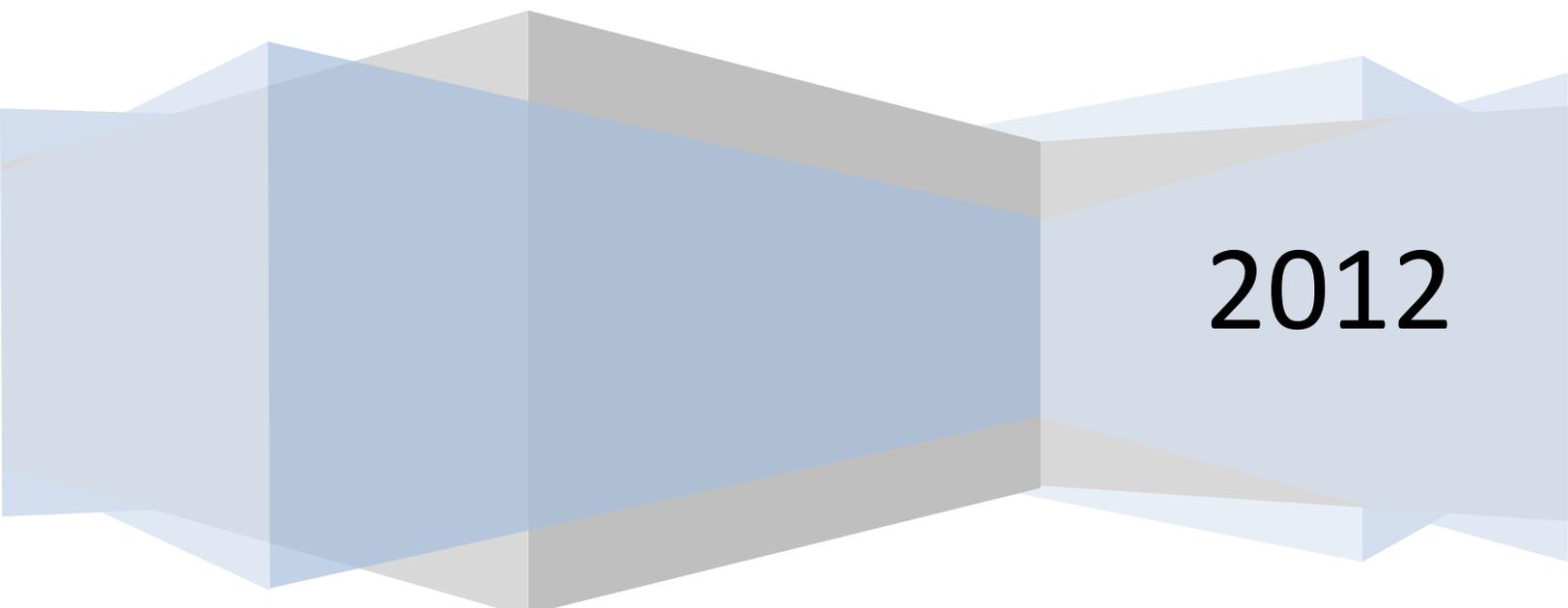


Canadian College of Health Leaders Fellowship Paper

Social Media and Health Care Leadership: Implications, Issues and Opportunities

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2012

SOCIAL MEDIA AND HEALTH CARE LEADERSHIP

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Acknowledgments

The author would like to express his deep appreciation to the following pioneers of the social media field and its potential contribution to the health care delivery enterprise. These are individuals with a spirit of adventure for exploring the unknown and emergent but with a critical eye and mind. I have been fortunate to hear, read, meet, discuss (oral and social media) and be inspired by these individuals over the past decade on the issues, challenges, and opportunities offered by the social media in the health care delivery field. Health leaders of the future will be the beneficiaries of their research, thoughts and advice.

- Norm Archer
- Elizabeth Borycki
- Gunther Eysenbach
- Marilyn Hebert
- Andre Kushniruk
- Kevin Leonard
- Carlos Rizo
- Don Tapscott
- Ellen Balka
- João Carlos
- Dean Giustini
- Alex Jadad
- Craig Kuziemsky
- Sabah Mohammed
- Neil Seeman
- Anthony Williams

Appreciation is also extended to Erin Thompson for formatting the document and to Mr. George Langill and Ms. Andrea Seymour, who acted as external reviewers of the fellowship project.

Dedication

This project is dedicated to my life long partner and friend, Patricia.

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Abbreviations

AHS	Alberta Health Services
AHW	Alberta Health & Wellness
CCHL	Canadian College of Health Leaders
HON	Health on the Net Foundation
LEADS	Lead self, Engage others, Achieve results, Develop coalitions, Systems transformation
RSS	Really Simple Syndication
UHN	University Health Network

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Key Messages

- Health care leaders are being called upon to help transform the Canadian health care system to be accessible, high quality and sustainable. The CCHL LEADS in a caring environment identifies the kinds of characteristics necessary in today's leaders to be successful in systems transformation. Social media can be an effective form of complementary communication that enhances the ability of leaders to respond to community needs effectively.
- Social media are emerging as an important communication and interactive medium that is empowering citizens and patients to express their needs and desires as well as opinions on how the health system could be more responsive to their needs. Ensuring that there are standards of practice, criteria for adjudicating on what is high quality information versus untrustworthy information will be essential.
- To HON standards for web content, the bloggers code of ethics, POST-M implementation plan for developing a social media approach and the social media interactive staging process are provided as examples to stimulate health leaders in developing approaches in their organizations for the systematic introduction and use of social media.
- The leadership characteristics identified in the CCHL LEADS framework provides a helpful way of thinking about and acting on advancing the use of social media to advance the effectiveness of health leaders on the one hand but to also improve health system transformation on the other.
- Citizens and patients are seeking timely, convenient and effective ways to communicate among themselves about health issues, care delivery challenges, effectiveness of interventions, the relative effectiveness of those interventions and advocacy. Health leaders must be prepared to mitigate this demand of patients.

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Executive Summary

Leadership relies on a multitude of human characteristics, abilities and tools to be successful. Health leaders are aware of conventional media sources and venues to improve their effectiveness in getting the “message” across to their audiences. Stimulating and leading health system transformation is a challenge because reform means changing the *status quo* and when this occurs a general discomfort arises about whether the proposed changes will in fact be an improvement. This paper explores and identifies the emergence of social media and how it might be exploited to help health care leaders improve communications and address the challenges of health system transformation. How can health care leaders and organizations, naturally risk averse, effectively advance health system transformation using social media in a responsible and effective fashion? To begin with CCHL has adopted the LEADS in a Caring Environment Framework to identify and define the knowledge, skills, attitudes and behaviors a leader ought to exhibit to successfully contribute to an effective and efficient health care system in Canada. This project explores and describes how health leaders can use the CCHL LEADS framework to exploit the opportunities offered by social media.

Although at an early stage and largely untested and unvalidated, social media is emerging as an important tool for health leaders to advance the application of the LEADS framework and encourage health system transformation. Strategies, plans and actions for using traditional media are well developed. By definition social media is open, explicit, transparent, ubiquitous and largely unregulated. Health care providers, administrators, researchers and educators are learning how to use this powerful media. Since it is emergent and unregulated, for leaders and institutions to use it effectively, they must have policies, practices and risk mitigation strategies that will ensure a high standard of behavior and practice. For this reason caution is urged.

