



Leveraging Social Media to Drive Health Care Improvement in BC

A Summary of Findings and Insights for Implementation

BC Patient Safety & Quality Council
and
eHealth Strategy Office

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a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

Faculty of Medicine
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BC PATIENT SAFETY
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EXECUTIVE SUMMARY

The BC Patient Safety & Quality Council and the University of British Columbia eHealth Strategy Office partnered to explore how social media can be applied in the BC context for improving the quality of health care and patient safety. This report outlines the various ways social media adds value to improvement strategies based on the feedback received from health care providers and the public, a published and grey literature review, and consultations with various health care working groups.

SOCIAL MEDIA FOR ENGAGING PATIENTS, FAMILY MEMBERS, AND THE PUBLIC

Social media adds value to strategies to improve health care through patient, family member, and general public engagement by: a) increasing **access to information** and ability to receive the information in real-time; b) increasing **opportunities for education** where patients and family members can easily access credible health information and interact with experts; c) its ability to easily and inexpensively **expand the reach** of a message to a larger audience through networking capabilities; d) its ability to extend the reach of those who want **to connect** with patient groups; e) providing opportunities for patients to **support** each other and become **empowered** to take control of their own health; f) the **facilitation of two-way conversations** between the public and health organizations for patient-centered care; and g) the facilitation of the building of **public trust** through transparency in communication.

SOCIAL MEDIA FOR ENGAGING HEALTHCARE PROVIDERS FOR HEALTH CARE IMPROVEMENT

Social media adds significant contributions to strategies to improve health care through engaging health care providers and health care organizations by: a) supporting health care professionals **to collaborate** with each other over platforms that bridges distances and settings; b) **providing alerts** such as reminders to family physicians to conduct medication reviews; c) providing a venue for **engaging with patients and the public** - such as for disseminating targeted messages to specific audiences and **listening** to the public to collect feedback on services and policies; d) increasing efficiency of current systems such as marketing through expensive traditional outlets; e) its ability to generate a quick response from **trying and testing new ideas and approaches** so that the approach can be altered for the desired result; and f) providing an additional medium for health care organizations to **communicate with staff** on administrative activities and policies.

APPLYING A SOCIAL MEDIA STRATEGY TO RESIDENTIAL CARE: A CASE STUDY

The case of polypharmacy in residential care illustrates how social media can be leveraged to improve the quality of care within that context. Polypharmacy is the use of multiple medications that result in negative effects that outweigh the benefits. In residential care, patients are primarily from the elderly patient population and have complex care needs, which make them susceptible to adverse effects of polypharmacy such as increased transfers to acute care to treat drug reactions. Stakeholders suggest considering: 1) assembling a team of individuals committed to the goals of improving medication safety including communications coordinators, managers, and patients; 2) obtaining senior management support for appropriate access to tools; 3) developing a strategy thoughtfully by identifying the goal, target audience, platform, message, and measurement indicators; 4) creating and carrying out an

implementation strategy to integrate social media use within the organization so that staff members can use social media to meet the goals.

MEASURING OUTCOMES OF SOCIAL MEDIA ON HEALTH CARE IMPROVEMENT

Measuring the process and impact of using social media in health care will aid in answering the “so-what” question which is important when justifying the need to invest staff time and talent in social media efforts and help create targeted strategies to drive health care change. Online analytics can track and measure activity and provide an understanding of how engaged the audience is and what resonates with them. Traditional research methods can be used to measure change and impact similar to any behavioural or educational intervention. Combining online analytics with traditional research methods is recommended, yet there is no definitive method of combining to measure the short, medium, and long term impacts of social media on health care quality and safety. Furthermore, since social media is only a tool within a large strategy for health system change, it is not easy to tease out what specific contributions social media makes.

