

Request for Recommendation

The City of Greater Sudbury Expert Panel on Health Cluster Development

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| Presented To: | City Council |
| Presented: | Wednesday, Jul 08, 2009 |
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Recommendation

Whereas the City of Greater Sudbury Expert Panel on Health Cluster Development was created to: Identify opportunities to leverage the Health Care sector so as to promote community growth; and work with the Greater Sudbury Development Corporation to establish projects designed to exploit the identified opportunities.

Whereas, over the past two and half years, the panel members have worked diligently to stimulate the health sector in a manner that has elevated its importance so that it is now seen in its proper place within the context of economic development in Greater Sudbury, and

Whereas the panel has accomplished its objective of linking health care researchers and other professionals to the economic development structure at the Greater Sudbury Development Corporation, and

Whereas the GSDC has recently reviewed its strategic plan and added an objective to become a regional centre of health services expertise in Northeastern Ontario, by building on our city's existing strengths in cancer care and research, cardiac care therapy, rural and northern health, and occupational health and safety, and

Whereas the panel is confident that the GSDC, with sustained community consultation and ongoing assistance of many panel members, will identify and pursue opportunities to leverage the health care sector to promote community growth.

Therefore, be it resolved that the Council of the City of Greater Sudbury officially dissolves the Expert Panel on Health Cluster Development and thanks Panel Chair, Jim Gordon and the panel members for their hard work and commitment to the community.

Further, Council recommends that the Greater Sudbury Development Corporation and Economic Development staff review the conclusions and recommendations contained within the Panel's final report and determine a strategy to pursue the outlined opportunities on behalf of the community.

Signed By

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Finally, Council requests that the Greater Sudbury Development Corporation provides information on health cluster development as part of its quarterly report to Council.

EXECUTIVE SUMMARY

The City of Greater Sudbury Expert Panel on Health Cluster Development (HCDP) has fulfilled its mandated. It has conducted a scan of the Health sector to identify opportunities to promote community growth. Working closely with the Greater Sudbury Development Corporation the HCDP has effectively facilitated a greater awareness and communication among community stakeholders; highlighting potential synergies and possible partnerships. The HCDP explored and identified a number of opportunities that could better position the community to address ongoing needs and promote community growth, including:

- The Alternative Levels of Care Crisis
- The Cancer Therapeutic Research Initiative
- The Northeastern Pharmacology Network
- The Northeastern Genetics Institute
- The Health Impact of Poverty
- The Centre of Excellence in Occupational Health and Safety
- The Adult Regional Cardiac Centre of Northeastern Ontario

It is this committees work that has stimulated the Health sector in a manner that has elevated its importance, and its proper place within the economic development strategic plan. The HCDP supports the recommended direction of the economic development strategic plan to become a Regional Centre for Health Services Expertise in Northeastern Ontario by continuing to build on our strengths; Cancer Care and Research, Cardiac Care Program Enhancements, and Expertise in Rural and Northern Health. There is also ongoing support to create a Centre of Excellence in Occupational Health and Safety.

The HCDP also recognizes the synergies that exist within advanced education, research, and innovation and further supports the recommendation that this to be a consideration of the economic strategic plan. From the Cancer Therapeutic Research Initiative (CTRI) to Artificial Breeding Pools to control West Nile, world class research is already being done here in Greater Sudbury and there is an opportunity to cultivate this growing sector within our community.

The panel is confident that the Greater Sudbury Development Corporation, with sustained community engagement will continue to identify opportunities to leverage the health care sector and promote community growth.

The HCDP believes this to be a strategic endeavour and an effective utilization of resources. In an effort to avoid duplication, they believe it is in the best interest of the community stakeholders to transfer this responsibility to the Greater Sudbury Development Corporation as they move forward with an updated strategic plan.

ANALYSIS

The HCDP explored and identified a number of opportunities that could better position the community to promote community growth.

Alternative Levels of Care (ALC) Crisis

The number of alternative level of care (ALC) patients have been steadily increasing which results in limited bed availability for other medical patients and has resulted in a bed crisis at the Sudbury Regional Hospital. The HCDP engaged in a lengthy discussions about how the challenges of the ALC crisis effects the ability to attract investment and leverage future opportunities. The panel is confident that they were the stimulus needed for the community take immediate action. The meeting held December 1, 2008 with community health leaders and Jim Gordon, Chair of the HCDP resulted in further community consultations to address

two specific options being additional community care hours and utilization of existing space to accommodate the additional demand for ALC beds. It was recommended to Council that the NE LHIN be encouraged to look at innovative solutions that can be piloted in Greater Sudbury and referred to as best practices in other communities across the province. Also, that the Ministry of Long Term Care be requested to make permanent the interim beds currently operating in the city. These efforts have led to the creation of the Alternative Level of Care Sudbury Community Steering Committee, which is co-chaired by Dr. Peter Zalan.

