

British Computer Society Disability Group

International (Standing) Conference on Assistive Technologies

DIRECT ELECTRONIC PATIENT DATA ENTRY WORKSHOPS Sept/Oct 2004

1. Report of meeting 30th September 2004

A small group of representatives from the BCS's Disability Group, Beneficiaries of The Thalidomide Trust and other members of the ICAT Alliance met with Professor John Bachman, Department of Family Medicine Mayo Clinic College of Medicine, USA , Dr Alan Wenner, Vice President, Clinical Systems Design Primetime Medical Software, USA and Dr Richard Sills, PPS Limited (a former GP) to discuss the concept of giving patients of both primary and secondary care health organisations the facility to conduct the history taking parts of consultations with health professionals in advance of any physical examination.

This was seen as being of potential benefit to groups of people for whom mobility and thus travel to a particular venue e.g as hospital or surgery could present difficulty. Therefore, the idea was that disabled people , or the elderly or infirm, could benefit from being able to communicate electronically with a clinician.

On the other side of the coin, clinicians would be able to reduce the amount of non-productive time spent during a consultation and, the evidence from places where this approach is in use is that the quality of information gained from patients is much higher because people seem to be more inclined to answer more questions more fully when able to do so without a time constraint of a few minutes, and, seem to be happier and more confident when interacting with a screen based questionnaire rather than face to face.

The outcome of this was that clinical intervention - history taking, diagnosis, treatment, care etc. - would be more accurate and more successful, thus leading to a better quality of outcome for the patient.

The purpose for the day was to explore and discuss these hypotheses and determine what input some of the participants might make in a subsequent event being in collaboration with the NHS in England's National Programme for IT on the following day.

The workshop received presentations from Professor Bachman and Dr Wenner relating to their experiences in running such systems for real in their practices in the USA. They were followed by Dr Sills, who demonstrated a system called Instant Medical History (IMH) which was available commercially in the UK, but which had not so far excited the interest

of many UK health organisation or individual clinicians. However, it was hoped that by addressing the issues from the patients' perspective, it might be possible to influence health providers - and it was seen as an important area where IT could assist disabled people with access to healthcare services.

The wide ranging and spirited discussion which followed the presentation may be summarised as confirming that if this facility was to be made generally available in the UK then it would certainly be of great benefit to disabled people and others with issues of mobility, geography etc. Therefore, the conclusion was that the above message should be taken to the meeting the following day and repeated with some emphasis.

2. Report of meeting 1 October at the Institute of Directors, London

This report is taken from a draft report prepared by Dr J A Muir Gray, Director of the NHS National electronic Library for Health, NHS National Knowledge Service, but which has not yet been published widely. It relates to the workshop which followed our ICAT event.

Provenance

This meeting was organised by Dr Richard Sills, PPS Limited, Professor Jeremy Wyatt, City University, London and Dr Muir Gray. It was funded by the National Programme for IT as part of the project to help clinicians adapt to the challenge that will arise from the introduction of computers to clinical practice, recognising that only about 50,000 of the 450,000 professionals who do see patients currently use computers in the consultation.

Two interlinked projects are being funded by the National Programme for IT:

1. the Computer in the Consultation Training Project;
2. the Extended Consultation Development Project.

In the former training resources are being developed to allow those responsible for managing clinical staff to organise training on the job to help them make the best use of the computer screen and to minimise the adverse impact on clinician/patient communication. The aim of the second is to explore ways in which the National Programme for IT can reduce the pressure on both clinicians and patients in the consultation.

These two projects are linked with projects to help clinicians develop and improve their skills of evidence-based and value-based decision-making, and of sharing responsibility for decisions and actions with patients.

Following a presentation made to the Benefits Realisation and Clinical Engagement Team, a decision was made to support this workshop because of the contribution that patient data entry could make to the reconciliation of the conflicting pressures listed below:

- the growing, and appropriate, demand from patients for increased information and involvement in decision-making;

- the increased time that consultations using computers will take in the short term;
- the lack of additional time within consultations in primary and secondary care;
- the need for more effective communication, history-taking, and recording for clinical effectiveness, patient safety, and clinical governance.

