Stakeholder perceptions to present electronic transfer of prescription (ETP) models

Darren Mundy, David W. Chadwick, Ed Ball ISI, University of Salford, Salford, M5 4WT

Keywords

ELECTRONIC TRANSFER OF PRESCRIPTIONS (ETP), FOCUS GROUP, HYPOTHESES, PRIVACY, CONFIDENTIALITY.

### **Abstract**

This article summarises the findings of five focus group sessions discussing the Electronic Transfer of Prescriptions (ETP), held in 2003 at Salford and Huddersfield Universities. The aim of this evaluation was to ascertain the views of the stakeholders towards the introduction of ETP and views on existing ETP pilot models. The eight hypotheses identified as most important from the findings [1] are described.

## 1. Introduction

The UK Government plans for the introduction of a system for the Electronic Transfer of Prescriptions (ETP) within the National Health Service (NHS) by 2004 [2]. A research project has been in place since 2000 at the University of Salford, to design an ETP system for implementation within the NHS [3]. In addition to this research project three commercial consortiums have also designed models for ETP [4]. However, what are the reactions of stakeholders to the models?

During the first quarter of 2003, five stakeholder focus groups were held at Salford and Huddersfield Universities. The objectives of these focus groups were to: discover the views of the participants to the Salford ETP model and other pilot models; to ascertain their views towards the implementation of ETP; and to identify underlying hypotheses to stakeholder responses.

Here we summarise the eight most important hypotheses identified in the focus group sessions. The intention is to help the NHS in the understanding of what stakeholders would like to see from the introduction of any ETP system and identify stakeholder perceptions to current models.

## 2. The hypotheses

2.1 Stakeholders are worried about the impact of systems using directed prescriptions.

In four out of the five focus group meetings stakeholders expressed concerns about the introduction of electronic prescriptions 'directed' straight to a pharmacy. The NHS pilot models and the Salford model all contain some form of directed prescription either in just the repeat process or in acute prescribing as well. Comments from stakeholders included:

"I wouldn't want prescriptions directed at all, that's it they are there. That doesn't seem any benefit whatsoever"

"[Pharmacists are] just going to lose touch with patients"

"No contact you know with patients cause at the moment that's what we thrive on"

2.2 Patient choice is valued and should be fundamental in the NHS's choice of which ETP system to use.

In a number of the focus groups patient choice was mentioned with many of the stakeholders viewing patient choice as important. In the comments made on patient choice two issues arose.

- ?? Timing of patient choice For acute prescriptions many of the focus group attendees believed that patient choice (over which pharmacy to go to) should remain even after consultation. "Still gives the patient the benefit of taking the prescription to wherever he decides, which I think is important".
- ?? Continued patient choice For example when a pharmacy is out of stock patients should still have the option of going to a different pharmacy. Other scenarios mentioned by stakeholders included patients choice not to have a prescription dispensed and alteration of where patients wished to get their prescriptions from in a directed prescription system.
- 2.3 Stakeholders would not be happy to lose present system workarounds, which they use in abnormal situations.

In the present paper based prescription-processing system there are workarounds in place to get around problems that occur at the pharmacy. For example; "you'd got drops and the Dr meant to say use an ointment" or "What about the situation where we 'loan' drugs to patients to get over the Christmas period." The situations mentioned above would still occur in an ETP system because they are human generated errors rather than technology related. The question is what procedures will be put in place to cope with them? The requirement therefore is for a flexible ETP system.

2.4 A system for the automatic checking of patient exemptions, such as the one found in the Salford system [5], is required for the future success of ETP.

One of the dominant issues to come out of the focus group sessions, were stakeholders attitudes towards dealing with patient exemption in an ETP system. In an ETP system there should be no need to send batched prescriptions to the Prescription Pricing Authority (PPA). However, for this to occur there must be an electronic exemption checking mechanism in place.

2.5 Patient privacy and prescription confidentiality is important and should be safeguarded or improved upon in the move towards an ETP system.

