

Development of an Accountability Framework

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Introduction

Measuring and reporting on metrics to ensure quality of care is foundational in the development of the Patient-Centred Medical Home (PCMH). However, the complexity and volume of metrics can be overwhelming due to demands on time and resources. Each measure is important individually but there are hundreds of measures to choose from and subject matter expertise is necessary to prioritize the selection of possible metrics.

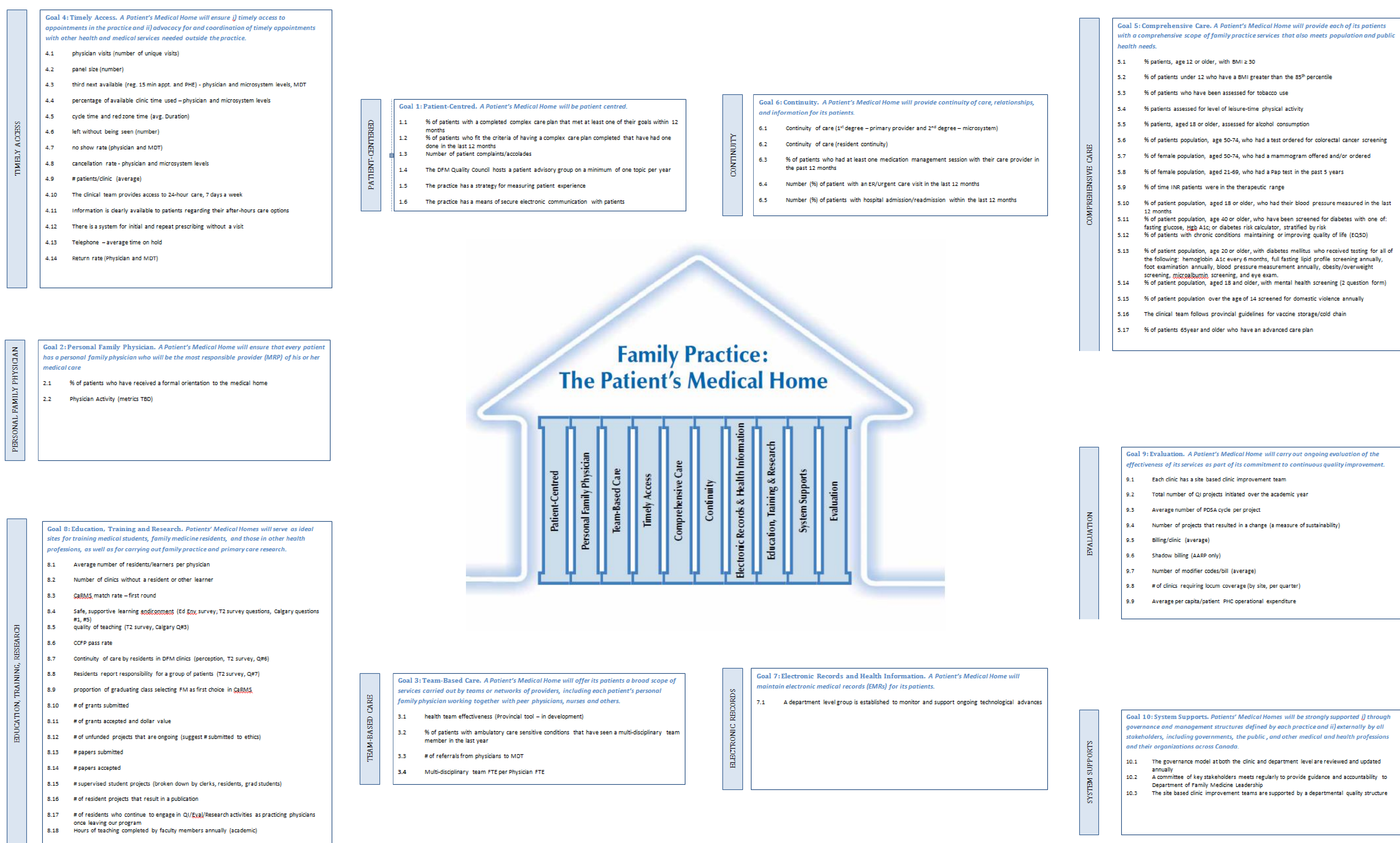
Our goal was to develop an accountability framework that aligned the continuous quality improvement (CQI) and evaluation program in the Department of Family Medicine with the PCMH model. We sought to prioritize our metrics creating a plan that met our internal needs and the needs of stakeholders, including PCNs, AH and AHS, our education programs, and the Academic Alternative Relationship Plan.

Methods

We drafted a document which organized the metrics we had been considering around the pillars of the College of Family Physicians of Canada PCMH model. Next, we developed a Quality Team that contributed to the document content. This team included representatives from all of the stakeholder groups within our department, as well as members of our data analysis team.

We created a wish list of measures we wanted or had been asked for from external partners. We condensed this list by reducing overlap and evaluating our priorities until we created a framework that met everyone's needs and was feasible within a 2 year timeframe.

This document is constantly evolving, as it is further developed we hope that it will become more stable, but are committed to being open to input and changes as the evaluation and quality improvement landscape changes, so must we be prepared to evolve with it.



Conclusions

We found that although our stakeholders were asking for different metrics there was significant overlap and room for compromise. By getting the key players together, we ensured our efforts were synergistic rather than incongruous.

The volume of possible metrics is bewilderingly large. A scattershot approach to evaluations can quickly get out of hand. Teams can use our experience in organizing around PCMH pillars as a guide to focus areas of interest. Once this is done, engaging key stakeholders for input and buy in is critical to the success of the evaluation program. In our experience, having all the interested parties on the same page supports CQI, leads to more engaged clinic team members and contributes to the efficient use of your analytical resources.



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Third Next Available

Reporting Differing Levels of Access with a Single Measure



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Introduction

Access to physicians (in a timely way) matters to patients. Meeting patients' needs is a valuable target in improving quality of care. Third Next Available aims to quantify this supply and demand, and potentially shed light on any imbalances within clinics. While there are standardized approaches to measuring physician TNA, it is also important to measure access to the microsystem or physician group and clinic. In many clinics physicians are arranged in groups or teams, and when a patient is unable to see their primary provider their second choice is to book with a team member.

Methods

First, we sought to design a simple system that would work for all three of our academic teaching sites, and their three different scheduling practices, to measure TNA at the physician level. Next, we wanted to ensure that the method of collecting data would allow us to calculate TNA for the microsystem and clinic levels reliably at a later time.

The staff at each clinic collects the data on a set day and time that is in alignment with the timeframes of the PCN evaluation working group. Data collected includes each physicians' first, second and third available appointment availability, measured in days. Although third next available appointment alone is what most groups collect, we collect 1st and 2nd in order to calculate blended data for our Micro-systems within each facility and facilities in total. This allows us to group the physicians as we like and through an ascending sort we are able to find the TNA for the group we specify. This novel approach allows for continuity of access testing beyond the physician level.

Detailed Process

Step 1: Collect Data

Clinic	Module	Physician	Ap1	Ap2	Ap3
Central	A	RS	0	0	1
Central	A	FT	1	2	2
Central	B	DE	5	5	5
Central	B	SH	0	4	8
Central	B	PG	6	8	12
North	A	AB	0	1	1
North	B	JT	12	14	17
North	B	KM	4	6	7
North	A	DB	2	5	6
North	A	RL	0	0	0
South	B	JB	1	1	2
South	B	LL	0	0	1
South	A	HN	1	3	4
South	A	SM	3	5	8
South	B	JC	0	0	3

Step 2: Reshape Database Long for Selected Group

Clinic	Module	Physician	Ap1
Central	A	RS	0
Central	A	FT	1
Central	B	DE	5
Central	B	SH	0
Central	B	PG	6
			Ap2
			0
			2
			5
			4
			8
			Ap3
			1
			2
			5
			8
			12

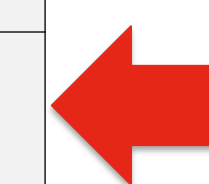
Example: Third Next Available Appointment for Central Clinic

Step 3: Sort Ascending

0
0
0
1
1
2
2
4
5
5
5
5
6
8
8
12

Step 4: Count down to third observation

0
0
0
1
1
2
2
4
5
5
5
6
8
8
12



Conclusions

Manual collection is necessary in our current EMR system. Collection has to accommodate unique clinic environments in our DFM clinics. Calculating TNA at differing levels allows us to demonstrate a more accurate picture of patient access rather than only presenting the physician level metric.

This method can easily be employed in clinics with or without data analyst resources to measure TNA for individual physicians, physician groups and the clinic as a whole. Although we use a statistical program, it could easily be completed in a spreadsheet. We recommend this method for use in other clinics where microsystem of grouped patient access is of interest.

Additionally, using this method allows you to group access to providers in a variety of ways, for example, you could look at TNA to any female doctor, to doctors belonging to a specific PCN, to allied health providers etc.



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IMPORTTEN, a network to study and support integration of complementary therapies into medical care: a needs assessment



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Introduction

Sixty to seventy percent of patients living with chronic disease use complementary therapies (CTs), as a part of self-care to help manage symptoms or side-effects associated with their illness or with conventional treatments. Despite the prominence of CTs in patients' lives, healthcare providers (HCPs) do not routinely ask about CT use, nor do patients necessarily disclose it, which compromises shared decision-making (SDM) and challenges effective management of chronic disease.