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Objectives for the use of social media must be clearly articulated, audience needs, subject relevance and timeliness matched to media strengths, and standards of practice for its use clearly identified to minimize the risk of misadventure. Standards for governing the use of social media, the POST method, are proposed. This study provides a survey of the developments in social media and asks how the health care policy community can prepare to deal with the challenges and issues of social media with the purpose of using it to advance the public interest and population health in advancing health system transformation. Practical tools for planning a social media program are provided. A knowledge management program for the project is described and research questions for the future identified.

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Context

Canadians are using social media to learn, exchange thoughts, compare experiences and advocate for health system improvement. The Canadian health care system is in need of transformative leadership. In response the CCHL LEADS framework was developed to provide guidance to health care leaders on the kind of characteristics, attitudes and behavior necessary to help achieve those changes. New issues, challenges and problems are emerging in Canadian society for which the traditional and tried practices are no longer effective and new, innovative approaches are needed to address them. The role of the citizen and patient as a passive recipient of health care is being transformed to one where citizens and patients are active partners who have a voice and demand that health care needs be met on their terms (Eysenbach, 2008).

Citizens and patients have immediate access to a wealth of information through the electronic medium like at no other time in history. To be effective in using the information they must take responsibility for their health literacy, have access to their data, information and knowledge and take part in informed discourse (Leornard, 2009). Patients expect to be treated as equals in the caring process (Eysenbach, 2008). Traditional forms of health care delivery centered on the acute care hospital are being eroded as the needs of citizens for the treatment of chronic diseases is coming under increasing scrutiny. The per capita expenditure on health care in Canada is one of the highest in the world yet yields results and health outcomes not commensurate. Access to primary health care through the emergency departments is creating issues of access that need a new approach. The emergence of the electronic medium, social media specifically, raises the question of whether it offers a means through which more effective communication and interaction between health care providers and leaders can take place to help transform the health care system (Juzwishin, 2009)

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This project addresses the question of *whether and how health care leaders in Canada can effectively utilize social media, as a tool, to help address and respond to contemporary problems, issues and challenges to achieve health system transformation.*

Strategic Importance of this Project

There is currently no national framework or dialogue to help guide health care leaders and organizations to harness the power of social media, mitigate the risks and avoid the pitfalls or dangers. This project will review the selected literature, which is emergent and identify and study current examples of social media which are promising with a view to helping transform the health care system. The project will make a contribution to Canadian health care leadership knowledge by providing a starting point for a conversation on the effective use of social media and identify opportunities for the use of social media to advance the ability of health leaders to achieve system transformation.

In summary, this work is important because,

- There is currently no consensus or guidance on how to use social media to advance the capacity of health care leaders to transform the system
- Without guidance for health leaders attitudes and behavior may become mired in confusion, challenges and pitfalls
- It identifies the challenges, issues and risks to be addressed and opportunities to be grasped,
- It provides a framework for linking leadership and social media, developing a strategic approach for the use of social media and tools to exploit social media effectively,
- It sets the stage for best practices to be developed, tested and refined for the use of social media by health leaders and their organizations, and
- It provides a knowledge management approach and research questions for the future.

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LEADS in a Caring Environment

In order to address the challenges of leading in a transformative environment CCHL has adopted the LEADS in a Caring Environment Framework to identify and define the knowledge, skills, attitudes and behaviors a leader ought to exhibit to successfully contribute to an effective and efficient health care system in Canada (CCHL, Leads in a Caring Environment). The framework consists of five major characteristics (CCHL, Health Leadership Capability Framework), which are to (1) lead self, (2) engage others, (3) achieve results, (4) develop coalitions and (5) encourage systems transformation. Each of the five characteristics is subdivided into four more descriptors. The framework is reproduced below.

Table 1: LEADS in a Caring Environment

Lead Self <i>Self motivated leaders...</i>		Develop Coalitions <i>Collaborative leaders...</i>	
Are self aware	Develop themselves	Purposefully build partnerships and networks to create results	Mobilize knowledge
Manage themselves	Demonstrate character	Demonstrate a commitment to customers and service	Navigate socio-political environments
Engage Others <i>Engaging leaders...</i>		System Transformation <i>Successful leaders....</i>	
Foster development of others	Communicate effectively	Demonstrate systems / critical thinking	Orient themselves strategically to the future
Contribute to the creation of healthy organizations	Build teams	Encourage and support innovation	Champion and orchestrate change
Achieve results			

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<i>Goal oriented leaders....</i>		Extracted from: Leads in a Caring Environment http://www.cchl-ccls.ca/assets/LEADS/LEADS_Print_Brochure_EN.pdf
Set direction	Take action to implement decisions	
Strategically align decisions with vision, values, and evidence	Assess, evaluate and hold accountable	

The LEADS framework identifies characteristics that are expected from today’s health leaders with a view to building accessible, high quality and sustainable health care systems in the country. It could be argued that all 20 characteristics could be more effectively practiced through the appropriate use of social media.

In order to be strategic about how health care leaders can use social media effectively it is necessary to understand how social media can be used to strengthen the roles and responsibilities of the health leaders. This paper will provide a bridge between the CCHL framework and how its characteristics can be amplified through social media so that leaders can be more effective in achieving health system transformation by:

- Practicing qualities such as honesty, integrity, resilience and confidence (Build trust)
- Fostering the development of others (Improve practice& behavior)
- Listening well and encouraging open exchange of information and ideas using appropriate communication media (Encourage discourse)
- Facilitating and creating environments of collaboration and cooperation to achieve results (Build understanding and cooperative behavior)

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- Inspiring vision by identifying, establishing and communicating clear and meaningful expectations and outcomes (Encourage discourse)
- Integrating organizational missions, values and reliable, valid evidence to make decisions (Improve understanding and behavior)
- Acting in a manner consistent with the organizational values to yield effective, efficient public centered service (Improve access to service and information)
- Holding themselves and others accountable for results achieved against benchmarks and correct the course as appropriate (Build trust and understanding)
- Creating connections, trust and shared meaning with individuals and groups (Build trust and understanding)
- Employing methods to gather intelligence, encourage open exchange of information, and use quality evidence to influence action across the system (Improve understanding, discourse and decisions)
- Creating a climate of continuous improvement and creativity aimed at systemic change (Improve understanding and behavior)
- Scanning the environment for ideas, best practices, and emerging trends that will shape the system (Increase understanding)

Health leaders have many tools at their disposal and social media is an additional one that they can use to:

- Build **trust**
- Encourage and improve **discourse**
- Build and improve **understanding**

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- Improve **behavior and practice**
- Improve **access** to data, information and knowledge

Social media are increasingly ubiquitous, open and transparent in society (Esenbach and Jadad, 2008). The paper explores and addresses the implications, issues and opportunities arising from the emergence of social media in contemporary Canadian society and demonstrates how health care leaders can benefit from using it effectively to help advance systems transformation..

Approach

In this section I outline the method and design used in the study. I review the sources of evidence, how they came to be selected and how the analysis was carried out. This work was not done in isolation, it has benefited from interchanges with health care providers and informatics leaders over the last decade. Finally, a framework for advancing the discussion on the effective use of social media will be prepared based on the findings. A dissemination plan is included with milestones and schedule, and considerations for future research posited.

