Engaging Provincial Stakeholders: A Strategic Communications Plan for Department of Pediatrics

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Community-University Institute for Social Research

Building healthy, sustainable communities
Since 1999, the Community-University Institute for Social Research (CUISR)—formally established as a university-wide interdisciplinary research centre in 2000—has remained true to its mission of facilitating “partnerships between the university and the larger community in order to engage in relevant social research that supports a deeper understanding of our communities and that reveals opportunities for improving our quality of life.”

Strategic Research Directions
CUISR is committed to collaborative research and to accurate, objective reporting of research results in the public domain, taking into account the needs for confidentiality in gathering, disseminating, and storing information. In 2007 CUISR adopted five interdisciplinary strategies:

1. Saskatoon Community Sustainability
2. Social Economy
3. Rural-Urban Community Links
4. Building Alliances for Indigenous Women’s Community Development
5. Analysis of community-university partnerships

These strategic directions extend our research organized until 2007 in three modules—quality of life indicators, community health determinants and health policy, and community economic development—the result of efforts to address health, quality of life, and poverty that led to the formation of CUISR to build capacity among researchers, CBOs, and citizenry.

CUISR research projects are funded largely by SSHRC, local CBOs, provincial associations, and municipal, provincial, and federal governments. Beginning in 2007, CUISR’s reputation for high quality community-based participatory research (CBPR) enabled us to diversify our funding by responding to community agency requests to conduct research projects for them for a fee.

Tools and strategies
Knowledge mobilization: CUISR disseminates research through newsletters, brown bag luncheons, reports, journal articles, monographs, videos, arts-based methods, listserv, website.

Portal bringing university and community together to address social issues: CUISR facilitates partnerships with community agencies.

Public policy: CUISR supports evidence-based practice and policy at these tables: provincial Advisory Table on Individualized Funding for People with Intellectual Disabilities, Saskatoon Poverty Reduction Partnership, and Saskatoon Regional Intersectoral Committee (RIC).

Student training: CUISR provides training and guidance to undergraduate and graduate students and encourages community agencies to provide community orientation in order to promote positive experiences with evaluators and researchers.
ENGAGING PROVINCIAL STAKEHOLDERS: A STRATEGIC COMMUNICATIONS PLAN FOR DEPARTMENT OF PEDIATRICS

Kris Klimosko, Marjorie Delbaere, and Isobel M. Findlay

UNIVERSITY OF SASKATCHEWAN
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We also acknowledge the valuable contributions of Antoine Bruneau-Bouchard who is responsible for Appendix B which measures the economic impacts of endowed chair positions in pediatrics at the Children’s Hospital of Saskatchewan on the basis of information generously provided by Dr. Alan Rosenberg, B.A., M.D., F.R.C.P.C., University of Saskatchewan.
Against the background of a growing Saskatchewan population and an evolving health care environment, the Department of Pediatrics partnered with Community-University Institute for Social Research (CUISR), University of Saskatchewan, in order to develop a strategic communications plan that would expand the Department of Pediatrics brand provincially and effectively engage multiple off-campus partners.

The Department of Pediatrics at the College of Medicine provides comprehensive patient care services in a wide range of subspecialties to children and adolescents throughout the province. Additionally, the department is engaged nationally through, for example, its active membership in the Canadian Association of Pediatric Health Centres (CAPHC) whose annual conference the department will be hosting in 2017. The year 2017 will also see the scheduled completion of the province’s first ever Children’s Hospital, which will have the capacity to serve approximately 40,000 children and adolescents annually. By forging and deepening its strong community relationships and partnerships, the department can further expand its child advocacy efforts through collaboration and knowledge translation.

In achieving its mission, the department is supported by a number of partnerships, which include:

- Children’s Hospital Foundation of Saskatchewan
- Greater Saskatoon Catholic Schools
- Northern Medical Services
- Saskatoon Health Region
- Saskatoon Tribal Council
- The Arthritis Society
- The Canadian Diabetes Association
- The Lung Association of Saskatchewan

After the literature review and environmental scan, findings from key informant consultations and a SWOT analysis are reported, all of which help shape the strategic communications plan, its objectives, audiences, messages, strategy, and measures of success. Appendix A compares the online communications effectiveness of pediatric departments across Canada; Appendix B includes an assessment of the economic impact of endowed chairs in pediatrics.

The literature review refers to an Innovation Saskatchewan Report completed in 2010 that identifies ‘Health’ as a latent sector in Saskatchewan. The report concludes that a connection created between health and agriculture could provide an innovative approach to economic development and create shared value for rural and urban communities. As well, a brand new state-of-the-art Health Sciences building further adds to the capacity of the province
and lends itself to the advance of pediatric health care in the province.

Community leaders, faculty, employees, partners, and other community groups with a direct involvement in the health care industry were all represented in key stakeholder consultation meetings. A summary of the results and key insights that emerged from the consultations include:

- Build on the culture of collaboration within the department
- Apply real-time data and analytics to measure the effectiveness of patient-oriented research
- Proactively address social determinants
- Engage communities, and improve health equity provincially, especially in rural and northern communities
- Strengthen partnerships provincially, nationally, and internationally
- Increase knowledge translation and leverage the diversity of the province to improve the health of children and adolescents
- Expand child advocacy throughout Saskatchewan
- Capitalize on opportunities to invest in human resources

The objectives of the department’s strategic communications plan were derived from the situation analysis, in particular, the key stakeholder consultations. Understanding both stakeholder and front-line worker needs can help contribute to the sustainability of health care in Saskatchewan through incorporating valuable feedback into programs to improve their quality and effectiveness. The department’s objectives include:

- Engage Saskatchewan communities
- Increase brand awareness provincially, nationally, and internationally
- Strengthen relationships with new and existing partners
- Expand child advocacy efforts in Saskatchewan
- Proactively focus on addressing the social determinants of health
- Build on the department’s culture of collaboration
- Enhance department efficiencies through investment

Furthermore, multiple target audiences have been identified in order to achieve the main objectives of the strategic communications plan with an emphasis on increasing the frequency of two-way communication between the department and each target audience:

- Rural and urban Saskatchewan residents
- Current and potential employees
- Current and potential community partners
- Policy makers
- Funders/donors
- Media
The vision of the Department of Pediatrics is to improve the health of Saskatchewan children in a family-centred environment, train the next generation of pediatricians to the highest standard, and create groundbreaking research. The mission of the Department of Pediatrics is to raise the standard of health care, especially for vulnerable children and adolescents, in Saskatchewan through research, knowledge translation, teaching, collaboration, and advocacy. This will be accomplished collectively through continuous engagement and communication with our valued partners, stakeholders, employees, and communities.

The following key messages were constructed based on the outcomes of the situation analysis, in particular the key stakeholder consultations where social responsibility was a common theme:

- The Department of Pediatrics at the University of Saskatchewan is the most trusted adviser on matters of child and adolescent health in Saskatchewan and a champion of child advocacy.
- The Department of Pediatrics is committed to expanding child advocacy and advancing pediatric health care in Saskatchewan through strong partnerships.
- The Department recruits, trains, and retains the best people for Saskatchewan health.
- The Department is committed to delivering and advancing the highest quality pediatric health care in Saskatchewan.
- The Department is leading a collaborative, learning culture among partners and communities, and building internal and external capacity for excellence in patient care, teaching, and research outcomes in Saskatchewan.
- The Department is investing in healthy children and community futures for the long-term sustainability of Saskatchewan research and health care.
- The Department demonstrates its social responsibility by actively addressing the cost of poverty to improve health equity provincially.
- The Department is investing in research for healthy Saskatchewan children, communities, and economies.
- The Department is implementing real-time data and analytics to programs for sustainable, cost-effective programs and policies.

In fulfilling the department’s mission, the strategy and tactics used are centred on increasing community engagement and brand awareness, strengthening new and existing partnerships, and expanding child advocacy efforts through collaboration with partners and similar organizations whose vision and mission aligns with that of the departments.

First, traditional and social media should be further explored to increase engagement with diverse community groups. An annual two-day dinner in Regina could be established, which would bring together many partners and key stakeholders to share success stories and discoveries, as well as exchange and disseminate information. In addition, using powerful social media tools, such as Twitter and Facebook, can help to communicate stories and messages to a broad audience.
Second, investing in research, human resources, and training would be valuable for building on the strength of the culture of collaboration within the department. Offering incentives and scholarships to top faculty, researchers, and students will help with recruiting and retaining top talent.

Third, becoming a Canadian Institutes of Health Research (CIHR) SUPPORT Unit and engaging in patient-oriented research will help to better understand patients and their health status. Implementing and benchmarking research and patient programs could help to raise the standard of pediatric health care through both continuous goal setting and quality improvements to programs. It is crucial that all programs are measured with relevant and focused metrics, striving for cost-effective and sustainable programs.

Lastly, investing in research and equipment, including proven technologies, can increase department efficiencies. Research could create more department efficiencies through project discoveries and innovation advancements (see Appendix B for the economic impact of creating endowed chairs in pediatrics).

Many opportunities exist to develop and build strong community partnerships with companies in the province who have a particular interest in health care and social opportunity. In this context, key infrastructure is already in place, including the new Health Sciences building, the Canadian Light Source Synchrotron, the National Research Council, the Cyclotron, and the Vaccine and Infectious Disease Organization (VIDO-InterVac), and the soon-to-be Children’s Hospital of Saskatchewan. Investing in patient services, community futures, research and development, commercialization projects, and technology infrastructure will increase Saskatchewan's competitive advantage, while helping to fulfill the mandate of the Department of Pediatrics.
**Introduction**

In the context of a fast-growing Saskatchewan population, rapidly changing health care environment, and specific investments in the provincial health sciences and pediatric care in particular, the Department of Pediatrics partnered with Community-University Institute for Social Research (CUISR), University of Saskatchewan, in order to develop a strategic communications plan that would expand the Department of Pediatrics brand provincially and effectively engage multiple off-campus partners.

Established in 1926 at the University of Saskatchewan, the School of Medical Sciences became a College in 1952, was officially named the College of Medicine, a major teaching and research centre, in 1955, and received accreditation in 1957 from both the Canadian Association and American Association of Medical Colleges (Canadian Resident Matching Service, 2012; University of Saskatchewan, College of Medicine, 2014). The Department of Pediatrics at the College of Medicine is the predominant pediatric centre in Saskatchewan, providing comprehensive patient care services in a wide array of subspecialties to children and youth throughout the province. The divisions within the Department include cardiology, critical care, developmental pediatrics, emergency medicine, endocrinology, gastroenterology, general pediatrics, hematology/oncology, infectious diseases, medical genetics, neonatology, nephrology, neurology, respirology, rheumatology/immunology, and social pediatrics/pediatric school-based health (University of Saskatchewan, Department of Pediatrics, 2014). In fulfilling its mandate, the department is supported by a number of partnerships:

- Children's Hospital Foundation of Saskatchewan
- Greater Saskatoon Catholic Schools
- Northern Medical Services
- Saskatoon Health Region
- Saskatoon Tribal Council
- The Arthritis Society
- The Canadian Diabetes Association
- The Lung Association of Saskatchewan

A state-of-the-art Health Sciences building completed and officially opened, May 8, 2014, at the University of Saskatchewan supports collaboration among faculty, students, and researchers from all health science disciplines to create “new standards for interprofessional education, research, and practice.” Focused on a team-centred environment that will help to educate and train health professionals, the health sciences project is the largest capital building project in the University’s history, as well as an investment in the future of health care education and practice in Saskatchewan (University of Saskatchewan, College of Medicine, 2014). Combining teaching concepts with broad research investigations will help to advance the understanding and exploration of health issues, while implementing best practices to meet the needs of patients (University of Saskatchewan, College of Medicine, 2014).
Construction has also commenced on the province’s first ever Children’s Hospital, which is scheduled to be completed in 2017. The Children’s Hospital of Saskatchewan will serve an increasing population base resulting from the province’s robust growth in many industries. As of July 1, 2014, Saskatchewan had a record high population of 1,125,410, an increase of 1.7% from a year previous, and an increase of 16.2% compared to the 968,157 population of the province in 2006 (Government of Saskatchewan, 2014). The new Children’s Hospital will serve approximately 40,000 children and adolescents annually. Some of the features include the following:

- Private patient rooms, with dedicated sleep spaces in each room will support partners and family members. Incorporating a family-centred environment was one of main goals of the hospital when it was designed.
- All of the maternal care services will be centralized on one floor to ensure each patient’s stay is comfortable and accessible.
- The 176-bed facility is designed to perform more than 5,000 surgical procedures annually. (Children’s Hospital Foundation of Saskatchewan, 2014)

The new Children’s Hospital will not eliminate out-of-province care. Rare conditions that require highly specialized care will potentially still mean travel out of province. The Stollery Children’s Hospital in Edmonton will continue to be Western Canada’s centre for pediatric cardiac surgery (Stollery Children’s Hospital, 2014).

The Department of Pediatrics is an active member of the Canadian Association of Pediatric Health Centres (CAPHC), who “is a recognized leader and advocate for advancing the improvement of health care for Canada’s children and youth” (Canadian Association of Pediatric Health Centres, 2014). The Saskatoon Health Region (SHR) has been an active member of CAPHC since 2002, (CAPHC, 2014). The Department will be hosting the CAPHC annual conference in 2017.

