Building a Primary Care Community of Practice: SCOPE as a Platform for Care Integration and System Transformation

Pauline Pariser, Haley Gush, Noah Ivers and Steve Pomedli

Abstract

Strong primary care plays a foundational role in a high-functioning health system. Primary care is the main entry point to the healthcare system for patients, but in many health systems, the majority of primary care practices and physicians are functionally disconnected from, and not meaningfully integrated with, specialist care, hospital resources or team-based allied professionals. Here, we detail how a grassroots program in the Greater Toronto Area, known as SCOPE (Seamless Care Optimizing the Patient Experience), has worked to build and grow a community of practice among physicians who were previously "unaffiliated" to provide streamlined access to specialist care and virtual team-based resources. Notably, through purposeful engagement efforts, this community of practice has led to new patient-facing initiatives that respond to primary care needs. This improved integration of primary care with both hospital-based resources and specialty services, along with the initiation of new services that address population needs, demonstrates the value of this type of purposeful engagement to develop a primary care community of practice.

Introduction

SCOPE (Seamless Care Optimizing the Patient Experience) began in 2012 in response to concerns that the majority of community-based primary care practitioners (PCPs) did not have formalized access to team-based care and were struggling to manage their growing demographic of older patients (Grant et al. 2011; McCusker et al. 2010; National Physician Survey 2014; Shields et al. 2010). In Ontario, there were approximately 7,800 such community-based primary care practices, with 930 in the Greater Toronto Area alone (Toronto Central Local Health Authority 2019). A large body of evidence has demonstrated the advantages of deploying team-based support in primary care, such as improving patient outcomes and decreasing emergency department (ED) visits and hospitalizations (Grumbach and Bodenheimer 2004; Wagner 2000; Zawora et al. 2015), reducing overall healthcare use by integrating primary and specialist care (Leppin et al. 2014) and reducing hospital admissions and 30-day readmissions through multidisciplinary-enabled care plans for people with medical and psychosocial complex care needs (Mercer et al. 2015). As a result, connecting these unaffiliated, unsupported family practices to a virtual interprofessional team was the initial rationale behind this program.

Building a Community of Practice

> SCOPE has had a profoundly positive effect on providing care to my patients, a decreased sense of practicing in isolation and an increased feeling of connectivity to the medical community.

(SCOPE physician – qualitative study interview; Lockhart et al. 2019)

The SCOPE team (described later) recognized that an inclusive, purposeful approach to engaging primary care was fundamental in building a community of practice among the initial target group of 50 PCPs (Table 1). Over time, SCOPE spread to an additional group of PCPs; to date, 616 (62%) PCPs unaffiliated with teams have registered. At each stage of spread and scale, the engagement processes were repeated. Qualitative work has suggested that the efforts to develop a community of practice filled a gap in the system that was appreciated by the SCOPE PCPs (Lockhart et al. 2019).

TABLE 1.
Initial target group of 50 PCPs in solo/small practice (defined as three or fewer PCPs) with higher rates of patients presenting to a nearby ED

SCOPE PCP demographics (initial cohort)		
Gender	Male (83%)	Female (17%)
Age	>50 years (67%)	<50 years (33%)
Practice years	>15 years (87%)	<15 years (13%)
Roster size	>3,000 patients (40%)	<3,000 patients (60%)
Average patient visits	23.4 per half-day clinic	–
EMR use	Yes (73%)	No (27%)
E-mail use with patients	Yes (40%)	No (60%)
After-hours clinics	Yes (87%)	No (13%)
ED experience	Yes (57%)	No (43%)
Practice type	Solo practices (75%)	Other (25%)

ED = emergency department; EMR = electronic medical record; PCPs = primary care physicians; SCOPE = Seamless Care Optimizing the Patient Experience.

