

# USING SOCIAL MEDIA TO IMPROVE HEALTHCARE QUALITY

**A Guide to Current Practice and Future Promise**

June 2011

## **PART 2**

### **Exploring Two Case Examples and Imagining the Future**



*innovation cell*

# CONTENTS

- 03 Introduction from The Change Foundation
- 08 Exploring social media to improve healthcare quality:  
a look at two Ontario organizations
  - 09 **Exploring the Centre for Addiction and Mental Health (CAMH)**
    - 11 Exploration 1: Mental health and addiction institutions: reputation and QI
    - 13 Exploration 2: Monitoring online conversations about mental health and addictions
    - 16 Exploration 3: Measuring social media engagement in mental health and addictions
  - 21 **Exploring Providence Healthcare**
    - 22 Exploration 4: Social media tools to improve patient engagement and awareness about transitions in care
    - 24 Exploration 5: Social media strategies to facilitate a culture of continual collaborative innovation
- 26 Imagining your future as a strategic user of social media
- 30 Ensuring uptake and sustainability
- 34 Conclusions
- 36 References

## **ABOUT THE CHANGE FOUNDATION**

The Change Foundation is an independent policy think tank, intent on changing the health-care debate, health-care practice and the health-care experience in Ontario.

A charitable foundation established in 1996 and funded through an endowment, The Change Foundation leads and leverages research, policy analysis, quality improvement and strategic engagement to enable a more integrated health-care system in Ontario designed with individuals and caregivers top of mind.

© The Change Foundation 2011  
200 Front Street West, Suite 2501  
Toronto ON M5W 3M1  
416.205.1459

[talktous@changeofoundation.ca](mailto:talktous@changeofoundation.ca)  
[www.changeofoundation.ca](http://www.changeofoundation.ca)

## **ABOUT THE HEALTH STRATEGY INNOVATION CELL**

The Health Strategy Innovation Cell is a health policy think tank based at Massey College in Toronto. We test new business models for the delivery of excellent healthcare. We use Web analytics and build online tools to guide our consumer-focused solutions.

[www.innovationcell.com](http://www.innovationcell.com)

## **INTRODUCTION BY THE CHANGE FOUNDATION**

In the fall of 2009, the Health Strategy Innovation Cell's CEO Neil Seeman and his Chief Imagineer Carlos Rizo brought us a unique proposition to explore the potential of social media as a tool to advance a more responsive, patient-centred healthcare system in Ontario. Social media refers to collaborative and interactive online communication and community-building tools. Though neophytes in social media, we recognized that the core question fit well with The Change Foundation's work: supporting the creation of a more integrated and innovative healthcare system responsive to the needs and lived realities of those it serves.

“ We had a hypothesis. We felt that by digging into these conversations and anonymizing them, specifically in the context of two healthcare organizations in Ontario, they could help us to better understand the quality improvement priorities for these two organizations, and for Ontario, and for the world.”

Neil Seeman, Health Strategy Innovation Cell

The resulting project, *Using Social Media to Improve Healthcare Quality*, was a two-year collaboration (2009-2011) between The Change Foundation and the Innovation Cell, an independent think-tank based at Massey College in the University of Toronto. We decided to fund and partner on this endeavour, working closely with the Innovation Cell to mold and frame the objectives and principles of the project. We wanted to ask a meaningful and forward-looking question that aligned with emerging policy issues – the *Excellent Care for All Act*, for example, and the province’s evolving quality improvement agenda – and we saw the opportunity to test the question in the field with provider partners. We wanted our findings to be practical, useful and transferable to other healthcare institutions in Ontario and beyond.

This guide is one of the products of our collaboration. Content for the guide was amassed and compiled by the Innovation Cell, with input and support from The Change Foundation.

#### **WHAT WE LEARNED**

Patients and caregivers are everywhere on social media channels. They are busy blogging, tweeting and building peer-to-peer communities on Facebook and other websites where they openly share and discuss their experiences with healthcare. But, compared to other sectors, healthcare organizations have been relatively slow to be comfortable with social media as a way to connect with patients. Although the use of social media in healthcare is growing by leaps and bounds – the dynamic directory created for this project shows that the number of Facebook, Twitter and YouTube accounts by Canadian healthcare organizations has quadrupled in the past year – few have begun to tap this rich reservoir of real-time, real-life stories to improve the delivery of care.

Why is healthcare a slow adopter?

- The main stumbling block is the lack of a set of accepted best practices that would enable organizations to become less risk-averse.
- Ethical questions are a major concern. Are we violating patients’ privacy by listening in or soliciting comments online? Are we ignoring the people who don’t participate in social media?
- Return-on-investment questions present another barrier. Should we devote scarce resources to explore this unmapped territory? What risks do we face if we embrace social media, and what if we don’t? Will social media really help us reach the people we want to reach?
- Healthcare organizations are also concerned about practical questions. How ready are we to use social media? How should we use it most productively for our own goals, and what is the best way to start? What policies do we need to support this work and what level of the organization should approve them?

This guide and the eToolkit (described below) are designed to help organizations answer these questions.

#### **ABOUT THE PROJECT’S PRODUCTS**

The project had two phases, producing a two-part guide to current practice and future promise, and culminating in an online eToolkit that will be hosted by the Innovation Cell. The guide, provided for people who prefer to get information from a more traditional format, mirrors much of the content of the eToolkit, though there will be additional dynamic and interactive resources available in the online version. We encourage you to explore the eToolkit at [innovationcell.com](http://innovationcell.com) when it is released later in June.

# MORE AVAILABLE IN THE ETOOLKIT

COMING LATE JUNE 2011 AT [INNOVATIONCELL.COM](http://INNOVATIONCELL.COM)

- If you are new to social media, you can learn the basics from our *social media glossary*.
- If your organization is currently using social media, you can post information about what you're doing on our *editable online directory* and use the directory to connect with other Canadian healthcare organizations.
- To stay up to date and see what's trending in discussions about social media use in healthcare, visit the *What's Hot* and *Further Reading* sections. These dynamic tools will work like a real-time literature review on emerging issues and leading practices.
- Please contribute to this discussion and share your insights, experiences and feedback through the *Comments* section at the bottom of every page in the eToolkit.
- In the eToolkit we will offer the ability to discuss the content via Facebook and Twitter so that the eToolkit itself emerges as an example of *social media in action*.

## PART 2

This is Part 2 of the guide, covering the second phase of the project in which the Innovation Cell undertook field explorations with two Toronto healthcare organizations to understand the frontline experience of providers, managers and executives as they begin to navigate these largely uncharted seas. Our field partners in this pioneering journey were Providence Healthcare and the Centre for Addiction and Mental Health (CAMH) – both teaching institutions affiliated with the University of Toronto – and they offer first-hand lessons that will be useful for all healthcare organizations grappling with similar issues as they explore how to harness the power of online dialogue and integrate social media within their own QI efforts.

Part 2 also imagines what the future might look like if and when healthcare organizations adopt social media to enrich their ongoing QI processes. How will it change organizations themselves and how they interact with patients and caregivers? How will they measure the impact of these efforts? Finally, the Innovation Cell looks at the lessons of this project through the lens provided by Ross Baker's book, *High-Performing Healthcare Systems: Delivering Quality by Design*, to offer advice on sustaining the value of social media as a tool for quality improvement.

## PART 1

Part 1 of the guide ("Introduction and Key Issues in the Current Landscape," released earlier in June) captures the first phase of the project, laying the foundation for the idea that healthcare organizations can use social media as a tool for quality improvement by tapping into the growing presence and power of online conversations. The Innovation Cell undertook a series of systematic scans of the social media environment to understand how it intersects with healthcare, particularly in Canada. As a result of these scans, they are able to describe current leading practices, challenges, lessons, opportunities and limitations related to the use of social media in healthcare.

# A FEW TECHNICAL NOTES

- **Social media is, by its nature, a dynamic environment. Information in this guide and in much of the soon-to-be released eToolkit is current as of December 2010 to June 2011, with the currency of different information marked accordingly. Some parts of the eToolkit are designed to be editable and are continually updated or can be updated by users.**
- **In our analyses, only data from open-access blogs were used, no personal identifiers were obtained, and no comments were actively solicited for the purposes of obtaining information about what clients thought about their experience of care at the two organizations that participated in our field explorations.**
- **We use the term “patients” throughout this guide and in the eToolkit, but we recognize that some healthcare organizations use “clients” to describe the people who receive their services. In our discussion of the field partnership with CAMH, we use “clients” as is the practice there.**
- **In this document, links without a reference number are definitional; if you are reading this online, you can explore the terms and background information provided through these links. Links with a reference number will take you directly to the source material (if you're reading online); for people reading this in hard copy, we've provided endnotes for these sources.**

Through numerous examples from across North America – and by presenting the first open and user-editable Canadian directory of healthcare organizations using social media – Part 1 of the guide (like the forthcoming eToolkit) provides a snapshot of where we are now in this fast-changing world. It also explores important ethical issues, particularly around privacy and data control, that healthcare organizations must understand as they begin to navigate this new territory.

## **ABOUT OUR FIELD PARTNERS**

The Innovation Cell met with the field partners from February to November 2010. At the beginning of this project, CAMH was making moderate use of social media and the organization was interested in how these tools could inform quality improvement by focusing on improving bonds with its client community. At the same time, Providence Healthcare's use of social media could be described as low and the organization was interested in how social media could inform its QI processes by becoming a tool to improve internal communications.