Against this background, the project guided by CUISR’s principles, tools, and strategies—knowledge mobilization, partnership facilitation, evidence-based policy development, and student engagement—used the following methods to achieve the objectives of this strategic communications plan:

- Audit current communications
- Review the literature on healthcare websites and online communications
- Scan the online environment of seven pediatric centres in Canada for best practices guided by a set of online communications metrics (Appendix A)
- Complete eleven key informant interviews to understand stakeholder needs
- Identify communication gaps
- Recommend where traditional and social media may be best mobilized within the mandate of the organization

After sections on the literature review and environmental scan, findings from key informant consultations and a SWOT analysis are reported, all of which help shape the strategic communications plan, its objectives, audi-
ences, messages, strategy, and measures of success. Appendix A lists online communications metrics; Appendix B includes an assessment of the economic impact of endowed chairs in pediatrics.

LITERATURE REVIEW

Based on secondary sources such as journal articles, books, and websites, this section provides evidence-based research findings on trends and issues in health care in provincial, national, and international jurisdictions; key opportunities and challenges in the sector and in the broader socio-economic environment; and best online communication practices for pediatric departments across Canada.

Trends and Issues in Canadian Health Care

The Standing Committee on Social Affairs, Science, and Technology (2002) completed a two-year research project for the Government of Canada on the Health of Canadians, hearing from 400 witnesses and examining foundational principles, historical development of the system, systems in international jurisdictions, pressures on and constraints in the system, and the role of the federal government. The Standing Committee (also known as the Kirby Committee) highlighted a 1974 report by former federal Minister of Health, Marc Lalonde, A New Perspective on the Health of Canadians. This highly influential report, citing expert opinion that 25% of the health of the population was attributable to the health care system, while 75% was dependent on factors such as the physical environment, biology and genetic endowment, and socio-economic conditions, promoted the notion of the “health field” involving both the health system and health promotion, insisting that a good health care system is only one of numerous factors that help keep people healthy.

There was agreement within the Standing Committee (2002) that multiple factors—or “determinants of health”—influenced individual health status and the overall population health. These included early childhood; income and social support; education; health care; gender; employment and working conditions; social environment; physical environment; personal health practices and coping skill; and culture. A population health approach officially endorsed in the 1990s by the federal, provincial, and territorial Ministers of Health aimed to mitigate the risk of potential health problems before they require treatment within the health care system. Population health advocates believe that investing more human and financial resources in a population health approach would improve health outcomes, and, in the end, reduce the demand for the services required to treat illness. A wide range of health status indicators shows significant disparities among Canadians in terms of geographical location, gender differences, socio-economic conditions, and demographic factors. Hence, population health strategies encompass a broad range of activities, ranging from health promotion and disease prevention to overall policies and programs that influence income distribution, housing, access to education, water quality, and workplace safety (Standing Committee, 2002).

Some disturbing trends affecting the health of children and adolescents in Canada raised the alarm with
respect to overweight and obese children: the body mass index of Canadian children between the ages of 7 and 13 had increased dramatically over time. In 1981, 15% of boys and girls were overweight; by 1996 the percentages of overweight children had risen to almost 29% of boys and 23% of girls. The research also suggested that children and adolescents with a large body mass index were more likely to experience health problems as adults (Standing Committee, 2002). According to Statistics Canada, 31% of Canadian children and adolescents were found to be overweight or obese by 2011 (Roberts, et al., 2012).

While upholding the five principles (universality, comprehensiveness, accessibility, portability, and public administration) of the Canada Health Act, the Standing Committee (2002) promoted devolution of responsibility to individuals, primary health care, and regional health authorities, new governance and funding mechanisms, as well as the importance of academic health sciences centres as “a national resource” and “crucial part of the health care infrastructure in Canada” in need of substantial investment of $4 billion over ten years.

Population health is one of the four pillars of health research of Canadian Institutes of Health Research (CIHR), the federal funding agency (Canadian Institutes of Health Research, 2014). The CIHR Institute of Population and Public Health particularly supports research relating to social, biological, environmental, and cultural capacities, which determine the health of individuals, communities, and global populations (Canadian Institutes of Health Research, 2014).

The National Children’s Agenda is another federal agency involved in a variety of population health and healthy child development initiatives, including the Canada Prenatal Nutrition Program, Aboriginal Head Start, the National Child Benefit, the Community Action Program for Children, as well as parental and maternity leave benefits that are covered under Employment Insurance. Some of the approaches employed to achieve agency objectives include comprehensive school health promotion programs, support for families at risk, and comprehensive work health and safety programs (Standing Committee, 2002).

According to many experts, socio-economic status constitutes the most powerful influence on health; differences in the health status are clearly evident in a comparison of the highest and lowest income groups (Standing Committee, 2002). Strategies must take into consideration the link between health status and demographic and environmental factors, such as age, region of residence, gender, and race, as well as disease and injury trends among specific demographic groups, such as youth and Aboriginal peoples (Standing Committee, 2002). Therefore, strategies tailored to the situations of each affected group and targeted to the groups that will derive the most benefit from prevention depend on effective engagement, partnerships, and coordination.

**Innovation Saskatchewan Report—Latent Sector**

A project commissioned by Innovation Saskatchewan in 2010 analyzed the strengths of the provincial economy, and the sectors contributing to the economy. Jeremy Heigh, Chief Economist at Sift Every Thing Corporation (Sift) and author of the report, conducted a Jurisdictional Advantage Assessment (JAA) to identify the core drivers of the Saskatchewan economy, the areas that drive growth and contribute to the long-term sustainability of the province. It used an evidence-based approach to determine Saskatchewan’s competitive advantage. The find-
ings indicated these core engines driving growth in the Saskatchewan economy (contributions towards the province’s annual Gross Domestic Product (GDP) are in parentheses):

- Agriculture (11.1%)
- Oil and Gas (9.4%)
- Mining and Metals (3.4%)

The JAA also identified two latent sectors in Saskatchewan:

- Health
- Forestry

Health represents over 6% of the province’s GDP and employs more than 12% of the workforce, with the highest percentage of highly educated people of any sector (Innovation Saskatchewan, 2010). The project showed how a connection between health and agriculture could provide an innovative approach to economic development. Opportunities may exist to form partnerships with companies in the agricultural biotechnology sector, leveraging another strength of the province (Innovation Saskatchewan, 2010). To this end, key infrastructure is already in place, including the new Health Sciences building, the Canadian Light Source Synchrotron, the National Research Council, the Cyclotron, and the Vaccine and Infectious Disease Organization (VIDO-InterVac). As well, the Children’s Hospital of Saskatchewan opening in 2017 will add further to the growth and capacity of the province. Investing in research and development, commercialization projects, science infrastructure, and technology infrastructure will increase Saskatchewan’s competitive advantage.

Creating Shared Value

In an article relevant to the discussion of healthy societies and economies, Porter and Kramer (2011) promote shared value, which involves creating economic value in a way that also creates value for society by addressing its challenges and needs. Shared value, they argue, “is not philanthropy, social responsibility, or even sustainability, but a new way to achieve economic success,” to discard outmoded, short-term approaches to financial performance, to bring transformative value thinking to the heart of business, and to support new collaborations across the profit and nonprofit sectors (Porter & Kramer, 2011, p. 64).

At a time when business faces a legitimacy crisis and a new generation expects business to be responsive and responsible, the time is right for shared value perspective focused on “strengthening the local cluster of supporting suppliers and other institutions in order to increase [an organization’s] efficiency, . . . product quality, and sustainability” (Porter & Kramer, 2011, p. 65). At the heart of shared value is the understanding that “the competitiveness of a company and the health of the communities around it are closely intertwined” and that location itself is a critical factor in “the productivity and innovation” of an organization (Porter & Kramer, 2011, pp. 66-67). Unmet needs in areas such as health, housing, or nutrition can cause companies to innovate in focusing better on how good products and processes are for people. Such innovation and productivity are strongly influenced by “clusters,” or
geographic concentrations of firms, service providers, and logistical infrastructure in a particular field,” including academic programs and other public assets for multiplying benefits for companies, communities, and economies (Porter & Kramer, 2011, p. 72). For an in-depth assessment of the economic impact of the creation of ten endowed chair positions in pediatrics at the new Children’s Hospital of Saskatchewan, see Appendix B.

Strategic Communications Plan—Aligning Communications and Strategy

According to Erik Qualman, author of the book Socialnomics, a Top 100 Digital Influencer, and Top 50 MBA Professor, investing in technology infrastructure can reduce geographical barriers and communication gaps. Implementing communication media effectively and strategically can significantly break down barriers and create value for stakeholders (Qualman, 2013). Similarly, Argenti, Howell, and Beck (2005) promote “the strategic communication imperative” whereby communication aligns “with the company’s overall strategy, to enhance its strategic positioning. . . . Companies that take a tactical, short-term approach to communicating with key stakeholders will find it increasingly difficult to compete,” while those with “an integrated, strategic approach to communications” will find success (Argenti et al., 2005, p. 83). Communication is at the heart of developing and executing strategy that “moves the organization” and “motivate[s] people to move behind it” (p. 84). Clarity, consistency, and repetition are key to authentic communications using the right channels to deliver the most value to the stakeholders whose feedback is invaluable. If the communication function is to improve community relations, for example, the objective should be to build the brand image and appropriate channels can be speeches, events, and philanthropy (Argenti et al., 2005). “Communication is not a separate function”; it is integrated and engages organizational leaders. It is among an organization’s “intangible assets” that impact performance and value; between 1978 and 1998 corporate value related to such assets increased from 20% to 80% (Argenti et al., 2005, pp. 87-89).

Developing Metrics for Online Communications

Technology can increase economies of scale and efficiencies for organizations. When time is an important resource, hospitals are trying to increase convenience, improve services and access to information, and provide value to the user through electronic services, such as websites and other communication methods (Rafe & Monfaredzadeh, 2011). Based on the analyses of almost 2,000 hospitals in the United States, Ford, Huerta, Diana, Kazley, & Menachemi (2013) discovered that “website quality significantly correlates with patients’ overall rating of the hospital and their intention to recommend the facility to others.” The “willingness to recommend a hospital was determined to be the number one factor relating to satisfaction” (Ford et al., 2013). A key finding in the study was that using website quality as an indicator of overall care quality is consistent with the belief that greater organizational transparency will lead to improved patient care outcomes. Organizational cultures committed to “quality and safety make their information relevant and easily accessible, therefore increasing their transparency to the public” (Ford et al., 2013).

Furthermore, “the key to survival for organizations in the information age is the ability to adapt and integrate management practices with new information technologies to help improve people’s lives” (Cudmore, Bobrows-
ki, & Kiguradze, 2011). The study found that “the factors that determine attitudes towards a website include perceived quality, usability, perception of information quality, and website design” (Cudmore et al., 2011). The higher the perceived quality of the website, the higher the traffic to the website and the higher the search engine ranking (Cudmore et al., 2011).

This trend to electronic communication (4.5% of Internet searches are health-related) has brought with it a need for comprehensive frameworks to evaluate the quality of health care websites on such dimensions as reliability, efficiency, usefulness, accessibility, and safety (Rafe & Monfaredzadeh, 2011). Rafe and Monfaredzadeh (2011) identified seven metrics (used later in this report) to evaluate websites:

1. Content Quality
2. Design Quality
3. Organization Quality
4. User Friendly Quality
5. Performance Quality
6. Service Quality
7. Technical Points

Each of the seven categories has related indicators. Content quality indicators, for instance, include relevance, accuracy, comprehensiveness, usefulness, timeliness, impartiality, multi-language/culture, variety of presentation, authority, and editing quality (Rafe & Monfaredzadeh, 2011). The design quality metrics deal with the visual characteristics of website design, such as attractiveness, appropriateness, colours, image, sound, video quality, text, and advertisements and banners. Organization quality metrics involve the general layout and logical structure of the page: site maps, scope, and navigation tools, and logo are key indicators included under this subheading. Another metric, user friendliness, pertains to ease of use, privacy, satisfaction, interaction, customization, and personalization. Performance quality refers to speed, usability, responsiveness, accessibility, availability, novelty, security, reputation, reliability, integrity, changeability, dynamism, consistency, sufficiency, and completeness. Service quality relates to internet reception, bill settlement, medical consult, information, E-results, library, and data base, a calendar of events, update lists, frequently asked questions, communications, help and search functions, news exclusive to the hospital, and service quality. Lastly, the technical points metric contains elements and indicators such as page structure, programming languages, size, volume, information retrieval, ranking in search engines, and extendibility (Rafe & Monfaredzadeh, 2011). The application of the above metrics can be found in Appendix A.

**Hospital Positioning**

Fischer (2014) demonstrated how, based on market environments, “hospitals can position themselves by using multimedia management, target group segmentation, and integrated messaging.” There are four different archetypes that can be formed “depending on the market, channels, and content: Public hero and trusted adviser, quality leader, service provider, and corporate value performer” (Fischer, 2014).
Fischer (2014) explains how each archetype or prototype differentiates itself through “content, knowledge, market, services offered, and communication channels.” The public hero and trusted adviser archetype can differentiate itself through the communication of relevant public health information and the promotion of community services. Providing patient information that is user friendly, easily accessible, and understandable contributes to this category. The archetype also promotes “social responsibility through active engagement in the community” (Fischer, 2014). “Sharing the hospital’s knowledge, facilities, and resources with surrounding communities creates a positive health image” (Elbeck, 1988).

