HC2009: An Interesting Diversity of Events

Conference Report

Rita Arafa, Committee Member Health Informatics (Northern) Specialist Group

Introduction

This was my first visit to the HC2009 and I felt very fortunate that the BCS had given me the opportunity to attend the full three days of the event. I wasn’t sure what to expect, but having read the programme on the website, my hopes were high and I had been looking forward to seeing and talking to an interesting variety of speakers and delegates. I wasn’t disappointed.

Like the speakers and sessions at HC2009, my background is also quite varied; I started my working life in an NHS Dental Practice, lived abroad for a number of years and returned to the UK where I gained a BSc (Hons) in Information Systems. It was while I was at University that I first joined the BCS as a student member. As part of my degree, I spent a year in the IT Dept of Macclesfield District Gen Hosp and I went to work there after graduating. Due to lack of funding, continued employment at the hospital could not be guaranteed and I left to go and work in the private sector for a number of years, latterly working for a software house as the manager of a team of systems analysts. Just over four years ago I took the opportunity to return to the public sector as a Senior Business Analyst working for NHS Connecting for Health on the Dental IT Programme. Since then I have worked for a number of years on the Choose and Book programme and I now work for Information Governance.

For this reason my interest in HC2009 was also not focused on any one particular subject and as on each day a number of talks and presentations ran in parallel, I sometimes had difficulty deciding which session to attend and which ones I would have to miss.

I have summarised below the sessions that I did attended.
Tuesday 28th April 2009

Opening Session 10am

Opening remarks and chairman: Dr Glyn Hayes
Dr Glyn Hayes welcomed us all to HC2009 and he informed us that this year the format had changed slightly. For 2009 the conference and exhibition was altogether, with the emphasis on being more interactive and with more showcase events.

IT – master or servant?

Alan Pollard, President, BCS
Alan Pollard informed the audience that he has been associated with IT in the public sector for more years than he can remember and he has learned from bitter experience that IT can be the fall guy for any public failure. The things that go right do not make news.

Dramatic advances have been made in NHS IT e.g. PACS. Alan told the audience that they can be very proud of what they have achieved already and that they should have every confidence in what they can deliver over the coming years.

Alan said it is time to stand up for IT, that IT is an enabling tool which is our servant and never our master. He used the analogy of a person using a garden Strimmer in bare feet and hurting themselves or a Black and Decker drill and drilling through a pipe – it is not the fault of the equipment if the person uses it incorrectly. Likewise, it is not the fault of IT systems if people misuse them, but should we apply cautionary notes to our IT systems in the same way as Black and Decker does?

The number of projects that failed from IT alone is 4%. IT professionals must work beside many other disciplines such as training, documentation and must ensure that realistic funding is secured. They must oversee the procurement process and they must stand up and be counted if these criteria are not met.

The National Programme for IT – what next?

Christine Connelly, Chief Information Officer, Department of Health
Christine Connelly worked for Cadbury Schweppes and BP before taking her current post with the Department of Health. Her talk was delivered enthusiastically and she engaged with the audience by not standing behind the dais, but by walking to the front of the stage and confidently speaking without any notes.

She informed us that her role is to maximise the benefit of IT in all of the NHS and to do this she needs to engage with users and get their feedback. NPfIT is not only about IT. The Secretary of State said NPfIT is wholly about improving the benefits to the patient, supporting better, safer patient care and improving the patient experience. £90 million was spent last year and the
NHS employs 1.3 million people. Only the Chinese Army, India Railway and Wal-Mart employ more! More than half the population of Britain engages with the NHS every day.

Successes include PACS. Britain is the first G8 country to implement a digital imaging and scanning system such as this. Choose and Book handles 52% of all referrals – but the media never says “another successful day in the NHS”.

We need to look at what has gone well and what we can do better, asking the question “If we were to do it again, what would we do differently”. We also need to be aware of changes in IT.

