

Building Capacity in Innovation Procurement

CEPSEM Event

Jennifer Moles, Innovation Procurement Manager June 13, 2019





About OCE



- A not-for-profit funded primarily by the Government of Ontario.
- Works in partnership with government, industry and academia to support SMEs and entrepreneurs.
- Supports projects that create jobs and exports, attract local and international co-investment and make Ontario more globally competitive.
- Top three measures of success: jobs created/retained; industry co-investment; and private sector follow-on investment.



What We Do



OCE Accelerates Innovation

- Supports collaborative R&D between industry and academia.
- Invests in early-stage commercialization of technologies emerging from Ontario's publicly-funded colleges, universities and research hospitals.
- Fosters campus entrepreneurship and provides real-world industry experience for Ontario's next generation of innovators.
- Leads and develops networks around high-potential, business-led opportunities
- Assist firms develop and commercialize scalable products and services



OCE's Business Development Experts

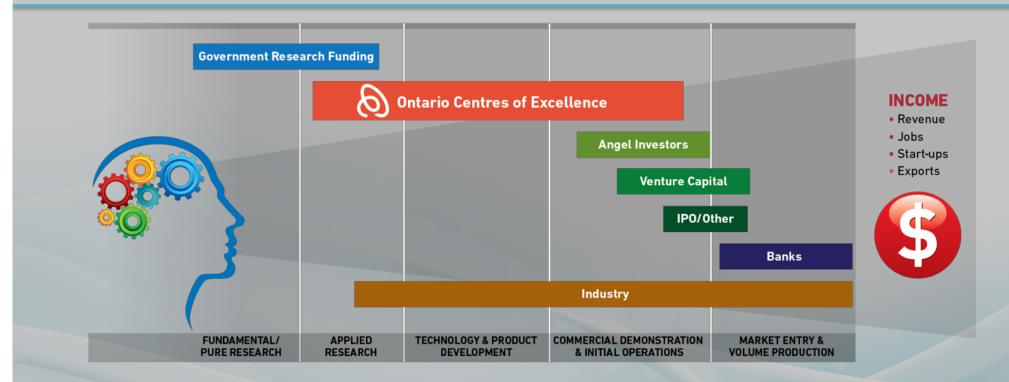


- A network of Business Development and Commercialization Managers (BDCMs) deployed across Ontario.
- With extensive business and sector expertise, BDCMs support companies, large and small, with commercialization and scale-up activities.
- Activities include:
 - Connecting business with industry and leading-edge research and expertise in Ontario's publicly-funded colleges, universities and research hospitals.
 - > Supporting development of OCE funding applications.
 - Advising on the development of business plans, marketing and sales plans, diversification.
 - Identifying potential public/private sector investors.
 - De-risking companies for investors by providing early-stage support.
 - Securing new markets (including international).



Bridging the Funding Gap





OCE bridges the funding gap between government-funded R&D and private investment.



OCE Economic Impact FY 2017/18



Start-ups created or supported directly through OCE seed financing or indirectly through other OCE programs, a 41 per cent increase over last year.

2,557



\$937

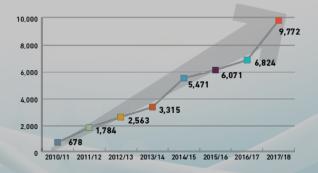
Follow-on investment

in client companies primarily from angel investors and venture capitalists, the highest in OCE history and a **57 per cent increase** over last year.



New or retained jobs directly attributed to OCE-funded projects, the highest in OCE history and a **43 per cent increase** over last year.

9,772 Jobs







Commercialization



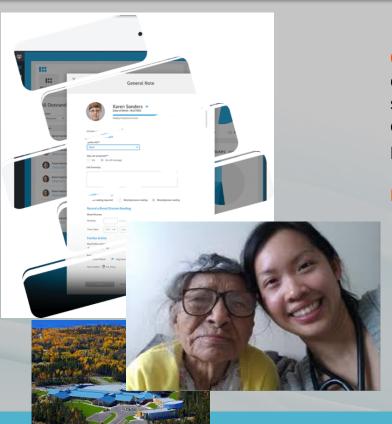
Innovation Procurement

Value Proposition:

- Firms find potential first customers in the Ontario public sector, which purchases billions of dollars of goods and services from 51,000 vendors each year
- OCE facilitates co-development, adoption and procurement of innovative, Ontario-made technologies by the Broader Public Sector (BPS) through programs that include:
 - AdvancingHealth
 - AdvancingEducation
 - Health Technologies Fund
 - REACH Program
 - Small Business Innovation Challenge
- Ontario SMEs acquire customers at home, with a chance to validate products and grow businesses to compete in global markets

Improving diabetes care through real-time monitoring [case example#1] REAL-TIME MONITORING





Objective: To provide diabetes clients with an easy-to-use digital health solution for remote client monitoring and secure communication among all members of a client's circle of care, including family members and health care providers.

Project Team





Improving diabetes care through real-time monitoring [case example#1] REAL-TIME MONITORING





iUGO Care

Solution: iUGO Care, Care co-ordination platform leveraging sensors & IoT devices to deliver care in the patient's home.

Outcome: Project is looking at efficiencies in providing care to patients in remote communities with a primary goal to reduce complications and improve health outcomes for Sioux Lookout Meno Ya Win diabetes patients while simultaneously reducing the cost of care delivery. [e.g. improving health outcomes, minimizing complications, and reducing cost of care delivery for diabetes patients].

Program Funding: \$100,000 + Matching = TPV <u>\$215,000</u>

Reliq Health Technologies Announces New Funding to Expand Diabetes Pilot in Sioux Lookout, ON, and Meeting with the Office of the Premier of Ontario

(A SEDTEMBER 26 2018 | IDADELIOHEALTH COM | DIOC DRESS DELEASES | O

VANCOUVER, British Columbia, Sept. 26, 2018 (GLOBE NEWSWIRE) — Reliq Health Technologies Inc. (TSXV:RHT or OTCQB:RQHTF) ("Reliq" or the "Company"), a technology company focused on creating innovative mobile health (mHealth) and telemedicine solutions for Community-Based Healthcare, is pleased to announce that the pilot of its remote patient monitoring solution for diabetes patients with Sloux Lookout Meno...

Transferring from the hospital to a LTC and ensuring timely medication reconciliation [case example#2]





Objective: To create the evidence for technical, clinical, and economic impact of the introduction to "pharmacist led medication reconciliation" at each transition point of residents in LTC.

Project Team



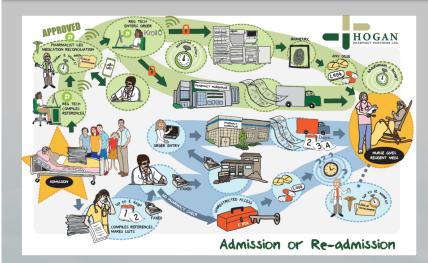






Transferring from the hospital to a LTC and ensuring timely medication reconciliation [case example#2]





Solution: Partnership between peopleCare, pharmacy service provider Hogan Pharmacy Partners, and electronic medical record provider PointClickCare [PCC]. PCC provides efficient digital communication, electronic medical and hospital record access, and 24/7 availability of the home to clinical pharmacist expertise.

Outcome: Pharmacy Led Medication Reconciliation [PLMR] enhances the efficiency of medication reconciliation processes in LTC, and that PLMR has the potential to prevent more adverse drug events than Nurse Led Medication Reconciliation [NLMR] processes.

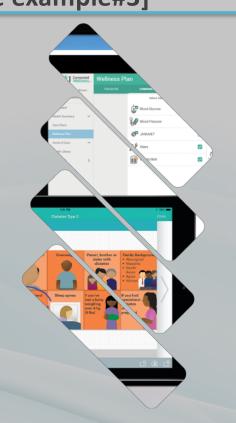
Program Funding: \$476,348 + Matching = TPV \$1,080,374



Quality Improvement
Innovation of the Year
peopleCare launches the first Clinical Pharmacy Model
in long-term care in Canada

Software to provide self-care tools for youth with mental health challenges [case example#3]





Objective: To offer enhanced connectivity and mobile availability which will significantly impact the flexibility and capacity of coordinators working across sectors to address client goals with diverse care teams.

