



Local Food Provision in Ontario's Hospitals and Long-Term Care Facilities: Recommendations for Stakeholders

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LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

TABLE OF CONTENTS

Project Synopsis	2
Executive Summary	4
1.0 Introduction	5
2.0 Stakeholders	7
2.1 Key Healthcare Facility Personnel	7
2.2 Food Suppliers	8
2.3 Provincial Ministries involved in setting relevant policies	10
3.0 Local Food Policy and Activity Considerations	13
4.0 Local Food Policy and Activity Recommendations	17
4.1 Discussion Terminology	17
4.2 Recommendations by Stakeholder Group	17
5.0 Conclusion	21
Appendix 1	22
Appendix 2	24
Appendix 3	26

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

PROJECT SYNOPSIS

This report is the third deliverable for Food for Health Project 200218 ("Exploring the Feasibility and Benefits of Incorporating Local Foods into Ontario's Healthcare System"), a research study conducted in 2010-2012 with the support of the University of Guelph/Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) Partnership Fund, My Sustainable Canada, the Canadian Coalition for Green Health Care, St. Mary's Hospital (Kitchener), St. Joseph's Health Centre (Guelph), and Aramark.

The five-member research team responsible for this project is:

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The project objectives are to:

1. Establish the current state of food provision in Ontario's healthcare system.
2. Gain an in-depth understanding of the opportunities and constraints impacting food provision decisions in Ontario's healthcare system.
3. Provide alternative perspectives on healthcare food provision and the potential for changing these practices.
4. Understand implementation details for making changes at the individual facility level.

There are four deliverables associated with this project. They are charted below along with their relationship to the above objectives.

PROJECT DELIVERABLE	RELATIONSHIP TO PROJECT OBJECTIVES	STATUS
1. Report on Food Provision in Ontario Hospitals and LTC's: the Challenges and Opportunities of Incorporating Local Foods	This report was written after the first three research objectives were met. It integrates the results of three studies to provide a macro level overview of the current situation in Ontario.	Completed March 2012
2. Case Studies in Ontario Healthcare: The Challenges and Opportunities of Incorporating Local Foods	These case studies met research objective 4.	Completed July 2012
3. Local Food Provision in Ontario Hospitals and LTC's: Recommendations for Stakeholders	This report flows from the first two documents and provides specific recommendations for all key stakeholder groups involved in or interested in food services in the Ontario healthcare system.	Completed January 2013
4. Local Food for Healthcare Symposia	Symposia will be held to disseminate the results of this project across Ontario.	2013

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

It is hoped that achievement of these outcomes will help create an institutional market for local foods that will increase both the number of local farmers growing foods for the Ontario healthcare system, and the amount and types of local foods they sell. As well, the use and endorsement of local foods by healthcare providers is expected to encourage chain store food retailers and the general public to stock and purchase local food, thereby increasing the current consumer market for local foods. Finally, it is expected that improved knowledge of the costs and processes associated with incorporating local foods into healthcare will encourage additional research and investigation into the use of local foods in other economic sectors, such as hospitality and tourism (e.g. restaurants, catering firms).

As previously noted, the report that follows is the third deliverable for this project. The research assistants for this report were Dr. Majid Hassas Roudari and Jenna-Lee Shuster. Dr. Hassas Roudari prepared Appendices 1 and 2. Jenna-Lee Shuster prepared Appendix 3.

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LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

EXECUTIVE SUMMARY

In April 2009, the provincial government committed to getting more Ontario-grown food into its public institutions.¹ A report submitted to OMAFRA later that year indicated that having more institutional buyers of local foods will: 1) ensure a stable market for local and sustainable products; 2) provide consumers more local food choices; 3) reduce environmental harm from shipping food unnecessary distances; and 4) retain more money in the local economy.²

The goal for this report is to provide practical recommendations that will improve the ability of Ontario's healthcare sector to increase its procurement and support for local food. The full report clarifies who the relevant stakeholders are, discusses key considerations that must be taken into account in any efforts to set policy or undertake activities related to the use of local food in healthcare, and makes specific local food recommendations for each stakeholder group. These recommendations are summarized below:

It is recommended that the Ministry of Health and Long Term Care (MOHLTC), Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) and Ministry of Finance (MOF):

1. Give healthcare facilities flexibility in their approach to local food. It is not recommended that local food procurement targets be mandated at this time.
2. Develop new "easing of access" programs.
3. Fund investigations into local food claims to provide scientific support for them.
4. Initiate dialogues between OMAFRA, MOHLTC and MOF to discuss trade agreement conflicts and the role of food and agriculture in creating healthy communities.
5. Define and differentiate the role(s) that food plays in various types of healthcare facilities.
6. Consider having food services funded by and report to OMAFRA rather than MOHLTC.

It is recommended that farmers and small-, medium-, and large-scale distributors:

1. Use local food language in public tenders that does not conflict with trade agreements.
2. Take full advantage of "easing of access" programs, such as *Ontariofresh.ca*.
3. Take full advantage of the Broader Public Sector Investment Fund.

It is recommended that healthcare facilities' food service managers and the senior administrators they report to:

1. Prepare a formal local food policy or statement for their facility.
2. Take full advantage of "easing of access" programs, such as *Ontariofresh.ca*.
3. Adopt local food language in contracts with their local food suppliers.
4. Endorse initiatives that support local food in healthcare, such as the Healthy Food in Healthcare pledge.

¹ News release from the Office of the Premier dated April 6, 2009; <http://news.ontario.ca/opo/en/2009/04/more-ontario-grown-food-in-schools-hospitals.html>.

² Landman, K., Blay-Palmer, A., Kornelsen, S., Bundock, J., Davis, M., Temple, K., Megens, S., Nelson, E., Cram, R. (2009). *Models and Best Practices for Building Effective Local Food Systems in Ontario*. Report prepared for the Ontario Ministry of Agriculture, Food and Rural Affairs.

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

1.0 INTRODUCTION

Although Ontario is home to some of the most productive agricultural lands in Canada, we import \$4 billion more in food than we export.³ According to a 2005 study for Waterloo Public Health, a significant quantity of food that can be grown in Southwestern Ontario is imported and has travelled, on average, about 4,500 kilometres to get to this region.⁴

In April 2009, the provincial government committed to getting more Ontario-grown food into its schools, hospitals, food service companies and other institutions.⁵ A report submitted to OMAFRA later that year indicated that having more institutional buyers of local foods, including universities, hospitals, government offices, prisons, will: 1) ensure a stable market for local sustainable products; 2) provide consumers more local food choices; 3) reduce environmental harm from shipping food unnecessary distances; and 4) retain more money in the local economy.⁶

It is generally believed that the benefits of purchasing locally-grown food fall into three main categories:

- Economic - increased sales for local farmers, which keeps more money in local economies and has a multiplier effect on them.
- Environmental - reduced air emissions and greenhouse gases caused by the fuel used to transport food, and, when more ecological practices are used, reduced chemical use.
- Social - improved food security, and better community cohesion.

However, it is also recognized that there are barriers that can offset these benefits, such as concerns about inconsistent supply and pricing of food due to seasonality.

The benefits and barriers associated with using local food need to be understood on a sector-by-sector basis within the institutional market due to each sector's unique elements. The benefits and barriers associated with food provision in the healthcare sector were explored in the first two reports completed for this project - *Report on Food Provision in Ontario Hospitals and LTC's: the Challenges and Opportunities of Incorporating Local Foods* and *Case Studies in Ontario Healthcare: The Challenges and Opportunities of Incorporating Local Foods*.

Our project has focused on healthcare because it is a large and growing aspect of Ontario's government services. There are over 800 facilities providing both acute care and long term care services to Ontario's 13.2 million residents every year.⁷ With 30,000 hospital beds and over 75,000 long-term care (LTC) beds at close to 100% occupancy, the Ontario healthcare system serves an estimated 115,000,000 meals to patients every year.⁸ The total cost to deliver food service programs in hospitals and long-term care is estimated at \$1.1 billion, while the value of the food in all those meals is estimated to be over \$285,000,000.⁹ Therefore, this system represents a very attractive market for organizations that produce, sell or market local food.

³ Blay-Palmer, A., J. Turner, S. Kornelsen (2012), "Quantifying Food Systems: Assessing Sustainability in the Canadian Context" in M. Koç, J. Sumner and A. Winson, eds. (2012), *Critical Perspectives in Food Studies*. Oxford University Press, Toronto.

⁴ Cited in Desjardins, E., J. Lubczynski and M. Xuereb (2011), "Incorporating Policies for a Healthy Food System into Land Use Planning: The Case of Waterloo Region, Canada", *Journal of Agriculture, Food Systems and Community Development* 2(1): 127-140.

