Fraser Health
Hackathon
#FHhackathon
January 21-22, 2017

Fraser Health Hackathon

What is a Hackathon?

A hackathon is an event where people involved in computer programming work collaboratively together, often in teams, in a sprint-like race to develop programs around a certain topic or theme.

What kind of solutions can we see from a hackathon?

Solutions might come in the form of apps that connect patients to services or support systems, heat maps that identify clusters of illnesses, predictive algorithms in population health trends, automated checklists, workflow tools, and many other possibilities

Fraser Health Hackathon

Purpose:

To find Technology driven solutions to nine challenges

Fraser Health Hackathon

January 21-22, 2017

THE 9 CHALLENGES

1 PATIENT CENTERED

Create a tool that helps the public navigate the health care system.

2 DECISION MAKING

Produce systems that reveal usable insights from available data.

3 CLINICIAN COLLABORATION

Develop tools that make workflows more efficient.

4 FRONTLINE ENGAGEMENT

Develop strategies that allow health care providers to communicate and collaborate more effectively.

5 SPECIALIST E-SCHEDULING

Create a tool to coordinate referral scheduling in a robust and transparent manner.

6 TAKE-HOME NALOXONE

Create an app that provides Naloxone kit users with emergency response support

7 OVERDOSE ANALYTICS

Produce an application that produces a database and visual map of overdoses, including real-time and historical.

8 MENTAL HEALTH SUBSTANCE USE

Produce an application that connects people to mental health and addictions resources and support.

9 WILD CARD

If you have a great idea that can help our health care system, we want to see it!

INFO & REGISTER:
healthhackathon.ca

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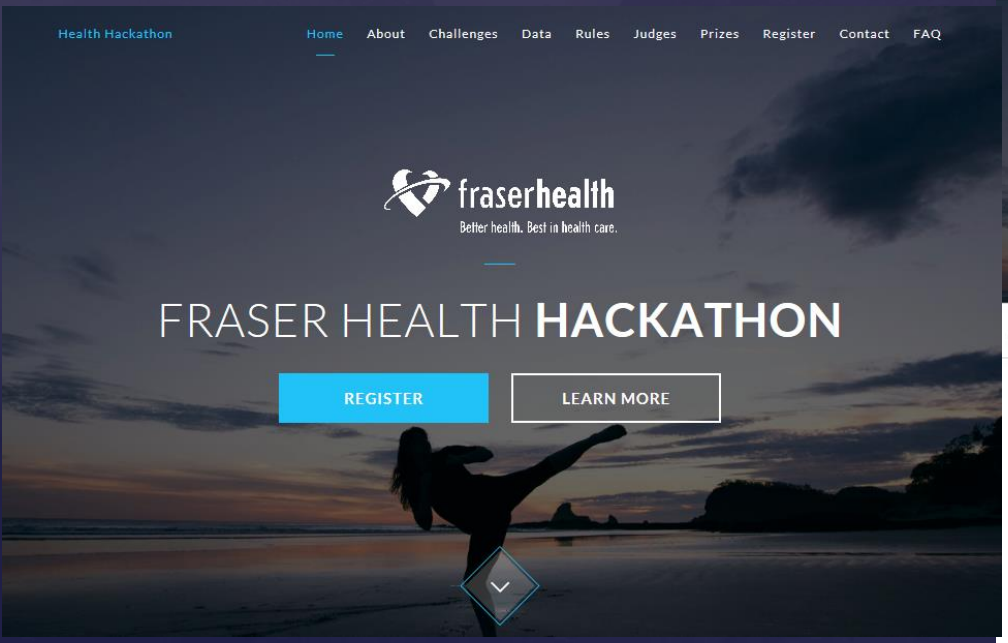
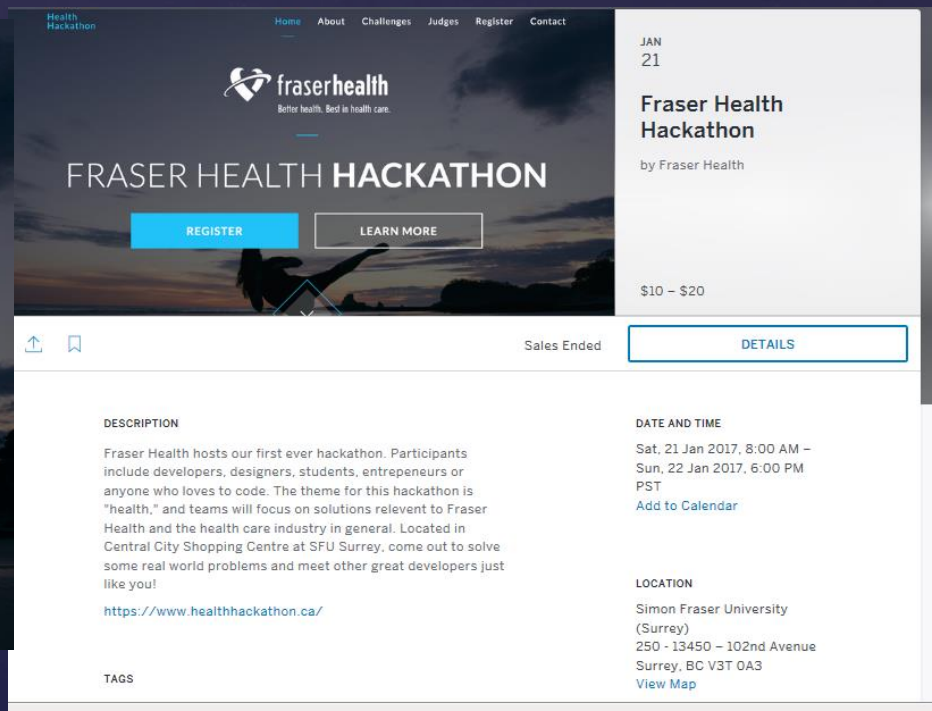
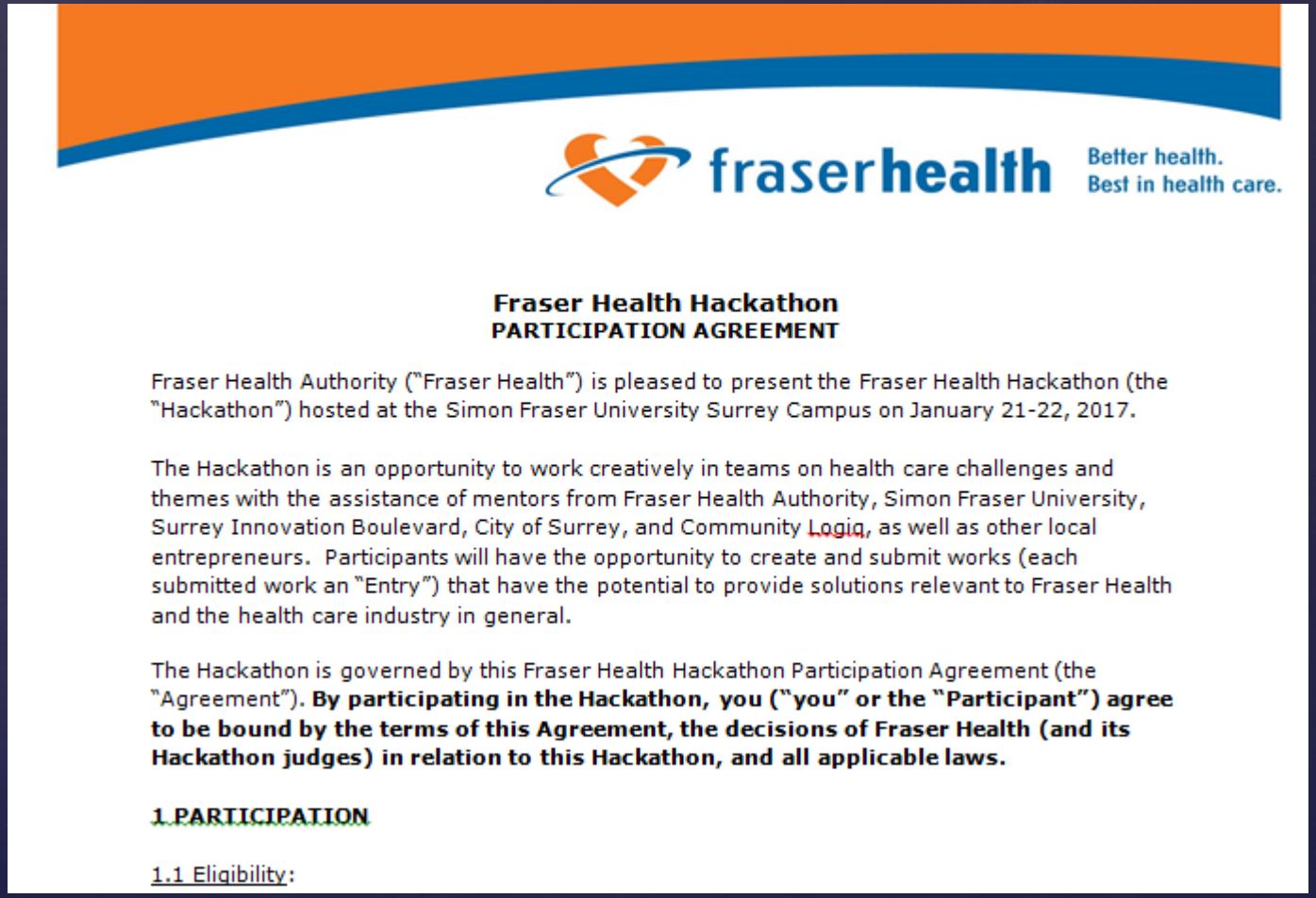
Fraser Health Hackathon