“Educational classes or sponsorship can be used to promote a hospital’s societal value” (Javalgi, Whipple, McManamon, & Edick, 1992; Kirdar, 2007). Being a trusted adviser can transfer knowledge to rural and urban communities. The trusted adviser “utilizes multiple channels to spread health care knowledge” (Ford, Huerta, Schilhavy, & Menachemi, 2012). Online libraries, educational brochures, and links to other patient organizations “serve the goals of prevention, health promotion, and patient education in the event of illness” (Huang, Bolchini, & Jones, 2011; van der Vaart, Drossaert, Tall, & van de Laar, 2011).

Incorporating “marketing communications across different channels helps to establish positioning” (Fischer, 2014). Building on the archetype framework and positioning, the next step is integrating messaging across multiple channels, such as a Websites, Twitter page, and Facebook page (Fischer, 2014). In order to “enhance recall and recognition, consistent messaging needs to be communicated to maintain the desired positioning over the long term” (Berry & Seltman, 2007; Srivoravilai, Melewar, Liu, & Yannopoulou, 2011; Wu, 2011).

It is also important to “integrate multichannel management into hospital marketing communications” (Fischer, 2014). “One central and consistent message should be conveyed within all channels, because each of them holds different values” (Gombeski, Taylor, Krauss, & Medeiros, 2003; Menon, Goodnight, & Wayne, 2006). Public relations are driven from “organizational values, as well as through promoting community achievements” (King & Scrimger, 1993; Tengilimoglu, Yesiltas, Kisa, & Dziegielewski, 2007).

The future of “social networking will help to break down social and cultural barriers created by distance” (Qualman, 2013). Effective organizations and people “embrace critical feedback and therefore digital comments that identify areas for improvement are invaluable” (Qualman, 2013). Social media enables a platform that encourages more people to engage in charitable and productive activities that they can rally around and become a part of (Qualman, 2013). The ALS Ice Bucket Challenge is a relevant example. “ALS Ice Bucket Challenge became a social media frenzy because it was exciting, fun, and a good cause,” said CEO Jeff Shuck, whose company Plenty Consulting specializes in peer-to-peer fundraising (Diamond, 2014). Donations related to the ALS Ice Bucket Challenge have exceeded $100,000,000 (Diamond, 2014). Hyderabad-based Manju Latha Kalanidhi came up with the challenge with the hashtag #RiceBucketChallenge that encouraged people to save water and feed the hungry (Kohli, 2014). Social media provided the platform for interaction and pushed the call to participate. The most effective form of advertising was at one time ‘word of mouth,’ but now with social media has changed to ‘world of mouth’ (Qualman, 2013).

However, there are differing opinions about the effectiveness of social media. Whereas Aaker and Smith
(2010) argue that “social networks are very effective at increasing motivation,” Gladwell (2010) argues that social media promote “weak ties” and low-level motivation while “strong ties,” loyalty, and commitment are more likely to occur through traditional means such as face-to-face meetings and interactions (Gladwell, 2010).

With Saskatchewan’s scalability and innovative history, there are many opportunities to integrate multiple disciplines. By combining online communication, promotion of community services, and social responsibility, hospitals can increase brand awareness and brand image. The biggest challenge for health care organizations is to have consistent, continuous, and centralized messaging. Furthermore, “there is an opportunity for organizations to build on their strengths and capitalize on jurisdictional advantages” (Innovation Saskatchewan, 2010). An organization’s growth has a “multiplier effect for the economy by creating jobs and stimulating new business and opportunities” (Porter & Kramer, 2011).

**ENVIRONMENTAL SCAN**

An environmental scan was completed within Canada to identify leaders in pediatric health care, examine comparable departments, and determine their competitive advantages. Using online communication metrics developed for websites (Rafe & Monfaredzadeh, 2011), Twitter (Qualman, 2013), and Facebook (Qualman, 2013), the online communications of eight Canadian pediatric departments were assessed at these universities: University of Toronto, McMaster University, Dalhousie University, University of Manitoba, University of Saskatchewan, University of Alberta, University of Calgary, and University of British Columbia. Appendix A summarizes findings.

Websites are frequently used in the health industry to communicate and engage with communities. Out of the eight departments analyzed, including the University of Saskatchewan, only the University of Alberta has a link to Twitter and Facebook pages on its website. In addition, it is a joint account of the Faculty of Medicine and Dentistry.

The Department of Pediatrics at the University of Toronto and the Hospital for Sick Children (SickKids) are highly co-branded. The Hospital for Sick Children is an industry leader in online communications and culture, evidenced by having won “Canada’s Most Admired Corporate Culture Award” in 2011 (Hospital for Sick Children, 2014). It was chosen from among the 440 nominated organizations. The Department of Pediatrics at the University of Toronto has very strong partnerships, and it conducts teaching and research in state-of-the-art facilities, such as the Peter Gilgan Centre for Research and Learning which is located in Toronto’s Discovery District (University of Toronto, Department of Pediatrics, 2014).

The Hospital for Sick Children has a Twitter account, YouTube Channel, Facebook page, and a LinkedIn page. The communications manager and media specialist handle public and media relations for the department (Hospital for Sick Children, 2014). Information about faculty research discoveries, and conferences held by the de-
partment are highlighted on the website and social media (University of Toronto, Department of Pediatrics, 2014). Although the department’s website could be strengthened, several links throughout the department’s page guide you to the Hospital for Sick Children website.

The McMaster University Department of Pediatrics website includes stories and information that relate to the long-term sustainability of health and research (McMaster University, Department of Pediatrics, 2014). The department established a fund in 2012 to ensure research resources would be made more readily available and sustainable (McMaster University, Department of Pediatrics, 2014). The McMaster Children’s Hospital Research Collaborative (MCHRC) was set up and supported by the Hamilton Health Sciences Foundation and McMaster’s Children’s Hospital (McMaster Children’s Hospital, 2014). The MCHRC provides operating grants to established research programs and emerging research areas. It is the foundation that helps to support five research chairs in partnership with McMaster University (McMaster University, Department of Pediatrics, 2014).

In addition, the McMaster website includes an annual report encompassing information relating to community engagement, patient progress, current programs, research projects, and faculty discoveries (McMaster University, Department of Pediatrics, 2014). One example of community engagement is a monthly program the department of pediatrics committee established to bring children and youth from surrounding communities to the campus. Some of the topics covered in the program have included nutrition, physical activity, and child empowerment (McMaster University, Department of Pediatrics, 2014). The program has been extremely successful at combining social responsibility and social opportunity, as well as developing and strengthening community relationships.

Also, online communications targeted at faculty engagement are accessible on the website (McMaster University, Department of Pediatrics, 2014). Overall, the department has a high quality website, and it is rated second out of eight departments for online communications. The department rates high on content quality, design quality, and performance quality.

The Department of Pediatrics at Dalhousie University is one of the oldest academic pediatric centers in Canada (Dalhousie University, Department of Pediatrics, 2014). It is highly co-branded with the IWK Health Centre in Halifax, and it is the tertiary care center for the Atlantic Provinces in Canada (IWK Health Centre, 2014). The IWK Health Centre’s online communications are highly effective and engaging. The hospital offers world-class online and social media communications. However, the online communications for the department of pediatrics are underdeveloped. Some pages on the website have not been updated since January 2012. Online communications pertaining to community engagement and alumni are not clearly shown on their website.

The Department of Pediatrics and Child Health at the University of Manitoba provides care and service to Manitoba, Northwestern Ontario, and Nunavut (University of Manitoba, Department of Pediatrics and Child Health, 2014). Regular communication and engagement with local heroes and celebrities has added to the enjoyment of patients and staff. For example, Jonathan Toews has visited the hospital, even bringing the Stanley Cup for one visit (Winnipeg Health Sciences Centre, Children’s Hospital, 2014). Moreover, the content, stories, and webpage are engaging, relevant, and current. Lastly, it rates high on content quality, design quality, service quality, and faculty/staff engagement.
The Department of Pediatrics at the University of Saskatchewan has a website that is visually appealing. The site map found on the homepage contains all relevant information and is extremely useful for a new visitor to the website. Adding content and stories would enhance the scope of the webpage, further embedding a visitor in the experience of the department’s online image and presence.

The website rates high on content quality, design quality, performance quality, and technical points. As well, the website features links to all of the partnerships established in Saskatchewan under the “About” tab. Having a more visible link to partnerships on the homepage may help increase traffic to partners’ websites. Additionally, adding overall depth to the website is an opportunity for the department to help increase time spent on the page by viewers.

According to the established online metrics found in Appendix A, the department rates low on faculty/staff engagement, alumni engagement, and community engagement. There may be an opportunity to explore social media and publish news stories and pictures on the website about the department. In particular, the news and events section could use engaging pictures and content. Sharing videos and relevant stories about faculty discoveries and teachings may help to engage viewers and strengthen their connection with the department.

The Department of Pediatrics at the University of Alberta has formed strong partnerships to share information and promote collaboration alongside. Their partners include Maskwacis First Nations, Women and Children’s Health Research Institute, Stollery Children’s Hospital, and Alberta Health Services (University of Alberta, Department of Pediatrics, 2014). The department’s online communications, including the website and social media, are all integrated with the Faculty of Medicine and Dentistry. The communication vehicles they engage people with include: Twitter, Facebook, Flickr, and YouTube. Their online communications rank the highest out of all eight pediatric departments, based on the established metrics. The department’s commitment to online communications and engagement is clear, lending itself to connections with more users.

The Department of Pediatrics at the University of Calgary, in partnership with Alberta Health Services, has grown to over 300 clinical and academic faculty members in 20 clinical sections and divisions, as well as two academic units (University of Calgary, Department of Pediatrics, 2014). The main Centre for their faculty and staff is the Alberta Children’s Hospital (Alberta Children’s Hospital, Alberta Health Services, 2014). The Department’s website features information on education and training, internal resources for employees, contact information, and news regarding faculty research. Also, easy-to-use links are located throughout the website, and increase the organizational quality of the website. The website ranks high on content quality, but low on community engagement. Community initiatives and engagement are not promoted on the website.

The Children’s Hospital in British Columbia provides secondary and tertiary care for the children and youth in British Columbia (University of British Columbia, Department of Pediatrics, 2014). Department members include full-time, part-time, and community-based pediatricians. The department has a close relationship and partnership with the B.C. Children’s Hospital (B.C. Children’s Hospital, 2014).

The department rates high on the online communications metric in faculty/staff engagement and research promotion. They are both clearly highlighted on the website. Also, the website features stories on its homepage relat-
ing to research and department members. Ten stories are featured on the homepage, which translates into a high rating based on content quality because of the timeliness and presentation. Furthermore, the website offers the viewer high performance because it is responsive, accessible, and engaging. Finally, the stories featured on the homepage of the website are current and engaging for faculty and community groups. Their online communications score could be improved if they showed an increased commitment on their website to engaging their alumni.

Overall, pediatric departments across Canada are very effective at engaging their audiences, surrounding communities, and partners through online communications. The extent of engagement achieved by departments can vary depending on resources allocated to online communications. Only one out of eight departments analyzed has a social media presence. This may be an opportunity for other departments to explore and provide more value to the end user by bridging the online communications service gap.

**KEY STAKEHOLDER CONSULTATIONS**

Consultations were conducted with key stakeholders with a direct involvement in the health care industry. Community leaders, faculty, employees, partners, and other community groups were all represented in one-on-one consultation meetings. A summary of the key findings and insights that emerged from the consultations follows.

*Build on the culture of collaboration within the department*

- Building on the strength of teams within teams, and utilizing both inter- and intra-organizational culture to share information and knowledge translation.
- Ensuring the requisite skills are present. This point was validated by a Harvard Business Review article which identified skills (supported by executive investments in relationships, mentoring, and modelling collaboration, human resources practices, team leadership, and team structure) that contribute to collaboration on large, complex, and diverse teams: “appreciating others, being able to engage in purposeful conversations, productively and creatively resolving conflicts, and program management” (Gratton & Erickson, 2007, p. 106).
- Nourishing a collaborative culture and providing training and mentoring programs can make an important difference in team collaboration (Gratton & Erickson, 2007).
- Supporting leadership understood as “a social process that produces direction, alignment, and commitment” (McCauley, et al., 2008, p. 1).
Apply real-time data and analytics to measure the effectiveness of patient-oriented research

- Canadian health research has a global reputation for excellence, yet Canada faces a challenge in turning this powerful information into high quality and cost-effective care (Canadian Institutes of Health Research, 2014).
- Strategy for Patient-Oriented Research (SPOR) is a national coalition of federal, provincial, and territorial partners dedicated to the integration of research into care where the right patient receives the right treatment at the right time (Canadian Institutes of Health Research, 2014).
- Patient-oriented research refers to a continuum of research that engages patients as partners, focuses on patient-identified priorities, and improves patient outcomes. This research, “conducted by multidisciplinary teams in partnerships with relevant stakeholders, aims to apply the knowledge generated to improve health care practices and systems” (Canadian Institutes of Health Research, 2014).
- Dedicating processes within the department to assess and measure the effectiveness of programs and treatments in real-time.
- Collecting and analyzing data in real-time ensures that programs/measurements can be refined, revised, and/or discarded if they are found to be ineffective.
- Measuring programs in real-time helps to increase efficiencies, and allows organizations to become more adaptable to the surrounding environment.
- Establishing key performance indicators for the department will be imperative in order to set benchmarks and ensure that the metrics are effective, and they achieve what they were designed to achieve.