The intention is to facilitate the use of IT systems around the NHS, but decisions on use can be made locally. We are introducing flexibility on how we deploy systems in the NHS.

Christine said “We will be working closely with the NHS and our current suppliers to improve the pace of delivery. If we don’t see significant progress by the end of November 2009, then we will move to a new plan for delivering informatics to healthcare. The potential for informatics to improve the quality of services for patients is enormous, and I want to ensure that what we are doing is in the best interests of patients, as well as the system.”

Christine then opened the meeting to the floor for questions. Questions were asked regarding the risk to patient safety, an update on procurement in the South of England, consistency across systems, data and technical standards and whether solutions were going to have an Open Source toolkit.

Christine assured everyone that patient safety will not be compromised, so we have to be careful that we maintain a protective level. A distinction must be made between local configuration and structural change. The NHS will be encouraged to do the former and not allowed to do the later. Data standards will be compatible not standardised.

**Stream 2, Queens Suit 2. Using IT to improve clinical practice. Part 1: How IT can make a difference in delivering clinical care?**

**How IT can make a difference to clinical care?**

*Dr Mike Bainbridge, Clinical Architect, NHS CFH*

Mike’s first slide was headed “Are we nearly there yet?” and he began by saying that we have been building on a number of different policies over the years and as Christine Connelly said, “This is not an IT programme, but a programme to improve patient care”.

The size of the problem is that a large amount of money is being spent but the future is that the sky is falling in. We have an aging population; the Baby-Boomers are turning into a chronically ill generation with a smaller number trying to provide patient care. None of us spend enough money on the NHS; the Wanless Report said that we should spend 4% of the total health budget
on IT to make a difference. We also have to have better and more stringent
standards. Back in 1998 Mike looked at what the future might hold in 10 years
time which included patients accessing information and information sharing.
That vision was not far off, although he had not realised how commonplace
the use of computers would be in private homes (he envisaged that people
would access information using the TV). Now we have to balance privacy – on
one side absolute privacy i.e. only sharing with record maker, against
absolute medical safety i.e. a patient’s record being available to anyone who
is involved in that patient’s care. This issue has still not been resolved.

Mike then talked about Standardisation:

There is always a conflict between a pragmatic approach and having strategic
standards. We could save half a billion pounds by getting the prescribing of
medication error free. 1 in 16 hospital admissions are due to adverse drug
reactions. Large amounts of litigation payouts are made because a full
medical record could not be found.

There are enough coding standards existing in the world – we don’t need to
invent any more. 189 companies worldwide are joining up to a continual
alliance so that their hardware will become interoperable.

All the Royal Collages have got together to agree professional standards for
admissions, discharges and handover of patients.

The NHS Common User Interface (CUI) Programme (www.cui.nhs.uk) is
going to make rational standards that most people all around the world will be
picking up.

There needs to also be standards in prescribing in GP systems and
secondary care.

Mike closed with the following quote from Elizabeth Blackwell, who was the
first woman doctor in the United States:

“We are not tinkers who merely patch and mend what is broken—we must be
watchmen, guardians of the life and health of our generation, so that stronger
and more able generations may come after”

International Standards for the evaluation of IT systems in healthcare –
the new STARE-HI standard.

Prof Michael Rigby, Professor of Health Information Strategy, School of
Public Policy and Professional Practice, Keel University
Prof Rigby talked about the importance of evaluating all Healthcare IT
systems and he gave the following rational for evaluation:

- Healthcare should be evidence based
- New treatments must be evidence based
- New products and clinical technology must be evidence based
Health Informatics Systems are intended to aid (patient care)
Health Informatics is as important as drug trials and clinical intervention. Evaluation underpins investment and clinical use and clinicians are more likely to have confidence in a Healthcare IT system if they can see evidence that it has been thoroughly evaluated.

The evidence base needs to be credible, accessible, comparable and scientific.