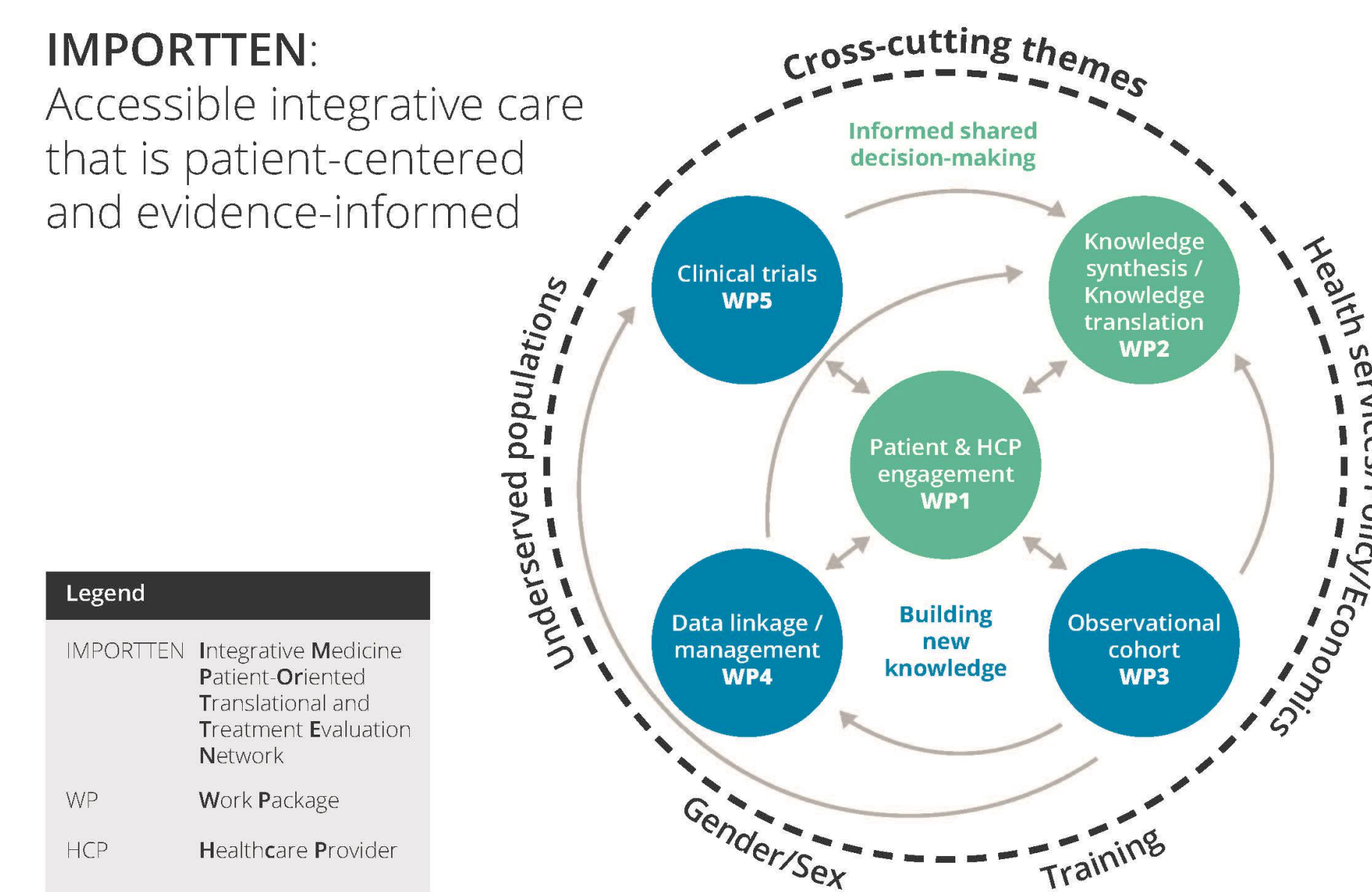
Widespread use of CTs without empirical evidence to support decision-making by patients and health care providers is one of the largest unmet needs in our health care system for patients living with chronic disease.

IMPORTTEN is a proposed network of HCPs, researchers and patients that will develop tools to help inform SDM and discussions concerning the use of CTs in chronic disease. The first step is to understand how to best support HCPs and patients in shared decision making around the use of CTs

Methods

In-depth interviews were conducted in person or over the phone with patients suffering from one or both of two chronic diseases (mental health and cancer) over the phone with physicians who provide care to these patients to determine the support and resources needed to help them engage in discussions about CT use in the management of chronic disease. All data were thematically analyzed.

IMPORTTEN:
Accessible integrative care that is patient-centered and evidence-informed



Findings

Patients unanimously supported the need for improved strategies for talking with HCPs about CTs. A phone line to obtain reliable information about the efficacy and safety of CTs was perceived by patients to be an important resource because they struggled to find such information and received limited support from HCPs. Patients also expressed interest in face-to-face consultations with knowledgeable HCPs trained in CTs and SDM.

Patient quotes:

"(The) anxiety of being found out about my reliance on complementary health care was often unbearable, my doctor made it clear that if I was using supplements that he would no longer see me."

"If anything, this has been a barrier for myself and my physician. In fact, I have greatly reduced my visits to my doctor because of this. I want a voice in my health delivery!"

"I think my health care team was willing to learn about what I was doing with my naturopath but they didn't know what to do with the information."

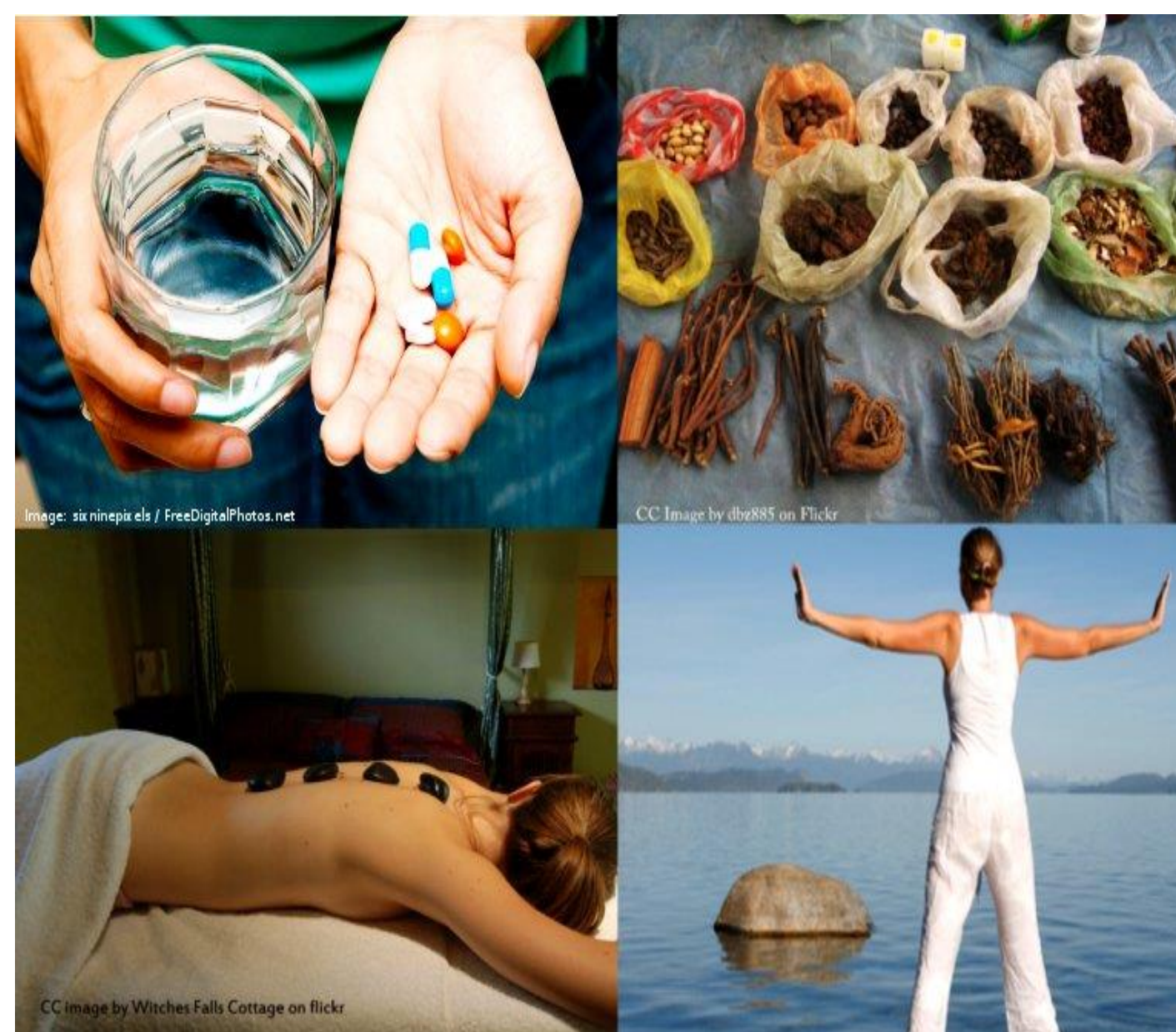
Physicians also saw the need for improved awareness and resources on CTs for themselves as well as for patients to better facilitate discussions. A majority of the physicians noted that a lack of in-depth knowledge was a barrier to patient-centered treatment plans. The physicians wanted to be able to refer patients to credible resources. They likened such resources to ones already being used by Health Link and the Poison Control Centre where they can call in and get answers. It was also expressed that the PCNs, nurses and members of multidisciplinary teams need to be included from the beginning. They also commented that patients may not be truthful with them about accessing CTs or may not feel comfortable talking to them about CTs which can also act as a barrier to comprehensive treatment plans.

Physician quotes:

"So I think as physicians we clearly have a role to our patients who come and ask about complementary therapies, but there is also a role for people who are not looking for our advice but are using complementary therapies in conjunction with ours - I feel some responsibility to my patients to do some investigations."

"A resource would be great, an excellent and fantastic idea, there is a huge need for it. I do not have the time or expertise to stay up on all the different practices. I may or may not call it myself, but I could refer patients to that system."

"Some people just do it on their own and never really tell you they're doing it. So there is often a lot more happening than you are aware. It is really concerning sometimes."



Conclusions

The resources required of IMPORTTEN by patients and health care providers include a telephone information line with access to evidence-based information, accessible by both HCPs and patients; a framework for shared decision making around CTs; and the generation of evidence for CTs through clinical trials.

Screening For Chronic Kidney Disease In Adult Patients With Diabetes; A Pilot Study

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INTRODUCTION

- Chronic Kidney Disease (CKD) is defined as;
 - an estimated glomerular filtration rate (eGFR) of less than 60 ml/min per 1.73m² lasting over a period of 3 months OR
 - urine albumin to creatinine ratio (ACR) of 2.0mg/mmol or greater over a 3 month time period¹
- Diabetic glomerulonephritis is amongst the leading causes of CKD in Canada.
- The Canadian Diabetes Association(CDA) recommends screening for CKD at the time of diagnosis in patients with Type II diabetes²
- Patients with Type I and Type II diabetes should have annual CKD screening after the initial screen.
- Annual screening can be completed by measuring the eGFR and/or ACR.

This pilot project aimed to measure;

- I. the CKD screening rate for patients over 50 years of age in a clinic micro-system at the Sunridge Family Medicine Teaching Centre and
- II. the prevalence of CKD in this subset of patients AND
- III. to invite those overdue CKD screening to have this completed

METHODS

Baseline Measurement

- Template 1: The electronic medical record (Med Access) was used to create a search template to identify our target population; Patients 50 years of age or older with diabetes.
- Template 2: New search parameters were added to the first template which included the laboratory values "eGFR or ACR completed within the past 12 months". This provided the number of diabetic patients screened in the previous year.
- Template 3: Patients were further isolated by filtering out those with a eGFR <60 or ACR >2.0. This provided the number of patients with CKD amongst the target population of patients with diabetes.

Intervention

- Using the templates the number of diabetic patients 50 years of age or older without up-to-date CKD screening was identified.
- These patients were then contacted via phone with the help of clinic staff (MOA's, LPN's). They were briefed on CKD screening in diabetes and then given the option of completing screening. A lab requisition highlighting GFR, and ACR was made available to these individuals.
- The templates were run again 1 month after the intervention began and new results calculated.

CONCLUSIONS

The aim of this project was to identify how well a microsystem of the Sunridge Family Medicine Teaching Center was screening for CKD amongst diabetic patients. The project was isolated to diabetic patients population that were 50 years of age or older. Furthermore the prevalence of CKD amongst this population of interest was also calculated. A baseline and post-intervention screening rate was successfully calculated as well as a prevalence rate.

- Prior to the intervention there were 178 patients with diabetes in this microsystem who were also 50 years of age or older. After the intervention this number had increased to 179. This increase can be explained by one of two occurrences a) A previously diagnosed diabetic patient had recently turned 50 years of age or b) A patient had recently been diagnosed with diabetes over the course of our intervention period.
- Of the 178 patients isolated prior to the intervention 146 had received the appropriate screening for CKD. This resulted in a screening rate of 82%. Following the intervention 168 of 179 patients had been appropriately screening, which resulted in a screening rate of 93.8%.
- The increase in the screening rate amongst this population of interest indicated that the intervention was successful. Of the 32 patients that were identified as having overdue CKD screening, 22 subsequently completed their screening after being contacted by clinic staff members.
- The prevalence of CKD amongst this isolated population of diabetics was 16.3% prior to the intervention and 17.3% after the intervention.