⁵ News release from the Office of the Premier dated April 6, 2009; <http://news.ontario.ca/opo/en/2009/04/more-ontario-grown-food-in-schools-hospitals.html>.

⁶ Landman, K., Blay-Palmer, A., Kornelsen, S., Bundock, J., Davis, M., Temple, K., Megens, S., Nelson, E., Cram, R. (2009). *Models and Best Practices for Building Effective Local Food Systems in Ontario*. Report prepared for the Ontario Ministry of Agriculture Food and Rural Affairs.

⁷ Ontario Ministry of Health and Long Term Care Master Numbering System: April 2011; accessed September 15, 2011 at http://www.health.gov.on.ca/en/public/publications/ministry_reports/master_numsys/master_numsys11.aspx

⁸ Canadian Coalition for Green Healthcare (2010), "Assessing the Opportunities for Local Food in Healthcare", a presentation to the HFS Conference in September, 2010.

⁹ Estimate calculated by Linda Varangu, Partnership Director of the Canadian Coalition for Green Health Care, January 21, 2013.

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

The goal for this report, the third and final written output from our project, is to provide practical recommendations that will improve the ability of the healthcare sector to increase its procurement and support for local food. It flows from the findings of our first two reports and also incorporates other new information and research that relate to various issues impacting local food and/or healthcare.

It is important to note that local food has been defined throughout this project as food that is grown or raised within the Province of Ontario or within 150km of the point of consumption. This definition does not take into consideration other factors that Ikerd (2011) argues are part of food grown with integrity, such as the method or scale of food production.¹⁰

This report starts by clarifying who the relevant stakeholders are in healthcare food services and the local food supply chain. It then discusses key considerations that must be taken into account in any efforts to set policy or undertake activities related to the use of local food in healthcare. The report ends with recommendations for policies and activities that will help healthcare facilities in Ontario purchase more local food.

¹⁰ Ikerd, J. (2011). "Local Food: Revolution and Reality", *Journal of Agricultural & Food Information* 12: 49–57.

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

2.0 STAKEHOLDERS

There are three key groups involved in providing food to the patients, visitors and staff at Ontario's healthcare facilities. In this section, each of the following groups is examined to understand their current food-related activities and their attitudes toward the use of local food in Ontario's healthcare system:

- Key healthcare facility personnel - *food service managers and senior administrators*
- Food suppliers – *farmers and small-, medium-, and large-scale distributors*
- Provincial ministries involved in setting relevant policies – *the Ministry of Health and Long Term Care (MOHLTC), the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), and the Ministry of Finance (MOF).*

2.1 Key Healthcare Facility Personnel

Food Service Managers and Senior Administrators

The first report for this project, *Report on Food Provision in Ontario Hospitals and LTCs: The Challenges and Opportunities of Incorporating Local Foods*¹¹, confirmed that there are usually multiple sources of food within individual healthcare facilities, including retail operations such as Tim Horton's and shops run by volunteers. However, the typical food service department only controls the food offered through the major delivery channels: bedside service, dining rooms and cafeterias. The department is generally run by a food service manager who reports to a senior administrator who may be responsible for other services, such as housekeeping and maintenance.

Our report also revealed that, although the typical food service department in Ontario purchases food for and prepares approximately 184,000 patient meals per year, the food service manager is given a budget that is limited and clearly defined, ranging from \$30-35 per patient per day. Most of this budget is spent on the labour needed to prepare and deliver food, allowing the typical food service department to employ 28 full-time and part-time staff. Only \$7-8 of the \$30-35 is spent on the food needed to meet the guideline of 3 meals, 2 snacks, and beverages per patient per day set by the Ministry of Health and Long Term Care (MOHLTC). In some cases, expensive nutritional supplements also come out of the food services budget. In the case of LTCs, the MOHLTC provides a specific target/subsidy per day to purchase food (currently \$7.46). Although it does not have a similar target/subsidy for hospitals, these facilities generally operate with a similar budget allocation for food.

We found that the food service manager has primary responsibility for procurement decisions. Four factors dominate his/her food planning and purchasing decisions: food service budgets, patient needs, food costs/prices, and food safety requirements. The influence of budget factors in particular on decision-making is evidenced by the use of common business practices, such as using group buying organizations (GPOs) and making extensive use of part-time staff.

Other key findings from our report regarding the use of local food in healthcare are as follows:

- A combination of conventional on-site cooking and outsourced, prepared food is used in Ontario's healthcare system, but the combination employed varies substantially across the province. Overall, food service management in healthcare is moving away from cooking on-site and moving toward providing outsourced, prepared food for some or all of the meals served to patients. Facilities that outsource their food typically have less control over

¹¹ Padanyi, P., Kanetkar, V., Varangu, L., Wylie-Toal, B., Blay-Palmer, A. (2012). *Report on Food Provision in Ontario Hospitals and LTCs: The Challenges and Opportunities of Incorporating Local Foods.*

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

food attributes, such as where it was grown.

- Most hospitals and LTCs in Ontario claim to use local food in the meals they prepare on-site. However, their efforts to promote local food are limited, and few facilities currently plan to increase their use of local food. Their ability to support local food is constrained by the facts that most facilities do not have a definition for “local food” and most do not have the means to accurately track their purchase or use of local food.
- Acute care-only hospitals in Ontario estimate that they purchase less than 10% of their fruits and vegetables and less than 5% of their breads, dairy, fish, meat and poultry from local farmers/producers. However, LTCs and hospitals with LTC beds estimate they purchase higher levels of local food, i.e. 20-30% of their fruits and vegetables and 5-10% of their breads, dairy, fish, meat and poultry.
- Local food is viewed very positively by both food service managers and senior administrators in all types of healthcare facilities across Ontario and is believed to have both economic and health benefits. This is consistent with a separate, national survey of local food programs in healthcare conducted for Farm to Cafeteria Canada which found that the primary benefit of a local food program is believed to be improved quality, freshness, taste, and/or nutrition of healthcare facility meals and snacks.¹²
- Most facilities would like to offer local food if it can be done within their current budget and regulatory constraints, and if their supply concerns can be addressed.

2.2 Food Suppliers

Farmers and Small-Scale Distributors

Farmers are the growers of the food we consume and therefore the most critical participants in the healthcare food supply chain. The 2011 Census of Agriculture found that the number of farms in Ontario declined 10% between 2006 and 2011 to 51,950 farms, while the average age of a farmer rose to 52 years.¹³ Gross receipts for farmers remain strong, with Ontario farms reporting \$10 billion in farm outputs.¹⁴ However, Statistics Canada data also reveals that, while average farm family incomes in Canada are higher than non-farm family income, net farm incomes have changed very little over time due to rapidly increasing costs of on-farm inputs.¹⁵

In 2006, the Canadian Senate released a report that provided several policy ideas that would help revitalize rural communities, some of which apply to the farming sector.¹⁶ As part of their recommendations for economic development, the report calls for building stronger rural alliances by leveraging urban growth and connecting rural and urban interests. The report draws on the opinions of several academic experts, including Dr. Mark Partridge of the University of Saskatchewan, Dr. Peter Apedaile of the University of Alberta, and Dr. Bill Reimer of Concordia University. They argue that, while rural areas are in decline, urban centers are growing. Since many urban centres are dependent on rural areas for essentials goods, such as food and clean drinking water, it stands to reason that, if rural areas can pool their resources, they should be able to tap into urban markets. However, the report points out that “the challenge, according to Dr. Reimer, is making urban Canada understand why rural Canada is important.”

¹² Suchorolski, R., McKenna, M.L., Bays, J., Wylie-Toal, B., Lahey, D., Vrins, M. (2012). *Farm to Cafeteria Canada: Results from the First National Survey*. Report for Farm to Cafeteria Canada (unpublished).

¹³ 2011 Census of Agriculture: <http://www.statcan.gc.ca/pub/95-640-x/2012002/prov/35-eng.htm>.

¹⁴ OMAFRA webpage: “Value Chains in Agriculture, Food and Agri-Products Sectors”; accessed in March 2012 at <http://www.omafra.gov.on.ca/english/food/valuechains.html>.

¹⁵ Statistics Canada: Canada at a Glance: http://www45.statcan.gc.ca/2009/cgeo_2009_011-eng.htm#t31

¹⁶ Fairbairn, J., Gustafson, J. (2006). *Understanding Freefall: The Challenge of the Rural Poor*. Interim Report of the Standing Senate Committee on Agriculture and Forestry.

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

Farmers sell most of their output to marketing boards or to medium- to large-scale food suppliers/distributors. There are two common means employed by those who want to also sell directly to consumers: farmers markets and Community Shared Agriculture programs (CSAs).