In all focus groups stakeholders recognised the value of patient privacy and prescription confidentiality and were concerned about how an ETP system would affect this. The security of the system was discussed in detail with items raised such as "how ETP systems would deal with duplicate prescriptions?", "What about where GP's share their passcodes with their secretaries for repeat prescriptions" and a perceived lack of confidentiality in the present system. The Salford system for privacy protection [6] was largely regarded as being a strong option for ETP.

2.6 Pharmacists require significant payback from the implementation of ETP if they are going to be expected to fund the transition from paper practices.

Funding was mentioned as a major issue by many of the pharmacy stakeholders. The question they had was who was going to be funding the transition to ETP. The implications that can be made from the analysis of the focus group data are stakeholder groups will only fund the transition, if they can obtain significant benefits from ETP or they face losses by not having it. "if (ETP) is going to happen then I think there should be some payback"

2.7 Having the prescription in paper format is still seen by stakeholders as important even with the introduction of ETP.

Stakeholders believed that a form of paper prescription token would still be required in any ETP system for a number of reasons.

- ?? Consultation Without paper it was noted that, "You'd never get them out the door then"
- ?? Third party collection From a performance aspect transcribing third party name and address details from a written form would be far quicker and more ergonomic than from verbal conversation.
- ?? Exemption checking to deal with exceptional circumstances
- ?? Staged implementation Whilst ETP is being rolled out and made applicable in all circumstances e.g. use in home visits.
- ?? System unavailability As a backup system
- 2.8 Stakeholders believe government targets for the implementation of ETP are too optimistic and should be more realistic.

All of the stakeholders who gave their views about the present government targets towards the integration of ETP in the NHS believed them to be "optimistic" or not realistic at all. Evidence for their reasoning about government targets can be found throughout the focus groups, with widespread concern about funding the transition to ETP and views on the success of the 3 UK pilots.

## 3. Concluding remarks

From the focus group findings it can be stated that stakeholders are extremely concerned about the effect ETP will have on their lives and the lives of their patients. Stakeholders are worried that the introduction of ETP will result in decreased market share (with the introduction of directed prescriptions), reduced flexibility in procedures and patient choice, increased workload, information security fears and poor electronic system availability. However, stakeholders also express a general attitude that if ETP is implemented in line with their requirements then there is the potential for improved patient care, increased system security and reductions in workload (especially in repeat prescriptions).

# 4. Acknowledgements

This research was funded by the UK EPSRC under grant number GR/M83483. The authors would also like to thank Entrust Inc and Dr. P. Marsden, D. Bell, J. E. Whatley, P. Sobreperez and J. New for their contributions.

## 5. References

- [1] Mundy, D.P, Chadwick, D.W, Ball, E, Marsden, P, Bell, D, Whatley, J.E, Sobreperez, P, New, J, "Towards Electronic Transfer of Prescriptions (ETP) in the United Kingdom National Health Service Stakeholder Evaluation of ETP Pilots", accepted for the 3<sup>rd</sup> International Conference on The Management of Healthcare and Medical Technology, Warwick, 7-9 September 2003
- [2] NHS, "The NHS plan a plan for investment a plan for reform", Presented to Parliament by the Secretary of State for Health, Available at http://www.nhs.uk/nationalplan/nhsplan.htm, (February 21 2002)
- [3] PPA ETP Pilot Descriptions, http://www.ppa.org.uk/news/consortia.htm
- [4] Mundy, D.P. and Chadwick, D.W., "A System for Secure Electronic Prescription Handling", Second International Conference On The Management Of Healthcare And Medical Technology On: The Hospital of the Future Bringing Together Technology, Health Care and Management., Stuart Graduate School of Business, Center for the Management of Medical Technology, Illinois Institute of Technology, Chicago, Illinois, USA, July 28-30, 2002.
- [5] Chadwick, D.W. and Mundy, D.P., "Policy Based Electronic Transmission of Prescriptions", Proceedings of the IEEE 4<sup>th</sup> International Workshop on Policies for Distributed Systems and Networks, Como, Italy, June 4-6, 2003
- [6] Ball, E., Chadwick, D., Mundy, D.P., Digital Patient Privacy in the Electronic Transfer of Prescriptions, *IEEE Security and Privacy Magazine*, Mar/Apr 2003, pp. 77-80