- Evaluation should be an ethical imperative
- Evaluation should be sufficiently funded
- Evaluation should be free from pressure
- Evaluation should be grounded in scientific theory

The Alliance for Clinical Excellence was formed during the Healthcare Information Management Systems society (HIMSS) Healthcare IT conference in Feb 09 in Kuala Lumpur. That meeting included representatives from vendors, members of academia and policy makers. Prof Rigby said that today, 26th April, there is a teleconference being held on how to take this initiative forward and get it off the ground.

The Impact of eHealth on the quality and safety of healthcare.

Aziz Sheikh, Professor of Primary Care Research & Development Centre, Population Health Sciences: GP Section, University of Edinburgh

Aziz opened his talk by stating that we have an increasing population and increasing incidents of obesity.

He asked the question "How hazardous is Healthcare?"

The R&D Centre was asked to look internationally and critically appraise NHS policies for electronic patient records etc.

Aziz asked, "What is eHealth?" He then went on to say there is no single definition and it can be all or any of the following:

1) Central storage and management of data
2) Functionality that supports decision making
3) Delivering Healthcare.

He said that the centre then started profiling Connecting for Health but they had difficulty in identifying documentation as there are no standard keywords which can be used in online searches. The searches covered documentation produced over a 10 year period and the research was quantitative rather than qualitative.

Of Electronic Patient Records, the one consistent recorded benefit is that records are more legible and there is some timesaving. There is little evidence that there is any significant benefit to patients.
Of Decision Support Functionality, there is more empirical evidence that this does benefit the patient, although there is plenty of scope for improving interaction between systems i.e. in prescribing. Decision Support Functionality still has some way to go. It is particularly good for long term chronic healthcare, helping the doctor remember routine medication etc.

The conclusion is that there is a large body of work which is rapidly expanding. Aziz said that it would be beneficial to be invited to contribute at the design stage of new software rather than reviewing it as an after thought once it is deployed.

Aziz also said that there is a policy drive towards self-monitoring and self-care. There is currently a trial with young people who have asthma using mobile phones to monitor their day to day progress. A lot of clinical input was needed to make this safe.

Aziz closed by informing the audience that on 17th Sept 09, at Imperial Collage London, the following conference is being held:

“Realising the Potential of Tele-healthcare” with a keynote address from Prof Denis Protti from Canada. NHS Connecting for Health Evaluation Programme (CFHEP) is providing the funding.

**Critical archetypes and contribution to improving clinical care.**

**Dr Ian McNicoll, Clinical Analyst, Ocean Informatics**

Clinical Archetypes and templates – Lowering the barriers to interoperability.

Dr McNicoll stated that Medical knowledge is driven by innovation, which is in conflict with Christine Connelly’s statement that CFH systems will allow local configuration. He stated that clinicians want to be innovative and make systems work for them. They will want to have more than just the ability to locally configure a system; they will want to be able change the technical architecture.

OpenEHR is a non-profit making organisation based in University Collage London (UCL) that looks at ways of delivering clinical content. The challenge is getting the knowledge out of the heads of clinicians and into the design of systems.

Dr McNicoll asked, “What are Archetypes and Templates?”

He went on to explain that an archetype is a detailed model of a specific clinical concept. Templates are formal specifications defining a particular use case, often as an aggregation of archetypes.

The biggest barrier is getting clinical and organisational consensus.

Microsoft Connecting for Health Framework v2.
John Meredith, IT Services Manager to Cardiff & Vale NHS Trust

John spoke about the Electronic Medical Record (EMR) Evaluation in Community Mental Health in Cardiff.

He opened by saying that there is a perception that things in the Electronic Patient Record (EPR) are not going well. In Cardiff and Vale NHS Trust this perception is not true; here it is a success story.

