

HEALTH COMMITTEE

Tuesday 30 May 2006

Session 2

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HEALTH COMMITTEE **14th Meeting 2006, Session 2**

CONVENER

*Roseanna Cunningham (Perth) (SNP)

DEPUTY CONVENER

*Janis Hughes (Glasgow Rutherglen) (Lab)

COMMITTEE MEMBERS

*Helen Eadie (Dunfermline East) (Lab)

*Kate Maclean (Dundee West) (Lab)

Mr Duncan McNeil (Greenock and Inverclyde) (Lab)

*Mrs Nanette Milne (North East Scotland) (Con)

*Shona Robison (Dundee East) (SNP)

*Euan Robson (Roxburgh and Berwickshire) (LD)

*Dr Jean Turner (Strathkelvin and Bearsden) (Ind)

COMMITTEE SUBSTITUTES

Mr Kenneth Macintosh (Eastwood) (Lab)

Mr Stewart Maxwell (West of Scotland) (SNP)

*attended

THE FOLLOWING GAVE EVIDENCE:

Stuart Bain (NHS National Services Scotland)

Alastair Bishop (Scottish Executive Health Department)

Paul Gray (Scottish Executive Health Department)

Charles Knox (Scottish Executive Health Department)

Kirsty MacLeod (Scottish Executive Health Department)

Dr Pradeep Ramayya (AxSys Technology Ltd)

Dr Kevin Woods (Scottish Executive Health Department and NHS Scotland)

CLERKS TO THE COMMITTEE

Lynn Tullis

Simon Watkins

SENIOR ASSISTANT CLERK

Graeme Elliott

ASSISTANT CLERK

David Simpson

LOCATION

Committee Room 5

Scottish Parliament

Health Committee

Tuesday 30 May 2006

[THE CONVENER *opened the meeting at 14:00*]

Item in Private

The Convener (Roseanna Cunningham): Welcome to this afternoon's meeting of the Health Committee. I have received apologies from Duncan McNeil. Under agenda item 1, we must decide whether to take item 3—consideration of the draft report on our care inquiry—in private, as is our normal practice. Is everybody agreed?

Members *indicated agreement.*

National Health Service

Information Technology Inquiry

14:00

The Convener: Agenda item 2 is information technology in the national health service in Scotland. This is the first of a number of single-evidence-session inquiries that we intended to hold this year when we had time.

The first of our two witness panels comprises representatives of local and national IT projects from around the country—that is the best way of describing them. The panel members are Kirsty MacLeod from the Scottish Executive Health Department, who is the e-health consultant for the emergency care summary project; Alastair Bishop, who is also from the Scottish Executive Health Department and is the programme manager for the community health index; Stuart Bain, who is the chief executive of NHS National Services Scotland; Dr Pradeep Ramayya, who is the chief executive officer of AxSys Technology UK; and Roy Flett, who is the chief executive of Legal Data Solutions Ltd.

Committee members have notified me of their interest in a number of questions. I understand that each panel member wishes to make a brief statement on their own behalf before we move to questions. Is that right? I see consternation. Do not feel that you have to speak. I invite the witnesses to say something, even if it is only for a minute, to explain what they are about. If no one wishes to do so, however, let us go straight to questions.

Janis Hughes (Glasgow Rutherglen) (Lab): There has been publicity about the IT situation in the NHS off and on over the past few years. It is claimed that a piecemeal approach has been taken over the years because various different organisations have bought and developed their own IT systems, which did not necessarily talk to other IT systems, and that therefore there has been no continuity or joined-up thinking. As someone who worked in IT in the NHS for a number of years before coming to this job, I certainly concur with that opinion. What are the panel's views? Where are we now in relation to taking a different approach?

Stuart Bain (NHS National Services Scotland): It is undoubtedly true that a number of different health systems and different parts of health systems have developed their own approaches to the IT solutions that they felt to be most helpful. We are working to an agenda that was set by "Delivering for Health". We need to step back from assuming that information management and technology and IT solutions and

fixes should, in themselves, direct the way in which the health service works. We are trying to redesign the way in which the health service delivers health and health care for the population of Scotland, and to put in place fit-for-purpose IM&T that enables people to do that and to re-engineer the way in which the health service works, rather than forcing people to work in the way that IT systems dictate. We are looking to have information and IT systems that facilitate changes in how we deliver health.

We are moving towards having fewer different systems and greater compatibility—in other words, convergence—around those things that work well and around best practice. We seek to make the high-impact changes and investments first, for example the picture archiving and communications system, or PACS; the accident and emergency systems; and the community health index, or CHI, number, which members will have heard about. The e-health strategy board is bringing all that together.

Those measures are very much about looking forward, not back. Some very good things have been developed in Scotland and they will form part of the thinking. I repeat that we are looking forward: we are trying to enable the implementation of “Delivering for Health” and the Kerr report with appropriate IM&T solutions, rather than forcing people to use IM&T that directs the way in which they deliver health care.

The Convener: What are the views from outwith the NHS?

Dr Pradeep Ramayya (AxSys Technology Ltd): We must separate IT and health care into two broad categories or confusion will arise. We have IT that is required to support the infrastructure of health care and we have IT that is required to support patient care. The good thing about the Kerr report is that it has directed us to ensure that IT must be more and more geared towards the care of the patients rather than the care of the institutions.

A piecemeal approach was taken because systems were not available at the right time and clinicians developed their own systems to deliver the functionality that they were unable to get from the huge systems that were being sold by the manufacturers in those days. However, in Scotland especially, there has been a focus on standardisation. Scottish care information products such as the SCI store and the SCI gateway and, to a certain extent, the general practice administration system for Scotland have shown us the way in relation to standardisation. It usually takes time for that to become embedded in the wider scheme of health care. I think that the piecemeal approach had to be taken at the time, but that we are now heading in the right direction

and adopting a clinical focus, which will give us benefits in the coming two or three years.