Please note that the field partners have not formally endorsed our reporting on this research or our recommendations to them on how they can advance their use of social media to meet their specific objectives. That being said, we are pleased to report that they have put their project learnings to good use. CAMH in particular has moved quickly to reflect and build on what they've gleaned during this timely experiment. They tell us that the project has augmented their understanding of the implications and opportunities that social media presents to healthcare organizations and that it has increased their capacity to make well-informed and strategic decisions about the uptake of social media.

## ACKNOWLEDGEMENTS

The Change Foundation would like to acknowledge the Health Strategy Innovation Cell, in particular Neil Seeman and Carlos Rizo, for their knowledge, intelligent enthusiasm, and hard work in executing this dynamic project, for their engagement with our field partners, and for translating the language and lessons of a new terrain.

Those lessons were enriched by the participation of our field partners – Providence Healthcare and the Centre for Addiction and Mental Health. We would like to thank in particular former Providence Healthcare CEO Neil McEvoy and Director of Communications Beth Johnson and, from CAMH, Vice-President Susan Pigott, Robin Rowe, Director of Public Affairs, and Manuel Gittermann, Director of Operations, Policy, Education and Health Promotion. They and their teams embraced the project as probing and curious champions, using what they've learned to walk the talk and prudently pursue their commitment to use social media in new ways to advance patient-centred care.

And finally, we thank the members of the project's advisory board, the Ginger Council, who provided strategic advice based on their diverse expertise in healthcare, ethics and social media. Their good guidance, expertise and engaging deliberations throughout the project stimulated our thinking and helped us hone our project. Although we list them here with their affiliations at the time the Ginger Council was active, members participated as individuals and not as representatives of the organizations for which they work.

**Melanie Barwick** Associate Scientist and Director of Knowledge Translation in the Child Health Evaluative Sciences program of Sick Kids' Research Institute; Psychologist at The Hospital for Sick Children

**Sonika Lal** Policy Analyst, Health Care Access Strategy Unit, Health System Strategy Division, Ministry of Health and Long-Term Care (MOHLTC)

**Wendy Katherine** Manager (Acting), Population Health and Integration Strategy Unit, Health System Strategy Division, MOHLTC

**Paula Blackstien-Hirsch** Executive Director, Centre for Healthcare Quality Improvement at The Change Foundation

**Marina Englesakis** e-patient; Information Specialist, University Health Network

**Rob Fraser** Graduate nursing student, University of Toronto; founder, nursingideas.ca

**John Sharp** Manager of Research Informatics in Quantitative Health Sciences, The Cleveland Clinic

**Tim Sturgill** Director of Social Media and Staff Physician at Emergency Medicine Physicians (a U.S. medical services group)

**Peter Szota** Executive Director, Grand River Community Health Centre

**Joe Peters** Partner, Ascentum, Ottawa

**Pat Campbell** CEO, Echo: Improving Women's Health in Ontario

**Joanna Zuk** Senior Communications Officer, Association of Ontario Midwives

# Exploring social media to improve healthcare quality: a look at two Ontario organizations

## **SUMMARY POINT**

- **Through a journey with field partners, we recommend how they might move from their current state to a future where social media is an active part of their QI strategies.**

In phase 2 of this project, the Health Strategy Innovation Cell, in collaboration with The Change Foundation, partnered with two Ontario healthcare organizations – the Centre for Addiction and Mental Health (CAMH) and Providence Healthcare – to explore opportunities, challenges and leading practices in using online dialogue and client and caregiver engagement to improve quality in healthcare.

Both organizations are strongly committed to quality improvement and keenly interested in understanding how social media can be harnessed to listen and respond to client and caregiver needs and preferences. Each reflects a different dimension in terms of organizational size (large versus medium), geographic location (urban versus suburban), clinical focus (mental health and addictions versus rehabilitation) and – at the start of the project – the organization’s level of social media use (mid-level experience versus early stage).

We worked closely and in parallel with each of these field partners to develop “explorations” that would illustrate near-term opportunities (three to 18 months out) for using social media to improve healthcare quality at each institution, based on their expressed needs and priorities. To be most useful and relevant to each partner, we tried to understand what we call each field partner’s “QI DNA” – the institution’s culture and history that drives its current strategies. Our broader goal was to highlight lessons and recommendations which – though developed specifically for our field partners – might be useful for other healthcare organizations in Canada and around the world and in settings beyond rehabilitation, mental health and addictions.

This section presents the results of these explorations, addressing five quality improvement topics (three with CAMH and two with Providence Healthcare). For each of these journeys, we summarize why the topic matters and what the exploration will address. We set the stage with background information and outline the organization’s current state of QI activities and thematic priorities (as of December 2010, unless noted otherwise). And finally, based on what we learned and on current leading practices, we present actionable, independent recommendations for each topic area, suggesting how the organization might move from its current state to a future that allows it to get the best from what social media has to offer in healthcare quality improvement.

## Exploring the Centre for Addiction and Mental Health (CAMH)

### INTRODUCTION

The [Centre for Addiction and Mental Health \(CAMH\)](#), located in downtown Toronto, is Canada’s largest mental health and addictions teaching healthcare organization. CAMH combines clinical care, research, education, policy development and health promotion to help transform the lives of people affected by mental health and addictions issues and to contribute to the building of a more effective healthcare system.

To help us dig into the institutional definition of quality, identify QI themes germane to social media opportunities, and understand the “QI DNA” at CAMH, we attended meetings of the CAMH Quality Assurance and Patient Care Committee and met with key informants from this field partner; we listened to quality improvement conversations at CAMH and reviewed related documentation.

In summary, we would describe the QI culture at CAMH through the following themes:

**Accessibility:** Ease of access to care and services and integration across sites and departments are major thematic focus areas for QI at CAMH.

**Reputation:** Enhancing its reputation for commitment to clients – through practices of responsiveness (fostering a customer-service mentality through, for example, timely response), clinical and client-service teamwork, excellence in knowledge exchange, and trust between clients and caregivers – is a major quality goal at CAMH.

“The more we can discuss the challenges in healthcare, whether it’s between providers and providers or between providers and patients, the more we can see and discover ways to improve the system. When hospitals understand how they can protect themselves and balance the concerns and the opportunities that social media presents, there’s a better chance to actually put this information to good use.”

Rob Fraser, graduate nursing student

**Client-centred engagement:** A deep understanding of clients’ needs, wants and preferences to influence change and processes is another goal at CAMH. Quality of client care and services are evaluated at CAMH on an ongoing basis through numerous mechanisms and levels of oversight.

**Healthy work environment:** Fostering a safe work environment and being accountable when quality is not met are vitally important to the CAMH QI journey.

**Collaboration and system building:** CAMH works with many hospital and community partners to develop a more effective healthcare system for people grappling with mental health and addictions issues. Education, policy development and health promotion are all important aspects of CAMH’s work. Partnership with community partners and providers – through teamwork and knowledge exchange – is another area of focus for QI.

**Staff engagement:** Annual staff surveys at CAMH measure staff satisfaction, client-staff safety, work-life balance, communications and overall quality. CAMH is committed to reaching high levels of client and staff safety, client-staff communications, and staff satisfaction and morale about the environment in which CAMH staff work.

**Research:** CAMH is a leader in research with a rich interdisciplinary program that includes neuroscience, community health, clinical research and pharmacogenetics.

**Strategic planning:** Clarity of organizational purpose, priorities and goals is an area of continuous emphasis.

**Leadership:** Excellence in corporate leadership at the administrative level (e.g., full adoption of organizational values) and at the clinical level (i.e., client-centred care) is a major QI goal at CAMH.

**Client safety:** A multi-pronged client-safety initiative is a prominent focus at CAMH. This initiative, which is integrated with workplace/staff safety initiatives, employs best practices in education/training and the ongoing use of safety measurement tools, safety reviews, infection control, falls prevention processes, auditing events, and literature searches to discover emerging best practices.

**Accreditation:** The accreditation process plays a role in driving QI initiatives at CAMH. With its emphasis on continuous improvement, CAMH’s accreditation process includes the ongoing evaluation of many of the priorities listed above.

We developed three explorations for CAMH to illustrate how this organization might best use social media for quality improvement.

**Exploration 1:** Mental health and addictions institutions: reputation and QI

**Exploration 2:** Monitoring mental health and addictions conversations online

**Exploration 3:** Measuring social media engagement in mental health and addictions

We expect many of the lessons and insights from our partnership with CAMH can be applied to settings beyond mental health and addictions.

**Note:** Throughout this project, the Innovation Cell worked closely with clinical quality staff at CAMH; therefore, our recommendations for all three explorations focus primarily on the organization's interactions with clinical clients rather than on its activities in research, education, policy development and health promotion.

## Exploration 1. Mental health and addictions institutions: reputation and QI

### WHY THIS MATTERS

- In the corporate world, public relations offices are commissioning real-time intelligence reports from “sentiment analysis” companies that evaluate blogs and social media forums to manage companies’ products, brand awareness and reputations online. An increasing proportion of all consumer comments in the commercial world now surface in one social media community: Facebook.
- Similarly in healthcare, reputation and quality improvement go hand-in-hand. Clients have access to new venues called “social rating” sites to assess the clinical services they receive from health professionals (e.g., [ratemds.com](http://ratemds.com)). Uptake of these social rating tools is escalating rapidly, especially in Canada. As a result, a healthcare organization’s ability to manage its online reputation ties directly to its capacity to maintain a bond of trust with clients.