Initial engagement strategies and successes

The team applied evidence-based principles to involve PCPs early in decision making and ensure that their input was integral in co-designing the program (Dickinson and Ham 2008). These principles informed the initial engagement strategy, based on evidence that specific and intentional methods are often required to engage smaller, community-based practices as these practices tend to have limited administrative support or capacity for quality improvement (Denis et al. 2013; Wolfson et al. 2009). This strategy tends to differ from that used to engage team- or hospital-based PCP group practices (Holmboe et al. 2005; Landon and Normand 2008). In practical terms, this meant using a variety of communication channels (fax, e-mail, phone contacts, regular mail, focus groups), using outreach from physician to physician (personal contact between the primary care lead on the team and the PCPs) and leveraging the influence of local PCP peers (early adopter champions) and declarative support for the initiative by hospital and community senior managers and department heads from the Toronto Central Local Health Integration Network (LHIN) Home and Community Care, University Health Network and Women's College Hospital (Pariser et al. 2016).

A baseline needs assessment of the SCOPE PCPs and a subset of their patients revealed four convergent needs, similar to those identified in other settings, including more rural locations (SCOPE 2018):

- single point of connection for all acute and community-based services;
- real-time access to a general internist to co-manage patients at risk for immediate emergency room transfer;
- improved navigation and more timely linkages to acute and community-based resources; and
- enhanced communication of hospital and community reports.

On the basis of these results and an environmental scan of the literature, the SCOPE collaborative was launched as a partnership between the hospital, community and primary care sectors to integrate care by linking small primary care practices to a virtual interprofessional team.

The SCOPE team consists of a primary care lead, a project manager, an administrative assistant, a general internist, a nurse navigator, a home and community coordinator, a lead radiologist and senior managers/department heads to whom the members report.

SCOPE provides participating PCPs with a single phone number to access a variety of services (see Figure 1):

1. internal medicine for phone or e-mail advice, urgent medical assessment and connection to acute care specialists;
2. home and community care for home assessment/case management, health coaching, mental health programs and community resources;
3. nurse navigator to access specialist care, tests and hospital resources; and
4. medical imaging to provide same-day consultation for expedited imaging and reporting of urgent cases.

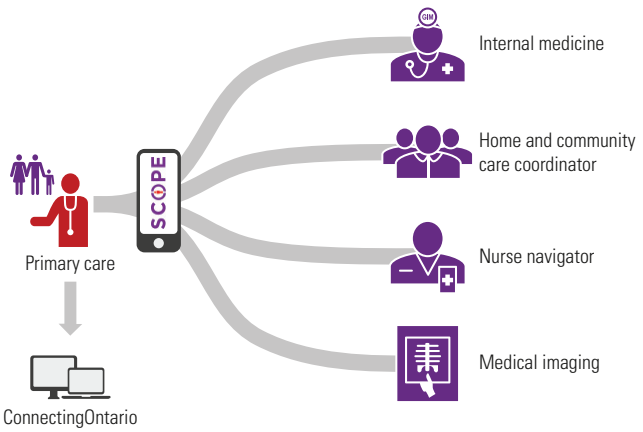
ConnectingOntario is offered to enable access to hospital and community records.

A retrospective survey of the initial PCP cohort revealed that the following factors were helpful in establishing interest, motivating them to enrol and continue to participate in the initiative (NHS Institute for Innovation and Improvement 2005):

- appreciation that the SCOPE team acknowledged its specific challenges in providing high-quality primary care;

- opportunity to improve care for patients with improved access to an internist and nurse navigator; and
- positive personal and patient-related experiences with initial pilot SCOPE services.

FIGURE 1.
SCOPE provides participating PCPs with a single phone number to access a variety of services



PCPs = primary care physicians; SCOPE = Seamless Care Optimizing the Patient Experience.

Forging trusting relationships

The NHS Institute for Innovation and Improvement (2005) defines a community of practice as a "knowledge sharing and learning network" with voluntary membership and with informal organizational structure and mechanics. Communities of practice "tend to be formed by peers who do similar tasks, use similar tools, face similar decisions [and] have similar issues, hopes and problems." By connecting SCOPE PCPs through phone, e-mail, in-person advisory meetings and continuing medical education forums, this nascent community of practice was strengthened by, as a group, identifying core issues, engaging in problem solving and recommending best practices to partnering service providers.

By establishing this community of practice, the SCOPE program was able to connect this community with other health services and professionals and begin to build trust among these emerging collaborative models, which is critical to their success (Bodenheimer and Sinsky 2014; Wood 1993). This trust has been cemented in four main ways: enabling co-design, being service oriented, developing relationships and maintaining regular communication.