The goal was to become “paper-light” – it had been agreed that it is impossible to become “paper-less”. The aims of the post implementation research were to find out if EMR is beneficial and the research was both quantitative, questionnaires were sent to all clinicians, and qualitative, one-to-one interviews were also conducted. The results were very positive and the study was considered to be a success. Negative responses were negligible and were due to user error or lack of training. These results helped to highlight where user help needed to be targeted.

John closed by telling us that the success of implementing EMR in Cardiff and Vale NHS was attributed to the fact that all staff were sent on a three day training course prior to the implementation. Some of the users had never used a computer before and were very negative about EMR before going on the training course. Once they had overcome these initial fears and their confidence increased, their initial negative attitudes diminished.

Kit Lewis, User Experience Architect, NHS Connecting for Health.

Kit opened by talking about Error Traps. These are a design feature that can lead to error. He categorised them as:

- Slips. These can be stopped by making actions clear
- Lapse. These can be prevented by the use of reminders
- Mistakes. These can be minimised by giving the user the right situations.

Kit then continued with Safety and Usability – the evaluating of User Interfaces.

He made the following suggestions;

- Produce UI guidelines and software controls e.g. standard date formats
- Promote patient safety and consistency across clinical applications in the NHS
He told us that there is a partnership between NHS and Connecting for Health. It would be preferable if all designs that haven’t yet been developed were evaluated first. Evaluations should be done by people with a variety of experience and it can be a challenge to get the right people as volunteers tend to be biased. Evaluation is done using wireframes and prototypes which can be quickly altered.

The closing session in Stream 2, Queens Suit 2 on day one was a panel session on How to make a socio-technical approach to the delivery of technical projects work.

This session was chaired by Amit Bhagwat and contributions were made by Ian Herbert, Vice Chair, BCS HIF; Prof Chris Clegg, Professor of Organisational Psychology, University of Leeds; Dr Jean Roberts, University, Central Lancashire and Bruce Elliott, Health Informatics Development Manager Programme Manager, NHS Connecting for Health

The session closed with the following quote from Brian Derry; “Success in any project depends on whose perspective you’re thinking from”.

Wednesday 29th April 2009

Opening Session 9.30am

Chair: Sheila Bullas
Sheila Bullas opened the second day of the conference by introducing the theme of working together to deliver better and safer patient care.

Supporting NHS delivery – Improving Patient Care.

Martin Bellamy, Director of Programme and System Delivery for NHS Connecting for Health.
Martin Bellamy began by presenting a chart which showed what deployments have been delivered: N3, NHS Mail, Choose and Book, Map of Medicine and then he showed a video relating to the success of the Rio system.

His theme was based on working together; there are 1,300,000 people working in the NHS, 7,000 of these people work in Connecting for Health. He said that it is essential to work collaboratively with our suppliers.

He then went on to say that we now have to take things forward and improve what we have got. He then showed another video about the early adopters of the SCR and said that we have to build on lessons learned.

Finally Martin spoke about the acute sector, asking the question of why progress with Lorenzo and Cerner has been so difficult. He stated that there are two different sets of issues in that we have had a problem with Cerner in the London Free, but significant improvements have been made. It is important to make sure everything is in place before go live, that all training has been done etc. It would be better to delay the go live date if everything
was not ready. Martin then moved to Lorenzo which he said is late but then he raised the question, “What are we doing to bring it on”. He said that we have been improving communications between separate teams; working better together and improvements have already been seen.

Stream 1, The Auditorium
Supporting NHS delivery – Improving Patient Care

Chair: Kathy Mason
Kathy opened the session and introduced the first speaker, Graham Evans

Supporting the NHS to understand and realise the benefits and how they enable delivery of NHS objectives.

Developing a benefits management approach for the NHS,

Graham Evans, CIO NHS North East.
Graham began by talking about responding to the need to be accountable for the money being spent in the programme. The NHS is a complex, variable and constantly changing entity which is made up of multiple organisations. Resources including skills and finance are scarce.