Project Team



















Software to provide self-care tools for youth with mental health challenges YOUTH WITH MENTAL HEALTH CHALLENGES [case example#3]







"NexJ Connected Wellness is expected to increase efficiency and enhance the capacity of these organizations to support young adults in Toronto and Hamilton to achieve enhanced selfmanagement and improved health outcomes while delivering a shift to community-based care."

Gary Baksi, Executive Vice President and General Manager, NexJ Health

Solution: Connected Wellness, digital platform for patient-facing population health management that incorporates mobile and wearable technologies

Outcome: Project is supporting a comprehensive evaluation in the context of YA mental health, with a primary goal of collecting the necessary data points for wider scale adoption of NexJ Connected Wellness platform [NCWp] within the Ontario healthcare system. [e.g. scale the technology-driven mental health solution to integrated service hubs and other mental health care settings provincially and nationally, providing young adults across Ontario and Canada with enhanced support to manage their mental health].

Program Funding: \$500,000 + Matching = TPV \$1,000,000

Meaningful Collaborations, RD1 Health Innovation Teams









With: Michael Garron Hospital. Markham Stouffville Hospital, University of Toronto, NextUpCare

With: WinterLight Labs, **Baycrest Centre for Geriatric** Care

With: Philips Healthcare, QoC Health, ThoughtWire Corp., CLOUD DX, XAHIVE Inc.

With: Think Research, University of Toronto

With: GE Healthcare Canada, University of Windsor-World Health Innovation Network, The Ottawa Hospital



With: Pathcore Inc.

Closing the Gap'

With: CLOUD DX, Women's

College Research Institute,

Markham Stouffville

Hospital



With: Step Up! ABI Recovery, Waterloo Wellington LHIN, Health Quality Ontario, Wilfrid Laurier University, Alaunus



With: ForaHealthyMe Inc., University Health Network-Toronto Rehabilitation Institute, Centre for Family Medicine -Family Health Team



With: Brantford Police Service, HealthIM, Nipissing University, **Brantford General Hospital**



With: BoehringerIngelheim Canada Ltd., Aetonix Systems Inc., Samsung Canada, Winchester District Memorial Hospital, Priority Business Services Inc., Women's College Hospital, Champlain LHIN



With: Reliq Health



Centre for Addiction and Mental Health, St Joseph's Healthcare, University Health Network, Toronto General Hospital, The Royal's Institute of Mental Health Research, Children's Hospital of Eastern Ontario Research Institute Inc. St. Michael's Hospital St. Joseph's Healthcare Hamilton



With: Hogan Pharmacy Partners Ltd., PointClickCare, University of Windsor-World Health Innovation Network, **McMaster University**

> **PAGE** 15

Meaningful Collaborations, RD2: Health Innovation Teams





With: BrainFx, ThoughtWire Corp., Wilfrid Laurier University

Holland Bloorview Kids Rehabilitation Hospital

With: Komodo OpenLabs, John McGivney Children's Centre, McMaster University, University of Toronto



Centre des sciences de la santé de Kingston

With: ArcheOptix, Queen's University



With: Bedside Clinical Systems

With: InputHealth Systems Inc., St.

Michael's Hospital Centre for **Excellence in Economic Analysis** Research, London Health Sciences Centre, Rogers Communications, St. Joseph's Health Care London



With: Bayshore HealthCare Ltd., MedChart Inc., Royal Victoria Regional Health Centre, Windsor Regional Hospital



With: NexJ Health



With: m-Health Solutions



With: ManagingLife



With: Fig.PSoftware, Cardiac Care



With: Eve Medical, Women's College Hospital -Institute for Health System Solutions and Virtual Care, N'Mninoeyaa Aboriginal Health Access Centre, Access Alliance, Roche Diagnostics, Mount Sinai Services

16

HTF, Outputs Achieved to Date



~1,520

Patients engaged

108.5

New jobs created

109

Jobs retained

\$15

MILLION

Matching contributions

\$1.53

MILLION

Incremental sales

\$4.04 MILLION

in follow-on investment







- Resources for Evaluating, Adopting and Capitalizing on Innovative Healthcare Technology (REACH), designed to help Ontario health service providers and shared services organizations effectively identify and procure innovative technologies focused on solving priority system challenges
- Opportunity to apply new methods to procure and more rapidly adopt innovative solutions to address high-priority health system needs using an outcomes based approach through a process called Innovation Procurement
 - Rds 1 & 2: \$6.2M + \$2.6M in additional project contributions [11 projects in total]
 - Administered by OCE on behalf of the Government of Ontario