SCOPE enabled co-design by soliciting feedback through regular meetings of a physician advisory panel as well as regular engagement events. Because the SCOPE team gradually established credibility with these end-users, bidirectional feedback became the norm, which helped improve the execution and efficiency of services and led to the expansion of these services to include other needed resources. For example, based on the initial in-person engagement event with PCPs, SCOPE was able to facilitate access to real-time radiology consultation to decrease ED visits that were arranged primarily for expedited imaging. Family physicians felt heard when their input was acted upon to improve service delivery.

> That the family physician's voice is valued is unprecedented. SCOPE has provided family physicians with a communication pipeline to the secondary and tertiary care centers in order to express where their services might be improved which has brought about change for the better (SCOPE PCP – support letter for award nomination)

Trust was strengthened by ensuring that the SCOPE service itself continued to be oriented to the needs of PCPs and their patients and be responsive in a timely way to any request for help. The motto of the SCOPE team members became "Whatever the patient needs, that's my job." In practice, this meant that phone lines were answered quickly, and if a query could not be answered immediately, reliable follow-up in a short time frame was provided to close the loop. SCOPE PCPs have appreciated this as a difference from their previous experience of feeling like "second-class" providers, with a lack of responsiveness and cooperation, especially from the hospital sector (Lockhart et al. 2019).

> And I will never forget, the wife called me from there … from the SCOPE unit [AACU] … and said "Oh my goodness, you sent us to such a fantastic place. We don't have to wait in emergency for hours and hours." They right away attended to my patient, gave him the blood transfusion. I'll never forget it. (SCOPE physician – unsolicited testimonial)

Developing long-standing relationships with providers the PCPs came to know builds trust with these family physicians. This concept of a "named provider" has demonstrated growth in fidelity between the PCP and a primary care integration model (Berendsen et al. 2007; Primary Care Workforce Commission 2015). For example, the same nurse navigator and general internist have been working in their respective roles since the onset, such that front-line staff and PCPs know, trust and rely on these team members. These health professionals have grown to appreciate the needs of the PCPs and even the unique nuances of the patient population each physician serves.

Thus, by adopting a relationship-based high-touch strategy, PCPs moved beyond engagement and "buy-in" toward "investment" in the SCOPE program, which was critical to sustaining long-term participation (Perrerra et al. 2018). This move

toward "investment" enabled ongoing refinement of SCOPE services and the development of new hospital/community initiatives. Beyond the physician advisory group, two SCOPE PCPs became representatives on the governance steering committee.

Finally, we aimed to continue an inclusive approach to change management with varied, regular and succinct e-mail updates; quarterly newsletters co-edited by SCOPE PCPs; in-office visits by members of the SCOPE team; and quarterly continuing medical education events. These events and communication strategies promoted both existing and new services and effectively kept the PCPs informed and involved.

SCOPE as a Platform for Care Integration

This primary care community of practice, better connected to hospital and community resources and to one another, provided a platform to rapidly trial new initiatives, perfect proof-of-concept initiatives and contribute to system improvements. A qualitative study reported that the provision of clinically useful supports enabled the practice of more collaborative ways of working, reconnected isolated practices to the broader system of healthcare and was perceived by PCPs as successful in contributing to effective shared management, helping redefine their professional identities as practitioners (Lockhart et al. 2019). Since the inception of this program, primary care input has signalled the addition of a mental health program, a neurology headache program and registered nurse (RN) health coaching, to name a few of the added services.

Vertical integration with hospital-based services has enabled incorporation of the primary care perspective to enhance service delivery. As noted earlier, very early in the implementation phase, direct access to radiology was an actionable response to PCP feedback, highlighting the need for navigational support and access to hospital-based medical imaging. A direct call centre followed, which created more formal and informal relationships between PCPs and radiologists, resulted in high physician satisfaction ratings, increased requests for more appropriate imaging and decreased ED visits (Weiser et al. 2017). Over time, the pilot became a prototype for offering this service in four other regions and enabled an imaging optimization process at three centralized sites (Toronto Central LHIN 2019, personal communication).