INSIGHTS FOR IMPLEMENTATION

The following recommendations are presented for consideration based on the input collected from the different data sources and participant groups:

- Insight 1. Acknowledge the potential of social media for improving the quality of health care and commit to investing time and resources to implement it.
- Insight 2. Build capacity in health care staff by providing a safe environment to use and learn more about social media and discover for themselves the advantages and challenges.
- Insight 3. Review and revise policies for social media use within health professional regulating bodies, health authorities, and the Ministry of Health.
- Insight 4. Plan with purpose to strategically expand social media implementation overtime.
- Insight 5. Integrate ongoing evaluation activities into social media plans to measure both the process (using analytics) and the outcome (desirable goals to be reached).
- Insight 6. Use communication groups that span all health authorities representatives to work together to support the update of their social media strategies.
- Insight 7. Review current dissemination strategies and see where/ if a social media component can be embedded to enhance the content or extend the reach of the message.
- Insight 8. Partner with other professional organizations that can help effect change at different levels and can offer different skills.
- Insight 9. Be bias towards action now.

SOCIAL MEDIA AND ITS POTENTIAL TO LEVERAGE HEALTH CARE IMPROVEMENT

Residents of BC are increasingly using social media as are health care providers, managers, and policy makers. Residents of BC are increasingly using social media as are health care providers, managers, and policy makers.

The hesitation to use social media for health care in BC seems to stem from apparent concerns about privacy, the current lack of policies guiding its use, and the unpredictable consequences when unfavourable events occur. In reality, other industries using social media have demonstrated positive results that we can apply to the health care setting. Furthermore, since social media is already being embraced by a large percentage of the public and by many other leading health organizations¹, it would be a mistake to not consider and implement this opportunity in BC.

In the Spring of 2013, the BC Patient Safety & Quality Council (BCPSQC) and the University of British Columbia (UBC) eHealth Strategy Office partnered to explore how social media can be used to drive improvement in the quality of health care in BC. As part of this project, a full-day workshop and an evening public forum were held in February 2014 to collectively identify the value social media can bring to health care improvement. Both events resulted in engaging discussion and idea sharing between communication managers, health policy makers, health care providers, patients and the general public. In particular, the public forum, with opening remarks by the Right Honorable Minister of Health, Dr. Terry Lake, and the Executive Associate Dean of Education at UBC, Dr. David Snadden, generated discussion from 126 people (in-person and online attendees), 553 tweets on Twitter, 1.5 million impressions, and trended in Vancouver on twitter. The dialogue demonstrated a mutual interest in this topic and built a partnership of trust and commitment to this issue between all those involved. More details about the public forum can be found in Appendix A.

This report outlines the various ways social media can be used within the health context and the value it adds to strategies to improve health care delivery in BC. The following discussion and conclusions are based on the feedback we received from stakeholders, a published and grey literature review, and consultations with various working groups and committees. A full description of the data sources and collection methods can be found in Appendix B.

SOCIAL MEDIA FOR ENGAGING PATIENTS, FAMILY MEMBERS, AND THE PUBLIC

Social media adds unique value to strategies to improve health care through patient, family members, and general public engagement. The most readily identified advantage of social media is that it increases **access to information**. Social media tools can provide access to health related news, resources, public service announcements, and health promotion/ awareness campaigns. Examples of the type of information that could be shared with patients and the public via social media as suggested by participants include introductions to hospital facilities, pre-and post- care guidelines, and details about

¹ CSC. (2012). Should Health care Organizations Use Social Media?: A Global Update. Accessed March 28, 2014, from <http://bit.ly/1h3siyl>

policies and procedures. Specific suggestions from consultations include public health warnings about food contamination, notifications of hospital outbreaks, and expected wait times for lab work at specific facilities and hospital emergency departments through Twitter. One of the value-added advantages of using social media in this context compared to other modes of communication (e.g., traditional website postings), is the ability to send out messages in a rapid, direct, and efficient manner. Those who need the information can access and receive it quickly, as events are occurring, which can be crucial in certain health care delivery contexts.

The increased access to information as a result of the public utilizing social media provides a unique **opportunity for education**. Through social media, patients can easily access credible, accurate, evidence based health information, while organizations can disseminate such information with one click of a button. Beyond disseminating information, education can occur through interaction with experts; physicians and researchers, who were once difficult for the public to access, are now easy to contact provided that they use social media. Furthermore, social media enables users to easily educate and disseminate information to others within and beyond their network by commenting on, “liking”, and re-posting the information they view.