Proactively address social determinants

- Developing a plan to address social determinants is vital to improving the health of communities. Health inequity is an issue in Saskatchewan.
- There is an opportunity to leverage proven programs and policies, and to further integrate services to address social determinants in Saskatchewan.
- One of CIHR’s four health research pillars—Social, Cultural, Environmental, and Population Health (Canadian Institutes of Health Research, 2014)—can guide investigation of how the health of populations, or sub-populations, is affected by the determinants of health.
- “Poverty costs Saskatchewan $3.8 billion dollars annually in heightened service use and missed opportunities” (Plante & Sharp, 2014).
- “Poverty makes it much harder for people to take advantage of opportunities such as employment, education, community and cultural activities” (Plante & Sharp, 2014).
- Community involvement in developing public policy that promotes living conditions is necessary for good health and social responsibility.
Engage communities, and improve health equity provincially, especially in rural and northern communities

- There is a disparity in pediatric services available across urban centres and rural areas. The largest barrier in rural and northern communities is accessibility to health care professionals.
- One of the goals of the department and the province should be to reduce disparities in the quality of care, and increase the accessibility of care across communities and populations.
- Identifying, monitoring, and conducting evidence-based research will help to raise both the profile of the department and the standard of health care provincially.

Strengthen partnerships provincially, nationally, and internationally

- Partnering with community groups to develop and create innovative community-based health equity solutions and information.
- Exchanging ideas and disseminating information across the continuum can help to spur innovative ideas and programs in the province.
- There is key infrastructure in place to enhance collaboration, such as the Canadian Light Source Synchrotron, a new state-of-the-art Health Sciences building, VIDO-InterVac, Cyclotron, and the soon-to-be Children's Hospital.
- Another opportunity may be to increase the visibility among new and existing partners with an annual dinner and meeting in the province.

Increase knowledge translation and leverage the diversity of the province to improve the health of children and adolescents

- The Canadian Institutes of Health Research (2014) defines knowledge translation as “a dynamic and iterative process that includes synthesis, dissemination, exchange, and ethically-sound application of knowledge to improve the health of Canadians, provide more effective health services and products, and strengthen the health care system.”
- There is a highly diverse range of specializations across campus, locally, and provincially to enable both knowledge translation and information sharing.

Expand child advocacy throughout Saskatchewan

- CAPHC continues to “be a resource for best practice guidelines, safety initiatives, and benchmarking data” (CAPHC, 2014).
- To be effective, “advocacy must be deeply rooted within the organization’s values and be apparent in everything the department does” (Ontario Office of the Provincial Advocate for Children and Youth, 2014). Advocacy is often described as “the process of empowerment, giving power to others, and influencing change” (Ontario Office of the Provincial Advocate for Children and Youth, 2014).
- The vision of the Saskatchewan Advocate for Children and Youth (2014) is that “the rights, interests, and well-being of children and youth are respected and valued in our communities and in government legis-
tion, policy programs and practice.”

- Developing and strengthening community partnerships can help to expand the reach of child advocacy in Saskatchewan through collective and mutual resources.

**Capitalize on opportunities to invest in human resources**

- Saskatchewan has an increasingly diverse population; the demand for services has been increasing with the population growth. As of July 1, 2014, Saskatchewan had a record high population of 1,125,410 (Government of Saskatchewan, 2014).
- The demand for pediatrics services exceeds the supply of health care professionals in the province.
- Increased human resources could help to achieve the goal of building healthier communities.
- Interactions and exchanges among patients and health care professionals can help to educate children, adolescents, and communities on certain health care issues, while simultaneously bridging the communication gap.
- Health promotion and illness prevention across the province should be made a priority.
- Another important factor to consider is scalability, being able to adjust personnel in times of heightened demand and growth.
- Health Canada’s Health Human Resource Strategy is committed to improving Canadians’ access to sustainable and publicly funded health care services for all Canadians (Health Canada, 2011).
- Four strategic directions to give Canadians “access to appropriate, timely, effective care now and in the future” include: “(1) Supply of health providers—to increase the number of qualified providers entering the health workforce; (2) More effective use of skills—to increase productivity of health care providers by making full use of their skills, and to improve access to health care services for all Canadians, particularly in underserved areas, by addressing the maldistribution of health human resources; (3) Creating healthy, supportive, learning workplaces—to enhance working and learning conditions to maintain an experienced, dedicated workforce with the skills to provide high quality, safe, timely care; and (4) More effective planning and forecasting—to develop the capacity for more effective health human resources planning and forecasting to support an affordable, sustainable health care system” (Health Canada, 2011).

**DEPARTMENT OF PEDIATRICS: STRENGTHS, WEAKNESSES, OPPORTUNITIES, AND THREATS (SWOT) ANALYSIS**

In addition to the literature review and stakeholder consultations, a SWOT analysis completed the situation analysis relevant to the strategic communication plan. The analysis reviews the strengths and weaknesses of the department, as well as the opportunities and threats that it faces in the external environment.
An in-depth SWOT analysis assesses an ever-changing environment and allows an organization to respond proactively to address weaknesses, while building on the strengths to enhance capacity and accomplish objectives.

**Strengths**

Internal capabilities and resources that can help the department achieve its objectives are included within this section. First, teamwork is a big strength within a highly developed and specialized health care team that provides an essential medical service to the province of Saskatchewan. The department's culture of collaboration was a common theme that emerged from the key stakeholder consultations; which provides not only a significant attribute, but also a strong foundation from which the department can build from.

The Department of Pediatrics is positioned on a platform, which enables them to engage regularly with community leaders and groups. Department personnel are highly respected within the community, which can help facilitate new partnerships among diverse community groups. As mentioned, the department is an active member of CAPHC, and it will be hosting the annual conference in 2017. Hosting events and conferences helps to bridge the communication gap between partners and stakeholders.

Also, the website provides a strong foundation to build the online communications from. The website is both visually appealing and user-friendly. This added service to the viewer is often overlooked by many organizations.

Interchangeable links are also found within the department's website that encourages information and story sharing among partners. This is found under the ‘About’ tab on the department home page. The department also possesses the internal capacity to utilize social media, which could further increase the scope of their community engagement.

Lastly, there is valuable content on the department website for prospective students looking for information about the College's undergrad, residency, and fellowship programs.

**Weaknesses**

Internal factors that might prevent the department from achieving its objectives are included within this section. The online communication tools are underdeveloped, which can be a hindrance to achieving high engagement and the dissemination of knowledge among community partners.

Furthermore, the website does not have an interactive section that is focused on connecting and engaging with communities and stakeholders. The website is the only online communications tool utilized by the department. Thus, the department does not currently employ social media vehicles, such as Twitter, Facebook, and Instagram.

**Opportunities**

External circumstances that the department can exploit to achieve objectives are included within this section. The diversity of Saskatchewan's population and its health challenges present a fitting and unique environment for research, innovation, and healthy outcomes. In addition, Saskatchewan's diverse economy offers opportuni-
ties to be further explored, such as in the health care industry. According to a report commissioned by Innovation Saskatchewan (2010), Saskatchewan has a latent and untapped sector in health care.

The department could pursue increasing collaboration with innovative provincial companies and leaders in the health care industry. Enhancing co-ordination of programs with partners, organizations, and facilities could enhance collaboration. Facilities that could be utilized include the Canadian Light Source Synchrotron, the Health Sciences building, VIDO-InterVac, Cyclotron, and the soon-to-be Children's Hospital.

Canadian Institutes of Health Research has developed a framework for SUPPORT-- Support for People and Patient-Oriented Research and Trials—Units that are designed to support those engaged in patient-oriented research (Canadian Institutes of Health Research, 2014). SUPPORT Unit core functions include: knowledge translation, health systems, and implementation, data platforms and services, real-world clinical trials, methods support and development, consultation and research services, and career development in methods and health services research (Canadian Institutes of Health Research, 2014).

Following CIHR’s strategy, which is based on applying real-time data analytics and measurements to patient-oriented research, internal department efficiencies could be increased. Moreover, knowledge translation communicated to communities and stakeholders would likely advance the standard of pediatric health care in Saskatchewan.

There is also an opportunity for the department to strengthen existing partnerships, while developing new strategic partnerships. These potential partners could include community groups whose mission and values align with the departments.

In addition, social media tools such as Twitter and Facebook could be created to communicate more frequently with all stakeholders. The website could be refined to include an online forum for community residents and stakeholders to express their concerns and suggestions. Engaging with communities and stakeholders more frequently will help to increase transparency and build trust between the community and the department.

The department could establish an annual dinner to increase visibility among partners, and to strengthen relationships with key stakeholders. Hosting leading speakers, presenters, and researchers in the province could enhance visibility among local, regional, and national colleagues.

Saskatchewan has historically been a very philanthropic province. According to Statistics Canada, Saskatchewan was tied for the second highest percentage of Canadian residents making a charitable donation in 2012. In 2012, 24.3% of all Saskatchewan and Prince Edward Island taxpayers donated to a charity (Turcotte, 2013). This is second only to Manitoba at 25.4% (Turcotte, 2013). Saskatchewan, Alberta, and British Columbia donated $550 on average to a charitable or non-profit organization in 2010, among the highest in the country (Turcotte, 2013). On average, Canadians donate to 3.8 different charities and non-profit organizations annually (Plan Canada, 2010).

Furthermore, Saskatchewan had the highest volunteer rate in the country in 2010, where 58% of adults aged 15 and over volunteered (Vezina & Crompton, 2012). Moreover, Saskatchewan had the highest volunteer rate in 2007, where 57% of adults aged 15 and over volunteered (Vezina & Crompton, 2012). An article featured on Statistics Canada, findings conclude that volunteering is found to be consistently higher in rural and less urban areas (Vezina & Crompton, 2012). Volunteers could be deployed in various capacities by the department, including
expanding child advocacy throughout Saskatchewan.

**Threats**

External factors that might prevent the department from achieving its objectives are covered within this section. Firstly, there is high competition among non-profit organizations for funding, donations, and personnel. There are numerous non-profit organizations provincially, nationally, and internationally for people to donate to. With a population of 994,800 in 2003, Saskatchewan featured 7,963 non-profit and voluntary organizations in the province (Cornerstones of Community: Highlights of the National Survey of Non-profit and Voluntary Organizations, Statistics Canada, 2003). On a national level, in 2003, there were 161,227 non-profit and voluntary organizations in Canada, with a population estimate of 31,752,800 residents (Cornerstones of Community: Highlights of the National Survey of Non-profit and Voluntary Organizations, Statistics Canada, 2003). The number of non-profit organizations measured in the United States in 2005 was over 1,500,000 (Foundation Centre, 2005).

Secondly, there is an increasing demand for services provincially. Saskatchewan has an increasing population, which adds to the demand for pediatric services, in particular in rural and northern regions.

Lastly, rising health care costs are a threat to the organization and all stakeholders. Canada allocated 10.9% of its total Gross Domestic Product (GDP) to health care in 2011 and 2012. This is comparable with France, who spent 11.6% of their GDP on health care, and Germany, who spent 11.3% of their GDP on health care in 2012 (OECD Health Data, 2014). Alternatively, the United Kingdom allocated 9.1% of their total GDP to health care expenditures in 2012, while the United States allocated 16.9% of their total GDP to health care expenditures in 2012 (OECD Health Data, 2014).

**DEPARTMENT OF PEDIATRICS: MOVING FORWARD**

As the Department of Pediatrics moves into a period including the 2017 launch of the new Children’s Hospital, a strategic communications plan provides a foundation for the department moving forward. The following recommendations align with the vision, mission statement, and values of the department.

**Objectives**

The plan objectives were derived from the situation analysis, in particular, the key stakeholder consultations. Understanding stakeholder and organizational needs can help facilitate long-term success and ensure the sustainability of Saskatchewan pediatric health care. The objectives for the department going forward include:

- Engage Saskatchewan communities
- Increase brand awareness provincially, nationally, and internationally
• Strengthen relationships with new and existing partners
• Expand child advocacy efforts in Saskatchewan
• Proactively focus on addressing the social determinants of health
• Build on the department’s culture of collaboration
• Enhance department efficiencies through investment

That objectives are of equal importance and interrelate will help to raise the standard of health care in Saskatchewan, and achieve organizational goals.

**Target Audiences**
With the department serving the entire province, multiple target audiences have been identified in order to achieve the main objectives of the strategic communications plan to expand the department brand provincially and engage multiple off-campus partners. All target audiences are of equal importance to the strategic communications plan:

• Rural and urban Saskatchewan residents
• Current and potential employees
• Current and potential community partners
• Policy makers
• Funders/donors
• Media

It is important for the department to engage with the target audiences on a continuous and on-going basis. Constant and direct communication with each target audience will help to promote Saskatchewan pediatric health care through increased knowledge translation, education, and information sharing. Increasing the frequency of two-way communication with each separate audience will help to develop and strengthen relationships.