Method

Step 1: Describe the CCHL LEADS framework

- Examine the framework and how elements of it might be supported and strengthened by social media
- Identify key strategies and actions that would strengthen health leadership capabilities

Step 2: Define and describe social media, its emergence and potential impact for health care leaders to achieve the LEADS framework objectives

- Identify literature and individuals in an authoritative role in social media and health care
- Identify a select group of social media based on appropriateness and readiness
- Identify the opportunities of social media for strengthening health care leaders

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- Identify the challenges and issues arising from social media for health care leaders
- Develop a set of guidelines or recommendations for how to advance the use of social media to more effectively demonstrate leadership in health system transformation.

Step 3: Cross tabulate the characteristics of the CCHL LEADS framework with types of social media

- Arrive at a guideline to advance the discussion of using social media to help health care leaders with health system transformation
- Develop a tool to systematically advance the use of social media

Step 4: Identify research questions for the future

Identify research questions that might be explored in order to gain further understanding of social media and leadership,

Limitations of the Study

When undertaking the description and analysis of an emerging area there will be challenges and limitations. This study is no exception; the health care systems of Canada are under significant pressure for transformation with conflicted and contested perspectives on how that should take place even though there is significant agreement on the “ends” or goal for the health system.

Social media are a relatively recent development and definitions of terms are shifting as are the growth of types and number of social media. The authority and legitimacy of the social media has also come under question. It is difficult to site a particular source as an authority on the topic and expect that it will still be relevant or valid a year from now. For these reasons it is a marvelous challenge to tackle a timely and relevant topic. To mitigate these confounders I will draw on sources that are recognized authorities, proven to be credible and respected within the Canadian health care landscape. Many of these are noted in the acknowledgements and

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references. Authorities such as Wikipedia and other web sources not available and considered inappropriate five years ago are also accessed and cited. A final limitation to be noted is that this paper will not have captured all social media that are in place or emerging. This is a dynamic field and new media are arising on a daily basis. It is hoped that the framework developed in this project can inspire and inform future work in this field.

Selected Evidence

The field of social media is emergent, it is by definition undisciplined, uncharted and even dangerous. However, social media, if channeled effectively by health leaders, offers tremendous power in leveling the asymmetry in access to data, information and knowledge. Caution however is advised, although much information is resident and emerging on the Internet, some of it is untrue, misleading or even malevolent. The challenge for health care leaders is to identify the positive characteristics of social media, develop a set of principles for practice and determine how best to harness it to achieve health care transformation.

What is Social Media?

There are many definitions of social media and they are contested because of the emergent nature of this medium. Social media is defined as “**media for social interaction**, using highly accessible and scalable communication techniques. Social media is the use of web-based and mobile technologies to turn communication into interactive dialogue” (Wikipedia, Social Media). Social media is characteristic of the interactive nature of the web. Giustini, Grajales III and Hooker at a recent Cochrane workshop on social media identified 6 ways that social media is currently used in health (1) recruitment for clinical trials, (2) inter-professional communication / collaboration, (3) medical education / virtual training, (4) illness support groups – health advocacy, (5) promote funding opportunities – fundraising, and (6) public health alerts such as

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infectious disease monitoring (Giustini, Grajales III, and Hooker, p. 5). Unlike the first stage in the development of the Internet as a static source of information (Web 1.0), social media represents an interactive stage (Web 2.0). Futurists envision a Web 3.0, which will use semantic intelligence and ontologies to undertake roles of “thinking” and “decision making” between and among machines (Juzwishin, 2010). There are many forms of social media. In this paper we will restrict ourselves to the social media identified in a paper recently presented by Sadeghi, Kuziemsy and Benyoucef at an international meeting of social informatics (Sadeghi, Kuziemsy, and Benyoucef, 2011) in which they identify 8 forms of social media. We will review each of them in turn. Health leaders who take a pro active stance to understanding how to use social media effectively can have a greater impact in their roles.

Blogs

Originating from the combination of the word web and log, a blog is a website authored by an individual who posts their views on news or events in reverse chronological order accessorized through medium of photos, music, audio or video. To qualify as social media, blogs should be interactive, permitting readers to provide feedback and engage in a discourse to interrogate a topic. Blogs may serve as on-line diaries as they do for many who wish to share their experiences such as their battle with a disease or organization. Linking to other social media is also a common characteristic of blogs.

The strength of blogs is that they are ubiquitous, encourage open discourse, provide a platform for advocating, deconstructing and positing thoughtful points of view, provide multiple media of expression and solicit thoughtful feedback. Thoughtless exchanges also take place in blogs. The weaknesses of blogs are that they are time consuming to maintain at a high level of quality in

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content and discourse, a challenge to sustain if not governed appropriately, and require regular updates to be relevant and timely in the discourse.

Dr. Stephen Duckett former CEO and President of Alberta Health Services, one of the first senior health leaders in Canada to post a public blog on their organization's website, communicated directly with 90,000 employees and engaged them in discourse around contemporary issues of health care delivery. Dr. Brian Goldman of the White Coat/Black Art CBC radio program writes a popular health care blog on CBC (see <http://www.cbc.ca/whitecoat/>). An institutional blog that has shown leadership and building its reputation on solid forms of evidence is Healthy Debates – unbiased facts, informed opinions. This blog is moderated by reputable medical and policy leaders Andreas Laupacis, Irfan Dhalla, Terrence Sullivan and writer Karen Born (see <http://www.healthydebate.ca/>)

The rules surrounding blogging are emergent however O'Reilly and others have identified 7 fundamental rules of blogging that can serve health leaders.

- *Take responsibility not just for your own words, but for the comments you allow on your blog.*
- *Label your tolerance level for abusive comments.*
- *Consider eliminating anonymous comments.*
- *Ignore the trolls.*
- *Take the conversation offline, and talk directly, or find an intermediary who can do so.*
- *If you know someone who is behaving badly, tell them so.*
- *Don't say anything online that you wouldn't say in person (Wikipedia, Blog).*

Observation of these rules and governing the blog content in the spirit of the rules will help to maintain and establish an appropriate standard of practice.

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Wikis

Wiki is derived from the Hawaiian word *fast*. A wiki is a website that serves as a brief encyclopedic source of information. One of the most popular is Wikipedia at www.wikipedia.com. The source of information for a wiki is multiple and it may be continuously under revision and refinement under the editorship of an individual assigned to adjudicate and govern the content. Intranets within health care settings are an example of a wiki. Rules for governing the content of wikis have a wide range.

The strengths of wikis are that they are accessible to anyone with access to the Internet, most are free, and they encourage collaboration among a community of participants, usually voluntarily. It is easy to correct a mistake in an entry of a wiki, they have a tracking process that allows the reader to see the “chain of evidence” leading to the current entry. The strict enforcement of medical evidence wikis has provided the foundation for rules to emerge where the trustworthiness of the information is of paramount importance. Caution is however appropriate as Barsky and Guistini state “wikis were not necessarily meant to replace trusted print and digital information. When used responsibly as part of an overall content management plan, wikis can enhance our traditional collections and services” (Barsky and Guistini, 2007). Means of maintaining high quality content in a wiki is dependent on mechanisms of experts and peer review. Health leaders should think about building teams and providing appropriate resource supports to Wiki endeavors.