### WHAT THIS EXPLORATION WILL ADDRESS

- Through the example of CAMH, organizations elsewhere will understand how their facilities are assessed by clients, family members and friends in online forums, and how these forums can help organizations identify where and how to improve care, sometimes at low cost.

- Monitoring reputation for the purpose of quality improvement is an emerging focus of board governance in the private and public sectors.

### BACKGROUND

- Assessing the perceptions and concerns of clients and other stakeholders is an important sustainability issue for any organization. Reputation matters for clients’ trust in the organization, the retention and recruitment of staff, and the organization’s ability to attract philanthropic or other funding.
- From our environmental scans and conversations, we heard that reputation is a critical asset in healthcare. It can sustain, or undermine, quality improvement initiatives.
- As with all organizations in the public eye, healthcare organizations are more exposed to reputational risk today than ever before. This is especially so in a period of fiscal restraint when taxpayers and the wider online community may scrutinize public expenditures more than they did in the past.
- The majority of private companies are making some efforts to manage their reputation and, to do so, they have increased their focus on online practices. This can range from reactive monitoring of “Google alerts” (online mentions of a company), which then get evaluated by the firm’s communications department and are summarized for different corporate audiences, to proactive sentiment analysis of the words, tone and trends in language spoken online about a company and its competitors.
- With media-reported criticisms of alleged misuse of taxpayer or stockholder resources, the public wants to know what business is doing (whether in the for-profit or non-profit sector), and the public expects to have a say.

“ I think all healthcare organizations are going to have to look at social media as part of their communications plan. Whether they want to or not, those conversations are going on around them, and as with any other conversation related to our organization, it’s important for us to know what’s being said and how it’s being responded to in the communities that we serve.”

Pat Campbell, Echo: Improving Women’s Health in Ontario

- On the Internet, negative information gets passed instantly among existing and potential clients, yielding significant detrimental effects to the credibility of any organization.
- Social media sites such as Twitter, Facebook and YouTube spread information more rapidly than was possible or imaginable prior to the intensive use of these tools beginning in 2004.
- Understanding how to listen and respond to the online conversations among clients and caregivers is good practice not only for reputational risk management. More importantly, it can be an opportunity to measure public sentiment by building an indicator of “trust sentiment” at the organizational or even unit level.

#### **CURRENT STATE AT CAMH**

- As described in the introduction to this section, the current QI culture at CAMH is characterized by (among other themes) goals of enhancing its reputation for commitment to clients, fostering client-centred engagement, and aiming for high levels of staff satisfaction.
- Annual client surveys – conducted by clients for clients – are being deployed to more fully understand the client experience at CAMH.

#### **RECOMMENDATIONS FOR CAMH**

**Develop a social media policy.** Consider expanding CAMH’s evolving social media strategy with a policy that supports the use of social media for quality improvement and the proactive management of potential

reputational risks. The policy needs to be flexible, to engage the multidisciplinary teams at CAMH, and be subject to periodic review. This policy should figure prominently on the CAMH home page. In the course of policy development, consider as a team how best to engage current and potential clients through social media. Consider engaging an executive champion who can signal the importance of this policy and ensure that CAMH staff and clients are familiar with it and know that they can provide feedback on it. This is critical to ensure that under-represented voices are heard as the policy matures over time.

**Integrate efforts.** Look at integrating quality improvement efforts with emerging social media tools. The QI committee of the Board, working closely with the Communications and Bioethics teams, should serve as the lead in promoting policy integration with other groups. These other groups may include Client Relations Services, Corporate Services, and Clinical Operations.

**Educate strategically.** Investigate “getting started” educational sessions on social media for clients and families. These sessions might use a “reverse mentorship” model, where non-professional young people (under 25) who are more versed in social media can coach others in how these tools can empower and engage individuals.

**Make it easy to use.** Assess the promotion of client-friendly communications technology and educate clients on how to use it. To support this effort, create a “user-friendliness” advisory body including members of the Empowerment Council, as well as current and former clients.

**Do social media research.** Consider creating a multi-disciplinary and culturally diverse research group that could determine best or leading practices for online engagement. This work should be monitored at a leadership level. Some suggested research themes include:

- As an early exploration, the group could investigate what clients and families are saying online about CAMH; determine what social media platforms they are using and which will require ongoing monitoring; gather aggregated, anonymized social media sentiment of clients and families; and report back through varied communication tools (e.g., newsletter, annual report).
- A client satisfaction theme is recommended with input indicators (e.g., use of social media tools as measured by the number of Facebook fans or Twitter followers actively engaged with CAMH’s social media channels) and outcomes indicators (e.g., client satisfaction with CAMH’s online engagement techniques).
- With time, the research group could help to design an online communications strategy, giving extra weight to under-represented voices by working with clients who suffer high rates of stigma relating to mental illness or addictions. Specifically, research could help organizations understand what’s involved in listening and anonymously aggregating online feedback in an ethical manner, as opposed to actively soliciting conversations in ways that may not respect the dignity and autonomy of web users. CAMH could explore the development of a simple ideas portal, governed by clients and clinicians, as a complement to traditional suggestion boxes and surveys. This portal, which would enable CAMH to respond to online feedback in a timely way, should leverage existing social media initiatives across Canada, such as [depressionhurts.ca](http://depressionhurts.ca) or [mindyourmind.ca](http://mindyourmind.ca), in order to draw on synergies

and best practices in privacy statements, terms of use, and governance for online dialogue in mental health and addictions.

- Lastly, CAMH could explore how to optimize social media communications. These explorations could: define boundaries for online listening activity; identify rules of transparency in online client engagement; specify what client data are being collected and how and where they will be stored; identify where clients and families are talking about CAMH in multiple languages and ethnic communities online; and create a multidisciplinary group to consider the development of input and outcomes indicators to capture these impressions.

Leading practices in online engagement indicators is the focus of Exploration 3 for CAMH.

## **Exploration 2. Monitoring online conversations about mental health and addictions**

### **WHY THIS MATTERS**

- Understanding what clients say and mean online is very challenging. The language used is more conversational, rife with jargon and slang, and may carry a range of emotional undertones such as sarcasm, excitement and disappointment. At times, points are stated so briefly that context is sometimes difficult to discern. It’s important to remember that all modes of communication, including face-to-face, involve listener bias. When “listening” online, we need to be even more aware of our biases.
- The ubiquity of social stigma about mental health and addictions makes monitoring online conversations in this area particularly challenging, since public statements online may reflect these stigma. At the same time, it’s important for service providers to understand the intensity of online comments and who is disseminating them (e.g., are they coming from individuals purporting to be experts?). Many of the biases expressed online can generate profound insights for organizations

“The question of how listening to the voices of people and their experiences with healthcare can be put to good use by organizations is a very interesting one to explore. How do we study this so that we have some evidence to back up the usage and utility of social media for quality and for informing our decisions as healthcare providers?”

Melanie Barwick, The Hospital for Sick Children Research Institute

that provide mental health and addictions services; these insights may help them confront stigma (e.g. by using the hospital’s own blog or social media channels to correct mis-information that is circulating online) and, in so doing, break down a major barrier to access for their services.

- Listening to online discussions can help healthcare organizations gain awareness of the public’s level of knowledge of basic mental health and addictions issues, such as the wide prevalence of these conditions, their severity and their serious health consequences (e.g., the risks of suicide among people suffering from schizophrenia and severe depression), their emotional consequences for family members and caregivers, and the high direct and indirect costs to society of these illnesses.

#### **WHAT THIS EXPLORATION WILL ADDRESS**

- This exploration will help healthcare delivery organizations such as CAMH appreciate how they can use fast-emerging, publicly available tools to understand online conversations. We look at web-based information beyond the traditional real-time analytics used in the corporate world (e.g., keyword spotting) to help organizations harvest the rich meaning and conceptual patterns within online content generated by clients and caregivers.
- Specific tools and strategies are recommended to accomplish this.

#### **BACKGROUND**

- The impact of social media communications on client sentiment is growing around the world. It is now commonplace for corporations and non-profit organizations alike to embrace social media and other forms of online outreach to engage with consumers, strengthen brand recognition, market and provide products and services, offer discounts, and even co-design products and services. Public- and private-sector organizations such as Starbucks, Zappos, Zynga, Google, IBM, Dell and GM are seeing social media channels as places where they can receive ongoing collaborative wisdom from clients, competitors, partners, and employees.
- Social communications are now part of an integrated communications platform for most leading client-service organizations around the world, including healthcare institutions. Keeping up with social conversations on healthcare topics can be overwhelming, especially in the context of mental health and addictions where online communities are among the most dynamic and intensely active anywhere on the web.
- Healthcare organizations, particularly in the U.S., are taking the pulse of online communities to keep up with what clients and caregivers are saying about their services. They are also going online to monitor industry trends, understand what new skills their employees need, and promote personalized services to stay relevant. Healthcare institutions are interested in staying current with conversations among their clients to build relevant connections and communities of supporters and champions.

## CURRENT STATE AT CAMH

As noted in the introduction to this section, the current focus for quality improvement at CAMH includes the following themes and priorities, among others:

- Accessibility, meaning ease of access to services, ease of access to care, and integration across sites / departments;
- Reputation for commitment to clients, through practices of responsiveness (fostering a customer service mentality, ensuring timeliness of response), teamwork (clinically and with clients), optimal knowledge exchange, and trust between clients and caregivers;
- Client-centred engagement with the goal of understanding clients to influence change and improve processes;
- High levels of staff satisfaction and morale about their work environment, including client-staff safety, communications and overall quality of care.