- Website www.HealthHackathon.ca
- Online Registration using EventBrite
- > 85 Registrants / Participants
  - 80 seats sold out online before event
  - Addition of 5 seats on site registration
  - 16 teams formed





Fraser Health Hackathon Participant Agreement



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Fraser Health Hackathon
PARTICIPATION AGREEMENT

Fraser Health Authority ("Fraser Health") is pleased to present the Fraser Health Hackathon (the "Hackathon") hosted at the Simon Fraser University Surrey Campus on January 21-22, 2017.

The Hackathon is an opportunity to work creatively in teams on health care challenges and themes with the assistance of mentors from Fraser Health Authority, Simon Fraser University, Surrey Innovation Boulevard, City of Surrey, and Community Logic, as well as other local entrepreneurs. Participants will have the opportunity to create and submit works (each submitted work an "Entry") that have the potential to provide solutions relevant to Fraser Health and the health care industry in general.

The Hackathon is governed by this Fraser Health Hackathon Participation Agreement (the "Agreement"). **By participating in the Hackathon, you ("you" or the "Participant") agree to be bound by the terms of this Agreement, the decisions of Fraser Health (and its Hackathon judges) in relation to this Hackathon, and all applicable laws.**

1 PARTICIPATION

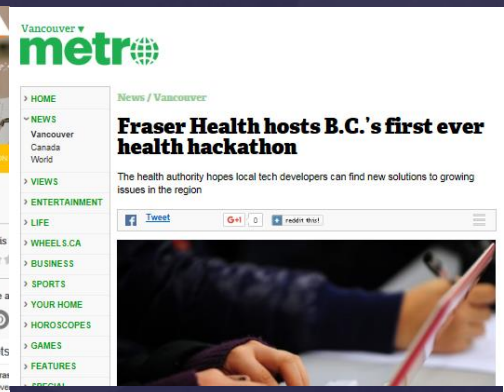
1.1 Eligibility:

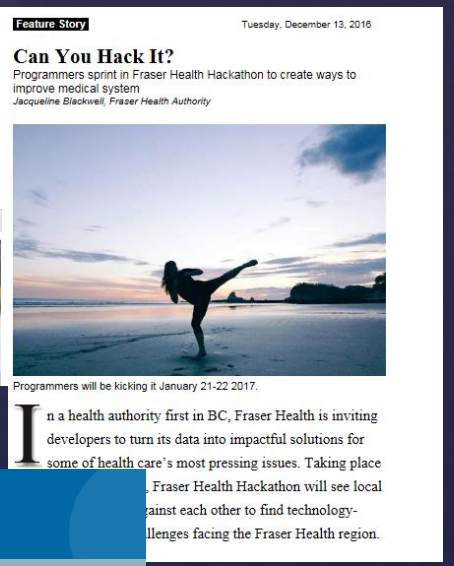
Fraser Health Hackathon

Sponsors and Partners:

Fraser Health Hackathon Communications and Media

- Diane Wild, Sr. Consultant, Communications
- Jacqueline Blackwell, Sr. Consultant, Public Affairs
- Lisa Thibault, Sr. Consultant, Electronic and Corporate Communication