Janis Hughes: I am pleased to hear all that. In particular, I am pleased to hear about the need to use IT to improve the patient's experience rather than trying to make the patient fit into a programme. However, because a piecemeal approach was taken over a number of years, a number of good examples of IT systems exist in the NHS. What are you doing to ensure that you use people's experiences of those systems to shape the ever-evolving process? I am concerned by the possibility that some of the good systems that are working well—even though they might have been bought off the shelf a number of years ago—might be lost if you do not ensure that they integrate into whatever system you come up with in due course.

Stuart Bain: As Dr Ramayya said, Scotland is quite far ahead of some of the other parts of the United Kingdom in that respect. The development of the CHI number, which is a unique identifier for all of Scotland's residents, is something with which we are way ahead of the other three nations in the UK. GPASS is used by 85 per cent of all the general practitioner primary care practices in Scotland. Nowhere else in the UK is there such a platform from which to build. Some of the organisations that have procured systems could be described as early implementers of best of breed. For example, Lanarkshire's picture archiving and communications system has proved the PACS concept, as it were, and now the contract for a single procurement for a PACS system for the whole of Scotland, based on 2006 technology, has been signed and implementation is rolling forward at speed. We have learned from some of the early implementers and the enthusiasts. Systems that have worked well have tended to become the standard platforms or part of the infrastructure that will underpin a robust IM&T strategy for the future.

Dr Ramayya: Just to complete that story, I should say that the reason why procurement of a generic clinical system is showing us the way forward in terms of allowing back-end standardisation while maintaining front-end flexibility—

The Convener: I hesitate to ask whether back-end standardisation and front-end flexibility are clinical terms. [*Laughter.*]

Dr Ramayya: I see what you mean.

The issue is about maintaining data standards. The new committees that have been formed by the Scottish Executive as part of the national clinical dataset development programme are focusing on data standards so that those standards can be applied across the board and

across the different systems that are used by clinicians at the coalface. The phrases that I used were supposed to suggest that we need to maintain flexibility at the working end while maintaining database standards at the database end.

Mrs Nanette Milne (North East Scotland) (Con): I want to talk about the GPASS system, which has not been without its critics. One of the concerns was about the possibility that information about one patient could be transferred electronically into another patient's records. The recent British Medical Association conference demanded that GPASS should be abandoned and replaced as soon as possible with better general practitioner computer systems. I know that there have been adaptations, but it would appear that the BMA does not consider any of them appropriate and it wants the system to be abandoned. Would Stuart Bain care to comment?

Stuart Bain: I disagree with the BMA on this. Like any IT system, some significant problems have occurred in the development and use of GPASS. Those problems have been put right, usually promptly, and are always prioritised, so that anything that is important in relation to patient care is dealt with effectively. In recent independent assessments alongside three or four of the other commercial suppliers to the NHS in Scotland, GPASS has demonstrated that it is effective and safe. Independent scoring systems have been used to evaluate a number of different clinical scenarios; in other words, GPs have written scenarios, for example a scenario in which a patient presents with asthma and needs to have drugs prescribed for them. The different systems that enable administration and clinical support to be provided to the GPs have been tested against that range of scenarios and then scored by the users—the GPs. GPASS has scored well in those tests. Indeed, in a recent test in Ayrshire and Arran it came second of the four systems, with a significantly high score. Perhaps more important was the fact that GPASS scored well and evenly throughout the range of the scenarios. In other words, it was not particularly strong in one area and weak in another. Some of the other systems had big variations in functionality.

I do not accept the high-level criticism—if you want to put it that way—that the system is not functionally sound and should be abandoned. I accept—and we take seriously—criticisms of individual problems in the system. We put such problems right. We have engaged with a number of different organisations and partner organisations to help us to refresh, renew and develop the product. AxSys systems worked with us on the software. We have Atos Origin, a preferred supplier, on the technology platform on which the software sits—it is known as a thin client

and is a type of server arrangement—and on the managed technical service that supports it and helps GPs and practices when there are problems.

I am not here to say that everything is perfect in relation to GPASS, nor would I suggest that everything is perfect with any of the other suppliers; we are aware of the problems and glitches that they, too, occasionally have with their systems. There is legitimate criticism, but it has been overblown. The new product that we are testing, GPASS clinical, is excellent. It will serve the NHS in Scotland well for the future, just as GPASS has served it well for the past 26 years.

Dr Ramayya: The most important thing is that GPASS has proven to be fit for purpose. Primary care computing has always been around; for example, it has monitored the general medical services contract and the performance against that contract of individual practices. All the surveys that have been done to date have proven that practices using GPASS have not been disadvantaged because of the software they use, which proves that it is fit for purpose.

In the early days of GPASS, the system was also criticised for its lack of clinical functionality. That has largely been addressed by the new product—GPASS clinical—and the new interface that is being rolled out. The issues that people are reporting are technical. We have hit technical hurdles in the roll-out, but so have other providers. The same things happened in England, for instance, but the problems are temporary; they have been identified and tackled. They will be yesterday's problems.

GPASS is a product that is fit for purpose; it has demonstrated its functionality in the past and it will do so in the future. We just need to wait for a little while, until some of the technical hurdles have been resolved, and then ask for an objective opinion. One example of that is the scoring system that has been adopted by Ayrshire and Arran NHS Board, where, once again, the clinical functionality has been demonstrated to be as good as or better than that of most other competitors to date.

The Convener: Does it worry you that the BMA has expressed such a lack of confidence in the system? The BMA has advised us that its most recent discussion of the subject in Scotland was in April, so the concerns that are being expressed are not historic but current. Does that lack of confidence worry you? Whether or not you think objectively that the system is good, if general practitioners are not happy with it, difficulties may continue.

14:15

Stuart Bain: I will answer that in two parts. Whether the concerns are current is an issue. One

key issue was the technical substitution of parts of patient records, to which Nanette Milne referred. That problem, which arose rarely and in peculiar and unusual circumstances, was put right last November, yet it was still part of the debate that led people to reach the view that you described in March this year. Despite concerted efforts at communication, releasing fixes—patches, if you like—for the software and producing new versions that exclude the possibility of that problem arising, that message does not seem to have been conveyed to those who pass motions.