Benefits Realisation is important and includes understanding local issues and building on lessons learned. This must be done by making sure that people are engaged at the local level, using good communication and ensuring that users are being listened to.

It has been necessary to put in place a method of reporting benefits, but it is important that we don’t increase the administrative overhead by creating a new industry.

Graham believes that it important to be pragmatic and not to wait for things to be perfect before going live with a project. A number of case studies have been put together to inform others of lessons learned to prevent people re-inventing the wheel. We need to be joined up, have user and clinician engagement and cross boundary community collaboration.

Graham closed with the quote: “Transforming means not putting the same thing back in place again”.

International comparisons of approaches to benefits management

Gia Marasco, Benefits Realisation & Achievement International Network (BraIN); and Simon Hagens, Canada Health Infoway
Gia explained that BraIN is a collaboration between 20 different countries, producing white papers on Benefits Realisation. The intention is to produce a framework to compare approaches and benefits methodologies and to support and develop new relationships.
Simon spoke about the evolution of a national approach such as realising the benefits of the Electronic Health Record. Infoway is the Canadian counterpart of CFH. It is a not for profit corporation with federal funding. They are still a long way behind the UK in the work that they are doing, but things are maturing and results can be seen.

**Summary Care Record – supporting patient-focused, better, safer care in local health communities.**

**James Hawkins, Programme Director, Summary Care Record (SCR)**

James spoke about a case study from the SCR Early Adopter Programme. Dr Darren Mansfield is a GP Clinical Lead in Urgent Care in Bolton. He has experience of the Summary Care Record, both as a GP uploading the SCR in the surgery and as a user at the acute end. His role was to identify the problems which then CFH could sort out.

The SCR is now being used as part of the Adastra system rather than alongside it as it was in the beginning. This has increased the clinician access rates as now they do not have to use two different systems. The system now tells the user if the patient has a SCR which saves the clinician searching unnecessarily for a SCR that is not there. Patients withholding or withdrawing consent to their SCR being used is less than 1%.

There are plans for further developments as a number of neighbouring trusts have shown interest in adopting the SCR as well.

**Stream 3, Queen’s Suite 3, Leadership and Direction – where are we now?**

**Health Informatics: a modern career for a modern NHS.**

**Di Millen, Head of Informatics Development, NHS Connecting for Health**

Di spoke about e-ice, Embedding Informatics in Clinical Education, building communities in the Health Informatics Community i.e. eSpace, talent management and PHI: Professionalising Health Informatics. She also introduced the work of the Faculty of Health Informatics.

She championed the gaining of accreditation – of people, courses, teams and services with the view of establishing informatics as an exciting modern career for a modern NHS.

Di said that we need to:
Measure the right things, Measure them right and Use them right.

The proposition is that drudgery is reduced, there is a shared solution, practical guidance is provided and skills are supported.

**Jackie Barber**, Informing Healthcare in Wales then took a turn to speak.
Jackie said that The NHS does not work across the whole of the UK, neither CFH nor the DH had any jurisdiction in Wales. Wales doesn’t have regional health authorities and does not use any independent sector services, only services provided by the public sector.

Sue Thomas then spoke about case studies around the implementation of the Health Informatics Career Framework (HICF). It is important that all job descriptions, job roles, job titles bands etc are consistent i.e. grouped by band. This avoids several job descriptions for the same job role.

Paul Lawton, Secretary for UKChip then gave a talk promoting UKChip (UK Council for Health Informatics) He explained that it doesn’t come under any regulatory body and registration is still voluntary but it is across all Informatics areas, both public and private. Currently there are approximately 600 people actually registered and several thousand who have started the registration process but not completed it.

This session was brought to a close by Mike Sinclair, NHS Connecting for Health who talked about inspiring leaders in Health Informatics and leadership development.

Stream 1, The Auditorium
Supporting NHS delivery – Improving Patient Care

Chair: Michael Thick, Chief Clinical Officer, NHS Connecting for Health.

