Elements of Highly Effective Healthcare Team Function

Pilot study final report

For BC MQI's Multi-professional Quality Improvement working group

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Submitted: 31 July 2017
Published: June 2018

A project of the BC Medical Quality Initiative,
with support from the Rural Coordination Centre of BC.

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Acknowledgements

For generously sharing their time and experiences

- All the individuals who comprise the highly effective teams of the case study sites

For project leadership and facilitation of the case studies

- Dr. Robert Woollard, MD CCFP FCFP, Professor, Dept. of Family Practice, University of British Columbia
- Wendy Bowles, NP F, RDH Dept. of Nurse Practitioners, Fraser Health

For key contributions to either the research foundations, literature review, case study groundwork or the effective teams jigsaw model

- BC Medical Quality Initiative (BC MQI) staff, in particular Beverly Mitchell, Beth Nuniam and Melanie Preston
- Colleen Kennedy , Executive Director, Health System Improvement & Engagement, BC Patient Safety and Quality Council
- Johanna Trimble, Patient Voices Network Representative, Multi-Professional Quality Improvement working group, BC MQI
- Members of the Multi-Professional Quality Improvement working group, BC MQI

Effective Teams QI is a project of the Multi-professional QI working group of BC MQI, with support from the Rural Coordination Centre of BC.

Contents

Introduction

Back in early 2016 members of BC MQI's multi-professional quality improvement working group began to conceptualize a pilot study of highly functional health care teams. Using an appreciative inquiry methodology, it was hoped the qualitative research would document the successes and characteristics of effective care teams as well as celebrate their dedication and perseverance. The project's potential wider relevance was framed in terms of inspiring and supporting the development of more effective health care teams in BC.

This research is informed by a significant and still emerging body of literature on the relationship of team-based care to quality of care. The emerging consensus is that quality health care provision really occurs through teams (Mitchell et al. 2012), with many even describing care provider relationships and communication as a determinant of quality of service (Kitto and Grant 2014; Lindgard 2016; Shinners and Franqueiro 2017). Such conclusions expand the discussion about quality of care and quality improvement beyond a sole matter of individual competence to one of collective competence and social and organizational relationships. The old adage that the whole is more than the sum of its parts could not be more true when it comes to health care collectives.

Naylor and colleagues (2010; as quoted by Mitchell et al 2012, p. 5) define team-based health care as "the provision of health services to individuals, families and/or their communities by at least two health providers who work collaboratively with patients and their caregivers—to the extent preferred by each patient—to accomplish shared goals within and across settings to achieve coordinated, high-quality care". Collective competence emerges through relationships demonstrating social interaction, shared experience, development of tacit knowledge and innovation in response to situated needs (Lave 1991; Eraut 2000; Mittendorf 2006). While professionals have a responsibility to maintain their individual competence at expected levels, collective or team competence requires sensitivity to interpersonal and cultural context, and collaboration horizontally across professional boundaries and vertically through the hierarchical structure of a profession (Canadian Interprofessional Health Collaborative 2010; Kitto and Grant 2014; Kitto et al. 2015; Shinners and Franqueiro 2017).

The immediate goals of the pilot phase were to confirm the feasibility, methodology and value of the appreciative inquiry study into effective care team function. On all fronts, the pilot study was a success. Three care teams in the province were selected for the initial pilot phase of this study and the research instruments included a combination of focus groups and key informant interviews. Together, the case studies produced an incredible depth of data and analytical consistency, which is rather unexpected given the small and diverse dataset. Each case study validated, and in most cases reinforced, each aspect of the working hypothesis jigsaw developed by the multi-professional working group on key elements of highly effective care team function. Further, the pilot studies suggest additional critical thematic areas to be examined in the future and hint at a few areas where previously identified key elements could be revised on the basis of participant terminology and experience.

This final report reviews the pilot study's methodology, summarizes what we have learned so far from the first three case studies, and makes some recommendations for how to proceed. Three case studies were produced as part of the research analysis process. Each has been reviewed and approved by the participating care team. Working group members who would like to read the case studies in full can contact BC MQI for confidential copies.

Summary of Key Findings and Recommendations

In preparation for this research, BC MQI's multi-professional quality improvement working group identified six key elements to successful team-based care:

1) Shared goal of patient-centred care;
2) Clear roles and expectations;
3) Mutual trust, including relationship/team building and reciprocity;
4) Effective and open communication;
5) Measurable outcomes and timely feedback; and
6) Open, supportive and visionary leadership.

The importance of having clear roles was the weakest thread of the six elements from the case studies. Related topics to clear roles, such as the importance of having expert and ongoing support, mutual understanding, strong organization (which was tied to having the capacity or resources for reciprocity, accountability and concrete outcomes and timely deliverables) and flexible structures (which balance organization and creativity), figured more centrally. In addition, participant accounts of mutual trust were strongly tied to leadership, communication and relationship building. Participants strongly supported measuring outcomes, but emphasized the importance of mixed qualitative and quantitative evaluation tools. Equally prominent, however, was a focus on the importance of concrete actions, timely feedback/engagement, accountability and reciprocity.

Further to the above, the pilot study's research participants identified the following characteristics as key to their team's successes: patient-centred care and quality improvement; evidence-based and inclusive decision making; community and provider engagement (including co-learning, participatory planning and decision making processes, and professional development); reciprocity; mutual understanding; the need for ongoing administrative support and coordination; timely and concrete actions; and dedicated time for formal and informal relationship building and collaborative activities. Interestingly, the role of job satisfaction figured centrally as a key incentive and outcome of collaborative team participation as well. With further study, it will become clear if these elements, as well as any newly emerging ones, should remain or can be folded into a pre-existing category, or should be treated as a discrete tile in the project's jigsaw visual of the key characteristics of effective care team function.