Cancer Therapeutic Research Initiative

The HCDP was asked to identify opportunities to build on the strengths of the Northern Ontario Medical School, the Cancer Treatment Centre, local cardiac care programs and medical specialists who are in the community. They believe that there are opportunities rooted in research and innovation that transcend all of these areas of expertise, and as well as others that garner global recognition. Specifically, the panel has been working with proponents to develop the Cancer Therapeutic Research Initiative (CTRI). An initiative that when it has reached its full potential will have created 120 direct jobs and 1000 indirect jobs. Imagine effective cancer drugs invented and produced in Greater Sudbury that are used throughout the world. CTRI will establish a world class pharmaceutical research and development hub in northeastern Ontario. Nine scientists with many different but complementary expertise, involving 6 institutions have formed this consortium. This initiative provides a model for our community to capitalize on the Knowledge economy and diversify with our creative class.

Northeastern Pharmacology Network

As presented to Council October 10th, 2007 ; led by Dr. Amadeo Parissenti, the Northeastern Ontario Pharmacology Network is a virtual network, utilizing the existing research space and infrastructure with the intent of increasing its research capacity and infrastructure as it grows. The Network will have a management committee, that will set policies and standards for the network its investigators. It will administer network activities including solicitation and contact of clients, providing assistance in the invoicing and reports to clients and the establishment of effective business models. Research activities conducted by the network are those requested by clients in discussion with network administration and investigators.

Northeastern Ontario Genetics Institute

Greater Sudbury has a significant amount of research expertise and infrastructure related to genetics and genomics, particularly as it relates to cancer. The creation of a Northeastern Ontario Genetics Institute is a natural progression of the work that is already being undertaken in Greater Sudbury. Researchers in Greater Sudbury have published papers related to gene expression changes or gene polymorphisms associated with cancer prognosis and treatments. Currently, patient samples from several national clinical trials sponsored by pharmaceutical companies are being sent to Greater Sudbury for genome profiling and quantitative PCR experiments.

The unfortunate reality of our community's health status provides further rationale that supports the creation of a Northeastern Ontario Genetics Institute in Greater Sudbury:

- Northeastern Ontario has higher frequencies of specific cancers and of cardiovascular disease, making it an attractive population for studies of risk factors associated with incidences of various cancers and of cardiovascular disease.
- Northeastern Ontario has higher frequencies of tobacco & alcohol consumption, and higher rates of obesity and diabetes, enabling us to look at the relative contribution of genetics and lifestyle factors in the incidence of various cancers and of cardiovascular disease.

The contribution of gene expression/gene polymorphisms to cancer risk associated with exposure to specific carcinogenics in mine workers can also be assessed.

Health Impact of Poverty

The HCDP acknowledged that economic development is not just about making money but saving money as well. In partnership with the Sudbury & District Health Unit and the Social Planning Council the HCDP has been hosting a breakfast series to explore the health impacts of poverty. These sessions were organized due to an ever increasing awareness about the enormous impact of poverty on the health of both individuals and the community. Poverty is an issue that is important from a health perspective but just as important from an economic development perspective—the cost of poverty far exceeds the cost to eliminate it. All four breakfast events will culminate in a community conference scheduled for the Fall of 2009. This conference will bring together representatives from diverse sectors - all with a shared interest in poverty reduction and to develop a community action plan.

At the most recent breakfast session, Paul Beach, Manager, Community Geomatics Centre (CGC), Sault Ste. Marie Innovation Centre delivered a presentation on "Mapping the impact of socially constructed environments on human health using geographic information systems (GIS)"

The CGC delivers a community-based GIS solution to more than a dozen organizations at affordable costs. Enormous amounts of data are being shared by all organizations to solve enterprise and inter-enterprise issues. GIS expertise is well entrenched in the area, and it is being transferred to the private sector. In addition, the entire community is benefiting from the enhancement of the IT expertise.

In recent years, the CGC has expanded the municipal and utilities GIS in innovative ways in order to address health and social issues in the community. Using the already established CGC GIS solution and the municipal data set as background layers, social and health agencies were approached to join the CGC partnership to improve the community's overall operation and health.

This approach has brought about significant improvements in services from all sides thus allowing services to be optimally delivered to areas where they are needed most. Early results have indicated improvements in public safety and health delivery, reductions in municipal liabilities and more effective use of budgetary resources.