FINDINGS

Baseline Measurement

- Search template #1 identified that there were 178 patients who had a diagnosis of diabetes and were 50 years of age or older in the microsystem at the Sunridge Family Medicine Teaching Center.
- Search Template #2 identified that of the 178 patients above, 146 had been screened for CKD in the past 12 months with either a eGFR or ACR. This left 32 patients who still required their annual CKD screen to be completed.
- Search Template #3 revealed that of the 178 patients in our target population of interest, 29 met the diagnostic criteria for CKD.

Post Intervention

- The search templates were run again 1 month after the intervention was initiated.
- Template #1 identified 179 patients who had a diagnosis of diabetes and were 50 years of age or older in the microsystem.
- Template #2 identified that of the 179 patients above, 168 had been screened for CKD over the past 12 month period, using a eGFR or ACR.
- Temple #3 revealed that of the 179 patients in our population of interest, 31 met the diagnostic criteria for CKD.

NEXT STEPS

The current cycle of this project was successful in achieving its AIM, however it proved to be a laborious process for the staff members involved. Many supports staff were diverted away from regular clinic duties in order to facilitate this quality improvement project. We will implement this quality improvement project again in the upcoming year albeit it with some modifications. These future directions are listed below.

- Expansion of the project to include all diabetic patients irrespective of age.
- Expansion of the project to include all three microsystems at the Sunridge Family Medicine Teaching Center.
- Altering the intervention by implementing an "alert" for overdue CKD screening in the electronic medical record of diabetic patients. We expect this to decrease the labor intensive nature of the current quality improvement project. Additionally if this type of auto-generated intervention proves to be successful it could be an invaluable tool for patient care.

1. Canadian Institute for Health Information Canadian Organ Replacement Register Annual Report: Treatment of End-Stage Organ Failure in Canada, 2000 to 2009 2011 Canada Ottawa, ON
2. Canadian Diabetes Guidelines <http://guidelines.diabetes.ca/browse/chapter29#sec4>
Accessed October 28th 2015

Table 1. Summary of Pre-intervention, True-baseline, and Post-intervention measurements

Characteristic	Pre-Intervention		Post-Intervention	
	Number	Percentage (%)	Number	Percentage (%)
Diabetics >50 years old	178	100 (178/178)	179	100 (179/179)
Screened within past 12 months	146	82.0 (146/178)	168	93.8 (168/179)
Meet criteria for CKD	29	16.3 (29/178)	31	17.3 (31/179)



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Screening for diabetic neuropathy and prevention of foot ulcers - Use of EMR template as a tool



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Introduction

According to the Canadian Diabetes Association(CDA), approximately 10% of diabetics will develop a foot ulcer. Out of those upto 20% may need amputation. Early detection of diabetic neuropathy through screening can help in preventing complications such as foot ulcers. Screening (including physical examination) is also important because neuropathy may not lead to symptoms early on. Current screening practice in PCN's is variable. Mostly it involves periodic assessment with monofilament testing only (consistent with CDA guidelines), by physicians and quite often by diabetic educators. However, a certain percentage of patients with skin breakdown are able to discern pressure during monofilament testing. Also, 15-20% diabetic foot ulcers may be related to vascular disease without neuropathy. Therefore, a more sophisticated approach may be warranted. Making screening more comprehensive can result in significant cost savings, because each amputation ranges in cost from \$30000-40000, not including loss of work, and social and psychological impacts. Therefore, prevention of diabetic foot ulcers and amputations should be a priority.

Project Overview

This project aims to improve screening of diabetic neuropathy and prevention of foot ulcers through use of EMR template for diabetic visits. The current practice for screening and prevention can vary between medical professionals, and mostly focuses on monofilament testing (in alignment with CDA guidelines), which is often performed by diabetic educators. Due to reasons previously discussed, an enhanced periodic physical examination may be beneficial. Adding a template to the EMR with specific check-boxes related to elements of physical examination may greatly enhance the process of screening. To this end, a suggested template for diabetic visits has been developed. This will include documentation of (if present) any skin changes, decreased peripheral pulses and delayed capillary refill, and tests other than 10-g monofilament (vibration sense with 128Hz tuning fork, pin-prick, ankle reflexes, temperature sensation). This template will be used in future, and the impact or potential improvement will be assessed through chart reviews by comparing the success of screening prior-to and after initiation of diabetic visit template.

Visit Template

Subjective Note
Objective Note

Hemoglobin a1c

Albumin Creatinine Ratio/ Creatinine

Blood Pressure/ Weight

Skin changes

*Callous formation, ulcers, evidence of fungal infection

10-g Monofilament test

Vibration with 128Hz tuning fork

Temperature sensation to dorsum of foot

Ankle reflexes

Peripheral vascular assessment

Symptoms/risk factors of neuropathy

*erectile dysfunction, dysesthesia, paresthesias, gastroparesis, pain
*smoking, alcohol abuse

Assessment and plan

Discussion

The EMR visit template was developed during the course of this project. This template can be used for diabetic checks, and further assessment will be performed regarding potential improvement or increased success in screening. The template will serve as a checkpoint, thereby making it easier for medical professionals to address screening questions.

It was challenging to assess the current status of care, because of variation in medical practices of different learners, residents and physicians. Further, the success of screening may also depend on the approach and experience with physical examination, for example number of points used during monofilament testing. It may be reasonable to share results with a larger audience through publication in a QI journal.

Next Steps

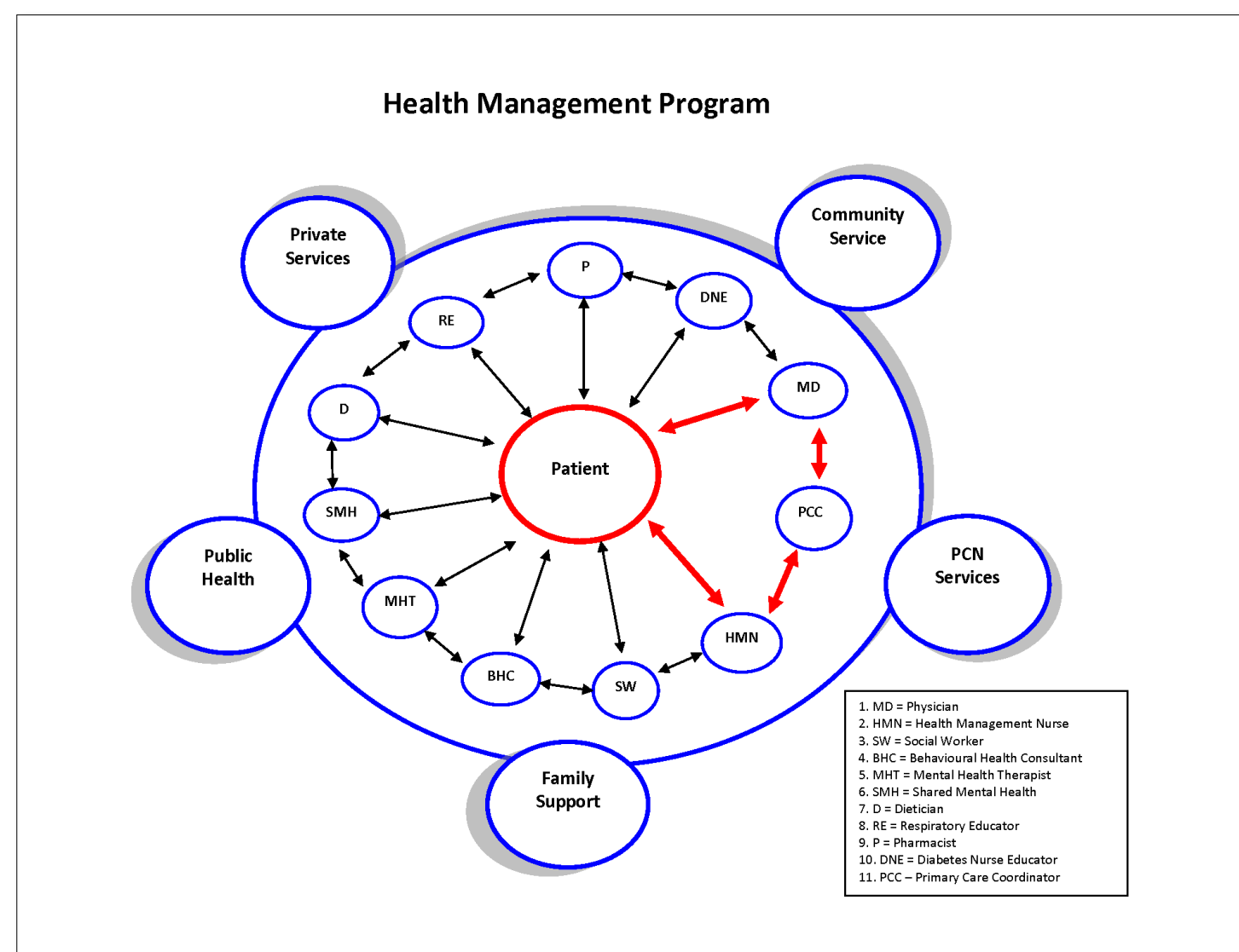
In the next phase, this EMR template will be used for diabetic patients. After a sufficient number of patients has been seen, evaluation of the impact of this template will be performed using chart reviews.



Nicole Phillips, Clinic Manager and Kathy Stewart, RN BN

Purpose

- The Health Management Program is a patient-centred approach to improve the general health of an identified target population at the Sunridge Family Medicine Teaching Centre.
- The program is a collaborative process between the patient, Health Management Nurse, physician, resident and the rest of the Allied Health Team to promote positive patient outcomes.
- The Health Management Program, encompassing 6 pillars of the Patient Centered Medical Home, was developed with the goal to provide high quality, patient-centred care while reducing visits to attending physicians, therefore allowing for increasing panel size and more efficient patient access.



Program

Allied Health Team (AHT) at Sunridge:

- Behavioural Health Consultant
- Respiratory Educator
- Mental Health therapist
- Shared Mental Health
- Pharmacist
- Social Worker
- Diabetes Nurse Educator
- Dietician
- Health Management Nurses

Target Population

- High risk patients
- High utilization and high cost patients (high ER, hospital, clinic visits)
- Poorly controlled patients
- Complex conditions
- Newly diagnosis
- At risk of developing a chronic disease
- Struggling with life style changes

Health Management Nurse

Sunridge has 3 RNs referred to as the Health Management Nurse (HMN). The HMN is responsible for case managing the patient. The HMN is scheduled to see 6 patients per day. Initial appointment is 1 hour but can be shortened to 30 minutes to accommodate patient time constraints.

The HMN works with the patient and patient's health care team to support positive outcomes through a patient-centered approach. The HMNs are encouraged to refer directly to any of the AHT based on their assessment. The HMN will communicate the referral to the physician and have the patient follow-up as necessary with the physician. If, at any time, the HMN is unsure of best practice for the patient they will consult with the physician.

