BEST ADVICE

Advanced and Meaningful Use of EMRs

MODULE 6
Patient-oriented Services

NOVEMBER 2018

Many Canadians cannot imagine life without a smart phone or the Internet to meet daily needs (banking, communicating with friends and family, working, and studying), yet health care has been slow to adopt these technologies.

Family physicians may realize a demand to adapt to patients' (end-users) needs in order to optimally care for, and stay relevant to, them. The less time that patients sit in waiting rooms or miss work for unnecessary medical appointments, or are better informed about their health conditions, the healthier they will be.

In the Commonwealth Fund 2015 International Health Policy Survey of Primary Care Physicians,[1] Canada's physicians score below average in electronic communication with patients (e.g., e-booking, patient portals). However, many practices in Canada have successfully adopted this technology, benefiting both practitioners and patients. The MyChart™ patient portal,[2] from the Sunnybrook Hospital in Ontario, is one example: 110,000 active users since its launch in 2006 and it is still growing.

Patients want to become more engaged with their own health and medical care,[3] and there is an opportunity to leverage technology to meet their needs for improved communication, information sharing, and time-saving efficiency.

Privacy and security remain of absolute importance in managing health information.[4] However, these are areas that have solutions, so the real challenge is working together to adopt patient-facing technology to better enable communication, scheduling, and patient engagement.

E-BOOKING

According to an Infoway survey in 2016, 90 per cent of patients want the ability to book appointments online.[5] Electronic booking (e-booking) refers to patients' ability to access an online system 24/7 to book an appointment with a health care provider. This has multiple benefits for the patient (convenience, flexibility), provider (fewer no-shows), and clinic staff (higher satisfaction and lower phone call volumes). Often included in this service is the ability to have automatic email/text reminders sent to patients.

Family physicians wishing to explore this area should consider that an initial investment of time and money often results in improved workflow efficiency and improved patient satisfaction. Additional considerations include the clinic's ability to customize same-day available appointment slots (advanced access), and rules in the patient self-booking software to allow booking the appropriate amount of time for certain types of appointments. Some pilot projects have identified the importance of continuing to have a hybrid model of e-booking and phone booking.[6]

E-booking is available most often through separate third-party software that is linked, but not native, to the EMR, which may limit customization of appointments based on patient characteristics. This landscape continues to evolve, and some EMR vendors are offering native solutions.

Following are examples of e-booking applications:

- Chronometriq – contact EMR vendor to verify compatibility
- Health Myself Patient Portal – contact EMR vendor to verify compatibility
- Iamsick.ca – contact EMR vendor to verify compatibility
- PetalMD – contact EMR vendor to verify compatibility
- Veribook – works with Oscar EMR

SECURE MESSAGING

PROVIDER TO PATIENT

While convenient, direct email communication with patients on unencrypted email servers carries a privacy risk for transmitting personal health information. Secure messaging evolved as a method to enable secure and private communication between patients and their health care providers.

Many solutions are third-party software add-ons to clinic EMRs that require a separate login to a secure portal, although some EMRs can provide messaging within the EMR itself. It is worth noting that regulatory guidance requires including clinical documentation from secure messaging/email in the patient's medical record. This can prove challenging to workflow for non-EMR-embedded messaging. EMR vendors can provide more information about secure messaging capability and options for integrating external secure messaging solutions.

Secure messaging has numerous uses that include clinic staff sending lab requisitions or test instructions to patients or physicians responding directly to patient inquiries. It is worthwhile reviewing the clinic's particular needs and typical scenarios in which secure messaging could be useful.

Some provinces have electronic communication fee codes to incent physicians to use privacy-approved secure messaging with patients.[7]

Finally, the CMPA recommends having patients sign a Terms of Use agreement about email communications or secure messaging that clearly lay out appropriate usage.[8] Physicians are advised to have discussions with patients about what they can expect from this type of service.

PROVIDER TO PROVIDER

Physicians often work in multiple clinical environments (hospital, clinics, private practice) that are not usually linked by electronic messaging. Many physicians resort to unsecured text or email to communicate with each other. The Canadian Medical Protective Association (CMPA) and provincial regulatory Colleges provide guidance for the security and privacy of any transmitted personal health information. Therefore, it is necessary to use approved secure/private solutions for interprofessional communication.[9] For a more detailed discussion, please see Module 2 – Using EMRs to Connect with Other Care Settings and Providers.

PATIENT PORTALS

Generally, patients can access their own health information in one of two ways: through an EMR-tethered portal or through a health system-linked EHR portal.

