

Innovation Partnership
Procurement by Co-Design
Michael Garron Hospital
Post-Anesthetic Recovery Room
Challenge Brief



Contact name

Adnaan Bhyat

Response deadline

September 26, 2016

Phone number

416-461-8272 x 3187

Challenge Brief reference #

MGH 111

E-mail

abhya@tegh.on.ca

Maximum procurement budget

\$ 25,000

Note: this does not obligate provider to procure any solution

All vendor responses must be made via completion of an "Innovator Brief" template and forwarded to the above contact via email by the response deadline.

Project Team

Adnaan Bhyat, Improvement and Innovation, Project Lead

Penny Walcott, Director Surgery, Senior Sponsor

Dr. Sunil Kapoor, Chief Anesthesia, Physician Sponsor

Marilyn Lee, Manager Post Anesthetic Recover Room, Primary User and Content Expert

Note: procurement team member will be engaged as required.

The Challenge

Maximum of 1200 characters

The Post Anesthesia Recovery Room (PARR, also commonly referred to as PACU) cares for inpatients, outpatients, and emergency patients immediately following their surgery in one of the hospital's operating rooms (ORs). The PARR has always experienced the challenge of periods of "closure", described as when the patient volume in the PARR reaches the nursing staff capacity and/or space capacity, for any reason. These PARR closures result in a reciprocal backup on the input end, thus patients are forced to be cared for in the OR post completion of their procedure, until a space is made available to them in the PARR.

Not only do these closures affect patient care, they can disrupt entire patient flow for an entire operating room. Multiple patients may have their surgeries delayed; some patients may even have their surgery cancelled. Physicians are kept in surgery longer, and staff need to spend additional time caring for patients, often incurring overtime costs.

In general, closures are far from ideal patient setting, they are costly to the system, and they incur a great deal of frustration and stress. Patient flow through the ORs is a common problem faced by surgical centres around the world, but enterprise solutions are often too complex and far too costly to implement and maintain.

Desired Outcomes

Maximum of 3 outcomes based specifications

Describe outcomes

We need a solution that will facilitate operational planning for the entire surgical journey, ensuring the appropriate resources are deployed to maximize patient flow and minimize risk of PARR closure. This also means better surgical scheduling and bed planning.

Optimizing the surgical schedule will allow the hospital the chance to reduce unnecessary in-patient days for patients, getting them home as safely and quickly as possible.

Primary outcome: predictive patient flow application to determine PARR patient volumes and identify potential bottleneck periods.

Secondary outcome: inpatient bed planning based on predictive model.

Tertiary outcome: surgical schedule modelling for optimal patient flow and minimal bed days downstream (PARR and inpatient units).

Evaluation Criteria

Criteria to be used for vendor selection (NOT to evaluate solutions).

Company

Has the company demonstrated the competency to act as partner? Do they have an innovative vision? Do they have a strong leadership team? Do they have strong references?

Proposed solution vision

Is the proposed solution to the challenge innovative? Do you agree that it can solve the challenge proposed? Will it have a significant impact on the end user (staff, patients, etc)?

Total cost of ownership

Is the typical cost of ownership of the proposed solution over a 3 year period realistic? Is it competitive? Is it comprehensive?

Ability to execute

Has the company demonstrated the ability to deliver this solution to other clients who have similar challenges? How do the outcomes of previous implementations of the solution panned out?

Strength of supporting validation data

How strong is the data that supports the solution's proposed ability to meet the provider's desired outcomes?

Experience of project team

Company Experience:

- Vendor's level of experience working on similar projects, working within hospital context with operational challenges.
- Vendor's other related application development expertise, integration with existing systems.
- Outcomes:
 - Evidence of successes with similar or comparable clients/projects in the past.
 - Evidence of application development abilities (samples/demos of work completed).

- Lessons learned:
 - Learning, challenges, and/or failures from previous work contracts, indicating their applicability and influence on this work.

Resource Experience:

- Skills, training, and experience of members of the team applying are relevant and effective for the challenge. Resume of key resources is appreciated.

Key Dates

The following is a summary of key dates in the RFP process. Program sponsor (MaRS) and provider may change any of the dates below, in its sole discretion and without liability, cost, or penalty.

Key Dates	Milestones	Duration
Aug 15, 16	Program launch, providers invited to download and complete a Challenge Brief	5 weeks
Aug 25, 16	Info session #1	
Aug 29, 16	Info session #2	
Sept 2, 16	Info session #3	
Sept 12, 16	Last day to submit Challenge Brief, all challenges posted online, vendors begin to respond with Innovator Brief	2 weeks for vendors to respond
Sept 26, 16	Last day for vendors to respond. Providers have all submitted Innovation Briefs. Providers begin initial screening and vendor selection	1 week for initial vendor screening
Oct 10, 16	Short-listed vendors notified by providers, invited to participate in a pitch & dialogue day (September 19)	1 week for selected vendors to prep
Oct 18, 16	Pitch & dialogue day at MaRS. Each provider will	1 day

hear their selected vendor pitches. Final vendor selection completed.