The wider point is that GPs are confused about which of the problems that they experience in using GPASS relate to GPASS the product and which relate to the technical platform on which they use it. I am trying to think of an analogy. Somebody might buy a piece of software from PC World that runs well if they have invested in a state-of-the-art computer but does not run particularly well on a computer that is old, has insufficient memory or has a slow processing speed. GPASS is installed on all kinds of equipment that GPs have bought or which has been provided by health boards at different times in the past. The machines have different memory capacities, processing speeds and storage solutions, so what works well on one technical platform in one part of the country may work less well on another.

In parallel with that, the NHS is trying to revise and refresh the technical architecture on which that stuff sits. The thin client server approach and the managed technical service approach are being introduced as part of the health strategy, to get away from fragmentation and to create a solid and unified base for the whole NHS in Scotland. Only the GPASS product is being rolled out on that basis, so the problems with the implementation of the technical architecture—the infrastructure—are being blamed on GPASS. We are not doing the same with Egton Medical Information Systems, Vision or any other system.

Some of the perceptions, which are real and important, are misplaced, because what is at the heart of the GP's concern may be the performance of the IT infrastructure, rather than the GPASS product—the software that sits on that infrastructure. We must explain that better and get people to understand the differences between the architecture and the GPASS product.

The Convener: Okay, but that is still a problem. You can roll out the best system in the world, but if, for example, someone drives a Rolls-Royce and the roads are covered in potholes, they will still have a problem going down the road.

Stuart Bain: I wholly agree. The system needs to work in its entirety; that is what it is there for. The GP does not want to be beset by problems

with it. I suppose I am saying that if we take a step forward by implementing 21st century infrastructure for primary care systems to sit on, we will inevitably hit some technical problems that we must overcome. We are hitting all those problems with the GPASS product because we are not subjecting the other commercial suppliers' products to the new environment until we have tested it.

The situation is inevitable. It is unfortunate that we have not explained fully enough the differences between the problems of the GPASS product, when it has problems, and the problems of the new environment that we are trying to prove, test and roll out throughout Scotland.

Mrs Milne: What does that mean for the general use of information technology by GPs in the future? I presume that it will always be the case that not every practice has state-of-the-art equipment.

Stuart Bain: That is the problem that we are trying to overcome. We are trying to create a more robust environment, in which servers enable us to have disaster recovery and to back things up so that everything is held not on individual computers or practice-based servers, but on servers that serve a wide area and are backed up by other servers. The speed of transaction and the ability to import data such as laboratory results and PACS information is enabled by the architecture. However, we are discovering as we try to roll out the system that there are problems. Those problems are not all ours—for example, there are issues related to the messaging from Microsoft, which enables printers to work in such an environment.

Until we start to roll out the system, the specific problems—which arise from compatibility issues with other people's software, our software and the hardware—cannot be identified and the system cannot be tested. That is why we are rolling out the system relatively slowly and testing it in a small number of practices—about 23—with a view to proving it and rolling it out more rapidly, first to 100 practices and then throughout the country. We have put our toe in the water cautiously because we do not want to cause problems for primary care and GPs in general. The downside is that we have done that in the environment that we control, which is basically the GPASS environment. That means that GPASS is getting all the bad news although much of it—the vast majority of it—has nothing to do with the GPASS product: it concerns the revolution that we are attempting to bring about in the primary care environment.

Dr Jean Turner (Strathkelvin and Bearsden (Ind): I have used GPASS in general practice. When I read the BMA report, I had a sense of déjà vu. Everybody who works in a general practice—

whether they are a receptionist, a GP or a nurse—wants the IT to be fit for purpose, so that they are caring for the patient rather than for the equipment. Nobody who works in primary care cares one little bit whether the problem is the software or the hardware. I have heard such talk all my life and I wish that I could have those hours of my life back to deal with patients.

If you provide a service, you must provide the people to back it up. From the comments that were made by the BMA, I am not sure that the people are in place to back up the service. When someone has a problem and nothing is working, they want to be able to phone a helpline and have someone come to the surgery as soon as possible. Can you provide such a service, whether the problem is to do with the software or the hardware? I understand that if the practices have bought their own computers they will have their own contracts for maintenance of the hardware, but if you are taking over 100 per cent payment in respect of those computers you must provide a service to GPs to make the system run smoothly.

Stuart Bain: I agree 100 per cent with your comments. Ultimately, the system is a tool to enable people to do a job, so it needs to work. I have no argument with that.

We are embarking on a solution to provide such support more efficiently. In extreme cases, there are whole areas in which GPs have their own PCs or their own practice-based server. Therefore, every time that we have an upgrade, every time that there is a development and every time that the GP contract changes—and therefore the software functionality changes—someone has to go round with disks, engage with practice staff, find a time when the computers are not in use and upgrade, reload and test the software.

The new environment—the thin client servers—will enable all that to be done remotely overnight. It will also enable all the data that are stored on GPs' computers to be backed up, stored and reloaded if there is a failure in any part of the system. That will provide robust disaster recovery and ease around upgrades, and enable technical help to be provided in real time from a central location rather than someone having to travel to a location that might be remote and difficult to reach. In addition, practice time will not need to be taken up for the work to be done. Those improvements are all part of the system development.

However, I do not want to pull the wool over people's eyes. I acknowledge that the development has not been without its problems. Over the past six months or so, much more effort has been required to deal with the technical issues than we thought would be the case. We are beginning to break the back of those problems. We believe that we have solved the major ones

and that we will be in a position to roll out the first 100 examples successfully in the next three to four months. If we obtain proof that the roll-out is successful and we are able to load the new GPASS clinical product, which is a totally new generation of GPASS that is focused on clinical functionality and support, I think that GPs will support the use of that product in that environment. However, I agree that we must make the system work.

