What is the Clinical Change Leadership Group (CCLG)?

The Clinical Change Leadership Group includes senior clinical representation from all NHS Boards in Scotland. The group is currently chaired by Mr Jim Docherty, Consultant Surgeon and Clinical Director of eHealth NHS Highland, and Dr Catherine Kelly, Consultant Physician NHS Lothian and Scottish Government national eHealth clinical lead for secondary care. The other two national clinical leads (Dr Libby Morris, GP NHS Lothian and eHealth clinical lead for Primary Care) and Ms Heather Strachan (eHealth clinical lead for Nurses, Midwives and Allied Health Professionals) sit on the group in addition to the Programme Executive Team from the Scottish Government eHealth Directorate. CCLG is responsible for working with networks of clinicians across NHS Scotland to raise awareness and understanding of the eHealth Programme’s progress and benefits and acts as the representative channel for clinical professions across Scotland. It provides advice and makes recommendations to the eHealth Programme Board and Strategy Board as appropriate.

What is clinical portal technology?

Information is recorded at each stage in a patient’s journey through the healthcare system. Some of this information is recorded electronically and stored in local or national IT systems. Other types of information are only recorded on paper. Where electronic information is available within NHS Scotland it is largely held in information silos and sharing of this information between different groups of clinicians is usually limited.

From a recent national electronic survey approximately 10% of clinicians working in Scotland do not have access to any form of electronic patient information. With the exception of laboratory results there is limited access to information (Figure 1). There is also marked inequity of access to information between different professional groups (Figure 2). For example 94% of General Practitioners have electronic access to information about a patient’s current medication compared with 12% of all hospital doctors and 23% of hospital pharmacists.

A clinical portal is an electronic window that will allow clinicians to access different pieces of information about an individual patient, which are stored in different systems, as though a true electronic patient record existed. Clinicians who have seen the clinical portal solutions deployed in parts of NHS Greater Glasgow and Clyde and NHS Tayside have expressed a view that similar solutions should be implemented across all Boards in NHS Scotland.
What benefits can be realised by implementation of clinical portal technology?
There are a number of potential benefits which could be realised by implementation of clinical portal technology.

- Availability of information would support clinicians making informed decisions, improve medicines reconciliation and reduce the risk of adverse drug events. Patients will not have to answer the same questions repeatedly and can be reassured that staff have the information they need to manage their care safely.

- Ability to view information from other Health Boards in the future will facilitate service delivery for patients who are treated across Health Board boundaries.

- The single sign on feature of the clinical portal means that authorised clinicians will be able to access information held in a number of systems using a single user name and password. This will remove the need for clinicians to remember multiple usernames and passwords, reduce the risks associated with sharing of passwords and reduce the amount of time spent searching for information.

- Access to information will be regulated using a role based access model of authentication, to ensure that only staff with a right to know clinical information will be granted access. Patients can be reassured that access will be more secure, appropriate and traceable than at present with the paper record.

- The configurability of the clinical portal will eventually allow the development of personalised or specialty specific portals for individual users or groups of clinicians.

- The clinical portal will provide the ability to provide links to clinical guidelines and sources of knowledge management to ensure clinicians are providing evidence based care.

- The portal will provide the ability for data entry onto structured forms which could support the development of handover documents, multidisciplinary clinical notes or recording of clinical observations.

- Information could be used by clinicians to review performance against targets and standards and support quality improvement.

What progress has been made and how are clinicians providing input and direction to the Clinical Portal Programme?
There are a number of things to report around progress and clinical involvement.
Portal Programmes in NHS Greater Glasgow and Clyde and NHS Tayside

NHS Greater Glasgow and Clyde and NHS Tayside have invested in portal technology and are in the process of rolling out their own portals to clinical staff. They have used different solutions to achieve the same end point. Different technologies were used as they started the process with different core systems in use in each of the Health Boards and they have exploited what already existed. The experience and lessons learned by each of these programmes will be used to inform the clinical portal programme.