Fraser Health Hackathon Agenda

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Fraser Health Hackathon

Agenda

Day 1 – Saturday January 21, 2017		
8:00 am–9:00 am	Day 1 Morning Networking	
9:00 am–10:00 am	Registration	Top of stairs on mezzanine level at SFU
10:00 am–10:10 am	Welcome by Master of Ceremonies: • **Gillian Vrooman,** President, Open Data Society of BC	Theatre
10:10 am–10:30 am	Welcome and Keynote speakers: • **Dr. Norbert Haunerland**, Professor of Biological Sciences and Associate Vice President of Research, SFU • **Michael Marchbank**, President & CEO, Fraser Health	Theatre
10:30 am–11:00 am	Hackathon Overview by Gillian Vrooman: • Challenge Overview • Participant rules • Awards/Prizes	Theatre
11:00 am–12:00 pm	Idea pitching and Team formation Breakout rooms assigned	Theatre
12:00 pm–1:00 pm	Lunch and Networking	Breakout rooms 1 & 2
1:00 pm–1:30 pm	Team Introductions and final Team formation	Theatre
1:30 pm–5:30 pm	Hack Away	Breakout rooms 1, 2 & Theatre
5:30 pm–6:00pm	Dinner	Breakout rooms 1 & 2
6:00 pm– 7:00 pm	Team Check- in and Progress updates	Theatre
7:00 pm	Dismiss and Cleanup (Day Close)	Breakout rooms 1, 2 & Theatre

TELUS HEALTHTECH INNOVATION BOULEVARD SFU SURREY OpenDataBC

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Fraser Health Hackathon

Agenda

Day 2 – Sunday January 22, 2017		
9:00 am–10:00 am	Day 2 Morning Networking	
10:00 am–10:30 am	Welcome and review of Agenda for the day	Theatre
10:30 am–2:00 pm	Hack away Online entry submissions due at 2:00pm	Breakout rooms 1, 2 & Theatre
Note: Lunch will be available at 12:00 pm in Break out rooms 1 & 2		
2:10 pm – 4:00pm	Team presentations to Judges: • **Dr. Victoria Lee**, Vice President, Population Health and Chief Medical Health Officer, Fraser Health • **Philip Barker**, Vice President, Planning, Informatics and Analytics, Fraser Health • **Peter Payne**, President & CEO Health Tech Innovation Foundation • **Dr. Daniel Schwarz**, Program Medical Director, Renal Program, Fraser Health • **Arvinder Sing Kang**, Co-founder & CTO, UrbanLogiq	Theatre
4:00 pm – 4:30 pm	Judges deliberate Keynote Speaker: • **Rob Peets,** Director, Investment Analysis for Telus Ventures	Theatre
4:30 pm – 5:00 pm	Closing Ceremonies and Awards Presentation Presenters: • **Linda Hepner**, Mayor City of Surrey • **Rob Peets**, Telus Ventures • **Victoria Lee & Philip Barker,** Fraser Health	Theatre
5:00 pm – 6:00 pm	**Feeback forms distributed, filled out and colleded** **Dismissal and clean up** **Event Close**	

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Fraser Health Hackathon

Speakers and Presenters:

Gillian Vrooman

Open Data BC

Dr. Norbert Haunerland

SFU

Michael Marchbank

Fraser Health

Rob Peets

Telus Ventures

Mayor Linda Hepner

City of Surrey

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Dr. Norbert Haunerland
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Michael Marchbank
President and CEO, Fraser Health
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CHALLENGES
Introduced by Victoria,
Tracy, Lisa, and Min
SURREY
TELUS
HEALTHTECH
INNOVATION
BOULEVARD
SFU
OpenDataBC

PATIENT CENTERED SERVICE
SFU

HEALTH HACKATHON CHALLENGE 3
CLINICIANS

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HEALTH HACKATHON CHALLENGE 9
X-FACTOR/WILD CARD
SFU
SIMON FRASER UNIVERSITY
Improving the
health of the
population
Serving 20 communit
in BC's largest and
fastest growing
health authority

Fraser Health Hackathon

Mentors

- Tracy Irwin
  - Devang Raval
  - Jan Olsen
  - Peter Barnsdale
  - Wendy Magnusson
- Dr. Nigel Fisher
- Min Naruki-van Velzen
- Chris Buckner
- Dr. Daniel Schwartz
- Lisa Thibault
- Tiffany Chui

Fraser Health Hackathon

Data

"The key to collaboration is access to data across boundaries to give knowledge, insight and ideas to do things differently"

– Philip Barker

- Fraser Health HBA, Population and Public Health provided data
- Public data (BC Stats, Census Canada etc.)
- Aggregated data, private and secure (no privacy infringements)
- Eduardo Garza & Matthew Amsel (HBA) onsite
- Provided on github website

HealthHackathon.ca

https://healthhackathon.ca info@healthhackathon.ca

Repositories People 0

Search repositories... Type: All

Expenditures-by-Community

Fraser Health Expenditures by community

Updated 4 days ago

Overdose-Emergency-Department-data-YTD-2016

Week 50 Overdose Emergency Department data YTD 2016

Updated 5 days ago

FHA-Referral-data-mock

FHA Referral data (mock)

Updated 9 days ago

FHA_FinalData_Acute

Updated 9 days ago

prenatal-registration

Updated 9 days ago

data

Open Data available for hackathon

Updated 15 days ago

People 0 >

This organization has no public members. You must be a member to see who's a part of this organization.

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Team Formation

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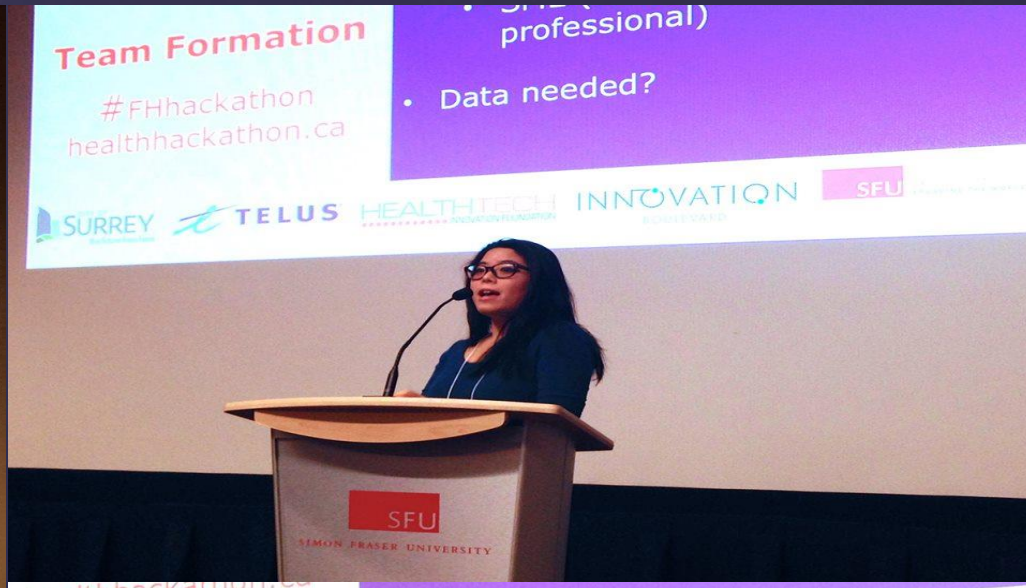
Team Introductions & Final Formation