Being able to increase the public’s and patients’ access to information is made more significant when considering how social media can also easily and inexpensively **expand the reach** of a message to a larger audience when used as a complementary communication strategy. The networking capabilities of the various social media platforms allows for information posted once through an organization’s account to exponentially flow to those directly connected to the organization (i.e., “followers” in the case of Twitter, “friends” in the case of Facebook) and beyond. Thus messages can be sent to a large number of people with one click.

Although not all patients and family members use social media, it can still increase reach to those who do – this can be crucial when trying to reach certain individuals involved in a patient’s care. For example, social media may provide another a way to contact out of town family members.

Participants also provided insight into how social media can extend the reach of those who want to **connect** with different groups. This was seen as particularly useful for patients with rare diseases seeking peer-support. Social media can also provide a convenient way for patients to connect with health care providers between face-to-face appointments for continuum of care. This type of online communication would also extend the reach of care to patients living in rural and remote areas where accessing a physician can be difficult due to travel distance, weather conditions, and availability of physicians.

Closely related to the benefit of extended reach, social media provides an easily accessible and low cost means for patients and the public to **support** each other and become **empowered** to take control of their own health. Patients and family members can form support groups and exchange health related information. Patients can build communities that support discussions to demystify barriers to accessing health care. Organizations can create a space for patients to connect with each other using popular social media platforms. Furthermore, the public can voice their opinion and experiences with the health care system.

The potential also lies in the ability of social media **to facilitate two-way conversations** between members of the public and health organizations. This can bring the care teams, families, and patients together in new ways to support patient-centered care. Examples of this type of engagement include conversations between patients and health care providers through Tweetchats (e.g., Parents in Pajamas,) and weekly discussion (e.g. @TEDMED) on Twitter.

From two-way interactions between health care providers and/or organizations and the public, social media facilitates the building and nurturing of **public trust**. Social media is one of the more powerful tools to build trust as it allows for transparency - an example is tweeting main discussion point during meetings. Communications between individuals and shared resources can be seen by everyone.

SOCIAL MEDIA FOR ENGAGING HEALTH CARE PROVIDERS FOR HEALTH CARE IMPROVEMENT

Through the various data collection points (see Appendix B) and discussions with the invited workshop participants and the audience members at the public forum, the multifaceted value of social media for health care providers (both professionals and health care organizations) emerged.

One of the most dominant themes to emerge across the input collected was the use of social media for health care professionals **to collaborate** with each other. Social media tools (such as Facebook, Twitter, and other platforms that enable the creation of electronic communities of practice) were seen as providing an opportunity to connect health care professionals across geographical locations and clinical settings. Participants suggested that this would allow health care professionals to share experiences, challenges, strategies and best practice guidelines with each other. It would also provide a means to network with colleagues over distances, thus reducing the need to travel while providing a venue to meet new and different professionals. Another added value piece to the *informal* networking opportunities provided by social media for health care professionals is the ability to share, access and peruse content when needed/ on demand or at their leisure, seemingly making it more meaningful.

Another valuable use of social media is **to provide alerts** to health care professionals. Specific ideas shared were to use social media to remind family physicians they should conduct annual medication reviews. Another suggestion was for health care professionals to use social media to monitor adverse drug reactions.

For health care organizations, social media is valuable for **engaging with patients and public**, and for **increasing efficiency** of existing processes.

For engaging with patients and the public, social media can be used **to disseminate** and push out targeted messages to very specific audience groups. This could be valuable for different interventions and public health campaigns.

In addition to delivering messages, social media can also provide a means to collect feedback from patients and the public. Participants emphasized the importance of using social media **to listen** and use the information gathered through these channels to make changes and improve services and policies. Social media channels can also be used to gather feedback to streamline patient care – for example, notifying patients of the medical history information that will be required for admission in advance, and

possibly collecting the information electronically (provided that security measures are embedded). Other information can be collected to inform care plans and create improved discharges. Participants also provided examples they have seen where social media campaigns have been useful to collect donations from the public.