## RECOMMENDATIONS FOR CAMH

**Ensure transparency.** Look at creating a policy of full disclosure for monitoring processes so the public is aware of the institution's activities and plans. Engage the organization's ethics board and client groups in the creation of this policy. Review the policy on an ongoing basis. Do not collect personally identifiable information (such as Myspace or Facebook IDs) and do not store any URLs housing information collected. Aggregate and anonymize all data collected, even if found on open-access blogs.

**Engage experts in social media analysis.** Consider exploring relevant natural language strings in multiple languages (in [Boolean format](#)), tracking these phrases on various online multi-ethnic, open-access forums (e.g., multi-paragraph blogs versus 140-character tweets) and weighting them differently to reflect the linguistic, sex and ethno-racial representation of the community served. Consider monitoring the “decibel level” of these language strings to see which are rising or falling in online visibility. Learn the process of sentiment analysis (described in CAMH Exploration 3) conducted in an ethical and sensitive manner. Before

taking action based on this new knowledge, however, be sure to involve a quality improvement expert in any review committee that evaluates, and potentially acts upon, the stories gathered and aggregated anonymously.

### **Use targeted listening strategies for different audiences.**

Consider segmenting different kinds of conversations on various topics to hear a range of perspectives. Examples of listening strategies might include:

- *Review and reconcile.* Social media can be used as a tool to engage, empower, and create quality improvement dialogue among clinical staff, clients and families. For the purpose of monitoring discussions, this means reviewing discussions around the various, evolving meanings of mental health and addictions, and reconciling different views.
- *Listen to clinical talk.* Consider listening to emergent ideas and dynamic topics around mental illness and addictions, and about novel, client-driven therapies (e.g. off-label uses of approved drugs or non-drug interventions). Identify online talk about overlapping chronic conditions that may require specialized attention in the development of new programs (e.g., to address restrictive eating habits) or that may be gaining acceptance as new diagnoses within the scientific community.
- *Listen to stigma talk.* Consider listening to discrimination and stigma talk online. For example, organizations might ask: How are clients and people talking online about discrimination related to mental health and addictions? What anti-stigma initiatives are gaining traction in Canada and around the world (such as the U.K.-based magazine “[One in Four](#)”)? How can we emulate best practice and connect with successful online initiatives?
- *Follow trends.* Look into capturing client-driven ideas in mental health and addictions. Examples include [mood-tracking tools](#), self-experimentation with therapies with little or no peer-reviewed evidence to support efficacy, and “pharmacovigilance 2.0” (online self-reporting of medication side-effects).

“Social media offers healthcare organizations an opportunity to understand patients’, families’ and kids’ fears, and a way you can redesign your care based on information you’d have no other way of finding out. We’ve seen it work, and it was incredibly innovative.”

Cathy Fooks, The Change Foundation

### **Exploration 3. Measuring social media engagement in mental health and addictions**

#### **WHY THIS MATTERS**

- Word-of-mouth marketing has taken on new meaning in today’s online reality, in healthcare as in the corporate world.
- Healthcare organizations are still learning how to measure engagement with key influencers, who can help build – or break – trusted relationships through their online commentary about their experience with healthcare services.
- Measuring online engagement – beyond traditional measures such as website hits – is critical if healthcare delivery institutions want to understand how effectively they are reaching out to key online influencers and building trusted relationships with clients.

#### **WHAT THIS EXPLORATION WILL ADDRESS**

- By measuring the impact of real-time client and caregiver stories told online, provider organizations could present these stories of success and failure, and their empirical impact over time, in accountability or internal strategy tools such as dashboards and annual reports.
- From dashboards of real-time client narratives, aggregated in a way that supports authentic engagement metrics, healthcare organizations could learn to: improve system integration; introduce reward programs or implement remediation efforts; support internal quality improvement practices; and be accountable to stakeholders.

- Healthcare organizations can conduct sentiment analysis (a systematic review of opinions expressed online) in an ethical, low-cost manner.

#### **BACKGROUND**

- Healthcare resources are scarce, and investments are continuously and carefully evaluated using best-practices such as [balanced scorecards](#).
- Measuring return on investment in social media is a novel and evolving area. Many organizations inside and outside of healthcare have attempted to explore social media but have questioned the investment.
- The websites of most healthcare organizations today are vehicles of one-way communication. Like other industries, healthcare has traditionally adopted a “numbers model” to measure the impact of their online communication strategies, measuring website traffic, page views and number of clicks.
- The rise of social media has transformed website visitors from consumers of information to people who look for interactive communication and engagement. This is especially relevant in the mental health and addictions setting, where engagement matters to establishing trust in a therapeutic relationship affected by intense social stigma.

- Leading social media companies increasingly do not measure page views (the “numbers model”); instead, they measure engagement through such things as trends in the amount of time clients spend on the interactive elements of the site (the “relevance model”). In the commercial world of social media sites, these metrics have real impact; the market value of social media companies such as Myspace and Facebook can rise or fall depending on their engagement metrics. A shift from the numbers model to a relevance model – using a suite of engagement measures – is evolving to become best practice.
  - One blogger, [Clay McDaniel](#), has recently summarized three types of engagement metrics that matter, and applied algorithms to calculate them in trendlines. These metrics are: total online community size (sCRM), monthly referred social traffic (sTraffic), and social monthly impressions (sMI). We feel these can be adapted to healthcare, and we describe how they are calculated in Table 1.
  - Healthcare – which is by definition an interactive service – needs new measurement models such as those mentioned above to understand the impact and return-on-investment of interactive online communication strategies.
- Camh.net’s Worldwide Traffic Rank (by Alexa) primarily comes from Canada (44.7%), France (5.9%) and the United States (17.1%).
  - Camh.net has a relatively good traffic rank in Scarborough (#871).
  - Camh.net has a “bounce rate” of roughly 60% (i.e., 60% of visits consist of only one page view).
  - The average visitor’s “load time” for Camh.net – 1.256 seconds – is considered fast; 74% of sites load more slowly.
  - Compared to the average demographics of Internet use overall, Camh.net is visited more frequently by women 55 – 64 years old.
  - Top search queries driving traffic to the Camh.net website are: referrals from other websites reached by the user (1.03% of the traffic) and the terms “oxycontin” (0.91%), “crystal meth” (0.56%), “bipolar symptoms” (0.46%), “cocaine lasting effect” (0.32%), “depression” (0.31%), “addiction centre” (0.3%), “marijuana” (0.3%), and “parent suicide” (0.29%).

Moving toward a **relevance model**, we can begin to assess online engagement using the following metrics:

### CURRENT STATE AT CAMH

Using a **numbers model**, we can assess the organization’s online penetration (as of October 2010) in the following ways:

- The Centre for Addiction and Mental Health has a “social media enabled” website ([Camh.net](#)) with prominent links to YouTube, Facebook, CAMH podcasts and Twitter channels.
- Camh.net is ranked #277,816 (June 2, 2010) in the world according to the three-month Alexa rankings (a free web-traffic ranking service). Though the precise accuracy of ranking by [Alexa.com](#) is disputed (there are other, fee-based services such as comscore.com), it is generally felt that a website with a global Alexa traffic ranking of 1 million or better can be considered among the most popular and highly trusted by other websites with a similar focus.
- When measuring online presence, the existence of sites with similar domain names – Camh.org (which belongs to the U.S. healthcare organization Kaiser Permanente) and Camh.com (a museum) – interfere with the easy distillation of online content relevant to the Centre for Addiction and Mental Health.
- As of January 2011, CAMH’s Twitter account ([@CamhMediaUpdate](#)) had 1,194 followers (up from 876 in September 2010) and had been “listed” 106 times by other people (compared to 86 in September 2010).

- Using more advanced social media monitoring tools during the project period, the keyword string “Centre for Addiction and Mental Health” received 1,443 news mentions, 884 blog mentions, 549 tweets (an estimated number because Twitter feeds are changing minute by minute), and 185 message board postings.
- Topics and themes of conversation change depending on the medium.

### **RECOMMENDATIONS FOR CAMH**

**Use meaningful engagement metrics.** Consider revising current methods of evaluating the organization’s communications to ensure that the adoption of social media metrics has a positive impact on the QI culture at CAMH. Explore, refine, invent and share metrics with a view to tracking meaningful client engagement, and monitor how the organization is using these metrics to foster quality improvement.

**Develop indicators with the relevance model in mind.** Given that CAMH is already using social technologies, consider shifting from a numbers model to a relevance model in the type of indicators being used to track trendable activity. Enable strategies to evaluate social media usage and uptake that will support board and upper management decision-making.

**Consider engagement metrics used by other sectors.** Look at what is being done to measure social media impact in areas beyond healthcare. Some of the metrics currently being used are shown in Table 1.

**Understand the value and limitations of sentiment analysis as a quality improvement tool.** Sentiment analysis involves mining open-access content on blogs, online commentary and message boards – where these comments are cached openly on search engines. As in traditional analysis of print news articles, sentiment analytics scores each online narrative as “negative,” “positive” or “neutral” based on every sentence in the text as a single unit of analysis. (See sidebar p. 18 for more detail.)

