DEVELOPMENTS IN INFORMATION TECHNOLOGY IN MORECAMBE BAY

Will it really work?

Sydney Schneidman, FCEM

Dr Schneidman is a consultant in emergency medicine and the clinical lead for IT at University Hospitals of Morecambe Bay.

The National Program for Information Technology (NPfIT) has had a big impact in Morecambe Bay. The search for a workable electronic patient record has been the holy grail of the Informatics Department in Morecambe Bay for many years. Before the national program started, we entertained a variety of international solutions, but with the development of the current scheme, we decided to look to the national solution for an answer to this elusive quest. As many of you are aware, we have adopted the national program's initial offering with the deployment of the iSoft patient administration system – iPM. Although it has met with mixed success, it is forming the foundation for what is yet to come. Several months ago, the Health Community was selected for the Strategic Partnership programme whereby we were charged to develop patient journeys for unscheduled out-of-hours care, scheduled care, and end-of-life/palliative care scenarios. They depict the current method by which we deliver care in the community and the hospital, and also look to what the partnership team believe would be the optimum design for the delivery of patient care for the future in our community. One of the important things that we discovered in developing these journeys was the fragmentation of medical information that currently exists. Clearly it is impossible to deliver cohesive care to a patient when there exist as many as twenty different repositories of medical information that are all disparate and unrelated to each other. We see the development of the end-of-life strategy as a method to bridge the primary and secondary care worlds through the hospice and palliative care programs. When the hospice is able to electronically access patient documentation and records from the hospital, Picture Archive Communication System (PACS) images and pathology results, along with the clinical documentation, information from the visiting nurses in the field, as well as referrals from the general practitioners (GP), the integration of information exchange will move forward in a dramatic fashion. The anticipated development of a patient register and the ability for any carer to be able to access information about a hospice/palliative care patient will result in an obvious improvement in communication and care delivery.

So how is this all going to happen? I know many have reservations about the ability for the national program to deliver what has been promised in a reasonable time frame. The exciting development that has recently happened is that Morecambe Bay Health Informatics has applied to become early adopters of Lorenzo. With support from the local Trust's executives, Connecting for Health has granted this request. What this means is that Morecambe Bay will be probably the first in the nation to see the initial version of the electronic patient record (EPR), code-named Lorenzo. The latest plan is to release Lorenzo in four increments. The first increment, which will include orders and results, clinical documentation, and other modules, should be in our hands in the spring of 2008. Some of you might have been aware that we were going to try and adopt an orders and results program (iCM) this autumn, but because we have decided to put our energy into developing Lorenzo, we have decided not to continue with the orders and results program we initially had decided to implement. We felt implementing two such programs in a short space of time was too demanding of our resources and presented challenges for not only hospital staff but the EPR team as well. The Lorenzo program, being written by Computer Sciences Corporation Alliance (CSCA), who along with iSoft is the primary vendor for northern England, is still a bit like a moist lump of clay. Because we are early adopters, we have the opportunity to mould the program and its clinical content somewhat. The work that the Morecambe Bay Lorenzo team carries out in the next six months will then be hard coded in Chennai, India and available for deployment throughout the NHS later in 2008. Of course, there is the possibility that these time scales might slip, and we have certainly seen precedence for that, but with the amount of public pressure on Connecting for Health, it is my opinion that every effort will be made to deliver the software on time. The goal is to have several modules of the EPR in place within the Health Community by next summer.

Security and confidentiality are major concerns that have been expressed throughout the media and other public forums. Because of the grand scope of the national program, with patient information held on a central server somewhere, people have legitimate concerns about the security of their data. Interestingly, many of the GP practices and after-hours care services throughout the Primary Care Trust already use some form of EPR and few concerns about privacy and security have been voiced. By utilising an encrypted 'smartcard' as well as a PIN number, a two-level security process protects sensitive patient information to a high degree. The complexities of role-based access ensure that only an authorised clinician will be able to access sensitive information, once granted access to the system. There are many other layers of security built into Lorenzo. Concepts such as Legitimate Relationships, sealed envelopes, and role-based access in addition to automatic audit notification should one of the security concepts be accessed, help to ensure that the patient information is seen only by authorised eyes.

This is really the future, and it will be here in your working lifetime. Resistance is futile, to quote the Borg. Handwritten clinical notes are archaic. The ability for a clinician to be able to electronically access diagnostic results, current medications, and clinical notes whether from primary or secondary care can only make our job easier and more efficient by making sure all the pertinent clinical information

is in one place. Integration of the multiple clinical records that exist for a single patient will ultimately prove to provide superior patient care by combining the efficiency of saving time and energy for the clinician, hospital, ancillary services and primary care. When completed over the next few months, I hope you will visit the model community that will be constructed by the Informatics Department which will demonstrate the benefits and integration that is possible with Lorenzo. During the developmental phase this winter, the Lorenzo team and I welcome any thoughts or contributions that you might have to help mould this EPR into a product that will be a functional and useful addition to patient care throughout the Morecambe Bay Health Community we can all be proud of. I can be contacted with comments or questions at: *Sydney.Schneidman@mbht.nhs.uk*

MBMJ Prize for best article by a junior doctor (2006)

Dr Shah's paper on the management of carpal tunnel syndrome (Autumn 2006, Volume 5 Number 3) is a worthy winner of the Journal prize.

It is an excellent example of an audit of a common musculoskeletal condition which examines current practice in primary and secondary care in accordance with local guidelines. The need for improved use of conservative measures in primary care has been highlighted and the shortfalls of secondary care managed identified. Although patients referred to rheumatology were more likely to be treated conservatively rather than surgically this may represent referral bias with more severe cases being referred directly to orthopaedics. The delays, inefficiencies and unnecessary clinics appointments in secondary care were noted and constructive proposals made on how the management of carpal tunnel syndrome could be improved with the establishment of a new referral pathway and pilot study. The outcome of these proposals is awaited as a further publication in the Journal. It is anticipated that this work should result in improved conservative management in primary care and more appropriate referral to secondary care, where cases will be dealt with in a more efficient and timely manner.