In terms of efficiency, the investment into social media efforts up front can save time, money and effort downstream. Participants noted that social media can be more cost efficient than traditional marketing outlets. While social media may take some extra time and attention up front, in turn increasing workload, it will reduce other efforts on the backend (such as the elimination of other communication channels).

Another value to health care organizations is the ability **to try and test new ideas and approaches** with social media in a manner that generates a quick response. By varying the tools used and the messages sent, organizations can determine what works best with their audiences fairly quickly and react accordingly. Social media provides a means to respond and evolve as things change. It also provides some control to continue with effective tactics, modify approaches, or stop efforts that are not achieving the desired results.

A final important use of social media for health care organizations is for **communicating with and managing staff** related administrative activities. For example, it was shared that at one health organization the senior leaders use a blog to engage staff in discussion. It was also suggested that social media channels could be used by organizations to collect feedback from staff on internal service and policy changes. Additional suggestions included the use of social media for recruiting purposes.

For all of the ideas on how social media can be used by health care providers to improve health care delivery, participants suggested that focus should be placed on how to enhance the experience and opportunities for people already using it.

APPLYING A SOCIAL MEDIA STRATEGY TO RESIDENTIAL CARE: A CASE STUDY

A case study of polypharmacy, the use of multiple medications that result in negative effects that outweigh the benefits, in residential care illuminates how social media can be leveraged for the purpose of improving medication safety and the overall quality of care. In BC, a polypharmacy initiative led by the Shared Care Committee is underway in residential care, where patients are primarily from the elderly patient population and have complex care needs. In this setting, they are susceptible to adverse effects of polypharmacy such as increased transfers to acute care to treat drug reactions. This issue was discussed at both the all-day workshop and the evening public forum where participants were asked to consider how in this context social media could be applied. The ideas and strategies below are based on the input received.

To effectively use social media within the residential care setting, consider the following:

- **Assemble a team.** Participants advocated for the assembly and development of a team or community of individuals committed to the goal of improving medication safety in residential care through the use of social media. Members of this team should include thought leaders, communications

coordinators or managers, content experts, and patient, family, or public representatives. It is important to include a communicator who specializes in social media. The team will lead strategy development, but the entire organization must take part.

- **Obtain senior management support.** One of the themes to emerge from the participant input was to get buy-in and endorsement from the organization *and* senior management to use social media for driving improvement. This endorsement comes in many forms. For example, on the ground level, this means ensuring that staff have access to the tools they need (e.g., internet, computers, non-restricting firewalls, etc.) and are supported to take action. In the bigger picture, this includes willingness from the organization and management to listen to and take action on feedback.
- **Develop a strategy thoughtfully.** Participants provided many suggestions throughout the two events that were structured into a strategy planning template below. Many of the participants noted that developing a social media strategy should follow many of the same considerations of any other communication strategy.

Steps	Examples
1. Identify goal or purpose of strategy	Increase awareness of the effects of polypharmacy in residential care.
2. Identify target audience	One or more of: <ul style="list-style-type: none"> • Attending physicians in residential care facilities • Supportive health care staff in residential care facilities • Pharmacists within hospitals • Patients in residential care • Family members of patients • General public
3. Choose appropriate platform that meets the needs of the goal and the target audience	Depending on the messages, content and resources: <ul style="list-style-type: none"> • Google Hangouts • Twitter • Facebook • YouTube • A combination of the above and traditional communication mediums
4. Identify how content will live beyond social media	House information on organization’s website Organization’s Facebook page
5. Develop messaging and method. It must be practical and simple with a clear call to action, while maintaining credibility	A Twitter campaign “Are you taking medications? Ask your doc for a MED REVIEW to stay safe – more info here http://bit.ly/1dxP6pK ”
6. Develop measurement indicators based on original goal – how do you define success?	High levels of engagement with the message, measured by ≥80% of followers retweeting

- **Create and implement an integration strategy.** One final thought to emerge from the participants' input from the workshop and public forum was to ensure that an integration plan be created based on the social media strategy. Participants were quite emphatic that social media "doesn't just happen." If staff is involved, the social media strategy must be integrated within an existing system and training must be provided. Longer term strategies may need to be created such as creating a new communication system with new policies. Participants suggested that small pilot projects could be implemented to demonstrate the value.