**TABLE 1. METRICS FOR SOCIAL MEDIA ENGAGEMENT**

<p><b>Client engagement metrics</b></p>	<ul style="list-style-type: none"> <li>• Total online community size (sCRM) = number of Facebook fans + number of Twitter followers + number of unique blog users + number of YouTube channel subscribers + all other registered managed community members</li> <li>• Number of new “friends” after 30/60/90 days</li> <li>• Number of friends met online whom users have met offline</li> <li>• Number of friends met online whom that member has subsequently collaborated with</li> <li>• Number of ideas that the friend has received and then used in his or her care plan</li> <li>• Number of mentions (tracked via blog search engines)</li> <li>• Positive-to-negative sentiment ratios on major search engines</li> </ul>
<p><b>Engagement activity metrics</b></p>	<ul style="list-style-type: none"> <li>• Percentage change in monthly referred social traffic to site (sTraffic), e.g., unique website users referred via Facebook, Twitter, YouTube, owned and third party blogs, and forums</li> <li>• Percentage change in social monthly impressions (sMI), e.g., number of mentions of your hospital on blogs, forums, Twitter, etc. within a given month</li> <li>• Number of conversations</li> <li>• Number of client posts (ideas/threads)</li> <li>• Number of groups (networks/forums)</li> <li>• Number of comments and trackbacks</li> <li>• Number of tags/ratings/rankings</li> <li>• Time spent on site</li> <li>• Contributors (active contributors, word count, referrals)</li> <li>• Completed profiles</li> <li>• Number of connections (between members)</li> <li>• Ratios: members to contributors, posts to comments, completed profiles to posts</li> <li>• Frequency: of posts, comments; by day, week, month, year</li> </ul>
<p><b>Survey metrics</b></p>	<ul style="list-style-type: none"> <li>• Satisfaction with experience; affinity “fan approval”</li> <li>• Quality and speed of issue resolution/response</li> <li>• Relevance of content, connections</li> </ul>
<p><b>Program development</b></p>	<ul style="list-style-type: none"> <li>• Number of new program ideas and percentage of ideas from clients, staff, community</li> <li>• Cycle time from idea to development initiation (e.g., from client blog post to policy implementation)</li> <li>• Rate of adoption of new ideas from online community versus traditional sources</li> </ul>

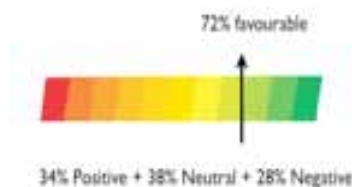
# SENTIMENT ANALYSIS

## HOW IT WORKS

- Google and other search engines are amenable to web algorithms that crawl the web for relevant information using natural language (i.e., search terms or phrases) and “semantic entity extractors” – web tools, such as [OpenCalais](#), that reliably extract concepts relevant to the content being mined.
- A search string is selected to identify content related to the organization – for example, the name of the organization. The sentiment analytics tool then searches for specific words, phrases and language constructs that are associated with positive or negative meanings in the text. In addition to searching the specified words and phrases, a complete analysis of the text and associated context is performed. For example, the word “great” is positive in the sentence, “The food at X healthcare organization is great.” At the same time, the same word becomes negative in the sentence, “The food at Y organization is not great.”

## WHAT IT LOOKS LIKE

- Our sentiment analysis for CAMH captured English language sentiment. Overall, sentiment expressed online about CAMH is generally favourable (72%), as shown in the diagram.



- In our sentiment analysis for CAMH, we found that – of the 268 doctors with clinical privileges at CAMH, as verified via the website of College of Physicians and Surgeons of Ontario – 27 (13.81%) had a profile on [ratemds.com](#) as of November 19, 2010. According to users of that doctor-rating website, CAMH scored 3.81 out of 5 in punctuality, 3.57 in helpfulness and 3.84 on knowledge, for an overall score of 3.7 out of 5. Content analysis of the 218 comments about doctors with privileges at CAMH revealed occasional concerns about service rapport with clients and wait times – concerns commonly expressed by clients at other healthcare institutions.

## ITS VALUE AND LIMITATIONS

- Sentiment analysis is valuable because, through their online comments, clients and caregivers can be considered **powerful influencers of public opinion**.<sup>1</sup> It's important to understand what impact they may be having.
- Sentiment analysis has limitations. The method carries some subjectivity, is generally unilingual, and it cannot accurately code nuanced language such as satire. It is biased toward people who feel strongly about a topic and currently tends to capture a younger demographic, although the world of online conversation is rapidly expanding to encompass narrators of all age groups.

## TRYING IT OUT

- Sentiment analysis tools will increase with sophistication over time, and there are many **free and paid tools now available**. Examples of companies offering these analytic tools include Sysomos, Radian6, and Crimson Hexagon. (The Innovation Cell does not endorse any specific tool or company.)
- From a return-on-investment perspective, our recommendation for healthcare organizations is to begin with free online tools. We also recommend piloting paid tools for short periods to determine their suitability to a particular organization. Some tools, for example, may be more focused on coding sentiment in multiple languages.
- The landscape of offerings and tools for sentiment analysis is competitive and changing by the week. A careful review of free available tools is advisable prior to engaging in a locked contract for a paid tool for a long period of time.

# Exploring Providence Healthcare

## INTRODUCTION

Providence Healthcare is a leading Toronto healthcare facility, specializing in rehabilitation for patients who have experienced strokes, orthopedic surgery, or lower limb amputation, or who require specialized geriatric rehabilitation, assessment or treatment. It also provides complex continuing care, long-term care and community outreach with a particular focus on addressing the medical, physical, spiritual and emotional needs of individuals with geriatric conditions.

To understand Providence Healthcare's current quality improvement culture and activities, we were given access to the organization's policies and processes related to quality improvement. We met one-to-one with a number of staff and also attended Lean rapid improvement events, Risk Management Quality and Safety Meetings, Inter-professional Practice Grand Rounds, and meetings related to access and flow initiatives. In addition, we held several workshops with key informants from Providence Healthcare to discover the institutional definition of quality and identify potential QI themes for social media that would be most relevant to the organization.

We found a strong organizational interest in internal communications and staff engagement and, in summary, identified the following key QI themes and priorities at Providence Healthcare:

**Corporate identity:** Providence is aiming to accelerate its organizational identity to embrace innovation and cascade a culture of innovation across the entire organization. In this context, it is recognized that transparency could be improved at the front lines, as well as at the management levels. At Providence there is a QI interest in so-called "bottom-up innovation" and in promoting a culture change from traditional to innovative.

**Education:** Staff have varying comfort levels with technology. A culture shift is necessary to help staff adopt new strategies such as e-learning and online communication tools including social media.

**Accreditation:** Discussions and new initiatives about QI are often top-of-mind during accreditation discussions.

**Continuum of care communication:** Two-way communication with providers beyond Providence Healthcare, as well as with patients returning home, is a quality improvement priority area.

**Patient flow:** The entire patient journey – from admissions, across various sites of care, and through to discharge – is a major focus of quality improvement for patients, caregivers and staff. A top priority at Providence Healthcare are the Transformation by Design initiatives developed to help patients re-adapt to everyday life after discharge. For example, there are on-site Internet cafes to help patients re-familiarize themselves with using computers, kitchens for patients to get comfortable again with preparing food, and mini-stores where patients can get used to reading grocery labels again. In addition, Providence also has a Health Navigator role – a person who tracks a patient's health and progress once he or she is discharged and checks in with the patients at four and 12 months. Providence's Health Navigator monitors various aspects of the patient journey, things such as return trips to the hospital, ambulatory care appointments, safety at home, and health status of the patient.

**Staff empowerment and satisfaction:** Promoting the ability of staff to contribute to quality improvement and craft their own solutions to problems is becoming increasingly important.

**Patient participation:** Current processes are starting to identify opportunities to include the patient's voice more prominently in quality improvement initiatives. Patient feedback is gathered through traditional lines of communication, both formal and informal. However, the organization recognizes that some concerns may remain unaddressed, either because patients are unable to voice their own concerns (and rely on families and caregivers to identify issues and speak on their behalf), or because patients and families may not feel comfortable giving feedback without fear that their comments might negatively affect their care.

“I think that – through social media – patients, healthcare providers and family caregivers will essentially be creating a database that can be tapped for the evidence that we are seeking, both for the overall direction of the healthcare system as well as for the specific care of a particular patient and for others in similar circumstances.”

Tom Sommerville, Ontario Ministry of Health and Long-Term Care

With these priorities in mind, we developed two field explorations for Providence Healthcare to illustrate the potential power of social media for quality improvement. Based on leading practices, we present recommendations for Providence and other organizations considering similar issues.

**Exploration 4:** Social media tools to improve patient engagement and awareness about transitions in care

**Exploration 5:** Social media strategies to facilitate a culture of continual collaborative innovation

#### **Exploration 4.** **Social media tools to improve patient engagement and awareness about transitions in care**

##### **WHY THIS MATTERS**

- The new ethos on the web, particularly in customer service, is to engage in open, transparent conversations about services and products. An increasing proportion of product and service reviews in all industries, including healthcare, now reside on Facebook.
- Gaining insight about a patient population by condition, interests and geographic location through sentiments expressed online is increasingly important to healthcare organizations. However, many are shutting down access to social media from their institutional networks and preventing open dialogue among staff and patients.

##### **WHAT THIS EXPLORATION WILL ADDRESS**

- We describe how Providence Healthcare could be better prepared to have meaningful conversations with patients about transitions in care which could contribute to their overall experience of care.
- We discuss opportunities to enable social media channels at Providence Healthcare.

