Department of Family and Community Medicine
Quality Improvement Program

THE TEAMING PROJECT

Learning from high-functioning
interprofessional primary care teams

Family & Community Medicine
UNIVERSITY OF TORONTO

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WE WOULD LIKE TO THANK ————————————

the individuals from the five case study sites
for so generously sharing their experiences with us
and for demonstrating great teaming in primary care.

Contents

Abbreviations

AMP   Activités médicales particulières
DFCM   Department of Family and Community Medicine
EMR   Electronic medical record
FOBT   Fecal occult blood test
HQO   Health Quality Ontario
IT   Information technology
PDSA   Plan-Do-Study-Act cycle
QI   Quality improvement

A note on extracts from interviews

Extracts from interviews are followed by a professional designation indicating the role of the participant within the team. In order to protect the anonymity of participants who might be identifiable by their role, designations have been generalized as follows:

Nurse – includes registered nurses, nurse practitioners, registered practical nurses, licensed practical nurses and nurses with specialist training such as psychiatric nurses

Allied health – includes social workers, registered dieticians and registered pharmacists

Administrator – includes administrators at all levels

Leader – includes non-medical directors and practice management

Extracts from interviews have been edited for length.

1. Background

HEALTH CARE PROVISION in the community is evolving from a single primary care provider, (usually a family physician), working patient by patient, to an interprofessional team approach to care for a defined population. While many such primary care teams now exist in Canada, there has been limited exploration of primary care team functioning and effectiveness.

The Canadian primary care landscape

SINCE THE EARLY 2000s, primary care renewal has been on the agenda across Canada. The impetus for change has included growing political and public concern about health care access and quality, and rising dissatisfaction among family physicians with their working conditions and ability to provide high-quality care to complex patient populations.[1] In response to these concerns, several provinces and territories initiated the development of group practices and networks, interprofessional team-based care, diverse funding and payment arrangements, patient enrolment, electronic medical records and quality improvement training and support.[2]

Across Canada, there are significant differences with respect to the structure, functioning, funding, governance, effectiveness and maturity of interprofessional primary care teams. For example, the degree and quality of collaboration varies as does the extent to which team members work to their full scope of practice. To date, Alberta, Ontario and Quebec have made the most progress in implementing interprofessional primary care teams.[3]

Interprofessional practice models

HEALTH CANADA defines interprofessional practice as an approach:

> … designed to promote the active participation of each discipline in patient care. It enhances patient- and family-centred goals and values, provides mechanisms for continuous communication among caregivers, optimizes staff participation in clinical decision-making within and across disciplines and fosters respect for disciplinary contributions of all professionals.[4]

The interprofessional primary care team typically comprises "a group of professionals from different disciplines who work together … to provide health ser-

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1. Hutchison et al., 2011.
2. Aggarwal & Hutchison, 2012.
3. Aggarwal & Hutchison, 2012.
4. Curran, 2004.

vices to a patient population in the community."[5] Teams may include a variety of regulated and unregulated health professions, administrative staff, and staff who promote and preserve health such as sanitation engineers, community workers, volunteers and health system managers.[6]

There is growing evidence that interprofessional primary care teams can improve patient and provider outcomes as well as health system performance. Improvements in physical, psychological and emotional symptoms have been noted in patients with chronic conditions,[7, 8, 9, 10, 11] and providers have been shown to experience greater job satisfaction, enhanced knowledge and skills and lower levels of stress associated with better teamwork and organizational climate.[12, 13, 14] At system level, interprofessional primary care teams can enable more efficient resource utilization, mitigate the economic burden of chronic conditions and improve the sustainability of the health care system.[15, 16]

Studying the functioning of interprofessional primary care teams

TO DATE, scrutiny of the interprofessional primary care team model has tended to focus on performance measurement and accountability. Moreover, the quality frameworks and instruments that might be used to assess team functioning in this context have generally not been well validated or evaluated in health care settings.[17] A more nuanced, experience-based perspective on what makes an interprofessional primary care team high functioning would add to our understanding.

The Teaming Project

THE TEAMING PROJECT was conceptualized, in 2014, by the Quality Improvement (QI) Program at the Department of Family and Community Medicine, University of Toronto. "Teaming" refers to the dynamic activity reflective of the mindset and

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5. Dinh, Stonebridge, & Theriault, 2014.
6. WHO, 2006.
7. Dinh & Bounaym, 2013.
8. Taylor et al., 2005.
9. Lozano et al., 2004.
10. Callahan et al., 2006.
11. Hughes et al., 2000.
12. Barrett et al., 2007.
13. Richter, Dawson, & West, 2011.
14. Borrill et al., 2000.
15. Barrett et al., 2007.
16. Dinh, 2012.
17. Lemieux-Charles & McGuire, 2006.

practices of teamwork, rather than to the design or structure of a team.[18] The aim of this project was thus to explore, and share knowledge about, the teaming which characterized a number of high-functioning, physician-led, Canadian primary care teams. In addition, the Teaming Project will draw on the learning emerging from this study to design, develop and test a conceptual and evaluative framework to support team functioning, improvement and sustainability.

18. Edmondson, 2012.

2. Methodology

2.1. Groundwork

A COMPREHENSIVE LITERATURE REVIEW was conducted, focusing on the concept of "team" in primary care, in health care more broadly and in the context of business with regard to management and leadership. This informed a number of key informant interviews with experts in the area of team functioning and/or primary care. Alberta, Ontario and Quebec were identified as the provinces where provincial policy and substantial financial investment have most extensively supported the emergence of interprofessional primary care teams. The five case study sites (one each in Alberta and Quebec, and three in Ontario), which became the focus of this project, were identified through professional networks and were selected on the basis of their availability to participate in interviews.