Discovery project

A consortium of Boards, led by NHS Lothian, is currently undertaking a piece of work to identify the current capabilities, products and services related to portal requirements that are already available to NHS Scotland. This piece of work is expected to be completed by the end of December 2009. CCLG is represented on this group. The clinical portal programme will provide a catalogue of components and services that can be used by Health Boards to support the creation of a clinical portal. It is anticipated that the available catalogue of components will promote convergence and avoid duplication of technical capabilities in favour of shared approaches. Each board is at a different state of readiness to implement clinical portal but the provision of a standard catalogue of components will allow those Boards who are able to press ahead, to do so in a manner that promotes interoperability across NHS Scotland in the future.

Links between CCLG and Scottish Government eHealth Directorate

Cathy Kelly, one of the Scottish Government eHealth clinical leads and current co-chair of CCLG, provides the link between the ongoing national work towards the Clinical Portal Programme and clinicians in the Boards through CCLG. This ensures CCLG are kept up to date with the Programme and are asked to contribute to various working groups and to provide clinical input, where appropriate. This relationship promotes partnership working between Scottish Government and the wider clinical community. It also provides a mechanism for clinicians to feedback any concerns they may have or suggestions to support the Programme.

CCLG are actively contributing towards clinical portal related work such as development of a role based access model for NHS Scotland and discussions about information assurance and governance.

Over the last year CCLG and the Board Directors of eHealth have also developed a more collaborative working approach. This has also supported more productive dialogue to ensure that clinical priorities and Board eHealth priorities are aligned.

Clinical Portal Programme Board

A Clinical Portal Programme Board has recently been established which will provide governance for the Clinical Portal Programme. The first meeting of this
group will take place on 24th November 2009. Clinical input will be provided by Cathy Kelly, as Scottish Government clinical lead and Cliff Barthram from NHS Tayside as CCLG representative.

**Patient Management System (PMS) procurement**

Some Boards do not have a patient management system that allows clinical data to be recorded. The procurement of a PMS for NHS Scotland has recently concluded. Implementation of the same modern PMS in the majority of health boards across Scotland over the next few years will improve the amount of clinical information that can be made available and potentially shared through the clinical portal.

**What information do clinicians want?**

NHS Scotland aims to adopt an incremental approach to clinical portal implementation. It is important that the early phases of implementation focus on delivering benefits to the majority of clinicians rather than providing a comprehensive virtual electronic patient record for a few. For this reason we recently undertook an online national survey which asked clinicians to rank the importance of different types of information they wanted Boards to deliver in the early stages. In the first series of questions clinicians were asked to rank the importance of availability of different types of patient information to them for delivering safe and efficient clinical care (e.g. results, clinical letters). The second series of questions asked clinicians to rank the importance of having electronic access to other types of information which could support them in their clinical role (e.g. knowledge support, performance indicators, patient lists). The final section of the survey asked clinicians about their current access to information held electronically.

3244 clinicians completed the survey. Replies were received from all Health Boards and all professional groups, with the majority of replies received from senior clinicians. In general clinicians welcomed the opportunity to provide input to the clinical portal programme and there was support for the use of portal technology to improve the availability of clinical information. One of the key messages was that clinicians wanted the portal to be patient centred, easy to use and focused on providing essential summarised clinical information. They would prefer a simple solution delivered in a timely fashion with phased delivery of benefits than an overcomplicated solution that may not be delivered for a long time and that requires significant resource to achieve.

There was a consistent view across all clinical groups about what type of information should be available through the portal. These were:

- Patient health summary (past medical history*, current problem list*, current medications*, allergies*, alerts*, treatment plan, social history, events and procedures)

- Clinical letters (in particular referral letters*, hospital discharge* and outpatient clinic letters*)
Clinicians saw implementation of the clinical portal as an opportunity to address concerns about data quality and to try and standardise some types of clinical documentation across NHS Scotland.