Dr Turner: My questions are about data protection and how the emergency care summary programme affects the patient in that regard. Everything needs to be working pretty well for information to go out to ambulance men, accident and emergency departments, hospitals and so on. It is important to the patient that that information gets there. Can you give me some feedback on how you assessed that? I can imagine that the system works well for kidney patients, who I think use Scottish care information or the SCI store to access their own information. I know that some groups of patients enjoy having such a facility.

What have you found out about patients' willingness to participate in the use of such systems? It is obvious to a patient in a practice when a system is not working. That just feeds doubt in a patient's mind about whether they want any of their information to be put on to computer, especially when, according to the BMA, it might zip off somewhere else if more than 250 words are typed in.

Stuart Bain: I do not want to go over the technicalities of the specific issue to which you refer. In certain circumstances, a problem occurred with the 257th character, which had to be a carriage return or a space, but that happened in only a handful of cases. A practice pointed out the problem to us early on and a technical solution was found and implemented many months ago. That issue to do with the transfer of records is no longer a problem.

In all our areas of work, confidentiality of patient records is an issue of the highest importance. Maintaining the integrity of patient records is crucial to the confidence of the public and of clinicians in what we do, so we attach an extremely high priority to it.

Under GPASS, 4 million patients are now registered with the emergency care summary programme. You obviously understand what that is, because you asked a question about it. Laboratory reporting is live across 150 sites—in other words, lab results go straight into a computer and can be reported back to the GP without their having to phone up for them.

Dr Turner: But GPs have not always been getting results that are sent in that way.

Stuart Bain: Through the SCI gateway and GPASS, 35,000 referrals and discharges are being made per month, which I think is more than the number that has been achieved for the whole of England through the work of NHS Connecting for Health. In addition, 60,000 records have been transferred through GPEX, which is the GP exchange system, by which records are sent from one GP practice to another across computer systems. The e-pharmacy initiative now handles 1 million electronic prescriptions from GPASS practices every year. If one looks at the figures, there is a huge amount of evidence of success and progress on which to build. We are not complacent—we do not think that we have got everything right—but we have handled numerous successful transfers of records without any problems of patient confidentiality having surfaced.

Kirsty MacLeod would be better placed to answer on the specific issue of the integrity of records and the way in which the emergency care summary programme is set up.

Kirsty MacLeod (Scottish Executive Health Department): The store for the emergency care summary programme meets all NHS Scotland's security standards as well as those for the rest of the United Kingdom. There is a full audit trail for all access that is made to the store. The information is transported securely in batch files from the GP practice to the store. There is a traffic light system for the transit mechanism that monitors the transfer of files to the store. If a batch file is not sent within a certain period of time, a red light comes on and the GP practice is contacted immediately to establish what the technical issue has been and to resolve it quickly.

Dr Turner: Is your monitoring service big enough to obtain feedback from the 4 million patients who are registered under the ECS programme? According to the BMA report, some GPs have not been getting results.

Have you had input from the Medical Defence Union on paperless practices? From what we have read so far, we are nowhere near having paperless practices.

Kirsty MacLeod: The Medical Defence Union, the General Medical Council, the BMA and the Scottish GMC were all consulted on the ECS programme. We have written our own access protocol, which they all approved before we went live with the project. They were all involved in the consultation process and the decisions that were made about how the system would operate and how access would be managed.

14:30

Janis Hughes: Stuart Bain briefly mentioned connecting for health. I have a quick question

about the difference between what England is doing with NHS Connecting for Health and what we are doing up here. I believe that a completely new approach across the whole NHS in England and Wales is being taken, which is slightly different from the approach that we are taking of trying to join up existing systems. Why is the approach that I have described being taken in England and why do you think that our way is better?

Stuart Bain: That is a very big question. The first issue is that the scalability of solutions in England needs to be much greater. Scotland is the equivalent of one of the local service provider areas in England, rather than of the whole country. Secondly, the English approach has been to develop strategically two or three key components of IT infrastructure such as the spine, which carries all the information, and within that to get local management of IT infrastructure that is compatible with key national products such as the spine and the choose-and-book system in large areas that are similar in size to Scotland geographically.

Interestingly, Scotland made considerable progress in a number of areas ahead of England. To return to the point at which the discussion started half an hour ago, England was even more fragmented than Scotland. Because of the scale of England, variety across that bigger geographical patch was even greater. The CHI number—the unique NHS identifier for Scottish residents—and the SCI store, which is not the same as the spine but has some of the capacity and characteristics of a single place for storage of everyone's electronic health records, were well advanced but not fully rolled out in Scotland. England was nowhere near that point, and it has been necessary to commission others to develop such systems there. It is fair to say that down south the choose-and-book programme has had its challenges.

I want to move back a little from the issue of IT solutions. In Scotland there has been a willingness to engage with clinicians and people who deliver health care. At the end of the day, we are trying to create a better environment that provides people with the tools that enable them to deliver health care. Scotland has gone about that in a very positive way. We have engaged with many clinicians and systems and have thought about how we want our health service to be run. We have then thought about how we will enable that through the development of IM&T, data and information and have tried to tie all that together.

In some parts of England, there is a sense that there is a very centrally driven, IT-dictated solution. Many clinicians down there are not using systems such as choose and book because they were not part of their development. They are not

sold on those systems as a means of providing the kind of health care that they want to deliver, in the way in which they want to deliver it. Although there are criticisms of allowing many flowers to bloom, having people do things differently and taking things slowly, there are big positives if the process is accelerated and we really engage. It means that people who will use the system have helped to design it and that it is fit for purpose in the clinical environment, which has perhaps not been the case down south.

Janis Hughes: Have there been discussions about integration in the future?

Stuart Bain: There are a lot of discussions with people in England. I would not like the committee to come to the conclusion that we are isolated on this issue. On the transfer of GP records, England has a system called GP to GP and we have GPEX. Those systems work to common data standards and methodologies, to ensure that records can be transferred around the whole UK, rather than just within Scotland or England. We use the same N3 contract with British Telecommunications that England negotiated for provision of wide area network technologies—the equivalent to being on broadband at home. I could list a number of similar examples.