How the program works

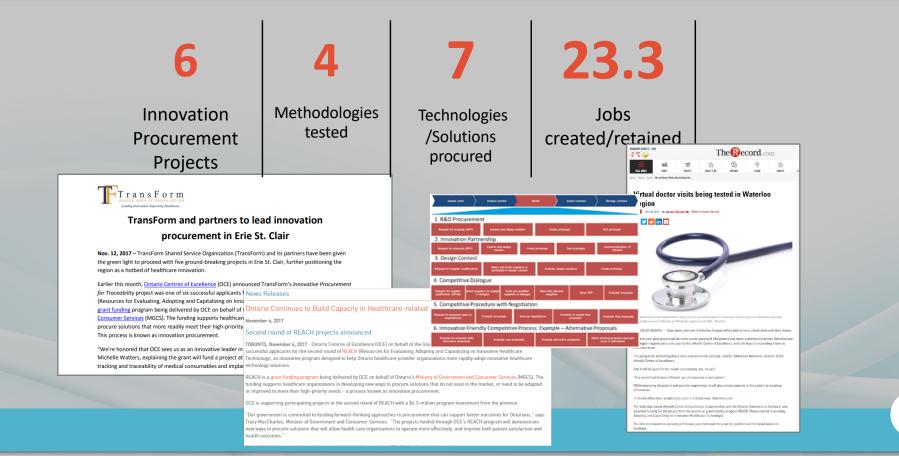


Through the use of enhanced public sector innovation-based procurement methodologies, health care organizations will be able to develop and implement a preferred procurement process that is intended to identify solutions to their most complex challenges. Recognized <u>public sector innovation-based procurement</u> <u>methodologies</u> include (but are not limited to):

- 1. Research & Development (R&D) Procurement
- 2. Innovation Partnership
- 3. Design Contest
- 4. Competitive Dialogue
- 5. Competitive Procedure with Negotiation
- 6. Innovation Friendly Competitive Process

REACH Program outputs to date





Community resources





Patient Communication Hub





Preventing Privacy Breaches: From Logging and Auditing to Smart Preventing



Tracking and Traceability of implantables

Kingston Health Sciences Centre

Centre des sciences de la santé de Kingston

Management of COPD Patients in Kingston



Co-Designing a Smart Hospital to Improve Patient & Information Flow



Academic Case Study Partner

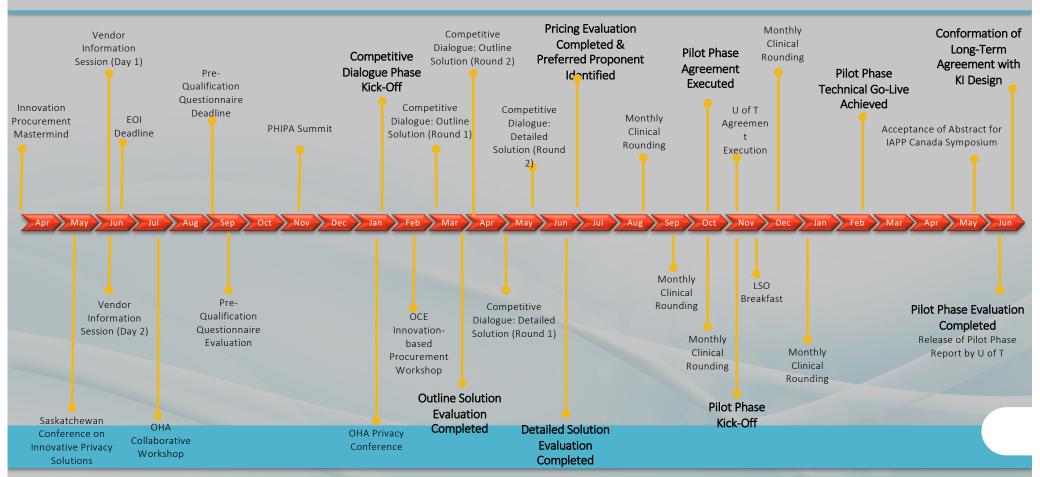
Reach project outcomes example 1 [Richmond hill] [project completed]