Fraser Health Hackathon Hack-away

Day 1

Fraser Health Hackathon Hack-away

Day 2

Fraser Health Hackathon

Judges

Dr. Victoria Lee

Fraser Health

Philip Barker

Fraser Health

Dr. Daniel Schwartz

Fraser Health

Peter Payne

Innovation Boulevard: Health Tech Innovation Foundation

Arvinder Kang

UrbanLogiq

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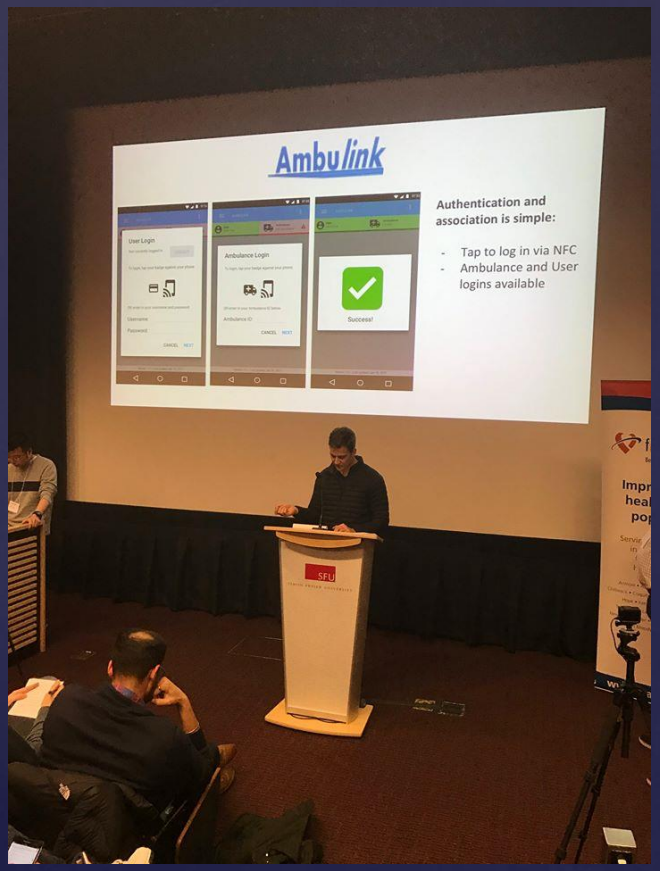
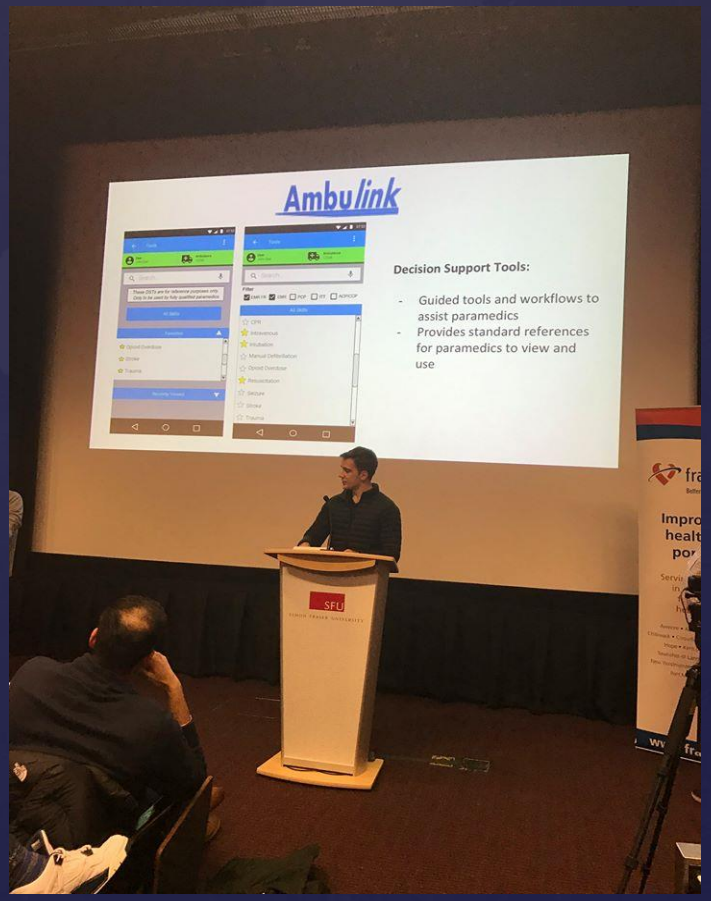
Team Presentations

Ambulink: Ambulink - a mobile toolkit and communication system for ambulance crews; Patient centered/guided support tools and workflows to assist paramedics X-Factor





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First Responders: Opioid Overdose Alert System (OOAS) - Mobile app for person first on scene to press RED button - report overdose. Notification sent to 1 KM radius, responders press GREEN button - geolocation map shows overdose location and responders;

Identifies areas with high overdose rates and allows a user to trigger a response from someone in the immediate area who can administer Naloxone quickly, increasing the chance of survival after an overdose occurs. Naloxone App

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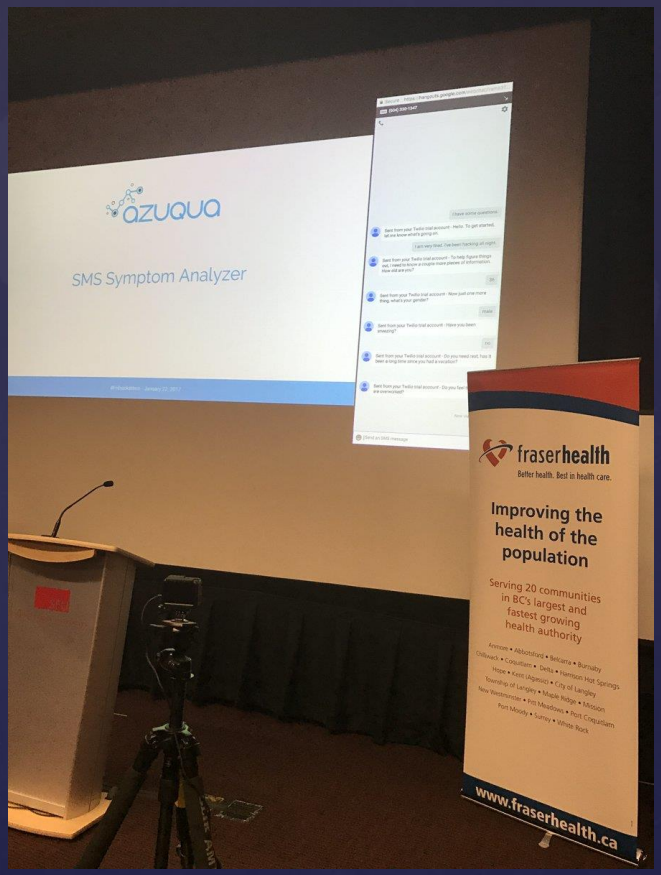
Azuqua: SMS Symptom Analyzer – Enables anyone with a cell phone to initiate a text conversation around symptoms. The service asks questions based on probability of a particular condition and offers a nearby location for follow-up. Patient Centered Service



