions about the effectiveness of service interventions in reaching socially disadvantaged young people was difficult.^{31, 36}

The review of services in healthcare settings concluded that there is reasonable evidence from five studies that outreach services, some of which specifically targeted socially disadvantaged young people, were effective in increasing access to mainstream reproductive and sexual health services.³¹

There is promising evidence from two UK evaluations that services targeted at areas of deprivation may increase access. The evaluation of Healthy Respect in Scotland found that services targeting young people from the most deprived areas were effective in engaging these young people to access sexual health drop-in services.⁴³ An evaluation of the Brook Sexual Health Outreach in Schools programme was cited in one review.³⁷ The study reported increased access to services, particularly among young men, young people with low educational attainment and those who are excluded from school.

There is evidence from one good-quality study that an intensive and comprehensive community intervention targeting teen mothers was effective in reducing repeated pregnancy and consequent birth (Pathways) and from another that intensive community programmes for socially disadvantaged young people (Carrera project) can have a positive impact on sexual behaviour and pregnancy. However an English adaptation of the latter programme found negative effects, although the study had significant limitations.³² Other evidence-informed interventions targeting young mothers can be found in Strand 4.

[NICE Public Health Guidance 51](#) recommends that services should be tailored to meet the needs of socially disadvantaged young people. This includes the provision of additional and relevant support to enable immediate access to services (for example trained interpreters and facilities for those with disabilities); working in partnerships with other services (such as family nurse partnerships and children's centres) to support young mothers to use services; support and referral to special services (for example for substance misuse, gender-based violence); outreach services, and culturally appropriate, non-judgemental, empathic and tailored information and support to meet the needs of the young people.⁷

Specific populations

Limited highly processed evidence was identified about the effectiveness of interventions to address poor sexual health and teenage pregnancy in looked-after children. A review of reviews suggested there is promising evidence from the USA that Multidimensional Treatment Foster Care (MTFC-A), an intensive and tailored fostering programme, is effective in improving health and social outcomes including a reduction in pregnancy rates.¹¹ An evaluation of this approach in England found no evidence that MTFC-A resulted in better outcomes than usual care, except among those with high levels of antisocial behaviour. However, sexual health outcomes were not measured in this evaluation.⁴⁴ NICE Public Health Guidance 28⁴⁵ sets out how agencies and services can work together to improve the quality of life (i.e. the physical health and social, educational and emotional wellbeing) of looked-after children and young people. It does not provide detailed information on health promotion.

Recent reviews of interventions to improve sexual health behaviour and reduce unintended pregnancy among homeless young people found a limited body of research. The reviews suggest that interventions offered in isolation appear to have limited impact on sexual health behaviour among shelter, drop-in and street-recruited youth. Interventions which target multiple risk behaviours and needs (substance use, mental health and housing) may be needed to reduce sexual health risk-taking.^{24, 33,}

34

No highly processed evidence was identified about services for black and minority ethnic communities. However it should be noted that black and minority ethnic communities are diverse and have different needs. It is plausible that in some communities targeted services may be appropriate and help increase access to information and services.

NOTE: Actions to reduce health inequalities, including inequalities in unintended teenage pregnancy, need to address the social determinants of these health issues. This includes addressing the fundamental causes of inequality (inequalities in power,

money and resources) and the wider environmental influences (for example, education and learning, work and the physical environment).⁴¹

Contraceptive services

Views of young people

A review of UK qualitative research about the views of young people suggests that young people have gaps in their knowledge about sexual activity, use of contraception and emergency contraception (EC) and where to access contraception. It also suggests that they value trustworthy and legitimate services which they feel more confident in using.⁴ It is plausible that knowledge and attitudes held both by young people and service providers are likely to influence use of contraception and contraceptive services by young people.

Service provision model

A review of contraceptive services and interventions in the healthcare setting concluded that there is moderate evidence from five reasonable quality studies, two from the UK and three from the USA, that adding outreach programmes to mainstream services is effective in encouraging young people to access and maintain contact with contraception services. The extent to which these services had a positive effect on sexual behaviour and reducing unintended pregnancy is unclear due to limited high-quality studies. Two studies reported a positive impact on use of contraception, one of which also reported a reduction in pregnancy.³¹

A recent review of health-led contraceptive services found mixed evidence from four studies about the effectiveness of comprehensive multicomponent interventions. In the two studies showing evidence of effectiveness, the provision of LARC within these programmes was particularly important in reducing repeat pregnancy in adolescents. In one study, failure to use LARC was the strongest predictor of repeat pregnancy.³¹

A review of reviews¹¹ identified 10 key areas for consideration when developing and delivering sexual health services for young people:

- Inclusion: accessible to everyone regardless of, for example, ethnicity, gender, physical ability.
- Access: located conveniently for young people and at times suitable to meet their lifestyle.
- Comprehensive: offering a full range of services including contraception and sexual health advice, pregnancy testing and counselling.
- Staff: welcoming and non-judgemental with appropriate interpersonal skills and training to work with young people.
- Service environment: youth friendly with positive images and comfortable surroundings.
- User involvement: young people are involved in the delivery and maintenance of service.
- Policy development: clear policies and procedures covering confidentiality, consent and child protection.
- Marketing: service actively promoted to develop awareness.
- Partnerships: partnership working to enable referral between agencies and services.
- Evaluation and review: build evaluation and review into services to ensure quality of service provision.

Long-acting reversible contraception (LARC)

Most unintended pregnancies result from either not using contraception at the time of conception or inconsistent or incorrect use of contraception.⁴⁶ A review to support the NICE clinic guidance on LARC found strong evidence that LARC is more effective than other forms of contraception. Increasing the uptake of LARC methods will reduce the number of unintended pregnancies generally. The most recent NICE guidance on LARC provides detailed evidence of effectiveness for individual methods. All currently available LARC methods (intrauterine devices (IUDs), intrauterine systems (IUS), injectable contraceptives and implants) are more cost-effective than the combined oral contraceptive pill, even at one year of use. IUDs, IUS and implants are more cost-effective than the injectable contraceptives.⁴⁶

NICE Clinical Guidance 30 outlines a range of recommendations for the provision of LARC including the provision of detailed verbal and written information for women to make informed choices about the method they use and how to use it effectively. This information should be relevant to the needs of the individual and, in relation to young women, should be in accordance with child protection issues.³⁵

Interventions to increase use of contraception

A recent review examined the effectiveness of a range of interventions to increase contraceptive use. These interventions included discussion and demonstration of condoms, computer-based contraceptive decision aids and nurse-led interactive individual session.³¹ The authors conclude:

- There is strong evidence from four good-quality studies from North America that interventions which include discussion and demonstration of condom use are effective in increasing engagement in services and condom use. The findings are consistent with a Scottish study of a 'condom club' provided by a genito-urinary medicine service. The intervention included the provision of one-to-one information and sexual health advice, demonstration of condom use and free condoms at satellite clinics. Attendance of young people at these clinics was higher compared with the clinics across the rest of Scotland, particularly where sites offered daily access and were located close to a school. The quality of the study was not as strong as the American studies, however.³¹
- There is evidence, from three good-quality studies, that additional interventions to promote hormonal contraception services use may be effective in improving adolescent knowledge about and use of contraception. However, effectiveness may vary depending on the type of intervention and population. Promising interventions included a computer-based contraception decision aid which improved knowledge about contraception among the white study sample but not the African-American sample, and a transactional one-to-one intervention with a nurse about oral contraception which increased adherence to use.³¹

[NICE Public Health Guidance 51](#) recommends that young people are advised to use condoms correctly and consistently alongside other contraception. The recommendations include the provision of accessible free condoms (including female condoms); information and advice about condoms, including demonstration of their correct use; provision of information about emergency contraception and other contraceptive services including when, how and where to access them.⁷

Emergency contraception (EC)

A recent review considered the effectiveness of interventions in community settings to increase use of contraceptives or contraception services. It found reasonable evidence from one good-quality study that a computer assisted emergency hormonal contraceptive (EHC) programme (including education and the provision of EHC) in urgent care clinics in the USA was effective in increasing knowledge and use of EHC, and reducing pregnancy rates.³²

[NICE Public Health Guidance 51](#) recommends the provision of EC and highlights the need for easy and timely access to free EC as well as actions which ensure young people know where to obtain free EC, and have accurate information about the types of EC offered as well as information to inform future choices about contraception and where to access them. The guidance recommends that referral pathways are in place to enable access to local contraceptive services or confidential pregnancy tests and that all professionals providing oral EC are aware of relevant issues of consent, duty of care and confidentiality in relation to young people under 16 years of age.⁷

Services based or linked to schools and colleges

The provision of health centres based in or linked to schools or colleges is one model of youth-friendly health services and allows services to be more accessible to young people.

A systematic review examined the effectiveness of school based and school linked health centres using evidence drawn largely from a relatively small number of studies from the USA. There is evidence from four reasonable quality studies that they may be associated with a reduction in sexual risk behaviour in terms of a reduction in the numbers of students reporting recent sexual activity and high numbers of sexual partners.⁵ In addition there is moderate evidence from seven studies that SBHCs or SLHCs are not associated with an increase in sexual activity or, on the basis of one study, lowering the age of sexual initiation. There is no good-quality evidence that they are associated with an increase in contraceptive use. A review by Kirby suggests there is weak evidence from one poorer quality study that SBHCs and SLHCs may be associated with a reduction in live births to teenage mothers.¹⁴

A review of school based clinics concluded that there is strong evidence from four studies of mixed quality that on-site dispensing of contraceptives from school based clinics can be effective in increasing contraceptive provision. However it is unclear from the available evidence whether these programmes are associated with an increase in contraceptive use or longer-term outcomes.^{5, 36}

A review of interventions in an educational setting concluded that there is moderate evidence from two studies of reasonable quality in the USA that interventions for college students including brief motivational interviewing interventions and experiential workshops can be effective in increasing use of contraception in the short term.³⁶

Reviews of the views of young people from the USA and the UK about accessing school based services suggest that both personal and service-based factors influence their decision.^{5, 37} Personal factors include awareness and need for service; anxiety about treatment and fear of disclosure; privacy in relation to disclosure, parental consent and trust; and staff attitudes, gender, relationship with student and trust. Service-based factors include accessibility and visibility; flexibility; cost; the physical environment and alternative provision.