##### **BACKGROUND**

- Staff at Providence Healthcare have a high level of awareness and sensitivity about the importance of ensuring patients know how to access care and adopt self-care techniques after discharge.
- Patients are increasingly going online to seek information, share opinions, and select treatments and providers. They are using the Internet not only to access information, but also to connect with other patients and form online communities. Popular examples include [Patients Like Me](#), a disease-community site where patients can share data, and [Diabetes Mine](#), a popular site for diabetes patients and caregivers.
- As we learned during our structured environmental scans (described in Part 1 of this guide), the Mayo Clinic has been proactive in using new tools for patient engagement and outreach. Since it began podcasting in 2005, the Mayo Clinic has made significant progress

in the use of varied social media tools to share in-depth medical information and gather communities of employees, patients and their families. The Mayo Clinic has leveraged social media tools such as blogs, Facebook pages and Twitter feeds to facilitate internal employee communications – for example, around the organization’s strategic plan. The Mayo Clinic launched its [Center for Social Media](#) in July 2010 with a vision to “be the authentic voice for patients and health care professionals, building relationships through the revolutionary power of social media.”

### **CURRENT STATE**

- As noted in the Introduction to this section, Providence Healthcare recognizes the need to be on a continuous path to hearing the patient’s voice on a more sustained basis, especially upon discharge, to improve the quality of the care journey. Patient feedback is gathered through traditional lines of communication, both formal and informal and new opportunities are being identified. The organization recognizes that some patient concerns are not being addressed because some patients are not able to speak for themselves, or because they or their families may not feel comfortable expressing concerns.
- After piloting several social media tools (including Twitter, Blogger and Facebook), Providence has identified Facebook as the most effective tool for their target populations and strategic quality improvement purposes. As of January 2011, the majority of Providence’s updates on its Facebook page were blog-like updates and pictures profiling Providence staff working in relief efforts in Haiti.

### **RECOMMENDATIONS FOR PROVIDENCE HEALTHCARE**

**Use social media tools more aggressively** to improve patient transitions within the institution and back into the community. This requires a “push” technique of self-care information targeted to caregivers and patients, and educational sessions prior to discharge on the use of these tools. A “social media cafe” at Providence Healthcare could be easily integrated into the existing physical Internet cafe. Patients and caregivers can be encouraged to use anonymous IDs on social media channels to feel safe in their communications.

**Avoid duplication of effort.** Though the organization has a social media policy, the use of Facebook, Twitter and the Providence blog remain largely unpublicized; they are not promoted on Providence Healthcare’s website. This lack of diffusion may lead to duplication of social media efforts across different initiatives (for example, a fundraising initiative and a corporate communications initiative) – a common problem in organizations inside and outside of healthcare. Any QI initiative using social media should begin with a view to “who’s doing what” internally and how social media synergies can be developed and sustained.

### **Promote and grow the organization’s social media presence.**

Providence Healthcare’s leadership should prominently announce its Facebook page to patients and staff. By expanding the organization’s Facebook presence, Providence Healthcare can easily and selectively aggregate content about the organization posted with other resources on the web and could serve as one of the primary channels for Providence fans to share their stories. Conversations and comments gathered from Facebook can help inform ideas and themes for Providence Healthcare’s future rapid improvement events and Transformation by Design workshops. Following are some recommendations to grow the existing Facebook community, personalize the conversations, and drive traffic to the Providence Healthcare website:

- Log in to Facebook every day. Respond to any comments or posts that the community has made.
- Remember the audience and what topics might be most relevant to them at the time of posting.
- Post regularly. Offer something new every day, such as links to resources of interest, photos, videos, or news.
- Add some variety and levity to the posts; not all content has to be serious.
- Find a balance between posting too much or too little.
- Be friendly, use informal language, and engage with fans in a social way. Personal narratives are particularly engaging.

“ In the patient world, people have an internal motivation to go to the web, to seek information, to share their stories, to hear the stories of others. In working with practitioners to use social media tools, when you’re trying to motivate people externally to communicate and collaborate that way, you meet with different challenges.”

Melanie Barwick, The Hospital for Sick Children Research Institute

- Ask questions to the community.
- Promote the Facebook page in all existing communications channels.

#### **Listen to online stories from similar organizations.**

Tuning in to a broader world of patient stories about rehabilitation and complex continuing care can help Providence identify what social media platforms patients like theirs are using already. This way, any social media tools that Providence creates can link to these external media (e.g., blogs).

### **Exploration 5. Social media strategies to facilitate a culture of continual collaborative innovation**

#### **WHY THIS MATTERS**

- Few healthcare organizations have social media strategies and, of those that do, few address internal collaborative innovation to generate new ideas to improve quality of care and organizational effectiveness. Even fewer know how to use their social media strategies adeptly to improve the delivery of care.
- Across industrialized countries, fiscal restraint has resulted in little new money for the healthcare system, which means that hospitals need to collaborate creatively (internally and externally) to make the most effective use of their resources.

#### **WHAT THIS EXPLORATION WILL ADDRESS**

- Organizations will be able to consider and plan a social media strategy to leverage low-cost tools for internal collaborative innovation to drive quality improvement.
- We describe how Providence Healthcare could be better prepared to listen to social media and draw lessons, in real-time, that will inform existing quality improvement programs through collaborative innovation.

#### **BACKGROUND**

- Collaborative innovation refers to teams of people with a collective vision, using web-based tools to collaborate in achieving a common goal by sharing ideas, information and workflow. Tools may include social media software such as blogs and wikis. Collaborative innovation benefits from a corporate environment that encourages people to work together on decisions. For example, staff performance reviews should reward people for collaborating effectively.
- An effective [collaborative innovation network](#), as described in Wikipedia, should operate in a way that respects five essential elements: (i) evolves from collaborative educational teams, (ii) practices sound ethical principles, (iii) is based on trust and self-organization (meaning it grew from a need, rather than a central authority), (iv) makes new knowledge accessible to everyone, and (v) champions honesty and transparency.

- In many jurisdictions, legislation requires that healthcare organizations undertake sustained quality improvement processes; these processes can be enabled by a culture of innovation that cascades through the organization, to transform all levels and departments.

### **CURRENT STATE**

- As noted above, Providence has identified Facebook as the most effective social media tool for community and staff engagement, and for strategic quality improvement. However, staff have varying comfort levels with communications technology, including social media.
- Promoting a culture of innovation among staff across the organization is becoming increasingly important, and Providence Healthcare recognizes that greater transparency at the front line and management levels is needed to support bottom-up innovation.
- There are sustained quality improvement processes already in place, including the use of Lean methodology and Providence Healthcare’s own Transformation by Design program.

### **RECOMMENDATIONS FOR PROVIDENCE HEALTHCARE**

**Define and disseminate the concept of collaborative innovation** in a manner that matches the organization’s values, focus and culture. Use an in-person forum and a social media forum (such as a wiki) to help build the definition organically.

**Use social media tools to augment quality improvement initiatives** and to support a culture shift to collaborative innovation. For example, Providence Healthcare can use its Facebook account to spur staff engagement and support for ongoing and future QI activities.

**Use social media to increase integration across the organization.** As an internal communications channel, social media can help to break down barriers between sites and departments.

### **Showcase the value of collaborative online innovation.**

Small workshops can be an excellent way to address potential barriers to the adoption of collaborative techniques. Pilot projects can demonstrate how an idea that emerges from an “innovation cell” – sponsored by an executive or within a unit – can take flight when it has been nurtured in a collaborative space online.

### **Determine how staff are already using online collaboration, and how comfortable people are.**

Find out what online platforms (e.g. Google Docs, wikis) staff are using for collaboration. Where are staff talking online? Consider how those channels can be used to gather feedback about collaboration through social media, as projects develop. Gather the true feelings of staff, recognizing that some people may be uncomfortable sharing concerns about demands on their time or a fear of technology. Consider financial support for an independent collaborative space online where staff would be assured that their comments would not be used for the purposes of discipline.

**Create opportunities for staff growth.** Increase access to online learning tools and self-directed learning. Measure hours spent using these tools, self-rated satisfaction and self-assessed improvement.

### **Foster connections with community agencies for quality improvement.**

Collaborative innovation forums – akin to [IBM’s “Innovation Jams”](#) – can promote efficiencies across multiple organizations through improvements such as shared forms, better communication and reduced redundancy.

### **Use social media to support Providence Healthcare’s academic research mission.**

Collaborative online tools can be a forum to promote the organization’s innovation and research identity, to communicate with other leaders in the field, and to exchange knowledge with community providers, partners and others in Providence Healthcare’s ecosystem.

### **Promote a culture of partnership and teamwork**

in communicating about the launch and uptake of web-based collaboration tools, especially regarding knowledge transfer with community partners and care providers.

# Imagining your future as a strategic user of social media

## SUMMARY POINTS

- Based on current trends, healthcare organizations can be expected to adopt social media tools en masse over the next few years.
- This section imagines a near-term future in which healthcare organizations become leaders in using social media to drive innovation in quality improvement, in particular to improve the patient experience.

## HOW USING SOCIAL MEDIA FOR QUALITY IMPROVEMENT MIGHT CHANGE HEALTHCARE ORGANIZATIONS IN THE NEAR FUTURE

We expect that healthcare organizations will adopt social media tools en masse in 2011 and 2012. The rate of growth in social media use by healthcare organizations in 2010 alone, as we found in our systematic scans (see Part 1 of this guide), is testament to this. This trend offers new opportunities to improve the quality of care for patients and clients. For example, it is not difficult to envision patients and clients using social media tools on their mobile phones at their healthcare organizations and for a range of purposes (e.g., to receive a blood test result for a family member or to review their own charts).

“We hope this project helps organizations see how they can harness the power of social media. This is taking information that is publicly available, that people have willingly provided about themselves. You can analyze it and think about what this information might do to change care in your organization.”