MEASURING OUTCOMES OF SOCIAL MEDIA ON HEALTH CARE IMPROVEMENT

Evaluation is important to consider when using social media to drive health care improvement. Measuring the process and impact of using social media in health care will aid in understanding what works, what does not, and why; answer the "so-what" question which is important when justifying the need to invest staff time and talent in social media efforts; help in understanding current interests, knowledge levels and potential misunderstandings with health consumers; and help create targeted strategies to drive health care change.

Social media measurement and evaluation is still a relatively new area and is only just emerging in the published literature². There are many articles available that discuss the potential uses, benefits and limitations of social media, especially in health care, but much less evidence on how to measure the health impact. However, there seems to be more discussion about this subject in the grey literature. Many different methods and tools are suggested to measure the impact of social media, and combining online analytics with traditional research methods is recommended.

Online analytics can track and measure activity. Online analytics include data points such as page views, fans, likes, followers, shares, traffic, referring sources, etc., and can provide information about reach and audience engagement. For example, engagement with the audience can be calculated based on the percentage of shares and comments relative to the total number of likes³. Similarly, for Twitter engagement can be calculated as the percentage of favorites and retweets relative to the total number of followers³. Online analytics can help track the types, frequency and even content of the interactions and conversations between users. They can also provide a meaningful understanding of how engaged the audience is and what resonates with them.

Traditional research methods can be used to measure change and impact. The grey literature indicates the impact of social media on health should be evaluated like any other behavioural or educational intervention⁴. A simple approach to start evaluating impact would start with determining the objectives of the social media campaign (i.e. What is social media being used for? What's the purpose?). Next, it is

² Ohno-Machado, L. (2012). Informatics 2.0: implications of social media, mobile health, and patient-reported outcomes for health care and individual privacy. *Journal of the American Medical Informatics Association : JAMIA*, 19(5), 683.

³ Paine, K. D. (2011). *Measure what matters: online tools for understanding customers, social media, engagement, and key relationships*. Wiley.com.

⁴ Robert Wood Johnson Foundation (2014). *Advancing Social Media Measurement*. Retrieved from <http://www.rwjf.org/en/research-publications/research-features/measurement.html>.

important to define the target audience or audiences (i.e. Who should be impacted?). Then, identify the expected action or behaviour change that should result (i.e. Is it a change in knowledge, reshaped attitudes, gained confidence, or an intention to change?). Finally, to effectively evaluate, choose an appropriate method to measure the impact.

At this time, there is no definitive literature or set methods of combining analytics and traditional research methods to measure the short, medium, and long term impacts of social media on health care quality and safety. Furthermore, since social media is only a tool within a large strategy for health system change, it is not easy to tease out what specific contributions social media makes. This challenge of measurement should not be considered an obstacle, but rather an opportunity to design and develop measures as we implement social media. As new technology is introduced and this field of research continues to emerge, the breadth of possibilities is endless. Having the measures available and in place to monitor and evaluate outcomes overtime will help ensure the effective use of social media in health care improvement.

INSIGHTS FOR IMPLEMENTATION

As exemplified throughout this report, social media can be leveraged to connect, inform, engage and empower the public, patients, health care professionals, and organizations to drive health care system improvement. As the technology continues to develop and the number of users expands, more opportunities to enhance shared understanding of quality care will emerge. Ignoring this growing trend and not being prepared to meet the demand for the use of social media in health care in BC will hinder the ability to be responsive to users' needs and proactive in managing its use.