2.2. Participants

A TOTAL OF 45 PARTICIPANTS from 5 primary care teams participated in interviews and focus group discussions. A breakdown of participants is presented in Table 1 below.

TABLE 1: BREAKDOWN OF PARTICIPANTS (N = 45)					
BY SITE		BY YEARS IN ROLE		BY ROLE	
SITE	No. OF PARTICIPANTS	YEARS	No. OF PARTICIPANTS	ROLE	No. OF PARTICIPANTS
A	8	1–5	24	Physician	14
B	11	6–10	11	Nurse	11
C	10	11–20	7	Allied Health	9
D	9	>20	3	Administration & leadership	11
E	11				

3. Data collection and analysis

3.1. Interviews

INTERVIEWS TOOK PLACE between August 2015 and May 2016 and were audio re-corded for verbatim transcription. Interviews explored participants' perceptions of team functioning in relation to a wide range of factors including: practice infra-structure, working practices, professional development opportunities, organiza-tional culture, interpersonal dynamics and system-level factors impacting their team.

3.2. Analysis

TRANSCRIPTS WERE ENTERED into HyperResearch software for qualitative data man-agement and were coded for both anticipated and emergent themes. A coding framework was developed in discussion with the project team. For the analysis, a qualitative descriptive approach was used[19, 20] incorporating techniques from grounded theory, specifically, the constant comparative method including search-es for disconfirming evidence.[21]

19. Sandelowski, 2000.
20. Sandelowski, 2010.
21. Strauss & Corbin, 1998.

4. Summary of key findings from interviews and focus groups

1. A practice environment where members of an interprofessional team work in close proximity (co-location) was seen as enabling team high functioning. Perceived benefits to patients of co-location included the ability of providers to deal concurrently and comprehensively with patients' needs; a reduction in the number of missed appointments and referrals; more timely provision of care and reduced duplication of services. Co-location was also seen as providing benefits to providers including facilitated communication and collaboration and the creation of informal professional development opportunities.

2. Effective use of electronic medical records (EMRs) was widely identified as a crucial element supporting team high functioning. Optimizing use of EMRs was seen to maximize efficiency, facilitate communication, enable continuity of care and support quality improvement initiatives within practices. Some teams spoke of substantial financial investment in their EMRs and several had full-time IT support staff who were seen as enabling high functioning.

3. A focus on patient experience was widely described as fundamental to a high-functioning organizational culture. This manifested in many ways ranging from prioritization of patient and community needs, to thoughtfulness about routine interactions, to ease of access and availability of a wide range of services. One-stop visits that allowed patients to address multiple concerns on a single occasion were offered whenever possible. An approach that minimized unnecessary intervention, encouraged self-management and allowed time to listen and connect with patients were all elements of patient-focused care. Group visits and supportive programming for targeted populations were being used successfully in some practices. Patient focus was also expressed at the community level through activities such as flu shot clinics and outreach to socially marginalized community members even though these populations might not be on the practice roster.

4. An effective communication culture was commonly described as an important attribute of team high functioning. Effective use of EMRs (especially instant messaging and intranet), an open-door leadership approach, and an environment supporting uninhibited discussion were all highlighted.

5. Leadership was widely seen as an important element of team high functioning. Leaders who were approachable, open to ideas emerging from within the team, and who routinely enabled the success of others were viewed as inspiring high functioning.

6. Several aspects of team composition were seen as contributing to high functioning. Participants valued having the right skill mix as well as professionally varied backgrounds and experience levels. Diversity of age and cultural background were also seen as assets. However, while having the right mix was seen as important, consistent alignment with the values and culture of the organization, such as having a good work ethic and being a team player, were considered crucial. Hiring practices reflected these priorities. Team-building activities included both formal events and informal social opportunities.

7. A combination of clarity and flexibility around roles was commonly associated with team high functioning. Participants appreciated clarity around roles and responsibilities. However, flexibility in relation to stepping in to help others and cross-training to ensure that roles were covered in the event of staff absence were seen as equally important. An absence of territoriality amongst staff with overlapping scopes of practice was taken as a sign of a positive working culture.

8. Ensuring that all team members work to their full scope of practice was one of the most consistently identified and emphatically articulated elements of high functioning. All team members working to their full scope of practice was seen as cost efficient at both system and practice level, ensuring that physician time was optimally used. It was also associated with high levels of job satisfaction and team members feeling respected and acknowledged.

9. Professional development opportunities were another consistent feature across teams. Financial support for continuing education, training and conference attendance was often written into staff contracts and there was a common culture of encouragement for continuous learning. Participants also described many informal opportunities for learning associated with mentorship and peer-to-peer support.

10. Collaboration with external partners and agencies was more successful and more well-established in some teams than others. One team shared a physical location with external partners and was, therefore, well positioned to achieve a high degree of effective collaboration. Other teams had informal relationships with external agencies that sometimes became consolidated over time. Barriers to collaboration included inter-agency bureaucracy, incompatible communication infrastructure and lack of information sharing.

11. A number of system-level issues were seen as having a substantial impact on team high functioning. In terms of funding, a capitation rather than fee-for-

service model was seen as enabling many of the practices and innovations which defined high functioning for these teams. Conversely, bureaucracy and comparatively low salaries for primary care providers were seen as impediments to high functioning.