The pilot study suggests that there is significant enthusiasm for this kind of research and outreach among health care providers. If additional case studies are as rich as the first three, it is likely only 7 to10 more case studies are needed to develop a comprehensive enough picture of effective care teams in the province. Once scaled up in full form, I expect this project to generate exceptionally clear and consistent insights into the characteristics and mechanisms of highly effective care teams, and as such have the potential to significantly inform provincial quality improvement initiatives. Reaching a higher volume of participating care teams is important not only in terms of rigour and reliability, but it is also needed in order to identify and understand the role of any contingent or contextual factors which would be critical in developing sensitive evaluation tools and resources.

In moving forward, I strongly encourage the multi-professional working group to continue with its action research methodology, which seeks to mix data generation with professional support and development and systems change. The preliminary results from this study reinforce such pragmatic and reciprocal exchanges. It is my assessment that more data is needed from rural and multi-professional care teams too, whose patients have the most to gain from this research. Before proceeding with further case studies, I also encourage the multi-professional working group to finalize its communication and outreach strategy, as thinking through the 'and so what?' will assist the working group in its selection of care teams for research engagement. Lastly, the working group should consult with other health researchers to see if the project should seek approval from a Research Ethics Board before proceeding further.

Research Questions and Methodology

This research project is interested in understanding the common features of highly functional health care teams in BC, and in turn using that knowledge to build up enthusiasm and capacity for team-based systems change in the province. This research asks:

1) Using an appreciative inquiry approach, what are the elements or characteristics that highly functional health care teams credit with propelling and sustaining their success and effectiveness?
2) In comparing care teams, what are their common characteristics?
3) While still attending to context, what generalizable model best reflects the literature and this study's empirical findings?
4) Using an epidemic model of innovation diffusion, how can BC MQI share its learnings about highly functional care teams to spread enthusiasm for and systemically support quality improvement through the formation of more effective health care teams across BC?
5) Finally, once having learned how effective teams work, how can quality team function be assessed?

Appreciative inquiry is a strength-based approach to discovery, where the focus is on learning from what is working well and what is successful, as opposed to focusing on barriers, deficiencies or gaps in relation to quality improvement for example. Appreciative inquiry was chosen as an approach because of how well it lends to constructive and attainable systems change (Cooperride, Whitney and Stavros 2008; Watkins and Stavros 2010). The intention is to focus on what you want to achieve, and to spur the imagination through considering what is possible and what has already been done.

The epidemic model of innovation diffusion is of particular interest to Dr. Bob Woollard, co-chair of the multi-professional quality improvement working group. Quite simply, it is the idea that innovation can be spread through contagious or infectious enthusiasm. Of note, mobilizing enthusiasm was used by all pilot case study teams through building relationships and mutual understanding, and fostering a common goal of participatory patient-centred quality improvement.

At the outset, fourteen health care teams were identified and screened for participation. Identified care terms were sent an introductory letter and if interested asked to complete a three page survey with the help of staff at BC MQI. Care teams were asked to describe: 1) the makeup and context of their team; 2) the types of support their team receives from other organizations (if applicable); 3) what services they provide and to what population; 4) the ways their team reflects diversity; 5) their quality improvement initiatives and care activities; 6) lessons learned and key takeaways; and 7) history of the team.

In the end, three teams were selected for the pilot study on the basis of geographic and scalar diversity.[1] The three main case studies represent a mix of institutional, multi-professional and hospital-based care teams. One and a half hour focus groups were conducted with each selected care team, in addition to one or two 30-60 minute key informant interviews per team.

Team	Location	Type	No. of Participants
Northern Health Authority Executive Team	Prince George	Institutional	13
Enhancing Perinatal Care Team	Comox Valley	Multi-professional	5
Patient Navigation Team	Burnaby General Hospital	Hospital/Clinical	4

[1] An additional fourth mini case study was conducted on the implementation of post-c-section skin-to-skin and breastfeeding policy at Comox's St. Joseph's General Hospital. It is excluded from analysis here, but once we receive the participant's consent, the micro case study can be included in the project's next phase of wider study.

The focus groups were primarily facilitated by Bob Woollard and Wendy Bowles (Multi-professional quality improvement working group co-chairs), and key informant interviews were primarily conducted by Bob Woollard. Johanna Trimble, a patient voices network representative, and BC MQI staff members participated in most of the focus groups and some of the key informant interviews as well. All the focus groups and interviews were audio recorded and transcribed for analysis.

Participants were provided with the research team's preliminary jigsaw matrix of the six key elements of effective care teams in advance, and the visual was either projected or circulated near the start of each focus group. Focus groups began with introductions and a five minute summary of the research project, its objectives, process and methodology. Of note, all participants supported the project's appreciative inquiry approach. Topics explored in the focus groups and interviews included: the genesis of their team, key initiatives and mandate; how their team functions and what makes it effective; specific examples and comments on the various elements of the highly effective care teams jigsaw matrix; and to what extent a collaborative culture change has occurred.[2] Participants were given the opportunity to close with final thoughts or comments. Participation was encouraged and sought from all in attendance. Focus group facilitators and key informant interviewers engaged in the practice of active listening throughout, pausing frequently to restate and summarize emerging key themes and observations. Audio recordings were transcribed by a professional transcribing service.[3]

A total of 181 pages of transcribed focus group and interview data were produced for analysis.[4] This author was hired as a research consultant to conduct a thematic analysis of the transcripts, and write a final report on the pilot study for the multi-professional quality improvement working group of BC MQI. Transcripts were read once for overall content and first impressions, and underwent two detailed rounds of successive coding on the basis of emergent themes. The coded data for each case study was then reorganized thematically into a thematic summary document and cross-referenced with transcript data points. Potential groupings of key transformative elements and outcomes of each care team were then considered until all key team characteristics and outcomes had been accounted for. Research facilitators and interviewers were also asked to provide their recollection of key points and insights from each case study as an additional reliability check on this research consultant's interpretations and analysis.