There is integration when it makes sense to set technological standards and to co-operate, for example on functionality issues to do with GPASS. There is something called Scottish enhanced functionality, which is to do with how all the computer systems operate. It is based on the functionality requirements for systems in England and Scotland, but it is enhanced for the Scottish environment and everybody must meet the standards. A lot of technical work goes on throughout the area.

Helen Eadie (Dunfermline East) (Lab): The committee's briefing paper refers to two streams of the IT strategy, which include the CHI programme, which was mentioned, and the emergency care summary project. What is the relevance of the CHI programme to the wider IT strategy?

Stuart Bain: I will make a brief stab at answering your question, but other witnesses might want to contribute.

There are a number of strands. First, the CHI number is of central importance in that it enables every interaction of a person with the health service to be tagged, so that the person's record can be identified and traced. As we move towards having a single health record, the CHI number enables data to be transferred so that they can be accessed, with appropriate controls, by the people who need to see them. Information is therefore visible to any clinician who treats a patient anywhere in Scotland, at any time.

Currently, if someone goes into Edinburgh royal infirmary, the hospital will have a record of that event. The person's GP practice will also hold a record and if the person has been taken ill while on holiday there will also be a record in an accident and emergency department. However, there has been no way of bringing those records together. Electronic records and the CHI number enable records to be tied together—that is the principle behind the CHI number.

Secondly, the issue is not just how wires and boxes operate. Pradeep Ramayya touched on that and might want to comment further. If the wires and boxes are to operate, standards for how data are collected must be set, because if different hospitals describe patients and procedures in different ways, we cannot draw the information together. Throughout the NHS in Scotland, a lot of work is going on in the background, which is being led by ISD Scotland in NHS National Services Scotland, to establish a standard set of data definitions and ensure that there are no data deficits. In the past, we tended to collect information only when a doctor treated someone, but nurses are increasingly treating people and in future pharmacists will treat people. It is important in clinical and managerial terms to collect all that data, to ensure that we have a full picture of what has happened to a patient. The work on data definitions and comparability is one strand. The second strand considers IT as a tool to enable clinicians to do a better job.

The Convener: Before I bring in Pradeep Ramayya, does Alastair Bishop, who is the programme manager for CHI, want to comment?

Alastair Bishop (Scottish Executive Health Department): I echo what Stuart Bain said. The CHI number is the unique patient identifier for people in Scotland. It allows us to identify people correctly and safely and to collate information about their health care, wherever the information comes from, so that clinical staff can have a complete picture and make better-informed decisions.

Dr Ramayya: The objective of the Kerr report was to change the model of delivery of health care from a reactive to a preventive model, which we should all support. If that is to happen, a lot of infrastructure must be put in place, including the CHI number—the single patient identifier—standards and other basic infrastructure such as the picture archiving and communications system, e-pharmacy and other work that was identified in stream 1. That infrastructure must be in place before we move on to stream 2, which is about the clinical care processes that we need to monitor, change and embrace if we are to deliver the health care service that Kerr envisages. Stream 1 is in place and work is continuing on stream 2, for

which procurements have been recently completed, so there will eventually be convergence on the delivery of the Kerr objectives.

Helen Eadie: Is the Executive on target for having the CHI number in place by June 2006? June starts the day after tomorrow.

Alastair Bishop: Since we started work in September last year, universal access to the community health index has been achieved. Every health board, hospital and GP practice can access it and is using it operationally when they are identifying and looking after people. We must now focus on ensuring that there is universal uptake of CHI so that it is used every time a patient is identified. In April, in Scotland as a whole, 86 per cent of the key clinical documents—requests, referrals and letters—included a CHI number.

Shona Robison (Dundee East) (SNP): My question has sort of been answered, but I would like to follow up on what has just been said. Is there a particular difficulty with the remaining 14 per cent of documents?

Alastair Bishop: As a result of the way in which the index works at the moment, a person will get a CHI number—

The Convener: I presume that they must go to a doctor to get a number.

Alastair Bishop: Not exactly. The trigger is when a person is registered with a GP practice in Scotland, which can happen at birth or later. Therefore, a proportion of people who receive care in Scotland do not have a CHI number, which means that the maximum possible use of the index is not 100 per cent—the figure is a little less than that. However, closing the gap between where we are and where we need to get to involves changing the attitudes of NHS staff in all the board areas. We must reach the point—which we are getting closer to—at which using CHI is standard practice and is the way by which people are identified throughout the health service. We have made significant progress towards achieving that objective since we started work in September, but we still have a way to go. That accounts for most of the gap.

Shona Robison: I want to be clear about the matter. Are you saying that, by June, the CHI records of someone who is admitted to hospital on an emergency basis will be traceable under the current system if they are among the 86 per cent of people who are on the system?

Alastair Bishop: That is correct. Every hospital is capable of finding a CHI number for any patient who comes through its doors. In 86 per cent of cases up to April, that will have been done.

Shona Robison: You seem to be distinguishing between the capability of using the system and

whether people use it. Is training being rolled out to ensure that people are using the system as a matter of course? I suppose that the difficulty or danger is that the system is there to be used but, like any other new system, it could become custom and practice not to use it all the time. Is there a danger that the resource and information exist but not all staff are accessing and using that resource and information to the maximum effect?

Alastair Bishop: The approach that we have taken has involved first of all educating people about what CHI is and why it is important to use it for direct patient care. The next stage is ensuring that it is easy for people to use the system and that the capability of using it exists, after which comes the stage that we are at now—ensuring that people access it. Ensuring that they do so can be done in several ways, including through local policy changes and direct contact with individual clinical staff and non-clinical staff who do not use CHI to reinforce, encourage and mandate its use. We are using every possible approach. Our approaches are tailored to the local situations in each NHS board area to ensure not only that the system can be used but that it is being used.

Shona Robison: Do you have ways of measuring what is happening and ensuring that all health boards are using the system as they should be?