12. There was substantial variation in the quality improvement culture across teams. Some teams had well-established, formalized quality improvement teams and processes. Others described their QI culture as nascent and evolving. Performance measurement tended to have an accountability focus and typically included wait times for appointments, panel size, cancer screening rates, A1C levels and blood pressures. Ministry-mandated performance measures were a common source of frustration because they were sometimes seen as irrelevant or as poor reflections of the care being delivered locally. Concern was also expressed about mandated performance measures that might compel physicians to over-treat patients.

13. A number of teams had undergone substantial growth and perceived some of the impacts of increasing size as risks to high functioning. These included the increasing complexity of management and logistics and proliferating bureaucracy. Concerns about the impacts on organizational culture included diminishing confidence in colleagues as the team grew, the emergence of silos, and increasing difficulty maintaining personal relationships. The need for leadership succession planning to ensure the sustainability of teams was also recognized.

5. Detailed findings from interviews and focus groups

5.1. Infrastructure

5.1.1. Physical practice environment

ONE ELEMENT that was commonly credited with enabling high functioning teams was a physical practice environment where colleagues work in close proximity with one another. Participants described the benefits of co-location to both patients and providers.

The perceived benefits of co-location to patients took a number of forms. Most prominent was the ability of providers to deal, concurrently and comprehensively, with patient needs rather than requiring patients to make repeated visits. A corollary to this was a reduction in the number of missed appointments and failure of patients to follow up on referrals to other providers. Participants also felt that co-location enabled patients' needs to be addressed in a more timely manner. This was seen as especially important in situations where the patient was experiencing acute physical or emotional distress.

Co-location was seen as benefitting healthcare providers by facilitating consultations and interprofessional collaboration and by creating opportunities for informal learning. This was a benefit experienced by colleagues across professional roles.

Finally, participants underlined the importance of involving all staff in decision making about the design of the shared space. This was seen as vital to ensuring that the space was optimally organized for all members of the team.

Often times with diabetes, it'll be a joint visit of some sort. So I'll go and pull a nurse practitioner in, the pharmacist, the nurse. I'll run to the physician and say, "Can we switch this?" You can see that impact on patient care. | *Allied health*

It's so much better for our patients because they just flow back and forth between people. They don't "no-show" as much as they used to for visits. | *Nurse*

If I'm currently seeing a patient that has some mental health issues, I could contact my psychiatric nurse that is onsite. She can come down quickly and have a chat with the patient, get them set up with certain resources in the community and book an appointment in the next three days. Other places, I've got to fill out this piece of paper and fax it off to somebody and then somebody will call you maybe within a week or two. | *Nurse*

We collaborate, consult a lot and that speaks to the importance of geography. You start to know people's expertise and where to go to for certain questions. | *Focus group participant*

When we have difficult cases, the being in the same room is really helpful because then we talk to each other. "I've got this patient. What would you do? This is what I was thinking about doing." | *Physician*

The pharmacist, nurse practitioners, doctors and students all sit in one big room. All the staff were consulted to look at the floor plan to see how they saw it from their work perspective. A Ministry person said, "When I look at your floor plan, I can see that you're working as a team. When I look at other floor plans, I can see that they're not working as a team, especially when they have nurse practitioners on one floor and doctors on another floor." | *Focus group participant*

5.1.2. Electronic medical records (EMR)

EFFECTIVE USE of electronic medical records was widely identified as a crucial element supporting team high functioning. It was seen as maximizing efficiency with routine tasks and enabling efficient communication within the team. In some practices, the instant messaging function of the EMR was an important tool keeping colleagues connected and allowing them, easily, to seek consultations.

Effective use of EMRs was similarly credited with supporting continuity of care. Because patients could be seen by multiple members of the interprofessional team, the EMR ensured that everyone involved in the circle of care had easy access to up-to-date information. It also allowed providers who worked part-time to stay connected with colleagues and, thus, to avoid delays in following up with patients.

Effective use of EMRs was also central to formal quality improvement initiatives as it served as a central repository of data and allowed for mapping of trends. Data from EMRs were used, programmatically, to effect targeted improvements in care for designated patient populations. Diabetes and hypertension management and routine screening were popular examples. In addition, use of data from EMRs supported the safety culture within practices by reducing near misses and adverse events.

Because the EMR was considered to be a crucial piece of infrastructure, several practices had made substantial investments in both software and technical support on an ongoing basis. This investment not only ensured that the EMR was always up and running but also allowed for customization of templates or data outputs tailored to practices' evolving needs.

Several practices had developed IT infrastructure for use by patients. In one case, a website allowed patients to book their own appointments online and to see what was available for walk-ins. Another site had developed a patient portal that supported self-management and allowed patients to ask non-urgent questions.

> We embraced EMR early. There's nothing that has made a bigger impact. We can access from our homes, from our vacation, from the office. We gained space, we gained staff time, we don't lose things, results are instantaneous. It's tremendous, the ability to graph, to cross reference, to communicate with each other. We rely heavily on our EMR. | *Physician*

> The nice thing with having the EMR system, it doesn't matter if you see someone else's patient or your own. You see the same file for everyone. If it pops up as an active rule that they need a mammogram or a screening colonoscopy, it's everybody's duty to do that. | *Nurse*

> With our health portal, I think our patients feel more connected to their physicians or practitioners, and I think that's going to make a big difference to our practice as well. In the RN clinic, you can see the rise of the questions coming in for the physicians on the health portal. It's pretty neat. | *Focus group participant*

5.2. Organizational Culture

5.2.1. Patient focus

WHEN ASKED ABOUT THEIR ORGANIZATIONAL CULTURE, many participants described patient focus as fundamental to their team. Patient focus was expressed in many ways ranging from awareness of patient and community needs, to thoughtfulness about routine interactions, to ease of access and availability of a wide range of services.