Participants were guaranteed full individual confidentiality and this research consultant prepared individual case studies for each team to review and approve, with an eye to making sure the

[2] In the largest focus group, Northern Health's executive team was also asked to participate in a bit of an ice breaker. Participants were asked to break off into twos and discuss and later share with the wider group their most satisfying personal or professional day in the last month.
[3] In some cases, direct quotes in the case studies and this final pilot study report were edited for clarity and confidentiality.
[4] Northern Health: 49 pages; Comox Perinatal: 53 pages; Burnaby Patient Navigation: 79 pages.

burden of confidentiality had been met and that the content and analysis as presented was accurate. The case studies ranged in length from 9 to 12 pages. The individual case studies may also prove to be a welcome resource for participating care teams, and a quick, ready to use resource of anonymized data and analysis for the BC MQI research team to use in the future as well. Minor revisions were made on the basis of participant feedback in each case study and approved case studies have been returned to each care team for their records.

The Three Case Studies

Focus groups and interviews with the three health care teams included in this study's first pilot phase produced a remarkable richness of data and analytical consistency, which was unexpected given the small and diverse dataset. Incredibly, all the elements previously hypothesized by the multi-professional quality improvement working group as key to effective care team function were validated, and in most cases strongly supported. The case studies also point to areas where theorized elements in the effective team function jigsaw may be revised or expanded upon with more comprehensive study.

The care team participants are an impressive lot. They spoke eloquently and thoughtfully and embody the very best in terms of their professionalism, dedication to patient-centred quality improvement and collaborative, participatory practice and engagement. The overwhelming consensus on the part of the research team is one of gratitude and admiration; our participants' stories are inspiring. In this next section I provide a condensed review of each care team's background and transformative elements and outcomes. I also present highlights from each case study in the way of illustrative examples and direct participant quotes. I then go on to assess the overarching and intersecting themes which emerged from the pilot study. Working group members who would like to read the case studies in full can contact BC MQI for confidential copies.

Northern Health Authority Executive Team

The Northern Health Authority is the province's most northern, and geographically the largest, health authority in BC. It has a reputation as a provincial leader in innovative health care provision and leadership, principally with respect to its collaborative, caring, participatory and strategic leadership and planning models. An extraordinary thirteen executive team members participated in the Northern Health (NH) focus group, with one executive team member selected for an additional key informant interview.

While the executive team emphasized that their accomplishments are still very much a work in progress, the executive team model and support an accessible and collaborative leadership, and inclusive, collective and strategic problem solving, through an institutional centring of a relationships, mutual trust, clear vision and goals, and community engagement. NA's leadership style and institutional model foster: mutual trust; free and open exchange of ideas; community

and care provider engagement; comprehensive and inclusive information gathering; mutual and in-depth understanding; an exploratory or entrepreneurial spirit; and a balance of clear structures, roles and goals which lend to efficiency, and informal and open relationships and communications which lend to creativity.

This study's NH focus group and key informant interview participants identified five transformative elements in their highly functional collaborative organization:

1) Consistent modelling of open and trusting leadership and communications;
2) Embedding of community engagement, engaged and relational leadership and participatory processes throughout;
3) Keeping leadership and governance structures flexible and adaptive;
4) Maintaining a laser focus on strategic vision and goals, and integrating these throughout; and
5) Devoting the time and resources to deep discovery, comprehensive decision making and mutual understanding.

The CEO and the executive team at NH strive to create an environment of mutual trust and value that encourages open and respectful communication and dialogue, and community and care provider engagement. Participants repeatedly voiced appreciation and praise for the CEO's open and receptive leadership style, as well as the sense of personal value and work satisfaction such an approach instills. Participants described feeling:

> that we've always had the freedom to contribute, and know at least those ideas don't fall on deaf ears. They basically are considered, and that to me is very important. At least it makes us feel individually valued, and I think also that you're actually contributing towards a bigger goal here. So I think that's an important thing. (NH FG, p. 15)

> We're quick to embrace people [...] And they feel comfortable then about raising questions, asking those provocative questions like, why are you doing this? Or, why has the executive decided on this? And how are we supposed to implement it? And they're good questions, and they know that we then bring them up at executive and have those conversations, and we know we can identify with the fact that they're feeling overwhelmed at times. [...] So [mutual trust] is a big one for me in terms of how this organization works. (NH FG, p. 28-29)

There was a noted ripple effect when that culture of open and trusting leadership and communication is consistently modelled from the top-down: "I don't want to ever suggest we're perfect at all, but there's a lot of walk the talk that goes on in terms of how people behave. And then I think it can then play out with our teams, which then plays out with their teams in a nice cascading sort of way" (NH FG, p. 20).

Participants also talked about how "the permission to disagree or in fact the courage to disagree" (NH FG, p. 33) and the vigorous but not vociferous feedback within the executive team membership undergirds an even broader process of rigorous and critical discussion and decision making, the extent of which may not be the norm in other organizations. As one participant commented, "we are really not afraid to uncover ugly stuff and dive into it. We don't brush those things under the carpet. We look at them" (NH FG, p. 38). Another participant put it this way: "It's not necessarily wanting to do something different. It's just wanting to make sure that we've explored all our options" (NH FG, p. 34).

In addition to mutual trust and candid but respectful communication, NH's commitment to comprehensive and mutual understanding and decision making requires time and resources. The CEO at NH has spearheaded a process called 'deep dives,' which is really about generating meaningful clarity and understanding on a given topic or issue through its comprehensive excavation and the conversations that follow. As we were told, deep dives are carried out for one of two reasons: 1) "we're stuck and we're not quite sure why we're stuck or where to go," and 2) "there's something new on the horizon that maybe we don't feel like we fully understand and want to take a closer look at it" (NH Int1, p. 6). The decision might be made to collect more evidence, conduct a literature review, hold community or frontline consultations, or engage a broader sector of the organization. The executive team also talked about the practice of pausing, wherein extra time is given to contextualizing a problem and learning from others. The practice of pausing can also be used to give people time to digest and synthesize new materials or a new approach in the hopes it will generate mutual understanding and possibly even consensus.

NH systematically embeds community and provider engagement, relationship-building and participatory processes, again requiring significant resources and time. NH's strategic vision was created through a grassroots community engagement process and community consultations continue to be held every two years. NH also has a network of localized leaders and community liaisons, and are in the process of formalizing a new leadership model which makes better use of frontline staff and end users in planning and development.