It is plausible that addressing these factors will improve access to and use of sexual health products and services. There is some review-level evidence to suggest that services which are holistic rather than specific to sexual health are preferred by young people and practitioners and may address issues of stigma and increase access to services.⁵

Based on the best available evidence, Owen⁵ suggests a number of principles that should inform school based service development and evaluation:

- Robust procedures across agencies to safeguard confidentiality.
- Engagement with users and young people in the design and implementation of the monitoring and evaluation processes.
- Consultation with school staff and parents to secure informed leadership and support.
- Close liaison and joint work with staff teaching Relationship, Sexual Health and Parenthood (RSHP).
- Design of locations and session times to protect privacy.
- Multi-professional staff teams including male and female members.
- Incorporation of local and national child protection guidelines and liaison with relevant local agencies.
- Provision of comprehensive sexual health services including relationship advice, prescriptions for oral and emergency contraception, other forms of contraception, sexually transmitted infections (STI) screening and pregnancy testing, signposting and referrals for specialised services off site.
- Access to continuing professional development for staff.
- Marketing services as broad based rather than solely sexual health.
- Secure funding basis.

[NICE Public Health Guidance 51](#) recommends the provision of school and educational based contraceptive services in or near educational settings which are informed, implemented, promoted and reviewed with the involvement of young people. Some of the key aspects of these services include appropriate confidentiality; the provision of accurate and up to date information, advice and support; availability of free and confidential pregnancy testing and the full range of

contraceptive methods; and quick and easy referral to local services outside of the educational setting. Provision for continuity of services and a non-judgemental and respectful workforce, able to support young people to make personal and appropriate choices about contraception, is also recommended.⁷

Community based interventions

A recent review examined the effectiveness of community based interventions in promoting positive sexual behaviour and reducing unintended pregnancy. This included a comprehensive and intensive community based project, community based interventions for men, arts based programmes and social marketing.³²

- A good quality study in the USA of a comprehensive and intensive community development programme (the Carrera Model Programme) found the programme was effective in delaying initiation of sexual intercourse, increasing condom use and reduced pregnancy rates among girls. The programme also had a positive impact for both females and males on health service use and academic achievement. An adaptation of the Carrera project, the Young People's Youth Development programme (YPYD), was implemented in the UK. This programme targeted young people considered at risk of teenage conception, substance misuse or exclusion from school. The evaluation found a number of negative impacts in terms of an increase in early sexual experience and expectations of teenage parenthood among young women and more reported pregnancies at 18-month follow-up. However, this programme had significant limitations including poor programme fidelity, a weaker study design than the original and group differences at baseline. The study authors suggested these limitations may at least partly account for the findings. Further, more rigorous research is needed in the UK context.
- Two reasonable quality studies found that interventions specifically for men may have a positive impact on knowledge and attitudes and number of sexual partners but not on increasing levels of contraceptive use. One good quality

study found that a community based educational intervention was associated with increasing knowledge about sexual and reproductive health, improving attitudes to condom use and reducing number of sexual partners in the short term but had no impact on condom use. A second reasonable quality study of a parenting programme (which included both group session and individual social work sessions) found no impact on improving levels of contraceptive use. However this programme did find positive effects in terms of employment, vocational planning and social outcomes.

- Two poor quality studies found that entertainment and theatre based interventions may increase knowledge about contraception among ethnic minority populations in the immediate short term.
- Two poorer quality studies found that social marketing approaches to emergency contraception and condom use may be effective in increasing knowledge, attitudes and use of contraception and emergency contraception.

While improved knowledge and attitudes are important prerequisites of behaviour change, they are unlikely to be sufficient to change behaviour. [NICE Public Health Guidance 6](#) on behaviour change and the principles for effective intervention provides a review of the evidence and recommendation about behaviour change.⁴⁷

General characteristics

A recent review of reviews suggests that a number of intervention characteristics across settings appear to contribute to effectiveness. These include being theoretically based; providing clear information through unambiguous messages; using behaviour skills training, including self-efficacy; being tailored and targeted and being based on needs assessment and formative research.¹¹

Early childhood and educational interventions

Link through the outcomes (2c)

Appropriate early childhood and educational interventions in all settings, targeted at those at risk of poor educational outcomes, will contribute to young people having positive experiences of education and young people developing their skills and aspirations for the future. This will contribute to increased engagement in education in all settings. This will ultimately contribute to a reduction in pregnancies and subsequent unintended pregnancies in young people, and improved health, social care and economic outcomes for young people.

Strategy actions

2.8 Early childhood and educational interventions for young people are delivered in all settings and are proportionate to need.

Evidence/plausible theory

Summary

Childhood interventions

- There is reasonable evidence that early childhood interventions and social development projects in primary school, targeted at those who experience social disadvantage, can have a positive impact on pregnancy and/or birth rates, reduced sexual activity or increased safe sexual behaviour and can contribute to reducing unintended teenage pregnancy as well as improved educational and longer-term social outcomes.^{9, 30, 48}

Youth development programmes

- There is reasonable evidence that youth development programmes addressing non-sexual risk factors for unintended teenage pregnancy as well as those incorporating services to address sexual risk factors can have a positive impact on unintended teenage pregnancy as well as on academic outcomes.^{9, 14, 32}
- There is promising evidence that universal youth work may contribute to improved educational attainment, employability and health and wellbeing.⁴⁹

Programmes to increase school attendance

- There is reasonable evidence that a range of school, community and afterschool interventions in primary and secondary schools are effective in reducing school dropout and increasing school attendance and that targeted school-, court- and community-based interventions have a modest impact on school attendance.^{50, 51}

HIA Note:

The evidence for early childhood interventions and youth development programmes includes programmes targeting children and young people who are socially disadvantaged.

Relationship between school engagement and attendance and teenage pregnancy

Poor attainment and poor school engagement are risk factors for early unintended pregnancy.³⁸ UK qualitative research also suggests that young people themselves identify negative experiences of school, expectations and aspirations about the future, poor material circumstance and an unhappy childhood as relevant to becoming pregnant as a teenager.⁹

Childhood interventions

There is good evidence, from a small number of good-quality long-term evaluations, that intensive and targeted childhood interventions delivered in infancy (such as the Abecedarian Project) and pre-school (such as the High/Scope Perry Project) can have a positive impact on reducing teenage pregnancy. This impact was stronger for women than men whose sexual partners become pregnant. These programmes can also have a positive impact on school achievement as well as longer-term impacts in terms of increased life success, reduced levels of delinquency and crime prevention. Greatest effects were seen in those at highest social risk. Academic achievement differences persist, leading to better outcomes in adult life. Combining centre- and home-based programmes focusing on both children and parents appears to be an effective approach. These interventions were delivered in the USA.^{9, 48}

There is strong evidence across three randomised trials of the Nurse-Family Partnership model in the USA that the Family Nurse Partnership programme can have a positive impact on a range of child outcomes including cognitive outcomes, language development and emotional development.^{48, 52, 53}

Evidence from two good-quality trials suggests that the Seattle Social Development Project had a positive impact on sexual health behaviour and reduced rates of pregnancy in the long term. The full five-year intervention (beginning at age five) had a greater impact than the later intervention delivered for two years from age nine, which itself had a greater impact than no intervention.^{9, 30} Evidence from five generally good-quality studies suggests that Social Development Projects which combine school and family based components, and are targeted at socially disadvantaged children during later childhood (including the SSDP, the Child Development Project and Positive Action Programmes), can positively impact on attachment to school, academic performance and social skills (family connectedness).^{9, 30}

Youth development programmes

There is evidence from two good-quality studies from the USA that youth development programmes which include a study or learning component and voluntary service in the community (Teen Outreach Program; Carrera) can have a positive impact on pregnancy rates of young women. However these programmes did not appear to be as effective for young men. The effectiveness of the Teen Outreach Program seemed to be influenced by whether young people had some control over where they volunteered. A further good quality study, also from the USA, of an intensive and comprehensive youth development programme (Quantum Opportunities) found a reduction in birth rate among those attending the programme, however this reduction did not reach significance. There is evidence that the programmes also had a positive impact on academic achievement.^{9, 14} These programmes appear to address a number of the issues raised by young people in the UK in relation to teenage pregnancy, particularly in terms of improving school

enjoyment, raising expectations and ambitions for future and improving the effect of an unhappy childhood in poor material circumstance.⁹

A number of other youth development projects (Learn and Serve; Reach for Health) showed positive impacts in terms of sexual behaviour; however these evaluations were not as robust and had a number of limitations.^{9, 14}

An adaptation of the Carrera project was implemented in the UK as the Young People's Youth Development programme (YPYD). This programme targeted young people considered at risk of teenage conception, substance misuse or exclusion from school, however it was not implemented with fidelity. The evaluation found a number of negative impacts: an increase in early sexual experience; increased expectations of teenage parenthood among young women, and more reported pregnancies at 18-month follow-up. In addition to poor programme fidelity, the study design had a number of limitations (including group differences at baseline) which the authors suggested may at least partly account for the findings.³² Further, more rigorous research is needed in the UK context.