At the individual patient level, two expressions of patient focus were central to many participants' accounts. These were one-stop visits and a comprehensive approach to care. In contrast with traditional, fee-for-service primary care practices where the focus may be on high volume transaction processing, participants in this study described an approach in which providers responded to, and proactively anticipated, patients' needs, addressing as many concerns as possible in one visit. A comprehensive approach to care which minimized unnecessary interventions, encouraged patient self management and allowed time to listen to, and connect with patients, were all elements of this style of practice.

Patient focus, as described by participants, also meant recognizing and engaging with the needs of the wider community. Sometimes this had a clinical focus such as ensuring that adequate services were in place for flu season or that community members living on low income were receiving health care. It also involved programing for targeted populations. Finally, patient focus was described as encompassing the broader social needs of the community where these were seen as potentially impacting health and well being, for example, by ensuring that cultural differences and language barriers were not impeding access to care.

When we start noticing trends in patient attendance or a need to see more late-night appointments, we work the schedule where they'll have more providers for those times. | *Administrator*

We were looking at one program where patients were coming back multiple different days for different visits and we kind of went "Whoa. That doesn't make sense. How can we serve this patient differently so they can do a number of things while they're here at one time?" | *Allied health*

People try hard to focus on prevention, focus on lifestyle change. There's a consciousness about over-investigation. There's a consciousness about over-treating with antibiotics. | *Physician*

I get to know people as people. We get to know families. We get to know generations of patients and we take care of what they need. We pull a whole lot more weight in terms of the care that we can provide if the patients know we care about them, and we do. | *Physician*

5.2.2. Communication

EFFECTIVE COMMUNICATION was commonly cited as a fundamental attribute of team high functioning. Participants in leadership roles emphasized the importance of fostering an open-door culture within the practice. Others emphasized the importance of uninhibited, safe communication to optimize patient care. Timeliness in communication was highly valued and responsiveness to requests and inquiries, typically sent via the EMR, was integral to high functioning. An effective strategy in use at one site, was the Monday morning huddle. This was a regular, brief meeting to ensure that everyone on the team was up to speed on that week's changes and developments.

> You have to have communication without fear. You're dealing with patients so you have to be able to put your own ego aside and say, "I don't know this so I'm going to ask." | *Nurse*

> We have a Monday morning huddle, usually 15–20 minutes. I let them know, "This is what is happening this week." It's all just day-to-day things. "This physician is away all week. It's going to be a little tight on physicians on Thursday because a lot of them are attending a conference." Anybody that is not here, they get an email. It says, "This is the Monday morning huddle. These are all the things that happened." | *Leader*

5.2.3. Leadership

EFFECTIVE LEADERSHIP was widely seen as an important element of team high functioning. Approachability, an openness to ideas emerging from within the team, and enabling the success of others were credited with fostering an effective organizational culture. Leaders who were open to innovation and willing to embrace risk were seen as helping the organization to grow.

Participants expressed appreciation for the fact that, while designated individuals led the organization, the leadership culture allowed others to share in that role. Similarly, many participants commented on the ease they felt in approaching organizational leaders and on the absence of an inhibiting hierarchy. Leaders who positioned themselves as a part of, rather than apart from, the team were highly regarded.

> If I have to go talk to the lead physician, I feel like we're on the same level which makes it a lot easier to get things done. I know who my bosses are but I don't feel like I can't go to them and say, "I have an idea," or "I'm not happy with this." I find that very valuable from a leadership point of view. | *Administrator*

> I really like how I have a lead physician to go to, that is there to support me, and that knows me, my profession, and to deal with my challenges. And, if there was anything, that she could represent me to the physicians. To me that was a great support. | *Allied health*

> We're big thinkers here. I always tell people when they come to see me, "Think big and we'll drill it down." | *Administrator*

5.2.4. Team composition

HAVING THE RIGHT MIX of clinical skills and backgrounds was considered fundamental to team high functioning. Participants also placed a high value on having a mix of experience levels within the team; seasoned colleagues were valued for their proficiency and experience, and newer colleagues for their energy, fresh perspectives and familiarity with more recent professional trends. The sense of mutual respect and reciprocity was striking as was the confidence participants expressed in their colleagues. Diversity, whether this referred to diversity of age, experience level or professional or cultural background, was perceived as adding value to the team. However, while diversity was highly valued, participants also identified consistencies within the team which they considered vital to high functioning. Most notably, alignment with the values and culture of the organization and being a team player emerged as key.

Another striking element to emerge in discussion was the care taken to ensure that people brought on to the team would be a good fit for the organization. Leaders were consistently described, or described themselves, as selective and discerning in relation to new hires. Participants described situations where individuals had not been hired or had left the practice because they were not aligned with the organizational culture. Retaining former students and residents and use of personal connections were common strategies for attracting candidates.

We have the right people in the boat. They all have different skills and we're able to take advantage of those skills to help us do the things we'd like to do. | *Physician*

We've got new grads [who] can't wait to triage everything that comes through and look up every medication that they've seen, so you feed off that new, young energy. Then you have people who have been nurses for a hundred years and they know everything, and you feed off their knowledge. We're very much the same in our team effort and wanting to help one another but we are very diverse in both age and stage. | *Nurse*

Do we have our conflicts? Absolutely. Do we have our interpersonal differences? Absolutely. But, at the end of the day, I think, philosophically, we all respect each other. We espouse the strategic plan and the mission statement of our organization on a daily basis. | *Physician*

We're very careful who we bring in. You have to buy into the culture which is not, "I'm a doctor. Therefore, I must be respected." Respect is earned not given. | *Leader*

5.2.5. Team development

TEAM BUILDING ACTIVITIES varied across practices. Some sites allowed dedicated time for team building activities led by professional facilitators or team members with the requisite background. These sessions were used to consider team dynamics, develop mission statements, address communication issues and the like. However, team building did not have to be a formal event to contribute to the strength of the team. Even an activity as simple as having team members talk to the group about their professional interests and role was seen as surprisingly generative. Events such as shared meals were also seen as team building opportunities despite their informality. Finally, a number of practices made a point of organizing social activities in order to promote a positive atmosphere, foster social relationships and remove barriers between team members.