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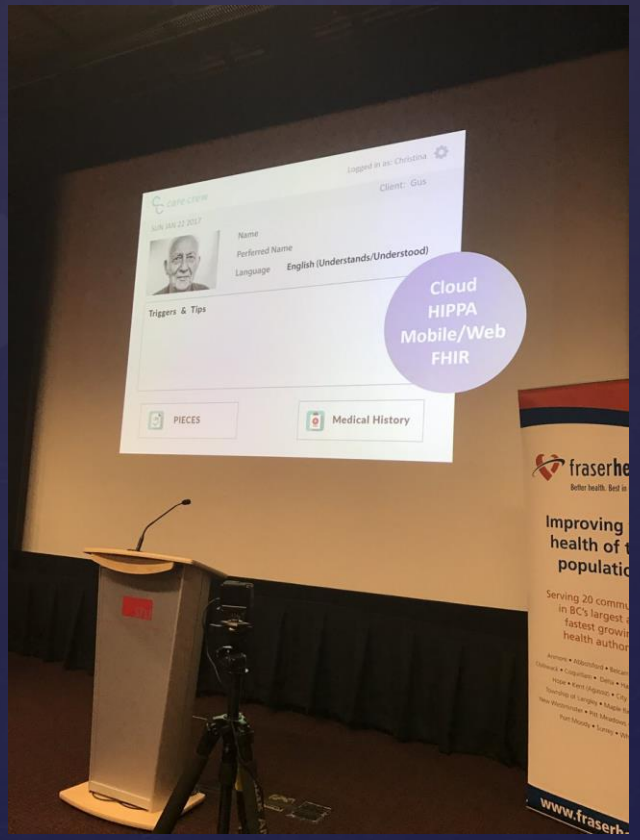
Care Crew: Care Crew - Simple Digital Personal Health Record for Seniors Care; developed for families to help support seniors aging at home. It centralizes medication lists, dietary restrictions, symptom tracking and other health information so seniors and their families can easily share information with health care providers and all those involved in the senior's care.

X-Factor



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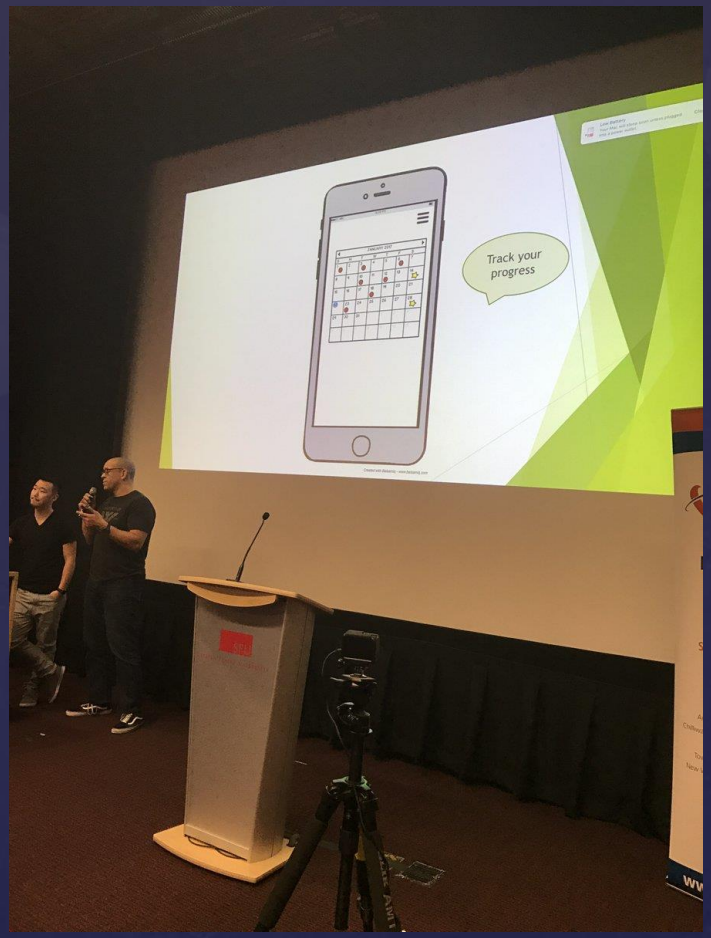
Panic Button: Biocalm - biofeedback anxiety app; An app that walks through techniques to manage anxiety attack using biofeedback Mental Health & Substance Use



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DI Scheduler: DI Scheduler – e-scheduling app to automate appointments with patient and doctor notifications e-scheduling of specialist resources