The HMN will assist patients in achieving positive outcomes through:

- Comprehensive health assessment of the patient's condition
- Prioritize the patient's health and lifestyle goals
- Recognize barriers, identify strategies and resources to achieve the goals
- Build confidence with problem solving and action plans
- Developing and implementing with the patient a care management plan that includes patient goals, monitoring and follow-up
- Care coordination
- Health coaching
- Patient education regarding current health care and wellness options
- Lifestyle management
- Advocacy
- Self-management support and shared decision making
- Assist the physician with complex care planning
- Community resources

Complex Care Plans

The Health Management Program was started with complex care plans.

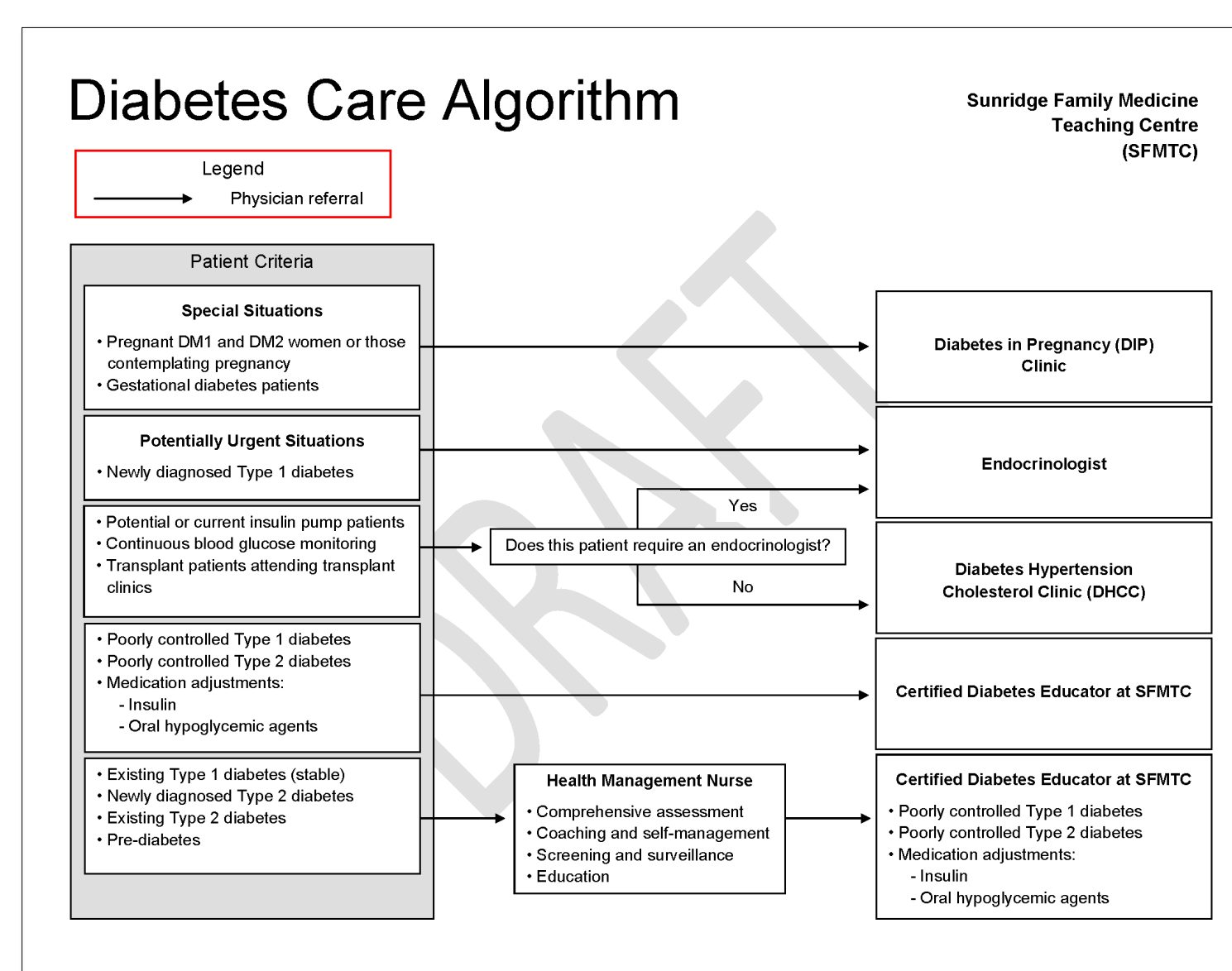
The Primary Care Coordinator (PCC) generates a list through the EMR of patients eligible for a complex care plan. The list is reviewed by the physician to ensure the patients are appropriate. Patients are scheduled for a 1 hour appointment with the HMN to complete the complex care plan immediately followed by a 15 min appointment with the patient's physician to review the complex care plan. Our goal and best practice is for the physician, HMN and patient to meet and review the complex care plan together preferably on the same day to provide timely and coordinated care.

The Health Management Program has been expanded to include other health conditions such as diabetes, hypertension, smoking cessation, weight loss, etc.

Standard Care Plans

A working group has been formed to develop standard care plans (standing orders) to allow the HMNs to adjust patient treatment within set parameters. The HMN will communicate with the physician immediately if the patient is outside the parameters. Starting with diabetes then will expand to hypertension and other standard care plans. The diabetes working group consists of 2 Physicians, HMN's, Diabetes Educator, Pharmacist and the Clinic RN.

The creation of the diabetes care plan is still in progress. Below is an example of the care plan in its initial stages.



Allied Health Case Conferences

Allied Health Case Conferences are currently scheduled once a month, alternating Tues and Wed. The HMN identifies patient's that would benefit from having the team collaborate as a group to discuss their conditions. Eventually any member of the health care team can suggest a conference. Patients are not present at the initial conference; however patients are invited to future meetings. The Health Management Team collaborates to discuss and strategize ways to support the patient and improve their condition.

Referral

A PCC was hired in conjunction with Mosaic PCN to assist in managing the AHT. The PCC is responsible for managing all referrals and scheduling all AHT appointments and allied health case conferences. They are responsible for running reports and evaluation of the Health Management Program.

The PCC sends the referral to the HMN or the applicable AHT member.

- If there is more than one referral request, the HMN will triage the referral based on patient's goals and health care needs.
- If there is a specific request that the HMN cannot manage, the PCC will send it directly to the appropriate AHT member.
- If the physician is unsure of which AHT member to refer to, the PCC sends referral to the HMN to triage.
- The AHT refer amongst each other based on their assessments whilst communicating with the physician.

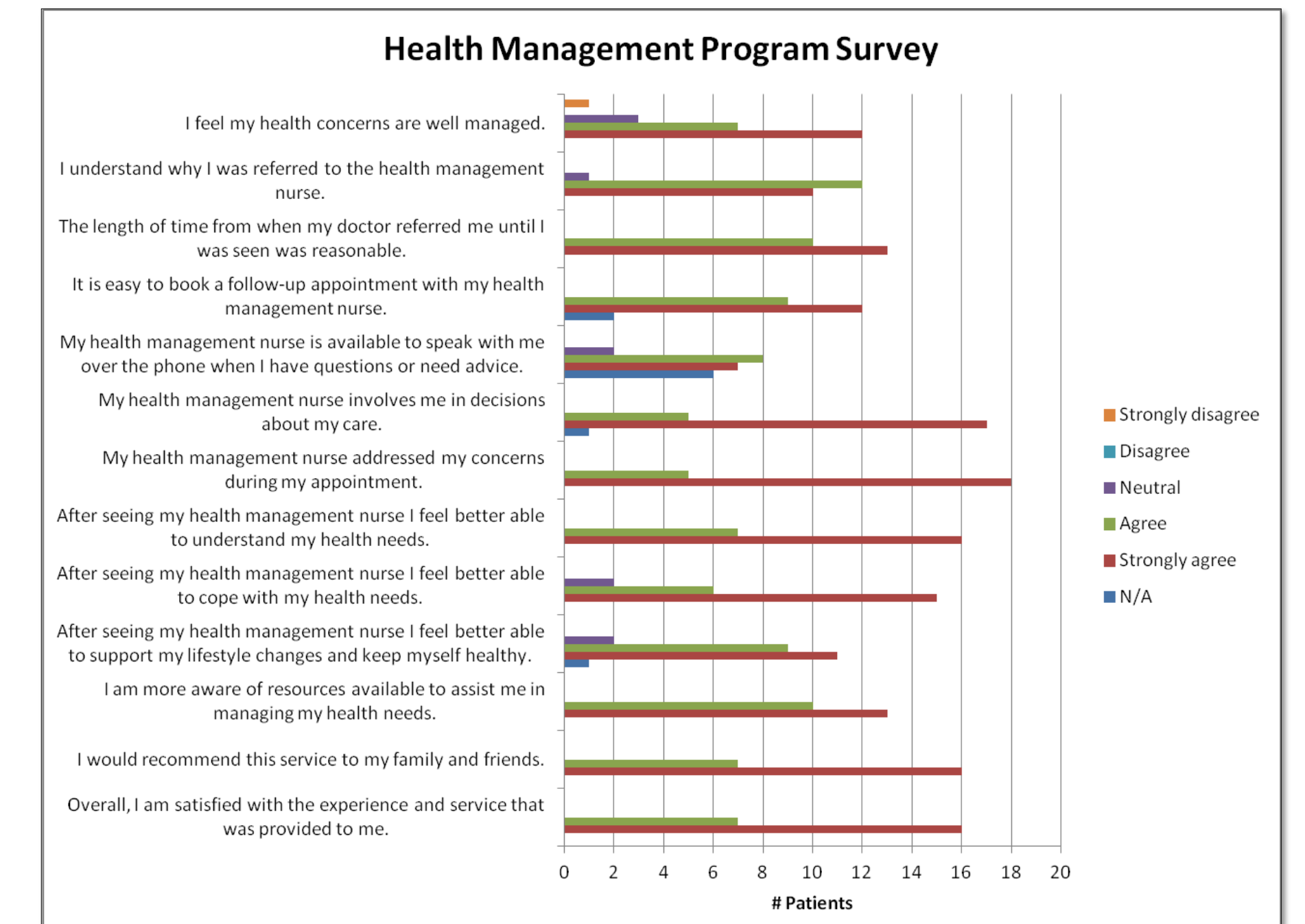
Evaluation

Patient Satisfaction Survey

A patient satisfaction survey was created to evaluate the program.

The survey conducted from March 4-31, 2015, was handed out to patients after their visit with the HMN and was completed in clinic prior to patient leaving. All surveys were kept anonymous.

- Total participants: 23 (9 males, 14 females)
- Age range: 33 yrs – 85 yrs. Males (33 yrs – 70 yrs), Females (45 yrs – 85 yrs)
- Length of time seeing HMN: First visit (18); 1-6 months (1); No answer (4)
- There were a total of 13 questions. Patients would rate the question on 6 different response categories.



Overall, results were positive indicating the Health Management Program was well received. Patients were satisfied with the management of their health needs, felt better able to cope with their health needs and to support lifestyle changes to keep themselves healthy. Patients stated they would recommend this service to their family and friends.

At the end of the survey, participants were free to add general comments about the program, and areas for improvements. Below is an overview of the comments received from patients.

HMNs were very knowledgeable and informative. The nurses were conscientious, offered excellent information and suggestions. Patients felt their concerns were important. They felt making decisions on lifestyle changes and improving their health is best supported through guidance and education opportunities. They appreciated knowing about resources available in the community and in the clinic. They look forward to follow up sessions.