One of the first team-building exercises we did was to organize a half-day retreat where everybody did a presentation about their roles and where their interests lie and what kind of patient programming they wanted to get involved in. It was amazing that when we left, the group said, "You know, I didn't know what that patient group was all about and now I know so I can refer patients." Or, "I didn't know that so-and-so was interested in getting involved in diabetes so now I'm going to link up with them and we're going to look at trying to streamline a process." | *Administrator*

5.2.6. Roles

PARTICIPANTS DESCRIBED a combination of clarity and flexibility around roles that they associated with team high functioning. On the one hand, effective interprofessional working required that roles, as well as individual strengths, were clearly defined and widely recognized. However, equally valued was a lack of territoriality and a willingness to step in and assist colleagues when this was in the best interests of patients.

One site emphasized the value of intentional cross-training of staff to prepare team members to step into each other's roles. In this way, they managed workloads in the event of staff illness, absence, maternity leaves or unexpected occurrences.

Role clarity had a lot to do with us being able to leverage each other's support and strengths and to figure out who we want to collaborate with and how we could help each other to provide better care. | *Focus group participant*

I think everything that we do, we're going to touch on a little bit of everybody's discipline. I do a little bit of social work, a little bit of nursing, a little bit of everything. If I have given the nurses some really good information on how to do basic nutrition care with their patients, then I don't see that as a bad thing. | *Allied health*

Cross-training is definitely something we believe in. Just because you're in one area doesn't mean you can't learn about another area and excel in it. We do have to pull staff from their routine duties to provide that training, but it's well worth it. | *Administrator*

5.2.7. Scope of practice

ENSURING THAT ALL TEAM MEMBERS work to their full scope of practice was one of the most consistently identified and emphatically articulated elements of high functioning across teams. There were many benefits associated with this approach.

First, ensuring that all team members worked to their full scope of practice was seen as more cost efficient, at both practice and system level. This meant that tasks were carried out by the least expensive qualified person available. In this way, physician time was optimally used, the quality of visits improved, and wait times for patients reduced. In some practices, special directives had been put in place to extend the scope of practice for particular providers in order to expedite routine tasks.

Enabling all team members to work to their full scope of practice was also associated with a high level of job satisfaction. Participants saw this as a form of acknowledgement and as an indication of their value to the team.

We push everybody to their maximum scope and we even have medical directives in place to extend their scope. We're always looking at what could be pushed down from the doctor. | *Leader*

I've talked to other physicians outside this team that have been very reluctant to allow a nurse practitioner to manage a diabetic patient or a hypertensive patient. In this place we've been very keen to say, "You run with it. Off you go, and we're more than happy to have you do those things." | *Physician*

We do not believe nurses were made for triage. We believe nurses are much too qualified for that. I don't need somebody to pre-see everybody that I see. I need somebody who might need to speak to my patients, and counsel them, and advocate for them, and navigate with them. | *Physician*

The best thing about this place or the reason it functions so well is the autonomy that Dr. [name] gives to all of us. I can make my own professional decisions. I manage my schedule. I am trusted to give the proper care because I am managed by an order. So, because I have that autonomy, I have a high level of satisfaction working here. | *Allied health*

5.2.8. Professional development

PARTICIPANTS ACROSS TEAMS saw opportunities for professional development as an important aspect of organizational functioning. At the broadest level, participants described an openness to learning which provided the foundation for continuing professional development. Course and conference attendance was widely supported, both in terms of dedicated time allotted and financial support.

Professional development in this organization is highly valued. Everybody is allowed to ask for PD based on interest and clinical need at the site level. We have people that go on their professional developments and then bring that back to the team. | *Administrator*

Professional development opportunities were also associated with formal and informal mentoring. This might occur when a new staff member joined the team or when less experienced team members benefitted from the guidance of their more established colleagues. Peer-to-peer support amongst colleagues of similar experience levels was also common.

The first three months, it was nerve wracking knowing that now I'm on my own and whatever I do, I'm in charge of now. I don't know if one of the doctors here picked up on that but she talked to me a couple of weeks down the road and said, "If you need anything, you can come and talk to any one of us. Yes, everybody is busy, but if you have a question, come and ask. I'm okay with explaining things to you." That, in itself for me was just like, "Phew!" | *Nurse*

If there's anything that we don't know, we'll be continuously knocking on each other's doors. No one is afraid to ask. A rash that you don't know, all these little things we ask each other. So, I think, as far as mentorship goes, it's nice to be in an environment where we actually bug each other about things. | *Physician*

5.3. Collaboration with external providers and agencies

COLLABORATION WITH EXTERNAL PROVIDERS and agencies was one area where teams described a divergence of experiences. While the value of effective partnerships with external providers was widely recognized, participants described differing levels of formality and success with these arrangements. In some cases, relationships with external agencies had evolved over time without any formal plan. In other cases, structured efforts had been made to establish or improve existing collaborations. Participants also described a number of challenges that their organizations had encountered in relation to these collaborations. One such challenge was staff turnover at partner organizations that made it difficult to sustain connections. More intractable, were issues related to inter-agency bureaucracy which participants described as hindering communication and negatively impacting patient care.