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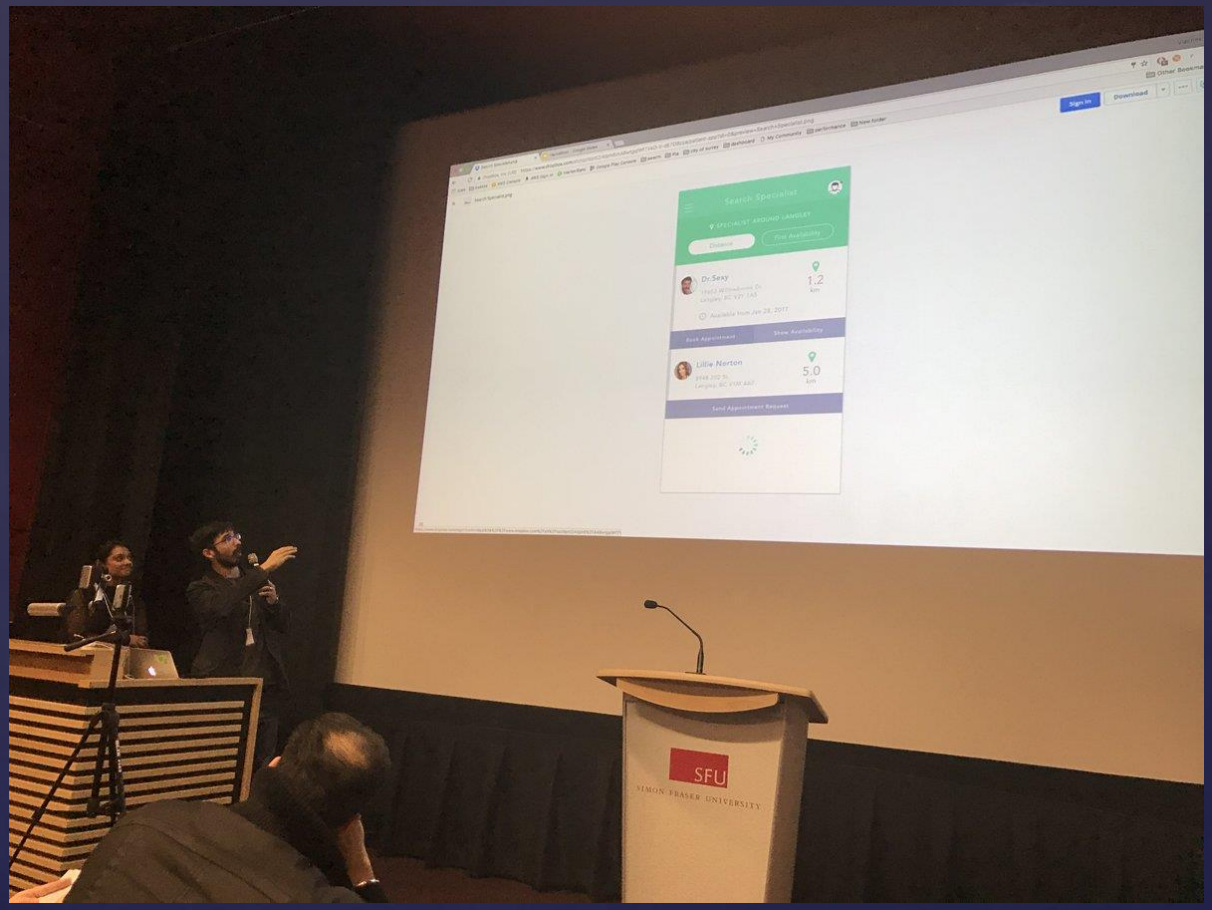
Makkke: MedicalMatch- Centralized Referral System, e-scheduling app for specialists; e-scheduling of Specialists Resources.



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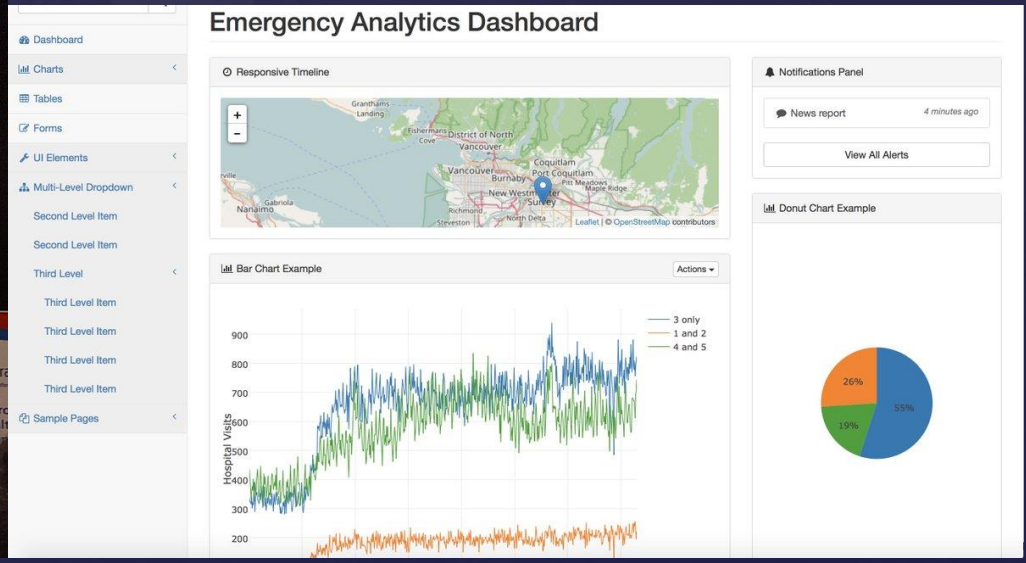
Spurious Correlations AI: Spurious Correlations – A dashboard to take control of your ER by predicting ER visits;
Finds a relationship between respiratory infection emergency room visits and changes in air quality, weather, and frequency of local Google trends of social media searches, which are visualized as an interactive map.
This model, which can be used for other types of illnesses, can forecast when spikes in emergency visits are likely to occur, allowing for better resource and staff planning, and helping identify where health care services can be delivered outside the hospital

Decision Makers



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Dr. Bill: Health Pass – Patient Owned medical records; a portable e-health record that connects patient's device with health care provider's systems Patient Centered Service