Farmers markets provide the opportunity for farmers to connect directly with consumers and address questions about their production techniques. The ability of consumers to better understand their food sources has been shown to increase consumer product confidence¹⁷ and is a well-recognized social benefit of local food. In the province of Ontario, farmers' markets grew from 60 in 1990 to 181 by 2012,^{18,19} while direct sales at those markets have increased 7.3% annually.²⁰ In the same time period, documented CSA initiatives have gone from 0 to 228 in 2012, including a 50% increase in the last two years.²¹

CSAs also provide farmers with the opportunity to connect directly with consumers, but in a different way. Supporters either buy shares or exchange labour/volunteer work with a farmer or network of farmers in return for weekly baskets of fresh produce. For the farmer, this is a way to share the risks involved with farming and helps them secure demand for their products throughout the growing season. In return, the consumer gets a consistent delivery of fresh, local food and becomes more educated about where their food comes from.

A third small-scale outlet for local food is provided by middlemen who run their own seasonal local food stands. They are "resellers". They aren't "farmers/growers", nor are they corporate "distributors/processors". Instead, they are usually individual entrepreneurs who buy food from their network of specialist farmers or from the food terminal. They perform various services, such as sorting and packaging, and then sell food in small market stands. They perform middlemen/distribution functions at a very local level, relieving farmers of the burden of sorting, packaging and selling their goods directly to consumers while providing customers with an easy means to purchase local food in one location.

Medium- and Large-Scale Distributors

Ontario's hospitals and LTCs purchase the majority of their food through medium- and large-sized professional organizations.²² Their preference for dealing with these organizations is the result of a desire for efficiencies in delivery (i.e.: one-stop shopping and as few deliveries as possible), and the perception that these organizations are more capable of providing food that is affordable and meets government food safety regulations. There are three main types of food suppliers/distributors that healthcare facilities deal with: food service operators, distributors, and group buying organizations.²³

Food service operators are organizations hired to run food service departments. They handle all of the processes associated with procuring, preparing, and cooking food. As a result, the healthcare institution often loses direct control over food procurement, including decisions about the products they purchase and where they purchase them from. This can limit the ability of the

¹⁷ Mount, P. (2012), "Growing local food: scale and local food systems governance", *Agriculture and Human Values* 29: 107-121.

¹⁸ Cummings, H., Kora, G., Murray, D. (1999). *Farmers' Markets in Ontario and Their Economic Impact 1998*. Report prepared for Farmers' Markets Ontario; <http://www.agrinenewsinteractive.com/features/farmersmarkets/farmersmarkets.html>.

¹⁹ Harvest Ontario webpage: "Destinations by Attraction Type: Farmers' Market"; accessed May 11, 2012 at http://www.harvestontario.com/attraction_type.php?id=10.

²⁰ *Farmers' Markets Ontario Market Customer Profile and Impact Study 2009 Report*. Report prepared for Farmers' Markets Ontario; accessed July 7, 2011 at http://www.farmersmarketsontario.com/DocMgmt%5CResearch%5CFMO%20Research%20and%20Statistics%5CFMO_Impact_Study_-_Fact_Sheet.pdf.

²¹ Ontario CSA Farm Directory (2012); accessed May 12, 2012 at <http://csafarms.ca> on.

²² Padanyi, P., Kanetkar, V., Varangu, L., Wylie-Toal, B., Blay-Palmer, A. (2012). *Report on Food Provision in Ontario Hospitals and Long-Term Care Facilities: The Challenges and Opportunities of Incorporating Local Foods*.

²³ Macpherson, K., Naccarato, F., Ohberg, L. (2012). *Connecting the Links: Foodservice in the Broader Public Sector*. Report prepared for the Greenbelt Foundation; accessed at <http://ontariofresh.ca/sites/default/files/files/resources/Combined%20Supply%20Chain%20and%20BPS%20overview-FINAL.pdf>.

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

healthcare facility to purchase local food unless provisions that allow the facility to retain control of procurement can be worked into contract agreements.

Distributors deliver food products to healthcare institutions. They are generally limited in the range of food SKUs (stock keeping units) they carry and use demand thresholds to determine what they will include in their inventories. Local foods have historically been difficult to source through conventional food distributors because demand for these products has been low. However, since October 2012, many of the major food distributors in Ontario's healthcare sector have received funding from the Greenbelt Foundation to create local food listings. This will greatly improve the ability of healthcare facilities to source local foods through these distributors.

Group Purchasing Organizations (GPOs) help healthcare facilities keep food costs down by using the buying power of multiple facilities to negotiate the best possible prices from food suppliers. Contracts with selected suppliers lock in prices for extended terms (usually 1-2 years). To receive a contract, a food supplier must complete a Request For Proposal (RFP). The Ministry of Finance (MOF) requires that all RFPs be evaluated in a fair and transparent manner, as outlined in the Broader Public Sector (BPS) Procurement Directive, based on criteria the GPO deems are important. It can be difficult to source local food through GPOs since the BPS Procurement Directive does not allow contracts to be awarded based on whether or not a food is local. However, GPOs can prioritize local food when all other criteria are equal. As a result, some have been successful in increasing the availability of local food to their healthcare customers. An example of this is MEALsource, a healthcare GPO in Southern Ontario.²⁴

2.3 Provincial Ministries involved in setting relevant policies

The Ministry of Health and Long Term Care

The Ministry of Health and Long Term Care (MOHLTC) oversees Ontario's healthcare sector. Its mission and mandate was recently adjusted to focus more on stewardship and less on the actual delivery of healthcare services:

“[MOHLTC's] plan for building a sustainable public healthcare system in Ontario is based on helping people stay healthy, delivering good care when people need it, and protecting the health system for future generations.”²⁵

MOHLTC is an important stakeholder in the discussion of local food and healthcare because it provides overall direction and leadership to the sector through development of planning and guiding resources that bring value to the health system. More specifically, it sets the regulations that Ontario's healthcare facilities must follow.

A major new piece of legislation is the Excellent Care for All Act (ECFAA) enacted in 2010. It is meant to ensure the needs of the patient come first through ongoing quality improvement measures. It includes requiring healthcare facilities to create annual Quality Improvement Plans (QIPs) that contain numerous QIP objectives. Each QIP objective must be paired with a desired outcome/indicator as well as information about current performance and desired performance. Senior executive compensation is linked to achieving QIP goals.²⁶

Unfortunately, MOHLTC does not currently prioritize local food. In fact, food in general has a low profile with the Ministry despite that fact that (a) the Ministry's mission is to create a healthcare

²⁴ Canadian Coalition for Green Health Care (2012). *Local Food Case Study #2: St. Joseph's Group Purchasing Organisation makes local food an integral part of buying strategy*; http://www.greenhealthcare.ca/images/projects/localfood/Case_Study_2-LocalFood.pdf

²⁵ MOHLTC webpage: “About the Ministry”; <http://www.health.gov.on.ca/en/common/ministry/default.aspx>.

²⁶ MOHLTC webpage: “Legislation”; <http://www.health.gov.on.ca/en/common/legislation/default.aspx>.

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

system that helps people stay healthy, and (b) food is important to preventative medicine and a core determinant of health.²⁷ Food is rarely mentioned in MOHLTC's documents²⁸ and the few references of food that can be found on the Ministry's website relate mostly to food safety. This is undoubtedly because most of the existing regulations that apply to healthcare facilities deal with food safety. It is not surprising, therefore, that a review of QIPs for 2010 found that, of the 3600 QIPs reported by 132 hospitals in the province, only seven related in some way to food. Of these seven food QIPs, five dealt with Increasing Patient Satisfaction, one with Increasing Food Safety, and one with Improving Processes. None related to local food.²⁹

The Ontario Ministry of Agriculture, Food, and Rural Affairs

The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has a clear interest in local food. The Ministry's mission is to be "a catalyst for transforming our agriculture and food sectors and rural communities for a healthy Ontario", and its priorities for 2011-12 were to create:

1. Thriving Agriculture and Food Sectors
2. Strong Rural Communities
3. Safe Food, Healthy Animals, Healthy Environment³⁰

OMAFRA recognizes the link between healthy and vibrant food systems and the health of Ontarians. It has been promoting Ontario-grown food to consumers through Foodland Ontario since 1977. More recently, it has created programs to help revitalize the agricultural economy of Ontario by targeting public sector institutions and the food supply chain:

- The Broader Public Sector Investment Fund supports procurement initiatives in Ontario's schools, universities, and healthcare institutions. It has been used to achieve supply chain changes that make local foods more available through conventional channels (mainline distributors, food service companies, and GPOs), to develop local food procurement models in healthcare facilities, and to increase the range of food options for healthcare, such as local entrées and lightly processed, fresh produce.