Leveraging this invested community of practice to help trial, scale and spread innovative healthcare strategies became routine practice. Examples of initiatives tested and refined through SCOPE include new centralized intake processes for rapid assessment clinics, emerging specialist directories, new services in specific domains (e.g., pain, addictions and breast-specific clinics) and provincially developed secure e-mail and health data portals. An illustrative example concerns the nephrology division at a large academic hospital that collaborated with an early adopter group of SCOPE PCPs, resulting in a record number of e-consults and physician-reported improvements in patient care delivery, and thereby addressed nephrology care gaps and positively impacted patient experience and healthcare utilization. The overall higher case volume with shorter wait times could be attributed to the engagement between SCOPE PCPs and nephrologists who integrated e-consult into their clinical workflow (Ong et al. 2019).

Significantly, there has been a steady scale and spread of SCOPE since its inception to facilitate SCOPE hubs in all five Ontario sub-regions. To date, across the province, 616 (62%) PCPs unaffiliated with teams have registered. It is clear that this platform continues to garner significantly positive levels of PCP satisfaction. Table 2 describes the impact of this expanded community of practice.

TABLE 2.
Impact of SCOPE

Impact of SCOPE	
Number of contacts since 2012	~20,000
Calls per month	~500
Perceived emergency department diversion rate	40%
Primary care practitioner satisfaction rates	98%
Perceived percentage of contacts resulting in decreased wait times for specialist care	20%–50%

SCOPE = Seamless Care Optimizing the Patient Experience.

System Transformation and Future Potential

> The SCOPE model has been a significant catalyst for primary care physician involvement in our OHT … a game changer regarding physician engagement (vice president, strategy, large community-based hospital network – unsolicited testimonial)

The evolution of SCOPE from a focused program to a platform to enable integration of care has facilitated bidirectional quality improvement between the acute, community and primary care sectors. The community of practice has helped identify community-based health needs and delivers intelligence on how services can be more efficient. For example, two hospitals, in response to advocacy through the community of practice, have established direct referral pathways to their respective fracture clinics instead of sending patients to wait in the ED for subsequent referrals to these clinics. From the specialist perspective, SCOPE has identified opportunities for enhanced co-management of patients with chronic disease. For example, there is evidence that screening rates for diabetic retinopathy in Ontario are low (Stukel et al. 2016), with lower rates in fee-for-service practices compared to other primary care models (Glazier et al. 2015). Similarly, there are low rates of proactive screening of diabetic foot ulcers and preventive measures to

address ulceration and avoid amputation in Canada (Wounds Canada 2019). SCOPE's community of practice has enabled the recruitment of a nexus of family physicians to work with colleagues from chiropody and endocrinology, patients living with diabetes, vascular surgeons and ophthalmologists to collaborate on developing more seamless care pathways to seek out patients with diabetes who have not been screened according to accepted guidelines. Supporting panel management of populations at risk and incorporating SCOPE team members such as the RN health coaches integrate key features of effective population health management (Bodenheimer et al. 2014). This community of practice thus enables the development of integrated pathways not just for diabetes but chronic disease in general.

> A simple referral from my doctor to SCOPE evolved into a network for complete support for every aspect of my life – counselling, financial, housing, legal-emotional and medical accompaniment. (SCOPE patient – statement at the Patient Advisory Committee)

To conclude, SCOPE has become a leader in understanding the "how" and the "what" regarding integration of care, including the types and mix of services needed to support community-based primary care (especially as the system prioritizes the establishment of accountable Ontario health teams). In its attention to access, continuity, comprehensiveness and coordination, SCOPE has addressed Barbara Starfield's (1992) foundational four pillars of primary healthcare. Furthermore, SCOPE has important direct benefits for PCPs and their clinical work, for example, increasing their capacity and confidence in dealing with a range of clinical presentations and in accessing the most appropriate resources for their patients. Although the SCOPE service is not always directly "visible" to patients, patient feedback has consistently emphasized improved experiences with the health system, particularly through perceived reductions in wait times, and access to care navigators and phone-based or online supports, which patients report have been especially sensitive and attuned to their individual needs.