The weakness of Wikis results from its strengths one of which is that because it is built on an open platform it can be vulnerable to abuse. One approach to this is to credential the individuals in the wiki community to preserve the trustworthiness of the content. Where controversial topics

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arise limitation of editing to credentialed individuals can take place. Security is an issue with a wiki because of its open nature and abuse can take place.

Dean Giustini a University of British Columbia health librarian has established a high quality wiki titled hiwiki – health information wiki. Giustini was one of the pioneers in advancing social media in health information and medicine. His editorial in the BMJ (Giustini, 2006) predicted the rise of web 2.0 and social media for health and medical information. (See

http://hlwiki.slais.ubc.ca/index.php/UBC_HealthLib-Wiki_-_A_Knowledge-Base_for_Health_Librarians)

Rules for wikis are wide ranging and it is a matter of trust as to how much freedom can be provided to users of wikis as to the changes that can be made to the content. Where credibility, reputation and authority is an important facet to protect, it is important to permit a free exchange surrounding the topic but what comes to be posted must pass a high degree of scrutiny to ensure that information is accurate and credible and malicious intent is not perpetrated.

RSS

Really Simple Syndication, or RSS, is a web-generated source used to disseminate and update events such as news, medical device alerts and weather warnings, in text format. The content from publishers is automatic and readers who subscribe receive the information instantly. RSS feeds can be read on computer screens or mobile devices. A RSS pushes messages out and avoids the need for a subscriber to manually check the source.

The strength of RSS is that the subscriber can select the source of information they wish to receive in a timely fashion. It is a very efficient way of sharing information with customers who are seeking the information and wishing to receive it in their email. The weakness of RSS is that it is limited to a small amount of text. It is also possible that it affords a degree of credibility to

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the information that may not be warranted.

RSS examples

- Tom Closson CEO of the Ontario Hospital Association offers an opportunity to subscribe to his RSS on his blog www.oha.com/News/TomClossonBlog/
- Canada Health Infoway provides an opportunity for people to subscribe to receive the latest media releases, newsletters, reports or other updates from *Infoway* <https://www.infoway-inforoute.ca/lang-en/rss-feed>

Social Network

Facebook is one of the most popular social network sites in the world. Individuals or organizations can join a social network because of a common interest, friendship or beliefs. It keeps them connected and manages their relationships. The strength of a social network is that it is ubiquitous, transparent and easily accessible. It allows subscribers to post messages, pictures, and videos and to interact in a multitude of means.

The weaknesses of social networks is its transparency and explicitness, if not exercised with a degree of sober second reflection, can place information in the public domain that may not be appropriate and put people at risk. The exploitation of children and adolescents on the Internet is an emerging area of concern (Ospina, Harstall, and Dennett, 2010) about social networks and requires careful study to ensure that appropriate behavior and action is taken.

Examples of social network

- The largest social network social media is Facebook (www.facebook.com). Organizations such as Alberta Health Services (AHS) have chosen to register their URL external web site on Facebook.

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- A networking site for business and professionals is LinkedIn. In March 2011 it had +100 million subscribers of which 3+ million were in Canada. (www.linkedin.com).

Mashup

According to Wikipedia a mashup is

Digital media content containing any or all of text, graphics, audio, video and animation drawn from pre-existing sources, to create a new derivative work....A major contributing factor to the spread of digital mashups is of course the World Wide Web, which provides channels both for acquiring source material and for distributing derivative works, both often at negligible cost. Current widespread practices of creating digital mashups have raised significant questions of intellectual property and copyright, which have been addressed by Lawrence Lessig, among others[3]. While questioning the law, mashups are also questioning the very act of creation. Are the artists creating when they use other individuals' work? How will artists prove their creative input?

Web or cloud computing based applications are a combination of separate parts brought together with the use of the open architecture of public Application Programming Interfaces API. For example, a mashup between Google Maps and Weather.com could be made available as an iphone application, where the content and context of that content are drawn from outside sources through the published API. (Wikipedia, Mashup (digital)).

The strengths of a mashup are that they can bring different data or information together (from two or more sources) into a form that gives new meaning to the subject areas, they can provide results that could not have been imagined if produced by a single source, the work can be done quickly, and it can be automated and replicated with little effort. The advent of cloud computing has added a new dimension of data to building mashups. The weakness of mashups is

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that the question of whether the original producers of one data set would have approved of their data being used in this way. By using data that is readily available rather than creating a new database that is purpose built it is possible that interpretations of the mashups may be misleading.

Examples of mashups

- The use of Google maps and data on inquiries in Google on swine flu to serve as a proxy of the incidence of swine flu to track the spread of the disease

<http://lifehacker.com/5229560/google-maps-mashup-tracks-swine-flu>

- A video on You Tube demonstrating how to create a health care mashup with the IBM

<http://www.youtube.com/watch?v=NX6Xr8gBLqo>

Podcasts

Podcasts, derived from the combination of the terms webcast and iPod, are digital audio or video media files that are available through subscription, usually free, and downloaded to the computer or mobile device much as is the RSS. Files are stored on a computer or mobile device and listened to or viewed at the receiver's discretion.

The strengths of podcasts are that they are an excellent complement to traditional forms of education, training and knowledge dissemination. They are ubiquitous and mostly free. They can be listened to at the receiver's discretion and provide an opportunity for a community of interest to comment and discourse around issues addressed in the podcast. The weaknesses of podcasts are that they are linear and one-way without providing the same degree of interface as face-to-face meetings. Adding a blog to a podcast provides some amelioration of this weakness.

Examples of podcasts

- Dr. Brian Goldman of the CBC program White Coat/Black Art explores contemporary issues in Canadian health care. <http://www.cbc.ca/whitecoat/>

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- Videocasts are also available and accessible through the Internet through a site called vimeo.
See <http://vimeo.com/>
- A public education program describing Alberta Health Services Emergency Medical Services can be viewed at <http://vimeo.com/5525759>

Microblogging

Microblogging is a form of blogging but the content of the message is significantly smaller than a traditional blog. Microblogs, such as Twitter, allow users to exchange messages to a maximum of 140 characters. Information in the form of images or video links can also be shared. The subject matter a blogger posts is entirely at their discretion, however it is usually a topic or event they have a significant interest in and they are often an authority. Commercial microblogs also exist in the business community promoting products, services, websites or collaboration among people or organizations.

The strengths of microblogging are that they transmit instant information from an authority you choose to follow. This may enhance learning where the subject areas are ones where developments are emerging at a rapid rate. It can notify individuals of problems that arise on a timely basis and provide advice on how to react quickly. The weaknesses of a microblog are that the messages are very short and complex thought development is not possible. There is little understanding of how effective microblogging is at this time.

Examples of microblogs

- Dr. Kevin MD who has one of the most popular medical tweets
<http://www.kevinmd.com/blog/>

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- Health Canada also provides a Twitter subscription that is available providing an opportunity to be made of important health related releases <http://twitter.com/#!/HealthCanada>

Folksonomies

Folksonomies derives from a conflation of the terms folk and taxonomy leading to the creation of nomenclatures that classify (tag) topics or pictures. Social software applications such as bookmarking, photographic naming or tagging provide an opportunity for users to collectively categorize and classify information. Tag clouds provide a method of visualizing the tags in folksonomy by displaying the size of a group of words based on the frequency with which they are used in the text.