Overall, this fund has helped establish Ontario as a national leader in local food initiatives. In 2011, Farm to Cafeteria Canada conducted a survey of Canadian farm to healthcare programs and found that, of the 59 respondents, 19 were from Ontario, double the number of programs running in 2nd place British Columbia.³¹

- Ontario*Fresh*.ca is an online network and marketing service designed to help Ontario businesses buy and sell more local food. The mission of Ontario*fresh*.ca is to connect the food value chain to get more local food on Ontario plates. It was created out of recognition that local food producers encounter difficulties finding buyers from outside of their own networks.

Ontario*fresh*.ca has seen rapid growth since its launch in August 2012. The website currently has 1420 registered businesses, and there are 15 to 30 new registrations every week. Of these members, 65% are sellers (including primary producers and processors), 25% are end buyers or distributors, and the remainders are support industries (such as packing and labeling services, OMAFRA reps, etc.). Some of the registered businesses

²⁷ World Health Organization webpage: "Health Impact Assessment: The determinants of health"; <http://www.who.int/hia/evidence/doh/en/index3.html>.

²⁸ Based on a September 2012 scan of the MOHLTC website, www.health.gov.on.ca.

²⁹ Based on data retrieved from Health Quality Ontario's QIP Navigator (<https://qipnavigator.hqontario.ca/>).

³⁰ OMAFRA webpage: "Published Results-based Plan 2011-12"; <http://www.omafra.gov.on.ca/english/about/rbp/1112/1112.htm>

³¹ Suchorolski, R., McKenna, M.L., Bays, J., Wylie-Toal, B., Lahey, D., Vrins, M. (2012). *Farm to Cafeteria Canada: Results from the First National Survey*. Report for Farm to Cafeteria Canada (unpublished).

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

are hospitals or LTC homes, and the online marketplace provides opportunities for direct purchasing between institutions and producers and between mainstream distributors and producers.³²

In addition to providing an online marketplace for local food businesses, *Ontariofresh.ca* provides resources to help educate the food supply chain about what is required to provide food to different markets, including institutional food markets. Many of the resources provide information on how institutions purchase and prepare food, and outline the types of requirements a producer may encounter. For example, there are a number of food safety requirements that food producers must comply with in order to supply the healthcare sector. *Ontariofresh.ca* provides details about these requirements and how to meet them.

The Ministry of Finance

The Ministry of Finance (MOF) ensures that public funds are used in an accountable and fiscally responsible manner. It creates key economic policies for the province and the facilities that receive funding from them. Its mission is to:

“Establish an environment that will ensure a dynamic, innovative and growing economy, and to manage the fiscal, financial and related regulatory affairs of the Province of Ontario.”³³

MOF, local food, and healthcare are connected through MOF's Broader Public Sector (BPS) Procurement Directive. The BPS Procurement Directive provides guidelines for BPS organizations (such as healthcare facilities) to follow when making purchases. It is meant to improve accountability and transparency for procurement decisions and processes, and to maximize the value that BPS organizations receive from the use of public funds.

For purchases or contracts with a value of \$100,000 or greater, the BPS Procurement Directive has a non-discrimination clause that states:

“Organizations must not differentiate between suppliers or goods or services on the basis of geographic location in Canada. Organizations must not adopt or maintain any forms of discrimination based on the province of origin of goods...”³⁴

As noted previously, healthcare facilities rely heavily on group purchasing, and as a result, often exceed the \$100,000 for individual food contracts. Therefore, this clause clearly limits the ability of healthcare facilities to give preference to local foods.

³² Information supplied by Meghan Hunter, Communications Director at the Friends of the Greenbelt Foundation, January 2, 2013.

³³ MOF webpage: “Results-based Plan Briefing Book 2011-12 – Ministry of Finance”;
<http://www.fin.gov.on.ca/en/about/rbplanning/rbp2011-12.html#mission>

³⁴ *Broader Public Sector Procurement Directive Implementation Guidebook*, issued by Ministry of Finance, April 2011; accessed at
http://www.fin.gov.on.ca/en/bpssupplychain/documents/bps_procurement_implementation.html

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

3. LOCAL FOOD POLICY AND ACTIVITY CONSIDERATIONS

There are seven factors that should be taken into consideration in the development of new policies and activities to help increase the use of local food in Ontario's hospitals and LTCs.

1. Food will become more important to MOHLTC as it undertakes its revised stewardship-oriented mission.

As discussed in the stakeholder section on MOHLTC, food is not currently a priority for this Ministry. The lack of attention given to food by MOHLTC helps explain why the overall rating for food quality in Ontario's hospitals hovers around 60%,³⁵ as reported by NRC Picker, a research firm contracted by the Ontario Hospital Association to document Provincial Patient Satisfaction baselines.³⁶

Despite the current situation, food will become a more important strategic priority for MOHLTC as healthcare facilities are asked, in keeping with the Ministry's revised mission, to take on more responsibility for educating Ontarians about healthy living. The importance of healthy eating to treating patients with chronic diseases such as Type 2 diabetes has long been recognized by the Ministry and its Health Promotion unit.³⁷ However, as the population ages and the obesity crisis increases, leadership and education in healthy living is likely to become an even larger part of the Ministry's efforts to serve Ontarians.

Individual facilities have already taken action on this front by joining the World Health Organization's Health Promoting Hospitals (HPH) initiative and the Health Promoting Hospitals and Health Services Network in Ontario.³⁸ Notably as well, in June 2010, the American Public Health Association (APHA) and a coalition of other health organizations created a set of shared principles for healthy and sustainable food systems in support of advocacy for improved food policies. According to these principles, food policies should "support socially, economically, and ecologically sustainable food systems that promote health". Balanced production of food over different national geographic scales is mentioned as being important.³⁹

Both the network of HPHs and the healthy food system principles of the APHA provide useful rationales for healthcare facilities interested in supporting local food from a leadership and health promotion perspective. Together, they can be considered a road map for Ontario-wide action.

2. Buy-local strategies have been shown to have a positive impact on the economic health of communities in Ontario.

A study conducted in 2009 by Harry Cummings and Associates in the Thunder Bay area found that \$1 of increased farm income creates \$1.30 in the wider economy and 2.1 jobs.⁴⁰ Similarly, a Northumberland study found that a \$10/week increase in local food purchases from the public

³⁵ See chart on Muskoka Algonquin Healthcare webpage that includes Ontario averages: "Acute Care Patient Experience – All Dimensions and All Ratings"; <http://www.mahc.ca/en/resourcesGeneral/InpatientCorporate.pdf#PatientSatisfactionResults>.

³⁶ OHA webpage: "Patient Satisfaction";

<http://www.o.ha.com/SERVICES/PATIENT%20SATISFACTIONANDHOSPITALREPORT/Pages/PatientSatisfaction.aspx>

³⁷ Ministry of Health Promotion guidance document (2010): "Healthy Eating, Physical Activity and Healthy Weights";

<http://www.mhp.gov.on.ca/en/heal/actionplan-EN.pdf>.

³⁸ See Ontario's Health promoting Hospitals and Health Services Network website at <http://ontariohph.com/>.

³⁹ APHA webpage: "Principles of a Healthy, Sustainable Food System";

<http://www.planning.org/nationalcenters/health/foodprinciples.htm>.

⁴⁰ Harry Cummings and Associates (2009). *Thunder Bay District Agricultural Impact Study*. Report prepared for FedNor, Ontario Ministry of Agriculture, Food and Rural Affairs, Northwestern Ontario Development Network, Thunder Bay Federation of Agriculture, Food Security Research Network; <http://www.tbfarminfo.org/report.pdf>.

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

would keep \$16 million/year in the region.⁴¹

In October 2012, the Premier of Ontario announced a buy-local program called the \$10 Challenge. He stated that, if every household in Ontario shifted \$10/week of their food purchases to Ontario foods, it would create an economic stimulus of \$2.4 billion and 10,000 new jobs.⁴²

3. There are many successful examples of local food programs in healthcare.

Many facilities in Ontario have found ways to support local food. There is a long list of local food activities that have been taken by healthcare facilities across Ontario. They range from setting procurement targets, to creating local food menu items, to hosting farmer's markets and community shared agriculture programs (CSAs).

