Quality Improvement and the Patient Journey: Improving Health Outcomes, Enhancing the Patient Experience and Reducing Health Care Costs

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Seventy-seven percent of Ontarians who have a regular doctor or place of care rate the overall quality of medical care they receive as excellent or very good. In this respect, Ontario compares favourably with the rest of Canada and with other wealthy industrialized countries (Ontario Health Quality Council 2011). However, despite this relatively high level of public satisfaction, Ontario's health care system suffers from worrisome shortcomings, many of which are highlighted in the Ontario Health Quality Council's 2011 Annual Report on Ontario's Health System. For example:

- In the first quarter of 2009, 6.5% of adult Ontarians had no family physician; slightly over half of them were actively seeking one without success
- In 2010, the proportion of adult Ontarians who were able to see their doctor on the same or next day when they were sick (48%) was - lower than in eight of the 10 other developed countries that were surveyed[1]
- In 2008, only one-third of adult Ontarians with chronic health conditions[2] were asked to talk about their health goals "almost always" or "most of the time" by their primary care provider
- In 2010, 48% of adult Ontarians who reported using the emergency room in the past two years, thought that their last ER visit could have been treated by their regular provider if available
- In 2010, only 51% of Ontarians waited four weeks or more to see a specialist – higher than in any of the 10 other countries that were studied[1]
- In 2009-10, only 51% of Ontarians with diabetes had an eye exam during the previous 12 months
- In 2010, only 66% of adult Ontarians who have a regular doctor or place of care said that their provider always tells them about treatment options and includes them in decisions about the best treatment
- In 2010, 18% of adult Ontarians thought their time was wasted because their medical care was poorly organized; this proportion was higher than inmost of the countries studied[3]
- In 2009-10, women from lower income neighbourhoods were less likely than women from higher income neighbourhoods to have had a Pap smear or mammogram within the recommended time interval

In recent international surveys of primary care physicians and adult residents of wealthy industrialized countries conducted by the Commonwealth Fund, Canada trails all or most other countries in information technology, timely access to care, care coordination, use of teams, performance monitoring and participation in quality improvement initiatives (Schoen et al. 2006, Schoen et al. 2007, Schoen et al. 2008, Schoen et al. 2009, Schoen et al. 2010). The Commonwealth Fund's ranking of health system performance among seven developed counties – Australia, Canada, Germany, the Netherlands, New Zealand, the United Kingdom and the United Sates - placed Canada last in quality of care, second to last (ahead of the United States) in overall ranking and efficiency and fifth in access and equity (Davis et al. 2010).

[1] Australia, France, Germany, Netherlands, New Zealand, Norway, Sweden, Switzerland, United Kingdom, United States

In response to these shortcomings – which reflect health system deficiencies rather than the failings of individual health care providers - the Quality Improvement and Innovation Partnership (QIIP) conducted an examination of the patient journey in Ontario and the ways in which primary health care quality improvement can enhance the patient experience, improve the health of the population and reduce per capita health care costs. The project has five main components:

1. Patient focus groups to identify typical health care experiences over time for Ontarians with health care needs ranging from preventive and episodic care to care for multiple co-existing chronic conditions;
2. Mapping the patient journey across a spectrum of health care needs based on focus group findings;
3. Focus groups of interdisciplinary health care providers in several primary health care locations to validate the patient journey maps;
4. Identifying where in the patient journey changes in system design that have been successfully applied elsewhere can be adapted to the Ontario context;

5. Describing the expected impacts of those changes on the patient experience, health outcomes and health care costs.

Patient Focus Groups

Separate patient focus groups explored the patient care experience over a one year time frame, focusing on one of three scenarios:

- A healthy adult who experiences acute minor illness
- A person with Type 2 (adult onset) diabetes
- A person with multiple chronic conditions.

For each focus group, patients were recruited whose experience corresponds to the scenario under consideration. The focus groups were facilitated by two QIIP quality improvement (QI) Coaches one of whom has extensive focus group experience. In addition to sharing their patient experience, focus group participants were encouraged to identify improvement opportunities.

Patient Journey Mapping

Based on the focus group findings, a typical patient journey over a one year time period were mapped for each scenario. The patient journey maps were developed by the same QI coaches who conducted the patient focus groups.

Provider Focus Groups

Focus groups were conducted with interdisciplinary health care providers from Family Health Teams in northern Ontario, urban southern Ontario and rural southern Ontario to validate the patient journey maps and to identify relevant opportunities for improvement in primary health care and at the interface between primary health care and other sectors such as specialist care, hospital care, community care and public health,

Identification of Opportunities for Improvement

Drawing on suggestions from the patient and provider focus groups and on international experience, points in the patient journey scenarios at which system redesign, particularly at the practice (micro-system) level, could improve the patient experience, quality of care and efficiency were identified. The emphasis was on system design changes that have already been tested and successfully implemented, are feasible in the Ontario context, can be introduced through a rapid-cycle change approach, and require limited additional resources. Examples include team-based care, advanced access, self-management support, prepared visits, group medical visits, use of recall and reminders, “panel management” (including use of registries and decision support), pro-active follow-up, shared care arrangements with specialists, community partnerships and substitution of telephone and email interaction for office visits. This and the final component of the project engaged practice facilitators and the QIIP senior management (Executive Director, Quality Improvement Coordinator, Provincial Lead and Senior Advisor).

Description of Expected Impacts of Quality Improvements

For each scenario, we characterize the expected impact of relevant and feasible system design changes on the patient experience, health outcomes and health care costs based on evidence and experience from Ontario, elsewhere in Canada and internationally. Although quantification of potential impacts is beyond the scope of this project, we describe the types of effects (e.g., fewer unattached patients, earlier access to care, more appropriate care, avoidance of complications, reduced emergency department visits, fewer hospitalizations and enhanced self-efficacy) that can be anticipated and the implications for health system functioning.

Knowledge Translation

We will actively disseminate the project findings within the Ontario Ministry of Health and Long-Term Care and to key stakeholders including professional associations, public and patient advocacy groups, organizations and individuals engaged in quality improvement work and primary health care providers and organizations.

Mapping the Patient Journey Focus Group Project Report

Produced by Tanya Spencer, Dora-Lynn Davies and QIIP QI Coaches

Purpose:

The purpose of the focus group sessions was to document the patient journey within the primary health care system for three types of patients, and to identify how primary health care could be strengthened to support patient self-management [patients as partners in health care], achieve better health outcomes and improve the experience of care.

Method:

A. Patient Focus Group Sessions:

- Focus group sessions were held in Timmins, Ontario with patients selected from the Timmins Family Health Team (FHT) and from non-FHT patients.
- The focus group sessions addressed the patient's journey through the primary health care system in three areas:
    - Adult preventive health maintenance and episodic care
    - Type 2 Diabetes
    - Complex care of patient with co-morbid conditions

B. Provider Focus Group Sessions:

- Focus group sessions were held with FHT health care providers for the purposes of validating the patient's experience and identifying how primary health care could be improved to support patient self-management [patients as partners in health care] and achieve better health outcomes .
- Sessions were held with Timmins FHT, Minto Mapleton FHT and Taddle Creek FHT.

Limitations:

- The findings were based on the responses from patients living in a specific region of Ontario, which has nuances not shared by other areas of Ontario, e.g., travel grants to visit specialists in other towns.
- Documentation during the focus groups for the most part was hand written therefore limiting the ability to capture exact quotes from participants.

Results

See below narrative documents and related patient journey maps for each of the three patient types.

Narrative Summary for Prevention and Episodic Care Focus Group

Group Information

Nine females attended the focus group. The average visit rate reported for the last year was 3.6 visits per year, which is regarded as high for this population. All participants identified that they did have a primary care provider. Eight identified the primary provider as a physician and one identified the primary provider as a Nurse Practitioner. Of the eight participants with a family doctor, five identified that they often access a Nurse Practitioner for care due to an access barrier to their physician. The participants identified that the usual reasons for going to see their primary provider were:

- Relief of symptom(s)
- Medication review
- Preventive screening/annual physical
- Follow-up
- Results
- Seeking feedback on their health care choices

Family Health Team Information

Three family health teams were asked to review the patient focus group information and validate the information for their own context. The teams who participated are the Timmins FHT, the Minto Mapleton FHT, Drayton site (rural), and the Taddle Creek FHT, Toronto (urban).

In the table below there are three columns:

1. Identified barriers to care – this information represents barriers identified by the patient participants in the patient focus group
2. Opinions related to current system of care – this information represents opinions voices by the patient participants in the patient focus group
3. Opportunities for improvement – this information represents improvement ideas generated by the patient participants in the focus group

Following the table is a summary of provider and staff feedback; this information represents feedback received from providers and staff in provider and staff focus groups.