The strengths of a folksonomies are that they provide information retrieval and monitoring of trends, and a means of organizing processes and expertise. The weaknesses of folksonomies are that each user creates their own tags thereby decreasing the consistency of the tags created. Tags are also initiated from the perspective of the individual rather than the public benefit rendering results of limited value.

Example of a folksonomies

- <http://www.43things.com/>

Functions, Limitations and Opportunities of Social Media

Why has health care been a slow adopter of social media? The Change Foundation finds that “The main stumbling block is the lack of a set of accepted best practices that would enable organizations to become less risk-averse” (The Change Foundation, 2011, p. 2). In addition the authors note that “Ethical questions are a major concern. Are we violating patient’s privacy by

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listening in or soliciting comments online? Are we ignoring people who don't participate in social media? (The Change Foundation, 2011, p. 2).

In summary, Table 2 below identifies the types of social media, how they are used, their limitations and the opportunities they provide (Sadeghi, Kuziemsy and Bengoucef, 2011)

Table 2: Nomenclature of selected social media (adapted from Sadeghi, Kuziemsy, and Bengoucef, 2011)

Social media type& category of technology	Processes and practices	Limitations and shortcomings	Opportunities
Blogs – broad communication	Communication, information sharing	Limited search capability (Soriano et al, 2010), possible lose of governance control (Ramirez-Medina, 2009) wrong or inaccurate information may be posted (Newman and Thomas, 2008)	Interactive, provides voice to opinion leaders, engages In discourse, multi media, provides historical string of discourse, all can participate
Wikis – broad collaboration	Ad-hoc collaboration, knowledge management and sharing, teaching and training	May loose governance as information is shared entity, coordination challenges with updates, need critical mass of people to sustain, time consuming lack of regular visits	Crowd sourced insights, opportunity for all voices to be heard and authority to adjudicate on, easily accessible continually seek to refine.
RSS – metadata creation	Instant information sharing, quick/frequent updates, distributing data and information, newsletter	Static output, unidirectional messaging, by product of other services already provided	Instant, frequent updates, introduces links easily, keeps audience informed as news occurs.
Social networks – social graphing	Supplier/customer relationships management, peer sharing, recruiting, online profile	Possibility of decreasing employee productivity may waste time, issues with substance with what is posted. Creates conflict in defining what is public	Provides instant access to the community, identifies peers, stimulates discussion, brings forth viewpoints

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Social media type& category of technology	Processes and practices	Limitations and shortcomings	Opportunities
		versus private information	
Mashups – application development	(Rapid) application development, quick fix	Source data may not be reliable, combination of data may overshadow subtlety of data	Powerful means of combining data in new ways, easily accessible, creativity is only limitation
Podcasts – broad collaboration	Learning, education, training	Linear and one way, suggest integration with other media	Audio or visual media, subject specific, access at leisure, opportunity for broad messaging
Microblogging – broad collaboration	Instant information sharing, learning, heighten awareness	Limited number of characters so no complex thoughts, difficult to know what the impact might be	Gets a point across quickly and widely, provide links to other sources quickly, generate a “buzz” around a topic
Folksonomy – meta data creation	Documentation	Uniformity and usefulness of tags may be suspect as there is no overall standard	Provides real life stories and data, provides insight of what public are thinking

Having established a basic understanding of the primary types of social media currently in play, their limitation and opportunities they offer, the following section of the paper we will identify the positive characteristics of health care leaders and map those against the opportunities offered by social media.

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Lessons in the Emergence of Social Media for Health Leaders

Health reforms in Canada are stymied. Progress is made and reported in pilot projects, successes are isolated but wholesale reforms are limited (Rachlis, 2005). Politicians, health care providers, and health care leaders are equally frustrated in their inability to make structural and process changes in the health care delivery system reflective of today's requirements for quick and easy access, with high standards of quality and safety within a sustainable financial envelope. Canada ranks last in the implementation of personal health information and electronic health records. (Davis, Doty, Shea, and Stremikis, 2009). Two reasons are noted – slow rate of adoption and system interoperability (Archer, 2009). Juzwishin (2010) presented a framework to help health care policy and decision makers advance the interoperability and diffusion of the electronic medium to patients and citizens. This work identified a series of 5 ingredients that must be in place to help facilitate an improved diffusion of the electronic health record to Canadians;

- Improved access to data, information and knowledge while respecting patient and citizens privacy and confidentiality,
- Improved opportunity for discourse with patients and citizens,
- Improved understanding of patients and citizens about health care,
- Improved trust with citizens and patients about health care, and
- Improving the behavior and practice of health care leaders, patients and citizens. (Juzwishin, 2010)

None of the elements alone are sufficient to establish a foundation of success for implementation but each is necessary and dependent on support from the others.

Social media cannot be adopted successfully without a critical eye toward how it complements other media and understanding what is attempting to be achieved through their use. The CCHL

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LEADS framework associated with the 5 characteristics of leadership provides a good starting point for exploring the effective use of social media to build health system transformation. A good place to start is determining what on the Internet can be trusted and what cannot.

Ensuring the Validity and Trustworthiness of the Contents of Social Media

An essential ingredient in the successful utilization of the social media by health care leaders will be to build a reputation and undisputable authority of validity and trustworthiness of the data, information, opinions and knowledge that is being posted on the Internet. How are health leaders to establish reputations of credibility in social media?

Five means to achieve credibility are:

1. Identify ways to embrace and use social media
2. Demonstrate critical means by which to deal with issues
3. Demonstrate through social media, how today's health care leaders can orientate themselves strategically to respond to issues
4. Use and lead by example with how health leaders encourage and support innovation in the health care system to achieve transformation
5. Demonstrate how social media can be used effectively to champion and orchestrate change and transform the health care system

Health on the Net Foundation (HON)

What standards can health leaders turn to help guide practice in the use of social media? Health on the Net Foundation is an independent non-governmental organization based in Switzerland with the mission to “guide the growing community of healthcare consumers and providers on the World Wide Web to sound, reliable medical information and expertise. In this way, HON seeks to contribute to better, more accessible and cost-effective health care (Health on the Net

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Foundation, Our Mission). HON endorses or accredits sites if they meet the requirements of their principles. It is useful to review the code of conduct that HON establishes for medical and health care websites.

***Principle 1, Authority** – give qualifications of authors*

***Principle 2, Complementarity** – information should support not replace the doctor patient relationship*

***Principle 3, Privacy** –respect the confidentiality and privacy of personal data submitted to the site by the visitor*

***Principle 4, Attribution** – Cite the source(s) of published information, date and medical and health pages*

***Principle 5, Justifiability** – site must back up claims relating to benefits and performance*

***Principle 6, Transparency** – accessible presentation, accurate email contact*

***Principle 7, Financial disclosure** – identify funding sources*

***Principle 8, Advertising policy** – clearly distinguish advertising from editorial content*

(Health on the Net Foundation, 2011)

Compliance with these standards and obtaining a HON credential for the website will provide the audience with some assurance that the site complies with guidelines.