Not only were we told that "the organization has a culture of engaging community and ensuring that our relationships with community are strong" (NH FG, p. 25), but when reflecting on the pilot study's jigsaw, another participant wondered if what "might be missing in your puzzle pieces is engagement" (NH FG, p. 25): NH's board travels throughout the region, the CEO and board chair maintain a highly visible and active presence in local, regional and provincial government associations, and

> all the VPs all know their communities as well the operating officers and our operational people, right down to the frontline. And so when we start any planning, I am very pointed in saying that every person in our organization has to have a healthy community liaison function. So that right at the very frontline they're responsible for their communities. So it's right from top down. (NH FG, p. 25-26)

Relational and collaborative processes which allow for genuine input and development of mutual understanding and trust were also said to help reduce points of friction when unpopular or challenging realities or initiatives come about.

Executive team members used the euphemistic term 'the northern way' to signal the different way things are done at Northern Health, primarily with respect to its culture of care and collaboration. Rather than having dozens of strategic objectives, they orient themselves to what they call their 'North Star' (the northern way of caring). A great deal of effort is put into translating ministry directives into NH language in order to preserve their focus. Incredibly, NH's "mission, vision and priorities have persisted over two strategic planning cycles (2009 to 2015 and 2016 to 2021)" (NH correspondence). Having a clear sense of purpose also facilitates accountability and evaluation. Outcomes can be "measured and accounted for in the context of our strategic plan" (NH FG, p. 28); everything can be linked back to the strategic plan. Participants also talked about how maintaining a consistent messaging and focus on the organization's strategic objectives and goals engenders a degree of predictability and stability which is crucial in building trust and clear expectations for the executive, staff and patients alike, and in helping the team work through differences of opinion.

Finally, executive team members articulated a preference to tack back and forth, on a situational basis, between different models and approaches. The NH executive team exemplifies flexibility in their governance and planning models, and repeatedly advocated a 'both/and' approach rather than any dogmatic extreme. This was demonstrated in team reflections on times where hierarchy may enable NH to be efficient, and other times "where you put the hierarchy aside" to enable the grassroots (NH FG, p. 26). Taking a 'both/and' approach is also reflected in NH's approach to evaluation and measured outcomes:

> The measurable outcome one is hard, because, at the executive level, so much of what you can measure is rear view mirror stuff, and it isn't necessarily forcing you to think from a more innovative, forward looking, futuristic, visionary perspective. So it's really good to keep an eye on the outcomes and what's measurable, but dangerous I think to have that as the only place that you're looking. So qualitative kinds of things, like what you're doing, intuitive senses of things, conversations that we have with people. I think it all… it needs to be a bigger picture than just the – and that's maybe sacrilegious – but measurable outcomes. So I think we need to make an effort to measure and both quantitatively and qualitatively. (NH Int1, p. 8-9)

Comox Valley Enhancing Perinatal Care Team

The Enhancing Perinatal Care team in the Comox Valley is a multi-professional group seeking to improve patient care and access through enhancing patient information and knowledge, care provider collaboration, and the reorganization and standardization of low-risk prenatal care (away from obstetrical specialists). As a collective, the group has been working to effect a

permanent culture change toward patient-centred, evidence-driven, participatory and process-driven health services, planning and evaluation. They began their work in 2014 and received critical support in the way of a project manager as part of a structured partnership with Perinatal Services BC and Shared Care's Partners in Care and Partners in Transition program, which provides 1-2 year funding for community-partnered collaborative health projects. Historically, perinatal care in the Comox Valley had been mired in severe interprofessional mistrust, derision and conflict which had real maternal health consequences in terms of access, informed choices and quality of care.

A total of five individuals participated in the focus group and two key informant interviews for the Enhancing Perinatal Care case study. The five participants identified six transformative elements of effective team function. Broadly speaking, the Enhancing Perinatal Care Team attributed their success to their team's visionary leadership and expert management and their adoption of participatory, collaborative, patient-centred, evidence-based processes of planning and development. Together these two broad elements facilitated relationship-building, the emergence of a common vision, mutual trust and mutual understanding among Comox Valley's perinatal care service providers, consensus around strategic objectives and goals, strong organization, timely reporting and evaluation and concrete actions, which built confidence and momentum among providers in the project.

The six transformative elements of effective care team function from the Enhanced Perinatal Care Team case study are summarized as follows:

1) Adoption of a patient-centred and evidence-based model;
2) Expert project management and team building;
3) Adoption of an open, process-driven model;
4) Structured time and opportunities to build relationships, trust, mutual understanding and common vision;
5) Timely evaluation, and concrete action and planning; and
6) Synergy of new people and perspectives and a desire for change.

The team's early focus on a needs assessment survey was critical in neutralizing pre-existing conflict and helped reorient care providers' energies toward a common desire of improved patient experience and outcomes. In speaking to building their team through a patient-centred and evidence-based model of change, one of the participants commented: "everybody had their opinion about what was wrong. […] So that's what this whole project started from, was trying to leave those opinions aside and actually gather the evidence" (Comox FG, p. 4). When providers met to workshop the findings of the needs assessment, "They started to hear the commonalities between their care for the women that they were talking about and their collective vision and hope and desire to better serve the women, and the egos started… you could just start to feel them start to slip away a little bit" (Comox Int1, p. 2). It was also significant that the needs

assessment and other evidence-based and evaluation pieces weren't perfunctory. Speaking to the needs assessment, this participant noted: "it wasn't just a pulse check. It was meant to really be the agent of change and the way to shape the change" (Comox FG, p. 36).