Based on the input collected from the different data sources and participant groups throughout the project period, the following insights for implementation are presented for consideration. These insights can be used to inform health care policy makers make the next step in embedding and evaluating the use of social media in health care in BC.

- Insight 1. Acknowledge the potential of social media for improving the quality of health care and commit to investing time and resources to implement it. A paradigm shift must occur so that organizations are flexible and adaptable with communication strategies. This shift requires management at all levels to embrace and be united in their commitment to use social media. Social media should be used strategically and purposefully. It will require planning and support like any communication strategy.
- Insight 2. Build capacity in health care providers by providing a safe environment to use and learn more about social media and discover for themselves the advantages and challenges. Identify and navigate environmental and technical barriers, such as firewalls and outdated web-browsers, in a timely manner. Engage health care providers by allowing teams, units, or organizations to communicate through social media.
- Insight3. Review current policies for social media use by health professional regulating bodies and associations, health authorities, and the Ministry of Health. Work in collaboration with

them to understand how the policies fit with the use of social media. Work in collaboration with privacy officers to understand privacy legislation. Create and revise policies to reflect the current environment and the evolving nature of social media.

- Insight 4. Plan with purpose to strategically expand social media implementation overtime. Identify goals and desired outcomes. Be mindful that social media should be used as part of a larger strategy for communication and behaviour change. In and of itself this technology is not the be all and end all. Set small and achievable plan-do-study-act (PDSA) cycles to trial social media for communication of messages that are low risks and gradually build trust with the audience.
- Insight 5. Integrate ongoing evaluation activities into social media plans to measure both the process and the outcome. Understand that this is a relatively new area of measurement and research and that methods and best practices are only just emerging. Be willing to invest some time and energy into trying new and different things. Be on the forefront of innovation. Small investments up front will add up over time for a bigger, overall picture.
- Insight 6. Continue to support the work of the Health Quality Network Communication Working Group, a group that includes communication representatives from all health authorities. As all health authorities are experiencing similar issues, collaboration between them will increase efficiency, reduce duplication, and promote peer-learning as they develop social media strategies. Collectively, members can guide goal setting, PDSA cycles, evaluation and continuous improvement.
- Insight 7. Engage the public by creating interactive and fun opportunities. Review current dissemination strategies and see where/ if a social media component can be embedded to enhance the content or extend the reach of the message. Content should be presented in short and digestible pieces. Ensure that health-related social media activities and campaigns have clear objectives, audiences and expected results to ensure impact can be isolated and measured.
- Insight 8. Partner with other professional organizations that can help effect change at different levels and can offer different skills. For example, the Doctors of BC to engage physicians across BC and the UBC Faculty of Medicine to embed social media use in medical curriculum and continuing professional development opportunities.
- Insight 9. Be bias towards action now. Do not let the perception of “issues” or the unknown reinforce inertia and delay the use of social media. By creating a plan for monitoring and evaluating its use and outcome, success and failures can be quickly identified, which will allow for direct and responsive follow up action.

Easy first step: Enhance social media efforts that are already taking place.

Easy first step: With areas that have already been identified as needing improvement, plan a social media communication strategy as part of the improvement plan.

Easy first step: With current services that engage the public, embed a social media component. Examples include Tweeting hospital wait times, and communities of practice across health authorities.

APPENDIX A: WORKSHOP AND PUBLIC FORUM

The Workshop: Leveraging Social Media to Drive Health Care Improvement

On February 3, 2014, a full day workshop was held at the Gordon and Leslie Diamond Health Care Centre in Vancouver.

Participants were 27 individuals who were strategically invited to represent BC's academics, clinical directors, patients, communication leaders, physicians, pharmacists, quality improvement leaders, ministry policy makers, nurses, the Doctors of BC, social media experts. The workshop was led by Dr. Kendall Ho and Ms. Christina Krause.