Narrative Summary of Preventative and Episodic Patient Care Experience		
Identified Barriers to Care	**Opinions Related to Current system of Care**	**Opportunities for Improvement**
• Access to the primary provider was identified as a barrier to care with wait times of 5-12 weeks. • By the time a visit for an episodic issue occurred the issue was generally resolved.	• Access to the primary provider is limited due the system being burdened by the volume of chronic disease management visits and the physicians' external commitments to the health care system outside his or her primary care office. • Most were willing to be routed to an alternative provider for an earlier appointment.	• Cancellation lists for earlier available appointment. • Reminder calls for booked appointments so that appointments won't be missed and cancellations could then be opened to those waiting for appointment. • Target chronic care patient needs through chronic disease specific clinics to open episodic/preventive care appointments. • Eliminate unnecessary follow-up visits for chronic patients that are just for medication renewal by having system with pharmacy for renewal of medication without office visit to open episodic/preventive care appointments. • Alternative clinic for more urgent needs where patient would pay fee to access earlier appointment time. • Cluster types of visits into clinics (e.g. immunization clinics, disease specific clinics).
• Were directed to access care via the emergency department and walk–in clinic for more urgent care. • Despite being advised by the primary provider's office to access the walk-in clinic, the provider seen at the walk-in clinic would express frustration to the patient identifying that "it was not appropriate for you to access the walk-in clinic just because you can't get into your family doctor" • Walk-in visit often managed by being redirected back to their primary provider /back to the initial access delay.	• Emergency department was avoided due to waits and was accessed only when emergent issue. • Felt there was no compassion, but rather judgment, from the walk-in provider, as to the need for the visit	• Discussion could be held on an organizational level to better equip the FHT walk-in providers with the medical record as well as better inform the walk-in providers of the regular provider's delays and the reasons why patients are being directed to the walk-in, so the regular provider isn't perceived negatively by the walk in provider.

• Walk-in clinic provider did not have access the participants' permanent health record resulted in intervention sometimes being limited or inappropriate and resulted in either redirection to or inevitable need for follow-up with the participant's primary provider.		
• On booking reception requesting information regarding reason for appointment.	• Perceived violation of personal privacy. • Concerned reception staff making clinical judgments without qualified medical background. Will bypass clerical to speak with nurse – generally gets earlier appointment this way.	• Receptionist could indicate why they are asking for the reason for appointment so caller understands it may be to triage, or for appropriate appointment type, staff support, etc. • Have reception person be a qualified medical professional (i.e., nurse)
• Patient accesses care only when sick or when preventive visit initiated by patient - lack of proactive approach from provider	• Does not feel engaged in care often outcome determined by provider – does not listen to patient opinion, concerns dismissed as due to age, feels over-looked, wants more time. • Finds providers unwilling to take next step in investigation in timely fashion and fail to look at concerns from broader view, not linking together multiple issues that may be linked. • Have to come to the visit prepared with a list of issues/identified needs to ensure that all care needs will be managed on the visit. • Important to be self-managers of their care. • When accessed care with their family physician, their needs were generally met; however, felt the encounter was rushed. Perceived that the provider was very busy and just trying to keep up so that the appointment was not intentionally rushed, but rather a circumstance of being heavily booked and busy.	• Both patient and provider need to be proactive about care. • Good communication between patient and provider. • Providers take whole person approach to both management of episodic care and preventive care to reduce long-term impact on individual's health and reduce long-term burden on system. • Increased open-mindedness of medical providers to alternate care providers and vice-versa. • Care from a family physician could be reserved for those patients with complex care needs. Those with general episodic and preventive care needs could receive care from Nurse Practitioner • Seminars or information on preventive care. • When the possibility was raised that this group might not have received preventive

	• When accessed care with the Nurse Practitioner as an overflow provider to the physician, felt that their needs were met; they were listened to and suggestion for care were heard; the encounter was thorough and not rushed; felt more like a person than a number, acknowledging that they felt the Nurse Practitioner's booking time was more open than the physician. • Fear that if primary care provider is not family physician that if care needs become complex the system will not support care any longer. • Fear that if primary care provider leaves community there will be no other available provider, no transfer of care. • Regarding preventive care, specifically, had to be an advocate for their own health care needs. • Some indicated feeling that if they were not self-advocates for preventive care that it would not be brought up by the primary providers. Others felt that the providers addressed this on encounters while reviewing the patient record but admitted that if they had not been in to see the provider they were not confident that this review would occur. • Some did receive letters reminding them of preventive care and screening; others were not aware that this was done. • Concern that those with breast cancer once completed treatment and back to routine screening are not eligible for routine screening program that has call-back safety net – fear of loss to follow-up as responsibility solely in hands of patient.	reminders if they had presented to the primary provider ahead of the reminder being due; they acknowledged this was likely true, however suggested that the system could better inform patients of such processes. • Overall more information on how system works, what system offers and what information system needs from patient to better provide care.

Summary of Provider and Staff Feedback:

Timmins Providers

- Access to care for patients is a shared frustration for providers.
- Providers desire to see episodic care type patients as feeling burdened by care needs of patients with chronic conditions.
- Agree that easier access to care would facilitate increased overall satisfaction
- Agree system could be designed to better support preventive care.
- Need for strategies to enhance awareness of preventive care (including 'what is preventive 'and 'what is not preventive' – clearing misconceptions).

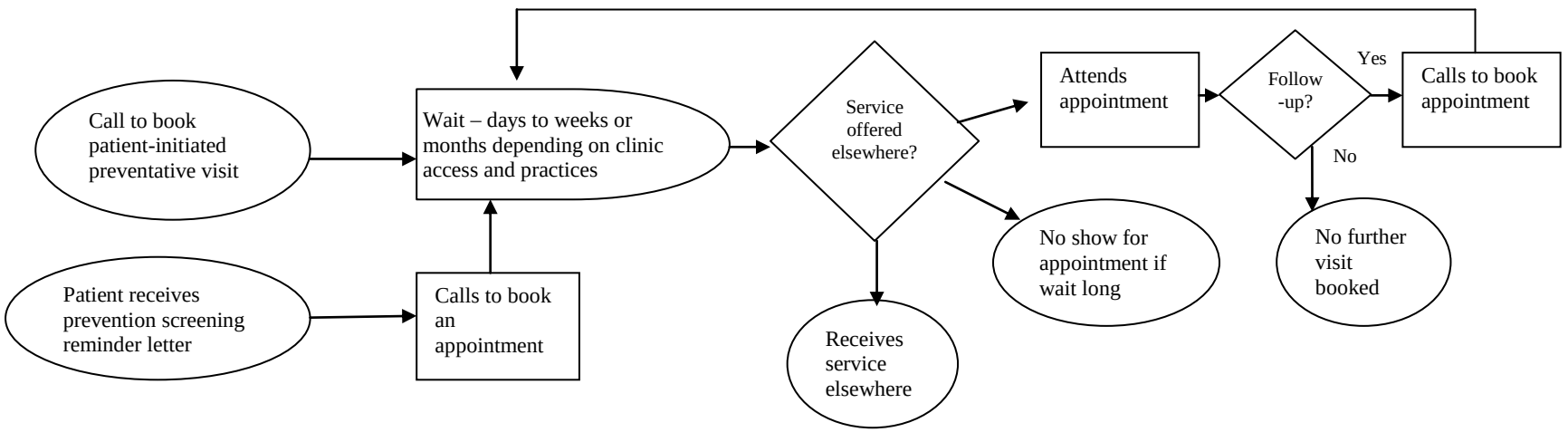
Rural Providers

- Access not as much of an issue for patients in rural area with most doctors having same day access to 2 week delay.
- No walk-in clinic available. Physicians expected to see their own patients
- Emergency department used after hours or Friday afternoon when office busy.
- Physicians try to see their own as they know they will be covering Emergency another day.
- Not all physicians' offices have an RN; therefore the option of speaking to the nurse is not available.
- Physicians in group practice see each other's urgent patients
- Older doctors more likely to stay and see patients until they are done.
- Nurse Practitioners are stand-alone providers in small communities effectively managing quite complex patients with support of a family doctor.
- Impressions of what a nurse practitioner does vary even amongst providers
- There is a potential to expand the role of the RN in physicians' offices to address prevention and episodic needs – e.g., Pap smear, upper respiratory infections.
- Reference made to looking at the role of the RN in Northern Ontario
- Need for more self-management on the part of patient. Generally people do not see this as their responsibility.
- Prevention screening letters only sent out by physicians who are using the electronic medical record.
- Ontario Breast Screening Program no longer doing a breast exam. This impacts the physician's office as need to see women once per year for breast exam.