The second deliverable for this project, *Case Studies in Ontario Healthcare: The Challenges and Opportunities of Incorporating Local Foods*, explored how two specific facilities - St. Joseph's Health Centre in Guelph, Ontario and St. Mary's General Hospital in Kitchener, Ontario – have supported the use of local food. These two facilities were selected because of their notable differences in food preparation – most of St. Joseph's food is prepared using conventional, on-site kitchen facilities, whereas most of St. Mary's food is pre-made. The key conclusions drawn from these case studies were that:

- Both St. Joseph's and St. Mary's have made notable attempts to support local food despite their different approaches to food preparation. This highlights the fact that there is widespread interest in local food among healthcare facilities and that every facility can support local food in one way or another.
- Many options are available to increase the use of local food in healthcare, from hosting a community shared agriculture program to implementing procurement policies. The level of success will vary by facility, but is likely to be sufficient to encourage continued efforts.
- Low food budgets in healthcare make it difficult for many organizations to consider using local food, but lack of internal personnel support may be an even more critical factor. As evidenced by St. Joseph's and St. Mary's, local food efforts are highly dependent on - and must be customized to the degree of - personnel support within each facility.
- Food budgets should not be seen as a significant barrier to local food since they can be offset through good fiscal management, such as operating profitable cafeterias that generate funds to subsidize food costs, tight menu management, and effective use of group buying organizations.

4. Local food is becoming increasingly available through the existing food supply chain.

There is a perception in healthcare that few local foods are available through food service suppliers, distributors, and GPOs. However, this situation is changing. In October 2012, the Greenbelt Foundation announced that 17 organizations received funding to increase the amount of local food served in Ontario's public sector institutions.⁴³ Of those projects, 7 were awarded to organizations that serve healthcare directly, including two of the top three distributors in Ontario (Gordon Food Services and Summit), three prominent food service operators (Aramark, Compass, and Marek Hospitality), and one healthcare GPO (MEALsource). In total, these organizations have been granted \$930,000 to help increase the availability and promotion of local

⁴¹ *The Regional Local Food Business Retention and Expansion Report, 2011-12:*

<http://www.pecounty.on.ca/pdf/PrinceEdwardBRE.pdf>

⁴² News Release from the Office of the Premier News dated October 4, 2012; <http://news.ontario.ca/opo/en/2012/10/shifting-to-local-food-will-create-10000-ontario-jobs.html>.

⁴³ *Ontariofresh.ca* webpage: "Fourth Round Grantees"; <http://ontariofresh.ca/fourth-round-grantees>.

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

foods. This funding will also help clarify how local food is defined, as the Greenbelt Foundation requires that grantees adopt Foodland Ontario's definitions for local food.

Importantly as well, tracking and measurement of local foods will become more common as a result of these Greenbelt-funded projects. Tracking and measurement will allow healthcare facilities to understand how much local food they currently purchase and to set procurement goals or targets. Gordon Food Services (GFS) started offering local food listings and tracking in 2011 and can now tell their clients what percentage of their invoice was spent on local products. Sysco and Summit plan to use a portion of their grant money to provide local food tracking for their clients as well.

5. Several important claims and concerns about local food need further research.

As indicated in the stakeholder section on key healthcare facility personnel, food service managers and senior administrators hold local food in high regard. However, their efforts to purchase local food have been limited and they do not plan to increase local food purchases over the next five years.⁴⁴ Since the economic benefits of local food accrue to producers, distributors and communities rather than healthcare facilities, non-economic benefits are needed to make local food more attractive to the healthcare sector.

There is widespread belief that local food is superior to conventionally sourced food in terms of attributes such as nutritional value and taste. However, measuring this has proved to be difficult due to a lack of academic and commercial interest in (and a related lack of funding for) investigating these types of benefits:

- A literature review was conducted in 2012 to uncover scientific data that supports widespread claims that local food is more nutritious, fresher and/or safer than conventionally sourced foods. Very few studies were found that dealt with local food, and these claims remain unverified (see Appendices 1 and 2 for summary reports).
- An experiment conducted in 2012 at Ross Memorial Hospital in Peterborough to determine whether local food improves patient satisfaction and increases meal consumption found that most patients are unable to tell the difference between local foods and non-local foods in full plated cooked meals. Local food had a significant positive effect on perceived flavour, but the impact was not great enough to increase patient satisfaction or meal consumption (see Appendix 3 for a summary report).

Furthermore, academic concerns have been raised about the scalability of local food systems. A 2012 review of recent academic discussions about the scalability of local food systems in Canada questioned whether it is possible to increase the scale of short food supply chains without violating the basic tenets of local food systems, including maintaining a direct exchange and a viable premium for producers. It concluded that:

“In short, while it is primarily the local food premium that attracts family farms to local food marketing ... the premium is almost entirely accounted for by processes, relationships and structures that may be ineffective - or difficult to maintain - at larger scale.... There are no easy solutions, and many of the current alternatives, including institutional procurement... often sacrifice interaction and shared responsibility in favour of practical logistical considerations”.⁴⁵

⁴⁴ Padanyi, P., Kanetkar, V., Varangu, L., Wylie-Toal, B. and Blay-Palmer, A. (2012). *Report on Food Provision in Ontario Hospitals and Long-Term Care Facilities: The Challenges and Opportunities of Incorporating Local Foods*.

⁴⁵ Mount, P. (2012). “Growing local food: scale and local food systems governance”, *Agriculture and Human Values* 29: 107-121.

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

6. Existing Ministry policies and policy conflicts are problematic for efforts to increase the use of local food in Ontario healthcare.

In October 2012, OMAFRA proposed *Bill 130, Promoting Local Food Act*, which could make the tracking and purchasing of local food a requirement in the public sector. The act focuses mostly on allowing the Ministry to create local food procurement targets and goals for public institutions such as hospitals. If passed, this could require healthcare facilities to buy more local food. However, procurement targets may conflict with the Ministry of Finance's BPS Procurement Directive. As noted previously, the BPS Directive has a non-discrimination clause that applies to any purchases or contracts with a value of \$100,000 or greater and clearly limits the ability of healthcare organizations in Ontario to "prefer" local, Ontario foods.

Furthermore, many senior administrators in healthcare question the viability of mandating the use of local food because they do not believe that MOHLTC will provide the financial support needed to implement it:

"If the Ministry was keen on supporting local produce and was prepared to pay a premium to hospitals for it, they could look at (requiring local) if that's the direction they wish to go. What we are seeing these days is the exact opposite. The expectation is that we are going to do more for less." (Hospital administrator #4)⁴⁶

7. There are significant differences between hospitals and LTCs that may justify the development of different food-related policies by type of facility.

Research conducted for our first report, *Report on Food Provision in Ontario Hospitals and LTCs: The Challenges and Opportunities of Incorporating Local Foods*, revealed that:

- LTCs currently purchase more of their food through small-scale distributors than hospitals do because more of them have retained the capacity to prepare meals on-site for their residents.
- LTC patients are long-term residents who often eat in dining rooms rather than bedside since meals are important socializing activities in their lives.
- Many LTCs use local food support programs, such as on-site patient gardens, to provide leisure-time activities for their residents.

LTCs are a major component of Ontario's healthcare sector. Our research indicates that they account for more facilities than hospitals (619 versus 177 acute care hospitals) and for almost 64% of the patient meals served in this province. Given the significant differences between hospitals and LTCs with regard to their current efforts and ongoing ability to make use of local food, consideration should be given to developing policies based on type of healthcare facility.

⁴⁶ Padanyi, P., Kanetkar, V., Varangu, L., Wylie-Toal, B. and Blay-Palmer, A. (2012). *Report on Food Provision in Ontario Hospitals and Long-Term Care Facilities: The Challenges and Opportunities of Incorporating Local Foods*.

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

4. LOCAL FOOD POLICY AND ACTIVITY RECOMMENDATIONS

4.1 Discussion Terminology

Nijaki and Worrel (2012) conducted a review of effective buy-local strategies and environmentally preferable purchasing policies in public governments around the world and found that they can be organized into three main approaches:

- Blanket policies: Taking a regulatory-integrated approach to sustainable procurement by providing specific overarching guidelines that apply to how procurement decisions are made.
- Bid preferences: Integrating sustainability goals within the ranking of prospective firms during the evaluation of procurement choices (e.g. contractors are given extra "points" in the scoring process based on specific sustainability criteria).
- Bureaucratic assistance: Offering assistance in navigating the bureaucratic procurement process to firms that have desired sustainability values. According to Nijaki and Worrel, such "easing of access" can include a variety of actions, but should focus on facilitating access to contracts for the local food supply chain through outreach, education, and the creation of "purchasing contact points."⁴⁷

Many of the current local food procurement efforts in healthcare can be categorized into these three approaches, making them useful for recommending different types of policies and activities that can help increase the amount of local food in Ontario's healthcare sector.