As the community of practice continues to mature, there may be opportunities to better define an administrative structure, to disseminate best practices to the larger community of PCPs and to interface with other communities of practice. Moving forward, further refinement of digital technology to expand the SCOPE offering will be a welcome adjunct in building out the SCOPE services and facilitating access to broader virtual interprofessional care team resources. HQ

References

Berendsen, A.J., W.H.G.M. Benneker, B. Meyboom-de Jong, N.S. Klazinga and J. Schuling. 2007. Motives and Preferences of General Practitioners for New Collaboration Models with Medical Specialists: A Qualitative Study. *BMC Health Services Research* 7: 4. doi:10.1186/1472-6963-7-4.

Bodenheimer, T. and C. Sinsky. 2014. From Triple to Quadruple Aim: Care of the Patient Requires Care of the Provider. *Annals of Family Medicine* 12(6): 573–76. doi:10.1370/afm.1713.

Bodenheimer, T., A. Ghorob, R. Willard-Grace and K. Grumbach. 2014. The 10 Building Blocks of High-Performing Primary Care. *Annals of Family Medicine* 12(2): 166–71. doi:10.1370/afm.1616.

Denis, J.-L., G.R. Baker, C. Black, A. Langley, B. Lawless, D. Leblanc et al. 2013, April. *Exploring the Dynamics of Physician Engagement and Leadership for Health System Improvement: Prospects for Canadian Healthcare Systems*. Retrieved November 2, 2019. <https://www.hhr-rhs.ca/index.php?option=com_mtree&task=att_download&link_id=11971&cf_id=68&lang=en>.

Dickinson, H. and C. Ham. 2008, January. *Engaging Doctors in Leadership: Review of the Literature.* Academy of Medical Royal Colleges. Retrieved June 22, 2020. <https://www.birmingham.ac.uk/Documents/college-social-sciences/social-policy/HSMC/research/leadership-literature-review.pdf>.

Glazier, R.H., B. Hutchison and A. Kopp. 2015, November. *Comparison of Family Health Teams to Other Primary Care Models, 2004/05 to 2011/12*. Retrieved November 22, 2019. <https://www.ices.on.ca/Publications/Atlases-and-Reports/2015/Comparison-of-Family-Health-Teams>.

Grant, R.W., J.M. Ashburner, C.S. Hong, Y. Chang, M.J. Barry and S.J. Atlas. 2011. Defining Patient Complexity from the Primary Care Physician's Perspective: A Cohort Study. *Annals of Internal Medicine* 155(12): 797–804. doi:10.7326/0003-4819-155-12-201112200-00001.

Grumbach, K. and T. Bodenheimer. 2004. Can Health Care Teams Improve Primary Care Practice? *JAMA* 291(10): 1246–51. doi:10.1001/jama.291.10.1246.

Holmboe, E., N. Kim, S. Cohen, M. Curry, A. Elwell, M.K. Petrillo et al. 2005. Primary Care Physicians, Office-Based Practice, and the Meaning of Quality Improvement. *American Journal of Medicine* 118(8): 917–22. doi:10.1016/j.amjmed.2005.05.015.

Landon, B.E. and S.-L.T. Normand. 2008. Performance Measurement in the Small Office Practice: Challenges and Potential Solutions. *Annals of Internal Medicine* 148(5): 353–57. doi:10.7326/0003-4819-148-5-200803040-00006.

Leppin, A.L., M.R. Gionfriddo, M. Kessler, J.P. Brito, F.S. Mair, K. Gallacher et al. 2014. Preventing 30-Day Hospital Readmissions: A Systematic Review and Meta-Analysis of Randomized Trials. *JAMA Internal Medicine* 174(7): 1095–107. doi:10.1001/jamainternmed.2014.1608.

Lockhart, E., G.A. Hawker, N.M. Ivers, T. O'Brien, G. Mukerji, P. Pariser et al. 2019. Engaging Primary Care Providers in Care Coordination for Patients with Complex Medical Conditions. *Canadian Family Physician* 65(4): e155–162.

McCusker, J., D. Roberge, J.-F. Lévesque, A. Ciampi, A. Vadeboncoeur, D. Larouche et al. 2010. Emergency Department Visits and Primary Care among Adults with Chronic Conditions. *Medical Care* 48(11): 972–80. doi:10.1097/MLR.0b013e3181eaf86d.