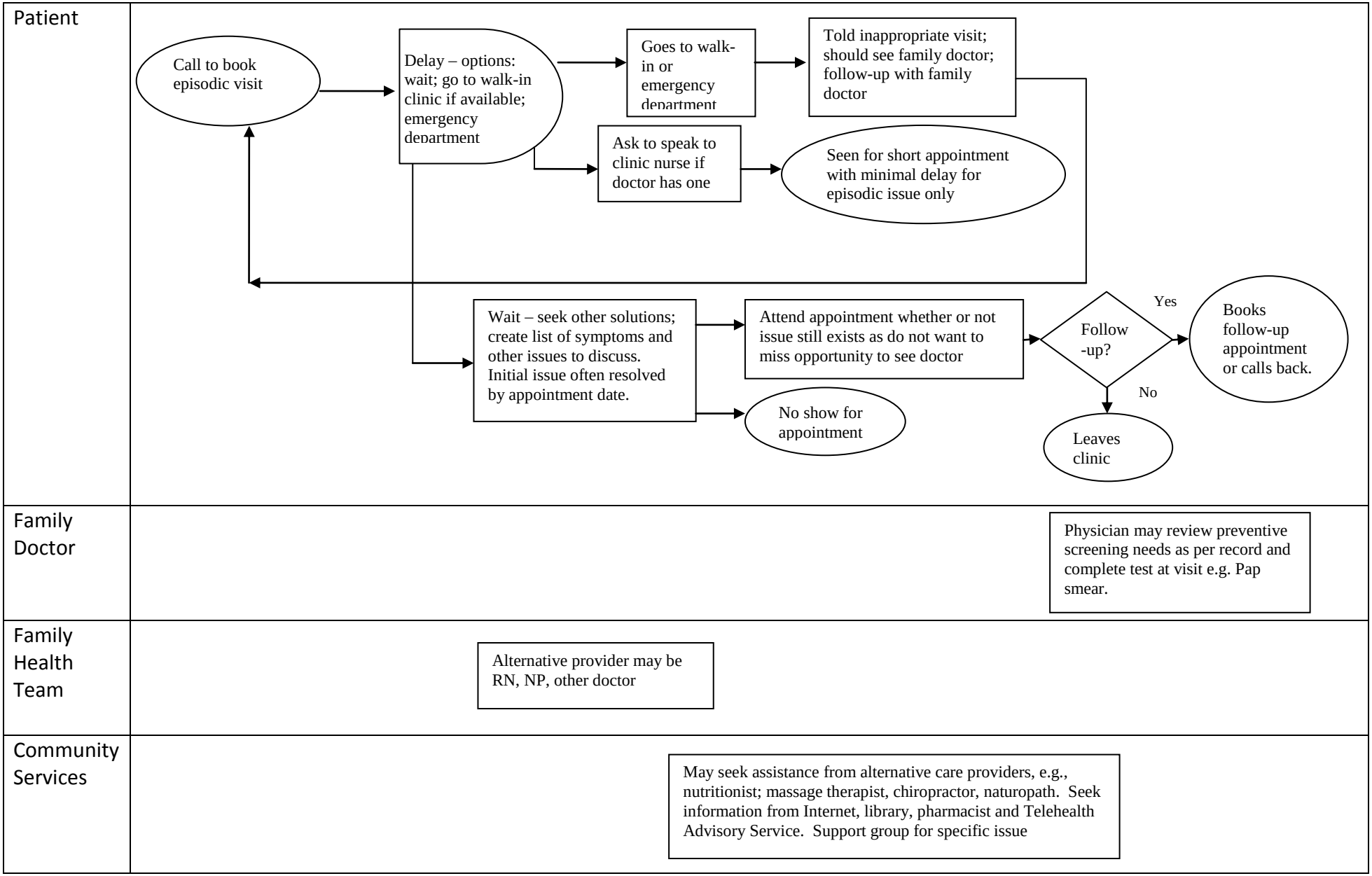
Urban Providers

- Downside of advanced access is that some patients are coming in for visit when do not need physician care. Seeing too many people with coughs and fevers who should be just recovering at home.
- FHT uses after hours clinic – no need for patients to use walk-in-clinic of any kind.
- Via P-Prompt data management system send out letter to patients reminding them of overdue prevention screening. Some patients complain that they get too many letters and wish it could all be rolled into one.
- Now provide episodic exams not annual physicals; address prevention at these visits.
- We deal with many worried well patients.
- Would like to see clinic where by patients come to see NP and/or RN to discuss prevention and lifestyle issues.
- Messages patients hear in the media can have a negative impact on FHT and providers – e.g., if Oprah says you need a specific test then people start coming into get the test. FHT needs to educate patient re: what prevention testing is needed before hand; this takes less time than explaining why TV program may not have been completely accurate.

Patient Journey Map for Preventive Screening

Patient	
Family Doctor/Clinic	May do preventive screening (e.g., physicals) only on specific times/days therefore increasing wait Some practices - review EMR for patients due for screening and send letters requesting patient to book appointment
Family Health Team	Alternate provider may be RN, NP, other doctor.
Community Services	Age appropriate patients get letter from Ontario Breast Screening Program re: mammogram Preventive care accessed via Health Unit, private clinics, employer Occupational Health Nurse.

Patient Journey Map for Episodic Visit



Narrative Summary for Diabetes Type 2 Focus Group

Patient Group Information

15 participants attended the focus group, a mix of males and females. The participants experienced living with Type 2 Diabetes in a range of years from three years to twenty-five years. The majority indicated that they see their family physician every three months for follow-up. All participants identified that they did have a physician as a primary care provider. The majority of participants had participated in the Diabetes Education Centre (DEC) series of learning sessions. A few patients were tracked every three months by the DEC and by their physician. The participants identified that the usual reasons for going to see their primary provider were:

- Follow-up appointment
- Medication review
- Test results
- Lifestyle teaching
- Episodic care needs

Family Health Team Information

Three Family Health Teams were asked to review the patient focus group information and validate the information for their own context. The teams who participated are the Timmins FHT, the Minto Mapleton FHT, Drayton site (rural), and the Taddle Creek FHT, Toronto (urban).

In the table below there are three columns:

1. Identified barriers to care – this information represents barriers identified by the patient participants in the patient focus group
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3. Opportunities for improvement – this information represents improvement ideas generated by the patient participants in the focus group

Following the table is a summary of provider and staff feedback; this information represents feedback received from providers and staff in provider and staff focus groups.

Narrative Summary of Diabetes Patient Care Experience		
Identified Barriers to Care	**Opinions Related to Current system of Care**	**Opportunities for Improvement**
• Access to the primary provider was identified as a barrier to care with wait times of 2-8 weeks. • Stand-alone primary providers have no professional staff to help manage patients with diabetes.	• Patients are lost to follow-up because they forget to call back for appointment and the physician's office does not call them. • Patients in denial can fall through the cracks. They have less contact with the family doctor and are non- compliant with care. • Historically, patients would go to a walk-in clinic at times for care. • Historically, patients were challenged with not always being able to book a follow-up appointment as provider's schedule was not always available for 3 month intervals. The result was that patients would then forget to call back to rebook and were then lost to follow-up. • Historically patients did not receive routine diabetes follow-up, but rather diabetes care would be reinitiated during an episodic visit and patients were called in for follow-up based on abnormal results.	• Regular diabetes clinics available with no appointment needed • Regularly scheduled 3 month planned follow-up visits and implementation of same day access model proposed for this fall by some physicians. • Visit prompts by physician's office. • Flagging abnormal lab results and having other provider in group practice see patient if own provider not available. • Patients with physicians in stand-alone clinics should be referred to the Diabetes Education Centre.
• Explanation of care is varied by provider	• Historically, education regarding the management and education of diabetes was done using threats – "if you do not do …. then ….. Is going to happen to you". Patients found this a turn-off and pulled back.	• Health care providers regard patients as partners in care. Provide information; discuss options for management, and promotion of self-management. • Provide education in a group setting for support and to promote self-care.

	• Physicians explain medications, lab results, and give a bit of guidance re: lifestyle. • DEC gives more detailed explanations • Participants now feel involved in decision making regarding their care. They express being responsible for their own care. Participants feel that their providers listen to their concerns. Patients feel threatening approach is no longer common. • Participants denied any delay in getting education when initially diagnosed. • One patient had attended the FHT Self-Management course but other participants were unaware of this program.	• Use doctor for guidance regarding medications. Use DEC for education and guidance re: lifestyles. Provide patients opportunity to have regular access to both. • Consistently provide time for education during visits.
• Restaurant eating and poor food labeling a barrier for people with diabetes in terms of following a diabetes diet.	• It is a challenge to eat out, not always able to know food meets diet recommendations.	
• Cost of testing supplies. Test strips are $1.00 each and are dispensed in large quantities resulting in having to discard unused strips that expire.		• Reduce barrier to cost of test strips and blood glucose monitoring supplies.
• How do patients with diabetes get care if they do not have a family physician?		• Regular diabetes clinics available with no appointment needed
• Physicians' hand-written prescriptions are consistently an issue with the dispensing pharmacy requiring follow up and delays		• All physicians have basic computer skills and can issue an electronic prescription

• Limited access to medical specialists – ophthalmologist, nephrologist, neurologist • Must travel out of town to specialists.		
• No advertisement about services available in the community to support people managing diabetes.		• Improve communication of services available – advertisement by DEC, FHT and community.
• Family members are not involved in care	• Family able to attend visits if desired. Families not invited directly. • Some family members deny their loved one has diabetes and continue to cook as before. • One participant did not tell his family for 5 years that he had diabetes	

Summary of Provider and Staff Feedback:

Timmins Providers

- A general barrier to access is patient non-compliance with care and follow-up.
- Care has shifted to quarterly diabetes care, often initiated by providers' office.
- Primary care providers and DEC need to coordinate care to ensure no service duplication and ensure comprehensive and timely care
- Providers need to reinforce diet education and self- management to encourage patient confidence with eating out.
- Need to encourage participation in programs that promote and encourage patient self-management.
- Need greater integration of patient self-management support into routine care and reinforced by all providers.
- Agree supplies are costly including both lancets and test-strips. Cost limits adherence to provider requests for patient self-blood glucose monitoring and can impact on care and patient outcomes.
- Need to increase awareness and opportunity for referral to and consultation with specialists via Ontario Telemedicine Network (OTN).
- Agree need to promote and communicate available services.
- Feel family members are encouraged to be part of patient care if patients want.
- Family members are invited to participate in certain programs and with certain providers, but perhaps the invitation needs to be more routine and formalized.

