Exploring the place of Ontario food at University Health Network

A learning journey

UHN Energy & Environment

The Choices for Ontario Food project

The project started in April 2014 when UHN department of Energy & Environment received a grant from the Greenbelt Fund. The objective was to explore UHN's food ecosystem and identify short and long-term opportunities to provide more Ontario foods to patients in the next 3-5 years.
The project used research methods inspired by leaders in the fields of user-centered design and collective impact.

Community Engagement Journey

Ecosystem Mapping

Thirty in-depth interviews were conducted between April 2014 and January 2015. The resulting mind map summarized flows of food & information, decisions processes, opinions and research data around food at UHN. Interviews included experts from nutrition services, clinical dietitians, physicians, nurses, infrastructure, clinical researchers, community engagement & behaviour change specialists, neighbouring hospitals, food suppliers, group purchasing organizations and local food advocacy.

Note: UHN food court and internal catering were not included in the scope of research.

Idea Crowdsourcing

An online interactive platform was launched in June 2014 to harness the collective wisdom of UHN staff, patients, visitors and the broader community. In four months, 402 participants built on 109 ideas about integrating more local foods within the UHN food system. Another 259 ideas were offered on "soothing foods when sick or injured".

Crowdsourcing generated interest and engagement from the community. It uncovered broader discussions on the challenges with hospital food, and a glimpse into the disconnect between ideas and realities.

Local Food Definition

Multiple definitions of "local food" exist in the province of Ontario. The project used Foodland Ontario's definition: Ingredients must be grown/raised and processed in Ontario. Items with multiple ingredients must be made in Ontario with a majority of Ontario ingredients. More than 80% of the total direct costs of production must return to Ontario.

Conversation Cafés

Three conversation cafés were hosted between January and February 2015 with 29 participants. Staff across UHN had an opportunity to look at UHN food from a systemic perspective and feed the ecosystem with their knowledge and expertise.

Main Learnings from the Community

Opinion Versus Expertise

Community conversations revealed that while many employees are involved with patients' food experience, the responsibility and expertise of food belongs to few. Most staff at the bedside refer questions about food to clinical dietitians. Still, food is so ingrained in people routines and thoughts that everyone has an opinion. Finding the right conversation about food in health care is muddled by popular culture, marketing messages and a cacophony of personal beliefs. At this stage, there is no unified voice on food in the health care community.

Uncovering Complexity

Food safety requirements, efficiency and budget are not the only barriers to providing more Ontario food to patients. What is fed to patients depends on a complex combination of factors - availability, patient satisfaction, clinically recommended diets, evidence-based nutrition research and clinical dietitians' expertise. UHN's non-cooking kitchen model narrows choice. Ready-to-serve meals include limited local ingredients, while access to Ontario's offerings is constrained by current distribution channels.

While the barriers seem daunting, research highlighted a strong interest and energy in bringing Ontario food to UHN at all levels of the organization, from senior management to frontline staff.

An overview of UHN Food Ecosystem

Decision Makers Within the Hospital

In-patients

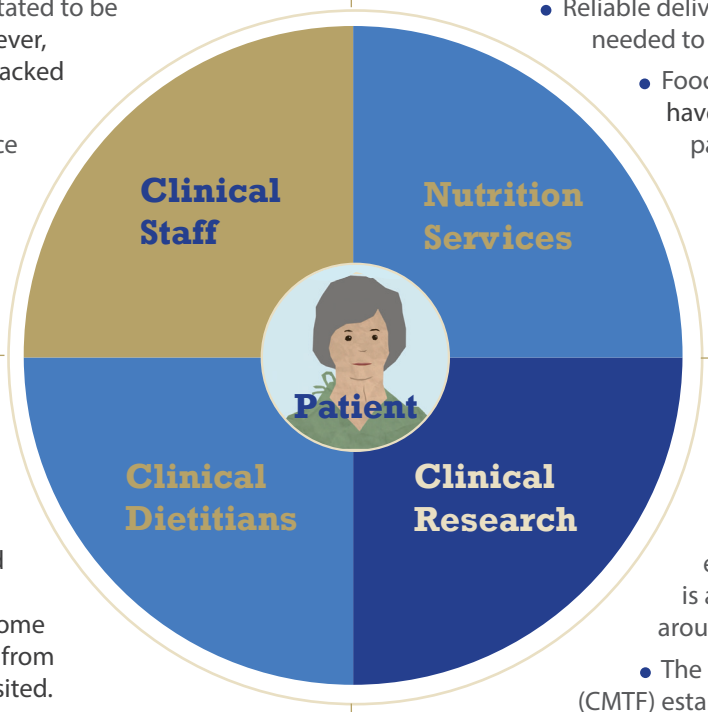
- Variety of needs and preferences reflect Toronto's cultural diversity and patients' conditions.
- Altered taste, poor appetite and disconnect between hunger and meal times can influence patient experience with food.
- In an unfamiliar environment, food is one of the rare elements patients may control during their stay.