Providing opportunities for positive face-to-face interaction was crucial to the success of the Enhanced Perinatal Care Team project, especially in light of the fact that prior to the perinatal care project "a lot of the interactions that [care providers] had here between disciplines would be at crunch moments, when things were going badly, or when things were tense, or you were tired and it's the middle of the night or whatever" (Comox FG, p. 17). Quite simply, care providers need time together to build collegial relationships, trust, mutual understanding, and the enthusiasm and common visioning required to facilitate collaborative practice. Spending time together was also instrumental in dispelling misinformation across provider groups, creating a platform to equalize care provider relationships and humanizing the 'other' as it were:

> You need the opportunities to work together. The way teams are often distributed now, people are doing their thing day-to-day, and they picture you're a team, but if you're not actually interacting with each other, then you can't build trust. It's easy to say, "Oh, we're going to work on communication." […] But unless you're actually talking to each other, it doesn't matter. You can tell people you want midwives doing this and this and this, but if they don't see how you work and how you speak and how you do it, then they don't develop a trust and confidence. You can say all you want, "Oh, the obstetricians aren't the big, bad wolves who just want to come in and do your C-section," but until you really know them and talk to them and work with them and see them, you don't know. (Comox FG, p. 17)

Timely synthesis of meetings and data, and identification of successes and next steps kept providers, in particular, who face significant time constraints, feeling supported and that their time had been well spent. This is why the role of project manager was so central in the success of the project.

> I mean, these busy clinicians, whether it be physicians, midwives or nurses, could leave their clinical and patient responsibilities, come to a meeting, share openly, brainstorm, come up with ideas and walk away. [The project manager] and her assistants were able to collate that, give it back right away. Summarize it, outline the next steps and put together the plan. They didn't have to do that piece, and I think that's important. […] I think everyone appreciated the support and it provided value to what they were doing and kept them going forward and it's the organization, the backbone of stuff is important. (Comox Int1, p. 4-5)

As a research team, we also heard how having an evaluator (in their project manager) right from the beginning and reporting requirements (to Shared Care) helped keep their project on task and moving forward:

> I think evaluation, sometimes that's the piece in my experience that gets left off, because none of us are really that… or maybe we are comfortable with it, but it's "We forgot to do it, we forgot to measure, so how do we evaluate it?" But having an evaluator right from the beginning, I think there are pieces of the evaluation that we don't even realize happened and that helped to really move us through the process. (Comox FG, p. 34-35)

It is worth noting too that some participants felt coming together as a community over a meal, as opposed to snacks, was important:

> The donuts and coffee in the first meetings weren't important. The coming together with the community over a meal in the evening was important. Because the people that were invited felt valued by being… it wasn't just, like, the usual, we better feed the docs because they like to be fed. There wasn't that sense about it. It was inviting all members of the community to come together, share a meal and talk. (Comox Int1, p. 3)

Burnaby Patient Navigation Team

The Patient Navigation Team at Burnaby General Hospital is a dedicated core team of two to three members and a supervising manager whose objectives are to motivate and elicit contributions and engagement from frontline staff in the enhancement of patient- and family-centred care, with the ultimate goal of creating a self-sustaining culture of patient-centred quality improvement, care provider engagement, and care provider led-initiatives. The core team's role begins with initiating and facilitating one-on-one and small group conversations and meetings on the unit floor through to identifying and training unit 'care champions' and supporting frontline provider conceptualization, planning and implementation of new initiatives. Two key informant interviews and one focus group were conducted with the Burnaby Patient Navigation team, with a total of four participants.

At its inception, the Patient Navigation Team was conceived as a collaborative program to empower care providers in the design and implementation of predefined problems or initiatives. More and more, however, the Patient Navigation Team's role is transitioning to include a greater mix of wholly provider-identified and -driven initiatives, and over time the hope is to bring more physicians into the mix; as is, provider participants are nearly exclusively nurses and other allied health providers. The Patient Navigation Team is also seeking more patient representation in their core and unit teams.

By strengthening interpersonal work relationships and providing opportunities for genuine dialogue, leadership and clinical training, provider engagement and collaboration the Patient Navigation Team hopes to set off a chain reaction of improved patient care and job satisfaction and an aspiring and self-sustaining culture of professional development and patient-centred quality improvement. Authentic provider engagement was described as hinging on the open

exchange, receptive receipt and meaningful integration of new ideas and perspectives and feedback. Having a degree of organization, coordination and structure was seen as critical, too, in facilitating co-learning and evaluation, routinizing reflective conversations regarding quality improvement, maximizing human resources in the context of time constraints and limited people power, and documenting and celebrating successes to spur on more interest and innovation in patient-centred care.

The participants in the group and individual interviews from the Burnaby Patient Navigation Team identified five transformative elements in mobilizing and sustaining team-based, patient-centred quality improvement. They are as follows:

1) Time and setting to build relationships and conversations, mutual understanding, common vision;
2) Authentic participation, and bottom-up provider engagement and design;
3) A relationship-based approach to identify and train future quality improvement leaders;
4) The need for some coordination and structure; and
5) The need to measure and demonstrate value and successes so people will invest time and energy.

In recognition of the structural time constraints imposed on frontline staff and in keeping true to the team's commitment to provider engagement, the core members of the Patient Navigation Team has developed a simple but truly transformative practice of stepping in to cover for frontline care providers so they can step out for thirty minute patient navigation unit meetings. Members of the core patient navigation team will arrive to a unit half an hour before any schedule meeting to get a feel for what is going on in the unit and, as we were told, "If it's really busy, one or two of us will stay in the unit and kind of manage the floor so then the staff can be part of the meeting" (BH FG, p. 31).

The Patient Navigation Team has also developed a key engagement instrument which they call 'the roving cart.' With the roving cart, a core Patient Navigation Team member circulates through a unit with a cart of cookies and tea. Creating opportunities for social interaction builds visibility and familiarity, and over time these quick conversations have resulted in more meaningful check-ins and input around what's needed or what's not working for patients or providers, and any solutions. These conversations are also an opportunity for the core patient navigation team to share key messaging around any upcoming initiatives or patient-centred care in general.