Based on both the views of young people and the effectiveness evidence, Harden and colleagues propose a range of factors that are important in developing interventions for young people.⁹ Some of these are addressed in actions proposed to promote emotional and social wellbeing:

- Improving young people's experiences of school
 - Involving young people in decision making within a whole school approach
 - Providing support for young people starting new schools
 - Equipping young people with skills to form positive relationships
 - Equipping young people with skills to resolve conflicts
 - Introducing anti-bullying strategies
 - Training in conflict resolution for secondary school teachers
 - Providing learning support interventions
 - Fostering greater parental involvement during secondary school.

- Broaden young peoples' expectations and aspirations for the future
 - Improve work experience opportunities
 - Protect against bad experiences of work
 - Ensure young people are involved in their career development
 - Provide out of school activities to improve self-esteem and positive outcomes
 - Create more employment opportunities in disadvantaged communities
 - Raise awareness of opportunities.

Universal youth work

There is promising evidence that universal youth work may contribute to improved educational attainment, employability and health and wellbeing. This evidence also suggests that a number of characteristics of universal youth development programmes may be important for positive outcomes.⁴⁹ These are:

- Prolonged and stable engagement with young people over time
- Voluntary engagement by young people in processes that begin with lived experience yet provide structured opportunities to problem solve and reflect on that lived experience
- Ensuring that adults and young people build authentic relationships and work as genuine partners in the learning process
- Start where young people are 'at' by taking their forms of cultural expression seriously.

Programmes to increase school attendance

There is review-level evidence, based on a meta-analysis of over a hundred studies, that a wide range of prevention and intervention programmes in primary and secondary schools are effective in reducing dropout rates among those with poor performance or poor attendance. Interventions were delivered in a variety of settings including school, afterschool or a community setting or multiple settings; these were high intensity and delivered on average over 91 weeks. They included class restructuring; vocational training; supplemental academic services; community

services; mentoring or counselling; alternative schools; attendance monitoring and contingencies; college-orientated programmes and multi-service packages (academic, vocational and case management); case management and skills training including Cognitive Behavioural Therapy.⁵⁰

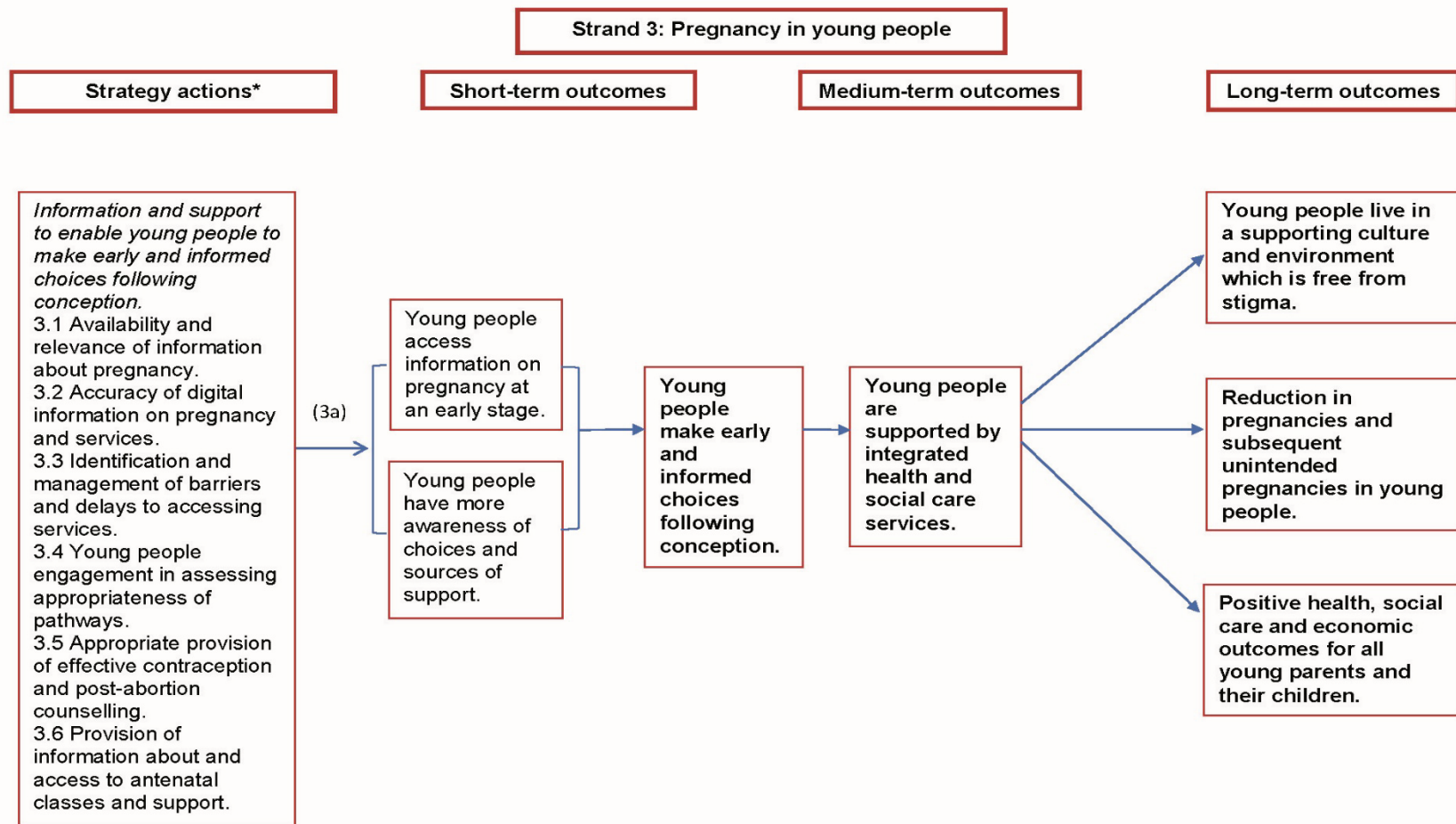
No single intervention was found to be more effective. Older participants tended to show better outcomes and programmes with more frequent contact had a small impact, possibly due to more variability in delivery or receipt of services resulting in smaller but still positive outcomes. There was some evidence that programmes in classroom settings or mixed settings were more effective than those in the community, though the latter also had positive effects. As setting is closely associated with type of programme it is not clear whether setting or programme type is the active component.

There is no evidence to suggest that participant characteristics influenced outcome and therefore tailoring programmes to meet the needs of specific populations may not be necessary; however there may be cultural or specific reasons for doing this. Good quality implementation emerges as an important factor influencing effectiveness and therefore strategies might usefully be selected in terms of what can be most successfully implemented and fits best within the setting, staff and cost. There was significant variation in effect between studies and within groups of studies and therefore caution is urged in the interpretation of findings.

There is review-level evidence, based on a meta-analysis of 16 good-quality studies, that a wide range of school-, court- and community-based interventions targeted at young people identified as having problems with school attendance are effective in increasing attendance. The impact of interventions is modest (average 4.64 days) and there is considerable variability across studies. There is no evidence that impact was influenced by intervention type, settings or modality; however this may have been due to the relatively small number of studies included. There was no evidence to suggest that collaborative and multimodal interventions were more effective than single component interventions. The evidence base is relatively limited and there is a lack of rigorous research. The available evidence is based on findings from the USA.⁵¹

Programmes to increase school attainment

An overview of highly processed evidence is not possible at the current time. However [The Sutton Trust-EEF Teaching and Learning Toolkit](#) is a resource which provides a summary of educational research for teachers and schools on how to use their resources to improve the attainment of disadvantaged pupils. Each topic is summarised in terms of their average impact on attainment, the strength of the evidence supporting them and their cost. The toolkit prioritises systematic reviews and meta-analysis of experimental studies. It is a live resource that is updated regularly as findings from high-quality research become available.



* The actions are linked to those outlined in the strategy. The evidence covers a broad range of actions that could also contribute to the outcomes. The outcomes in bold are from the strategic logic model to highlight the links.

Rationale for Strand 3: Pregnancy in young people

This section should be read in conjunction with the ‘Pregnancy in young people’ detailed model of the PPYP Strategy Outcomes Framework (page 53). It focuses on early identification and support for young women to make informed choices about conception and pathways for pregnancy options. The actions outlined in the PPYP Strategy to support pregnancy in young people are highlighted below. However, the evidence overview covers a broader range of actions which contribute to the outcomes.

Information and support to enable young people to make early and informed choices following conception

Link through the outcomes (3a)

Early identification, support and advice for young women who have conceived will enable them to have access to information about pregnancy at an early stage and have more awareness of choices and sources of support available to them. This will enable them to make earlier informed decisions following conception. This will contribute to earlier access to and support from appropriate integrated health and social care services including, where appropriate, effective contraception (including LARC). This will contribute to improved health and social outcomes for young women and, where appropriate, their offspring.

Informed choices around conception are: continuation of the pregnancy with a view to keeping the child, continuation of the pregnancy with a view to adoption, or abortion.

Strategy actions

- 3.1 Information on pregnancy should be available in places frequented by young people and should consider the needs and concerns of young people, particularly concerns around confidentiality.