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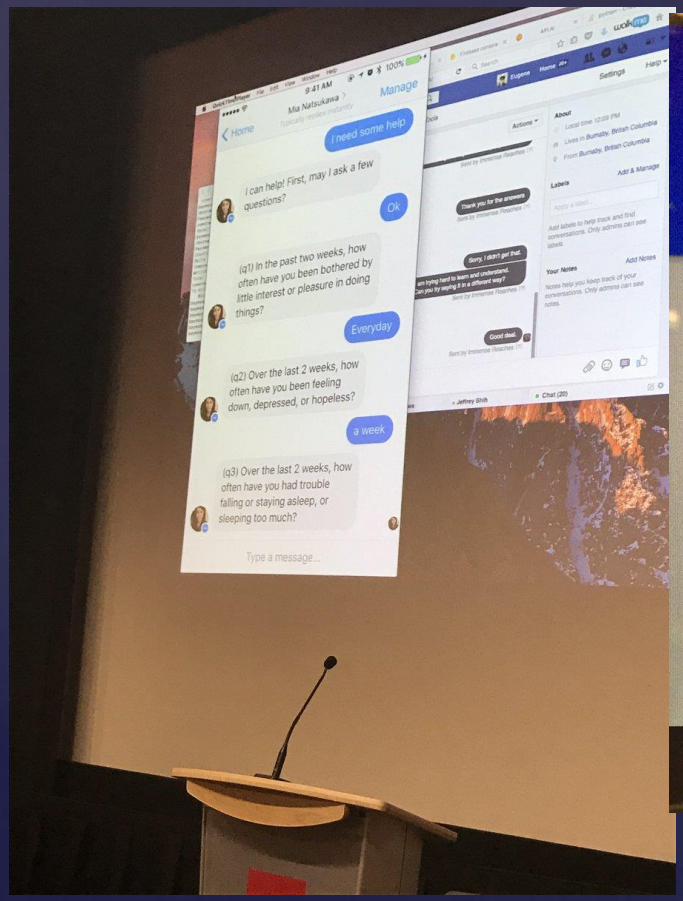
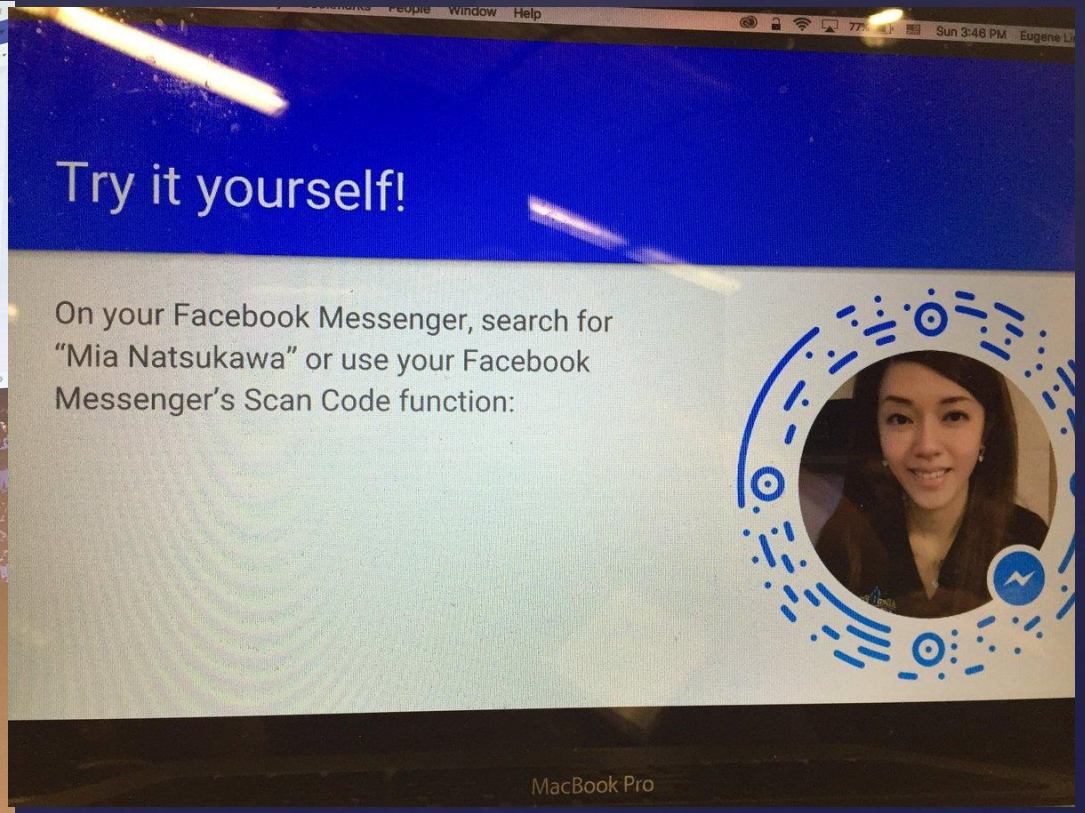
Team Baymax: Chatbox for Depression Screening - A chatbot for depression screening via PHQ-9 (Patient Health Questionnaire for depression), while keeping an upbeat and pleasant conversation to bring some sunshine. Mental Health and Substance Use





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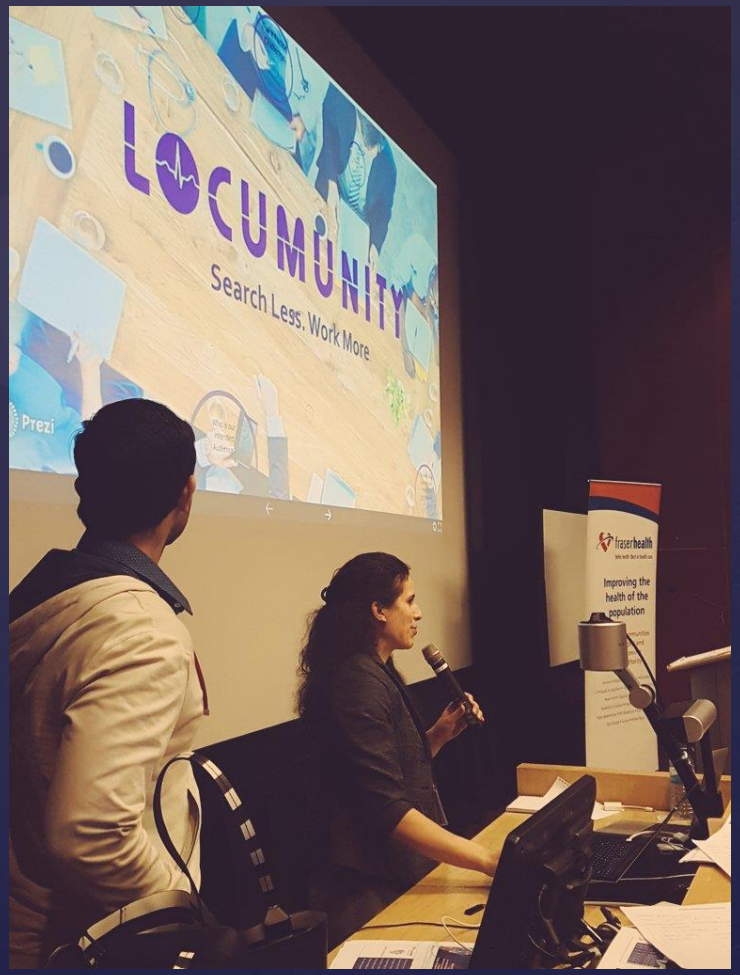
Locumunity: Locumunity - Locum Job Matching Tool; An active online matching tool to match locums to physicians/clinics and available jobs. X-Factor



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Extreme Gradient Wusting: Drug Overdose Analytics Platform - Web-based application designed to visualize where overdoses tend to happen at given times of day, and days of week. Web platform showing overdose data with interactive maps and graphs.
Overdose Analytics