Study participants from this team spoke eloquently about the role of job satisfaction—the satisfaction of having the time to talk, to listen, to dream, to collaborate, to develop new skills and to plan—in driving a culture of patient-centred quality improvement:

> Each unit has their own set of challenges. And really what we're trying to do is build a conversation with those potential advocates and try to support them and grow leadership […] and there's opportunities for team building there too. Working together with a shared purpose can impact your perspective as to what the opportunities are. Also it's esteem building and it gives opportunities to celebrate things as opposed to just grinding through your shift. I think all of these things eventually satisfy people in their job.
>
> At some point, someone told me about the SCARF model. Now I'm going to have to try to remember. I think it was mastery of skills, shared purpose, and autonomy that were the three things that give people a sense of satisfaction in their work. When I read that, I'm like, "Well, okay. This gives us a bit of a roadmap. How can we give people opportunity for autonomy? Ask for frontline solutions. How can we give people opportunity for shared purpose? We've got to bring them together and we've got to have a conversation on common goals. And mastery of skills? I mean that is all part of bringing best practice to the floor and committing to that standard." That's sort of been at the heart of all the different projects we've undertaken. (BH FG, p. 8)

Supportive leadership and mutual trust were seen as critical in fostering the open exchange of ideas and experimentation which allowed members to try something new and see if it works, and if it doesn't "then we move on and do something different" (BH FG, p. 21). Participants also spoke highly about the collaborative and open tone set by senior management:

> I think if you set this tone around "I don't have all the answers, but I'm there to support what you think might be working best for you," then you're setting yourself up for more for success than if you're like, "I know everything and I'm going to tell you why it's going to work and how we're going to achieve this goal. (BH FG, p. 39)

Study participants felt it was very important that new initiatives be assessed and measured, through a combination of quantitative (department statistics) and qualitative (open-ended) reporting, to see if they really do result in any kind of quality improvement and have provider and patient approval. Study participants also described a reinforcing cycle where their successes as a group in supporting the development of care champions and patient-centred quality improvement initiatives builds future successes: success in moving from idea to implementation for one "provides motivation for the next project" (BH Int2, p. 4).

Lastly, the Patient Navigation Team has begun to develop a catalogue system of team and unit projects and initiatives to address concerns about institutional legacies, interdepartmental communication, and duplication. Study participants were clear that some degree of coordination and structure is needed to facilitate co-learning, minimize duplication across units, and document patient navigation core and unit team initiatives, in addition to routinizing reflective

conversations and the pursuit of individual quality improvement projects at the unit level. Speaking to the catalogue initiative, the following participant shared:

> there's so many units and departments that are working on good stuff, but it doesn't get shared across our site. And sometimes it doesn't even get recorded or saved. And six months or a year later, you've got a different complement of staff on the unit and they're starting from square one again. So we want to have a mindset where we're going to try to learn together and build off of what we've learned. (BH Int2, p. 4)

Elements of Highly Effective Health Care Team Function

As observed above, each pilot case study was analyzed individually and the empirically generated key themes reflect each team's unique context and narrative. All the same, however, there is remarkable consistency and overlap between the three case studies. The following is a list of shared characteristics and values among the three teams:

- Focused objectives of patient-centred care and quality improvement, and care provider job satisfaction
- Importance of having a strategic focus, even if specifics are emergent
- Time and resources to talk, build relationships, share new perspectives, develop mutual trust, mutual understanding and common vision among care providers
- Centrality of relationships, whether with respect to leadership, team building, training, knowledge production, decision making or planning
- Collaborative, visionary leadership
- Desire and mechanisms for authentic/genuine community and provider engagement/participation
- Participatory and iterative governance, planning and development processes
- Comprehensive and evidence-based discovery, planning and development
- Need for ongoing team supports, strong organization and coordination to reach goals, maximize and encourage provider participation, and create sustainable outcomes/change
- Importance of reciprocity whether in terms of co-learning, synthesizing feedback, project updates, shared responsibilities or redistributed/reorganized workload
- Need for flexible structures and governance which balance efficiency, strategic focus and coordinated activities with creativity, collaboration and innovation
- Importance of timely and concrete outcomes and delegated project management, synthesis and evaluation (frontline providers do not have the time or expertise)
- Acknowledgement of unique interpersonal factors and synergies

The following chart provides a simplified assessment of the degree to which the three case studies support each theorized element of effective care team function and itemizes the intersecting or related concepts which participants referenced when talking about the six elements. Paying attention to participant language and experience will be crucial in developing an intuitive and accessible team function guide and evaluation framework.

Six Elements of Effective Team Function	Degree of Empirical Support	Intersecting or Related Concepts/Elements
1) Shared Goal of Patient-Centred Care	Very Strong	Mutual Understanding; Visionary Leadership; Engagement; Participatory Processes
2) Clear Roles and Expectations	Weaker	Expert and Ongoing Support; Mutual Understanding; Strong Organization; Flexible Structures and Processes
3) Mutual Trust (incl. Relationship Building and Reciprocity)	Supported but potential need to disentangle	Mutual Understanding; Relationship Building; Participatory Processes; Communication; Leadership; Reciprocity
4) Effective and Open Communication	Very Strong	Mutual Trust; Mutual Understanding; Relationship Building; Collaborative Leadership; Engagement
5) Measurable Outcomes and Timely Feedback	Very Strong	Concrete Actions; Reciprocity; Expert and Ongoing Support; Strong Organization; Accountability; Evaluation; Engagement
6) Open, Supportive and Visionary Leadership	Very Strong	Shared Goal; Communication; Mutual Trust; Engagement; Participatory Processes; Expert and Ongoing Support; Evaluation

It is entirely possible that having clearly defined roles and expectations will be a more prominent feature of effective team function in future case studies. It is also possible that this element matters more for managers, directors and evaluators than practitioners, and on that basis the right balance will have to be struck. That said, it is worth noting that while some participants did talk about the importance of clear roles, pilot study participants more often focused on related topics of: mutual understanding; supportive leadership; the importance of ongoing support; strong organization which was tied to having the capacity or resources for reciprocity, accountability and concrete actions and timely deliverables; and flexible team structures and processes which balance efficiency and creativity.

The element of mutual trust was a strong theme in the pilot study, but the current category is at risk of being too much of a catch all. Reciprocity, mutual understanding and relationship building all figured prominently in the case studies. In the jigsaw's current configuration, however, the concepts of communication, mutual trust, relationship building and mutual understanding may not be sufficiently distinct. I foresee parcelling out reciprocity as well, which is likely more connected to concrete outcomes, feedback, participatory processes, and community and provider engagement. Depending on the results of future case studies, it is possible the research team may need to consider adding a new category related to participatory processes and provider and/or community engagement as well.