- 3.2 Accurate and up to date information on pregnancy and local services is made available on local sexual health websites and other websites aimed at young people.
- 3.3 Determine where delays into services have occurred, what barriers exist and feed into local information provision and referral pathways.
- 3.4 Young people are involved in assessing the appropriateness of the pathway (at key transition points) to their experiences and needs.
- 3.5 All abortion services to offer and, where appropriate, provide effective contraception and counselling post-abortion.
- 3.6 Demonstrate how young parents are given information on and are able to access antenatal classes and support groups locally.
- 3.7 A guide for midwives, doctors, maternity support workers and receptionists will be developed in collaboration with the NHS and young parents based on the Public Health England guide '*Getting maternity services right for pregnant teenagers and young fathers*'.

Evidence/plausible theory

Summary

Supporting early informed choices

- Pregnant young women are less likely to access services early in pregnancy. Late engagement with services is associated with poorer health outcomes for mothers and their offspring and, in relation to abortion services, can result in reduced choices for young women.⁶
- No highly processed evidence was identified about how best to support professionals to recognise early teenage pregnancy or effective ways of supporting young people to make early informed choices following conception.

Accessing antenatal services

- Young women experience a large number of personal and service barriers to accessing antenatal care. There is promising evidence that specialist services which emphasise early initiation of care and a multi-faceted community based

service, including home visits by trained lay advocates, increase early booking.⁶

- There is good evidence that antenatal classes designed for young people, home visiting and assistance with transport costs, specialist antenatal services and continuity of care for young women help young people maintain contact with services. There is inconsistent evidence about the most appropriate additional services and limited evidence about what additional information is needed to support young women.⁶
- NICE Clinical Guideline 110 provides a number of recommendations to improve access to and contact with antenatal services among pregnant women aged under 20. This includes service organisation, training for healthcare staff, care provision and information and support for women.⁸

Access to contraception following abortion

- NICE Public Health Guidance 51 includes recommendations about the provision of advice and effective contraception in abortion services for young people and CMO (2015) 19 letter⁵⁴ recommends targets for the provision of advice about effective contraceptive advice (including LARC) for women, particularly vulnerable women prior to discharge from abortion services in Scotland.

HIIA Note:

The evidence includes research on the views of and programmes targeting pregnant young women.

Identification and supporting young people to make informed choices following conception

Statistical data from Scotland suggest that pregnant young women are less likely to access services early in pregnancy.^a Late booking is associated with poor obstetric

^a Information Services Division (2014) http://www.isdscotland.org/Health-Topics/Maternity-and-Births/Publications/2014-08-26/mat_bb_table9.xls

outcomes.⁶ Accessing either maternity or abortion services at an earlier gestation in pregnancy supports better health outcomes for the woman concerned.

It is plausible that early recognition of pregnancy by professionals (for example from health, education and youth work) and the provision of information about, and early support for, continued pregnancy, abortion or adoption will enable more young women and their partners to make timely and informed choices about the progression of their pregnancy. This will contribute to a reduction in the number of young women presenting later to abortion and antenatal services.

No highly processed evidence was identified about how best to support professionals to recognise early teenage pregnancy or how best to support young people make informed choices following conception.

Accessing antenatal services

A review of UK-based qualitative research identified a large number of potential barriers for young women accessing services. These included both personal reasons (e.g. not wanting to recognise pregnancy, embarrassment of unplanned pregnancy, being afraid of telling parents and having social problems that are more important to focus on than health care) and service barriers (e.g. treatment and attitude of staff, waiting times, transportation and age discrepancy with other service users).⁶

A recent evidence review considered the effectiveness of a range of approaches to improving access to antenatal care. These included specialist services for young women; school-based versus hospital-based comprehensive antenatal programmes; community based versus standard care and community based (with lay home visiting) versus multidisciplinary hospital-based care. However the most effective means of increasing access to antenatal services is unclear. There is promising evidence, from two studies, that a specialist service for young women which emphasises the early initiation of care and a multifaceted community based service, including home visits by trained lay advocates, will result in early booking. There is, however, no evidence to suggest any significant benefit in relation to booking

gestation, and it is not clear which components are critical for improving access. The evidence is of poor quality and largely conducted in the USA.⁶

Other promising interventions for socially disadvantaged and vulnerable women include mobile clinics offering walk-in appointments, link workers and culturally appropriate community-based programmes. However no robust evidence has been identified and there is a need for further investigation of these approaches in the UK.⁵⁵

There is good evidence from seven studies that the provision of antenatal classes designed for young women aged under 20 appears to improve contact with antenatal care. In addition six studies found that home visiting can improve contact and that the provision of transport to and from antenatal services also improves contact. However, some of the positive effects were only observed in pilot studies prior to the wider implementation of a programme.⁶

There is some evidence that specialist antenatal services can improve contact with services. One study conducted in Lisbon, evaluating a specialist service providing continuous care by one obstetrician, reported improved contact. Two other studies showed significant improvements in the number of antenatal visits made by those attending dedicated antenatal services designed for pregnant young women aged under 20. However it is not possible, based on the available evidence, to differentiate which aspects of the services described have made a difference to outcomes.⁶

The NICE Guidance Development Group (GDG) acknowledged continuous care as representing good practice and as potentially helpful in overcoming the barriers to antenatal care. The GDG proposed that services should enable continuity of antenatal care from a single carer (named midwife) and noted that named midwives should have communication skills and the appropriate knowledge to meet the needs of this population.⁶

No studies were identified by NICE that reported the effectiveness of specialist antenatal care intervention in terms of health gain for the mother or baby. The cost effectiveness analyses suggest that a specialist service could be cost effective if it

results in more early booking and maintenance of contact than routine care alone. To ensure the cost effectiveness of a service, the number of women who need to book in the first trimester is dependent on the level of specialist service provided.⁶

A review of additional consultations and support to improve pregnancy outcomes for young women considered four approaches: multi-faceted services providing social support; information and facilitated contact with health and social care; comprehensive antenatal services including health and social care; and school-based services. Overall the evidence is inconclusive; some studies suggest benefit and some little or no benefit. No studies demonstrate harm. Due to the quality of the evidence it is not possible to discern if any particular aspects of the interventions have consistently led to significant positive outcomes. Most of the studies were conducted in the USA.⁶

There is limited evidence about what additional information should be provided to women under 20, their partners and families in order to improve pregnancy outcomes.⁶

While the evidence is generally small, of poor quality and largely from studies conducted in the USA, [NICE Clinical Guideline 110](#) makes a number of recommendations specifically in relation to young women under 20 who are pregnant. These include:

- *Care provision*: encouraging access to antenatal care through provision of age-appropriate services, recognition that young women may be dealing with a range of social problems, help and information about transportation to and from services, community based services and opportunities for partner/father involvement in antenatal care with the woman's agreement.
- *Service organisation*: partnership working to improve access and contact with antenatal services, considering establishing specialist antenatal care for pregnant teenagers using flexible models tailored to the needs of the local population. While not recommending a particular model, they note that continuity of care for teenagers is beneficial to their continued attendance and suggest care is provided by the same health professional.

- *Information and support:* age appropriate information in a range of formats about antenatal services and other relevant services and benefits.
- *Training for healthcare staff.*⁸

NICE suggests audits of existing services and new services will contribute to further development of the evidence.

There is strong evidence that the Family Nurse Partnership programme engages young people well, and sustains that engagement.^{56, 57} Consistent evidence from the USA suggests that FNP programmes have positive impacts on health, social and emotional outcomes for socially disadvantaged mothers and their children.^{48, 52, 53} The recent findings from the RCT in England found that the programme had no effect on the chosen primary outcomes: maternal smoking; child A&E attendance; birthweight and subsequent pregnancies. It also showed no effects for the control group on these outcomes, who received services as usual. Where the programme did show strong effects was for child outcomes, particularly language and cognitive development.⁵⁸

A note on mental health

Mental health was identified by young people in Scotland as a particular area of need due to the associated stigma and fears about child protection issues.⁵⁹

Evidence suggest that pregnant adolescents and teenage mothers are at increased risk of mental health problems as a result of both cumulative and current life stressors.⁶⁰ While mental health problems during pregnancy and the postnatal period are associated with increased risk of adverse outcomes for children, these are not inevitable.⁶¹

[NICE Clinical Guidance 192](#) on antenatal and postnatal mental health acknowledges the increased risk of mental health issues for pregnant adolescents.⁶² It highlights evidence from one study that teenage mothers expressed a need for information about mental health and available support services and increased awareness among healthcare staff about the psycho-social and mental health needs of pregnant teenagers and young mothers. The guidance provides recommendations for the

management of mental health problems during and after pregnancy and recommends that staff are familiar with relevant information about confidentiality, the rights of the child and the need to gain appropriate consent.