Occupational Health & Safety Centre of Excellence

Greater Sudbury has a rich history with various aspect of mining and an opportunity to better link industry, manufacturing and research. On February 8, 2008 the HCDP hosted a cross sectoral stakeholder meeting to discuss the merits of pursuing a Centre of Excellence in Occupational Health and Safety.. Laurentian University continues to lead the pursuit of this initiative. They are working closely with the lead researchers in the development of several applications intended to move the Centre forward.

Adult Regional Cardiac Centre for Northeastern Ontario

Greater Sudbury is home to a comprehensive Adult Regional Cardiac Centre for Northeastern Ontario, which serves as a tertiary centre with seamless cardiology and cardiac surgical medical coverage. It is the only full cardiac re-vascularization Centre in Northern Ontario providing the following services:

Non-invasive and invasive diagnostic cardiovascular services

- Pacemaker implantation and follow up clinic
- Perfusion services
- In-patient services
- Cardiac / Pulmonary Rehabilitation

Indirect HCDP Initiatives

Innovation Sudbury/Research Park

A collaborative effort has been undertaken to position Greater Sudbury's core strengths positively within the context of the global economy through an innovation strategy. Innovation Sudbury is a proposed research and development strategy that will act as a gateway for initiatives that will transform our economy; and intends to lead this transformation by focusing on three distinct clusters, including enablers that will facilitate their growth.

Laurentian University's Animal Care Facility

In February 2008, the GSDC supported construction of an advanced research facility on the campus of Laurentian University comprising renovation of existing 5,000 sq.ft. research Animal Care Facility and a 3,000 sq.ft. addition in the amount of \$50,000. The present facility will be retrofitted with new animal holding cages / cage washing area and aquatics research component. New facility will allow more advanced biomedical / medical research to better accommodate the needs of the Medical School, the Sudbury Regional Hospital, the Cancer Research Centre and new faculty members and researchers at Laurentian University. Facility will ensure proper procedures for biosafety research and satisfy government legislative requirements.

Artificial Breeding Pool Project—Control of West Nile

Control of mosquitoes is done generally with the use of pesticides (e.g. malathion), and larvicides (e.g. *Bacillus thuringiensis israelensis* (Bti)), costing substantial amount of money, time and effort to maintain a healthy ecosystem. Currently a study is being carried out in Greater Sudbury by Dr. Gerardo Ulibarri who has developed a system called "Artificial Breeding Pools" (ABPs) that is capable of attracting female mosquitoes to deposit their eggs in a contained solution. The eggs and larvae can then be extracted for elimination. Further, to the work that is being done here in Greater Sudbury, Dr. Ulibarri has been collaborating with the World Health Organization and how this system might have global application.

RECOMMENDATIONS

1. To acknowledge that the City of Greater Sudbury Health Cluster Development has completed their mandate to identify opportunities to leverage the health sector so as to promote community growth; and to establish projects designed to exploit these opportunities. Further, that the Greater Sudbury Development Corporation continue as the lead to leverage the Health sector as an economic engine.
2. To establish a Health Sector Advisory Committee to advise Council on issues that have a broader focus than economic development. A group that will continue to lead "Made in Greater Sudbury Solutions"
3. To further investigate the benefits of a community based GIS solution to ensure that data may be shared by all organizations to solve enterprise and inter-enterprise issues. In addition, this approach could improve public safety and health delivery, reduction in municipal liabilities and more effective use of budgetary resources.
4. To continue to collaboratively address the Alternative Levels of Care Crisis including two specific options already recommended to Council. One, being additional community care hours and utilization of existing space at the Memorial site to accommodate the additional demand for ALC beds. Further, that it was recommended to Council that the NE LHIN be encouraged to look at innovative solutions that can be piloted in Greater Sudbury and referred to as best practices in other communities across the province.
5. To encourage the Greater Sudbury Development Corporation to advance Greater Sudbury's position as a Northeastern Ontario Region Centre for Health Care, by highlighting our expertise in the areas of cancer, cardiac and northern and rural health.

CONCLUSION

Through the work of the panel they have established a network that has improved sector communications and provided stakeholders with a network to identify project synergies and new opportunities. This has

allowed the health sector to gain prominence in the community as an economic driver.

The panel is confident that the Greater Sudbury Development Corporation, with sustained community consultation will continue to identify opportunity to leverage the health care sector to promote community growth and will establish projects designed to exploit those identified opportunities. The HC DP members want to reiterate that they believe this to be a strategic endeavour and an effective utilization of resources.