Rural Providers

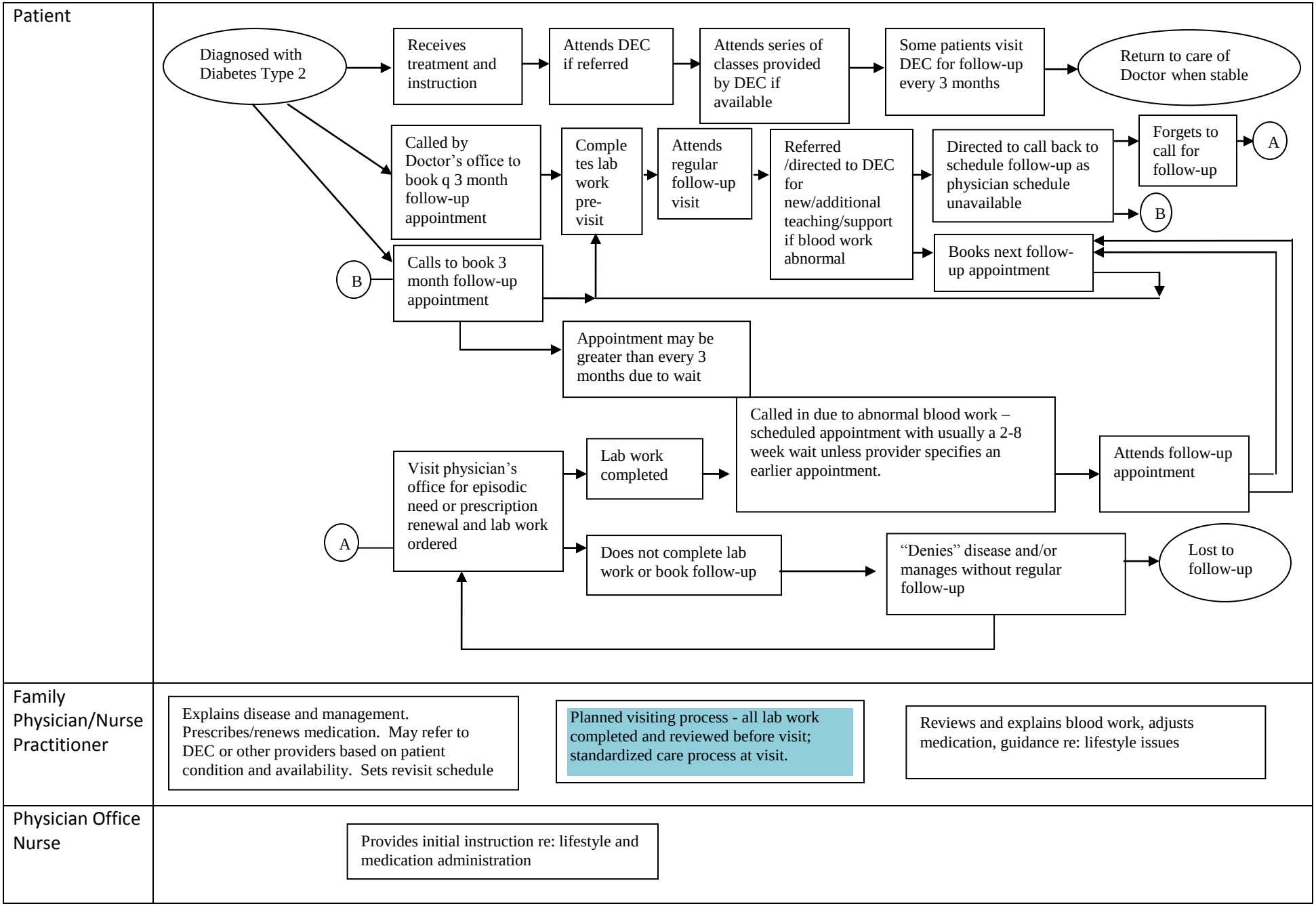
- Regular diabetes clinics with no appointment required would not work in a rural area due to lack of critical mass needed to ensure clinic is cost-effective.
- Physicians max-pack visits (meaning they address all needs possible at one visit) so if a patient came in for an episodic visit and was due for a diabetes check-up then this would happen along with addressing the episodic care need.
- Diabetes Patient Portal is an up and coming tool for managing diabetes – being trialed in rural area currently.
- FHT provides weekly clinic for stable type 2 diabetic patients who are referred by physician or DEC
- FHT provides diabetes education classes every quarter including chiropody, pharmacy and social work.
- Partnership with the DEC in North Wellington. Diabetes Care Network for Wellington County has agreed that all new diabetics must be seen by the DEC.
- Office nurse, in one group practice, sees new diabetic patients to teach blood glucose self-monitoring
- FHT worked with DEC and doctors to identify all patients with diabetes and determine who is providing care. Patients who have not been seen are being called in for visit. This has reduced lost to follow-up patients. FHT staff and doctor conducting group visits with these patients.
- Reporting between local DEC and FHT re: patients in common, have to be effective in order to not lose patients to follow-up.
- FHTs have a tremendous ability to see diabetes patients. DECs cannot manage the volume of diabetic patients alone.
- Funding constraints for staff limit the ability of FHTs and the DEC to meet the demand for service.
- Checking to see when the patient has last been in is a means of catching patients who have not been in for follow-up.
- Some specialists come from urban centers to local hospitals.

Urban Providers

- Access to provider not a problem for patients whose physician has adopted advanced access philosophy and strategies.

- Access to providers is confounded by the problems of patients being late due to parking, public transit, traffic, etc.
- Lack of respect on patients' part re: "no-shows" required revamping policy.
- FHT has Diabetes Education Program (DEP) that patients can be referred to or can self-refer. New program so no wait at this time.
- Patients who do not attend DEP are followed by family doctor. EMR reminders systems flag when patient is to return for appointment. RN follows up if patient does not make appointment. Sometimes patients can feel like we are bombarding them. Need to document overall diabetes management system of care for MD and DEP so everyone clear on roles and expectations.
- Coordination of care between DEP and physician needs to be improved for continuity and completeness of care.
- Culture of city reinforces individual anonymity therefore group visits a hard sell. Less sense of community in a large city.
- FHT promotes self-management. Contradiction is that providers still badger the patients to attend visits and manage disease.
- FHT runs self-management groups – patients initially shy but then jelled as a group.
- Some practitioners still feel they have to "make" patient change their behaviour rather than taking the self-management approach.
- No reference to Ministry-funded Diabetes Education Centre.
- Even with DEP services, patients chose to disregard their own need for care/management.
- The patients you badger the most to come in for checkup and blood work are usually the no shows.
- Food can be a challenge for patients with diabetes if you are depending on food banks or soup kitchens for food.
- City dwellers have more stress induced by the environment and providers often have to address mental health issues with patients before they can get to disease management specifically.
- FHT staff visited a Community Centre (CONC) and were shocked to discover that some desperate people have no access to primary health care.
- Access to specialists is limited by demand for the service, not by distances patients must travel.

Patient Journey Map for Patients with Diabetes Type 2



Diabetes Education Centre	Nurse and/or dietitian provide instruction re: lifestyle, diet, etc.	Series of education classes provided	Ongoing 3 month follow-up with some patients	Instruct re: medication management and lifestyle
FHT	Provides chronic disease self-management course			

Narrative Summary for Complex Chronic Conditions Focus Group

Group Information

Twelve individuals attended group; participants were both male and female. The participants have experience living with complex chronic conditions for between 2 and 32 years. All participants identified that they did have a primary care provider. One of the participants identified the primary provider as a Nurse Practitioner, and the other 11 participants all identified that a physician was their primary provider. Six of the participants identified that they accessed a specialist over the past year for the management of their chronic conditions. Eight participants reported accessing either the emergency department or walk-in clinic over the last year due to exacerbations of their chronic conditions and lack of access to their primary provider to address the exacerbation. Five participants reported participating in an Ontario Tele-Health Network pilot project for the management of their chronic disease which occurred over a 3-4 month period. During this project patients participated in electronic in-home daily monitoring by a Registered Nurse and in 12 weekly group sessions aimed at teaching them about their disease and how to self-manage. Several participants also reported having some components of their chronic disease managed by nurses in the primary provider's office, e.g., injections and anticoagulation monitoring.

Participants identified that the interval in which they visited with their primary provider varied based on the interval set by their provider, their co morbidity and the stability of their condition.

The participants identified that their usual reasons for going to see their primary provider were:

- Relief of symptom(s)/exacerbation
- Medication reviews/refills

Family Health Team Information

Three family health teams were asked to review the patient focus group information and validate the information for their own context. The teams who participated are the Timmins FHT, the Minto Mapleton FHT, Drayton site (rural), and the Taddle Creek FHT, Toronto (urban).
In the table below there are three columns:

1. Identified barriers to care – this information represents barriers identified by the patient participants in the patient focus group
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Following the table is a summary of provider and staff feedback; this information represents feedback received from providers and staff in provider and staff focus groups.

Narrative Summary of Complex Patient Care Experience		
Identified Barriers to Care	**Opinions Related to Current system of Care**	**Opportunities for Improvement**
• Access to the primary provider was identified as a barrier to care with wait times of 1 day to 1 month. • Care for exacerbation of illness required going to emergency department or walk-in clinic. • Walk-in clinic visits involve prolonged wait. • Receptionist is gatekeeper and inhibits access with an exacerbation • Attempts to reach nurses for earlier appointment is barrier as nurses may take 24-28 hours to call back.	• Walk-in provider or alternative provider does not know patient history, co-morbidity or needs – does not have permanent patient record	• Same day access system • Cross coverage of providers in the same office setting for earlier appointment/same day appointment for exacerbation would avoid emergency department and walk-in clinic visits. • Have nurse available to triage needs for earlier appointment. • Providers identify complex chronic patients with special needs so receptionist has authority to book patient without a wait. Prioritize care for patients with complex needs. • More primary care providers.
• Concerns not always heard by provider.	• Has to push provider to listen to their concerns. • Satisfied with care received on encounters and coordination of care. • Information provided on visit generally clear and explained on patients' level. • Satisfied that provider is willing to ask questions and look for answers when answer not immediately known by the provider. • Given options for care and provided with choices	• Caring provider that takes personal approach. Respectful and considerate to patient. • Providers need to actively listen to patient concerns.