4.2 Recommendations by Stakeholder Group

<i>Provincial Ministries – MOHLTC, OMAFRA, and MOF</i>

The Local Food Act proposed in 2012 would give the Premier the ability to set procurement and reporting targets/goals for local food. This Act is a blanket policy for Ontario's healthcare sector regarding the use of local food. However, if the LFA was passed today, it would create several problems for healthcare facilities for several reasons. For one thing, local food has little relevance to the key priorities in healthcare. Importantly as well, food in general has a low profile within MOHLTC. Also, as previously discussed, local food procurement goals or targets for public institutions could place healthcare facilities in potential conflict with MOF's BPS Procurement Directive. Finally, the antecedents required for such a mandate, such as the ability to consistently source, purchase, and track local foods, are not yet in place on a broad scale. Therefore:

1. To increase the amount of local food in healthcare, the most appropriate approach at this point in time is to continue giving facilities flexibility in their approach to local food. Flexibility is appropriate because individual facilities have different strategic priorities, different budgetary circumstances and constraints, different human resource capabilities, and different local food supply situations.

Rather than mandating local food procurement targets for the healthcare sector at this point in time, support for the efforts of individual healthcare facilities to increase their use of local food should continue in the form of effective bureaucratic assistance/"easing of access" programs, such as *Ontariofresh.ca*, and the following recommended actions.

⁴⁷ Nijaki, L.K., Worrel, G. (2012). "Procurement for sustainable local economic development", *International Journal of Public Sector Management* 25 (2): 133-153.

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

2. It is recommended that OMAFRA develop new “easing of access” programs. In addition to the efforts of Foodland Ontario, the BPSIF, and *Ontariofresh.ca*, OMAFRA should:
 - Provide workshops that encourage sector-specific conversations about how local food producers can access the institutional food market.
 - Help educate healthcare personnel about the various ways for healthcare facilities to support local food systems.
 - Provide new funding through the BPSIF designed specifically to help small- and medium-sized businesses access institutional markets, rather than large private sector organizations.
3. It is recommended that OMAFRA encourage more investigation of local food claims. More research is needed to investigate claims that local food tastes better, improves freshness, and improves patient satisfaction. Very few academic studies have focused on local food, and it remains unclear whether the claims being made about local food are well-founded or not. Since a lack of research does not mean there is no benefit, it is suggested that funding be dedicated to this research to provide the scientific evidence needed to justify these claims.
4. It is recommended that OMAFRA initiate dialogues with MOHLTC and MOF to reduce barriers to increasing the use of local food in Ontario’s healthcare system. Most notably:
 - OMAFRA and MOF must discuss the BPS Procurement Directive. Consideration should be given to amending the geographic non-discrimination clause so that individual healthcare facilities can seek to increase their use of local food without concern for being in conflict with the BPS Procurement Directive.
 - OMAFRA and MOHLTC should discuss the role of food and agriculture in creating healthy communities. By building a health-based rationale for local food, OMAFRA will be more likely to gain support from MOHLTC for their local food efforts.
5. It is recommended that MOHLTC define and differentiate the roles that food and food quality should play at various types of facilities to benefit the short- and long-term health of patients and the general community. This is needed for the Ministry to more fully address its new stewardship mandate. It will also provide important input for MOHLTC as it re-evaluates the relative strategic importance of food and its current financial guidelines for food service spending in the province.
6. Coincident with #5, it is recommended that consideration be given to having food service departments in healthcare institutions be funded by and report to OMAFRA rather than MOHLTC. If food service departments were moved to OMAFRA's portfolio, they would not have to compete with front line healthcare costs. A senior healthcare administrator framed it as follows:

“If I am (MOHLTC), and I have ways to reduce cancer surgery, I’m probably not going to throw in a subsidy for food before throwing in a subsidy for reducing cancer surgery rates... We have a set budget. We provide food as economically as we can and as nutritiously as we can, but it competes with the other aspects of the operation.” (Hospital administrator #8) ⁴⁸

⁴⁸ Padanyi, P., Kanetkar, V., Varangu, L., Wylie-Toal, B., Blay-Palmer, A. (2012). *Report on Food Provision in Ontario Hospitals and Long-Term Care Facilities: The Challenges and Opportunities of Incorporating Local Foods*.

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

Food Suppliers - Farmers and Small-, Medium-, and Large-Scale Distributors

As mentioned in the stakeholder section on local food producers/suppliers, most of the food purchased for healthcare facilities is contracted through medium- and large-scale distributors and GPOs, which must all operate within the BPS Procurement Directive. Therefore,

1. Until the BPS Directive is revised, it is recommended that local food language that does not conflict with the Directive be used in public tenders. There are several ways to employ this tactic. For example:
 - In 2011, the MEALsource GPO revised their requests for proposals (RFPs) to include requests for information on the origin of foods. Specifically, they asked that the bidder identify any foods that meet Foodland Ontario's definition of local. This allowed them to use food origin as a tie-breaker (i.e. if all of the options are equal on all other accounts, such as quality and price, the local option can be selected). After adding this element to their RFP, their contracted local food purchases increased by 15%, or \$670,000/year.⁴⁹ Another advantage of this approach is that it allows MEALsource to identify local foods for their clients.
 - The Region of Halton has a Local Food Procurement Policy that builds a 10% locally grown and sustainably produced food procurement target into their food contracts.⁵⁰ Such targets are permissible within the BPS Procurement Directive because it allows for bids to be given preference on the basis of environmental considerations.
 - Contracts can be written so that the selection of local foods is encouraged, but not required. This is the approach promoted by the U.S. organization, Healthcare Without Harm, in their Buy Local Challenge (which focuses on both local and sustainable food). For example, a contract could state:

“Food that is locally grown or raised is not necessarily sustainably produced. When possible, choose local *and* sustainable [food].”⁵¹
2. It is recommended that local food producers and distributors take full advantage of current “easing of access” programs, such as Ontariofresh.ca. Healthcare facilities are large institutions and their purchasing practices can be complicated and difficult to access for the uninitiated. There is a need to provide assistance to stakeholders in the local food supply chain to help them navigate this bureaucratic process. Nijaki and Worrel (2012) maintain that “easing of access” initiatives will improve the performance and the competitiveness of local suppliers. Ontariofresh.ca provides a centralized purchasing point, plus a source of educational resources and materials, for all food suppliers.
3. It is recommended that local food companies take full advantage of OMAFRA's Broader Public Sector Investment Fund. The MEALsource GPO provides an example of this approach. In 2011, MEALsource received a grant from the Broader Public Sector Investment Fund (BPSIF) to work with the Canadian Coalition for Green Health Care and My Sustainable Canada to increase the amount of local food on their contracts. One of the issues they

⁴⁹ The Canadian Coalition for Green Health Care (2012). *Local Food Case Study #2: St. Joseph's Group Purchasing Organisation makes local food an integral part of buying strategy*; http://www.greenhealthcare.ca/images/projects/localfood/Case_Study_2-LocalFood.pdf.

⁵⁰ Halton Region's Corporate Sustainability Assessment 2009; accessed October, 2012 at <http://www.halton.ca/common/pages/UserFile.aspx?fileId=18226>.

⁵¹ Healthcare Without Harm webpage: “Buy Local Challenge”; accessed December 19 2012 at www.healthfoodinhealthcare.org/buylocalchallenge.php

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

uncovered was that smaller local food providers were not quoting on healthcare RFPs. To address this, MEALsource actively engaged and educated local food vendors about the institutional procurement process. As a result of these efforts, the number of local food vendors quoting for healthcare food products increased significantly. For example, 6-7 companies typically quote for products on MEALsource's Sliced, Whole Meats, and Poultry RFP. However, after engaging the local food supply chain, they had over 20 companies make bids.

In addition to their above efforts to increase the procurement of local food, MEALsource and their project partners held workshops geared towards increasing collaboration and communication between the local food supply chain and healthcare. These workshops involved having stakeholders who do not typically interact get together to discuss issues affecting local food procurement in public institutions. They resulted in meaningful conversations and interchange about key barriers to local food procurement, such as the availability of local food through conventional channels and how to navigate the healthcare procurement process.

Key Healthcare Facility Personnel - Food Service Managers and Senior Administrators

A notable finding in both of the previous reports written for this project is that, even in facilities where local food is actively purchased and otherwise supported - such as at St. Joseph's Health Centre-Guelph - there are no formal policies regarding local food. Inevitably, these efforts have been undertaken on an informal basis and are heavily dependent on the interest and leadership of a local food champion, generally the food service department manager. This means that there is nothing in place to ensure that local food achievements are sustained if the champion leaves the organization. Therefore,

1. It is recommended that every healthcare facility in Ontario prepare a formal local food policy or statement. This will allow each facility to:
 - Clarify what it considers to be local food and where it wants to fall on the spectrum of support for local foods.
 - Entrench gains made to date.
 - Have a basis for guiding its future actions.
 - Help encourage its food suppliers to provide local food listings (such as GFS).
 - Develop measurement metrics that can be used to create annual QIPs related to local food.
 - Ensure local food is considered in situations where the facility does not have direct control over procurement decisions (such as when food service operators are hired to run food services departments).