Supporting NHS Staff to improve performance:

Will Moss, Programme Head – NHSmail, NHS Connecting for Health
Will informed us that NHSmail is free to everyone in the NHS, it is approved for transfer of patient data and it has a Gold Standard interface. There is also increased security which is Government regulated.

NHSmail now has full push email to mobile devices and better Outlook integration.

He told us that currently there are a large number of different email services being used in the NHS. NHSmail is not mandated in England (it is mandated in Scotland) so it has to compete with all these other services, but it has a world-class build. It is a National Service that can be configured at a local level and is scalable to 1 million users. It can be used via the web where ever you are and it works with Blackberries and Apple Macs. It also offers free SMS from email and is available 24 hours a day.

Catherine Coe, Programme Manager, NHS Gateway NHS Connecting for Health then spoke about the NHS Gateway Programme which came out of the Darzi Review. NHS Gateway is a Web Portal which is user configurable. It doesn’t exist as yet, but they are looking for five early adopter sites to work with them from this design stage through to piloting it. Users must be willing participants and have supportive managers.
Dermot Ryan, Programme Head – Clinical Dashboards, NHS Connecting for Health and Sally Getgood spoke about Clinical Dashboards. These were also born out of the Darzi Review. Three prototype dashboards were developed which were then moved out into the pilot stage. These were in A&E at Homerton, in General Practice in Bolton and in Elective Urology in Nottingham.

The dashboards provide immediate and timely information which can be used to assist in decision making.

This session was closed by brief talks from Darren Emil, a GP from Brighton and Hove who spoke about the Map of Medicine; Sandy Scales, Healthspace, NHS Connecting for Health introduced David Wainwright who gave a patient’s view of Healthspace and Dr John Nicholas, Clinical Lead for Choose and Book gave an overview of the Choose and Book system.

Thursday 30th April 2009

Stream 3, Queen’s Suite 3, tbc

Chair: Andrew Hartshorn
Andrew opened this session by saying that the session’s title, tbc, was the intended title and it could stand for any number of different things. He then went on to introduce the next speaker.

Achieving the intended benefits and success from IT-enabled change in the health sector.

Raied Abdul-Karim, Director of Informatics, Rotherham NHS Foundation Trust
Raied began by saying that they looked at two projects across the NHS that were considered to be a success, one of which is the PACS programme.

He went on to say that various stakeholders will view the level of success differently and for any project it is important to manage the stakeholders carefully. The NHS has a great diversity of stakeholders, resource planning is very complex and many of its staff have professional autonomy. It is important that for a project to be considered a success that the stakeholders are accountable and have control of their systems.

Speech Recognition – What a surprise!

Margaret Cosens, Programme Manager, Countess of Chester NHS Foundation Trust and Mark Barnett, Project Manager
Margaret introduced another NHS project that proved to be a surprising success, the use of Speech Recognition for producing radiology notes and reports. The system was introduced as a link between PACS and the hospital Radiology Information System (RIS) and was based on the Dragon speech recognition software. Since its introduction, the turnaround time from patient
scan to the report being complete and signed off has reduced from seven
days to between one and two days.

The project was only ever intended to be used in the radiology department,
but such is its reported success, many clinicians from other departments have
been asking if they can have it as well. This has raised the issue of providing
the required support, should the system be rolled out to a larger scale than
was first intended.

Another aspect that has occurred is that clinicians who work in other
organisations as well as the Countess of Chester are finding that when they
attend these other organisations, they are missing the convenience of using
the speech recognition software when they are there. These clinicians are
spreading the word about the success of the speech recognition software in
the CofC.

**Building NHS 2.0: rebooting communication within the health service.**

**Edward Miles, Student Doctor, University of Bristol**

This session closed with a brief talk from Edward Miles who is studying
medicine at the University of Bristol. He was promoting better and more
modern communication between people in the NHS. He suggested using web
2.0 technology that facilitates two-way communication, secure information
sharing, interoperability and collaboration. Web 2.0 concepts have already led
to the development of web-based communities such as social networking and
video sharing and Edward was suggesting that these concepts could be used
to support communication, training and support within the NHS.

