

Physician Information Technology Office: Year in review

Ending the 2009 calendar year, the second full year of implementation, it seems an appropriate time to provide an update on progress and status.

There are now over 2000 physicians enrolled in the PITO program—slightly over the target for this point—25% of whom have completed implementation. The implementation rate was over 50 physicians per month over the summer months and 70 to 80 per month in September and October, and is projected to be well over 100 per month starting in November.

Physician Peer Leadership

Until recently, adoption of an electronic medical record (EMR) in BC was largely an isolated, individual experience. Surveys have shown this lack of access to information and peer advice to be a significant barrier to EMR adoption.¹

Over the last 2 years, however, a large number of BC physician leaders have stepped forward as local physician champions, and others have led the creation of local Communities of Practice (CoPs) to provide assistance to their colleagues throughout the EMR adoption experience.

The CoP model was initiated by a few innovative leaders in the physician community who saw the opportunity to work together toward common clinical goals by adopting the same EMR, allowing them to collaborate and support each other through the journey, and create opportunities to enhance continuity of care.

Dr Allan Horii, physician lead for the Richmond CoP, believes that a CoP fosters collaboration between physicians, thus maximizing the potential benefits of an EMR. “The

strength of a CoP lies in enhanced communication, whether it’s improved flow of patient information between GPs and specialists or peer support from colleagues during implementation of electronic records in an office,” he says.

A Specialist Physician Champion program has also been added this year, with specialists being identified from each major specialty/subspecialty to act as resources and leaders for their specialty province-wide.

eReferral projects

Through the CoPs, the first electronic referral (eReferral) pilot projects started in 2009, with the south Okanagan and Powell River groups leading the way. These pilot projects are testing an innovate approach to referral based on the experience from the 2004/5 Electronic Medical Summary pilot project. In addition to the prose referral note, data from the originating EMR can be attached to the referral letter, allowing it to be reviewed by the receiving physician and imported into the receiving EMR to prepopulate or update the record, thus enhancing continuity of care and efficiency. Initial feedback from the pilot projects has been exceptionally positive and there is significant demand to expand this service following the pilot implementations.

In addition, pilot projects of the secure e-mail system are beginning. This service will allow secure electronic referrals with physicians who do not have an EMR. Referral letters can be attached to an e-mail and sent from one clinic inbox to another via the secure Private Physician Network. E-mail referrals are faster than letter mail and more legible than faxed letters.

Lessons learned

The vast majority of EMR implementations to date have proceeded as expected. The few that have been more challenging have provided specific lessons learned, which will allow PITO to assist subsequent practices to avoid the same experiences. These lessons learned are not new, but rather reinforce the importance of some of the critical steps and considerations. Of particular note has been the importance of:

- Very clearly defined unique needs well in advance of implementation to ensure that key items are not missed.
- Effective internal communication and engagement, particularly in larger practices.
- Robust training and workflow change plans to adapt to new software and ways of working.
- Effective vendor support during go-live and the post go-live period.
- Knowledgeable peer advice and support (local physician champions).
- Thorough testing where more complex network configurations exist in a practice.
- Robust network devices suitable for a medical office, with knowledgeable and accessible information technology support.

In addition, a number of clinics have converted from one EMR to another in recent months, providing useful lessons to assist subsequent conversions. Conversions are challenging and require careful attention to both the data conversion and the workflow changes.

Specialist strategy

This year PITO has engaged a large number of specialist physicians in

Continued on page 432

Continued from page 431

validating EMR and information technology requirements for specialists and established a focused program to support specialists, the first of its kind in Canada.

The specialist strategy includes several initiatives already underway, including:

- A template funding initiative to offset costs of developing sharable specialty-specific templates.
- Specialty-specific communities of practice.
- Definition of requirements for surgeons and medical specialists with more episodic consultation cases.
- Work with specialties that have complex diagnostic device integration requirements, particularly ophthalmology.
- Identification of specialty-specific physician champions to lead efforts on behalf of their specialty, be peer advisors, and provide input to PITO.
- E-Referral initiatives both within local communities of practice and between disparate EMRs.
- Collaboration with the local health authorities regarding key interface points between specialists and hospitals including OR booking, results/reports delivery, EMR access from within hospitals, and access to hospital information system (e.g., PACS) from the office or home.

For more information please see www.pito.bc.ca/specialists and refer to previous issue of the *BCMJ*.^{2,3}

Private Physician Network

In parallel to PITO, the Ministry of Health Services is implementing the Private Physician Network (PPN). The PPN is a secure network available to physicians and their staff to access their EMR and the Internet. It will soon also connect to the local health authorities and hospitals. To date, 750 physicians across BC have installed the PPN. There are a variety of circuit types available to match the size and needs of the practice, ranging from

ADSL and the newer ADSL 2+ technology all the way to T1 and E10/E100 fibre-optic circuits.

The majority of physicians using the PPN have had a smooth transition and are using the PPN effectively. The first few implementations had the expected teething issues of a major new technical solution, but those have been identified and addressed. It will continue to be particularly important that the practice ensure that its internal practice network is upgraded and tested. As a result, it is strongly recommended to have qualified technology support available (which can be reimbursed through PITO).

The only known limitation of the PPN is where a smaller clinic would normally be allocated an ADSL type of circuit (PPN 1 or PPN 2) due to their practice size, but needs to upload very large volumes of scanned documents to the EMR or access hospital PACS (imaging) systems. In these cases, investigation is required to ensure that the correct solution and configurations are put in place to meet the requirements.

Access to EMRs from within hospitals is improving but remains a challenge in some health authorities due to strict hospital network security rules. It is hoped that this situation will improve when the PPN is connected to the health authority networks.

Interoperability

Receiving lab results electronically is well known to be a critical success factor for EMR adoption, which is further enhanced by the electronic delivery of imaging reports, hospital reports, and referrals. BC has come a long way in the last year in this regard. Interior Health Authority has led the way with complete lab, imaging, and hospital reports interfacing from all Interior hospitals using a common system. This system has been exceptionally well received by physicians. Vancouver Island Health Authority now has electronic lab results consis-

tently delivered throughout the Island, and is expecting to add imaging and text reports shortly. Northern Health does not have a results delivery system but expects to start providing a service by the end of the year. The three health authorities in the Lower Mainland have various solutions in place for lab results delivery, with plans to enhance and standardize their services.

Strategic priorities for 2010

In addition to continued rollout, PITO will focus on several strategic priorities in 2010:

- Adding physician support services for post-implementation support and optimization.
- Continuing to support the CoP groups and the innovative local e-referral initiatives.
- Continuing to evolve programs to support specialists.
- Establishing local physician user groups and other local, regional, and provincial forums for collaboration on EMR adoption and optimization.
- Supporting complex EMR-to-EMR conversions.

We look forward to creating new opportunities for physicians and their staff to collaborate, share experiences and best practices, and support an environment province-wide for EMR adoption and optimization.

—Jeremy Smith
Program Director, PITO

References

1. Lai JK, Lau F, Shaw N. A study of information technology use and implementation of electronic medical record systems in BC medical practices. *BCMJ* 2009;51: 114-121.
2. Smith J. Specialists and EMR adoption. *BCMJ* 2009;51:154.
3. Smith J. The unique EMR needs of various specialties and subspecialties. *BCMJ* 2009;51:337-338.