Our clinic tries to be very proactive. The mental health clinic and this clinic were not communicating very well so I've really worked to try to improve that. It's constantly on our radar. | *Nurse*

There's a lot of silos out there. They won't even share their paperwork. "Guys, it's the same patient. I can go to their house and read their chart on top of the fridge but yet you won't share with me your assessment?" | *Physician*

5.4. System level factors impacting teams

5.4.1. Funding

MANY PARTICIPANTS MAINTAINED that one of the most important factors enabling team high functioning was the funding model under which they worked. Most notably, a capitation rather than fee-for-service model was credited with enabling innovations such as one-stop and group visits and team-based care since physicians were less concerned about billing than they might be in a fee-for-service environment. Capitation was also seen as providing better value for money at system level, for example, by reducing reliance on hospital emergency departments.

Without the funding, you can't have all the different disciplines that we have. Patients who are part of solo practices, there is a physician, a nurse, maybe, and a front staff. So, with the family health teams you have this big organization. Without that you can't have all the different services. | *Leader*

A physician could be seeing a diabetic and they won't refer them to the family health team certified diabetes educator because they get billing codes that are outside the basket and get bonus payments for it. So they'll see them instead of a CDE seeing them. Or they'll see their babies instead of the nurse practitioner seeing them. A lot of these outside the basket billing codes drive activity. | *Administrator*

Look at what you get for this money. Our emergency visit rates are going down where, everywhere else, they're going up. Our patient satisfaction is pretty darned good. Patients can get a visit here when they want and, generally, with whom they want. We don't turn anyone away. Fee-for-service, to me, has its place in surgical procedures and that sort of stuff. But, in family care, it's completely the wrong thing to do because it doesn't encourage longitudinal care. It encourages one patient at a time, one thing at a time. | *Leader*

5.4.2. System level challenges

WHILE SYSTEM-LEVEL SUPPORTS were seen as enabling team high functioning, a number of system-level challenges were also identified. Complex bureaucracy and requirements for physicians to provide care in other parts of the healthcare system were seen as negatively impacting access and continuity of care. Bureaucracy was also seen as limiting the ability of some team members to work to their full scope of practice.

Another system-level issue to arise was salaries within family health teams. Several participants noted the difficulty of

The greatest challenge has been, from a governmental level, the AMPs that pulls doctors out of the office, that they have to do hospital work, emergency work, out of town, up north. The greatest barriers are the barriers that are put on us by the system, the requirements, the expectations. | *Physician*

attracting and retaining high quality team members because of the difference in pay scale between themselves and providers in other parts of the health care system.

Finally, concern was raised about the evolution of primary care away from very large patient rosters. As physicians with large rosters retire, a question arose about how they would be replaced given the growing trend towards physicians working part time and having smaller rosters, and the position of funders to maintain the current number of physicians despite the changing patterns of work.

I think it's a huge thing—retention of employees. Which is sad because you get a bunch of people working good together and then one leaves because they got a better opportunity. Not because they really wanted to but, financially, they had to. | *Nurse*

Some of the senior physicians who have too large a practice probably will need two physicians to cover them. Most new physicians don't want that many people. We have asked the ministry specifically and they have said, "No. You may only replace a retiring physician with one body." | *Physician*

5.5. Quality improvement

5.5.1. QI culture

THERE WAS WIDE VARIATION, across sites, in relation to organizational quality improvement culture. Some sites had well-established, formalized quality improvement teams and processes. Others described their organizational QI culture as being at an earlier stage in their evolution. One site, which had little in the way of formal QI activity, nonetheless saw itself as having a healthy, albeit informal, improvement culture.

Participants stressed the importance of integrating QI into the fabric of the organization so that it would be meaningful to all staff rather than only to those with designated responsibility for QI. The importance of having a well-integrated QI program was especially highlighted by participants from one site where the designated QI team was perceived as disconnected from the front line.

We developed a mission statement, we developed our values statement. Then we brought that into the organization in terms of having small committees that involve everybody, be it receptionist, nurse. That strategy is to make sure that everybody in the organization is trained, understands the words of quality, the PDSA. We want it to filter down and involve more people, developing leaders in quality that include the clerical staff, the admin staff. | *Physician*

The quality team can figure out how to report outcomes but there's a void where they haven't put themselves out there to figure out exactly what we do and how we do it. They have the numbers, but the actual hands-on piece on how the whole process comes to be, there is a void. | *Nurse*

5.5.2. Performance measurement

TEAMS PARTICIPATING IN THIS STUDY typically used performance measurement to track wait times for appointments, panel size, cancer screening rates, A1C levels for patients with diabetes, and blood pressure values for patients with hypertension. Specific programs within teams also sometimes took the initiative to set and monitor targets for themselves. Much of the performance measurement described by participants had an accountability focus whether the accountability was internal to the organization or mandated by provincial funders.

Mandated performance measures were often seen as problematic because they were not necessarily reflective of local care delivery or because they incentivized clinicians to over-treat their patients. In addition, mandated performance measures were sometimes linked to wasteful spending, for example, when requiring physicians to see patients within one week of their discharge from hospital when this might not be clinically necessary. A number of participants pointed out that there were many intangible aspects of high-quality primary care that could never be expressed quantitatively. In light of such concerns, team members sometimes independently developed performance measures that they felt would more accurately and meaningfully reflect the care they delivered.

Despite the many challenges, there were also examples of performance measurement being used, successfully, to drive process improvement. One example was a team that used performance measurement to improve their distribution of FOBT kits to patients.