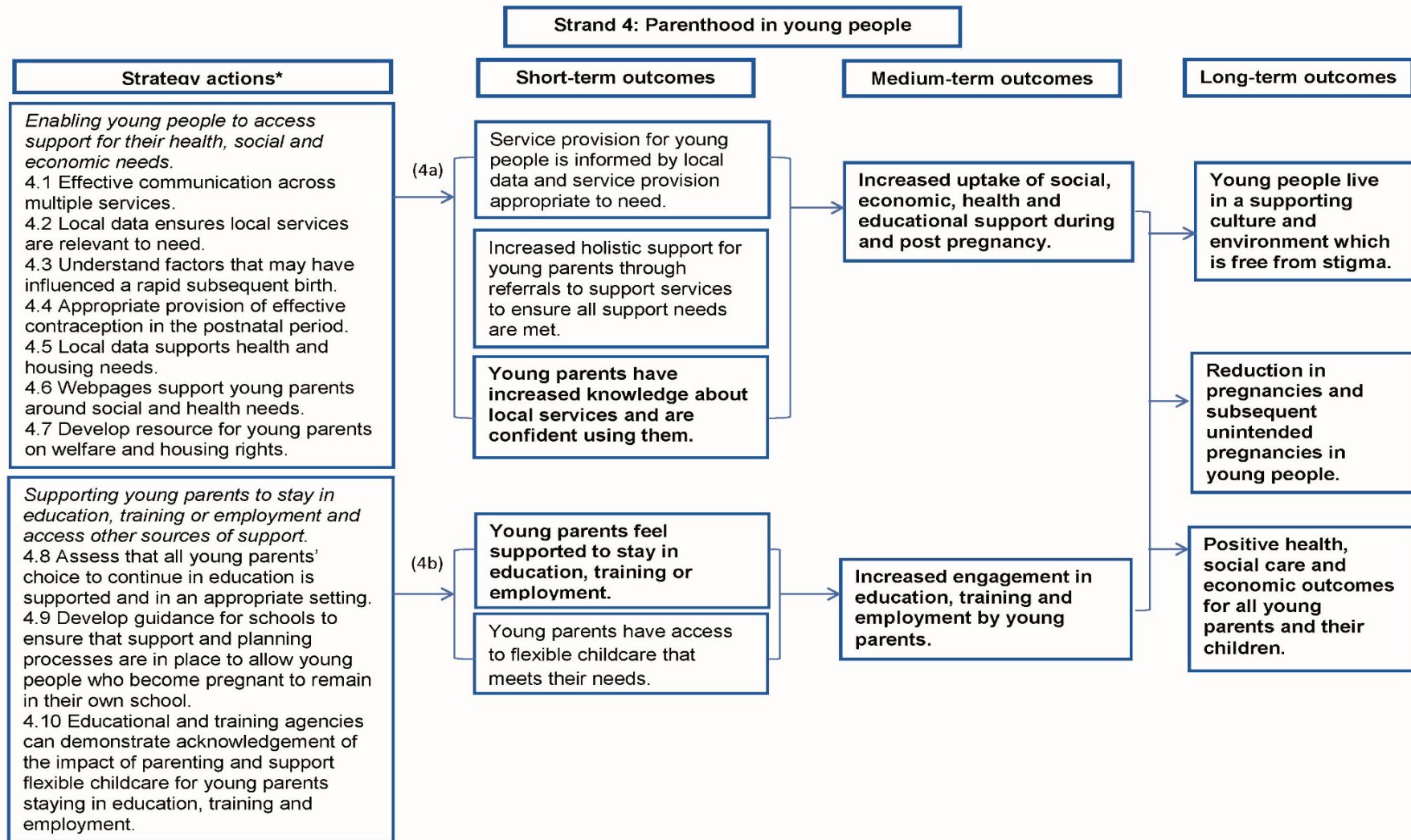
Mental health interventions for adolescents who are pregnant and in the postnatal period should be age appropriate. [NICE Clinical Guideline 28](#) for the management of depression in children and young people provides guidance for depression in young people; however, this does not make specific reference to mental health problems during pregnancy or following the birth of a child.⁶³

There is limited highly processed evidence about effective interventions for perinatal mental health problems experienced by young mothers. A recent review found promising results for treatment and preventative approaches, however the quality of the studies suggests that further research is needed in this area.⁶⁰

Access to contraception following abortion

[NICE Public Health Guidance 51](#) provides recommendations about the provision of contraceptive services for young people in abortion services.⁷

[CMO \(2015\) 19 letter: Health Promoting Health Service: Action in Secondary Care Settings](#) provides targets for the provision of contraception, including LARC, to all women, in particular vulnerable women at risk of poor sexual health outcomes, prior to discharge from abortion services.⁵⁴



* The actions are linked to those outlined in the strategy. The evidence covers a broad range of actions that could also contribute to the outcomes. The outcomes in bold are from the strategic logic model to highlight the links.

Rationale for Strand 4: Parenthood in young people

This section should be read in conjunction with the 'Parenthood in young people' detailed model of the PPYP Strategy Outcomes Framework (page 62). It focuses on supporting young parents to have access to support in order to meet their health, social and economic needs, including taking control of their reproductive health, increasing the spacing of pregnancies, and enabling young parents to stay in education, training and employment. It recognises young fathers and the need for targeted interventions to engage them early in services and support their transition to fatherhood. The actions outlined in the PPYP Strategy to support parenthood in young people are highlighted below. However, the evidence overview covers a broader range of actions which contribute to the outcomes.

Enabling young people to access support for their health, social and economic needs

Link through the outcomes (4a)

The provision of actions and services to understand and meet the health, social and economic needs of young parents will enable services to be more holistic and proportionate to needs, and young parents to have a greater understanding of the local services available and the confidence to use them. This will contribute to greater engagement and uptake of a wider range of services by young people to meet their needs. In the longer term, this will contribute to reductions in subsequent unintended pregnancies in young people and improved health and social outcomes for both the young parents and their children.

Strategy actions

- 4.1 Ensure everyone working with young parents communicates effectively, across multiple services, putting the young parent(s) and their needs at the centre.
- 4.2 Use local data to understand local population and ensure the provision of local services is relevant to the needs of young parents.
- 4.3 Understand more comprehensively the factors that may have influenced a rapid subsequent birth.

- 4.4 Ensure all pregnant women aged under 20 are consulted about their contraception preferences antenatally and that these preferences are provided in the post-natal period.
- 4.5 Local data is used to map if young parents have the health and support they need to secure housing appropriate to their needs.
- 4.6 Agency (national and local) webpages aimed at young people or young parents have information on support for young parents around social and health needs.
- 4.7 Develop a resource for young parents which provides up to date information and support on accessing welfare and includes help and support to understand their housing rights.

Evidence/plausible theory

Summary

Supporting the social, economic and health needs of young parents

- Young parents experience a range of problems in relation to housing, childcare, finances, education, training and employment. Common themes include diverse needs and lack of choice; stereotypes of teenage mothers; reliance on family; consideration of the cost and benefits of education and employment; and continuation of social problems prior to pregnancy.⁹ Actions to meet these needs may contribute to improved life courses for teenage parents.
- A number of actions for social inclusion have been proposed on the basis of the available qualitative and quantitative evidence.⁹
- There is evidence that enhanced home visiting is effective in increasing maternal employment as well as reducing use of welfare, arrests and convictions.^{48, 52, 53}
- There is limited highly processed evidence about the experiences of young fathers and how to effectively and appropriately engage them in services to improve outcomes for themselves, their partners and their children. There is

promising evidence from evaluations of Family Nurse Partnership (FNP) and Sure Start Plus which begin to address this area.^{56, 64}

Support to control reproductive health and pregnancy spacing

- There is strong evidence that Long Acting Reversible Contraception (LARC) is the most effective and cost-effective form of contraception.⁴⁶ NICE Clinical Guidance 30 provides recommendations about the provision of advice and effective contraception in maternity services for young people.³⁵ Chief Medical Officer (2015) 19 letter is a key driver for the provision of advice about effective contraception (including LARC) for women, particularly vulnerable women, prior to discharge from maternity services in Scotland.⁵⁴
- There is evidence that enhanced home visiting beginning antenatally and extending up to 18 months by professionals (such as the Family Nurse Partnership) can reduce rapid repeat pregnancy and births and increase the spacing between first and second births.⁵³ FNP (based on studies of the Nurse-Family Partnership model) can have a range of positive short-, medium- and long-term benefits for mothers and their children, in particular cognitive and language outcomes for children.^{48, 52, 53, 58}
- There is mixed evidence about the effectiveness of community based interventions in reducing repeat pregnancy. Some studies of home visitor programmes and peer support programmes showed a positive impact on reducing repeat pregnancy, while others found no effect on repeat pregnancy. There is evidence from single studies that sibling pregnancy prevention programmes and generic programmes may be effective in preventing repeat pregnancy and subsequent birth.³²
- There is good evidence that intensive care management, a school-based programme delivered by culturally matched social workers as part of a multicomponent intervention, may have a positive impact on reducing repeated pregnancy.³⁶
- There is good evidence that curriculum interventions which include community outreach may be effective in reducing pregnancy rates and some evidence that this may be particularly the case for teenagers who are already parents.³⁶

HIA note:

The reviews of effectiveness of interventions to reduce repeated pregnancy among young mothers under the age of 25 included interventions which target socially disadvantaged young women.

Supporting the social, economic and health needs of young parents

Although teenage parenthood is a positive experience for many young people, it is associated with an increased risk of a range of poor social, economic and health outcomes.⁹ The *Growing Up in Scotland* survey indicates that young mothers have lower qualifications and lower levels of employment than older mums and that this is maintained over time. A greater proportion of young mums in Scotland are in the lowest income quintile, are more reliant on state benefits and credits and live in rented accommodation in the most deprived areas. This remains the case as the child ages. The data also suggests that mums under 25 rated themselves as having poorer physical and mental health than older mums (25 and over).⁶⁵

Holistic services

A review of UK-based qualitative studies found that young parents perceive themselves as experiencing a range of difficulties and challenges in relation to housing, money and benefits, childcare, education and training, and employment and careers.⁹ A number of themes run through these experiences:

- Diverse needs and preferences but a lack of choice
- Struggling against negative stereotypes of teenage mothers
- Heavily reliant on family
- Needing to consider the wider costs and benefits of education and employment
- Continuing to experience the problems they experienced prior to parenthood (including a dislike of school, low expectations, poverty, violence and unhappiness).