Allied Health Case Conferences

First case conferences were held on Oct 20/15. Four patients were presented and discussed with the physician, HMN, dietician, pharmacist, social worker and mental health therapist. Feedback from the team members was very positive.

Benefits identified by the team:

- Ability for the team to discuss the patient's case together. Communicating plan of care for the patient using only the EMR is limiting and difficult; case conferences allow for more in-depth communication and strategic planning
- Identifying tasks needing to be undertaken to achieve outcomes and allocating those tasks to the appropriate members of the team
- Discovering new observations about the patient from a different view/discipline
- Learning what other AHT members can do to help the patient
- Acquiring a wider perspective on how to better care for the patient
- Great way to engage with team members and enlist cohesive measures for the patient
- Ability to address complex issues from different perspectives and scope of practice

As we continue to advance and improve the program, regular evaluations will occur. Effectiveness will be evaluated through regular distribution of the patient survey (every 6 months), regular feedback from the HMNs, AHT, and physicians, measuring health parameters, and achievement of patient goals.

Conclusions

- Complex care plans need to be spread out throughout the year to balance the workload of the HMNs and enable them to see and follow-up on other patients. We limit complex care plans to 4 appointments per day.
- Need to be flexible in length of appointment time. Not all patients have time or energy for 1 hour appointments.
- Monthly meetings are held to discuss process, workflow, schedule, challenges, positive outcomes and feedback.

The Health Management Program is one example of a team approach for optimizing health management of high risk patients. Using a patient-centered approach and encouraging/supporting patients to manage their own health, is a win for the patients and health care. Patients are more ready to help themselves when they are leading their own health and have better success in making permanent lifestyle changes. We are anticipating this program will reduce patient high utilization rates of ER, hospitals and repeat visits to family physicians, thereby decreasing health care costs and opening appointments in primary care.

INCOPORATING PROCEDURAL MEDICAL EDUCATION IN THE MEDICAL HOME IN ACADEMIC FAMILY MEDICINE



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Introduction

- Referring patients out for surgical procedures, that could be done in a family practice setting, results in a loss of continuity for our patients.
- This also results in a lost opportunity for a learning experience .
- Our patients can face delays in treatment due to specialist wait times .
- We wanted to achieve more in-house treatment of simple outpatient issues to avoid fragmented care, delays in treatment, and to provide an effectual learning experience for our future family physicians.
- Our residents identified a need for educational opportunities with minor surgical procedures, and have expressed this in a questionnaire.
- Confidence levels with these procedures pre-procedure clinic are rated on the low end of a 1-10 scale.

Methods

- To address these issues, we have dedicated one clinic per month for the Procedure Clinic.
- One physician is dedicated to running the clinic.
- Residents are scheduled into the clinic on a rotation.
- We have set up an organized intra-clinic referral system utilizing our Central Referral Clerk.
- To streamline the referral, we use our clinic camera to present photos of lesions to the surgery physician to allow for more efficient determination of patient eligibility in the procedure clinic.
- A procedure binder has been compiled, outlining information for staff and learners about the procedures.
- Evidence based literature is reviewed by residents prior to the procedure.
- An R.N. is the main contact person who provides the pre and post procedure teaching, ensures all equipment, medication, dressings and teaching materials are prepared, and is the contact person for any concerns for the patients.

Findings

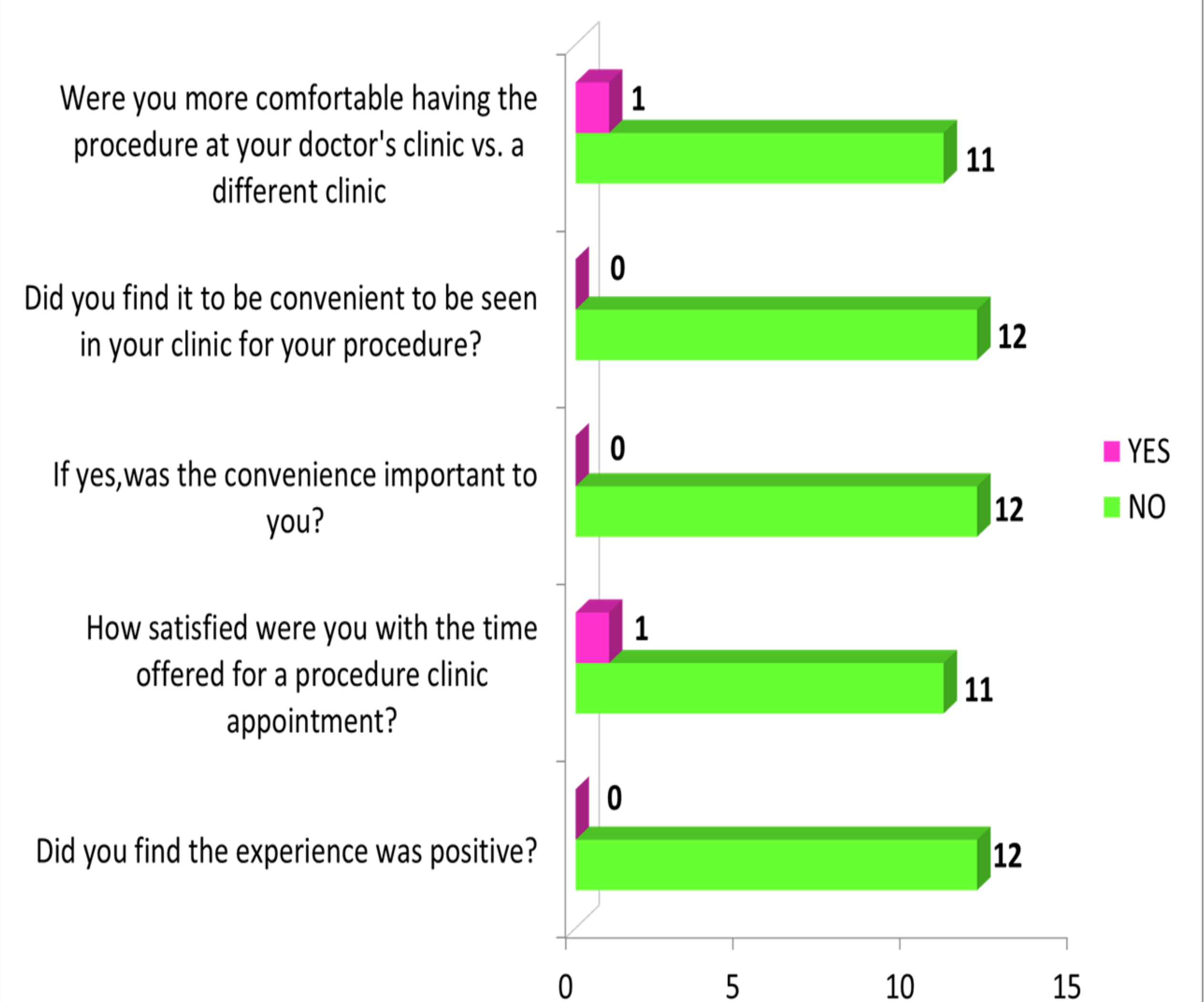
- Ongoing education to clinic physicians regarding available procedures , and how to send a referral, was a key element in initiating, and maintaining patient volume in the clinic.
- Using an organized intra-clinic referral process has allowed our patients to be scheduled in our clinic to maintain continuity of care.
- Dedicating an R.N. to coordinate the clinic, and manage patient teaching, enables the physician to devote time to review with the learners.
- Learners report increased confidence with minor out patient procedures following the scheduled clinic day.
- Using patient handouts from www.myhealthalbert.ca and Lexicomp has kept our information up to date, and standardized.



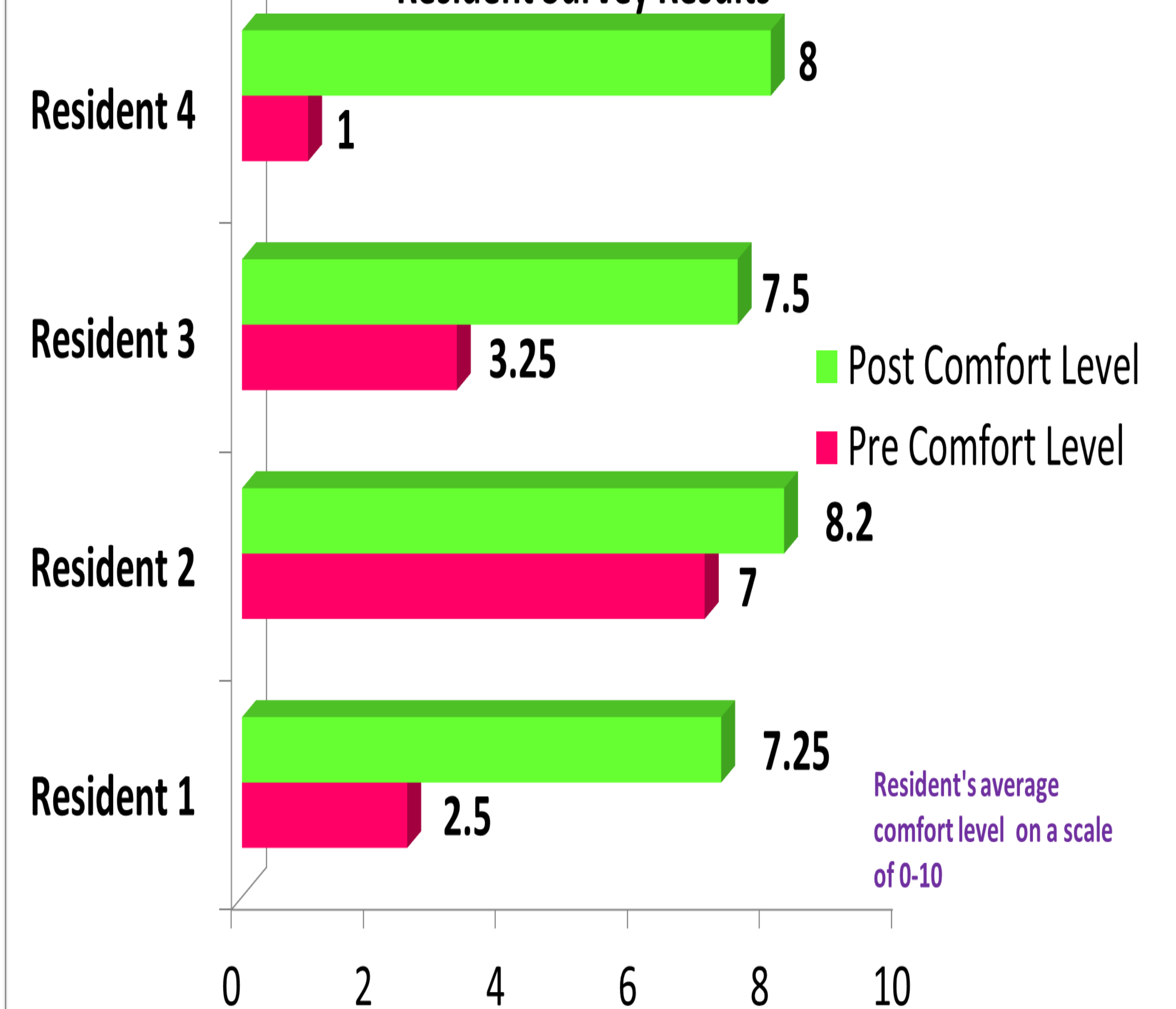
Evaluation

- To evaluate this initiative, we administered a survey to both the residents and the patients.
- ALL the residents have reported an increased level of confidence following their scheduled clinic day.
- Patient survey results show an overall positive experience with the clinic, taking into consideration the patients comfort level and convenience of the clinic.