**Vision, Mission, Values, and Key Messages**
The vision of the Department of Pediatrics is to improve the health of Saskatchewan children in a family-centred environment, train the next generation of pediatricians to the highest standard, and create groundbreaking research.

The mission of the Department of Pediatrics is to raise the standard of health care, especially for vulnerable children and adolescents, in Saskatchewan through research, knowledge translation, teaching, collaboration, and advocacy. This will be accomplished collectively through continuous engagement and communication with our valued partners, stakeholders, employees, and communities.
Values:
1. Teamwork – Support, respect, and embrace each other’s differences
2. Collaboration – Strive for constant care improvements, knowledge translation, financial efficiency, and inter-professional partnerships
3. Community Engagement – Embrace health promotion and prevention models of service delivery, practice social responsibility, and work together with communities to improve pediatric health
4. Innovation – Continue to encourage and invest in new ideas
5. Passion – Listen and respond to the needs and expectations of patients, caregivers, students, faculty, and community
6. Advocacy – Expand child advocacy through continuous communication and strong partnerships

<table>
<thead>
<tr>
<th>Core Values</th>
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<tbody>
<tr>
<td>Teamwork</td>
<td>To recognize this value as one of the department’s biggest strengths and use it as a solid foundation to build from.</td>
</tr>
<tr>
<td>Collaboration</td>
<td>To encourage knowledge translation and inter-professional partnerships, as well as increase social functions and programs in order to build and strengthen relationships.</td>
</tr>
<tr>
<td>Community Engagement</td>
<td>To practice social responsibility and demonstrate preventive medicine. Listening to and engaging with Saskatchewan residents will be crucial in order to facilitate open and transparent communication between the department and the community.</td>
</tr>
<tr>
<td>Innovation</td>
<td>To take the opportunity to do something special, which is turning research into a revenue generator. See Appendix B for an analysis on the economic impact of creating ten endowed chair positions in pediatrics at the new Children’s Hospital of Saskatchewan.</td>
</tr>
<tr>
<td>Passion</td>
<td>To listen and respond to the needs and expectations of patients, caregivers, students, faculty, and the community in order to allow department personnel to demonstrate and apply their knowledge and specialized skill sets.</td>
</tr>
<tr>
<td>Advocacy</td>
<td>Expand child advocacy through continuous communication and strong partnerships. Strengthening existing partnerships and developing new strategic partnerships will be critical to help achieve the department’s goals and objectives.</td>
</tr>
</tbody>
</table>

The following key messages were constructed based on the outcomes of the situation analysis, as well as from stakeholder consultations that stressed that strategies and messaging should be focused on programs and initiatives that are socially responsible:
• The Department of Pediatrics at the University of Saskatchewan is the most trusted adviser on matters of child and adolescent health in Saskatchewan and a champion of child advocacy.
• The Department of Pediatrics is committed to expanding child advocacy and advancing pediatric health care in Saskatchewan through strong partnerships.
• The Department recruits, trains, and retains the best people for Saskatchewan health.
• The Department is committed to delivering and advancing the highest quality pediatric health care in Saskatchewan.
• The Department is leading a collaborative, learning culture among partners and communities, and building internal and external capacity for excellence in patient care, teaching, and research outcomes in Saskatchewan.
• The Department is investing in healthy children and community futures for the long-term sustainability of Saskatchewan research and health care.
• The Department demonstrates its social responsibility by actively addressing the cost of poverty to improve health equity provincially.
• The Department is investing in research for healthy Saskatchewan children, communities, and economies.
• The Department is implementing real-time data and analytics to programs for sustainable, cost-effective programs and policies.

Strategy

The strategic communications plan is used to align communications and organization strategy. The overall strategy for the department is focused around its goals and objectives and designed around the following strategies and tactics to ensure growth, success, and long-term sustainability.

Engage Saskatchewan communities

Engaging communities in the province will be accomplished through using traditional media and social media. An annual event in Regina is an opportunity for key stakeholders to engage and share information in a traditional environment, while celebrating successes and achievements by the department and its partners.

Having an inter-professional learning environment encourages collaboration among partners and provides an opportunity to exchange information. The invitees would include department personnel, Saskatchewan Health members, new and existing partners, funders/donors, alumni, local media, community leaders, and decision makers. The annual dinner would be included as part of a two-day event, featuring guest speakers and presentations. Success measures include the number of partnerships formed, the number of partners that are present at each annual dinner, and partner support going forward.

Connecting with a particular hotel and convention centre in Regina to hold the annual event may be an opportunity to secure hotel rooms for guests. The event created by the Department of Pediatrics would celebrate
provincial achievements in patient care, research discoveries, and teaching excellence, as well as acknowledging all partners for their continued support and collaboration.

Moreover, a social media policy should be implemented in the department, along with building a Twitter page and a Facebook page. These tools can be used to share information, pictures, videos, and stories. Social media and an effective website can be used to engage and communicate with community members, partners, and other stakeholders. A video on the department homepage with a powerful message could be created to engage the viewer. Also, more faculty and research projects should be highlighted and featured on the homepage.

Having a Twitter and Facebook page will enable direct engagement with citizens in the province and anywhere in the world. The communications/administrative coordinator would be responsible for handling the social media communications. The main objectives of this position are to ensure that there is constant, continuous, and coordinated messaging coming from the department. This would require not only personnel time, but also high engagement by the executive team and identified targeted audiences.

In addition, metrics can be used to measure the progress and effectiveness of online communications. For example, the number of followers, tweets, retweets, and favourites, can measure the effectiveness of Twitter engagement. As well, Facebook effectiveness can be measured by the number of likes, shares, posts, and replies. For additional social media metrics, see the attached Appendix A.

An online forum on the website is an opportunity to connect with Saskatchewan residents. Suggestions and comments by community members enable more frequent communication. Examples of metrics that can be used to measure the effectiveness of the website include the number of comments on the forum, the number of users, and online satisfaction surveys created by the department.

Increase brand awareness provincially, nationally, and internationally

The department can expand brand awareness provincially, nationally, and internationally by becoming a SUPPORT Unit for Canadian Institutes of Health Research and adopting the SPOR strategy, which focuses on patient-oriented research. Patient-oriented research refers to a “continuum of research that engages patients as partners, focuses on patient-oriented priorities, and improves patient outcomes” (CIHR, 2011). Multidisciplinary teams in partnership “conduct the research with relevant stakeholders, and aim to apply the knowledge generated to improve health care systems and practices” (CIHR, 2011).

Achieving the goals of SPOR involves “mobilizing the expertise and resources of stakeholders who come together to support the various elements of the Strategy.”

SUPPORT Units are “provincial or regional centers” designed to support those “engaged in patient-oriented research” (CIHR, 2011). They are “locally accessible, multidisciplinary clusters of specialized research resources, patient perspective, and policy knowledge.” The SUPPORT Unit’s core functions include “knowledge translation, health systems, implementation, data platforms and services, real-world clinical trials, consultation and research services, methods support and development, and career development in methods and health services research” (CIHR, 2011).
The objectives of the SPOR Network include “establishing priorities and developing a nation-wide agenda of outcomes-oriented research; evidence-informed practices, policies, services, products and programs to improve patient outcomes, access to care and the quality, efficiency, and effectiveness of care; the translation of new knowledge into clinical applications, practice, and policy; and strengthening the capacity to conduct patient-oriented research through training and mentoring initiatives.” This includes “patients meaningfully and actively collaborating in the governance, priority setting and conduct of research, as well as summarizing, sharing, distributing, and applying its resulting knowledge” (CIHR, 2011).

Additionally, investing in more team-building events represents a good return on investment. Sponsoring healthy team activities for children and youth who might not otherwise foresee a future in health care is an example of a team-building event. Also, department social gatherings could be increased, such as forming a team to enter a winter bowling league. A suggested league for the department to join is at Fairhaven Bowl or Eastview Bowl in Saskatoon. The department would cover the bowling expense, and the Manager of Finance and Administration would handle the transactions with the bowling facility. E-mail reminders with photos could be sent to all staff members to help spread awareness about the initiative.

Lastly, the department can host more conventions, research presentations, and keynote speakers at facilities in Saskatchewan to enhance knowledge exchange and knowledge translation. In 2017, the department will host the annual Canadian Association of Pediatric Health Centres (CAPHC) conference. The website and social media are tools that can be used to communicate events taking place in Saskatchewan pediatric health care that are relevant to stakeholders. Hosting more events in Saskatchewan will increase the visibility among partners and key stakeholders and help to strengthen both the department brand and relationships.

Brand awareness of the department can be measured by surveys available on the website, on social media, and at the hospital. Surveys are an economical and effective way to gather pertinent information. Targeted questions on the survey relating to brand awareness and brand recognition can help the department to establish benchmarks and identify gaps to make improvements.

**Strengthen relationships with new and existing partners**

In order to achieve the goal of engaging multiple off-campus partners, an annual dinner will help to build and strengthen relationships with partners. With busy work schedules and lifestyles, it can be challenging to find time to bring all partners together to share ideas and exchange information. Having a dedicated annual event will ensure that all parties can plan and coordinate their schedules and travel plans well in advance.

There is an opportunity to build and develop new strategic partnerships with community organizations whose vision, mission, and values align with those of the department. Some recommended community organizations that the department should engage and partner with include:

- Children’s Advocate of Saskatchewan
- Ronald McDonald House
- Saskatchewan Public Schools
• Saskatoon Downtown Youth Centre (EGADZ)
• Saskatoon Regional Intersectoral Committee (SRIC)
• Station 20 West
• Student Wellness Initiative Toward Community Health (SWITCH)
• The DreamBrokers

The Department of Pediatrics’ core values—Teamwork, Collaboration, Community Engagement, Innovation, Passion, and Advocacy—align with the above recommended partners and their missions and values. The above community organizations are well respected and are focused on educating and empowering children and adolescents. Forming a strong voice for Saskatchewan children and adolescents will help to expand child advocacy efforts. Furthermore, strengthening relationships with existing and new partners will be imperative in order to co-ordinate advocacy efforts and build awareness and momentum for pediatric health care in Saskatchewan.

As discussed in the literature review, “hospitals can position themselves as different archetypes or prototypes, one of which is the public hero and trusted adviser” (Fischer, 2014). This archetype communicates relevant public health information and the promotion of community services (Fischer, 2014). Providing patient information that is user friendly, easily accessible, and understandable contributes to this category. Additionally, this archetype “promotes social responsibility through active engagement in the community” (Fischer, 2014). Sharing the hospital’s knowledge, facilities, and resources with surrounding communities creates a positive health image (Elbeck, 1988).

Demonstrating social responsibility is one of the key messages that can strengthen new and existing partnerships. A biennial report can be published to communicate advances, successes, and breakthroughs in Saskatchewan pediatrics. McMaster University produces an effective and impressive annual report that shares patient, faculty, and research stories to engage communities and stakeholders (McMaster University, Department of Pediatrics, 2014).

Another initiative that would strengthen partnerships and address stakeholder needs would be to increase the number of pediatricians in community-based schools. The department is partnered with the Saskatoon Catholic School Division and Saskatoon Tribal Council in delivering an innovative school-based program at St. Mary’s School in Saskatoon.

The St. Mary’s Wellness and Education Center is a pediatric school-based clinic that provides comprehensive pediatric care within schools for all children who live in Saskatoon’s low-income neighbourhoods (Greater Saskatoon Catholic School Division, 2011). The program partners social pediatrics with School-Based Health Centers as a vehicle to provide patient care (Greater Saskatoon Catholic School Division, 2011).

However, there is still a very high demand for pediatricians in schools, especially rural and northern schools. The report done by all three partners in 2011 found that future opportunities could be explored, which includes increasing the number of pediatricians in rural and urban schools, partnering up with public health nurses and other staff in other schools, and trying to address social determinant issues (Greater Saskatoon Catholic School Division, 2011).

For future growth in community-based schools, the St. Mary’s Wellness and Education Centre is a strong
model of how to implement and execute the program. One of the key success factors for the program is the sharing of resources, personnel, and knowledge across all three partners, Saskatoon Tribal Council, Saskatoon Catholic School Division, and the Department of Pediatrics.

The measures of success for achieving this objective include the number of partnerships, the number of partners present at the annual dinner, and the frequency of communication with each specific partner.

Expand child advocacy efforts in Saskatchewan

Expanding child advocacy efforts in Saskatchewan is also tied to strong partnerships. Exchanging ideas and information across many groups can help to raise awareness and enhance child advocacy efforts province-wide. Additionally, increasing department presence in community schools can also help advocacy efforts.

Success measures for this objective include the number of partnerships, the number of pediatricians present in Saskatchewan community schools, and the frequency of communication with partners.

Proactively focus on addressing the social determinants of health

Many of the stakeholder needs are encompassed in demonstrating social responsibility and focusing on addressing the social determinants of health. Investing in healthy children and community futures will be crucial to the long-term sustainability of Saskatchewan research and health care.

The tactics and strategy to realize this include becoming a CIHR SUPPORT Unit and engaging in patient-oriented research. Connecting with partners and community groups whose mandate aligns with the departments, presents an opportunity to exchange, share, and disseminate information across a wide spectrum.

Increasing the department’s presence in community schools will also be a critical factor to achieving this objective. Addressing the cost of poverty to improve health equity provincially demonstrates the department’s social responsibility.