Holistic programmes, such as the Sure Start Plus programme, aim to reduce the risk of long-term social exclusion associated with pregnancy and parenting in young people. These types of programmes appear to address many of the needs identified by young people; however the effectiveness of these programmes in terms of improving participation in education, training or employment has not yet been established.⁹ On the basis of the available qualitative and quantitative research the authors proposed a number of potential interventions.⁹ These include:

- Additions to holistic programmes based on the views of young parents:
 - Tailored information and advice about choices for education and training, employment and careers, childcare, money and benefits, and housing
 - Individualised plans for return to education and employment which consider the wider costs and benefits of such a return
 - Specialised services for young parents
 - Advocates to help young parents approach services and/or co-ordinate cross agency support to better match young parents' needs
 - Childcare provision
 - Interventions to reduce domestic violence and improve relationships
- Continued action to tackle social disadvantage and poverty among young people.

A number of interventions to support young parents and foster social inclusion were proposed as 'promising' and worthy of development and testing on the basis of young people's views rather than studies of effectiveness.⁹ These included:

- Anti-discriminatory policy and practice for schools and other professional services
- Reality workers (people who have been through similar experiences) to support young parents
- Creation of viable choices for young parents in terms of housing, education and training, employment and careers, money and benefits and childcare.

Enhanced home visiting

There is evidence from three good-quality trials that the Nurse Family Partnership Programme (known as the Family Nurse Partnership Programme in the UK) has a

range of positive short-, medium- and long-term benefits for both mothers and their children.^{48, 52, 53} For mothers this includes improvements in pregnancy health and behaviour, self-efficacy and reduction in rapid repeat pregnancy. In the longer term the programme was associated with reductions in use of welfare, greater employment, fewer arrests and convictions.

Home visiting programmes are also associated with improvements in some child cognitive outcomes, positive health behaviours and emotional development as well as the prevention of injury. The best outcomes are seen in children of mothers with low emotional intelligence and/or poor mental health.^{48, 52}

The recent findings from the RCT in England found that the programme had no effect on the chosen primary outcomes: maternal smoking; child A&E attendance; birthweight and subsequent pregnancies. It also showed no effects for the control group on these outcomes, who received services as usual. Where the programme did show strong effects was for child outcomes, particularly language and cognitive development.⁵⁸

Actions to support fathers

Fathers play an important role in children's lives and their attitudes and behaviour can have implications (positive and negative) for both the mother and child.¹⁰ A recent mapping of qualitative research exploring the experience of young fathers suggests they have varying attitudes to fatherhood. They often experience difficulties in transitioning to parenthood and may have negative experiences of service provision, perceiving healthcare staff as marginalising and excluding them from decision making during pregnancy and early post-partum.¹⁰

Overall there is limited highly processed evidence about how to effectively and appropriately engage fathers (the partners of teenage mothers) in services to improve outcomes for themselves, their partners and their children. Of particular relevance are two UK studies of reasonable quality.

Findings from the formative evaluation of FNP in England suggest that the programme resulted in good engagement with fathers. The study reported father involvement in at least one session for 50% of those enrolled on the programme.⁵⁶

An evaluation of Sure Start Plus suggests that interventions specifically focusing on fathers may increase the proportion of fathers receiving information about health; advice and provision of contraception; help in giving up smoking; advice about domestic violence, and help about housing issues. However, these findings were not significant and there was no evidence, due to the small sample sizes, of an impact on health or social outcomes.⁶⁴

The evaluation of Sure Start Plus noted that little investment was made initially in work with fathers. This was possibly due to lack of prioritisation among the Sure Start Plus programmes; a perception among staff of a conflict of interest between working with young female clients and young fathers, and a lack of guidance about how to work with young fathers.⁶⁴

The limited available evidence (including qualitative research on the views of young fathers and evaluations of intervention) suggests that there is a need for services to be 'parent friendly' and inclusive of fathers as well as mothers. Personal advisors (recommended as one of the main vehicles of support in Sure Start Plus) offered separately for young mothers and young fathers may help staff avoid conflicts of interest when trying to support both young mothers and fathers – for instance with domestic violence or custody issues. They could also help ensure that the needs of young fathers are not subsumed by the more obvious support needs of young mothers.⁶⁴

Support to control reproductive health and pregnancy spacing

Long Acting Reversible Contraception (LARC)

The majority of unintended pregnancies result from either not using contraception at the time of conception or inconsistent or incorrect use of contraception. There is strong evidence that Long Acting Reversible Contraception (LARC) is more effective

than other forms of contraception. It is more cost-effective than the combined oral contraceptive pill even at one year of use. Intrauterine devices (IUDs), intrauterine systems (IUS) and contraceptive implants are themselves more cost-effective than injectable contraceptives.⁴⁶

[NICE Clinical Guidance 30](#) outlines a range of recommendations for the provision of LARC including the provision of detailed verbal and written information for women to make informed choices about the method they use and how to use it effectively. This information should be relevant to the needs of the individual and, in relation to young women, should be in accordance with child protection issues.³⁵

[NICE Public Health Guidance 51](#) provides recommendations about the provision of contraceptive services for young people in maternity services.⁷

The [CMO \(2015\) 19 letter: Health Promoting Health Service: Action in Secondary Care Settings](#) provides targets for the provision of contraception, including LARC, to all women, in particular vulnerable women at risk of poor sexual health outcome, prior to discharge from maternity service.⁵⁴

Enhanced home visiting

There is evidence that enhanced home visiting beginning antenatally and extending up to 18 months by professionals (such as the Family Nurse Partnership) can reduce rapid repeat pregnancy and births, and can increase the spacing between first and second births.⁵³

Community based programmes

A recent review considered the effectiveness of a range of community based interventions implemented in the USA and Australia to reduce rapid repeat pregnancy in teenagers. These included home visitors, generic multicomponent programmes, sibling interventions and incentive peer support programmes.³²

- There is mixed evidence from three good quality studies that home visiting is effective in reducing teenage pregnancy. Two studies measured repeat pregnancy rate as an outcome, although only one found evidence of a reduction in repeat birth while the other found an increase in school continuation. The programmes were both delivered over 1–2 years by culturally matched home visitors and included parenting skills, adolescent development, contraceptive use and, in one, promotion of school continuation. A third study found a significant improvement in contraceptive use among young women receiving contraceptive advice through structured home visits from midwives. Repeat pregnancy was not measured in this study.
- There is evidence from one good-quality study that a generic multicomponent programme, Pathway teen mother support programme, may be effective in reducing repeat pregnancy. The programme targeted low-income pregnant and parenting teens and included case management, support groups and family discussions, life skills training and leadership development. Young people received a small financial ‘gift’ on completion of the programme.
- There is evidence from one reasonable-quality study that an intervention with siblings of pregnant teenagers may be effective in preventing pregnancy and delaying initiation of sex.
- There is inconsistent evidence from three studies that incentive-based peer support programmes are effective in reducing repeat pregnancy. Two studies, one of the Dollar a Day programme and another of Sisterhood Agenda, found that peer support programmes were effective in reducing repeat pregnancy over five years. However a better-quality study of Dollar a Day found no significant reduction in repeated pregnancy.

School-based programmes

A recent review examined the effectiveness of programmes in educational settings to reduce repeat pregnancy. This included intensive care management programmes and curriculum interventions.³⁶

- There is good evidence from two good-quality studies and one poorer-quality study that a school-based intensive care management programme delivered in the USA provided by culturally matched social workers and targeted at socially disadvantaged pregnant or parenting girls was effective in reducing repeat pregnancy among adolescents. The intensive care management was part of a multi-component intervention which included home visiting, peer education and comprehensive medical care for mother and child. The most recent evaluation of this programme found a significant impact on reducing repeat birth but found no impact on overall contraception use. There is weak evidence from one economic evaluation that the intervention is likely to result in net cost savings; however little detail was provided about the study.
- There is good evidence from three American studies that curriculum interventions which include a community component (such as Teen Outreach and Reach for Health) can be effective in preventing sexual risk behaviour and teen pregnancy (as well as improving educational outcomes – see Strand 3). Two good-quality studies of Teen Outreach found the intervention was effective in reducing rates of pregnancy, the second of which show that this was particularly the case for teenagers who were already parents.

Supporting young parents to stay in education, training or employment and access other sources of support

Link through the outcomes (4b)

The provision of appropriate services and actions to enable young parents to stay in education, training or employment will contribute to them feeling supported to stay in education, training or employment and having increased access to flexible childcare. This in turn will contribute to greater engagement by young parents in education, training and employment and in the longer term this will contribute to improved health and social outcomes for both the young parents and their children.

Strategy actions

- 4.8 Assess that all young parents' choice to continue in education is supported and in an appropriate education setting.
- 4.9 Local Authorities should develop guidance for schools to ensure that support and planning processes are in place to allow young people who become pregnant to remain in their own school.
- 4.10 Educational and training agencies can demonstrate acknowledgement of the impact of parenting and support flexible childcare for young parents who stay in education, training, and employment.

Evidence/plausible theory

Summary

Education/career development and other programmes

- There is reasonable evidence that education and career development programmes, alongside welfare sanctions and bonus programmes, are effective in improving in education and training. However, the former are more effective and may be more appropriate to the needs of young parents. Neither type of programme had a long-term impact on employment rates.⁹
- Education and career development interventions and holistic programmes had a positive but non-significant effect on emotional wellbeing and had a non-significant impact on reducing further pregnancy.⁹
- Holistic programmes address many of the needs identified by young parents; however, the effectiveness of these programmes in terms of improving participation in education, training or employment has not yet been established.⁹

Childcare

- There is evidence that day care for young children is associated with improved prospects of education, training and employment for mothers, including teenage mothers.⁶⁶ The Abecedarian project, an early childhood intervention targeted at teenage parents, was associated with improvements

in high school completion, participation in training and employment as well as a reduction in repeat pregnancy.^{9, 48}

HIIA notes:

The evidence includes a review of the views of young parents, many of whom are experiencing social disadvantage. Reviews of effective interventions specifically include targeted interventions for young people who are socially disadvantaged.