A policy of this nature should take into consideration the many different ways to support local food beyond the procurement of food for patient food services. While policies that focus on patient food have the greatest potential to increase the use of local food, procurement is admittedly the most complex area to deal with. Many healthcare facilities have retail operations such as cafeterias, and there are usually fewer barriers to local food procurement in these outlets. The policy should also establish whether the facility wishes to support local food systems by undertaking activities such as hosting on-site farmers markets, food stands, and CSAs.

2. It is recommended that healthcare facilities take advantage of OMAFRA's current and future "easing of access" programs. They should register with Ontariofresh.ca and participate in education/outreach events that focus on local food and healthcare.

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

3. It is recommended that healthcare facilities adopt local food language in the contracts they enter into directly with food suppliers. Local food language can range from specific procurement targets to more general guidelines, such as “local-when-possible”.

Contract language can also be used to request that local food purchases be tracked. This is an important step towards setting procurement goals, and will help sustain the demand for local food listings from food distributors in healthcare.

Contracts can also specify that the amount of local food being purchased needs to increase year over year. This ratchet-up approach allows organizations to start with reasonable goals, while committing to continual improvement.

4. It is recommended that healthcare facilities endorse initiatives that support local food in healthcare, such as the Healthy Food in Healthcare pledge. The Canadian Coalition for Green Healthcare has worked with Healthcare Without Harm to develop a Canadian version of the Healthy Food in Healthcare Pledge. This pledge is being used to help hospitals be part of the North American Healthier Hospitals Initiative (HHI). The Coalition is promoting both the pledge and the HHI in Canada. To join the healthy food component of the HHI, healthcare facilities sign the pledge to improve the sustainability of their healthcare food services, which includes the goal of increasing local food purchases by 20%. The HHI is an example of how healthcare facilities in the United States are using policies to increase the amount of local food being purchased.

5. CONCLUSION

This report is the third and final deliverable for Food for Health Project 200218 (“Exploring the Feasibility and Benefits of Incorporating Local Foods into Ontario’s Healthcare System”). Primary financial support for this project was provided by the University of Guelph/Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) Partnership Fund.

It is our hope that the key stakeholders this report is addressed to will take our recommendations into consideration in their future efforts to incorporate more local food into Ontario’s healthcare system. Although the research conducted for this project has shown that it is not currently possible to implement a “one size fits all” approach to the use of local food in healthcare, this report has demonstrated that actions and activities can nevertheless be undertaken that will support and advance the local food movement in Ontario and will help put healthcare facilities in a position to use their institutional purchasing power to support local food systems, farmers, and the communities of Ontario.

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

APPENDIX 1

SUPPORTING THE CLAIMS THAT “LOCAL FOOD IS FRESHER” AND “LOCAL FOOD IS MORE NUTRITIOUS”

Local food consumption has gained a lot of interest among shoppers. This document summarizes an attempt made in the first half of 2012 to find evidence that (a) food produced in Ontario is fresher than food imported from outside the province and that (b) the nutritional value of any Ontario produce is “consistently” higher than the same kind of non-Ontario produce.

Typical “fresher” claims for local food were found in an article in a non-scientific journal entitled “Farm fresh: the health benefits of buying local produce” (Ramirez, Times Herald-Record, 2008). The author stressed the high health benefits of local foods compared to non-locals due to the freshness of the local produce. He also repeated the widely-held belief that fresh food is more nutritious compared to processed or stored food. No scientific studies were found to support these statements. Broadly speaking, from a food science standpoint, claims of this nature can only be made if the customer can be assured that the particular food item that they are buying has been very recently produced and distributed. However, it is not unusual for food, regardless of local or nonlocal origin, to be stored for some time before distribution. If local produce is stored longer and distributed later than non-local produce, it will not be as “fresh” as non-local produce.

In this review, we also tried to find scientific evidence to demonstrate that Ontario produce (crops, fruits and vegetables, meat, dairy products) contains consistently higher nutritional value compared to same-kind produce imported into Ontario. The nutritional values we focused on were protein, carbohydrate, fat and mineral content. We also looked at some bioactive compounds such as vitamins and antioxidant compounds when the data was available.

We explored if such claims, scientifically, can be supported by Ontario-based studies. No academic study (to date) has looked into any possible nutritional advantages of Ontario produce versus non-Ontario produce (of the same kind).

We also explored if such claims can be supported by studies conducted in regions other than Ontario. Searches of the scientific literature from North America, UK, Australia and some parts of Europe did not provide any information supporting that “local food” of any specific region has nutritional advantages over non-local food of the same kind.

(Note: “local and non-local food” statements should not be interpreted or influenced by “organic versus non-organic food” statements since “local” produce may or may not be “organic”.)

Based on the evidence uncovered in this search, it can be said that the nutritional value of any food constituent (fresh or processed) depends on several factors including variety, production method, production condition, ripeness, harvesting post-harvest conditions, handling, processing and packaging. As a result, for instance, fruits and vegetables of the same kind may differ in appearance and taste, as well as their vitamin, mineral, and phytochemical (such as antioxidants) content. In addition to the above-noted variables, these differences may due to the ecological conditions in the production year. Due to all of the factors that can influence food, the answer to the question of whether local food is more nutritious can never be a straight yes or no!

Some selected references

Dobrzański B, Rabcewicz J, Rybczyński R. Handling of Apple. 1st ed. Lublin: B Dobrzański Institute of Agrophysics, Polish Academy of Sciences; 2006.

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

Dumas Y, Dadomo M, Di Lucca G, Grolier P. Review. Effects of environmental factors and agricultural techniques on antioxidant content of tomatoes. *J Sci Food Agric*. 2003; 83: 369–382.

Goldman IL, Kader AA, Heintz C. Influence of production, handling, and storage on phytonutrient content of food. *Nutr Rev*. 1999; S46–S52.

Harris RS, Karmas E ed. *Nutritional Evaluation of Food Processing*. 3rd ed. New York: Van Nostrand Reinhold Company, Inc; 1988.

Heaton S. *Organic Farming, Food Quality and Human Health. A Review*. Soil Association, 2001.

Howard LR, Pandijaitan N, Morelock T, Gil MI. Antioxidant capacity and phenolic content of spinach as affected by genetics and growing season. *J Agric Food Chem*. 2002; 50: 5891–5896.

Jeffrey EH, Brown AF, Kurilich AC, Keck AS, Matusheski N, Klein BP, Juvik JA. Variation in content of bioactive components in broccoli. *J Food Comp Anal*. 2003; 16 (3): 323–330.

Kopsell DA, Kopsell DE. Accumulation and bioavailability of dietary carotenoids in vegetable crops. *Trends Plant Sci*. 2001; 11(10): 499–507.

Lee, SK, Kader, AA. Preharvest and postharvest factors influencing vitamin C content of horticultural crops. *Postharvest Biol Technol*. 2000; 20: 207–220.

Liu M, Li XQ, Weber C, Lee CY, Brown J, Liu RH. Antioxidant and anti-proliferative activities of raspberries. *J Agri Food Chem*. 2002; 50 (10): 2926–2930.

López Camelo A F. *Manual for the preparation and sale of fruits and vegetables: From field to market* Food and Agriculture Organization (FAO) Services Bulletin 151. ISSN 1010-1365. August, 2002

Shah NS, Nath N. Minimally processed fruits and vegetables - Freshness with convenience. *J Food Sci Tech*. 2006; 43 (6): 561–570.

Worthington V. Nutritional quality of organic versus conventional fruits, vegetables, and grains. *J Altern Complement Med*. 2001; 7(2): 161–173.

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Dated: July 7, 2012

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

APPENDIX 2

SUPPORTING THE CLAIM THAT "LOCAL FOOD IS SAFER"

Local food consumption has gained a lot of interest among shoppers. This document summarizes an attempt made in the first half of 2012 to find evidence that "local food is safer". Based on a review of existing academic literature, it is apparent that we do not have any support/evidence to call local food "safer". Indeed, from a food science perspective, the only claim that can be made is whether or not local food has greater "safety assurance" than non-local food. "Safety assurance" is the result of government rules and regulations

The Canadian Food Inspection Agency (CFIA) is responsible for enforcing a number of Acts and policies designed to deliver inspection and related services for consumers and industry. These services contribute to food safety, animal health and plant protection and encompass all local, imported and exported items related to them.

There are several existing acts to protect and ensure the quality of local, imported and exported foods including the Fish Inspection Act, the Canada Agricultural Products Act, the Meat Inspection Act, and the Consumer Packaging and Labeling Act. The Federal Government also recently proposed the Safe Food for Canadians Act to strengthen the Government's ability to protect Canadian families from potentially unsafe food.