Patient Satisfaction Survey



Resident Survey Results



Developing a Systematic Approach to Health Screening in a Community Academic Setting

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UNIVERSITY OF CALGARY
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Department of Family Medicine

Introduction

- Primary care plays a key role in providing screening and preventative care to patients.
- During an informal audit of documentation to assess our clinics practices around health screening, we discovered that there was;
 - no organized or standardized approach to how health screening offers were documented
 - screening was limited primarily to periodic health exam visits
 - practices varied from physician to physician
 - the multidisciplinary team was under-utilized in the screening process.
- Our electronic medical record did not support standardized documentation of screening offers and there was no system in place to alert staff when screening was overdue.
- There was no formalized process around screening and the multidisciplinary team did not play an active role in supporting physicians in their efforts to provide routine health screening.

Methods

- The clinic enrolled in Alberta Screening and Prevention (ASaP), a Towards Optimized Practice (TOP) initiative. All of the screening maneuvers identified by the initiative were adopted.
- We engaged and enrolled all of the clinic physicians in the initiative. We also actively worked to educate and engage the residents and learners.
- We enlisted the assistance of the multidisciplinary team. Nurses took a lead role in ensuring that screening maneuvers were up to date and entered in a standardized manner.
- We worked closely with the Informatics team, to develop standardized approaches to data entry into the EMR;
 - to ensure that screening data could be easily accessed and extracted.
 - a worksheet was developed in the EMR, for nursing to utilize, to ensure screening was on file
 - Clinical Support Decision (CDS) Triggers were created to serve as a recall system
 - the Goals tab of the EMR was operationalized.
- A patient questionnaire was created to gather information from patients, surrounding lifestyle practices as they pertain to health screening.

Discussion

- S** » **Standardized** entry of health screening increases the ease in which screening data and screening offers are located in a patient's medical record and improves data extraction.
- C** » Creating a **Culture** of health promotion and disease prevention among staff, learners, physicians and patients creates an awareness of, and a dialogue around, the importance of early detection, early intervention and disease prevention.
- R** » Creating a **Recall** system, that can alert staff and clinicians when screening is due or overdue, provides a safety net to ensure that routine screening is complete and timely.
- E** » The **Electronic Medical Record** can be utilized to organize and prompt routine screening. The EMR can provide a way to standardize data entry, create a recall system, be utilized to identify due or overdue screening, and used to extract data.
- E** » Clinic teams can increase **Efficiency** by reducing physician workload. **Engaging** a multidisciplinary team in screening efforts can increase patient uptake of screening.
- N** » Creating a **Network** of support around health screening processes, through the utilization of multidisciplinary team members, increases efficiency and uptake of screening. In collaboration with physicians, multidisciplinary team members can become key players in not only the identification of, but also the completion of a significant portion of routine health screening.
- I** » **Integrating** screening opportunistically, into routine patient encounters, can improve patient rates of screening.
- N** » **Nursing** can play a key role in ensuring that routine screening is up to date and relevant to patients. In collaboration with physicians, nurses can assist with identifying relevant screening, identifying appropriate screening intervals and ensuring that recall processes are accurate and in place. They can also coordinate completion of screening and provide patient teaching and support where required.
- G** » Clinic **Goals** around the commitment to improve clinic practices provide incentive and sustainability.

Clinical Support Decision (CDS) Triggers in EMR

	BP goal is overdue		
	Breast Cancer Screen is overdue		
	Cervical Cancer Screen is overdue		
Allg	Meds	Profile	Labs



Findings

- Standardizing data entry of screening offers improves efficiencies and helps to identify gaps in screening.
- Optimizing the use and functioning of EMRs provides for more efficient data entry and easier and better data extraction.
- Utilizing the multidisciplinary team can reduce physician workload, can increase efficiencies and decrease missed opportunities for screening.
- Challenges in a community setting may include limited human resources, health records that do not support standardized methods for data entry and the lack of a recall system.

References

Towards Optimized Practice (TOP) www.topalbertadoctors.org

Optimization Through Consolidation: The MEDICUS Project



UNIVERSITY OF CALGARY
CUMMING SCHOOL OF MEDICINE
Department of Family Medicine

Dave Jackson, Bcomm; Allison Mirotchnik, MSC; Agnes Dallison, MSc CE

Introduction

- The Department of Family Medicine (DFM) represents all family physicians in the Urban Calgary Zone. The DFM is divided into two main areas: Clinical (AHS) and Academic (UofC). Each area will have a set of programs with accompanying data requirements.
- The primary goal of the MEDICUS project is to create one centralized data source that can be used simultaneously by all programs within the DFM. MEDICUS will allow for programs to always have access to the most up-to-date data, which can quickly be cross-referenced and compared to data from other programs.
- Other goals of MEDICUS include implementing automation where possible, optimizing reporting, and providing data dashboards
- MEDICUS data will include: demographics, clinical privileging, academic appointments, scheduling, scholarly activities, communications, finance, EMR activity, QI, and much more...

Methods

Create a Formal Project Working Group

- Identify CORE development areas and identify Champion and Project Lead for each area
- Specify in-scope vs. out-of-scope activities to avoid project creep.
- Workflows and Needs identified BEFORE any development occurs
- Quality and proper building is #1 Priority. Timelines should not be main driver

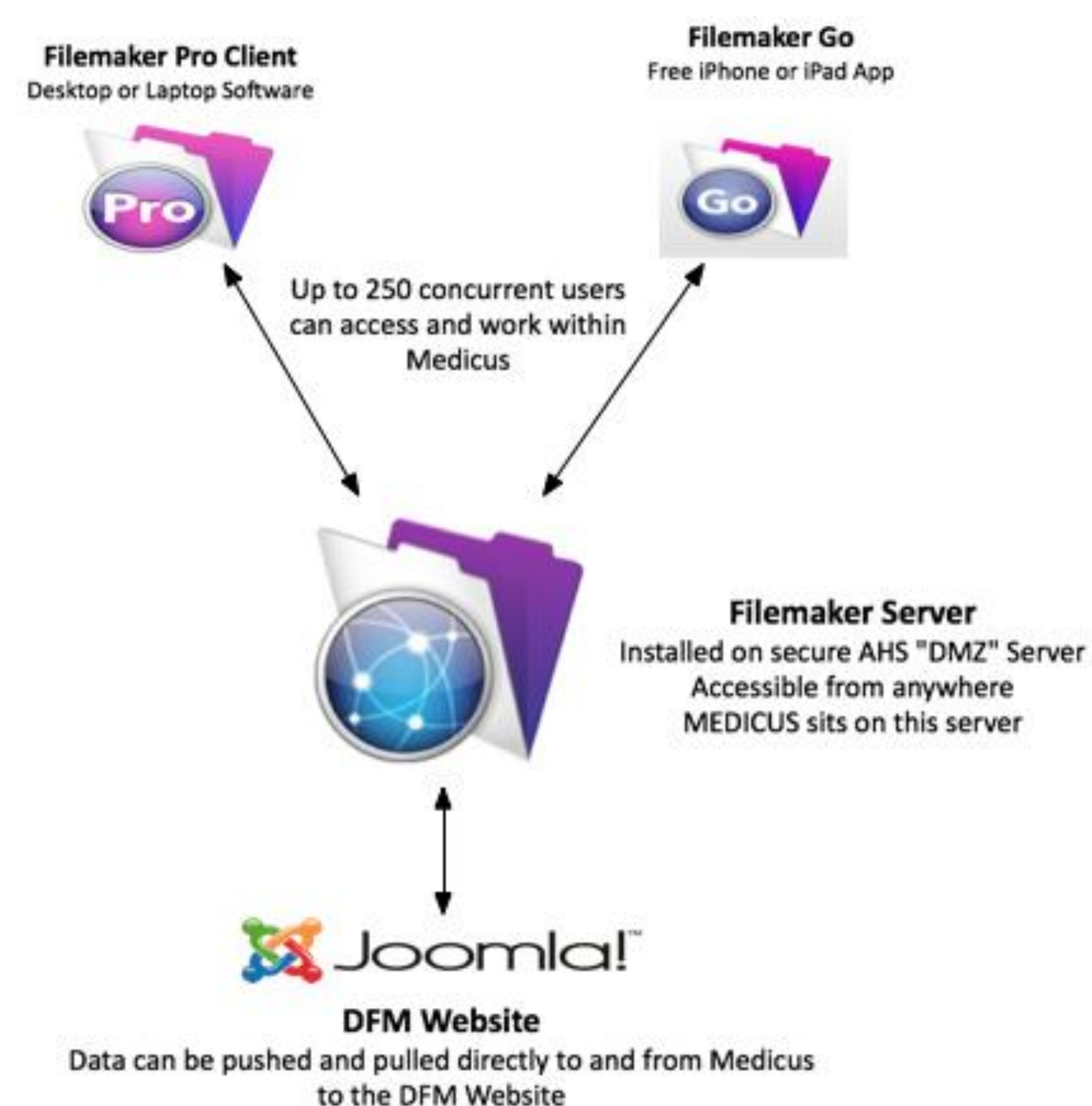
Select and commit to a development platform.

Five consideration items when choosing...

- Is it supported by your IT Department? Is it a cross-platform solution?
- Does it allow for customizations to make it fit to your needs? (and not the other way around)
- Does it have the capacity to connect with other external data sources / software?
- Is it secure? How will your data be hosted?
- Based on your project plan, do you have the resources to develop and maintain your product?

DFM selected Filemaker Pro as a development platform.