Participants strongly supported measuring outcomes, but emphasized the importance of mixed qualitative and quantitative evaluation tools. Equally prominent, however, was a focus on the importance of concrete actions, timely feedback/engagement, accountability and reciprocity. Of note as well, the role of job satisfaction figured centrally as a key incentive and outcome of collaborative team participation. Finally, some consideration should be given to the role of ongoing team supports and other support or governance structures in future elements of effective team modelling, especially given the project's long term goal of supporting and assessing effective team function in the province.

Conclusion

This pilot study suggests that there is significant enthusiasm for this kind of research and outreach among health care providers in BC. The three case studies included in this pilot study produced an incredible depth of data and analytical consistency. Significantly, this pilot study validates all previously theorized key elements of effective team function identified by the multi-professional working group. The pilot study also points to additional critical thematic areas to be examined or reorganized on the basis of future research. Once scaled up in full form, I expect this project to generate exceptionally clear, consistent and generalizable insights into the characteristics and mechanisms of highly effective care team function. As such, this research has the potential to significantly and confidently inform provincial quality improvement initiatives, on the basis of producing a comprehensive, evidence-based and research-tested model of effective team function in the project's next phase. Congratulations to the research team on its very successful first phase of study.

Works Cited

Canadian Interprofessional Health Collaborative. 2010. *A national interprofessional competency framework.* College of Health Disciplines, University of British Columbia, Vancouver, BC. http://www.cihc.ca/files/CIHC_IPCompetencies_Feb1210.pdf

Cooperride, David L, Diana Whitney, & Jacqueline M. Stavros (eds). 2008. *Appreciative Inquiry Handbook: For Leaders of Change*, 2nd edition. San Francisco, CA: Berrett-Koehler Publishers.

Eraut, M. 2000. "Non-formal learning, implicit learning and tacit knowledge in professional work" in *The Necessity of Informal Learning*, editor F. Coffield. Bristol: The Policy Press, 12-31.

Kitto, S., & R. Grant. 2014. Revisiting evidence-based checklists: interprofessionalism, safety culture and collective competence. *Journal of Interprofessional Care.* 28 (5): 390 – 392.

Kitto, S., S.D. Marshall, S.E. McMillan, B. Shearer, M. Bulist, R. Grant, M. Finnigan & S. Wilson. 2015. Rapid response systems and collective (in) competence: an exploratory analysis of intraprofessional and interprofessional activation factors. *Journal of Interprofessional Care.* 29 (4): 340-346.

Lave, J., & E. Wenger. 1991. *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge UP.

Lingard, Lorelei. 2014, October 23. *Collective competence: adapting our concept of competence to healthcare teams.* Plenary Session, International Conference on Residency Education (ICRE), Royal College of Surgeons. http://www.royalcollege.ca/portal/page/portal/rc/common/documents/events/icre/2014proceedings/slides/Plenary%20Sessions/Plenary_session_Collective_competence_Adapting_our_concept_of_competence_to_healthcare_teams.pdf

Mitchell, P., M. Wynia, R. Golden, B. McNellis, S. Okun, C.E. Webb, V. Rohrbach, and I. Von Kohorn. 2012. *Core principles & values of effective team-based health care*. Discussion Paper, Institute of Medicine, Washington, DC. www.iom.edu/tbc

Mittendorf, K., F. Geijsel, A. Howeve, M. de Laat, & L. Nieuwenhuis. 2006. Communities of practice as stimulating forces for collective learning. *Journal of Workplace Learning.* 18(5): 298-312.

Shinners, J., & Franqueiro, T. 2017. Individual and collective competence. *The Journal of Continuing Education in Nursing.* 48 (4): 148-150.

Watkins, Jane Magruder, and Jacqueline M. Stavros. 2010. "Appreciative Inquiry: OD in the Post-Modern Age" in *Practicing Organization Development: A Guide for Leading Change* (3rd Edition), editors William J. Rothwell, Jacqueline M. Stavros, Roland Sullivan and Arielle Sullivan. San Francisco, CA: Pfeiffer, 158-181.

Appendix I: Appreciative Inquiry

The following overview of Appreciative Inquiry was shared and discussed with the focus groups participants.

1. Appreciative Inquiry

A belief that the future can be built on the lessons learned from the best of the past.

A search for new knowledge to enrich the images of the future.

A theory that acknowledges that collective action is a vital part of creating a way to enact the values and vision of a group, an organization, or a society.

A realization that human systems can create what they imagine.

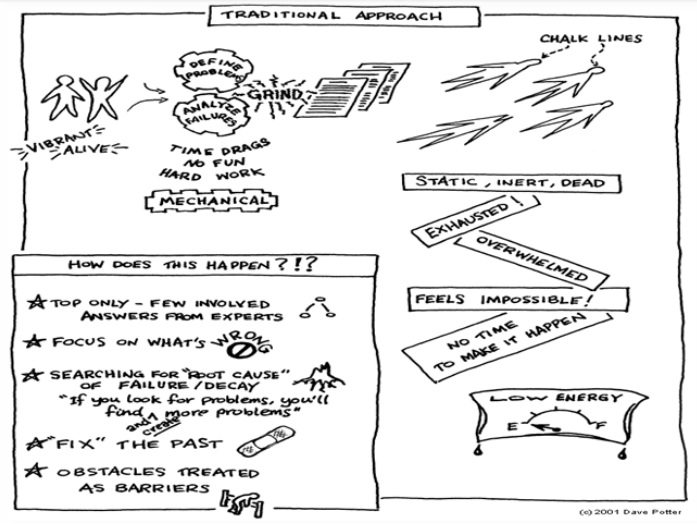
Remember as you learn

(A belief that) the future can be built on the lessons learned from the best of the past.