**Can this information be delivered?**

The results of the survey were discussed jointly between the Clinical Change Leadership Group and Board Directors of eHealth to determine how technically feasible it would be to deliver each of these types of information through a clinical portal. It was agreed that all Boards would attempt to deliver the information sets marked with an asterisk (∗) above, recognising that each Board would be starting at a different state of readiness and would therefore not all provide the same information at the same time through their versions of the portal. The vast majority of information that clinicians have identified as being crucial to managing patients safely and efficiently is actually held currently in an electronic format but, as explained earlier, is often in individual silos. With the help of portal technology these silos can be joined together so that authorised clinicians can access this information. Information that is not currently held electronically will be far more difficult to share via portal technologies as this will involve changing the way data is recorded and may involve major changes to the way clinicians work.

**What are the potential budgeting implications of the development of clinical portal technology?**

The results of the Discovery project will inform the investment priorities for the Clinical Portal Programme. CCLG is aware that with significant financial challenges ahead there needs to be clear justification to buy new products and that it is important that we utilise existing products in NHS Scotland to maximum benefit.

**How is the debate on the development of such projects shaped by the use of wider definitions such as Telehealth, Telecare, e-health etc?**

CCLG includes representation from all the territorial and special health boards and also has links with a wide range of national advisory groups and key stakeholder groups. Through this network of clinicians, a wide range of views and experience can be harnessed. Experience from existing projects or new pilots in areas such as Telehealth and Telecare are fed back to the CCLG by the clinical
representatives from the Boards involved. CCLG also provides input to the governance of national eHealth programmes, through the Scottish Government eHealth Directorate Portfolio Management Groups, to ensure that future roadmaps for existing national eHealth projects are all strategically aligned and that any dependencies for implementation of clinical portal technology are identified and managed appropriately.

**What do CCLG see as challenges to delivering clinical portal?**

Clinicians have expressed a desire for clinical portal technology to be implemented quickly. Each Board is at a different state of readiness to implement clinical portal technology. For those Boards who are planning to implement the new PMS solution it is likely that this will be the priority for their eHealth department over the next couple of years. This may mean that some Boards will be in a position to press ahead with implementing a clinical portal quickly while clinicians in other Boards may perceive very little progress until the PMS solution is implemented. This may lead to lack of engagement from clinicians in these Boards.

At the present time clinicians are enthusiastic about the clinical portal programme. Given the proposed incremental implementation of a clinical portal clinicians are unlikely to have everything they would like at the initial stages, therefore it will be important to manage clinical expectations. This needs to be balanced with the recognition that failure to deliver the information that has been agreed as a priority will cause disillusionment and scepticism, which will be hard to address in the future.

The most challenging information set to deliver is likely to be the patient health summary. Most of this information is currently held almost exclusively in primary care and there has traditionally been some reluctance to share this information more widely because of concerns about existing data quality and lack of a consistent approach to ensuring information assurance. The current programme to procure new GP IT solutions for NHS Scotland, along with development of a role based access model for Scotland, guidance regarding audit of IT systems and development of training packages to inform clinicians about information governance principles, offer an opportunity to address some of these concerns. There is a recognition within the secondary care community that wider access to information about medication and allergies, currently available in the Emergency Care Summary (ECS), would provide significant benefit towards supporting the patient safety agenda. CCLG is actively working with members of the ECS Programme Board to highlight the benefits of wider access to the ECS within secondary and community care.

**Mr James Docherty**  
Consultant Surgeon and Clinical Director of eHealth NHS Highland  
Co-chair CCLG

**Dr Catherine Kelly**  
Consultant Physician NHS Lothian and Clinical eHealth Lead Scottish Government  
Co-chair CCLG
Figure 1. Electronic access to clinical information for all professional groups

Figure 2. GP and other doctors' access to patient health summary and clinical letters