Education/career development and other programmes

A meta-analysis⁹ of six good-quality studies found that education and career development interventions, in addition to welfare sanctions and bonus programmes, are effective in improving participation in education, training and/or employment. However, education and career development programmes appear to be more effective and also have a positive impact on educational attainment. Quality of implementation is particularly important; programmes experiencing implementation difficulties had a smaller impact. There is no evidence that either type of programme had a long-term impact on employment rates. The evidence suggests that focusing solely on educational courses does not improve employment prospects; rather a clear focus on employment and provision of jobs and higher earning for teenage mothers is associated with improved long-term self-sufficiency.⁹

On the basis of the experience and views of young parents, career and educational interventions may be more appropriate to the needs of young people as they improve access to relevant and tailored information and advice about choices, and raise employment and career aspirations of young people. In contrast, welfare sanctions and bonus programmes may be inappropriate, further reinforcing negative stereotypes of young people, ignoring the wider costs and benefits of education and employment in the short term and reducing the level of choice.⁹

Holistic programmes, such as the Sure Start Plus programme, aim to reduce the risk of long-term social exclusion associated with teenage pregnancy and parenting.

These types of programmes address many of the needs identified by young people; however, the effectiveness of these programmes in terms of improving participation in education, training or employment has not yet been established.⁹

Both education and career development interventions and holistic programmes had a positive but non-significant effect on emotional wellbeing. Education and career development programmes, holistic and day-care programmes also show promising effects in terms of reducing further pregnancies, but these effects were not statistically significant.⁹

Childcare

There is review-level evidence that childcare has a positive impact on a mother's education and employment.⁶⁶ An evaluation of the Abecedarian Project, specifically targeted at teenage parents, reported that teenage mothers were more likely to have completed high school; participated in post-secondary training; be self-supportive; be employed; and have jobs that were skilled or semi-skilled. In addition they were less likely to have subsequent children. A second study of a day care provision and professional training programme also found an increase in education and training.⁹

References

1. Scottish Parliament Health and Sport Committee, *Inquiry into teenage pregnancy*. Edinburgh: Scottish parliament; 2013.
www.scottish.parliament.uk/parliamentarybusiness/CurrentCommittees/58031.aspx (accessed 3 June 2015).
2. Scottish Government. *Scottish budget spending review 2007*. Edinburgh: Scottish Government; 2007.
<http://www.scotland.gov.uk/Publications/2007/11/13092240/0> (accessed 3 June 2015).
3. Scottish Parliament. *Children and Young People (Scotland) Act 2014*. Edinburgh: Scottish Parliament; 2014.
4. Baxter S, Blank I, Payne N et al. *A review of the effectiveness and cost effectiveness of contraceptive services and interventions to encourage use of those services for socially disadvantaged young people: views review*. Sheffield: University of Sheffield School of Health and Related Research (SchARR); 2010.
<http://www.nice.org.uk/guidance/ph51/evidence> (accessed 3 June 2015).
5. Owen J, Carroll C, Cooke J et al. School-linked sexual health services for young people (SSHYP): a survey and systematic review concerning current models, effectiveness, cost-effectiveness and research opportunities. *Health Technol Assess* 2010; 14(30).
6. National Collaborating Centre for Women's and Children's Health. *Pregnancy and complex social factors: a model for service provision for pregnant women with complex social factors. Commissioned by the National Institute for Health and Clinical Excellence*. London: Royal College of Obstetricians and Gynaecologists; 2010.
<http://www.nice.org.uk/guidance/cg110/evidence> (accessed 3 June 2015).

7. National Institute for Health and Care Excellence. *NICE Public Health Guidance 51: Contraceptive services with a focus on young people up to the age of 25*. London: National Institute for Health and Care Excellence; 2014. <http://www.nice.org.uk/guidance/PH51> (accessed 3 June 2015).
8. National Collaborating Centre for Women's and Children's Health. *Pregnancy and complex social factors: A model for service provision for pregnant women with complex social factors. Clinical Guideline 110*. Available at: <http://guidance.nice.org.uk/CG110> (accessed 3 June 2015).
9. Harden A, Brunton G, Fletcher A et al. *Young people, pregnancy and social exclusion: A systematic synthesis of research evidence to identify effective, appropriate and promising approaches for prevention and support*. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London; 2006.
10. Trivedi D, Brooks F, Bunn F and Graham M. Early fatherhood: a mapping of the evidence base relating to pregnancy prevention and parenting support. *Health Education Research* 2009; 24 (6): 999–1028.
11. Fullerton D, Burtney E. *An overview of the effectiveness of sexual health improvement interventions: final report*. Edinburgh: NHS Health Scotland; 2010. <http://www.healthscotland.com/documents/4622.aspx> (accessed 3 June 2015).
12. World Health Organization. *Making health services adolescent friendly: developing national quality standards for adolescent-friendly health services*. Geneva: World Health Organization; 2012. http://www.who.int/maternal_child_adolescent/documents/adolescent_friendly_services/en/ (accessed 3 June 2015).
13. Jones L, Bates G, Downing J et al. *A review of the effectiveness and cost-effectiveness of personal, social and health education in secondary schools*

focusing on sex and relationships and alcohol education for young people aged 11 to 19 years: final report. Liverpool: John Moores University Centre for Public Health; 2009.

14. Kirby D. *Emerging answers: Research findings on programs to reduce teen pregnancy and sexually transmitted diseases*. Washington DC: The National Campaign to Prevent Teen and Unplanned Pregnancy; 2007.
<http://thenationalcampaign.org/resource/emerging-answers-2007%E2%80%94full-report> (accessed 3 June 2015).
15. NHS Health Scotland. *Scottish perspective on NICE Public Health Guidance 20: promoting social and emotional wellbeing in secondary education*. Edinburgh: NHS Health Scotland; 2010.
<http://www.healthscotland.com/documents/4037.aspx> (accessed 3 June 2015).
16. Ambresin AE, Bennett K, Patton GC et al. Assessment of youth-friendly health care: a systematic review of indicators drawn from young people's perspectives. *Journal of Adolescent Health* 2013; 52: 670–681.
17. Tylee A, Haller DM, Graham T et al. Youth-friendly primary-care services: how are we doing and what more needs to be done? *Lancet* 2007; 969: 1565–1573.
18. Scott E. *A brief guide to intimate partner violence and abuse*. Edinburgh: NHS Health Scotland; 2015.
<http://www.healthscotland.com/documents/25774.aspx> (accessed 3 June 2015).
19. Reid G, Teuton J. *Outcomes framework for Scotland's mental health improvement strategy*. Edinburgh: NHS Health Scotland; 2012.
<http://www.healthscotland.com/OFHI/index.html> (accessed 3 June 2015).

20. Chin HB et al. The effectiveness of group based comprehensive risk-reduction and abstinence education interventions to prevent or reduce the risk of adolescent pregnancy, human immunodeficiency virus and sexually transmitted infections: two systematic reviews for the guide to community preventive service. *American Journal of Preventative Medicine* 2012; 42(3): 272–34.
21. Goesling B, Colman S, Trenholm C et al. *Programs to reduce teen pregnancy, sexually transmitted infections, and associated sexual risk behaviours: a systemic review*. Washington DC: Department of Health and Human Services Office of the Assistant Secretary for Planning and Evaluation; 2013. <https://aspe.hhs.gov/basic-report/programs-reduce-teen-pregnancy-sexually-transmitted-infections-and-associated-sexual-risk-behaviors-systematic-review> (accessed 3 June 2015).
22. Oringanje C, Meremikwu MM, Eko H et al. Interventions for preventing unintended pregnancies among adolescents (Review). *Cochrane Library* 2009; Issue 4.
23. Wright D, Fullerton D. A review of interventions with parents to promote the sexual health of their children. *Journal of Adolescent Health* 2013; 52 4–27.
24. Jones L, Bates G, Downing J et al. *A review of the effectiveness and cost-effectiveness of alcohol and sex and relationship education for all children and young people aged 5 to 19 years in community settings: final report*. Liverpool: John Moores University Centre for Public Health; 2010. <http://www.nice.org.uk/guidance/gid-phg0/documents/pshe-evidence-review-community2> (accessed 3 June 2015).
25. Toli MV. Effectiveness of peer education interventions for HIV prevention, adolescent pregnancy prevention and sexual health promotion for young people: a systematic review of European studies. *Health Education Research* 2012; 27(5): 904–913.

26. Kim CR, Free C. Recent evaluations of the peer-led approach in adolescent sexual health education: a systematic review. *International Family Planning Perspective* 2008; 34 (2): 89–96.
27. Jackson C, Geddes R, Haw S, Frank J. Interventions to prevent substance use and risky sexual behaviour in young people: a systematic review. *Addiction* 2012; 107 (4); 733–47.
28. Guy J, Feinstein L, Griffiths A. *Early intervention in domestic violence and abuse: full report*. London: Early Intervention Foundation; 2014.
<http://www.eif.org.uk/wp-content/uploads/2014/03/Early-Intervention-in-Domestic-Violence-and-Abuse-Full-Report.pdf> (accessed 3 June 2015).
29. NHS Health Scotland. *Health Scotland commentary on NICE Public Health Guidance 12: promoting social and emotional wellbeing in primary education*. Edinburgh: NHS Health Scotland; 2008.
<http://www.healthscotland.com/documents/2831.aspx> (accessed 3 June 2015).
30. Jones L et al. *A review of the effectiveness and cost-effectiveness of personal, social and health education in primary schools focusing on sex and relationships and alcohol education for young people aged 5 to 11: final report*. Liverpool: John Moores University Centre for Public Health; 2009.
<https://www.nice.org.uk/guidance/GID-PHG0/documents/pshe-evidence-review-primary-education2> (accessed 3 June 2015).
31. Blank L, Payne, N, Guillaume L et al. *A review of the effectiveness and cost-effectiveness of contraceptive services and interventions to encourage use of those services for socially disadvantaged young people: services and interventions in healthcare settings*. Sheffield: University of Sheffield School of Health and Related Research (SchARR); 2010.
<http://www.nice.org.uk/guidance/ph51/evidence> (accessed 3 June 2015).