• Wait time for specialist is 4-6 months • Distance and cost to see specialists	• Travel grants flawed. Travel grants are not adequate to cover cost of travel and accommodations. • Specialists often want the patient to stay an extra day or two for testing so increased cost. • Primary provider and specialist communicate well and share results.	• Reduce system cost by bringing specialist to community rather than having so many patients travel.
• Medication management difficult due to volume of medications and complexity of administration • Pharmacy medication dispensing intervals and associated cost. • Pharmacy delays in filling prescription renewal requests.	• Inconvenient to get medications monthly and costs more. Want long-term medications at 3 month intervals. Feel pharmacy is cheating with monthly renewals for more dispensing fees. • Faster to go in and request renewal /refill of prescription face-to-face versus phoning in, but it is more convenient for patient to phone in. • When refill requested for prescription when three or four days of current prescription left, pharmacy will refuse to fill. Patient frustrated because often takes one week to get refill done – then goes without medication refill for a few days despite trying to initiate earlier with pharmacy.	• Provider and pharmacists provide clarity around medication administration. • Three month dispensing of all long-term medications with convenient and timely refill process.
• Needed community-based home health care services are unavailable • Failure to meet criteria for inclusion in community-based home health care	• There are more services needed than provided. • When not eligible for services cost to have	• Improve quality of care and type of community-based home health care services provided. • Make home health care accessible,

services. Services denied. • Referral to community-based home health care services has delay.	services is too high. • Referral was supposed to be done to have services at home, but did not occur so patient had to visit hospital on ongoing bases for management of illness.	affordable, effective and compassionate. • Ensure providers make timely referral to community-based home health care services.
• Family members are not involved in care.	• No invitation from providers to involve family. • Family could attend if request was initiated by patient. • Some patients do not wish family to be engaged.	
• Funding, time and disease-specific limited program	• The OTN diabetes management program increased disease knowledge and encouraged self-management. • Increased confidence and understanding of my disease. • The government needs to continue to fund this type of program.	• More group education and support and self-management programs. • Effective use of funding to maintain programs.

Summary of Provider and Staff Feedback:

Timmins Providers

- Patient access to care delay is a frustration shared by the providers.
- Suggests need for increased patient education regarding rules for refills of certain drugs, e.g., narcotics.
- Suggests need for increased education around particular insurance companies restrictions on amount of drug that can be dispensed.
- Also need to educate patients that are admitted to hospital and discharged with prescription for one month. Despite it being a medication that they were previously on, it erases all previous prescriptions of the same drug/dose.
- Surprised that medication cost was not identified as a barrier by patients.
- Feel family members are encouraged to be part of patient care if patients want.
- Report family members are invited to participate in certain programs and with certain providers, but suggest perhaps the invitation needs to be more routine and formalized.
- Need more programs that promote and encourage patient self-management.
- Need greater integration of patient self-management support into routine care and reinforced by all providers.
- Need to increase awareness and opportunity for referral to and consultation with specialist via Ontario Tele-health Network.

Rural Providers

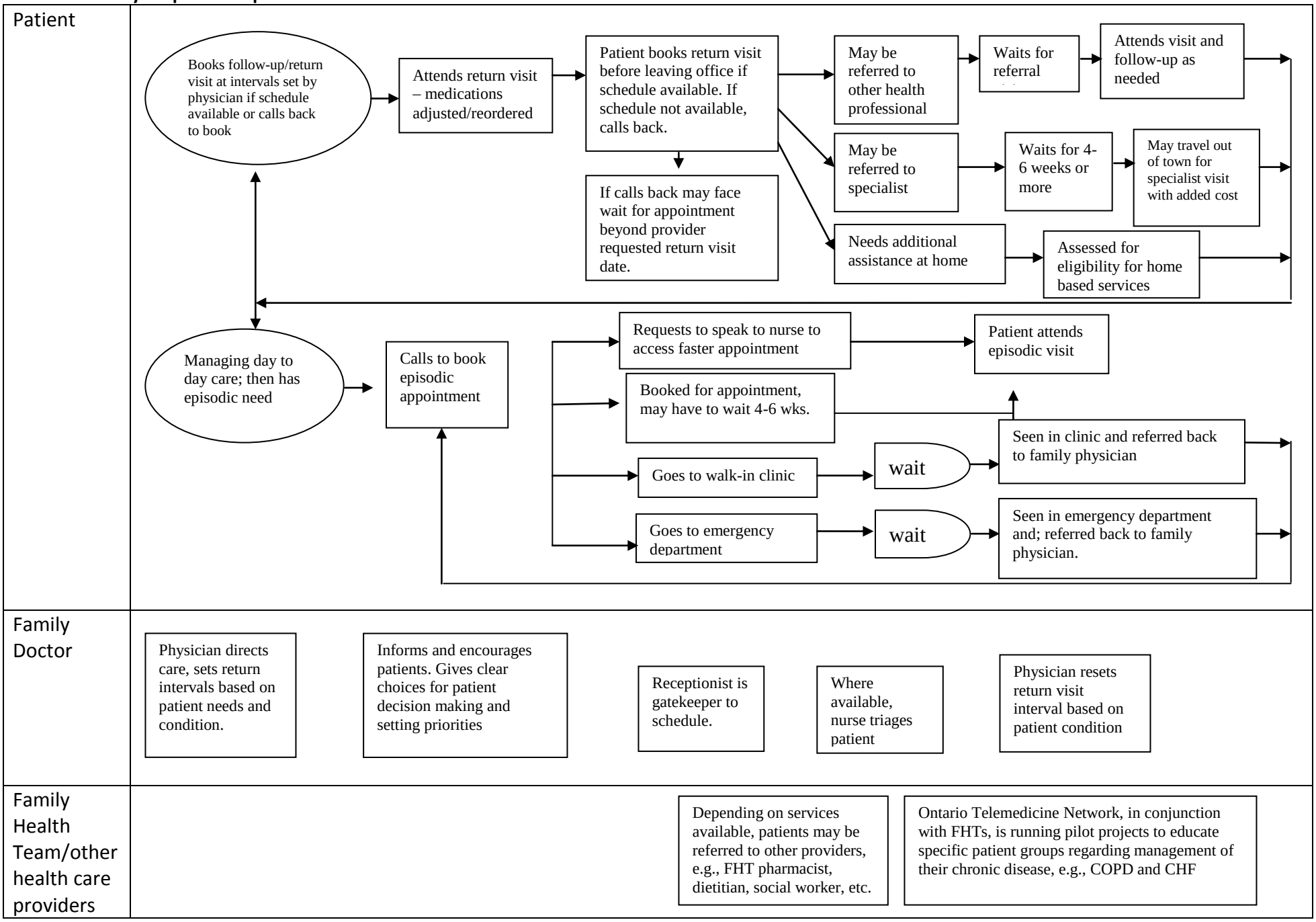
- FHT partnering with urban hospital (1 hour away) on a Heart Failure Clinic. It is a multidisciplinary team approach (dietitian, health promoter and chronic disease nurse) delivered by FHT in local rural hospital setting with support from cardiologist and urban hospital. Clinic focuses on self-management. Frequency of patients' attendance at the clinic is based on patient need. Outcome – fewer emergency visits for these patients and better quality of life. Patients like the program. Frequent follow-up with chronic disease nurse. Very resource intensive program – needs additional resources to be able to expand the program. Currently managing 25 to 30 patients. Physicians have found the program very helpful.
- Management of care depicted by these patients in focus group seems to be based on provider availability which is not a proactive approach. This is a challenge for the FHT's providing care.
- Specialists travel to the local area to provide service. Wait lists may be longer than these patients are experiencing as a result of specialists travelling into the area.
- FHT would like to have clinics for each chronic disease but are limited by resources
- Taking a self-management approach to manage chronic pain. FHT is building capacity in Stanford Self-Management.
- Managing patients in groups helps with resources but not all patients respond well to a group setting.
- A lot of patients have not embraced the self-management approach – encourage patients to be proactive and advocate for own health.
- RN in one office acts as patient navigator, e.g., getting oxygen in the home.
- Orient new patients to the FHT and the services it provides.
- Impress on patients the importance of self-management.
- All providers use self-management as approach to care.
- Starting psychogeriatric services via OTN.

Urban Providers

- Patients encouraged to attend FHT after-hours clinic and not a walk-in-clinic.
- Access to care not a problem with providers scheduling in "advanced access" method.
- Some patients have unrealistic expectations of pharmacies' ability to refill medications at the last minute rather than planning ahead.

- Phone appointments are helpful when managing patients with chronic conditions.
- Some patients are chronic complainers or worry warts. Need to help patient understand when need to see provider.
- Some patients with chronic disease are desperate/frightened people looking for a fast fix that does not exist.
- Some patients unaware that FHT has after-hours clinic. There needs to be better teaching about after-hours clinic.
- Continuity of care important – inexperienced locum sent a number of patients presenting at after-hours clinic to emergency department unnecessarily.
- EMR a challenge for remote access so some patients records not available at after-hours clinic. FHT's need IT support!
- Blessed with a number of community services in the city but unable to synthesize this and help patients access them. Need someone to help navigate the system for patients. Need someone assigned full time for this. Some see this as part of self-management.