The workshop

Particular concern was taken to invite people from groups whose disabilities might make patient data entry difficult. It is important to emphasise that the patient groups represented people with physical disabilities. The problems faced by people who did not have access to the World Wide Web or digital television, or who could not use that access because of cultural, educational or linguistic barriers, was identified as being of crucial importance, but representatives of patients with these characteristics were not specifically targeted for invitation to the workshop.

The key points that arose from the programme are discussed below.

The problems of the present system

It was recognised that because of the time required to meet appropriate patient expectations for information and involvement being greater than the time available, innovation was required to meet these appropriate demands.

The present situation had many weaknesses and deficiencies

This emphasises that face-to-face communication is often incomplete and inaccurate. Furthermore, the time pressures on clinicians are so great that they frequently have to interrupt patients with the result that data collection is incomplete and care substandard.

The evaluation of patient data entry reveals certain common findings:

- the approach is widely acceptable; more than 90% of patients are able to complete the patient data entry, or have someone whom they trust complete it on their behalf;
- patients find the experience rewarding;
- more data are collected than can be collected in face-to-face consultations and these data can be analysed to identify key positive findings;
- the availability of the outputs of patient data entry changes the nature of the consultation, which requires much less time for gathering information and much more time for agreeing the key problems, planning action, and information giving;
- although further research is needed, the consensus of the meeting, emphasised most strongly by patient representatives, was that this technology was of proven value and should be made available as soon as possible;

- the only reason that research ethics committees might need to be involved would be if patient identifiable data were being moved out of the practice or hospital service in which they had been collected for the purpose of further analysis;
- the basic concept of patient data entry was regarded as being of proven value and did not need to be considered by local or multicentre research ethics committees unless some additional research protocol was being run in parallel; however, it was also emphasised that, like any health service, a system of evaluation should be set up when the service was introduced to allow quality improvement;
- to maximise the benefits of patient data entry it was necessary to re-engineer the process of consulting and clinical communication between patient and clinician.

If the physical environment in which clinical practice takes place were to be changed, the following style of practice could be undertaken:

- all patients expected to carry out patient data entry before seeing a clinician; in practice over 90% could complete this accurately and quickly;
- all dictation to be completed before the patient left the healthcare facility;
- the paper print-out of both the data entry and the consultation could be immediately given to the patient;
- this system should be linked with all other knowledge transfer and management initiatives, for example NeLH, Choose and Book and Myhealthspace.

The evidence base

The evidence base for the points listed above was not only provided by the speakers at the workshop. It is also recorded in the paper by Professor Bachman [which was circulated to participants prior to the meeting] and his conclusions are reinforced by the systematic review conducted at the Royal Free Hospital with the support of Professor Wyatt.

The next steps

Discussion needs to take place with the National Programme for IT.

The barriers to effective and efficient patient data entry need to be explored in projects in defined local health communities, preferably linked to the Choose and Book initiative.

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3. OUTCOMES FROM BOTH EVENTS

The points and issues identified by the ICAT representatives were given a good hearing by the health professionals, managers and policy makers, and we came away with the understanding that previous work done in this area would be synthesised and incorporated into a national pilot programme in the NHS. However, we have yet to see any evidence of this happening, but, given the current political and operational changes with which the NHS in England and the DH are wrestling currently, that should not be much of a surprise to anyone.

What we, within the ICAT Alliance, should perhaps consider now is if some further work might be necessary to give this subject a new impetus? Recipients may care to consider how best to do this, either via their own organisations or collectively via the ICAT Alliance?

The BCS Disability Group will be considering if we should revisit the topic and if so how. Perhaps via another workshop, with the intended aim of establishing what has been done, what is being done, and what will be done nationally during 2005 to implement a programme of direct electronic patient data entry - by patients, in both primary and secondary care health organisations.

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