32. Blank L, Payne, N, Guillaume L et al. *A review of the effectiveness and cost-effectiveness of contraceptive services and interventions to encourage use of those services for socially disadvantaged young people: services and interventions in community settings*. Sheffield: University of Sheffield School of Health and Related Research (SchARR); 2010.
<http://www.nice.org.uk/guidance/ph51/evidence> (accessed 3 June 2015).
33. Naranbhai V, Abdool Karim Q, Meyer-Weitz A. Interventions to modify sexual risk behaviours for preventing HIV in homeless youth (Review). *The Cochrane Library* 2011, Issue 1. Cochrane Collaboration; 2011.
34. Coren E, Hossain R, Pardo Pardo J et al. Interventions for promoting reintegration and reducing harmful behaviour and lifestyles in street-connected children and young people (Review). *The Cochrane Library* 2013 Issue 2. Cochrane Collaboration; 2013.
35. National Institute for Health and Care Excellence. *Long-acting reversible contraception: NICE Clinical Guideline 30*.
<http://www.nice.org.uk/guidance/cg30> (accessed 3 June 2015).
36. Blank L, Payne, N, Guillaume L et al. *A review of the effectiveness and cost-effectiveness of contraceptive services and interventions to encourage use of those services for socially disadvantaged young people: Services and interventions in educational settings*. Sheffield: University of Sheffield School of Health and Related Research (SchARR); 2010.
<http://www.nice.org.uk/guidance/ph51/evidence> (accessed 3 June 2015).
37. Mason-Brooks AJ, Crisp C, Momberg M et al. A systematic review of the role of school-based healthcare in adolescent sexual, reproductive, and mental health. *Systematic Reviews*: 2012; 1(49).
38. Swann et al. *Teenage pregnancy and parenthood: a review of reviews*. London: Health Development Agency; 2003.

39. The Scottish Government. *The Healthcare Quality Strategy for NHS Scotland*. Edinburgh: The Scottish Government; May 2010.
<http://www.gov.scot/Resource/Doc/311667/0098354.pdf> (accessed 3 June 2015).
40. The Marmot Review. *Fair society, healthy lives: the Marmot review*. London: The Marmot Review; 2010.
<http://www.instituteofhealthequity.org/projects/fair-society-healthy-lives-the-marmot-review> (accessed 3 June 2015).
41. Beeston C, McCartney G, Ford J et al. *Health inequalities policy review for the Scottish Ministerial Task Force on Health Inequalities*. Edinburgh: NHS Health Scotland; 2014.
<http://www.healthscotland.com/documents/23047.aspx> (accessed 3 June 2015).
42. McIntyre S. *Inequalities in health in Scotland: what are they and what can we do about them?* Occasional paper No. 17. Glasgow: MRC Social and Public Health Sciences Unit 2007.
<http://www.scotpho.org.uk/comparative-health/health-inequalities/key-references-and-evidence> (accessed 3 June 2015).
43. Elliot L et al. *Evaluation of Healthy Respect phase two: final report*. Edinburgh: NHS Health Scotland; 2010.
<http://www.healthscotland.com/scotlands-health/evaluation/programme/evaluation-respect-2.aspx> (accessed 3 June 2015).
44. Biehal N et al. *The Care Placements Evaluation (CaPE) Evaluation of Multidimensional Treatment Foster Care for Adolescents (MTFC-A)*: Research report. London: Department of Education; 2010.

<https://www.gov.uk/government/publications/the-care-placements-evaluation-cape-evaluation-of-multidimensional-treatment-foster-care-for-adolescents-mtfc-a> (accessed 3 June 2015).

45. National Institute for Health and Care Excellence. *NICE Public Health Guidance 28: Promoting the quality of life of looked-after children and young people*. London: National Institute for Health and Care Excellence; 2010.
<http://www.nice.org.uk/guidance/PH28> (accessed 3 June 2015).
46. National Collaborating Centre for Women's and Children's Health. *Long-acting reversible contraception: the effective and appropriate use of long-acting reversible contraception (update 2013)*. Commissioned by the National Institute for Health and Clinical Excellence. London: RCOG Press; first published 2005.
<http://www.nice.org.uk/Guidance/CG30/Evidence> (accessed 3 June 2015).
47. National Institute for Health and Care Excellence. *NICE Public Health Guidance 6: Behaviour change: the principles for effective interventions*. London: NICE; 2007.
<http://www.nice.org.uk/guidance/ph6> (accessed 3 June 2015).
48. Geddes R, Haw S, Frank J. *Interventions for promoting early child development for health: an environmental scan with special reference to Scotland*. Edinburgh: Scottish Collaboration for Public Health Research and Policy; 2010.
http://www.scphrp.ac.uk/wp-content/uploads/2014/03/1454-scp_earlyyearsreportfinalweb.pdf (accessed 3 June 2015).
49. Edinburgh Youth Work Consortium and the University of Edinburgh. *Universal youth work: a critical review of the literature*. Edinburgh: Youth Work Consortium; 2015.

50. Wilson S et al. Dropout prevention and intervention programs: effects on school completion and dropout among school aged children and youth. *Campbell Systematic Reviews*: 2011: 8.
51. Maynard BR et al. Indicated truancy interventions: effects on school attendance among chronic truant students. *Campbell Systematic Reviews*: 2012: 10.
52. Scott E. *Briefing on the Family Nurse Partnership*. Edinburgh: Health Scotland; 2013.
<http://www.healthscotland.com/documents/6089.aspx> (accessed 3 June 2015).
53. Family Nurse Partnership National Unit. *FNP evidence summary leaflet*. London: Department of Health; 2011.
<https://www.gov.uk/government/publications/evidence-base-for-family-nurse-partnership-fnp> (accessed 3 June 2015).
54. CMO letter (2015) 19. *Health Promoting Health Service: action in secondary care settings*. Edinburgh: Scottish Government; 2015.
[http://www.sehd.scot.nhs.uk/cmo/CMO\(2015\)19.pdf](http://www.sehd.scot.nhs.uk/cmo/CMO(2015)19.pdf) (accessed 3 June 2015).
55. Scott E, Woodman K. *Antenatal health inequalities: a rapid review of the evidence: final report*. Edinburgh: NHS Health Scotland; 2010.
<http://www.healthscotland.com/documents/4919.aspx> (accessed 3 June 2015).
56. Barnes J, Ball M, Meadows P et al. *Nurse-Family Partnership Programme: first year pilot sites implementation in England. Pregnancy and post-partum period*. London: Department for Children, Schools and Families; 2008.
<http://fnp.nhs.uk/research-and-development/published-research> (accessed 3 June 2015).

57. Martin C, Marryat L, Miller M et al. *The evaluation of the Family Nurse Partnership programme in Scotland: phase 1 report – intake and early pregnancy*. Edinburgh: Scottish Government Social Research; 2011. <http://www.gov.scot/resource/doc/355013/0119868.pdf> (accessed 3 June 2015).
58. Robling M et al. Effectiveness of a nurse-led intensive home-visitation programme for first-time teenage mothers (Building Blocks): a pragmatic randomised controlled trial. *The Lancet* 2016; 387 (10014): 146–155. [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(15\)00392-X/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)00392-X/abstract) (accessed 3 June 2015).
59. Young Scot. *Co-design the Teenage Pregnancy and Young Parent Strategy*. (Young Scot draft for consultation). Edinburgh: Young Scot; 2015.
60. Lieberman K, Huynh-Nhu L, Perry DF. A systematic review of perinatal depression interventions for adolescent mothers. *Journal of Adolescence* 2014; 37 (8): 1227–1235.
61. National Collaborating Centre for Mental Health. *Antenatal and post-natal mental health. The NICE guidance on clinical management and service guidance: update edition*. Commissioned by National Institute for Health and Care Excellence. The British Psychological Society and The Royal College of Psychiatrists: 2014.
62. National Institute for Health and Care Excellence. *NICE Clinical Guidance 192: Antenatal and postnatal mental health: clinical management and service guidance*. London: National Institute of Health and Care Excellence; 2014. <https://www.nice.org.uk/guidance/cg192> (accessed 3 June 2015).
63. National Institute for Health and Care Excellence. *NICE Clinical Guidance 28: Depression in children and young people: identification and management in*

primary, community and secondary care. London: National Institute of Health and Care Excellence; 2005.

<http://www.nice.org.uk/guidance/cg28> (accessed 3 June 2015).

64. Wiggins M, Rosato M, Austerberry H et al. *Sure Start Plus National Evaluation: Final report*. London: Social Science Research Unit Report, Institute of Education: 2005.

65. Bradshaw P, Schofield L and Maynard L. *The experiences of mothers aged under 20: analysis of data from the Growing Up in Scotland study*. Edinburgh: ScotCen Social Research; 2014.

<http://growingupinScotland.org.uk/publications> (accessed 3 June 2015).

66. Zoritch B, Roberts I, Oakley A. Day care for pre-school children. *The Cochrane Library*; 2000, Issue 2.