MEDICUS Infrastructure



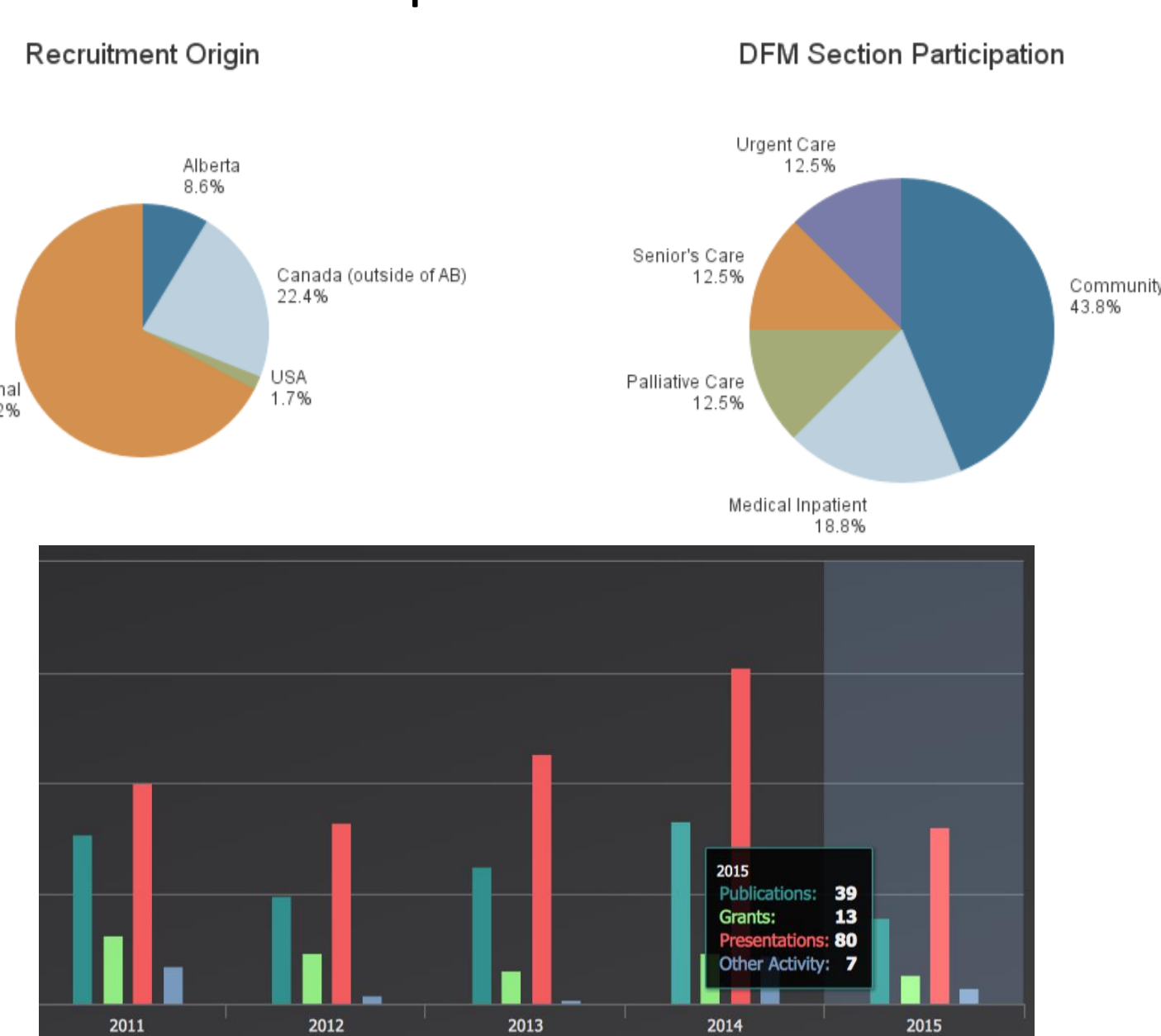
Findings

- The Filemaker platform has allowed for the customizability and flexibility for all of DFM needs, however requires a dedicated resource for development and maintenance. It is not an "out-of-the-box" solution.
- The most difficult and important work is identifying workflows, data requirements and program needs. Development is secondary. Any development without a proper vision will result in re-work and potential errors.
- Duplication and redundancy of data is a major issue. While programs may be collaborative in day to day work, often their data is isolated and there is no real source of truth. A regular maintained data dictionary is a MUST. MEDICUS currently contains over 1500 data elements and without a data dictionary, ensuring each element is unique would be a nightmare.
- Small automations can create HUGE time savings. MEDICUS can generate reports in less than a minute that in the past were taking teams hours, days, and sometimes weeks to do manually.
- Reports are only as good as the data being entered. Interfaces set up to maximize structured data entry.
- A custom system requires a change of thinking by the users. It is not about what the system can do, but what do you need the system to do for you.

Physician Profile Example

The screenshot shows a 'Providers General Info' form for 'TEEN WOLF'. Fields include: First Name (Teen), Last Name (Wolf), Gender (Male), Birthdate (West, Aug 23, 1967), Age (46), and various checkboxes for 'Data Requested'. There are sections for 'PREVILEGING' and 'IDENTIFIERS'.

Data Visualization Examples



Resident Scheduling Example

The screenshot shows a 'Master Schedule Manager' table for the year 2015. It lists various residents and their schedules across different sections, with columns for dates and shift types.

Conclusions

MEDICUS will enable the DFM to have one source of truth for all program and physician data that can be securely accessed from anywhere by registered users.

- DFM will be able to quickly generate reports and visualizations representing data across multiple programs (finance, research, clinical, etc.)
- Process of identifying workflows and program requirements will ensure transparency of programs and facilitate sustainability.
- A formal project group creates an accountability structure and minimizes project creep. Priorities are decided by a group of key stakeholders.
- DFM can focus less on managing data and more on utilization and acting on data.

The importance of organized data should not be underestimated. Data will play a part in almost every decision and action.

Opening the Doors: A collaborative transition initiative to assist stable complex mental health patients back to their Patient-Centered Medical Home for mental health management

Michelle Houle, BA, RPN from Addiction & Mental Health Central Clinic (A&MHCC)
Sarah Willis, BN, RN from Central Family Medicine Teaching Centre (CFMTC)

Potential Conflict of Interests: None to Declare

Issues to Address

A&MHCC Concerns

- Large case loads created when stable individuals remain in community mental health programs

CFMTC Concerns

- CFMTC capacity to meet new type of demand and unpredictable volume when taking on this initiative

Mutual Concerns

- Long referral and re-referral wait times to community mental health programs
- Minimizing risk of patient decompensating
- Expanding specific capabilities for advanced clinical practice within primary care nursing
- Having support tools to maintain best practice in assessing mental health and documenting care
- Devising a care management strategy for patients that decompensate

Initiative Development

Partnership Formation

- Leadership engagement between the two clinics

A&MHCC Perspective

- Created a Transition Nurse role
- Identified a pilot group of stable patients
- Created a transition process
- Located primary care providers to accept transfer of care

CFMTC Perspective

- Clarified our needs to make this initiative manageable in primary care setting
- Gained support from the Primary Provider team to take on this advanced skill set

Mutual Perspective

- Facilitated changes into clinical practice
- Trained and supported primary care staff
- Designed workflows and documentation templates
- Created a plan for decompensation in primary care setting

Findings

Although our project is ongoing, we have some preliminary findings:

Potential Positive Impact on staff in both clinics:

- ↑ Capacity in A&MHCC for new patients
- ↑ Comfort of CFMTC staff caring for complex mental health patients

Potential Positive Impact on the patients:

- ↑ Rapport with CFMTC staff and Primary Provider
- ↑ Opportunistic Screenings
- ↓ Stigma related to needing specialized Mental Health Management to cope in our health care system

Conclusions

Challenges

- Breakdown of co-dependencies on requirement of specialized Mental Health Services
- Reinforcing changes in practice for workflow and documentation
- Staggered timeline of education and application of newly acquired skill set
- Individual providers attempting to piggyback on to the initiative without completing the necessary facets

How others can gain from our experience

- Recognition of potential modifications through collaboration and evaluation
- Value in identified facilitators
 - Transition Nurse
 - Clinical Development Lead (CFMTC RN)
- Application of the Medical Neighbourhood principles does not require all pillars to be advanced in the Patient Centered Medical Home (Taylor et al, 2011)
 - Make partnerships with your neighbours!

Patient Journey into Primary Care

Engagement

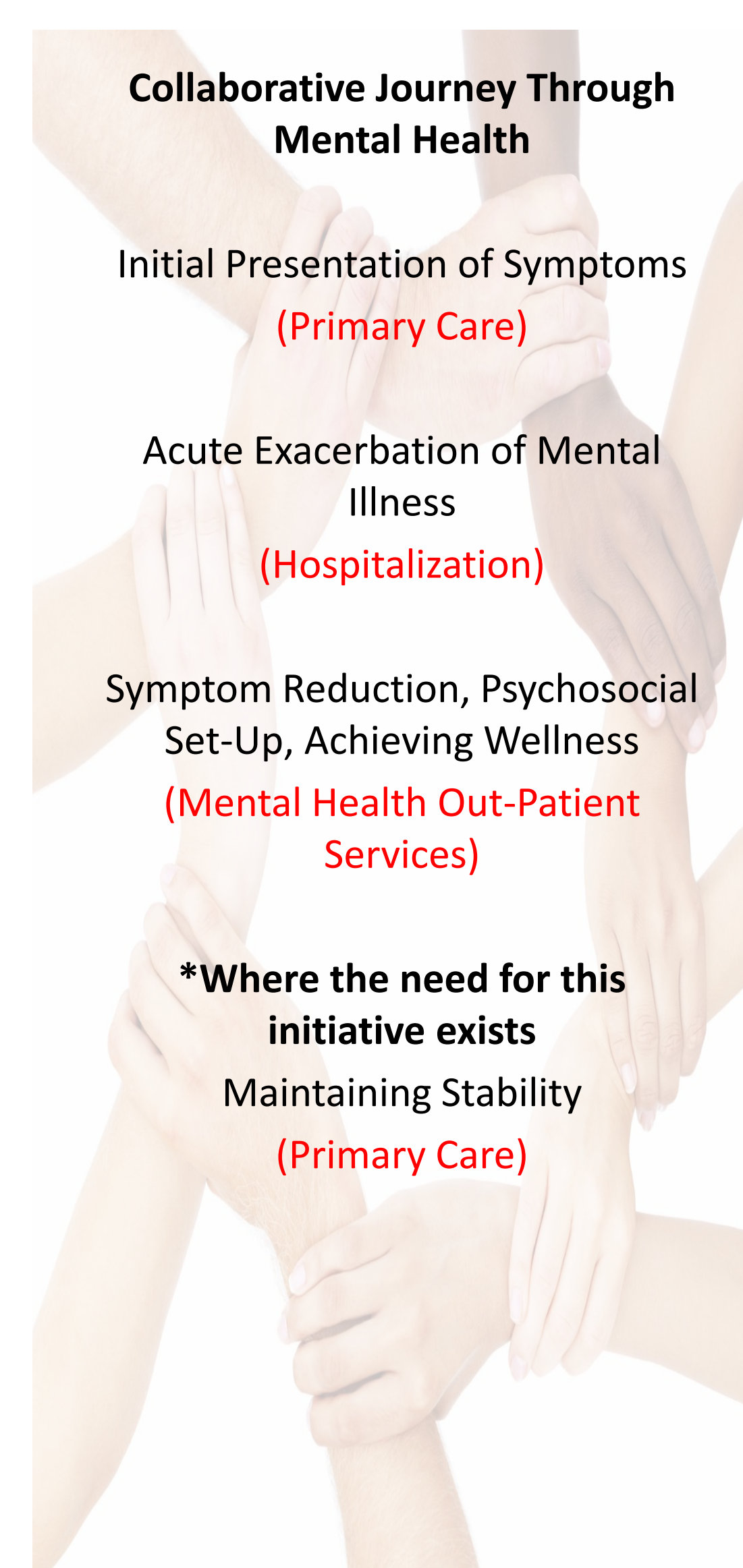
- Transfer from Mental Health Therapist to Transition Nurse based on meeting predetermined criteria
- Involvement of Transition Nurse in the months leading up to transfer of care
- Completion of Primary Care Transfer Summary, including case specific guidelines for mental health follow-up
- Initial meeting with Transition Nurse and Primary Care team

Transition

- Active follow-up by the Transition Nurse for the first three months that the transfer is initiated
- Follow-up meeting involving Transition Nurse and Primary Care team at three months to review status
- Provided the client remains stable, transfer of care continues
- If there are changes in client status, role of A&MHCC program and transfer re-evaluated

Transfer

- Transition Nurse involvement reduced to the frequency of the psychiatric review (typically every three months)
- Follow-up meeting involving Transition Nurse and Primary Care team at three and six months
- Provided the client remains stable, client is formally discharged from A&MHCC at 12 months
- If there are changes in client status, role of A&MHCC program and transfer re-evaluated



This project demonstrates that family medicine clinics can manage patients with stable complex mental health problems. By working together and establishing good communication, family medicine clinics and specialists can develop a working relationship for providing comprehensive care to patients.