Mercer, T., J. Bae, J. Kipnes, M. Velazquez, S. Thomas and N. Setji. 2015. The Highest Utilizers of Care: Individualized Care Plans to Coordinate Care, Improve Healthcare Service Utilization, and Reduce Costs at an Academic Tertiary Care Center. *Journal of Hospital Medicine* 10(7): 419–24. doi:10.1002/jhm.2351.

National Physician Survey. 2014. Results by FP/GP or Other Specialist, Sex, Age and All Physicians: Ontario. Retrieved June 22, 2020. <http://nationalphysiciansurvey.ca/wp-content/uploads/2014/11/2014-National-EN.pdf>.>.

NHS Institute for Innovation and Improvement. 2005, June 1. *Improvement Leaders' Guide – Leading Improvement – Personal and Organisational Development.* Retrieved January 19, 2020. <https://www.england.nhs.uk/improvement-hub/publication/improvement-leaders-guide-leading-improvement>.

Ong, S.W., A. Kaushal, P. Pariser and C.T. Chan. 2019. An Integrated Kidney Care eConsult Practice Model: Results from the iKinect Project. *American Journal of Nephrology* 50: 262–71. doi:10.1159/000502602.

Pariser, P., L. Pus, I. Stanaitis, H. Abrams, N. Ivers, G.R. Baker et al. 2016. Improving System Integration: The Art and Science of Engaging Small Community Practices in Health System Innovation. *International Journal of Family Medicine* 2016: 5926303. doi:10.1155/2016/5926303.

Perrera, K., Z. Lord and H. Bevan. 2018, December 10. *How to Be a Brilliant Change Agent* [presentation]. Institute for Healthcare Improvement Forum. Retrieved October 15, 2019. <https://www.slideshare.net/HelenBevan/q10-how-to-be-a-brilliant-change-agent>.

Primary Care Workforce Commission. 2015, July. *The Future of Primary Care: Creating Teams for Tomorrow*. Retrieved September 15, 2019. <https://www.hee.nhs.uk/sites/default/files/documents/The%20Future%20of%20Primary%20Care%20report.pdf>.

Shields, M., M.S. Tremblay, M. Laviolette, C.L. Craig, I. Janssen and S.C. Gorber. 2010. Fitness of Canadian Adults: Results from the 2007–2009 Canadian Health Measures Survey. *Health Reports* 21(1): 21–35.

Starfield, B. 1992. *Primary Care: Concept, Evaluation, and Policy*. Oxford University Press.

Stukel, T.A., R. Croxford, F. Ralman, A.S. Bierman and R.H. Glazier. 2016, June. Variations in Quality Indicators across Ontario Physician Networks. Retrieved June 22, 2020. <https://www.ices.on.ca/Publications/Atlases-and-Reports/2016/Variations-in-Quality-Indicators-Across-Ontario-Physician-Networks>.

Wagner, E.H. 2000. The Role of Patient Care Teams in Chronic Disease Management. *BMJ* 320(7234): 569–72. doi:10.1136/bmj.320.7234.569.

Weiser, K., D. Martin, C. Wang, L. Whitham, P. Cornacchione, C. Ciappanna et al. 2017. 1-800 Imaging: Building Partnerships between Primary Care and Medical Imaging. *Journal of American College of Radiology* 14(2): 286–89. doi:10.1016/j.jacr.2016.06.030.

Wolfson, D., E. Bernabeo, B. Leas, S. Sofaer, G. Pawlson and D. Pillittere. 2009. Quality Improvement in Small Office Settings: An Examination of Successful Practices. *BMC Family Practice* 10: 14. doi:10.1186/1471-2296-10-14.

Wood, M.L. 1993. Communication between Cancer Specialists and Family Doctors. *Canadian Family Physician* 39: 49–57.

Wounds Canada. 2019. Wounds Canada Develops Infographic to Increase Awareness of Diabetic Foot Complications. *Limb Preservation in Canada* 1(1): 55–61. Retrieved June 23, 2020. <https://www.woundscanada.ca/docman/public/limb-preservation-in-canada/2019-vol-1-no-1/1522-lpc-summer-2019-v1n1-final-hr/file>.

Zawora, M.Q., C.M. O'Leary and J. Bonat. 2015. Turning Team-Based Care into a Winning Proposition. *Journal of Family Practice* 64(3): 159–64.

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