Clinical Staff

- Time with each patient is valuable so conversations must be prioritized: condition, patient history, drugs, outcomes, side-effects, allergies, all come before food.
- Physicians, Nurses, Diet Technicians, Occupational Therapists all refer food questions/concerns to Clinical Dietitians.
- Across professions, food is stated to be important to recovery. However, statements are not always backed up by behaviour.
- At the bedside, the assistance with meal set-up, opening packaging and feeding competes with other priorities.

Nutrition Services

- Two satellite kitchens are staffed by UHN, and support the delivery of 3,750 trays per day across 7 hospital sites.
- UHN's kitchen model is called "cold-plating re-therm": food items are plated cold and heated in nutrition centres near patient units. This model is the most efficient for large acute care hospitals.
- Reliable deliveries and consistent products are needed to best manage 84 different diets.
- Food safety concerns and efficiencies have favoured the use of individually packaged items.
- Labour represents 80% of nutrition services' costs.



Clinical Dietitians

- Clinical Dietitians are unable to see every patient that is admitted, and only consult patients when requested by clinical staff. Some patients who would benefit from their intervention are not visited.
- They collaborate with Nutriton Services to develop and revise menus based on expertise, patient feedback and new evidence in nutrition research.
- From a dietitian's perspective "food is medicine" and the least expensive therapy to address malnutrition.

Clinical Research

- Patient malnutrition (deficiency, excess or imbalance of energy, protein and other nutrients) is a common concern of hospitals around the world.
- The Canadian Malnutrition Task Force (CMTF) established that 45% of adult Canadians are malnourished upon admission to hospital.[1]
- The study shows that malnutrition is an independent predictor of prolonged length of stay and 30-day readmisison.[1]
- Eating less than 50% of the food provided in hospital is a factor associated with prolonged length of stay.[2]
- The CMTF recommends, among others, systematic nutrition screening and tracking, protected meal times, diet liberalization, additional assistance with meals and nutritional education upon discharge.[1]

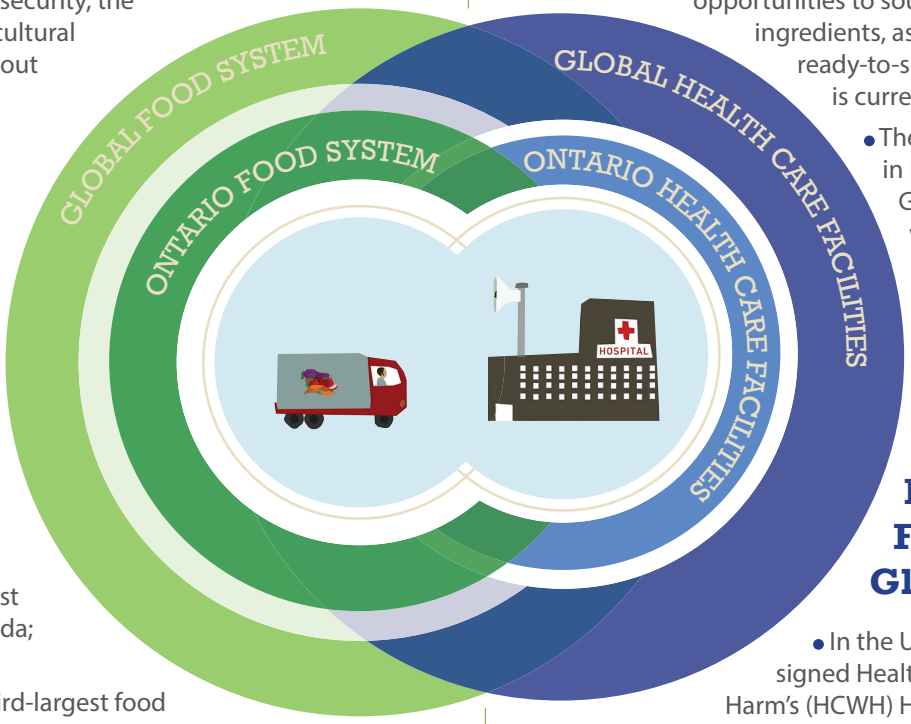
Food Procurement Landscape

Ontario within the Global Food System

- Structural, legislative, economic, and regulatory frameworks have favoured large scale food production to accommodate international markets.[3]
- Ontarians consume more food than the province produces. Over 50% of the $20 billion in imported food products can be produced in Ontario.[4]
- Concerns about climate change are raising issues about future food security, the sustainability of the agricultural system, and criticisms about energy used and carbon emitted by importing products from far away.[5]