Healthcare Blogger Code of Ethics

Another useful guidance is the code of ethics developed by Healthcare Blogger. This code looks to five areas that bloggers should be mindful of. They should ensure:

Perspective: The blog author's perspective should be clearly established...

Confidentiality: Patient identity is respected...

Disclosure: Bloggers must clearly disclose whether they are paid to pitch products...

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Reliability: Sources for information should be cited...

Courtesy: Personal attacks should not be permitted... (The Healthcare Blogger, Code of Ethics, 2011)

The POST-M Method – A Social Media Framework

Finally Giustini, Grajales III, and Hooker (2011) adopted the work of Li and Bernoff (2007) for a Cochrane Canada workshop in 2011 on applying the POST method to develop a social media framework that can help inform our work for health leaders. The first step of using social media is to be clear about the objectives – wanting to be “cool” or the first organization to use social media is not a good reason. Be clear about how social media is going to help you do a better job as a health leader and how it will help your organization. The Post Method developed by Li and Bernoff (2007) states;

***P** is People. Don't start a social strategy until you know the capabilities of your audience. If you're targeting college students, use social networks. If you're reaching out business travelers, consider ratings and reviews. Forrester has great data to help with this, but you can make some estimates on your own. Just don't start without thinking about it.*

***O** is objectives. Pick one. Are you starting an application to listen to your customers, or to talk with them? To support them, or to energize your best customers to evangelize others? Or are you trying to collaborate with them? Decide on your objective **before** you decide on a technology. Then figure out how you will measure it.*

***S** is Strategy. Strategy here means figuring out what will be different after you're done. Do you want a closer, two-way relationship with your best customers? Do you want to get people talking about your products? Do you want a permanent focus group for testing product ideas and generating new ones? Imagine you succeed. How will things be different afterwards?*

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Imagine the endpoint and you'll know where to begin.

T is Technology. A community. A wiki. A blog or a hundred blogs. Once you know your people, objectives, and strategy, then you can decide with confidence.

The letter **M** is added to the POST approach to designate the importance of method. The authors point out that for advanced users method or measurement will be important to track your social media use. Metrics, analytics and influence tools like Klout can be useful to collect and report on how citizens and patients are interacting with your social media initiatives (Li and Bernhoff, 2007) .

To provide health leaders with a tangible place to start their work with social media the POST Method from Giustini et.al.(2011) is reproduced in Appendix III and the Using Social Media: Tips and Best Practices is in Appendix IV.

Results

The evidence selected and analyzed in this paper points to the need for careful attention when considering the use of social media to advance any objectives. The CCHL LEADS framework is a useful way for health care leaders to think strategically about how they can use social media to advance their role in creating health systems transformation. The evidence has also demonstrated that social media are ubiquitous, open and powerful when put to proper use and in the proper context. The evidence has identified a select number of social media and provided examples of where it is being used effectively in Canada. In order for social media to be utilized successfully it must comply with good planning efforts and use of standards of practice, which ensure that the validity and trustworthiness of the data is beyond reproach. Three guidance documents are shared, the HON guidance, Bloggers code of ethics and POST approach to help health leaders address the issues of standards and best practice.

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The reader can turn to appendix I to delve deeper into how the results of this study can help inform how health care leaders can use the CCHL LEADS framework to improve access to data, information, knowledge discourse with patients and citizens, build and improve understanding of patients citizens of the health care system, build trust and improve behavior and practice.

Implications for Health Leadership

This project can benefit the Canadian health care leadership community by raising awareness of social media and the issues and opportunities it presents. The project identifies linkages between the CCHL LEADS framework and how the effectiveness of leadership can be improved through social media. This can be achieved through:

(1) professional self development (2) developing a standardized approach to ensuring the quality of data, information and knowledge on social media, and (3) identifying the social media options and approaches that can help stimulate health system transformation.

Table 3 below describes an iterative staged process for addressing the implementation and management of a social media initiative for health leaders and organizations. The process is meant to be cascading from the top down with an iterative loop to inform the audience and their needs in a continual process.

Table 3: Social Media Iterative Staging Process

Stage 1	Identify your customers/audience		Determine the audience information needs				
Stage 2	Identify the Evidence and Values Filter for Quality, Relevance, Timeliness and Value Systematically Synthesize the evidence Convert to communicable form appropriate for audience needs						
Stage 3 Traditional	Blogs	Wikis	Social Networks	Mashups	Microblogs	RSS Podcasts	Folksonomies

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Media							
Stage 4	Interact and monitor						
	Evaluate						

Currently there is no comprehensive guidance for health leaders on actions that can respond to the promise of social media and to exploit its full potential. This project provides a first step in this process.

Generalizability and Transferability

The approach, selection of evidence, analysis of social media options and recommended practices for the use of social media in health care have been described with a view to help guide health leaders in Canada as well as the organizations, portfolios, departments or staff that they lead. This work is a starting point that calls for health care organizations to begin thinking about and developing policies, procedures and practices for how they will use and monitor social media to strengthen the role of health leaders and stimulate health systems transformation.

It was demonstrated that in order to gain the trust and commitment of citizens, patients and providers to help transform the health care system, improvements in access to data, information and knowledge will be necessary. The need to improve the understanding and behavior of all participants in the health care enterprise is essential if we are to achieve the improvements.

Social media provides one more means to achieve this with many other complementary options.

Mastering the social media will be essential to ensure that health care leaders are in control of the social media rather than being controlled by it.

Knowledge Translation

Knowledge translation is an embedded portion of this project. The definition of knowledge translation adopted for this project is the CIHR definition which states that it is “a dynamic and

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iterative process that includes the synthesis, dissemination, exchange and ethically sound application of knowledge to improve health, provide more effective health services and products and strengthen the health care system” (CIHR, About Knowledge Translation). A knowledge management plan is provided to advance the dissemination of the results of this study to health care leaders who are the primary audience. In addition to health care leaders secondary audiences include health care providers, policy makers, researchers, health information specialists, patients and citizens.

Key Messages for Health Leaders

The key messages for are:

- Social media appears to be a promising medium for health care leaders to explore the adoption of to help stimulate advancements in the leadership characteristics identified in the LEADS in a Caring Environment
- Social media and the LEADS framework are at an early stage of implementation, encouragement and caution are advised in developing next steps
- The opportunities arising from the effective use of social media by health care leaders appear to outweigh the risks as long as principled approaches are undertaken and implemented. The HON standards, Blogger Code of Ethics, Post M framework and social media staging process are offered as structures, processes and tools to adhere to high standards of practice.
- Further research into the relationships between social media and health care system transformation is necessary

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Key Messages for the Secondary Audiences are:

- Health care leaders are interested in advancing the appropriate and effective use of social media to improve their effectiveness in advancing health system performance and transformation
- Health care leaders can demonstrate leadership in social media by inviting other health care partners such as providers, citizens and patients, policy makers, researchers and health information specialists to engage in a cooperative effort to advance health care transformation
- Social media can be an effective way of engaging others through networking and collaboration
- Social media are an effective form of knowledge mobilization and in collaboration with others leaders can be more effective communicators

Knowledge Mobilization Plan

The knowledge mobilization plan consists of the following plan and actions.