Alastair Bishop: Yes. Since last October, every NHS board has provided monthly detailed reports on its use of CHI with respect to the 10 key clinical documents that we have identified. The process has shown that there has been significant improvement every month.

The Convener: Okay. I thank members of the first panel for attending the meeting and ask members of the second panel to swap places with them.

The second panel comprises Scottish Executive representatives, who can provide a more strategic perspective on what is going on, particularly with respect to “Delivering for Health”. Dr Kevin Woods is the chief executive of NHS Scotland, and Paul Gray and Charles Knox are from the Scottish Executive Health Department directorate of primary and community care.

14:45

Dr Kevin Woods (Scottish Executive Health Department and NHS Scotland): Thank you for inviting us today. Committee members will recall that we discussed some aspects of this work when the committee considered the efficient government programme in September last year. Since then, “Delivering for Health” has been published and a considerable number of things have happened in relation to the organisation and governance of our

e-health programme. In particular, I have attached a great deal of importance to reviewing the governance arrangements for the programme. Members will be aware just how important that is strategically to all the objectives in "Delivering for Health". We thought that it was appropriate to take stock of the adequacy of our governance arrangements.

As a result, we have created a new e-health strategy board at national level. I chair it and we have membership at director level from the national health service and from elsewhere in the department. Three other significant components of the governance system support the strategy board. I will say briefly what they are, because this relates to some things that the committee heard earlier.

First, we are putting in place a board to co-ordinate all the individual programmes and projects to ensure that they work well together. Secondly, under the chairmanship of the chief medical officer, we are establishing a change board. That will ensure that clinicians are centrally involved in everything we do. Thirdly, there will be a design authority to ensure that all the kit comes together in a technically appropriate way.

We can learn lessons from others. We have therefore co-opted on to the strategy board someone who is leading the work in England at cluster level. That person will be a member of our team so that we can learn from any experience that they have. The strategy board will also have lay representation and representation from the Scottish partnership forum, which will bring in our trade union colleagues.

We are currently advertising for a new director to lead at national level. That will be important to drive things forward. At present, Paul Gray is handling that work on my behalf.

So far, we have had two meetings in which we have considered our progress. We have reached a few important conclusions. One is that it is unlikely that any one supplier can deliver the full range of what we need. Committee members will be familiar with the idea that what we are trying to procure is a set of products and not a simple single system. We believe that we can exploit many of our current systems, and we believe that we are on track in relation to a number of the important components in stream 1, which were discussed earlier.

I am glad that previous witnesses emphasised the importance of the CHI number. That is a fundamental building block and we are very pleased with the progress that we are making. We are determined to see it through.

We will be happy to answer any questions.

Helen Eadie: As an IT enthusiast, I went along to my local hospital—the Queen Margaret—to see the picture archiving and communications system in operation. I can understand the significance of that. I note from our briefing papers that "Delivering for Health" says that the roll-out programme will be completed by June 2007 but that "E-Health Insider" says that it will not be completed until 2008. Will someone explain the difference between the two dates? Why does one publication say one thing and another publication something else? Obviously, it will be very important to the "Delivering for Health" strategy to get things up and running.

Dr Woods: The answer is very simple and relates to the protracted negotiations over the contract. Those negotiations set the implementation programme back a few months. The bulk of implementation of PACS throughout Scotland will take place in 2007. If I remember correctly, there is just one site for early 2008.

Charles Knox (Scottish Executive Health Department): One big site.

Dr Woods: Yes, but it is only one site out of the whole of Scotland.

The Convener: Is it the whole west of Scotland?

Dr Woods: No, it is not. Charlie Knox will tell you where it is—there is no secret about it.

Charles Knox: It is the Western general.

Dr Woods: Everything else will happen in 2007. The slippage was to do with contract negotiations that took rather longer than we had hoped.

Janis Hughes: I am interested in the national accident and emergency programme. I know that several accident and emergency departments throughout Scotland have their own systems up and running. What is the timescale for the national programme? How will accident and emergency departments that already have their own systems be able to integrate with the national system?

Dr Woods: I invite Charlie Knox to say something about that.

Charles Knox: The new system has been installed in six board areas.

The Convener: Where?

Charles Knox: In Lanarkshire, Grampian, Forth Valley, the former NHS Argyll and Clyde area, the Western Isles and Highland. Two other boards—Borders and Dumfries and Galloway—are in the final stages of implementation, and we are in detailed implementation discussions with a further three boards or divisions: Glasgow north, Crosshouse in Ayrshire and Arran, and Shetland. The boards or divisions that have elected not to implement the national system are Tayside, Fife,

Lothian, Glasgow south and south Ayrshire. We are undergoing compliance checks on those systems to ensure that they meet the standards that we have set for the national system.

Janis Hughes: The glaring anomaly is the difference between Glasgow north and Glasgow south, which will impact on care across the catchment area. What will happen in the boards or parts of boards that choose not to implement the national programme?

Charles Knox: The phrase “design authority” was used earlier. If boards chose not to implement the national programme, we—as the design authority—would have to be satisfied that the system that they continued to operate fitted with the national infrastructure. In particular, it would have to provide all the information that we got from the national system in areas of concern such as child protection and national statistics. The system would also have to interface technically with the national infrastructure. For example, it would need to interface satisfactorily with the emergency care summary.

Glasgow south was one of the big trusts, back in the days of trusts. It implemented what was known as a hospital information system. That hospital-wide system contained an accident and emergency module, so an accident and emergency module has been running at the Southern general hospital for some time. It is woven into the working practices there, so I imagine that the hospital will want to retain it. The priority in Glasgow is to get the accident and emergency system into the north, where the functionality that the south has is not present.

Janis Hughes: I hear what you are saying, but I still have concerns about discrepancies between boards or areas of boards. You say that you will have to be assured that boards or areas of boards that choose to go down their own road will have compatible systems that will provide you with all the data that you want. However, the question arises as to why they would make that decision. Is it purely cost that would determine whether they chose to keep the systems that they had instead of joining the national programme?