Ontario Health Care Facilities

- Nutrition Services in Ontario hospitals and long-term care facilities vary in size, service and staffing models.
- Ontario hospitals prepare 115 million patient meals per year, with an average budget (labour costs included) of $30-35 per patient per day.[9]
- Facilities with cooking space have more opportunities to source local raw ingredients, as access to ready-to-serve local food is currently limited.
- The average increase in local food sales per Greenbelt Fund Grantee was $687,000 in 2013/2014.[10]



Ontario Food System

- Ontario counts the highest number of farms in Canada; 25.3% in 2011.[6]
- While Ontario has the third-largest food and beverage manufacturing sector in North-America,[7] many facilities are not focusing on sourcing local ingredients or tracing their origin.
- Experts argue that a sustainable regional food economy in Ontario cannot exist without appropriately scaled food processing. Regional food clusters or "Food Hubs" have been identified as a way to support local food systems.[3]
- In 2013, the *Local Food Act* was passed to encourages the broader public sector to purchase more Ontario food[8], increasing opportunities to "rebuild the middle" infrastructure, linking small and medium farmers to their end consumers.
- The "Dollars & Sense" report showed that reducing the top fruit and vegetable imports by 10 percent and expanding local production would help create 3,400 jobs and boost the province's GDP by nearly a quarter billion dollars.[4]

Health Care Facilities Global Scan

- In the US, hundreds of hospitals signed Health Care Without Harm's (HCWH) Healthy Food Pledge encouraging local & sustainable food purchases, healthier beverages in hospital food courts and reduced meat protein on patient menus.
- HCWH encourages hospital stewardship of antibiotic-free meat.
- In the US, fruit & vegetable prescription program (FVRx®) measures health outcome linked to families increased consumption of fruit & vegetables.[11]
- In England, the campaign for Better Hospital Food advocates for mandatory nutritional, environmental and ethical standards for food served to patients in NHS hospitals.[12]

Intersections of Ontario Food and Health Care

Along our learning journey, community conversations often diverted beyond the topic of local, to include broader discussions on hospital food and on offerings at food courts. While we did not demonstrate a direct measurable impact of local food on the patient experience, there is a sense across UHN staff, patients and their families that increased Ontario food would have a positive impact on UHN's culture. Local food brings a fresh perspective on the place of hospital food in patient recovery.

We hope that the findings summarized in this case study help sow the seeds for new ideas to germinate. At this stage, we can offer several hypotheses on the directions that future systemic work might take root.

Multi-Hospital Collaboration

By collaborating, hospitals can combine their expertise and align their requests to the local food industry to develop food products tailored to health care needs.

Developing a Culture of Nutrition in Health Care

Building a "culture of nutrition", supporting the belief that food matters to patient recovery, needs to be reflected in the way staff work and interact with patients and coworkers. Raising the profile of food might be accomplished in various ways:

- Community gardens can be developed on institutional land and can be used for patient and staff engagement.
- Community Shared Agriculture (CSA) programs can be offered to staff as a way to build food culture and encourage eating fruits and vegetable.
- Explore the idea of "protected meal times", during which major interventions are suspended.
- Conduct events, conferences and staff engagement around food to help develop a food culture at the hospital.

Patient-Centered Approach

Using ethnography - combining non-invasive observation and in-depth interviews - to explore the UHN food ecosystem from the patient's perspective could shed light on new solutions to improve mealtime experience, reduce waste and consider new opportunities for local food to enter the system.

Evidence-Based Research

A research program studying the impact of fresh, Ontario-based, prepared food to the patient experience can have significant impact on advancing the case of local food in hospitals. Similarly, a fruit & vegetable prescription program can provide evidence on the impact of fresh food to patient recovery.

The Choices for Ontario Food Project is lead by Adeline Cohen B and Kady Cowan. We welcome opportunities for research and multi-disciplinary collaboration. Follow our project on our blog www.TalkinTrashwithUHN.com or contact adeline.cohen@uhn.ca

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Supported by the Greenbelt Fund

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