- Prepare an article for submission to the Canadian Healthcare Management Forum describing the findings of this project
- Submit an abstract for presentation of the results of this study to the June 2013 joint CCHL/CHA National Conference
- Submit an abstract for presentation of results to the Information Technology and Communications in Health – University of Victoria, 2013
- Submit an abstract for presentation of results to the next annual COACH conference
- Prepare a presentation of results for presentation to Alberta CCHL Chapters.

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The effectiveness of these dissemination initiatives will be judged on the basis of the evaluations from the sessions as well as how much traction it generates within the health leader community in Canada.

Future Work

Social media is at a very early stage of development inviting further work that critically examines the effectiveness of these forms of communication, particularly as they have relevance and benefit for health care leadership and system transformation. Social media appears to be promising and preliminary results suggest that they can be effective, but whether they are effective to support health care leaders in the transformation of health care systems remains somewhat in doubt. Below several research questions that arise from this work and should be given careful consideration.

- How do Canadians use social media in respect to health care issues? How does it influence their thinking and behavior?
- Are there ways that social media can be harnessed to help advance the health of Canadians and to improve the effectiveness of the health care system?
- How can social media be used to improve the collaboration among health care leaders, providers, citizens, researchers and policy makers?
- How can social media help improve the discourse, health literacy, understanding and access to evidence of the effectiveness of health care interventions and services?
- What practices and qualities of social media communications engender trustworthiness among health care leaders, providers, researchers, patients and citizens?
- How can social media be used to more effectively monitor and report on the performance and accountability of health care systems to patients and citizens?

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- How can social media be utilized to help health care leaders strategically align the decisions, priorities, vision, and values of an organization to match the needs of citizens and patients?
- How can social media be utilized to mobilize citizens, governments and health leaders to address health status gaps in the population?
- How can social media be utilized to forecast the expectations and needs of citizens and patients for health care 20 years from now?

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Appendix I - CCHL LEADS Framework and ways to advance health system transformation with social media

The following questions are posted as challenges health leaders should be prepared to address

Access

How can we improve access to data, information and knowledge while respecting citizen privacy and confidentiality?

Discourse

How can we improve discourse with patients and citizens?

Understanding

How can we build and improve understanding of patients and citizens?

Trust

How can we build trust with citizens and patients?

Behavior and Practice

How can we improve behavior and practice of health care leaders, patients and citizens?

Table 3 below provides some suggestions for how health care leaders might hold themselves accountable for achieving the health system benefits through a commitment to the LEADS framework.

Table 4: CCHL LEADS Framework and Improved Health System Elements

	Improve Access	Improve Discourse	Improve Understanding	Improve Trust	Improve Behavior & Practice
Lead Self	Build confidence to express values publicly Model honesty, integrity,	Demonstrate leadership by undertaking efforts to advance opportunities for open health system and	Demonstrate leadership by undertaking efforts to improve understanding of citizens, patients and providers of respective issues	Demonstrate character traits that improve public trust in health leaders	Manage their own behavior and practice to inspire others to do the very best

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	Improve Access	Improve Discourse	Improve Understanding	Improve Trust	Improve Behavior & Practice
	resilience and confidence	public discourse	and challenges		
Engage Others	Engage citizens, patients and providers in discussion about improving access	Establish programs that foster improved discourse among citizens, patients and providers	Undertake knowledge translation programs to advance the public understanding of health care issues & challenges	Establish mechanisms to build trust with citizens, patients and providers	Build teams to improve behavior & practice and communicate results
Achieve Results	Hold yourself accountable to the explicit targets set	Provide multi media platforms to communicate	Make explicit the expectations and targets of health system delivery	Celebrate successes and interrogate failures publicly	Demonstrate tangible improvements in service delivery
Develop Coalitions	Build teams that are committed to liberate data	Create networks that mobilize knowledge and improve interchange of ideas	Build teams with a capacity to access, assess and mobilize knowledge with supports to citizens, patients and providers	Establish coalitions with commitment to high standards of practice in knowledge mobilization	Demonstrate unswerving commitment to using data, information, knowledge to improve behavior & practice
Systems Transformation	Drive innovation that improves access to data, information and knowledge	Create and encourage a climate of critical thinking and discourse to champion positive change	Champion and orchestrate change to reduce information asymmetry among citizens, patients and providers	Gain the trust and respect of citizens, patients and provider to lead the transformation	Seek and implement best practices, and innovate with health care providers to serve citizens and patients

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Lessons Learned

Having demonstrated the linkage and relevance of the CCHL LEADS framework and the elements of a high performing health care system we will now turn to identifying specific ways in which the different forms of social media can be used to advance health systems transformation.

Table 5: Lessons learned for leading self (Sadeghi, Kuziemsky, and Bengoucef, 2011)

Social Media	Lead Self			
	Are self aware	Manage themselves	Develops themselves	Demonstrate character
Blogs	Provides an avenue for expression	Exemplify mentoring to others	Share your thoughts and seek advice from others	Articulate honesty, integrity, resilience and confidence
Wikis	NA	NA	Contribute to Wiki	Correct errors in Wikis
RSS	Open to ideas	NA	Subscribe to appropriate RSS	NA
Social Networks	Articulate values	NA	Monitor relevant social networks	Model exemplary behavior
Mashups	NA	NA	Increase knowledge & applications	NA
Podcasts	Open to others ideas	Subscribe to relevant sources	Continual learning	Broadcast own podcasts
Microblogging	Demonstrate capability	NA	Open to learning	Provide leadership
Folksonomy	NA	NA	Become familiar with public's tags	NA

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Table 6: Lessons learned to engage others (Sadeghi, Kuziemsy, and Bengoucef, 2011)

Social Media	Engage Others			
	Foster development of others	Contribute to the creation of healthy organizations	Communicate effectively	Build teams
Blogs	Share knowledge and experiences	Share knowledge of healthy organizations	Demonstrate and be open to multiple forms of communication	Demonstrate collaboration and cooperation
Wikis	Encourage sharing of knowledge	Encourage others	Provide input and clarify misunderstandings or errors	Work on a wiki as a team
RSS	Endorse high quality RSS sources	Flag relevant RSS sources	Use RSS as a supplementary form of updates	Build an RSS team
Social Networks	Encourage commitment to life long learning in networks	Flag healthy organizations	Facilitate networks that communicate effectively	Build a social network team
Mashups	Demonstrate power of mashups	Draw on data to demonstrate successful organizations	Highlight powerful effect of using multiple data sources and visual clarity	Encourage and build Mashup teams
Podcasts	Encourage podcasting	Communicate successful strategies and that of others	Use to communicate information that is not time sensitive	Build podcast teams
Microblogging	Encourage critical microblogging	Flag successes and celebrations	Master technique	Build team of microblogging surveillance
Folksonomy	Share experience	Identify successes	Examples of good tags	Build standardized folksonomy capability

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Table 7: Lessons learned to achieve results

Social Media	Achieve results			
	Set direction	Strategically align, decisions with vision, values and evidence	Take action to implement decisions	Assess, evaluate and hold to account
Blogs	Demonstrate leadership explicitly	Demonstrate leadership explicitly	Show action and achievements or failures openly	Celebrate success and develop improvement processes for failures
Wikis	Be explicit	Link strategies to operations and results	Provide evidence of implementation	Be explicit, open and transparent with results
RSS	Distribute direction	Distribute direction	Distribute implementation	Distribute results
Social Networks	Communicate direction	Demonstrate linkages between strategy and actions	Demonstrate actions	Demonstrate results
Mashups	Use evidence	Use evidence	Demonstrate success or challenges	Demonstrate
Podcasts	Broadcast	Broadcast	Broadcast	Broadcast
Microblogging	Broadcast	Broadcast	Broadcast	Broadcast
Folksonomy	Monitor others	Monitor others	Monitor others	Monitor others