Dr Woods: This illustrates the transition from the world that your first question opened up for the committee—a world in which individual trusts made decisions about the kind of systems that they needed to support their analysis of their business needs—to a new world. If at all possible, we do not want to waste investment if a system retains the kind of functionality that we are talking about. Sometimes we say that the new strategy that we are working with is not about—to use the jargon—rip and replace. We want to build on the things that work where they work but ensure that they comply functionally with the additional

systems that we will put in, to ensure that we have a complete set across Scotland. I know that it is a bit dull and boring, but that is what the work of the design authority is intended to achieve. That is where the assurance that you are looking for will come from.

Janis Hughes: So the bottom line is that I can be assured that if I choose to go to Southern general accident and emergency this month but Glasgow royal infirmary accident and emergency next month, there will be no difference in what can be accessed and what information can be found for me.

Dr Woods: It might look a bit different, but the functionality will be there.

The Convener: Jean Turner wanted to ask about the English experience.

Dr Turner: Yes. Dr Woods, you said that you have co-opted someone with an interest in England on to your strategy board. Is that right?

Dr Woods: Yes.

Dr Turner: You said that in England there was a more fragmented system before. I know that we have had the CHI number for years, and it is a great thing to have. What could we learn from the English system that we could incorporate into our systems?

Dr Woods: In a sense, both England and Scotland are heading in the same direction. In the earlier questioning, a number of the witnesses referred to the difference in scale and the fact that the English are trying to pull together the equivalent of several regions of equivalent size to Scotland. That means that they might have had to design the way they do things slightly differently.

However, I would single out one message from experience in England that I think is of great importance—I know that the issue has been addressed. People in England feel that they have identified the really important dimension of clinical engagement in this set of changes. That is why in the past we have attached so much significance to making sure that leading doctors play a key role in the development of systems. Members from Tayside might be familiar with the work on diabetes led by Andrew Morris and his colleagues. That is an outstanding example of what happens when we have such clinical leadership. We are determined to ensure that that approach informs all that we do. That is why I have asked the chief medical officer to lead the group that I described. That is one of the key messages from England.

Dr Turner: Do you think that in future people will be able to cross the border and go to English hospitals that are able to access information from Scotland?

Dr Woods: I will ask Charlie Knox to talk about the technical aspects of that but, yes, we want to ensure an appropriate flow of information, subject always to confidentiality safeguards.

The Convener: Before we go on, I would like to take that point further. An enormous number of people decamp to the south of Spain, for example, particularly when they get to retiring age. Presumably, they access the health services of other countries. It is now not unusual for people to switch between two systems. I guess the issue is not just about England; it is also about the capacity for extending beyond there.

Charles Knox: We have been speaking to all the home countries—including the island communities—about interoperability, or being able to get at patient information as the patient moves for whatever reason. That is not happening now, but we are planning to make it happen. We are further ahead with our emergency care summary than is the case down south. We are working towards a position where if a Scot down south or someone up here on holiday lands in the accident and emergency department, the hospital can get to their emergency care summary.

Also mentioned earlier was the ease with which GP records are transferred. We have thousands of cases of that happening in Scotland already and we are working with England to establish a common system, so that moves anywhere in the UK will result in records being sent electronically. That will be a huge improvement on what used to happen with paper notes, which could take months to transfer.

I have one more point about England. England has the spine, which is for transferring patient information between hospitals and regions or clusters. In practice, the English have had to reduce their ambition for the amount of information that goes on to that spine and they have had to hold more information locally. Serendipity is involved, because the data set in England has been reduced and is now similar to what is in our emergency care summary, which should ease the transfer. We continue to talk to England about the spine and how it will operate with our systems.

We are not so far advanced on the European level, as we are not talking about specific integration measures, although work is being done towards a common data definition of a European health record. We will participate with the Department of Health in talks at a European level about a common record. The principle is the same as with the practicalities that we have spoken about in relation to England—we need to establish standards and then work towards them. As standards are set for Europe, we must work towards them, in partnership with the rest of the UK.

15:00

Dr Turner: I have a quick question about the transfer of records. Do you recommend to practices that, when they transfer whole records, they should clean out the notes by taking out old information, even though it might be relevant at some stage, perhaps during a litigation process? Alternatively, do you encourage people to make the whole set of notes electronic, by scanning?

Charles Knox: We are enabling and supporting scanning. I know of nothing that recommends to GPs that they cull information in any way. My personal supposition is that that is up to clinical judgment.

Dr Turner: So there is no recommendation on that.

Charles Knox: I am not aware of any such recommendation.

Mrs Milne: I am from the Aberdeen area, so I am well aware that telemedicine has been developed over a number of years in the area. About 20 years ago, a remote health care package was rolled out to deal with problems in the North sea and, with modification, was used by the British Antarctic Survey. The remote system has worked well for various populations. That seems a long time ago and I am not sure how much progress has been made. I am encouraged that the Scottish centre for telehealth is to be based in Aberdeen. Will you update me on what has been happening and on the present situation with telehealth?

Dr Woods: Much has been happening in different parts of Scotland. Anyone who visits local hospitals—as I am sure you do—will have encountered applications of the system in a variety of places. Shetland is in my mind—although it may be Orkney—as an example of a place in which such a system is used to support the work of a multidisciplinary cancer team through a link to Aberdeen. That is valuable. We have several such initiatives, but we want to build on them, which is why we have decided to invest in the centre in Aberdeen, which has just been put in place. Paul Gray can elaborate on the work that is in hand there.

Paul Gray (Scottish Executive Health Department): There are three key points. First, until now, we have had no particularly formalised system for sharing the good work that Dr Woods mentioned throughout Scotland, so lessons that have been learned in one place have not necessarily been passed on. The Scottish centre for telehealth will ensure that new systems are developed, but one of its core objectives will also be to ensure that existing systems that work well are shared more widely.

Secondly, telehealth is becoming much more closely integrated with telecare. I am not trying to make a false distinction: telehealth tends to be something that assists with the process of diagnosis or sharing of clinical information, particularly in remote areas, whereas telecare is more about systems that people have in their houses to enable them to continue with independent living, such as systems that help them to remember to take medication or phone calls in the morning to remind them to do certain things. We are trying to ensure that that integration happens.