One of the measures is the percentage of patients seen within one week after a hospital visit. Is it really relevant? If I'm the physician that followed them in hospital and discharged them, do I really need to see them again in two days? We have to collect the data that the Ministry and HQO are telling us to collect but we're also recognizing that that's not necessarily the best data that reflects the quality of the work that we're doing. | *Physician*

In Ontario, part of the hypertension program, they'd track your patients, monitor their blood pressure and tell us we're on target. I hated that. I truly hated it because it didn't take into account my patient characteristics and it was biasing me towards over-treating patients that shouldn't be over-treated, so I started ignoring them. | *Physician*

There's so many outcomes that are not measurable in a quantitative factor. That's what makes the difference at the end of the day really. We had one lady that I saw for cognition who ended up being profoundly depressed. She had been to a therapist, this and that and whatever and then we got her into the group sessions. She put it in writing, that we basically changed her life. That's never measured. | *Nurse*

5.5.3. Formal meetings, committees and working groups

IN KEEPING WITH THE VARIATION in QI culture across teams, there was similar variation in terms of the use of formal meetings, committees and working groups. Groupings could be organized by profession, by disease focus or, interprofessionally, by function across the team. In some instances, having interprofessional committees or working groups was seen as beneficial. In others, participants felt that it was easier to have uninhibited dialogue within rather than across disciplinary groups. Some committees or working groups also included team members from an outside profession, strategically, to tackle particular concerns.

From a managerial perspective, the value added by formal committees and working groups was an important question. While there was obviously a cost associated with pulling people away from their jobs into committee work, there were also perceived benefits.

We're really trying to foster participatory inclusion with all the people that work here, from medical office assistants, the administrative staff, the health outcomes assessor, the dieticians, everyone is very, very inclusive. A lot of the committees and working groups from the board level down, we try to include everybody in it and I think that's one of our strengths. | *Focus group participant*

My constant struggle is: "How do we continue to take people away from frontline work onto committees? How much is enough? How much is too much?" Every time we talk about creating committees that's one of the first conversations: "What's the value added of pulling them away?" | *Leader*

We do meet with the whole team once a month. It's an opportunity to present new things, new ideas, the changes that are happening, some educational things. It's quite expensive for us to do that because that takes people away from their work but we think, overall, it helps make everybody work better and feel connected. | *Physician*

5.6. Impact of increasing practice size on high functioning

SOME OF THE TEAMS participating in this study had grown very large and were experiencing challenges related to their size. Others had begun to contemplate the potential impacts of expansion. The limitations on physical space was one concern, as was the proliferation of organizational bureaucracy. While the need for more formalized management structures was acknowledged as an inevitable side effect of growth, these changes were not always seen as contributing to team high functioning.

Similar concerns were voiced about the impacts of expansion on organizational culture. Participants maintained that the mutual trust and respect they had for their colleagues was more difficult to sustain in an organization staffed by so

many people. Moreover, the potential emergence of silos was perceived as a threat to effective interprofessional collaboration. Concern was also raised in relation to the organization's openness to innovation since more rigid organizational systems were seen as discouraging individual initiative. Finally, participants expressed a sense of loss at a personal level since increasing practice size made it noticeably more difficult to maintain personal relationships and a sense of camaraderie.

When we looked at the initial space we were thinking we would have four nurses, so we created a space for four nurses at that station. We would have so many admin staff. We would have so many disciplines and we counted it all. Well, really, within the first couple of years, we were maxed out. We didn't prepare for that. | *Leader*

As you grow, issues come up and it seems like as soon as there's an issue, there's a policy now. I think sometimes we might be overdoing it on the policies and procedures. | *Nurse*

We need a robust governance structure. It's part of what helps us make the decisions that we need to make and use the resources that we have in the most efficient way. I also think that sometimes it can get in the way. Sometimes being too big is not always the easiest thing to work with. | *Physician*

I just feel so fortunate to be here and to have developed with this group of people, even as we've gotten bigger and bigger. I think we're at our limit now. I think we can't get any bigger or we're going to lose too much. | *Physician*

As the group gets bigger, it's harder to develop a personal relationship that really enables that mutual trust. Back in the early '80s, we knew everybody's patients. We knew everybody's names. We were in a call group that we shared each other's responsibilities. | *Focus group participant*

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6. Reflections

DIVERSITY IN PRIMARY CARE SERVICES reflects the diversity of health needs in the communities they serve. In this project, diversity was evident across the participating teams which varied in terms of their size, number of patients served, programs offered and staff complement. There were also striking differences between the teams in relation to organizational structures and processes, funding models, levels of engagement with formal quality improvement activity and leadership style. Yet despite these differences, the teams shared many attributes which they placed at the heart of their organizational identities. The experience of learning from these teams thus invites reflection on what those attributes are and on the relational dynamics that transform a static set of attributes into a high-functioning primary care culture.

Patient focus

FOREMOST AMONGST THE ATTRIBUTES these teams shared was patient focus which was manifest in a number of ways. First, it was evident in their patient-centredness, the extent to which patients' values, beliefs and attitudes are reflected in clinical decision making. Participants spoke of longstanding, sometimes multi-generational relationships with patients and their families and of the value of knowing them as people rather than just as patients.

Second, patient focus was evident in attentiveness to patient experience in relation to the delivery of care. This drove efforts to ensure that people got the care they needed in an easily accessible and timely manner at each visit. It also drove innovations such as online access to patient charts for physicians, and online appointment booking systems for patients. The importance of patient experience was equally evident in the purposeful, team-based conversations that took place every day with a view to determining how best to meet patient needs and to engage patients as partners in their own health journey.