Success measures include the number of pediatricians in community schools, the number of community partnerships, and the frequency of communication with partners.

Build on the department’s culture of collaboration

Increasing collaboration and building capacity to achieve excellence in patient care, teaching, and research can only be realized through strong partnerships and alliances. Drawing on CIHR’s resources, as well as the resources of the Canadian Association of Pediatric Health Centers (CAPHC), the department can establish benchmarks and metrics to help measure the effectiveness of processes and programs.

The department is already an active member of CAPHC and it will be hosting the CAPHC annual conference in 2017. CAPHC’s vision is “knowledge to action: enabling the best health care for Canada’s children and youth” (CAPHC, 2014). CAPHC has valuable material which can be utilized, including a website that has lots of valuable information relating to programs, conferences, tools, resources, and partnerships.

In furthering the department’s commitment to recruitment, training, and retention of top students and per-
sonnel, tuition reimbursements, scholarships, and incentives may be helpful for human resource development. The leadership of the department is responsible for designing culture-enhancing initiatives. Holding more department social gatherings and enacting succession planning are options that could be implemented within the department to enhance the collaborative culture.

Success measures for culture may include employee satisfaction surveys, attrition and retention rates, job evaluations, reviews, mentoring programs, on-going coaching, training programs, the amount of funding allocated to strategic human resource management, the number of social gatherings, and the number of attendees at the social gatherings.

**Enhance department efficiencies through investment**

The department has an opportunity to increase workplace efficiencies through the implementation of technology that would save time for health care professionals. The Pyxis Medstation System (Pyxis) is an example of a technology saving time for Pharmacists. The Pyxis is an automated dispensing system that supports decentralized, secure, and accurate medication management. The Hospital of Saint Raphael was able to decrease their time to first dose by 94%, freeing up pharmacists’ time to allocate to other responsibilities (Pyxis Medstation System, 2014).

Investing in research for healthy Saskatchewan children, communities, and economies presents a unique value proposition. By investing in community futures, the department has an opportunity to do something special and innovative. Appendix B shows an economic analysis that measures the economic impacts of the creation of endowed chair positions in pediatrics. Private donors and philanthropists would provide all funding for the endowment. To raise the goal of $50,000,000, continuous messaging and reminders need to be communicated about the progress and status of the money raised. Four years is the recommended time period to raise the private funding.

Sending a personalized letter of appreciation to every funder/donor is one way that the department can ensure that gratitude and thankfulness is expressed to philanthropists for their generosity. Sharing philanthropist stories on the website and social media is an effective way to get the message out to the public. Powerful stories are often tied to philanthropy.

Lastly, once the new Children’s Hospital is opened, it is recommended that the department undertake an innovation assessment to set a benchmark and identify innovation gaps. Strategian is a local company on campus that conducts innovation assessments for clients, working with “organizations that desire to become industry leaders, and helping make the transition to a sustainable innovation culture” (InnovationOne, 2014). Strategian has experience advancing the innovation cultures of organizations; their innovation metrics are based on many comprehensive factors, such as employee connectivity, alignment, and employee empowerment (InnovationOne, 2014).

The metrics to measure success include the time saved and increased efficiencies realized from implementing technology and benchmarking. The amount of funding, the number of donors, and innovation benchmarks are other possible metrics. Furthermore, the number of ongoing research projects from faculty and researchers can also be used to measure success.
CONCLUSION

The added value for hosting events, such as conferences, presentations, and speakers in Saskatchewan, would be the knowledge transfer, expertise, and awareness that it would bring to the province. The events are an investment in community relations, partner relations, and media relations. Also, community relations are partnerships, whereby intriguing and powerful stories can be shared among the department and the surrounding communities through various media outlets, including traditional and social media.

In addition, strong partner and media relations are vital to achieving the department’s vision and mission. Working together with communities and collaborating on social pediatric programs will likely raise the standard of health care in Saskatchewan. Information sharing among partners will likely lead to an increase in social opportunity for children and adolescents in the province, while exemplifying social responsibility by the department.

By adhering to the vision, mission, and values of the department, the department can strengthen new and existing partnerships, while expanding the Department of Pediatrics brand across Saskatchewan through constant and continuous engagement with communities and stakeholders. The Department of Pediatrics has an opportunity to do something special, unlike any other health care organization, which is to transform health care into an economic driver and further strengthen Saskatchewan’s competitive advantage.
RECOMMENDATIONS

1. Engage Saskatchewan Communities

Target Audience
- Current and potential employees
- Rural and urban Saskatchewan residents
- Current and potential community partners
- Media

Key Messages
- The Department is investing in healthy children and community futures for the long-term sustainability of Saskatchewan research and health care
- The Department is committed to delivering and advancing the highest quality pediatric health care in Saskatchewan

Strategy/Tactic
- Engage with communities/partners via traditional media (annual event in Regina with key stakeholders)
- Engage with communities/partners via online communications (website and social media)
- Connect with partners and like-minded organizations to exchange, share, and disseminate information

Success Measures
- Number of partners present at the annual dinner
- Social media - number of retweets, replies, followers, shares, and posts
- Number of community partnerships

2. Increase brand awareness provincially, nationally, and internationally

Target Audience
- Rural and urban Saskatchewan residents
- Current and potential employees
- Current and potential community partners
- Media
Key Messages

- The Department is committed to delivering and advancing the highest quality pediatric health care in Saskatchewan.
- The Department recruits, trains, and retains the best people for Saskatchewan health.

Strategy/Tactic

- Engage with communities/partners via traditional media (annual event in Regina with key stakeholders).
- Engage with communities/partners via online communications (website and social media).
- Become a CIHR SUPPORT Unit and engage in patient-oriented research.
- Send a personalized letter of appreciation to every funder/donor and share their story on the website and social media; powerful stories are often tied to philanthropy.

Success Measures

- Number of community partnerships.
- Frequency of two-way communication; Website - number of responses on forums.
- Research dissemination - number of ongoing projects; number of faculty publishings.
- Amount of funding/donations.
- Brand awareness - brand recognition surveys.
- Appendix A - Benchmark set to measure online communications.

3. Strengthen relationships with new and existing partners

Target Audience

- Current and potential community partners.
- Current and potential employees.
- Rural and urban Saskatchewan residents.

Key Messages

- The Department of Pediatrics is committed to expanding child advocacy and progressing health care in Saskatchewan through strong partnerships.
- The Department is investing in healthy children and community futures for the long-term sustainability of Saskatchewan research and health care.

Strategy/Tactic

- Direct engagement with key stakeholders by forming an annual two-day dinner and information sharing event.
in Regina
• Connect with partners and like-minded organizations to exchange, share, and disseminate information
• Engage with communities/partners via traditional media (annual event in Regina with key stakeholders)
• Engage with communities/partners via online communications (website and social media)

Success Measures
• Number of partners present at the annual dinner
• Number of community partnerships
• Frequency of two-way communication
• Social media, number of retweets, replies, followers, shares, and posts

4. Expand child advocacy efforts in Saskatchewan

Target Audience
• Current and potential community partners
• Rural and urban Saskatchewan residents
• Policy makers

Key Messages
• The Department of Pediatrics is committed to expanding child advocacy and progressing health care in Saskatchewan through strong partnerships

Strategy / Tactic
• Leverage partnerships to form a strong voice for Saskatchewan child advocacy
• Increase department presence in community schools
• Connect with partners and like-minded organizations to exchange, share, and disseminate information

Success Measures
• Number of community partnerships
• Number of pediatricians present in community schools
• Number of community partnerships; frequency of two-way communication
5. Proactively focus on addressing the social determinants of health

Target Audience
• Current and potential community partners
• Current and potential employees
• Rural and urban Saskatchewan residents
• Policy makers
• Funders/donors

Key Messages
• The Department demonstrates its social responsibility by actively addressing the cost of poverty to improve health equity provincially
• The Department is investing in healthy children and community futures for the long-term sustainability of Saskatchewan research and health care

Strategy/Tactic
• Become a CIHR SUPPORT Unit and engage in patient-oriented research
• Increase department presence in community schools
• Invest in research - Appendix B - Measuring the economic impact of endowed chairs in pediatrics
• Connect with partners and like-minded organizations to exchange, share, and disseminate information

Success Measures
• Research dissemination - number of ongoing projects; number of faculty publishings
• Number of pediatricians present in community schools
• Amount of funding; number of donors, amount invested in research
• Number of community partnerships; frequency of two-way communication

6. Build on the department’s culture of collaboration

Target Audience
• Current and potential employees
• Current and potential community partners
• Policy makers
Key Messages
• The Department is leading a collaborative, learning culture among partners and communities, and building internal and external capacity for excellence in patient care, teaching, and research outcomes in Saskatchewan
• The Department recruits, trains, and retains the best people for Saskatchewan health

Strategy/Tactic
• Invest in training and mentoring programs for students and employees; enact succession planning
• Provide tuition reimbursements/incentives/scholarships to recruit, train, and retain top students, faculty, and researchers
• Increase social gatherings for department personnel (i.e. bowling league)
• Invest in research - Appendix B - Measuring the economic impact of endowed chairs in pediatrics

Success Measures
• Department attrition and retention rates; amount of funding invested in human resources programs
• Amount of funding for investment in retention, training, and recruitment; establishing benchmarks for mentoring, training, and coaching programs
• Number of social gatherings; number of attendees
• Amount of funding; number of donors, amount invested in research
• Research dissemination - number of on-going projects; number of faculty publishings

7. Enhance department efficiencies through investment

Target Audience
• Current and potential employees
• Funders/Donors
• Policy Makers

Key Messages
• The Department is implementing real-time data and analytics to programs for sustainable, cost-effective programs and policies
• The Department is investing in research for healthy Saskatchewan children, communities, and economies

Strategy/Tactic
• Develop, collect, and analyze data (form a qualitative framework to quantify established criteria)
• Implement technology to increase efficiencies (i.e. Pyxis Medstation System)
• Send a personalized letter of appreciation to every funder/donor and share their story on the website and social media, powerful stories are often tied to philanthropy
• Establish innovation benchmark (i.e. Strategian Innovation Assessment)

**Success Measures**
• Time saved and efficiencies increased from implementing new technology and benchmarking
• Time saved and efficiencies increased from implementing new technology and benchmarking
• Amount of funding/donations; number of funders/donors
• Established benchmarks developed in order to measure future innovation processes/programs
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Dalhousie University, Department of Pediatrics. (2014). Education Programs, Faculty of Medicine. Retrieved from [http://pediatrics.medicine.dal.ca/education/index.htm](http://pediatrics.medicine.dal.ca/education/index.htm)


University of Toronto, Department of Pediatrics. (2014). Faculty of Medicine, homepage. Retrieved from http://www.paeds.utoronto.ca/home.htm


## APPENDIX A: ONLINE COMMUNICATION MATRIX

University of Toronto, McMaster University, Dalhousie University, University of Manitoba

<table>
<thead>
<tr>
<th>Department/University</th>
<th>U of T Pediatrics</th>
<th>McMaster Pediatrics</th>
<th>Dalhousie Pediatrics</th>
<th>U of M Pediatrics</th>
</tr>
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<tbody>
<tr>
<td>Children Hospital Affiliation (CHA)</td>
<td>Hospital for Sick Children</td>
<td>McMaster Children’s Hospital</td>
<td>IWK Health Centre</td>
<td>Children’s Hospital of Winnipeg</td>
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<tr>
<td>Degree of online co-branding with CHA (1-5 Highest)</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

* Rating Scale: 1 = Low … 5 = High

* Website Quality

1. **Content Quality**
   - (Accuracy, relevance, timely, usefulness, comprehensive content, editing quality, authority, variety of presentation, impartiality, multilanguage/culture)
   - Rating: 5 5 4 5

2. **Design Quality**
   - (Attractiveness, appropriateness, colors, text, image/sound/video, advertisement, banners)
   - Rating: 4 5 2 5

3. **Organization Quality**
   - (Organization, logical structure, scope, logo, navigation, site map, links)
   - Rating: 5 5 4 4

4. **User Friendly Quality**
   - (Interactive features, user interface, ease of use, privacy, customization, satisfaction)
   - Rating: 3 4 3 4

5. **Performance Quality**
   - (Usability, reliability, integrity, responsiveness, speed, consistency, dynamism, changeability, availability, novelty, accessibility, reputation, sufficiency, security)
   - Rating: 5 5 3 4

6. **Service Quality**
   - (Internet reception, frequently asked questions, medical information, current news, events, exclusive hospital information, parking maps, communications, calendar of events)
   - Rating: 4 4 4 5

7. **Technical Points (1 = Ineffective … 5 = Effective)**
   - (Page structure, extendibility, size and volume of website, programming language, mechanism of information retrieving, solving technical problems)
   - Rating: 4 5 4 5

* Website: Faculty/staff engagement

8. **Frequency of communication (1 = Infrequent … 5 = Frequent)**
   - (Infrastructure to collaborate)
   - Rating: 5 5 3 5

9. **Degree of engagement (1 = Low … 5 = High)**
   - (Current and relevant: information/projects/discoveries/teachings/publishings)
   - Rating: 4 5 3 5
<table>
<thead>
<tr>
<th>Department/University</th>
<th>U of T Pediatrics</th>
<th>McMaster Pediatrics</th>
<th>Dalhousie Pediatrics</th>
<th>U of M Pediatrics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Website: Alumni engagement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Frequency of communication (1 = Infrequent, 5 = Frequent)</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>(Infrastructure to communicate effectively with alumni)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Degree of engagement (1 = Low … 5 = High)</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>(Current and relevant: information/pictures/videos/stories)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Website: Community engagement</strong></td>
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<td></td>
<td></td>
</tr>
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<td>12. Frequency of communication (1 = Infrequent, 5 = Frequent)</td>
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<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(Infrastructure to communicate effectively with communities)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Degree of engagement (1 = Low … 5 = High)</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(Current and relevant: information/pictures/videos/stories)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Website: Research promotion</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Research is promoted (1 = Low … 5 = High)</td>
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<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(Research is highlighted, and to what degree)</td>
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<td></td>
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<td>N</td>
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<td><strong>15. Maintained, Professional, and Current (1 = Low, 5 = High)</strong></td>
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<td>N/A</td>
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<tr>
<td>(Frequent updates, current information/pictures/videos/stories)</td>
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<tr>
<td><strong>16. Multimedia Integration (1 = Low, 5 = High)</strong></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>(Relevant, clear, and concise information/pictures/videos/stories)</td>
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<td></td>
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</tr>
<tr>
<td><strong>17. Balances Conversational and Individual Tweets (1 = Low, 5 = High)</strong></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>(Contains interactive and engaging content, pictures, and videos - combined with conversational tweets, links to other websites are easily accessible)</td>
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<td>Average Rating</td>
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***(Kafe, Montarezdadeh, 2011), ** (Qualman, 2013)
APPENDIX A. CONTINUED...