Thirdly, the first meeting of the newly constituted telehealth programme board, of which I am a member, takes place this week. If the committee would find it helpful, we would be happy to provide a report of that first meeting.

The Convener: That would be useful.

Helen Eadie has a question on the back of that.

Helen Eadie: It is just a small question. When Jean Turner, Janis Hughes and I visited the hospital in the Western Isles, we were told that telehealth was fine at allowing people to ask for a diagnosis but that there was an issue about whether a consultant would be available at the other end who could carry out the diagnosis. Has that problem been resolved? Has a systemised way been found of tackling that issue?

Paul Gray: Yes. Part of good practice is learning from exactly the sort of circumstance that has been described. We need to ensure that we get all the technological aspects right but, if we are to make full use of a telehealth solution, we also need to understand what must be in place at both ends. Although, superficially, this might sound simple, that includes ensuring that we have the right clinician available at the right time and organising things so that, rather than have senior and expensive clinicians dotting in and out of telehealth consultations, we try to line up the consultations so that a number of them can be done in series.

Mrs Milne: In the past couple of days, it has been brought to my attention that one or two clinicians in the Aberdeen area are talking about setting up an institute of remote health care. Obviously, we do not want any duplication of effort, so I presume that I should suggest to them that they contact you.

Paul Gray: Yes. Alternatively, they could contact Professor Gordon Peterkin at NHS Grampian, who is the programme manager for telehealth.

Dr Woods: We usually think of such applications in the context of remote and rural areas, but they can also be used in the rest of

Scotland, including in urban areas. I am not sure whether Pradeep Ramayya is still present, but we have used his generic clinical system in one of the cancer networks in the west of Scotland. That system has illustrated how the use of teleconferencing and electronic health record integration can enable us to run multidisciplinary team meetings for cancer patients right across the west of Scotland in real time. That is making a practical difference to patient care. Telehealth has an application in urban areas as well.

The Convener: Nanette Milne has a final question on GPASS.

Mrs Milne: I think that all members of the panel were present when we had a discussion on GPASS just a little while ago. What is the panel's view of the system? The e-health strategy group was to commission an independent study. Is that study on-going? Where has it got to? How compatible is GPASS with the development of the electronic patient record?

Dr Woods: Paul Gray will answer that question.

Paul Gray: I think that the question was split into three questions. What do we think about GPASS? What is happening with the study? How compatible is GPASS with the single patient record?

I do not have much to add to the previous discussion on GPASS save to remind colleagues that, I think, 85 per cent of GPs in Scotland use it—certainly, the figure was above 80 per cent at the last count. We hear quite a lot about what people would like to be changed and what they think is deficient about the system. A substantial body of evidence suggests that many people are quite satisfied with using GPASS, but that is not to say that the system cannot be improved. GPASS is and remains a critical part of our e-health strategy.

On the question about where we are with the study, it is important to emphasise that the investigation that is being carried out is not trying to redo the clinical assessment of GPASS that others, including Professor Lewis Ritchie, have done. The study is about asking how systems such as GPASS and our other primary care IT systems ought to be managed in future in the context of the electronic health record that we are developing and our more co-ordinated approach to managing national systems across Scotland. At the moment, GPASS is run and managed by NHS National Services Scotland. We need to ask ourselves how that fits into a commercial environment in which there are at least four other main commercial competitors in the marketplace.

That is not to say that we are predisposed to the idea that NHS NSS should or should not continue to run it, but we thought that the study was the

appropriate point to address the issue. The study is about how GP and primary care IT systems ought to be managed rather than about clinical functionality. It is due to report next month and the e-health strategy board will take a report on it at that time.

How does it fit in with the electronic health record? The overall specification of what needs to constitute an electronic health record has been drawn up and the components that are drawn down from all general practice IT systems, including GPASS, are known and understood. The GPASS system is capable of delivering the components that it is required to deliver to meet the overall standard.

Dr Turner: I think that everyone would agree that computers require a large workforce to run the system software and hardware and take up a lot of time for both primary care staff and hospital staff. How much money has been set aside to train not just the people who look after the computers but the people who deal with the patients? Also, has money been set aside for extra staff? Usually, one needs extra staff when one has to collect complicated data.

Charles Knox: In recent years, that has been a matter largely for health boards, but in the past three or four years—to my knowledge—we have allocated additional funds that are specifically ring fenced for training. This year, that funding is about £600,000.

There is general recognition that the forward planning of a coherent system to be applied consistently throughout the country needs to include a national programme both for staffing and resourcing it and for training staff and users. Any plan to implement a programme of work in the coming three, four or five years will have to include those elements.

Dr Woods: Convener, I would like to ask Paul Gray to speak about one particular item, which is our plan to establish a number of demonstrator sites in Scotland so that we can learn from experience.

Paul Gray: I entirely accept what Dr Turner said. We are establishing demonstrator sites so that, before we make final decisions about what to buy, people can come and see what is on offer. That includes not just the clinical functionality but also the ease of use, which we regard as utterly critical. I would much prefer someone to spend five minutes doing 80 per cent of what they need to do than for them to spend three hours doing 82 per cent of it, as long as the extra 2 per cent is not clinically significant.

Through the demonstrator sites, we seek to establish not just whether the system's clinical functionality is sufficient but whether the system is

sufficiently useable for us to put it in place. In time, we will move towards selecting systems that are much less dependent on intensive data entry and manipulation and which depend rather more on using the mouse and, in future, voice recognition software so that staff can speak to the system rather than expensive clinicians' time being taken up with manual tasks.

We acknowledge the point about training. We seek to implement systems in such a way as to ensure that additional staff resource is not required to make them work effectively, and we are also looking towards future technology that makes interaction with the system easier to do and to learn.

The Convener: I thank the second panel.

15:14

Meeting continued in private until 15:36.

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