Table 8: Lessons learned to develop coalitions (Sadeghi, Kuziemsky, and Bengoucef, 2011)

Social Media	Develop coalitions			
	Purposefully build partnerships and networks to create results	Demonstrate a commitment to customers and service	Mobilize knowledge	Navigate socio – political environments
Blogs	Demonstrate	Demonstrate	Share data, information and	Scan, synthesize and make

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Social Media	Develop coalitions			
	linkages	commitment	knowledge	“sense”
Wikis	Collaborate	Demonstrate	Use to effect improved understanding	Scan, synthesize and make “sense”
RSS	Broadcast and monitor	Demonstrate and flag successes	Broadcast and monitor others	Scan, synthesize and make “sense”
Social Networks	Collaborate	Demonstrate and flag successes	Demonstrate and share	Scan, synthesize and make “sense”
Mashups	Bring sources of data together	Use multiple data sources to demonstrate	Illustrate using multiple data sources	Scan, synthesize and make “sense”
Podcasts	Collaborate on projects	Broadcast and monitor	Respond to needs	Scan, synthesize and make “sense”
Microblogging	Broadcast and monitor others	Broadcast and monitor	Share and demonstrate	Scan, synthesize and make “sense”
Folksonomy	Monitor others	Monitor	Monitor	Scan, synthesize and make “sense”

Table 9: Lessons learned for systems transformation (Sadeghi, Kuziemyk, and Bengoucef, 2011)

Social Media	Systems Transformation			
	Demonstrate Systems/Critical Thinking	Encourage and Support Innovation	Orientate Strategically to the Future	Champion and Orchestrate Change
Blogs	Participate and comment	Demonstrate leadership	Participate, monitor and correct	Demonstrate leadership
Wikis	Participate and contribute	Stimulate thinking and inspire action	Participate, monitor and correct	Participate

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Social Media	Systems Transformation			
	Demonstrate Systems/Critical Thinking	Encourage and Support Innovation	Orientate Strategically to the Future	Champion and Orchestrate Change
RSS	Distribute	Broadcast	Broadcast	Broadcast
Social Networks	Distribute and monitor	Stimulate and monitor feedback	Communicate, vision, mission, values	Communicate and monitor feedback
Mashups	Provide evidence	Demonstrate	Demonstrate needs and unfilled gaps	Demonstrate necessity for change
Podcasts	Broadcast and monitor feedback	Distribute and monitor feedback	Distribute and monitor feedback	Broadcast and monitor feedback
Microblogging	Broadcast and monitor	Distribute and monitor	Distribute and monitor feedback	Distribute and monitor feedback
Folksonomy	Monitor	Monitor	Monitor	Monitor

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Appendix II - Selected High Quality Sites on Social Media in Canada

The following sources are examples of high quality social media sites in Canada.

1. The Health Strategy Innovation Cell is a health policy think tank based at Massey College in Toronto.
www.innovationcell.com
2. Center for Global e-health innovation is a joint University Health Network and University of Toronto program.
<http://www.ehealthinnovation.org/>
3. UBC Librarian Dean Giustini provides a thoughtful approach to advancing social media from the perspective of information science at his Search Principle Blog.
<http://blogs.ubc.ca/dean/>
4. Dean Giustini provides a health science wiki
[http://hlwiki.slais.ubc.ca/index.php/UBC_HealthLib-Wiki - A Knowledge-Base for Health Librarians](http://hlwiki.slais.ubc.ca/index.php/UBC_HealthLib-Wiki_-_A_Knowledge-Base_for_Health_Librarians)
5. Health on the net foundation provides principles for judging and credentialing social media sites.
<http://www.hon.ch/home1.html>
6. Statistics Canada data liberation project identifies the plan to make data more available to Canadians
<http://www.statcan.gc.ca/dli-ild/dli-idd-eng.htm>
7. Cochrane provides their Webliography of evidence-based health care resources
<http://www.cochrane.org/about-us/evidence-based-health-care/webliography>

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8. Oxford University provides their approach to evidence based health information
<http://blogs.trusttheevidence.net/>
9. A You Tube video provides instructions on how to build a health care mashup
<http://www.youtube.com/watch?v=NX6Xr8gBLqo>
10. An excellent Podcast of contemporary issues in Canadian health care with Dr. Brian Goldman, White Coat/Black Art
<http://www.cbc.ca/whitecoat/>
11. Healthy Debate - a site stimulating thinking and discourse about contemporary issues
<http://www.healthydebate.ca/>

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Appendix III – POST Method (Extracted from Giustini, Grajales III, and Hooker, 2011)

Implementation Plan

Social media project _____
Organization Department _____
Implementation Date _____

(P) – People

With whom do you want to communicate? Who will be reading and commenting on your social media? Who are you trying to engage?

(O) – Objectives (or purpose)

Why do you want to establish a digital presence? What do you want to accomplish? What do you plan to achieve with this social tool? Inform? Encourage dialogue? Share information? What kind of information? How will this differ from your primary Web site?

(S) – Strategy

How will you ensure your strategy will be successful?

(T) – Technology (tools)

Which social media tool will you use?

(M) – Methods

- Who will manage and maintain your accounts? Who will be your administrator?
- How will you measure success? What metrics will you use?
- How often will the tools you selected be updated? (Depending on type of tool, updates may be expected frequently.)
- How will you promote your social media presence?
- How will you make connection to your official web sites?

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Appendix IV - Using Social Media: Tips and Best Practices (extracted from Giustini.,Grajales III, and Hooker, 2011)

- Ask yourself: *who* is your audience? Who do you want in your network?
- How much interaction do you want? A little, once in a while, *every day*?
- Do you want a local, national or international reach in your network?
- Do you want synchronous or asynchronous contact? Or a mix?
- Find out whether the learning curve with social media is *sharp* and find a buddy
- Do you want to start a blog? A wiki? How much upkeep is required?
- Select your social media tools based on your needs, or needs of your organization

Start (and keep) it simple

- Start with reading some of the literature
- Start following a few blogs
- Start with basic activities and test the digital space(s)

Be yourself

- Be honest about who you are, your knowledge, your limitations—earn others' respect
- Own up to any social networking gaffes
- Do not use pseudonyms or false identities
- Ensure that you are familiar your privacy settings
- Not much different than email, or conversations face-to-face!

Participate and share

- Networks are built on trust and reciprocity
- Others want to hear from you! Be willing to contribute to the conversation
- Connect with any people you know first, and ask them how to get started

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Keep up to your network

- Know what people in your network are saying, and what they might want
- Let people know what you think
- Share (or *re-share*) something new or exciting a few times a week

Choose what tools you want to use

- Find tools and approaches that fit for you and that you enjoy
- Use the POST method or devise your own framework
- Keep in mind many tools (Blogs, Wikis and Twitter) can work *together*

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