Patient Journey Map for Complex Care



Specialist	Specialist requests more tests and/or return visit as per patient condition Specialist communicates with primary provider.
Community Services	Disease-specific associations offer support, resources, education as needed at no cost – limited number, e.g., Alzheimer Society
Other Community-Based Home Health Care Services	Assessed for eligibility to service, e.g., CCAC, home and community support services

Analysis of Opportunities for Improvement

The following are the opportunities for improvement identified by patients and/or FHT staff:

Diabetes Care:

- Greater coordination of work between the family physician, the FHT and the regional Diabetes Education Centre (DEC). Greater interdisciplinary team work including an understanding of roles and responsibilities. This would ensure that care is complemented and not duplicated, that there is continuity of care, and that patients are not lost to follow-up.
- Planned and prepared visit approach for regular diabetes management visits.
- Increased EMR capability and ability health care workers to connect all those involved in the patients care for ease of communication and to support continuity.
- Increased EMR capability for supporting planned and prepared visits.
- Increased capability of providers to use the EMR to its maximum capacity.
- Promotion of patient self- management of his/her diabetes by all involved. Not only do patients need to understand how to manage their disease but providers need to learn to be advocates of self-management and good self-management coaches.
- Implementation of the principles of "advanced access" for family physicians, DECs and all other health care providers to improve patient access to needed care.
- Navigation or case management services to help patients find the needed resources in the community to manage their diabetes well.

Prevention and Episodic Care:

- Greater use of RNs and nurse practitioners to carry out the prevention programs within a FHT and for those patients without family doctor affiliation.
- Education of patients regarding prevention and self-management. Combat the "worried well syndrome" with education and support for self-management e.g. self assess when need to see family physician for episodic illness and when to manage it at home.
- EMR with capacity to identify prevention screening requirements by patient, generate a letter to the patient and remind the provider which prevention screening is due or overdue.
- Timely access of patients to family physicians and other providers in the FHT.
- Understanding that changes in community based programs can impact the FHT and the services it provides, e.g., Ontario Breast Screening program no longer doing breast exam so FHTs now believe they must see female patients every two years to do this examination.

Complex Chronic Disease Care:

- Implementation of advanced access principles by family physicians in order to enable patients prompt access to their physician.
- Orientation of patients to the Family Health Team so they are aware of services and how to access.
- Education and coaching for patients in how to manage their disease, e.g., Ontario Telehealth Network program for patients with COPD.
- Support for patients to be managers of their own disease by having staff well versed in self- management and in using this approach in their interactions with patients. Build in follow-up systems to support people managing disease in their own home.
- Staff playing the navigator role to help patients identify services in the community or within the health care system to enable them to manage their disease.
- FHTs need resources to enable them to effectively deliver chronic disease management.

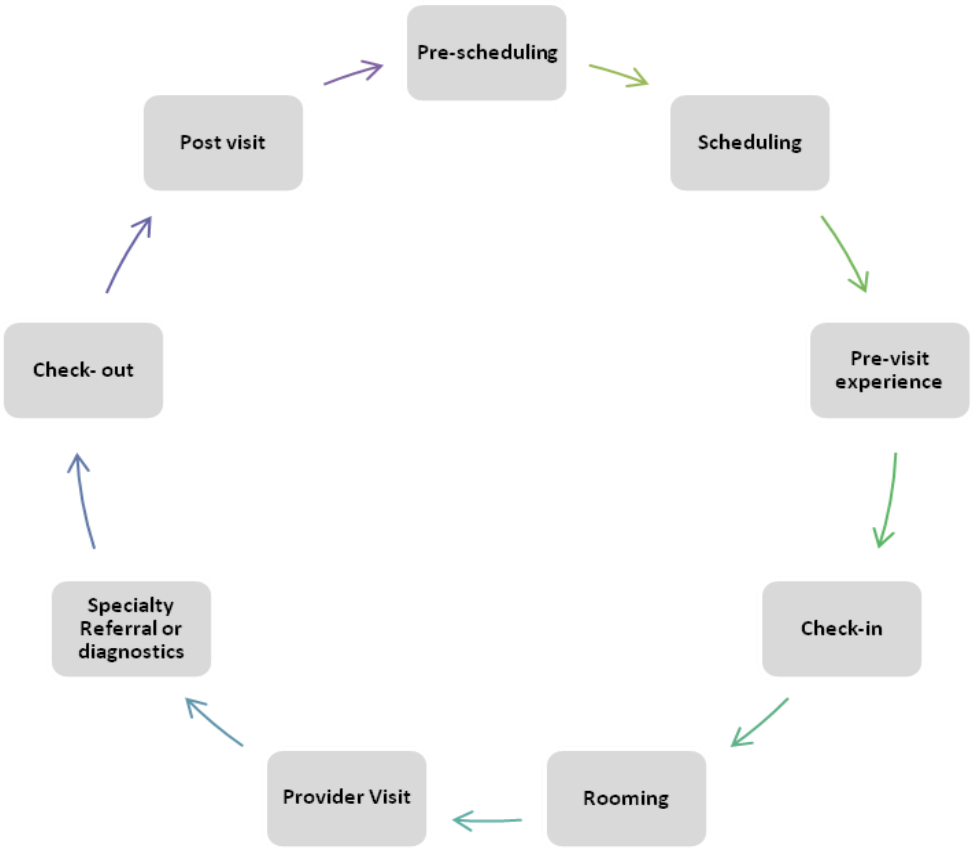
- Use of other visit methods to increase patient access to care for episodic or routine care and to support of self-management. For example the use of group visits, phone visits.
- Family physicians and FHTs need to have a method to deal with the episodic needs of people living with chronic disease to minimize the wait and maintain continuity. Staff cited that walk-in clinics are not the answer for patients with chronic conditions.
- Bring specialists to communities either in person or via OTN.
- Help patients link to CCAC or other community agencies to get needed help in the home.
- Creating partnerships with other organizations to deliver services to patients in a community, for example, the Heart Failure Clinic between Minto Mapleton FHT and St. Mary's Hospital.

Strategies to Improve the Patient Experience in Primary Care identified by internal QIIP staff including: Office Administration, Senior Team, Quality Improvement Coaches, Co-Leads of Quality Improvement and Clinical Integration

Participants: Tanya Spencer, Dora-Lynn Davies, Jamie Reid, Brenda Fraser, Maria Ferguson, Milo Mitchell, Ashley Campbell, Julie Baird, Nick Kates, and Brian Hutchison.

Purpose of this session was to review the patient journey maps and narrative summaries of the patient/provider focus groups and identify targeted improvement strategies that primary care practices can undertake to improve the patient experience, health outcomes and coordination of care.

Patient Journey Process of Care
An overall patient journey of care in a PHC encounter was identified through the following diagram:



Participants brainstormed and sorted the following improvement strategies along the process of care:

Pre-scheduling	Scheduling	Pre-visit experience	Check-in	Rooming	Provider Visit	Specialty Referral or Diagnostics	Check-out	Post Visit
Orientation of patient to primary care practice including: services, roles of providers, schedules, expectations of patient	Electronic appointment booking – option, chief complaint (Kaiser)	Tip sheet to prepare for visit	Flag/act on EMR reminders on check-in	Prepared visits, e.g., standardized clinic rooms and supplies	Invite community agencies (e.g. CCAC, PHN) to have a base in the practice.	Closing the loop: office advised of patient appointment, office advises/reminds patient, verifies appointment occurred;, seeks timely consultation note, arranges follow-up as appropriate	Follow-up plan layed out and agreed upon by patient and provider. Plan given to patient in writing.	System navigator role to guide patient through health care system and to help patients link to other agencies for care and service, e.g., CCAC
Set phone system up to direct calls appropriately, e.g., press 1 for nurse...	Principle-based access to care – Mark Murray method (Advanced Access)	Ensuring that all relevant notes/reports/lab results are available for the visit, avoiding second unnecessary visit	Empower reception staff	Physicians remain in the room and patients come to them.	Using EMR features for reminders and updates and build a system to respond to reminders.	"Shared care" with the specialist	Ensure that appropriate re-books are being done when patient is in office.	Provide patients with access to their records, e.g., via portal
Ease of telephone access to make an appointment – adequate phone system	E-mail or on-line scheduling of appointments	Daily team huddles	Update demographics including what community pharmacy a patient uses		Different appointment types: • E-mail • Skype • Telephone	Specialist delays – not acceptable. Response expected within safe time-frame	Post-visit summary (health passport)	Follow-up with patients post visit to close loop re: medications, task completion, progress on plan/self-management goals.
After-hours clinics	Planned visit for chronic disease management	Pre-visit planning	Post check-in questionnaire for chief complaint and review of systems,		Peer support 1:1 or group	Confirm the communication process and the booking process with the patient	Provide families with information about elders/children electronically (with patient permission)	Patients have information about appropriate resources
Consider ways that patients can be supported to prevent illness or decrease need to make a visit (e-mail, telephone outreach)	Balance supply of appointments with demand for appointments thereby improving access	Providing patient with self-management advice/tools prior to a visit, e.g., diet record	Receptionists deliver patient-centered customer service to patients.		Optimizing use of the interprofessional team.	Give the patient a copy of the referral letter		Source recommended websites
Patient/client portals	Coding in the schedule to ensure the appointment is prepared for, e.g.,	Patient directed to selected websites	Flow - reception knows what needs to be done for patient in that visit		Max-pack visit – look beyond 1 visit/1 problem to interrelated issues and	Inform patient re: reason for referral or test		Portal system where patients can enter test results (e.g., home blood

Pre-scheduling	Scheduling	Pre-visit experience	Check-in	Rooming	Provider Visit	Specialty Referral or Diagnostics	Check-out	Post Visit
	results follow-up		– where patient is to go in the office and who to see next.		co-morbidities.			glucose and blood pressure monitoring) for review by provider
EMR reminders – preventive care, chronic disease management	Consistency in schedule templates (block times, colour coding etc.)		Confidentiality in the waiting room is preserved.		Integration of specialists/specialized services.	Primary provider does not batch referrals; does referral on the spot.		Telephone consultations for things like. medication renewal, interpretation of lab results, etc.
Day of choice access to appointment		Implement and utilize e-mail feature of EMR	Use of iPads by providers		Home visits	Timely access to specialists via OTN		Patient self-management
					Set the agenda with the patient			Patient experience surveys routinely implemented
					Group educational/self-management support			Use e-mail for follow-up
					Shared medical appointments			Telephone care via OTN projects for monitoring
					Use of IHP's to deliver prevention screening and chronic disease management programs			
					Medication reconciliation – could be done by nurse or pharmacist role			
					Point of care testing (i.e. anticoagulation			
					ENR point of care decision support.			