Cathy Fooks, The Change Foundation

Following are some scenarios that organizations could achieve over the near term – within three to 18 months from the time they begin to adopt some or all of the recommendations described in our field partner explorations.

### **Healthcare organizations revise their corporate values to include the values of social media.**

Like healthcare organizations, social media is about people. Social media democratizes the conversation about how to improve healthcare quality, by expanding the range of people who can be part of it. Social media reflects the reality and values of the web – individuality, equality, openness, meaningful communications, valuable cooperation, continuous learning, mutual understanding and collaboration, solidarity, universal access, ownership and control, multilingualism and the need to change for a better future. In adopting social media, healthcare organizations embrace these values which, in turn, help healthcare organizations re-define every measure of impact currently used to monitor improvement. For example, hospitals measure community participation in a wiki created to design the organization’s new strategic plan.

### **Healthcare organizations use social media tools to share personalized information with their patients and clients.**

Dedicated communications professionals at each organization use social media to tailor information for the clients they serve. Using tools like Facebook group pages, Twitter, blogs, podcasts and web meetings, organizations inform patients and clients about

wait-time bottlenecks, alerting people in real time to availability of day programs and delays in an outpatient waiting area. These online alternatives increase clients’ confidence in the organization, enhance patient and caregiver knowledge about prevention and self-care, and improve the way organizations support clients and caregivers after discharge. These new ways of communication create a fresh environment of respect, trustworthiness and transparency.

### **Healthcare organizations use social media tools to identify, enhance and prioritize themes that can support ongoing quality improvement programs.**

The low-cost strategies that healthcare organizations can use to make sense of the large repositories of self-reported health conversations available online can also be used to focus their strategic quality improvement themes. Using dashboards, free social media monitoring tools and other simple visualization tools, organizations get a sense of the different areas of interest for their patients, clients and caregivers. Such monitoring enables organizations to better understand the self-help needs expressed by clients for specific illnesses and to learn about emerging diagnostic areas.

“The big contribution of this project is that each organization can stop wondering and questioning on their own, where they should start and why they should start being part of the conversation. It brings the critical mass of knowledge together and allows the industry to do some of that questioning together and provides a platform for those conversations to take place.”

Pat Campbell, Echo: Improving Women's Health in Ontario

Mapping types of conversations about the organization (e.g., access issues versus other quality issues) helps organizations extend their support initiatives at social service agencies. Listening to patient/client conversations also helps organizations to endorse advocacy for special causes by patients/clients and caregivers, and to understand the prevalence of alternative or complementary treatments and off-label uses of medications.

### **Healthcare organizations ensure that all of their social media platforms are quantifiable.**

By adopting indicators of social media engagement – to measure, for example, the number of conversations in online forums or the themes identified by monitoring social media content – healthcare organizations provide their leadership with a new opportunity to root a strategic vision in organizational dialogue in ways that continuously improve performance and quality. Over time the engagement indicators become aligned with the organization's mission and vision and support the shaping of strategy and policies in corporate communication, access to health services, and the uptake of health promotion campaigns (e.g., flu prevention).

### **Healthcare organizations establish themselves as social media leaders in ethical and transparent online monitoring.**

By creating guidelines on the ethical principles and implications of monitoring health dialogue on blogs, websites and other social media platforms, healthcare organizations promote best practices in the protection of patient/client and caregiver privacy and respect for concerns about data use. For example, through their carefully crafted social media policies, healthcare organizations help guard against the unethical practices of selling personal information to third parties or tracking the other websites visited by individuals coming to the organization's site.

### **Healthcare organizations allow more patients and clients to compare perceptions about the quality of care within and between organizations.**

Adopting the openness and transparency of social media, healthcare organizations publicly share the continuous patient/client feedback gathered through social media. This allows patients and clients to compare experiences of care within the organization and between organizations, giving them a broader perspective on quality of care.

Sharing this feedback enables meaningful online conversations among organizations and patients, and a capacity to engage in meaningful online conversations emerges as a new gold-standard indicator in quality improvement. The sharing of continuous patient/client feedback gains increasing acceptance within the policy, clinical and patient/client communities and may inform legislation or regulations related to patients' experiences with the healthcare system.

### **Healthcare organizations build an innovation community through the use of social media.**

As a first step, organizations reserve time for free-ranging innovation and open-space brainstorming for all levels of staff. This begins to build an innovation community that extends to all corners of the organization by promoting, through formal communications, the idea that anyone can be a leader and an innovator. By fostering a culture of innovation, organizations also promote inter-professional collaboration through social media as a core value. Organizations protect time during QI meetings to learn about social media and its benefits and challenges for enabling collaborative innovation among staff.

Social media platforms such as wikis and “ideation platforms” like [InnoCentive](#) enable staff to identify the most pressing problems and provide solutions; these platforms help people engage with like-minded individuals and discover how to reward change, and organizations can use them to find out whether staff concerns are being met. Through the creation of pilot projects in collaborative innovation online, healthcare organizations become leaders in using these tools to foster improved connections with community agencies and quality improvements (e.g., shared forums, better communication and reduced redundancy) across the trajectory of care.

# Ensuring uptake and sustainability

## **SUMMARY POINTS**

- Peer-reviewed research has identified conditions of success for healthcare quality improvement, and some jurisdictions, notably Ontario, have embraced these conditions in legislation.
- Healthcare organizations can leverage social media to support achievement of these conditions.

## **DELIVERING QUALITY BY DESIGN ... WITH THE HELP OF SOCIAL MEDIA**

We have made recommendations to our field partners to enhance their use of social media for quality improvement purposes, and we have sketched out what the near future might look like for like-minded organizations that want to leverage social media to enrich their quality improvement cycles.

What will it take to get there from here? In [High-Performing Healthcare Systems: Delivering Quality by Design](#), Ross Baker and colleagues describe thematic conditions for sustained success in QI-focused organizational change. These conditions, determined after a systematic international review, are beginning to be embraced by QI-focused legislation such as Ontario's *Excellent Care for All Act*.

“Efforts to improve performance at the front line depend on a range of supports both within organizations and from the broader environments in which they operate,” write the authors of *Quality by Design*.<sup>2</sup> These supports are captured in a list of nine key attributes (such as organizational culture, leadership, and structure) and related elements that describe what successful organizations look like. In this final section, we revisit our five field-partner explorations and consider how, in each case, the use of social media might support the achievement of these recognized conditions for sustained quality improvement.

### Exploration 1: Mental health and addictions institutions: reputation and QI

This exploration requires organizational attention in the areas of **strategy and policy**, where – according to the attributes described in *Quality by Design* – successful organizations do the following:

- Leaders set clear priorities for improvement.
- Improvement plans are integrated in the overall strategic plan as the means to achieve key strategic goals.
- Leaders demonstrate both constancy of purpose and flexibility.
- Operational policies and procedures, including human resources policies, provide incentives, rewards and recognition.
- Incentives, rewards and recognition are aligned to support improvement work.

### HOW COULD SOCIAL MEDIA SUPPORT THESE CONDITIONS FOR SUCCESS?

- Quality committees of boards could report to their organizations on quality-related issues using anonymized stories captured from social media such as blogs and social rating sites (e.g., Yelp). This would be similar to how organizations have in the past internally circulated to decision-makers examples of public commentary about the organization, such as letters to the editor in newspapers.
- Where executive compensation is linked to achieving improvement targets set out in the annual quality improvement plan, these targets could be matched to social media engagement measures, such as the number of ideas collected from the community in response to a needs assessment question posed to the public via the organization's Facebook account.
- Patient / client and caregiver surveys to assess satisfaction with services could be supplemented by social media activities designed to listen online to client sentiment.
- The sustained use of social media such as Facebook in the organization's evolving client relations processes could enable greater transparency as the organization addresses and responds to clients' issues in ways that reflect the organization's declaration of values.

## Exploration 2: Monitoring online conversations about mental health and addictions

In our field work, this exploration was specific to mental health and addictions, but it could easily apply to other kinds of healthcare organizations. It requires organizational attention in the areas of **resources and structure**, where successful organizations do the following:

- Organization provides time for staff members to learn skills and participate in improvement work.
- Financial and material resources and human resources are available for improvement.
- A core group of improvement experts is available to help teams and individuals.
- Quality improvement department coordinates and supports initiatives.
- Roles and responsibilities for improvement are clearly articulated.
- Steering /oversight committees provide direction.
- Teams and teamwork are part of the organizational structure.

### HOW COULD SOCIAL MEDIA SUPPORT THESE CONDITIONS FOR SUCCESS?

- Quality committees of boards could draw on engagement metrics (see examples in Table 1, p. 17) to better understand how target populations are accessing priority services. These metrics could be segmented to reflect changing levels of engagement with new or underserved client groups.
- Ultimately, social media engagement measures could be correlated with other outcomes indicators such as patient satisfaction in order to continuously refine measures and ensure they are relevant to the values of the organization.

## Exploration 3: Measuring social media engagement in mental health and addictions

This exploration requires organizational attention to **communication channels**, where successful organizations do the following:

- Organization has vehicles to communicate with stakeholders regarding priorities, initiatives, results and learning.
- Ample forms of communication are provided.

### HOW COULD SOCIAL MEDIA SUPPORT THESE CONDITIONS FOR SUCCESS?

- Patient /client and caregiver surveys to assess satisfaction with services could be undertaken through information captured online.
- Real-time public consultation (e.g., through social media channels such as Ning or Facebook) can help organizations craft a “declaration of values.”