The morning consisted of a world café style rotation station activity. Participants were grouped into three groups and asked to rotate between three rooms. Each room, or “station” focused on one of:

- How to leverage SM to engage **patients** for health care improvement
- How to leverage SM to engage **health care providers** for drive health care improvement
- How to leverage SM for **patient care and polypharmacy in residential care**

At each station, a facilitator led a discussion asking:

- What examples have you seen where social media has been used to engage patients / health care providers in health care improvement/polypharmacy in residential care?? Did it work? Why/why not?
- What challenges do you see in using social media to engage patients / health care providers / in health care improvement /polypharmacy in residential care?
- What opportunities do you see in using social media to engage patients / health care providers in health care improvement/polypharmacy in residential care? Where is there potential?

The afternoon consisted of a group discussion facilitated by Dr. Ho on how to apply the strategies identified in the morning session to the current health care system. This was followed by short presentations on methods of assessing the impact of a social media strategy and a discussion facilitated by Ms. Krause on this topic.

The workshop closed with a recap of the day and soliciting questions that the participants had for the attendees of the evening public forum.

The Public Forum: Connecting for Quality: Social Media and Health Care

On the evening of February 3, 2014, a 2-hour public forum was held in-person at the Paetzold Auditorium at Vancouver General Hospital, and simultaneously through webcast. In total 126 people attended the public forum with almost half connecting through the webcast.



The forum was facilitated by Gillian Shaw, Digital Life Writer of The Vancouver Sun. Opening remarks were conducted by the BC Minister of Health, Dr. Terry Lake, and the Executive Associate Dean of Education at UBC, Dr. David Snadden. Ms. Christina Krause, the Executive Director of the BC Patient Safety & Quality Council set the stage on social media and health care in BC after which the audience was asked for their ideas on how social media can be used to improve the quality and safety of health care. Dr. Keith White, the physician lead of the Shared Care Polypharmacy in the Elderly Initiative of the Doctors of BC and Ministry of Health, then explained the issue of polypharmacy in residential care, after which the audience was again asked for their suggestions on how social media can be used to address the issue.

A lively discussion and exchange of ideas were generated at the event. The in-person audience was provided with the opportunity to voice their suggestions through the microphone. At the same time, both the in-person and virtual participants engaged through Twitter using the hashtag #sm4health, which resulted in 553 tweets during the event and another 163 tweet three days later. According to Twitter analytics, the discussion led to the generation of eight tweets a minute at its peaks, created 1.5 million impressions, and trended in Vancouver.

APPENDIX B: DATA SOURCES AND COLLECTION METHODS

Multiple sources of feedback were collected across different groups. Below is a description of where and how the data was collected and summarized.

Literature review

To provide the BCPSQC SoMe project team with an overview of the current evidence and practices, a limited literature and grey lit search was conducted in November 2013. The searches focused on answering two main questions:

1. How are others using social media to drive health care?
2. How are others measuring outcomes/impact of social media?

The literature search was conducted using PubMed and the grey lit search was conducted using Google. Results from both searches were pulled and reviewed for relevancy. All 'very relevant' results were reviewed and were summarized in an annotated bibliography.

Consultations

Between September and December 2013, consultations with the Health Quality Network and its Communications Working Group and the CLeAR Partnership Alliance were conducted. A discussion was initiated on how social media is currently being used in health care, the advantages and barriers to use, and future ideas for implementation. Notes from the consultations were coded to extract themes of value, recommendations, and considerations.

Surveys

Between November 2013 and January, a short online survey was sent out to all members of the MedRec, CLeAR, and Communications Working Group committees. The survey asked participants to report on how they were currently using social media in their work or the work of their organizations. It also asked participants to provide suggestions or examples of ways they have seen social media be used effectively to engage health care providers and patients in health care improvement. The results of the survey have been summarized into a short report.

Workshop participants

Input from all workshop participants was collected throughout the day. Notes from the rotation station activity and from the afternoon presentations and discussion were compiled, sorted and coded to extract themes of value, recommendations, and considerations.

Public forum participants

Tweets from the evening SoMe public event were sorted and categorized into themes. Thirty-two (32) tweets were identified as relating to the value of using social media to drive health care improvement. A full summary of the Tweet findings is attached.