The Safe Food for Canadians Act, which was tabled in the Senate on June 7, 2012 as Bill S-11, is an upgrade to Canada's aging food safety legislation that will better equip Canada to maintain its reputation as a world leader in food safety and traceability protocols. This Act improves food oversight by:

- Instituting a more consistent inspection regime across all food commodities;
- Providing better control over imports and exports;
- Implementing tougher penalties for activities that put the health and safety of Canadians at risk; and
- Strengthening food traceability.

Most notably, the Act strengthens controls over imported food commodities, introduces powers to register or license regulated parties, and prohibits the importation of unsafe foods. With regard to the latter point, importers will be held accountable for the safety of the food products they bring in, establishing a more level playing field between importers and domestic producers. These changes will result in food that is assured to be safe being available across Canada regardless of production origin. Therefore, the Safe Food for Canadians Act will ultimately diminish the supportability of claims that "local food has greater safety assurance than non-local food".

On the other hand, the new Act may cause importers to incur costs that will help local food producers better compete with them in terms of pricing. The license for importation will only cost about \$300. However, the quality and safety improvements needed to be able to obtain and retain the license to the level that meets our standards could be very costly for importers who have low quality food. These costs may potentially impact the final selling prices of their imported foods and, consequently, help local food producers.

From an export standpoint, the Act further aligns Canada's food safety system with those of our key trading partners. By doing so, it enhances international market opportunities for the Canadian food industry. A new authority in the Act allows certification of any food commodity for export in order to increase global confidence in Canadian food.

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

With regard to penalties, fines are raised significantly, providing a stronger deterrent for both local producers and importers against practices that cause great harm to the industry. Previously, anyone convicted of a serious offence could be fined up to a maximum of \$250,000. Under the new Act, penalties could be as high as \$5,000,000 or, in the case of the most serious offences, even higher at the court's discretion. New penalties are also being added for recklessly endangering the lives of Canadians through tampering, deceptive practices or hoaxes.

Key links:

Ontario Federation of Agriculture – comment on new Act:

<http://www.ofa.on.ca/media/news/Safe-Food-For-Canadians-Act-is-a-win-for-the-sector>

Canadian Federation of Agriculture – comment on new Act:

<http://www.cfa-fca.ca/media-centre/news-releases/2012/cfa-welcomes-safe-food-canadians-act>

CFIA – Overview of Act:

<http://www.inspection.gc.ca/about-the-cfia/acts-and-regulations/initiatives/sfca/overview/eng/1339046165809/1339046230549>

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LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

APPENDIX 3

ROSS MEMORIAL LOCAL FOOD EXPERIMENT

Conducted: February-May 2012

Methodology: Participants were randomly selected and placed in 1 of 4 weekly conditions. On a specific day during week 1, participants consumed food from the regular hospital menu (turkey, potatoes and vegetables, and a dessert), which included conventionally-sourced, i.e. "imported" food with the origin not advertised. In week 2, participants consumed the same food; however, the food was locally-grown although the origin was not advertised. In week 3, participants were served the same menu using local ingredients with the origin of the food advertised. Finally, during week 4, participants consumed "imported" food with the origin of the food.

Ten hypotheses were tested using ANOVA and bivariate correlation analysis techniques.

Analysis and experiment summary prepared in July/August 2012 by: Jenna-Lee Shuster, MSc
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EXPERIMENT RESULTS

Hypothesis 1: *Local food improves the perceived freshness of meals served to hospital patients.*

Test Result: The effect of origin on perceived freshness of food was not significant, $F(1, 228) = .89, p < .35$. **Hypothesis 1 was not supported.**

Table 1 - Mean Freshness Scores based on origin (with Standard Deviations in Parentheses)

Local	4.36 (.70)	N=115
Imported	4.27 (.69)	N=115

$N = 230$

Hypothesis 2: *Local food improves the perceived flavour of meals served to hospital patients.*

Test Result: Origin had a significant effect on perceived flavour, $F(1, 128) = 6.80, p < .01$.

Hypothesis 2 was supported.

Table 2 - Mean Flavour Scores based on origin (with Standard Deviations in Parentheses)

Local	4.22 (.84)	N=115
Imported	3.91 (.93)	N=115

$N = 230$

Hypothesis 3: *Local food improves the perceived texture of meals served to hospital patients.*

Test Result: Origin did not have a significant effect on perceived texture of the meals, $F(1, 229) = 1.25, p < .27$. **Hypothesis 3 was not supported.**

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

Table 3 - Mean Texture Scores based on origin (with Standard Deviations in Parentheses)

Local	4.23 (.75)	N=115
Imported	4.11 (.80)	N=116

N = 231

Hypothesis 4: *Local food positively influences the emotions of patients.*

Test Result: The origin of food did not have a significant effect on the emotions of patients, $F(1, 227) = .55, p < .42$. **Hypothesis 4 was not supported.**

Table 4 - Mean Emotion Scores based on origin (with Standard Deviations in Parentheses)

Local	4.12 (.77)	N=114
Imported	4.04 (.72)	N=115

N = 229

Hypothesis 5: *Perceived meal quality (freshness, flavour, texture, and temperature combined) increases as the perception of one or more of freshness, flavour, texture or temperature becomes more positive.*

Hypothesis 6: *Positive emotions increase perceived meal quality.*

Hypothesis 7: *Increased perceived meal quality increases overall meal satisfaction for hospital patients.*

Hypothesis 8: *Increased perceived meal quality increases food intake for hospital patients.*

Test Results for all of the above hypotheses: Bivariate correlations were conducted for each of the dependent variables. Significant positive correlations exist between the majority of the variables. This implies a parallel movement between responses. For example, if the texture in one condition increases, overall satisfaction also increases. Thus, **hypotheses 5, 6, 7 and 8 were supported.**

See Table 5 on the following page for detailed results.

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

Table 5 – Correlations of Dependent Measures (with Significance in Parenthesis)

	1	2	3	4	5	6	7	8	9
1. Satisfaction	1	.56 (.00)	.50 (.00)	.54 (.00)	.36 (.00)	.60 (.00)	.66 (.00)	.35 (.00)	-.00 (.95)
2. Texture		1	.62 (.00)	.56 (.00)	.40 (.00)	.79 (.00)	.62 (.00)	.18 (.01)	-.07 (.27)
3. Freshness			1	.67 (.00)	.46 (.00)	.83 (.00)	.57 (.00)	.25 (.00)	-.06 (.35)
4. Flavour				1	.56 (.00)	.87 (.00)	.61 (.00)	.25 (.00)	-.17 (.01)
5. Temperature					1	.75 (.00)	.44 (.00)	.12 (.08)	-.05 (.46)
6. Perceived meal quality						1	.69 (.00)	.24 (.00)	-.11 (.10)
7. Emotions							1	.28 (.00)	-.05 (.42)
8. Food intake								1	-.05 (.48)
9. Perceived origin									1

**. Correlation is significant at the 0.01 level (2-tailed).

Hypothesis 9: Patient awareness that the food is local increases meal satisfaction.

Test Result: There is no significant main effect of patient awareness of origin on satisfaction, $F(3, 167) = 1.04, p < .38$. **Hypothesis 9 was not supported.**

Note: Being aware means that participants correctly identified the origin of the meal they were consuming. Interestingly, satisfaction was highest when patients were eating imported food but believed it was local ($M = 4.46$). When ingredients were correctly identified as local, satisfaction was second highest ($M = 4.38$). This variable was rated the lowest when patients correctly identified the ingredients as being imported ($M = 4.20$)

Table 6 - Mean Satisfaction Scores Based on Awareness of Origin (with Standard Deviations in Parentheses)

Local and aware	4.38 (.64)	N=60
Imported and aware	4.20 (.55)	N=30
Local and unaware	4.28 (.94)	N=25
Imported and unaware	4.46 (.74)	N=56

Note. $N = 171$

LOCAL FOOD PROVISION IN ONTARIO'S HOSPITALS AND LONG-TERM CARE FACILITIES: RECOMMENDATIONS FOR STAKEHOLDERS

Hypothesis 10: *Patient awareness that the food is local increases food intake.*

Test Result: The effect of origin on food intake was not significant, $F(3, 164) = 2.48, p < .06$.

Hypothesis 10 was not supported.

Note: It appears that most patients cannot tell the difference between local and imported food. Patients who ate the most food thought their food was local although it was imported ($M = 5.29$); patients who ate the second most food believed they were eating imported food although it was local ($M = 5.24$). On the other hand, patients ate the least food when the food was imported and they correctly identified its origin ($M = 4.63$).

Table 7 - Mean Food Intake Scores Based on Awareness of Origin (with Standard Deviations in Parentheses)

Local and aware	5.09 (1.08)	N=60
Imported and aware	4.63 (.99)	N=27
Local and unaware	5.24 (1.25)	N=25
Imported and unaware	5.29 (.99)	N= 56

$N = 168$