Additional Overarching Strategies:

- Providers aware of reasons for non-adherence to negotiated care plans, with sensitivity to the patient perspective.
- Panel management for proactive recall, follow-up visits, diagnostic results, and prevention
- Integrated system-wide provincial EMR – sharing of health information in circle of care, e.g., labs, pharmacies, hospitals, specialists, CCAC, etc.
- Everyone on the patient care team knows health, demographic and socioeconomic characteristics of their patient population and is aware of the related social determinants of health
- Coordination of system-level care with community partners in primary care (e.g., Diabetes Education Centre, Canadian Mental Health Association)
- One robust team EMR able to support panel management (e.g., planned visits, preventive screening, max-packing visits, decision support for evidence-informed care)
- Physicians work together in FHT to share expertise – physician who has expertise in one area available to consult with others re: care plan
- Health coaching – this can be a non-professional, a volunteer to provide support and follow-up to patient to guide them through the process
- Health passport
- Implement and utilize e-mail feature of EMR
- Health education room with a health care practitioner attached. The patient accesses resources and can ask questions.
- Optimize team function and let patient choose provider
- Think about where the value is from perspective of patient
- Allocate work according to function not discipline – (e.g. health coach, nurse case manager, panel manager
- Nurse case management
- Efficient office practices
- Create partnerships with other health care organizations in order to deliver services

Knowledge translation to date:

Presentation of process and findings to date at QIIP Learning Collaborative 2, Learning Session 3, in co-presentation with Connie Davis from Impact BC as related to Impact BC's Patient as Partner Program.

Presentation of process and findings to date at QIIP Learning Collaborative 3, Learning Session 3.

Presentation of process and findings at the Taking Charge of Our Health Conference. A conference, hosted by the Institute for Optimizing Health Outcomes, related to self-management and self-management support.

Analysis of Evidence to Support Recommendations of Patients/Providers and Identified Strategies along Process of Care

In reviewing the recommendations for improvement by patients and providers and the improvement strategies suggested by QIIP staff, seven key themes emerged:

1. Care coordination and effective communication
2. Team-based care and optimization of the care team
3. Access to care and efficiency in care system design
4. Planned and proactive care of the patient
5. Self-management support
6. Optimization of the electronic medical record
7. Resources

Care Coordination and Effective Communication

This involves:

- Coordination of care within the team and with partner agencies external to the team.
- Integration of care and effective/timely communication between the primary care provider and specialists.
- Case management and the role of system navigator to support the patient through the care journey
- Effective communication to patients to help them understand the process of care and the role/function of members within the care team.
- Patient passport.

From the literature:

> "Clinically significant population-based improvements in diabetes care were observed during a 1-year period using a multifaceted "enhanced primary care" strategy [with] interventions [that] empowered patient self-management, supported care team decision making, redesigned office systems, and maximized use of available information technology"
>
> Sperl-Hillen J, O'Connor PJ, Carlson RR, Lawson TB, Halstenson C, Crowson T. Improving diabetes care in a large health care system: an enhanced primary care approach. Jt Comm J Qual Improv 2000; 26:615-622
>
> "Consistent and clinically important effects suggest a potential role of interactive communication for improving the effectiveness of primary care–specialist collaboration."
>
> Foy R, Hempel S, Rubenstein L, Suttorp M, Shanman R, and Shekelle P.G. Meta-analysis: Effect of interactive communication between collaborating primary care physicians and specialists. Ann Intern Med 2010. 152:247-258

Team-Based Care and Optimization of the Care Team

This involves:

- Understanding role/function of team members
- Optimizing scope and function
- Utilization of non-professionals – e.g., health coaches
- Interdisciplinary/inter-professional delivery of care.
- Effective team coordination and communications – e.g., daily team huddles

From the literature:

> "…reorganize primary care into a team-based endeavor, offloading many functions from the 15-minute visit — a solution requiring fundamental payment reform that uncouples reimbursement from the clinician visit and creates incentives for team building…a fundamental paradigm shift: rather than spending all day in traditional patient visits, primary care physicians must analyze their patient panel and manage it so as to keep all patients as healthy as possible. To do so, practices need a registry (database) that gives them access to their patients' diagnoses, key clinical data (e.g., blood pressures and cholesterol levels), and reminders of studies or services that are overdue. A panel manager (perhaps a retrained medical assistant) must systematically and repeatedly review the registry and use physician-created standing orders to ensure that all tasks related to preventive and chronic care (subject to patient preference) are performed. Such panel management has the potential to improve care as well as reduce the burden on the 15-minute visit[1]."
> (1. Neuwirth EB, Schmittdiel JA, Tallman K, Bellows J. Understanding panel management: a comparative study of an emerging approach to population care. Permanente J 2007; 11(3):16-24.)

Bodenheimer, T. Transforming practice. The New England Journal of Medicine 2008; 20(359):2086-2089.

"The following research findings show that the central institution of primary care—the 15-minute physician visit—can no longer accomplish what society expects:
* Fifty percent of patients leave the office visit without understanding what advice their physician gave.[1]
* Physicians, according to 1 study, interrupted patients' initial statement of their problem in an average of 23 seconds; in 25% of visits the patient was unable to express his/her concerns at all.[2]
* It takes 7.4 hours per working day to provide all recommended preventive care to a panel of 2,500 patients, plus 10.6 hours to manage all chronic conditions adequately.[3,4]
* Forty-two percent of primary care physicians report not having adequate time to spend with their patients.[5]
During the 15-minute visit, primary care physicians cannot provide acute, chronic, and preventive care while building meaningful relationships with their patients and managing multiple diagnoses according to a host of evidence-based guidelines. The 15-minute physician visit must be eliminated as the central institution of primary care. The teamlet (little team) model is offered as a replacement for the 15-minute physician visit. This model has 2 central features: (1) the patient encounter involves 2 caregivers—a clinician (physician, nurse-practitioner, or physician's assistant) and a health coach—rather than only the clinician; and (2) the 15-minute visit is expanded to include previsit, visit, post visit, and between-visit care."
(1.Roter DL, Hall JA. Studies of doctor-patient interaction. Annu Rev Public Health. 1989; 10:163–180
2. Marvel MK, Epstein RM, Flowers K, Beckman HB. Soliciting the patient's agenda: have we improved? JAMA. 1999; 281(3):283–287
3. Yarnall KS, Pollak KI, Ostbye T, Krause KM, Michener JL. Primary care: is there enough time for prevention? Am J Public Health 2003; 93(4):635–641
4. Ostbye T, Yarnall KS, Krause KM, Pollak KI, Gradison M, Michener JL. Is there time for management of patients with chronic diseases in primary care? Ann Fam Med. 2005; 3(3):209–214.
5. Center for Studying Health System Change. Physician Survey. http://CTSonline.s-3.com/psurvey.asp.)

Bodenheimer, T and Yoshio Laing, B. The teamlet model of primary care. Annals of Family Medicine 5:457-461 (2007).

"The creation of teams is the key element in primary care redesign that allows other innovations to succeed."

Bodenheimer, T. Innovations in primary care in the United States. BMJ 2003; 326:796-799

"Patient care teams in primary care have the potential to improve the quality of care for patients with chronic illness if the roles of team members are clearly defined and explicitly delegated and if team members are trained for their roles. But the presence of a trained team may be of little help if doctors cannot share care effectively[1] or if a practice's lack of organisation limits the availability of staff to work in these complementary roles. With appropriate training and effective teamwork, primary care teams make it possible to manage complex chronic illnesses intensively without losing the benefits of comprehensive, continuous primary care. [2,3-5]"
(1.Pearson P, Jones K. The primary health care non-team? BMJ 1994; 309: 1387-1388.
2. Starfield B. Primary care: concept, evaluation, and policy. New York: Oxford University Press, 1992.
3. Becker MH, Drachman RH, Kirscht JP. Continuity of pediatrician: new support for an old shibboleth. J Pediatrics Med Care 1974; 84: 599-605.
4. Hjortdahl P, Laerum E. Continuity of care in general practice: effect on patient satisfaction. BMJ 1992; 304: 1287-1290.
5. Wasson JH, Sauvigne AE, Mogielnicki RP, Frey WG, Sox CH, Gaudette C, et al. Continuity of outpatient medical care in elderly men: A randomized trial. JAMA 1984; 252:2413-2417)

Wagner, E.H. The role of patient care teams in chronic disease management. BMJ 2000; 320:569-572

Access to Care and Efficiency in Care System Design

This involves:

- Principles of advanced access.
- Alternate points of access to care by provider or model of delivery, e.g., telephone, e-mail, Skype, patient portal, after-hours clinic, home visits, etc.
- Efficiency in design of care space and process of delivery of care, optimizing patient flow and team function.
- Proactive encounters that create timely and efficient care, e.g., max-packing encounters, reminders

From the literature:

> "Delay of care is a persistent and undesirable feature of current health care systems. Although delay seems to be inevitable and linked to resource limitations, it often is neither. Rather, it is usually the result of unplanned, irrational scheduling and resource allocation. Application of queuing theory and principles of industrial engineering, adapted appropriately to clinical settings, can reduce delay substantially, even in small practices, without requiring additional resources. One model, sometimes referred to as advanced access, has increasingly been shown to reduce waiting times in primary care. The core principle of advanced access is that patients calling to schedule a physician visit are offered an appointment the same day. Advanced access is not sustainable if patient demand for appointments is permanently greater than physician capacity to offer appointments. Six elements of advanced access are important in its application: balancing supply and demand, reducing backlog, reducing the variety of appointment types, developing contingency plans for unusual circumstances, working to adjust demand profiles, and increasing the availability of bottleneck resources. Although these principles are powerful, they are counter to deeply held beliefs and established practices in health care organizations. Adopting these principles requires strong leadership investment and support."
>
> Murray M, Berwick DM. Advanced access: reducing waiting and delays in primary care. JAMA 2003; 289:1035-1040

Planned and Proactive Care of the Patient

This involves:

- The planned visit
- Team-based planning
- Communication to patient prior to and post visit for framing the encounter, setting the agenda and guiding self–management
- Group medical appointments
- Group education/self-management support

From the literature:

> "Evidence shows that physicians rarely negotiate with patients concerning the medical visit agenda even though agenda setting is likely to improve the patient-centeredness of the encounter.[1] Because time is a barrier to agenda setting, transferring this activity to the previsit improves the likelihood that the patient's agenda items will be addressed. To set the visit agenda, the health coach explains the clinician's agenda items and allows patients to express fully their agenda items. Having the health coach negotiate the agenda helps to minimize the unequal power relationship between physicians and patients."
> (1. Baker LH, O'Connell D, Platt FW. "What else?" Setting the agenda for the clinical interview. Ann Intern Med. 2005;143(10):766–770.)
>
> Bodenheimer, T and Yoshio Laing, B. The teamlet model of primary care. Annals of Family Medicine 5:457-461 (2007).

"Ideally, an after-visit summary would be generated to recap the advice given by the clinician during the visit—what diagnostic studies to schedule, what referrals to arrange, what medications to take, what behavior changes to work on, and when to follow-up with whom. Using the after-visit summary, the health coach can apply the technique of closing the loop by asking patients to repeat back their understanding of each item of advice given during the visit. Closing the loop, which helps the 50% of patients who do not understand the clinician's advice,[1] has been found to be associated with improved outcomes in patients who have diabetes. Unfortunately, this process is seldom performed.[2]"
(1. Roter DL, Hall JA. Studies of doctor-patient interaction. Annu Rev Public Health. 1989;10:163–180.
2. Schillinger D, Piette J, Grumbach K, et al. Closing the loop: physician communication with diabetic patients who have low health literacy. Arch Intern Med. 2003;163(1):83–90.)

Bodenheimer, T and Yoshio Laing, B. The teamlet model of primary care. BSAnnals of Family Medicine 5:457-461 (2007).

"Studies suggest that planned visits to patients with chronic conditions and case management of high risk patients (two components of redesign of delivery systems) and reminder systems for clinicians (a component of clinical information systems) improve doctors' performance and, at times, patients' outcomes. [1, 2]"
(1. Sadur CN, Moline N, Costa M, Michalik D, Mendlowitz D, Roller S, et al. Diabetes management in a health maintenance organization. Efficacy of care management using cluster visits. Diabetes Care 1999; 22:2011-2017.
2. Davis DA, Thomson MA, Oxman AD, Haynes B. Changing physician performance. JAMA 1995; 274:700-705.)

Bodenheimer, T. Innovations in primary care in the United States. BMJ 2003; 326:796-799.

Self-Management Support

This involves:

- Enhancing patient understanding of their role in their care.
- Enhancing provider understanding of self-management support and delivery of care to support self-management in the patient

From the literature:

"Goal setting with action planning is a useful technique for engaging patients in behavior-change discussions. Some evidence suggests that this technique is effective in improving healthy behaviors. Caregivers can learn the goal-setting technique through a 50 to 60-minute training session."

Bodenheimer T, Davis C, Holman H. Helping patients adopt healthier behaviors. Clin Diabetes. 2007; 25(2):66–70.

"A recent study found that in about three quarters of primary care visits physicians issue instructions to patients, such as "change your diet, take more exercise, and take your pills."[1] This model often fails to encourage healthy behaviours and leads physicians to blame patients for being "non-compliant" with doctors' orders.[2] Under the collaborative model, both patients and physicians define the problems that require solution [through collaborative goal setting]"
(1. Gotler RS, Flocke SA, Goodwin MA, Zyzanski SJ, Murray TH, Stange KC. Facilitating participatory decision-making: what happens in real world community practice? MedCare 2000; 38:1200-1209.
2. Anderson RM, Funnell MM. Compliance and adherence are dysfunctional concepts in diabetes care. Diabetes Educ 2000; 26:597-60.)

Bodenheimer, T. Innovations in primary care in the United States. BMJ 2003; 326:796-799.

"Patients with chronic conditions make day-to-day decisions about—self-manage—their illnesses. This reality introduces a new chronic disease paradigm: the patient-professional partnership, involving collaborative care and self-management education. Self-management education complements traditional patient education in supporting patients to live the best possible quality of life with their chronic condition. Whereas traditional patient education offers information and technical skills, self-management education teaches problem- solving skills. A central concept in self-management is self-efficacy—confidence to carry out a behavior necessary to reach a desired goal. Self-efficacy is enhanced when patients succeed in solving patient-identified problems. Evidence from controlled clinical trials suggests that (1) programs teaching self-management skills are more effective than information-only patient education in improving clinical outcomes; (2) in some circumstances, self-management education improves outcomes and can reduce costs for arthritis and probably for adult asthma patients; and (3) in initial studies, a self-management education program bringing together patients with a variety of chronic conditions may improve outcomes and reduce costs. Self-management education for chronic illness may soon become an integral part of high-quality primary care."

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Optimization of the Electronic Medical Record

This involves:

- Optimzing use of EMR for proactive care, use of reminders, enhanced communication and planning and coordination with care team
- System-wide/province-wide EMR that is robust and supports delivery of primary care and communication across health care settings, e.g., pharmacy, hospital, clinic
- Patient access to and interaction with their clinical record – patient portal

From the literature:

"Using HIT for short-term preventive care. EMR systems can integrate evidence-based recommendations for preventive services (such as screening exams) with patient data (such as age, sex, and family history) to identify patients needing specific services. The system can remind providers to offer the service during routine visits and remind patients to schedule care. Reminders to patients generated by EMR systems have been shown to increase patients' compliance with preventive care recommendations when the reminders are merely interjected into traditional outpatient workflows.[1] More systemic adaptation—for example, by Kaiser Permanente and Group Health Cooperative—appears to achieve greater compliance.[2]"

"Using HIT for.. chronic disease management…Disease management programs identify people with a potential or active chronic disease; target services to them based on their level of risk (sicker patients need more-tailored, more-intensive interventions, including case management); monitor their condition; attempt to modify their behavior; and adjust their therapy to prolong life, minimize complications, and reduce the need for costly acute care interventions.

EMR systems can be instrumental throughout the disease management process. Predictive-modeling algorithms can identify patients in need of services. EMR systems can track the frequency of preventive services and remind physicians to offer needed tests during patients' visits. Condition-specific encounter templates implemented in an EMR system can ensure consistent recording of disease-specific clinical results, leading to better clinical decisions and outcomes. Connection to national disease registries allows practices to compare their performance with that of others. Electronic messaging offers a low-cost, efficient means of distributing reminders to patients and responding to patients' inquiries. Web-based patient education can increase the patient's knowledge of a disease and compliance with protocols.

For higher-risk patients, case management systems help coordinate workflows, including communication between multiple specialists and patients."

(1. R.C. Burack and P.A. Gimotty, "Promoting Screening Mammography in Inner-City Settings: The Sustained Effectiveness of Computerized Reminders in a Randomized Controlled Trial," Medical Care 35, no. 9 (1997):921–931.
2. B. Kaplan, "Evaluating Informatics Applications—Clinic Decision Support Systems Literature Review," International Journal of Medical Informatics 64, no. 1 (2001):15–37.)

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Resources

This involves:

- Adequate funding to support the development of the care team from a human resource standpoint.
- Adequate funding, training and expertise to support the enhanced system-wide EMR.
- Adequate funding to support the redesign of care.

Triple Aim - Better Care, Better Health, Better Value

Each of the improvement opportunities and strategies identified above has the potential to advance the Triple Aim of improved population health (Better Health), enhanced patient experience (Better Care) and reduction, or at least control, of per capita costs of care (Better Value). In some cases, single strategies can support all three improvement aims. For example, by providing timely access to care, advanced access improves patients' experience of care, improves health through early intervention, and reduces downstream health care costs (e.g., ER visits, specialist referrals and hospital admissions) by preventing deterioration due to delayed treatment. Conversely, multiple strategies can act synergistically to drive improvements in a single domain. For example, improvement strategies targeting timely access, care coordination, effective communication, team-based care , planned and proactive care, and self-management support can work together to enhance the patient experience.

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