**Stream 1, the Auditorium**

**The single shared electronic patient record – the way forward?**

The final session that I attended was a panel session with five panellists, each
with a slightly different viewpoint on the Electronic Patient Record (EPR).

**John Taylor, Patient.**

John informed us that he is retired and that he travels around quite a lot. He
has a complex medical record and as his GP does not have software
compatible with the NHS Spine, he does not have a summary care record (SCR). For this reason John carries his medical record around with him on a
memory stick. He believes that EPRs can never be 100% safe, but they have
to be better than the paper records that they replace. If he had a SCR, he
would not need to carry his medical record with him on a memory stick.

**Kate Warriner, Liverpool Primary Care Trust IM&T Programme Manager**

Kate described a new health service for Liverpool which includes a local SCR.
They have set up a neighbourhood treatment centre and health centres
working in a virtual cluster. Within this virtual cluster, clinician to clinician
information sharing is vital. EMIS provides a web-based solution which offers
their own SCR and in some cases a full care record can be accessed by
clinicians. Everyone who has access to patient data had to sign a confidentiality agreement. The service was designed and driven by clinical leaders and it was signed off by the Local Medical Committee (LMC).

Kate said that it was early days, but the feedback so far from both patients and clinicians has been very positive.

**Dr Mary Hawkins, GP UKChip Level 3**
Dr Hawkins raised the issue “Sharing Information Electronically – Is Data Quality a Safety Issue?” Her main concerns are around the full Detailed Patient Record (DCR), specifically who owns the information and who governs it?
Different organisations have different, legitimate requirements on the type and format of the data they need to record and access. If there is a single “bucket” of data for each patient, how can a clinician easily recognise which information is relevant to them, what if another clinician changes the information i.e. the patient’s medication record? Can a clinician update what another clinician has added? Her concern is that there are no data standards or controls on who does what with the patient’s medical information.

**Alan Hassey, Royal Collage of General Practitioners (RCGP), co-author of RCGP report on the Shared Electronic Patient Record.**
Alan was involved in the report that was commissioned by Connecting for Health on the Shared Detailed Electronic Patient Record.

The report is close to being completed. There was a desire to get multi-discipline buy-in from the Royal Collages, regulatory bodies, suppliers etc. Information Governance, the law, professional guidance and consent were all considered. It was felt that there was no evidence on any significant improvement in costs, efficiency, time saving or patient safety, although it was agreed that it eliminated the problem of illegible patient notes.

The areas that need to be addresses are:
- Semantics
- Errors
- Relevance

**Ewan Davis, BCS Primary Health Care Specialist Group (PHCSG)**
Ewan said that the PHCSG has been looking at the sharing of clinical patient’s records for some years. They feel that CFH has made a move in the right direction, but the holy grail of a "big bucket" with all the patient’s information in which everyone can dip into is not sound.

They feel that what we need is a purposeful publication on information and that the likelihood that a system will be delivered to cover the whole of the North West is slim, and if we did get such a system, it would provide for the lowest denominator.

What is required is something between the single large bucket and the other extreme of lots of small esoteric systems all over the country.
Following this final presentation, the session was opened up to the floor for comments and questions before the conference was brought to a close.

Generally people seemed to be in favour of the SCR but agreed that more work needed to done on the design of the Detailed Patient Care Record.

On leaving the Harrogate Conference Centre for the last time on Thursday afternoon I reflected on the diversity of talks, presentations and presenters that I had the good fortune to have seen over the last three days. All were of an extremely high standard and many were thought provoking, some giving contradictory views to others. Overall it was a thoroughly enjoyable and informative conference, which I am very glad to have had the opportunity to attend.