EMR-TETHERED PORTAL

Some vendors make a subset of patient data available through family physicians' EMRs. Physicians can set parameters regarding what information patients can view, and add context to test results by sending patients messages attached to their laboratory results (e.g., "Good job Tom, your A1C is at target!"). These comments have significant value for patients and improve closed loop communication with those who are waiting for test results. Tethered to an EMR, this type of portal is convenient for workflow and requires less documentation. However, availability of this service is limited by EMR vendors, and is not yet common in Canada.

EHR-LINKED PORTAL

A government, health region, or health system-based EHR patient portal provides patients with a view of their health information from all provincial/territorial sources that contribute to it, not just the information from their family physician.

These portals can offer patients a more comprehensive view of their health, in part by offering data—such as immunization history and pharmacy medication records—that are typically stored outside physicians' offices.

EHR portals usually do not present important information from family physicians, the providers that patients interact with most often in the health care system. The lack of integration with family physicians' EMRs presents a significant barrier to the usefulness of these portals.[10]

However, some groups have achieved considerable success, such as the Sunnybrook Hospital group in Toronto using their MyChart patient portal. Patient and physician satisfaction rates are very high. Importantly, physicians felt that both the physician-patient relationship and office efficiency improved when patients accessed their own personal health information through the portal.[11,12]

Following are examples* of patient portal applications and the province(s) in which they are available:

- Citizen Health Information Portal (CHIP) Pilot Program; Saskatchewan[13]
- LifeLabs; British Columbia, Saskatchewan, and Ontario[14]
- MyChart; Ontario

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*For simplicity, hospital system-tethered patient portals have been included in this category (e.g., MyChart), due to the overlap in data available to patients in some regions.

TELEHEALTH

Telehealth can be defined as the "use of electronic information and telecommunications technologies to support long-distance clinical health care, patient and professional health-related education, public health and health administration."[15]

In Canada the term has traditionally referred to technology-enabled video visits between physicians (often in hospital-based settings) and patients in remote geographical locations. The concept of telehealth has now grown to include telehomecare with remote patient monitoring and virtual visits in primary care.

TELEHOMECARE

Telehomecare helps keep patients with chronic diseases in their homes, optimizing self-management and using remote patient monitoring technology to connect patients with their care providers. This has been shown to have benefits in chronic disease management for patients with COPD, diabetes, and heart disease by helping to avoid costly acute care visits and improve patient satisfaction and quality of life.[16] Family physicians may be able to generate referrals to such services through their EMRs, depending on their province or territory of practice.

Some jurisdictions have well-established telehomecare or similar remote patient monitoring services, such as the Ontario Telemedicine Network's Telehomecare program in Ontario.

VIRTUAL VISITS

Virtual visits can be separated into two main practice models: in-practice, in which clinicians visit patients they know and/or who are rostered to their practices; and virtual clinics, in which clinicians provide episodic care.

In the CFPC's Patient's Medical Home (PMH) framework,[17] the preferred use of virtual visits is physicians connecting with their existing patients. This approach ensures that valuable continuity of care inherent in the PMH is strengthened, rather than disrupted, by technology. This approach is also well supported by the experience of virtual visits in British Columbia, in which patients preferred to see their own provider in the virtual visit. They perceived virtual visits as complementary to, but not as a replacement for, in-person visits.[18]

Table 1: Virtual visit provider examples

Provider	Region	Remuneration
EQ Virtual	British Columbia	Publicly remunerated by the Medical Services Plan (MSP) of British Columbia
Maple	Ontario	Private pay model
Medeo Virtual Care	Canada	Publicly remunerated; depends on specific criteria
Ontario Telemedicine Network	Ontario	Publicly remunerated; depends on specific criteria

CONCLUSION

By exploring new technology-enabled approaches to health care, family physicians are well positioned to achieve PMH goals, including timely access and improved communication for continuity of care.

Patient-facing technologies not only have the potential to significantly change how medicine is practised, but are also tools that can improve the patient experience. Family physicians are encouraged to consider the services discussed in this module, and apply them in the unique contexts of their practices while keeping in mind challenges of health literacy and access to technology that may exist for some patients. The Best Advice guide *Health Literacy in the Patient's Medical Home* explores actions and tools family physicians can use to match patients' literacy needs during clinical interactions.

Family physicians working in teams must remember that managing the practice changes that occur when technology is adopted is often just as critical as the technological details themselves. Technology should not be a goal in and of itself, but should serve as a tool to achieve better health outcomes.

Canadian Medical Protective Association

- The Privacy and confidentiality eCommunication pages provide an overview of medico-legal considerations about electronic communications.

Canada Health Infoway

- ACCESS Digital Health is a gateway for various digitally-enabled care and services

- Access to Services provides information about topics such as virtual visits, telehomecare, and e-booking

- Safer Medication Practices provides information about and links about electronic prescribing and related practices, as well as the e-prescribing service PrescribeIT™

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