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Scott Jalbert, BN, RN
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CFMTC Team

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Twila Orto, BN, RN
Richard Alarie, MA, R Psych
A&MHCC Team

Beyond the TNA - what do patients value in access?

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background

- the "third next available (TNA)" appointment assesses the number of days a patient will wait to be seen after booking an appointment and is a sentinel marker. "Third" next appointment is preferred as first and second appointments may reflect availability created by cancellations, rather than truly reflecting accessibility¹
- TNA is one measure of timely access to an appointment with a provider, and indicates provider capacity to meet urgent need
- the advanced access model attempts to eliminate appointment delay by ensuring that patients requesting an appointment can be seen the same day of the request – the common motto is *do today's work today*²
- successful application of principles of advanced access may require one-half to two-thirds of appointment slots being empty at the start of a clinic day, to reserve space for same day appointment requests³
- some clinics differentially measure TNA for short appointments (re a health issue), and long appointments (for predictable chronic disease management or periodic health evaluations). TNA assesses access *speed* of the resulting appointment offer, rather than appropriateness or patient satisfaction with it

introduction

- following TNA as a marker may incent prioritization of same-day appointment availability over other appointment types
- in a patient-centred environment where advanced access is well established, TNA monitoring may be less relevant
- patients may have access priorities beyond simple speed
- one Canadian study in an academic clinic setting found patient access interest related to specifics of hours of clinic opening, interest in evening and weekend appointment availability, with some dissatisfaction over a lack of early morning and lunch appointment access⁴
- our academic clinic wished to better understand components of access most valued by our patients. We suspected factors might include:
 - particular day or time of day
 - delayed interval scheduling to match patient schedule
 - preferred provider
 - particular appointment type

methods

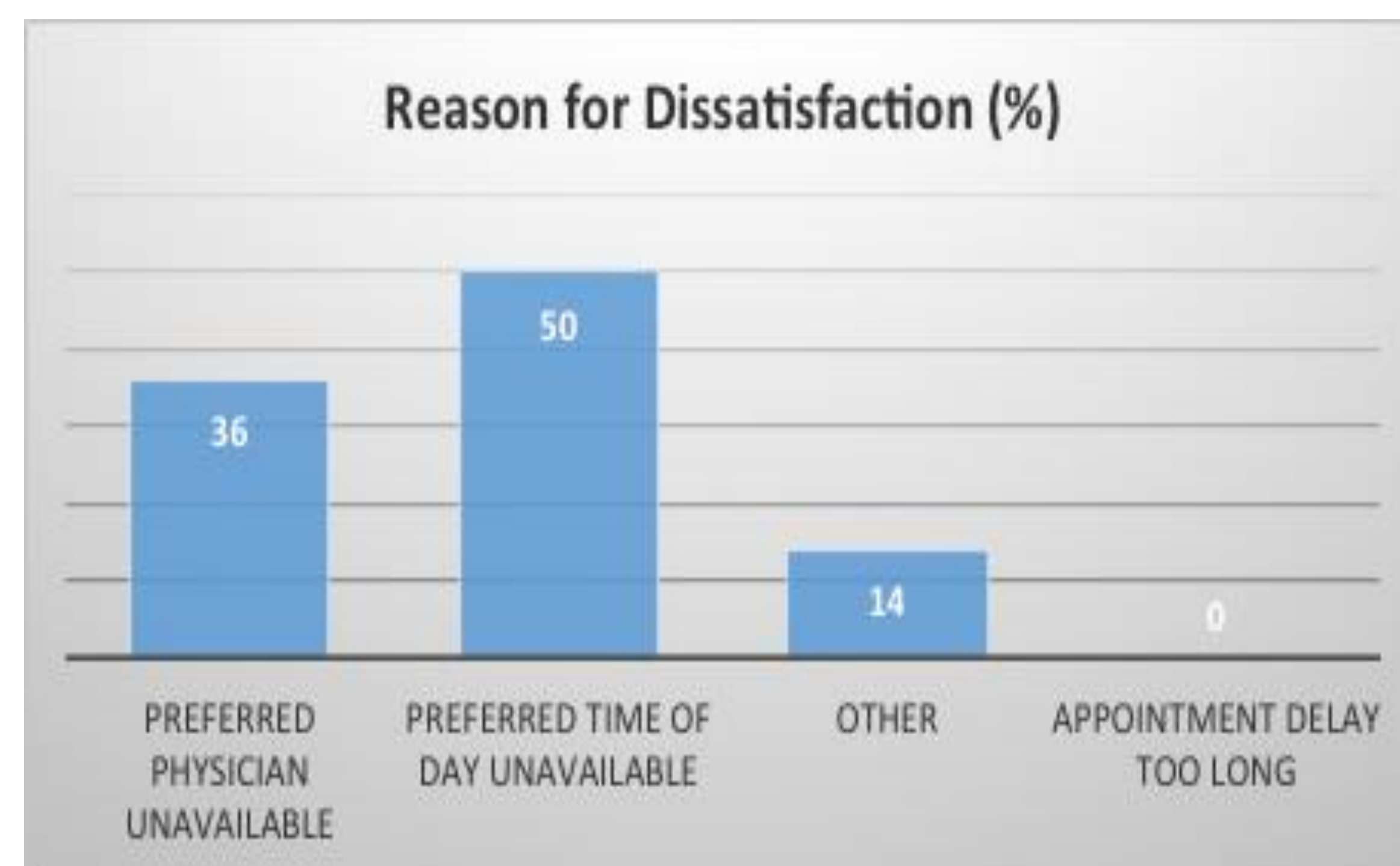
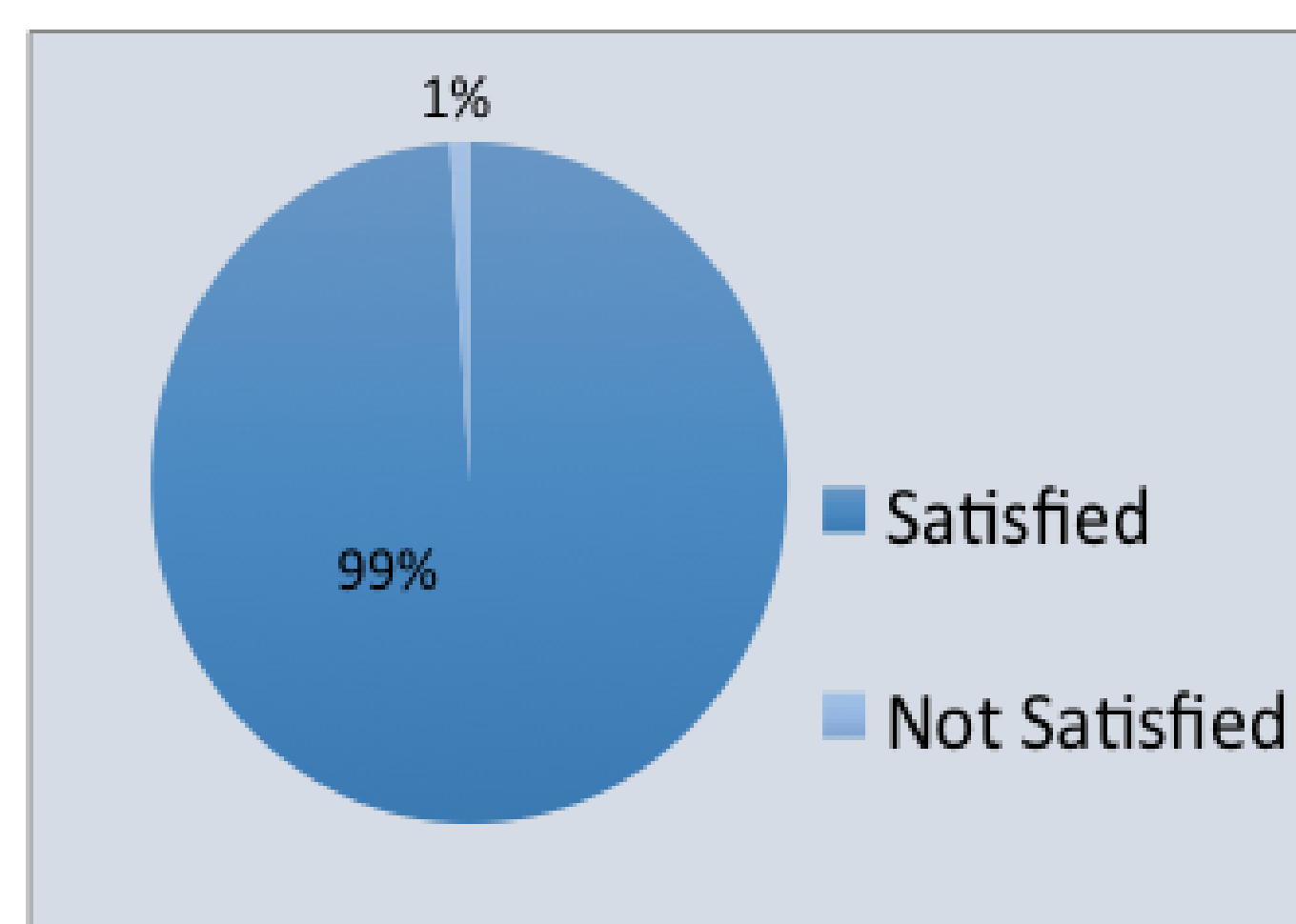
- receptionists, using a simple tick box, noted after each patient call, the level of patient satisfaction with appointment offered
- Tick Box – included:
 - If appointment was successfully booked
 - If the patient was satisfied with appointment given
 - If unsatisfied, the reason for dissatisfaction



findings

- very few patients were unsatisfied with the appointment offering
- the commonest reason for dissatisfaction related to the available time of day
- the next most common reason was unavailability of the specific requested physician
- no patients indicated unhappiness with overall delay to appointments

Capacity to book the type of appointment, with the preferred provider, at a time convenient for the patient schedule, was of higher patient value than speed of access.



discussion

- the environment may be changing, as more family physicians enter comprehensive office practice, resulting in better balance between supply and demand
- advanced access scheduling may become more commonplace
- periodic TNA measures as a sentinel marker of appointment delay may have reduced meaning as an access indicator as patients have access expectations of the Patient's Medical Home beyond simple speed
- simple-to-implement, and inexpensive, office processes monitoring patient satisfaction with the type and time of appointment offerings may be more meaningful and helpful in adjusting appointment schedule processes to better meet patient need



references

^{1,2,3} Bodenheimer T, Grumbach K. 2006. Improving Primary Care: Strategies and Tools for a Better Practice, McGraw-Hill Education. Pages 101-104.

⁴ Wetmore S, Boisvert L. April 2014. Patient satisfaction with access and continuity of care in a multidisciplinary academic family medicine clinic. Pages e230 – e236.

May - September (5 months)						
			Unsatisfied			
Appointment Request Calls	Appointments Not Made	Satisfied	Preferred Physician Unavailable	Preferred Time of Day Unavailable	Other	Appointment Delay Too Long
2247	2	2233	5	7	2	0