Nov 9, 16

Official design and prototyping phase begins:
Discovery and Design

8 weeks

**Nov 9, 16 -
Jan 11, 17**

Discovery, Design and Prototyping basics
workshops

**3
workshops**

Jan 11, 17

Progress pitch day at MaRS + judging. Grants of up
to \$25k for further prototyping and testing.
Commence prototyping and testing

24 weeks

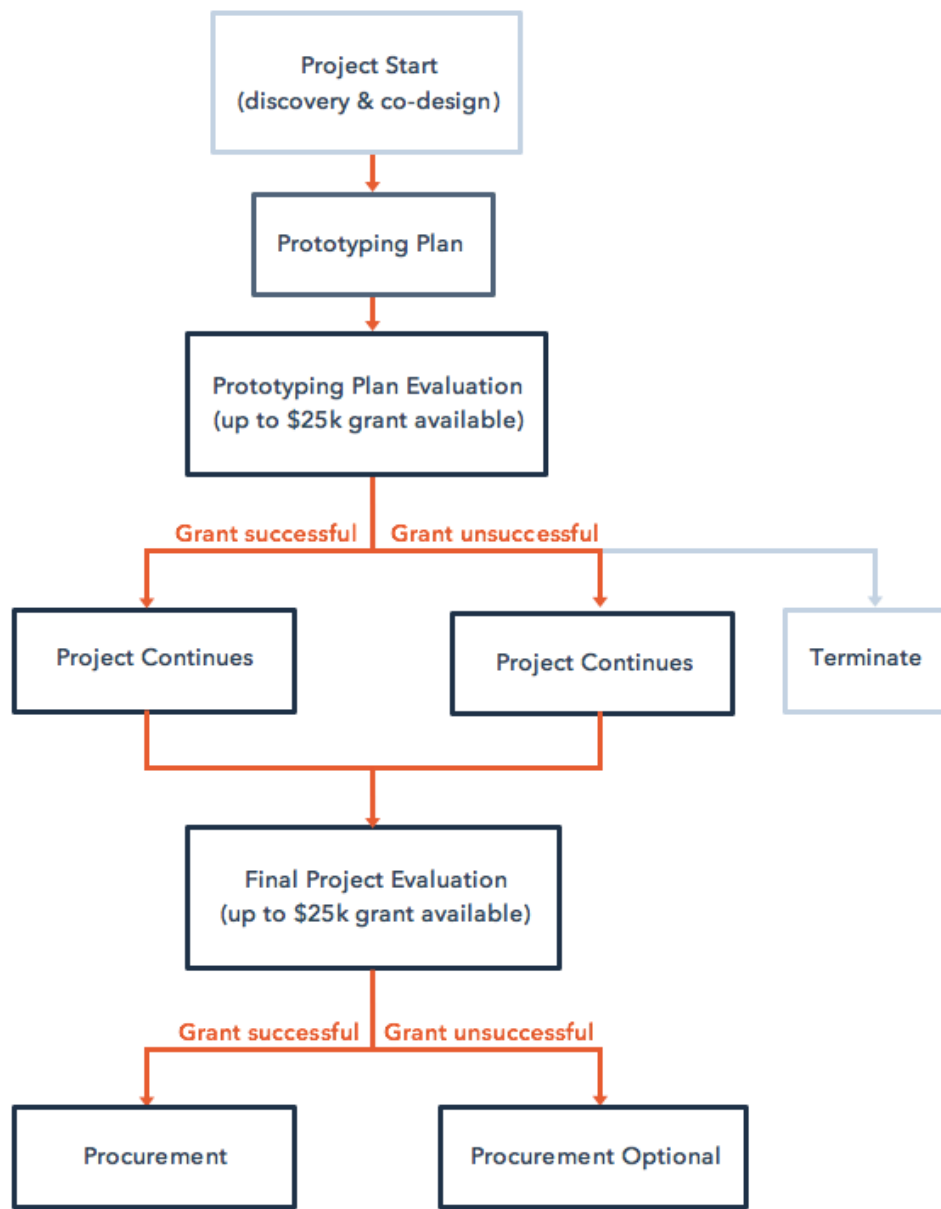
July 5, 17

Final demo day. Judges award up to \$25k for
procurement

1 day

Terms and Conditions

1. The "Innovation Partnership: Procurement by Co-Design" program may or may not lead to procurement. There is no requirement for procurement at the end of the program, and procurement is at the discretion of the provider.
2. This Design Challenge document is issued to invite vendors that have existing solutions (or have the competency to develop a solution within the program timelines) to respond and partner with the provider to solve the proposed challenge.
3. There are a number of potential outcomes from participation in this program, and are summarized by the figure below.



4. Interested vendors must respond via submission of an Innovator Brief document, available online on <https://www.marsdd.com/systems-change/procurement-co-design/>
5. Innovator Brief document must be submitted directly to the provider by the due date listed on the cover page of this document.
6. Questions related to the Challenge being proposed must be directed at the provider. Questions related to the Innovation Partnership: Procurement by Co-Design Program must be directed at MaRS (designchallenge@marsdd.com)