2. The Process

3. The Approach

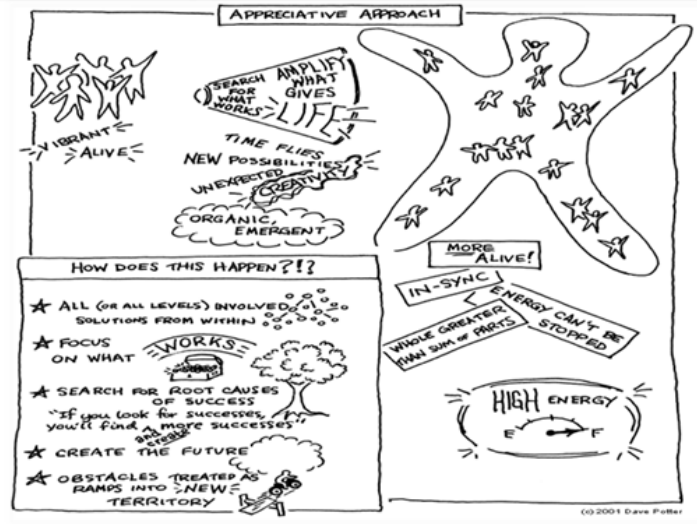
Traditional Approach



A problem to be solved:

- Analyze the cause
- Identify the problem
- Analyze potential solutions
- Action planning

Appreciative Approach

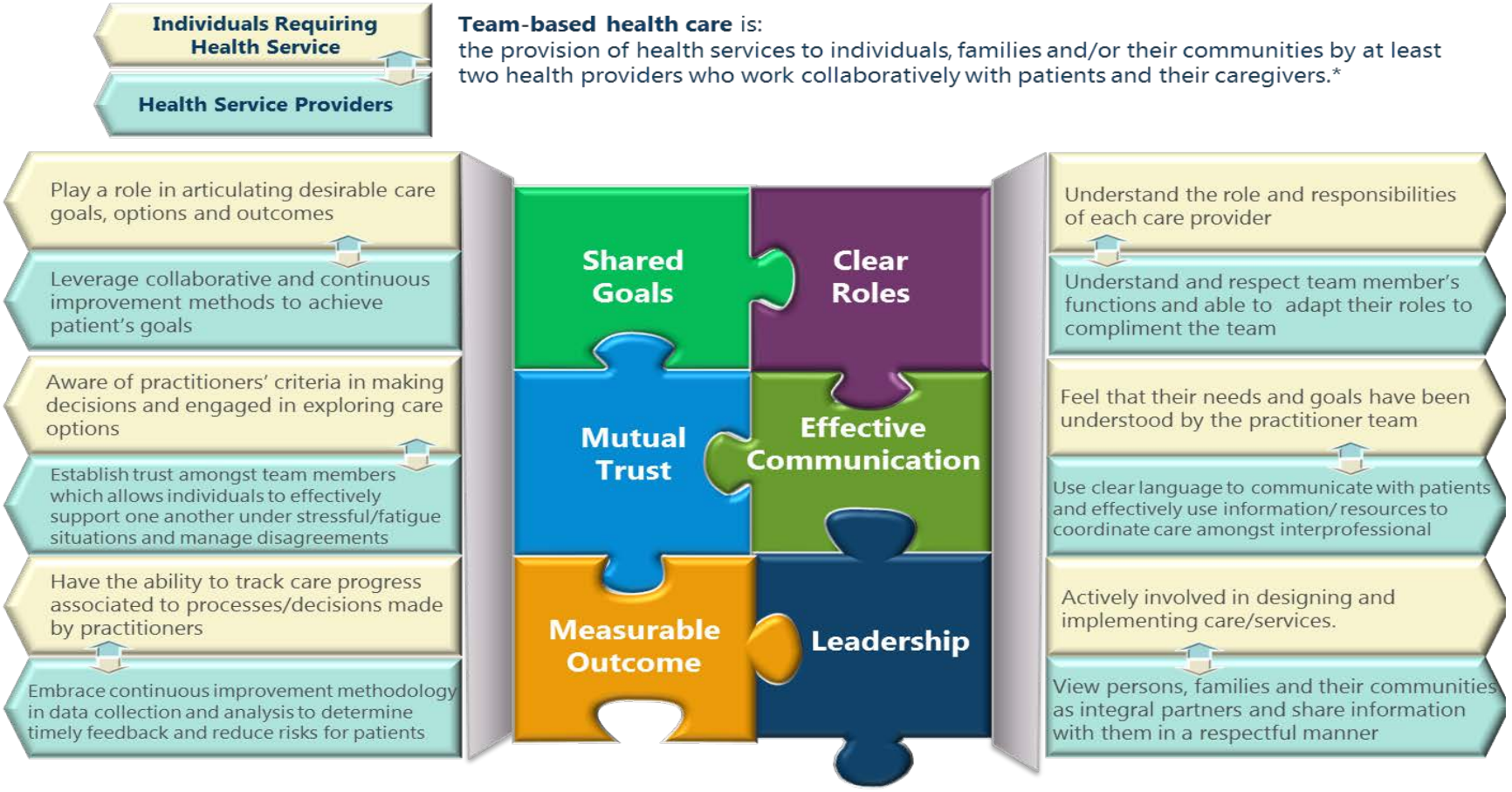


A mystery to be embraced:

- Appreciate and value the best of what is
- Envision what might happen
- Dialogue what should be
- Innovate what will be

Appendix II: Elements of Effective Team-based Care—A Jigsaw Matrix

A jigsaw matrix developed by BC MQI's Multi-Professional Quality Improvement working group shows select elements of the interprofessional, team-based and non-technical skills anticipated to be common to high functioning health care teams. The jigsaw matrix was shared and discussed with focus group participants, with modifications made following input from the participating teams. As indicated in the paper, further research may contribute to refinement of the matrix.



* Naylor, MD, Coburn KD, Kurtzman ET, et al. *Inter-professional team-based primary care for chronically ill adults: State of the Science.* Unpublished white paper presented at the ABIM Foundation meeting to Advance Team-Based Care for the Chronically Ill in Ambulatory Settings. Philadelphia, PA; March 24-25, 2010.