A third manifestation of patient focus was community affiliation, evident through the provision of services to the community beyond the patient roster. Each of the teams participating in this study provides comprehensive primary care which includes collaboration with community and regional level partners as well as targeted services for specific populations. Examples of collaboration involved shared program delivery, structures enabling better coordination of services, (for example, between primary care and public health), and alignment with community partners to provide for high-needs, under-served groups such as the homeless or socially isolated cultural communities.

Optimizing infrastructure: The physical practice environment and EMRs

ANOTHER ATTRIBUTE COMMON TO THESE TEAMS was the extent to which they had addressed issues related to infrastructure, most notably, their physical practice environment and use of electronic medical records. Physical co-location was credited with enabling comprehensive care delivery at a single visit, facilitating cross coverage when this was needed, enhancing communication, and creating opportunities for informal professional development. Physical space design was also seen as inviting social engagement and a sense of connectedness between team members. Utilizing the full capability of their EMRs to facilitate access, communication and quality improvement efforts was similarly credited with strengthening team-based care.

Communication and social cohesiveness

COMMUNICATION STRUCTURES AND BEHAVIOURS are fundamental to effective "teaming" and each of the teams shared examples of a mutual openness and accessibility, of having a variety of communication tools and strategies, of the advantages of physical co-location, and of using their EMR as a communication tool and data repository rather than simply as an electronic medical chart. Moreover, an effective communication culture was seen as fostering a sense of trust and mutual respect amongst team members. This was described as a game-changer in relation to both work life experience and patient care as team members were confident they could be open about the things they did not know and could rely on one another whatever challenges might arise.

Closely allied to the communication culture was a sense of social cohesiveness which many participants described as feeling more like a family than a team. There were many examples of learning and playing together ranging from a group of colleagues attending a conference, to dedicated team building activities, to conversations shared over lunch. These activities enhanced communication and trust and provided a counterbalance to any perceived hierarchy of roles.

Generative leadership

WHILE EACH OF THE TEAMS participating in the project is physician led, the absence of hierarchical culture was striking. Rather, what participants described was a phenomenon known as generative leadership.[22] Leaders were described as receptive, approachable, supportive, collegial, open in their communication style and deeply focused on patients, the community and their team. Some were acknowledged for

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22. Suri & Hazy, 2006.

their resourcefulness in navigating funding challenges and system-level barriers to health care delivery. Expansive, accessible support for professional development, a commitment to having team members work to their full scope of practice and an interest in enabling the success of others were similarly identified as attributes of leadership that support high functioning teams.

Risks and challenges faced by high-functioning teams

DESPITE THEIR STRENGTHS, high-functioning primary care teams are not immune from risks and challenges and several of these emerged in the course of our study providing further opportunity for reflection. These included dependence on legacy leaders, managing practice growth, recruitment and retention of team members, leveraging collaboration with other agencies, envisioning new ways of engaging patients in health care and building capacity in quality improvement.

In this era of evolving models of primary care, teams are sometimes led by charismatic, entrepreneurial founders whose energy is a driving force in team development. This raises questions about the future when these leaders retire and teams are compelled to transition to new leadership. It also suggests that attention to succession planning may well be needed in order to ensure organizational sustainability.

Several of the teams participating in this study have undergone substantial expansion and are now facing challenges related to managing their growth. Some had outgrown their physical space and now had team members located in other premises or organizations. This substantially impacted communication and the sense of connection between team members. Participants expressed regret over the fact that they no longer knew the names of all their colleagues and this observation stood in contrast to the expressions of respect and mutual trust that were voiced so strongly in smaller teams. Expansion was also associated with a proliferation of bureaucratic structures and processes which were considered necessary by practice leadership but were not always seen as adding value at the front lines of care.

Recruitment and retention are challenging issues for primary care teams generally in the current funding and accountability climate. Several teams highlighted the challenge of retaining staff who can draw higher salaries in other sectors of health care. Participants also spoke of the importance of protecting the integrity of the team by drawing on professional networks to identify potential new hires, or by retaining individuals who had been with the organization as postgraduate medical residents or on practicums. While there is nothing inherently unreasonable about this approach, it does raise questions about equity of opportunity and about lost opportunities to build strength through casting the hiring net more widely.

While these teams all demonstrated commitment to their communities, the development and leveraging of collaborations with other community-based health service providers is just beginning. Care in the community is currently fragmented and constrained by siloes and achieving effective collaboration will require a common system of accountability and more effective sharing of personal health information.

Patient focus was a prominent strength of the teams participating in this project but it was not without its challenges. For some, a tension had begun to emerge around distinguishing patient needs from patient wants especially in light of the need for responsible stewardship of healthcare resources. The perception that patients sometimes lacked the capacity or willingness to engage in self-management of minor conditions raised questions about how patients could become more active members of the care team rather than passive recipients of care.

A desire for continuous improvement and a culture of openness to learning were similarly prominent attributes of all the teams. That said, this did not often translate into a systematic approach to capacity building or capability in quality improvement. Moreover, mandatory performance measures and metrics unaligned to the realities of local care delivery were a common source of frustration for teams who felt they often detracted from, rather than supported, priority setting and achieving improvements in care. While the frustrations teams expressed were understandable, exploring more positive forms of engagement with quality improvement strategies would create opportunities to achieve even higher levels of care delivery and team functioning.

While this study focused on physician-led teams it was intended to stimulate a wider conversation about what makes for good primary care and effective teaming in a variety of settings. We hope that our process of learning from these high-functioning primary care teams will inspire the efforts of others, encourage reflection and spark new conversations about how to navigate the team improvement journey from good to great.

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