Problem Statement	Preventing Privacy Breaches: From Logging and Auditing to Smart Preventing
Lead HSP/SSO	Mackenzie Health
Project Team	Markham Stoufville Hospital; Michael Garron Hospital, Information and Privacy Commissioner of Ontario
Project Summary	To procure an innovative comprehensive privacy solution that will be proactive in preventing unauthorized access to patient health information in shared electronic information systems.
Key Outcomes	 Used Competitive Dialogue methodology Conducted market sounding and competitive dialogue sessions Evaluated top 3 solutions by proponents
Procurement	 Piloted top solution by proponent for 3 month period. Evaluated against Outcomes Based Specifications Procured solution by KI Design
Knowledge Translation	 Formal case study developed by World Health Innovation Network [WIN] Knowledge Translation Session held, Sept 13, 2018 [co-hosted by OCE]

PAIP Achievements At A Glance





Reach project outcomes example 2 [Kingston] [~6 months remaining]



Problem Statement	To reduce the frequency of ER visits caused by acute exacerbation of Chronic Obstructive Pulmonary Disease (COPD) by managing patient care in the community.
Lead HSP/SSO	Kingston Health Sciences Centre
Project Team	3SO; Queen's University
Project Summary	To procure a solution to deliver better care and curb the healthcare cost of managing COPD patients in the hospital environment, novel health solutions that provide better care in the community are highly desired. Reducing frequent emergency rooms visits and readmission of COPD patients limits ER overcrowding and reduces patient risk in developing secondary complications such as respiratory tract infections.
Key Outcomes	 Using Innovation Partnership methodology RFSQ, received significant response, did not require in-person session Held Design presentations [February 2019]
Procurement	 Plan to pilot top solution by proponent and this will be evaluated against Outcomes Based Specifications Final procurement decision dependent upon outcome of the pilot Selected top proponent and in contracting stage [to be executed end of April]
Knowledge Translation	- Formal case study developed by World Health Innovation Network [WIN]



For more information about our programs, please visit the OCE website at www.oce-ontario.org/programs





Thank you



Jennifer Moles, Innovation Procurement Manager Jennifer.Moles@oce-ontario.org

@jenwoodsmoles



Ontario Centres of Excellence

325 Front Street West, Suite 300, Toronto, ON M5V 2Y1 t:416.861.1092 • 1.866.759.6014 • f:416.971.7164 www.oce-ontario.org



Innovation Procurement Primer (Interim)





References



- REACH Program: https://oce-ontario.org/programs/commercialization/reach-program
- REACH Innovation Workshop, Feb2017 (Toronto, ON), http://www.oce-ontario.org/programs/commercialization-programs/reach-program/reach-innovation-based-procurement-workshop
- News Release, Nov2017: http://www.oce-ontario.org/news-events/news/2017/11/06/oce-continues-to-build-capacity-in-healthcare-related-innovation-procurement
- Innovation Procurement Primer:
 https://www.doingbusiness.mgs.gov.on.ca/mbs/psb/psb.nsf/0/df7388300f40aec68525814d004a00bf/\$FILE/B

 PS Primer on Innovation Procurement Interim.pdf
- HSCN Innovation Procurement Toolkit: http://hscn.org/iptoolkit/home.aspx
- Innovation Procurement E-learning Program: https://www.conferenceboard.ca/topics/inn/e-learning.aspx?AspxAutoDetectCookieSupport=1
- EU Guidance Document: https://ec.europa.eu/transparency/regdoc/rep/3/2018/EN/C-2018-3051-F1-EN-MAIN-PART-1.PDF
- MIX: https://guelph.ca/city-hall/open-government/municipal-innovation-exchange-mix/
- BC AI Justice Challenge: https://innovatebc.ca/what-we-offer/innovation-marketplace/ai-justice-challenge/
- Nourish: https://www.nourishhealthcare.ca/values-based-procurement
- CAHO Art of the Possible: http://caho-hospitals.com/wp-content/uploads/2018/06/Art-of-the-Possible Quick-Reference-Guide-to-Ontario-BPS-Procurement-Myths.pdf
- MEDEC Value-Based Healthcare: Quick Guide Version 1
 https://cdn.ymaws.com/www.medec.org/resource/resmgr/Value-Based-Healthcare Qu.pdf