## Exploration 4: Social media tools to improve patient engagement and awareness about transitions in care

This exploration requires organizational attention in the areas of **communications channels and information**, where successful organizations do the following to guide decision-making:

- Organization has vehicles to communicate with stakeholders regarding priorities, initiatives, results and learning.
- Ample forms of communication exist.
- Needed clinical and administrative data are readily available.
- Information is available to support improvement.

### HOW COULD SOCIAL MEDIA SUPPORT THESE CONDITIONS FOR SUCCESS?

- Quality committees of healthcare organization boards could leverage insights gained from social media “information capture” tools (e.g., Twitter) to dynamically assess patient/client and caregiver needs.
- Patient/client and caregiver surveys to assess satisfaction with services, especially in relation to transitions of care, could be validated or complemented using the information gathered from social media channels.
- Processes to address issues in patients/clients’ experiences could draw on social media forums to gain insights about patient/client needs during transitions in care.

### Exploration 5: Social media strategies to facilitate a culture of continual collaborative innovation

This exploration requires organizational attention in the areas of **culture and leadership**, where successful organizations do the following:

- Organizational leaders support and expect learning and innovation.
- Organizational leaders value staff and empower all members to participate.
- Organizational leaders focus on customers and patients.
- Organizational leaders value collaboration and teamwork.
- Organization leaders are flexible.

- Strong administrative leadership provides role models for organizational values.
- Leadership celebrates and even participates in improvement initiatives.
- There is emphasis on developing, fostering and inclusion in decision-making for clinical leadership and champions.
- Board sets expectations by asking for reports on improvement initiatives and results.
- Board provides continuity of expectations if administrative leadership changes.

### HOW COULD SOCIAL MEDIA SUPPORT THESE CONDITIONS FOR SUCCESS?

- Quality committees could report to the board on “collaborative innovation” metrics (e.g., percentage of time by department devoted to collaborative innovation; unit-level self-assessment of culture and readiness for collaborative innovation).
- Staff surveys conducted via social media to assess satisfaction with employment experience could be correlated with related measures of the impact of collaborative innovation to better understand such internal concerns as turnover rates and recruitment trends.

## CONCLUSION

Whatever your level of expertise and experience in the world of online communication, and whatever your role in ensuring your organization understands and responds to the people you serve, we hope this guide and the dynamic eToolkit – unique repositories of the latest information about social media use in healthcare – will inspire you to tap the tools that social media has to offer. Whether you need to know how to deliver on legislative requirements to demonstrably improve the patient experience, or where best to invest to reach your QI goals, we encourage you to consider how you could mine social media’s deep vein of insight into what patients and caregivers think, feel, know, want and expect.

“ I think the biggest learning is that healthcare organizations generally realize that the Internet is increasingly social in all respects and is an enormously powerful tool. Healthcare organizations are using social media to advance charitable initiatives, to push out research to stakeholder groups, to collaborate on efforts internally, but we found an early-stage trepidation to dip into the waters of quality improvement using social media.”

Neil Seeman, Health Strategy Innovation Cell

Many of your patients are already online – and the next generations of patients and caregivers will conduct more and more of their daily activities through social media. We are confident that, by joining them there, you can open new doors to patient engagement, particularly by listening to how they define what quality means in their own healthcare experience.

Many healthcare organizations are embracing social media channels to augment their communication tools – an encouraging start, a way to test the waters. But many hesitate about going further, to experiment with social media as a research tool and to test its potential for supporting and enriching their quality improvement cycles.

The hesitation to wade deeper is understandable. It takes time and expertise to stay on top of this fast-moving world, and both may seem in short supply. However, you may have more capacity than you think. We learned from our field partners that one of the most strategic benefits of announcing your intention to create a social media strategy is that people start stepping forward, eager to help, from all parts of the organization. Internal champions for the use of social media likely already exist in your organization. You just have to find them, and they may be people with job titles far afield from communications.

A few words of advice as you get started:

First, know that you're not alone. Our two field partners and other organizations are showing that it can be done. They explored, experimented and evolved, and are moving on their experience. And again we thank them for sharing their evolution with us, and now with you.

Second, start by asking the extra questions: Could social media help us achieve our objectives? Where are we starting from? How do we go about embedding social media activities into our processes? What do we need to know? What should we be watchful for? Plan to integrate social media strategically. Try it out in a prudent and phased approach – across divisions, units, programs – wherever it can help the organization meet its goals. Then, by adopting some of the impact measurements suggested in this guide, measure your interim success, and try a different strategy if your current one (e.g., a Twitter feed for research dissemination) is not gaining traction with your target audience.

“The benefit of directly listening to patients and involving a diversity of voices is the opportunity for insight into the lived experience of the people that we’re providing service to. It’s very difficult for someone to sit in a boardroom and decide how best to deliver care and services to a population.”

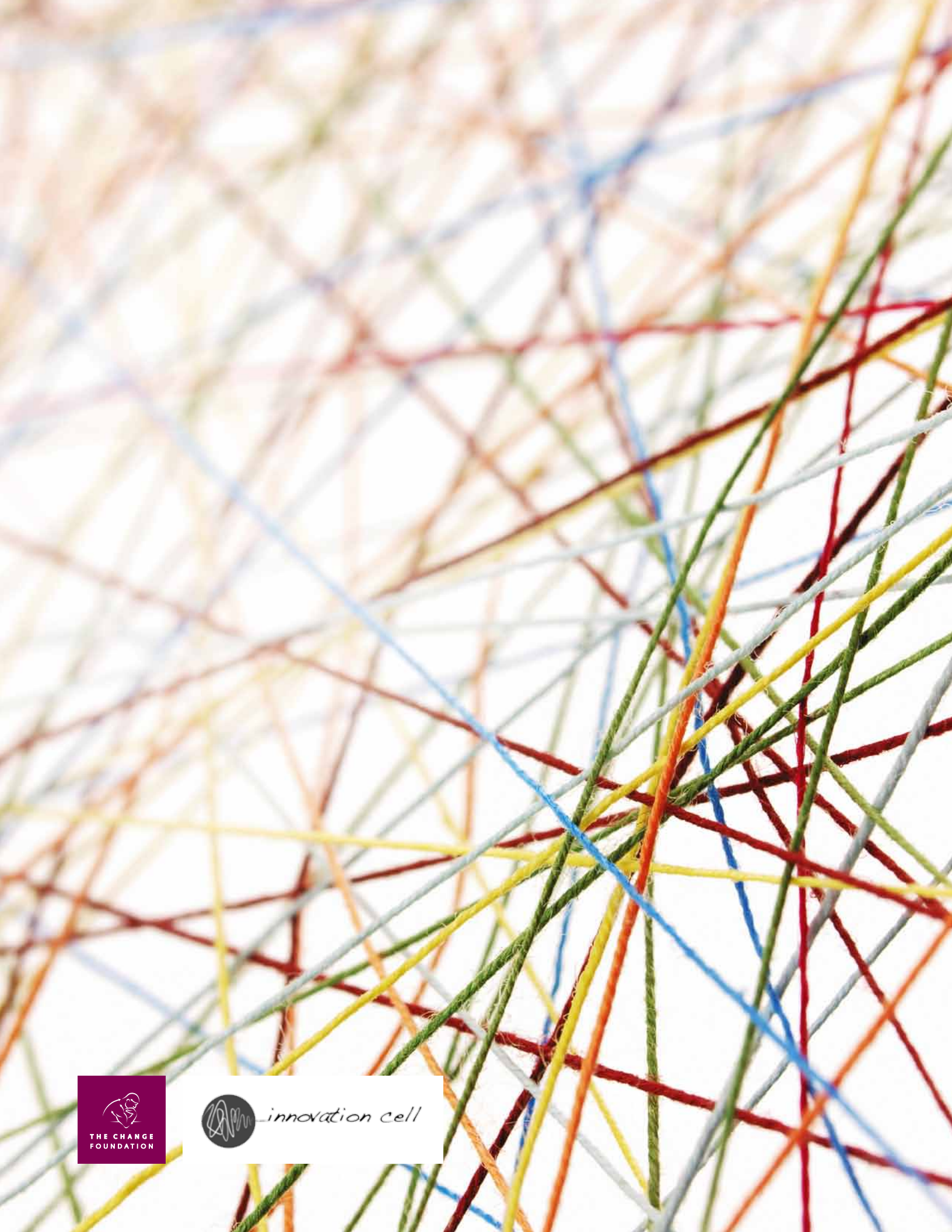
Rob Fraser, graduate nursing student

Third, recognize that you are indeed experimenting, and expect to learn and adapt as you go. Major corporations in the commercial world have advised us that their initial social media efforts were fundamentally experimental and they changed course based on feedback from users and after learning about the importance of internal champions.

And finally, please share this guide within and beyond your organization, and explore and engage in the eToolkit. Please talk about these tools with your colleagues and with your patient and caregiver groups. And tell us if they have helped you, and how. Thank you for your future collaboration in the new world of social innovation in healthcare. In the spirit of social media, you are not just a reader of this guide; you are a co-creator.

## REFERENCES

- 1 Seeman, N. 2009. [Inside the health blogosphere: quality, governance and the new innovation leaders](#). *Electronic Healthcare* 7(3): 101-108.
- 2 Baker, G.R., A. MacIntosh-Murray, C. Porcellato, L. Dionne, K. Stelmachovich and K. Born. 2008. [Learning from high-performing systems: quality by design](#). In: [High-Performing Healthcare Systems: Delivering Quality by Design](#). 11-26. Toronto: Longwoods Publishing.



*innovation cell*