University of Saskatchewan, University of Alberta, University of Calgary, University of British Columbia

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<td>Alberta Children's Hospital</td>
<td>B.C. Children's Hospital</td>
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*Rating Scale: 1 = Low ... 5 = High*

*Website Quality*

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<tr>
<th><em>1. Content Quality</em></th>
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<th>4</th>
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</thead>
<tbody>
<tr>
<td>(Accuracy, relevance, timely, usefulness, comprehensive content, editing quality, authority, variety of presentation, impartiality, multilanguage/culture)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><em>2. Design Quality</em></th>
<th>5</th>
<th>5</th>
<th>4</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Attractiveness, appropriateness, colors, text, image/sound/video, advertisement, banners)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><em>3. Organization Quality</em></th>
<th>4</th>
<th>5</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Organization, logical structure, scope, logo, navigation, site map, links)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><em>4. User Friendly Quality</em></th>
<th>4</th>
<th>5</th>
<th>5</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Interactive features, user interface, ease of use, privacy, customization, satisfaction)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><em>5. Performance Quality</em></th>
<th>5</th>
<th>5</th>
<th>5</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Usability, reliability, integrity, responsiveness, speed, consistency, completeness, dynamism, changeability, availability, novelty, accessibility, reputation, sufficiency, security)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><em>6. Service Quality</em></th>
<th>4</th>
<th>5</th>
<th>4</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Internet reception, frequently asked questions, medical information, current news, events, exclusive hospital information, parking maps, communications, calendar of events)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><em>7. Technical Points (1 = Ineffective ... 5 = Effective)</em></th>
<th>5</th>
<th>4</th>
<th>5</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Page structure, extendibility, size and volume of website, programming language, mechanism of information retrieving, solving technical problems)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Website: Faculty/staff engagement**

<table>
<thead>
<tr>
<th>8. Frequency of communication (1 = Infrequent ... 5 = Frequent)</th>
<th>2</th>
<th>5</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Infrastructure to collaborate)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9. Degree of engagement (1 = Low ... 5 = High)</th>
<th>3</th>
<th>4</th>
<th>3</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Current and relevant: information/projects/discoveries/teachings/publishings)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department/University</td>
<td>U of S Pediatrics</td>
<td>U of A Pediatrics</td>
<td>U of C Pediatrics</td>
<td>UBC Pediatrics</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>---------------</td>
</tr>
<tr>
<td><strong>Website: Alumni engagement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Frequency of communication (1 = Infrequent, 5 = Frequent)</td>
<td>2 5 4 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Infrastructure to communicate effectively with alumni)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Degree of engagement (1 = Low … 5 = High)</td>
<td>2 5 3 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Current and relevant: information/pictures/videos/stories)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Website: Community engagement</strong></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>12. Frequency of communication (1 = Infrequent, 5 = Frequent)</td>
<td>3 5 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Infrastructure to communicate effectively with communities)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Degree of engagement (1 = Low … 5 = High)</td>
<td>3 5 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Current and relevant: information/pictures/videos/stories)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Website: Research promotion</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Research is promoted (1 = Low … 5 = High)</td>
<td>3 5 5 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Research is highlighted, and to what degree)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Social media - Twitter</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twitter page (Y/N)</td>
<td>N Y N N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Maintained, Professional, and Current (1 = Low, 5 = High)</td>
<td>N/A 5 N/A N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Frequent updates, current information/pictures/videos/stories)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Multimedia Integration (1 = Low … 5 = High)</td>
<td>N/A 5 N/A N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Relevant, clear, and concise information/pictures/videos/stories)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Balances Conversational and Individual Tweets (1 = Low … 5 = High)</td>
<td>N/A 5 N/A N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Contains interactive and engaging content, pictures, and videos - combined with conversational tweets, links to other websites are easily accessible)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Social media - Facebook</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facebook page (Y/N)</td>
<td>N Y N N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Maintained, Professional, and Current (1 = Low, 5 = High)</td>
<td>N/A 5 N/A N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Frequent updates, current information/pictures/videos/stories)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Multimedia Integration (1 = Low, 5 = High)</td>
<td>N/A 5 N/A N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Relevant, clear, and concise information/pictures/videos/stories)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Balances Conversational and Individual Tweets (1 = Low … 5 = High)</td>
<td>N/A 5 N/A N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Contains interactive and engaging content, pictures, and videos - combined with conversational tweets, links to other websites are easily accessible)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>50 98 57 61</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Relevant Metrics (14 = without social media; 20 = with social media)</td>
<td>14 20 14 14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Rating</td>
<td>3.57 4.90 4.07 4.36</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average score out of 100 (%)</td>
<td>71.43 98.00 81.43 87.14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rank (1-8 in Canada)</td>
<td>7 1 6 4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*(Rafe, Monfaredzadeh, 2011), **(Qualman, 2013)*
APPENDIX B: MEASURING ECONOMIC IMPACTS OF ENDOWED CHAIR POSITIONS IN PEDIATRICS AT THE CHILDREN’S HOSPITAL OF SASKATCHEWAN

Prepared by: Antoine Bruneau-Bouchard, B.A. Economics, University of Saskatchewan Information provided by: Dr. Alan Rosenberg, B.A., M.D., F.R.C.P.C., University of Saskatchewan

Introduction
This report examines the effects of creating ten endowed chair positions in the Department of Pediatrics at the new Children’s Hospital of Saskatchewan. The effect is measured on a province-wide basis. The hospital is set to open its doors in 2017 but this report measures economic impacts using 2014 data. Holding the dollar constant to 2014 value enables this report to better predict impacts on the economy while allowing for inflation to run its natural course.

Methodology and Data Collection
The provincial government will run the hospital but the information provided for this research was clear that funding for the new endowed chairs would be entirely private. Since the investment would be made with private money, there will be no crowding out effect and the real impact of the investment of cash into the hospital will be greater than the gross impact. The crowding out effect refers to “a situation when increased interest rates lead to a reduction in private investment spending such that it dampens the initial increase of total investment spending” (The Economic Times, 2014). It can also be assumed that introducing private money in the Saskatchewan economy will have direct, indirect, and induced effects that will be measured in this report using the input-output method.

This report is intended to show economic impacts on the provincial economy and it does not consider the costs of operating the ten new chair positions in terms of their impact on hospital operations. Instead, salaries of chairs are considered as a gain to the provincial economy since the funds required to operate the chair will be private. The employment figures used in this report are considered to be full-time equivalent (FTE), which means that the economic impact that one FTE has is the salary value assigned to it and not the nominal value of the FTE. An FTE value does not equal the number of jobs; it is simply the sum of the salaries of jobs created as full-time equivalency, which allows for part-time jobs to be considered as part of employment figures.

This report operates under an inflation rate of 2.4%, as this rate is the total CPI value for October 2014 published by the Bank of Canada (Bank of Canada, 2014). This report also operates under the 2014 personal tax structure of the province of Saskatchewan (Government of Saskatchewan, 2014). This report assumes there will be no tax credits applied, since tax credits are a trade-off between social gains and economic gains, and they can be difficult to project, as they are sensible to social and political changes.
Economic Impact of the Endowment

This report uses figures that were provided by the Department of Pediatrics. The endowment collected per chair annually was estimated to be five million dollars, which means that the overall sum of the endowment would be multiplied by ten, as ten positions would be created (University of Saskatchewan, Department of Pediatrics, 2014). The sum of the endowment would be for a period of five years. The Department of Pediatrics (2014) estimates that the salaries paid to the research chairs would be set at $300,000. The $300,000 salary is considered to be the value for one FTE in this report. Each chair would bring on average $250,000 worth of funding, which would amount to $2,500,000 per year for the ten chairs (University of Saskatchewan, Department of Pediatrics, 2014). The recruiting would be focused on “established scientists who have major research funding” (University of Saskatchewan, Department of Pediatrics, 2014).

Theoretically, the endowment fund could be seen as an investment fund, which means that the amount could yield interest and therefore the interest amount will be taken into consideration when valuing the economic impact. This interest value is merely an estimation of the opportunity cost the investor would be faced with when deciding whether to create the endowment fund or not. The Department of Pediatrics proposed that this interest return be set at 6%. Whether or not a 6% return is possible or not is the question here; this report will assume it is. However, the Fisher equation indicates that a 6% rate of return would be discounted by the rate of inflation and therefore the real inflation-adjusted interest would be 3.6%. The Fisher effect describes the “relationship between inflation and both real and nominal interest rates” (Fisher effect, 2014). The Fisher effect states, “The real interest rate equals the nominal interest rate minus the expected inflation rate” (Fisher effect, 2014). Hence, “real interest rates fall as inflation increases, unless the nominal rates increase at the same rate as inflation” (Fisher effect, 2014).

The last structural assumption that needs to be made to ensure that this study can help predict economic impacts, deals with the multiplier. The private investment multiplier is similar to the public investment multiplier, but public money is subject to the crowding out effect, while private money is not. The method this report employed to get the Saskatchewan multiplier effect is a comparative method. There seems to be a consensus among scholars that the multiplier effect in Saskatchewan is 1.43 (Government of Saskatchewan, 2005; Innovation Place, 1998; Stabler and Olfert, 2002). Therefore, the direct impact of a private endowment would be 1.43 and the indirect effect would be 1.18 (1.18 is derived from multiplying 0.43 by 0.43). The effect would be applied equally to output and employment figures since the multiplier effect was calculated as a provincial aggregate value.

Figure 1. Net impact on the Endowment Fund

<table>
<thead>
<tr>
<th>Impact Type</th>
<th>Employment</th>
<th>Labour Income</th>
<th>Output</th>
<th>Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Effect</td>
<td>10 FTE</td>
<td>$3,000,000</td>
<td>$10,000,000</td>
<td>1</td>
</tr>
<tr>
<td>Indirect Effect</td>
<td>4.3 FTE</td>
<td>$1,290,000</td>
<td>$4,300,000</td>
<td>0.43</td>
</tr>
<tr>
<td>Induced Effect</td>
<td>1.9 FTE</td>
<td>$570,000</td>
<td>$1,849,000</td>
<td>0.185</td>
</tr>
<tr>
<td>Total Effect</td>
<td>16.2 FTE</td>
<td>$4,860,000</td>
<td>$16,149,000</td>
<td>1.615</td>
</tr>
</tbody>
</table>
Figure 1 shows that the direct impacts register the acts of funding the endowment, as well as paying the salaries of the chairs. The indirect and induced impacts are then estimated using the multiplier. Data from Figure 1 show that 16.2 full-time equivalent would be created for a total labour income of $4,860,000. Additionally, activating resources would generate $16,149,000.

The economic impact of the private investment is clearly visible in Figure 1, and it can be computed as the total effect minus the direct effect. The values extracted are 6.2 FTE, $1,860,000 of labour income, and $6,149,000 of output. 6.2 FTE or $1,860,000 is an amount that refers to aggregated salaries; the amount of each salary and the part-time/ full-time divide are unknown, but it could be any combination of a salary and a number of jobs. For example, it could be ten jobs at $186,000 per year, or twenty-five jobs at $74,400 per year or it could be fifty jobs at $37,200. The certainty that can be derived from FTE is that jobs will be created as a result of creation of the private endowment while significant research will be made in the field of pediatrics.

To estimate the overall effect on the Saskatchewan economy, one must also consider the non input-output impacts that may indirectly affect them. These additional impacts include the interest revenue, the provincial tax revenue, and research funding. Given that the endowment fund would grow by $10,000,000 each year, the interest collected each year would be 3.6% of that amount, which is $360,000. The provincial tax revenue can be derived using the provincial tax brackets as applied to a $300,000 per year salary, which would give the province income of $41,660.32 (Government of Saskatchewan, 2014). That amount multiplied by the ten chairs would give tax revenue of $416,603.20. The last additional impact is the research revenue, which was previously established to be $2,500,000, since all researchers would be expected to come in with an average of $250,000 worth of funding.

Another factor to consider is the social effect of the endowment, as those affected cannot be measured. For example, “the social rate of return to Saskatchewan from Saskatchewan-based research is likely to be a very tiny fraction of that rate, since most benefits are likely to be derived by populations outside the province” (Peach & Marshall, 2008). Research is a very important field and labs around the world work day and night to try to solve some of the greatest threats to humanity, and while it is true that some or most of the benefits from research may be driven out of province, the opportunity to make an important discovery surely outweighs the social rate of return.

---

**Figure 2. Net Economic Impact on the Saskatchewan Economy**

<table>
<thead>
<tr>
<th>Economic Impact</th>
<th>Value (per chair)</th>
<th>Value (1-year)</th>
<th>Value (5-year)</th>
<th>Value (10-year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>1,614,900</td>
<td>16,149,000</td>
<td>80,745,000</td>
<td>161,490,000</td>
</tr>
<tr>
<td>Labour Income</td>
<td>486,000</td>
<td>4,860,000</td>
<td>24,300,000</td>
<td>48,600,000</td>
</tr>
<tr>
<td>Interest Revenue</td>
<td>36,000</td>
<td>360,000</td>
<td>1,800,000</td>
<td>3,600,000</td>
</tr>
<tr>
<td>Tax Revenue</td>
<td>41,660</td>
<td>416,603</td>
<td>2,083,016</td>
<td>4,166,032</td>
</tr>
<tr>
<td>Research Revenue</td>
<td>250,000</td>
<td>2,500,000</td>
<td>12,500,000</td>
<td>25,000,000</td>
</tr>
<tr>
<td>Estimated Impact</td>
<td>2,428,560</td>
<td>24,285,603</td>
<td>121,428,016</td>
<td>242,856,032</td>
</tr>
<tr>
<td>ROI</td>
<td>1,428,560</td>
<td>14,285,603</td>
<td>71,428,016</td>
<td>142,856,032</td>
</tr>
</tbody>
</table>
Figure 2 represents the aggregate impact on the Saskatchewan economy with the creation of ten endowed chairs. Adding to the economic impact analysis is the potential return on the private investment at each period for a private investor. Figure 2 shows that economic gains can be made for the province if the Department of Pediatrics’ private endowment fund is created. Private investment in pediatric research is a viable investment because the projected returns would help the Saskatoon area to grow its health care sector, while growing the regional economy through the multiplier effect.

Figure 2 allows data to be presented with a perspective on outlook. One can decipher that the outlook for the first year is an estimated impact of over $24,000,000, which would amount to a projected outlook after five years of over $120,000,000. Granted, those figures must take into account that each year, the endowment fund would be increased by $10,000,000. They also indicate that the sum of the endowment would be lower than the estimated returns after five years.

Conclusion

As a result of the creation of a private endowment chair for the Department of Pediatrics at the new Children’s Hospital of Saskatchewan, this report concludes that the economic impact on the Saskatoon economic area, as well as the province of Saskatchewan would be positive. The estimated annual impact for the endowment fund would be over $24,000,000 and the annual return on investment would be $14,000,000. The investment would create an estimated 16.2 full-time equivalent jobs, which would further stimulate economic activity by $16,000,000 each year. The creation of the endowment fund would also energize the Saskatchewan research industry, and collateral impact with other research sectors and ventures could be created. Something to consider, however, is that if the creation of the endowed chair positions goes ahead, numbers should be adjusted to the new Children’s Hospital performance and reach, when it is opened in 2017.

Technical Appendix

Input-Output Analysis

The input-output analysis is used to measure economic impacts at a given time for a given event. This model can “be used directly to estimate the full income and job effects of changes in business activity levels … and with “demand translator”… tools, to also estimate the effects of changes in spending” (Weisbrod & Weisbrod, 1997). The input-output model is a significant tool for analysts and economists since it can help them derive the multiplier, and measure potential impacts and shocks on the economy. An expansion of the scope of this study could have included IMPLAN, econometric tools, dynamic projections, and a cost-benefit analysis.

Multiplier

Economic impact studies use a multiplier to derive the effects on the economy of a specific event. The multiplier can be measured using an input-output analysis and will be derived using labour, market, and social data. To better
comprehend the multiplier, one must assume that any impact on the economy from a given event will have secondary and tertiary effects. Economists will attempt to quantify this impact by measuring the propensity of a region or community to spend on local versus non-local products. Understanding how a community spends its money helps economist better model how additional spending or investment would be utilized. It also helps with forecasting what percentage of an investment will be reinvested in the community. This hypothetical example shows how the effect of one event can be measured:

“One dollar in additional wages will cause a secondary economic impact of $1\cdot(0.363) = 0.363$ in the town. This secondary economic impact can then be multiplied by the same local multiplier to arrive at the third round of economic activity $0.363\cdot(0.363) = 0.132$. Naturally, we can calculate these spending rounds indefinitely, or simply use the formula $1/(1-r)$, where $r$ is the local economic multiplier, to calculate the total local” impact (Prairie Research Associates, n.d.).

**Full-time Equivalent (FTE)**

Economists use a full-time equivalent figure to refer to levels of jobs that have high salaries. It is easier to compare data when it is in the same units and by using FTE; it allows the research to evaluate the impacts without determining which consumers will be the recipients of the investment impacts. Full-time equivalent also allows for data to look past job designation, average number of hours worked per year, and full-time or part-time status. Eurostat (2013), which is the European Union’s main statistical vehicle, assesses that “a full-time person is therefore counted as one FTE, while a part-time worker/ student gets a score in proportion to the hours he or she works or studies.”

**Return on Investment (ROI)**

In economist terms, the return on investment or ROI, is simply the net benefits minus the total costs of that investment. In the case of privately endowed research chairs, it is clear that the costs are linked to expensing the money, and the benefits are the level of output produced by the subsequent impacts created by the investment. The benefits of using this method are that “ROI is useful when costs and benefits are tangible and tightly focused on a specific program with boundaries” (Applied Geographics, 2009).
To review, the following are key considerations in implementing the plan:

1. **Positioning.** Based on consultations with stakeholder groups, an evaluation of the Department's values, and a review of the literature, we recommended that the Department of Pediatrics position itself as “public hero and trusted adviser”. This aligns with research done by Fischer (2014) on hospital positioning archetypes, or four different ways hospitals are perceived by the community (see pages 14 – 17 of the report).

   a. This positioning entails utilizing multiple channels to spread health care knowledge and promoting community services
   b. Online libraries, educational brochures, links to other patient organizations are important in establishing this position
   c. One central and consistent message should be conveyed across all channels of communication; e.g. regardless of the platform, the gist of all messages should be:
      i. “The Department of Pediatrics at the University of Saskatchewan is the most trusted adviser on matters of child and adolescent health in Saskatchewan and a champion of child advocacy”

2. **Audience.** Determine which stakeholder groups are most important audience to target in the short-term and which groups are more important in the long-term.
   a. For example, Saskatchewan residents, community partners and funders/donors should be targeted in the short-term and employees, policy makers should be long-term targets.

3. **Interactive Platform.** Once these groups have been identified, select the most appropriate platform to connect with each audience.
   a. The Department website should be the first platform that is addressed and updated. The website will function as the repository of information and news stories and be the main platform to provide detailed content on child and adolescent health and advocacy.
      i. Consider expanding the website to include a section focused on research, both current research by members of the Department as well as the latest developments in the field
      ii. Information on community partners and advocacy groups should be included on the website; testimonials from people representing various stakeholder groups could be included on the website
      iii. When deciding on what content to include on the website, consider what your target audience would like to learn, in addition to what you would like to tell them.
   b. Social media platforms should be used to facilitate a conversation with stakeholder groups, to provide them a forum to connect with other parties and to keep them abreast of recent developments and activities of the Department.
i. Facebook provides a forum for two-way communication allowing followers to post their thoughts and experiences in addition to the Department posting their news; the personality of the Department can emerge through images posted to Facebook (or Instagram); people/groups can be invited to participate in various events and activities via Facebook; links can be created to other relevant groups and associations with Facebook pages. Requires regular updates.

ii. Twitter provides a forum for brief announcements and updates; it provides a mechanism for alerting members of your audience about changes in content to the website or about current events taking place. Requires frequent updates to remain effective.

iii. LinkedIn tends to be focused on professionals and it could prove to be an effective tool in recruiting talented new members to the Department or perhaps in attracting donors. Requires frequent updates.

iv. Social media must be maintained and frequently updated; otherwise it loses its power as a platform for two-way communication. Not staying current essentially says that you are not listening to people active on social media and they will consequently stop participating in the conversation.

4. **Staffing.**
   a. Temporary staff in the summer months should update the website and establish a presence on social media
   b. Going forward, a permanent member(s) of the Department must be appointed to keep the activity on social media current. This responsible member could switch on a monthly basis or by platform. An additional staff member is not required to manage social media activity; however, it is important that the responsibility for staying current is clearly assigned.
   c. The Department must also decide on the frequency of activity. E.g. weekly updates for Facebook and Tweets every other day. If you have limited human resources that can be devoted to social media, consider only pursuing one platform to begin with, e.g. Facebook, and then when resources permit, consider adding additional platforms, e.g. LinkedIn and Twitter.
PHASE 1

- Appoint staff member to manage and monitor website and social media.
- Liaise with IT group to implement changes.

- Initiate conversation to establish online and social media link with the Children’s Hospital Foundation of Saskatchewan (CHFS) to leverage best practices.

- Promote faculty research, alumni stories, and department highlights in order to raise the online communication metrics to 90% (Metrics can be found in Appendix A).
- Add a dedicated space on the website for community engagement. For example, feature five to ten new stories on the homepage every few months relating to faculty research, partners in the community (i.e. St. Mary’s School), and advances in pediatrics.

- Add a Facebook and Twitter page to the department’s online communication and marketing tools. An option is to maintain and update a Facebook page and Twitter account. These could act as the community engagement tools instead of having that section on the website. It is important to have links integrated between the website, Facebook, and Twitter.
- Twitter can be used to engage with alumni, share stories with partners, and share department successes. In addition, Twitter can be used to expand the brand through communicating directly with communities.
PHASE 2

- Strengthen and promote existing relationships with key stakeholder groups (target audiences).
- Plan an annual gala event in Regina/Saskatoon to recognize developments and advances in Pediatrics.
- Partner with the Children's Hospital Foundation of Saskatchewan (CHFS) and media to promote and/or sponsor events.
- Develop a plan to promote the CHFS and other partners on the website and social media. This can be achieved through mentioning each other in tweets, featuring links to each other’s website and social media pages, and sharing stories among the department and partners on social media and the website.

Increase brand awareness provincially

Build relationships with new partners

- Initiate conversations with new stakeholder groups and work on establishing relationships.
- Develop a partnership and relationship with the DreamBrokers and the Ronald McDonald House to build capacity with child advocacy groups in Saskatchewan.
PHASE 3

Increase brand awareness nationally

- Increase involvement with Canadian Institutes of Health Research (CIHR) through information sharing.
- Develop brand awareness and engage with communities through effective communication. For example, showcasing relevant and interesting stories regarding faculty, alumni, employees, partners, and patients on social media can help to build visibility and awareness for the department.
- In addition, profiling and sharing advances made by the department should be promoted and communicated to all audiences through the website, Facebook, and Twitter.

Create an online research database

- Create an internal research database for the department online to provide more support for researchers. Online security for the database is critical; therefore, internal login credentials and password protection would be required.
- Add a public database/listing of abstracts of working papers online.

Build on the culture of collaboration

- Try to use the department culture as a recruiting strategy and a competitive advantage.
- Promote the culture and make it visible to the community. Adding a public database/listing of abstracts of working papers online could be promoted to increase collaboration.
LIST OF PUBLICATIONS

**Community-University Institute for Social Research**


Bidonde, Julia. (2006). *Experiencing the Saskatoon YWCA Crisis Shelter: Residents’ Views*. Saskatoon: Community-University Institute for Social Research. Please contact Clara Bayliss at the YWCA at 244-7034, ext. 121 or at info@ywcasaskatoon.com for copies of this report.


Bidonde, Julia, Mark Brown, Catherine Leviten-Reid, & Erin Nicolas. (2012). *Health in the Communities of Duck Lake and Beardy’s and Okemasis First Nation: An Exploratory Study*. Saskatoon: Centre for the Study of Co-operatives and Community-University Institute for Social Research.


Daniel, Ben. (2006). *Evaluation of the YWCA Emergency Crisis Shelter: Staff and Stakeholder Perspectives*. Saskatoon: Community-University Institute for Social Research. Contact the YWCA at 244-7034, ext. 121 or at info@ywcasaskatoon.com for copies of this report.


Sinclair, Raven, & Sherri Pooyak (2007). *Aboriginal Mentoring in Saskatoon: A cultural perspective*. Saskatoon: Indigenous Peoples’ Health Research Centre in collaboration with Big Brothers Big Sisters of Saskatoon and the Community-University Institute for Social Research.


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