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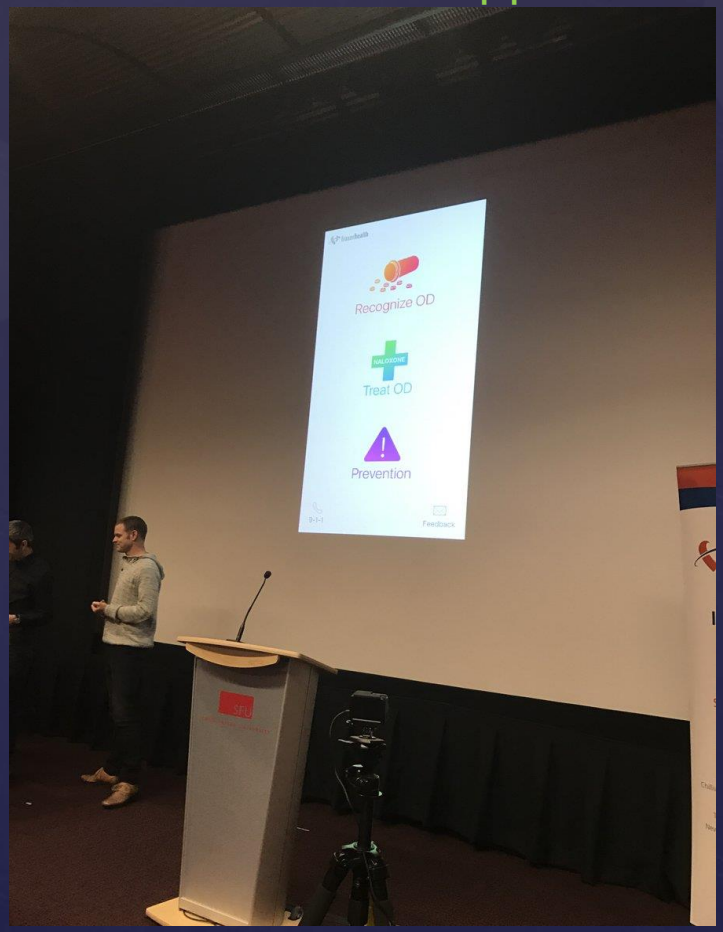
Spectrum : Naloxone Take-Home App - iOS, Android & Web app to help people identify and recognize an overdose, provide a step by step guide to respond and treat with naloxone kit & prevent overdoses.

Naloxone Take Home App



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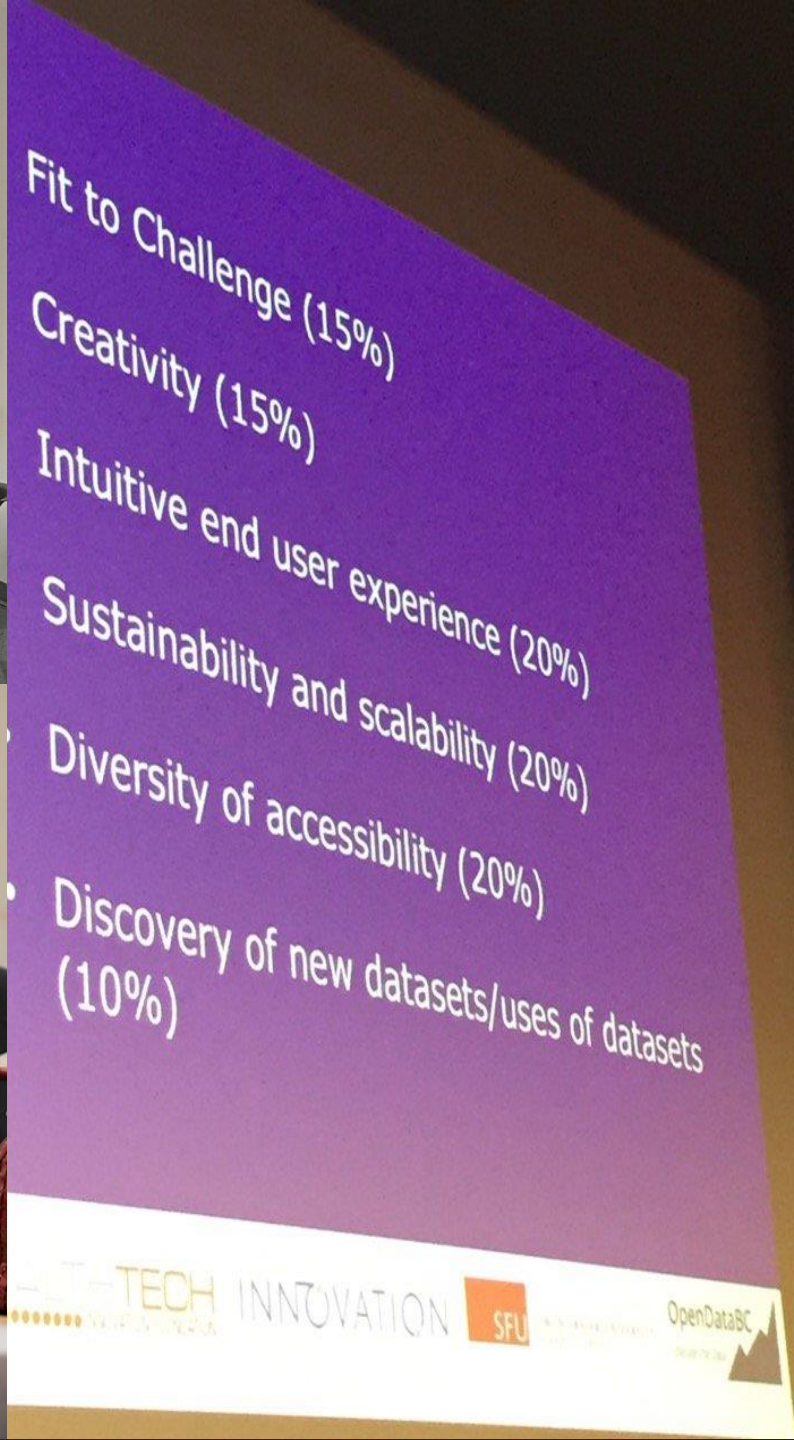
TrackER: TrackED – A web system that track patients, admissions and diagnosis. To enable ER professionals to realize the full power of their own data by providing Personalized Reports on their Patient's Outcomes. Clinicians

LJN: Nalox App - Provides educational resources and crowd sources first local response in an emergency. Sends notification to trained naloxone users with geo-location of an overdose. Take Home Naloxone App

Genzo Consulting: ReferMeDoc - Referral system to decrease patient wait time and provide optimal communication flow between GPs and Specialists. E-scheduling of specialist resources


Fit to Challenge (15%)
Creativity (15%)
Intuitive end user experience (20%)
Sustainability and scalability (20%)
Diversity of accessibility (20%)
Discovery of new datasets/uses of datasets (10%)
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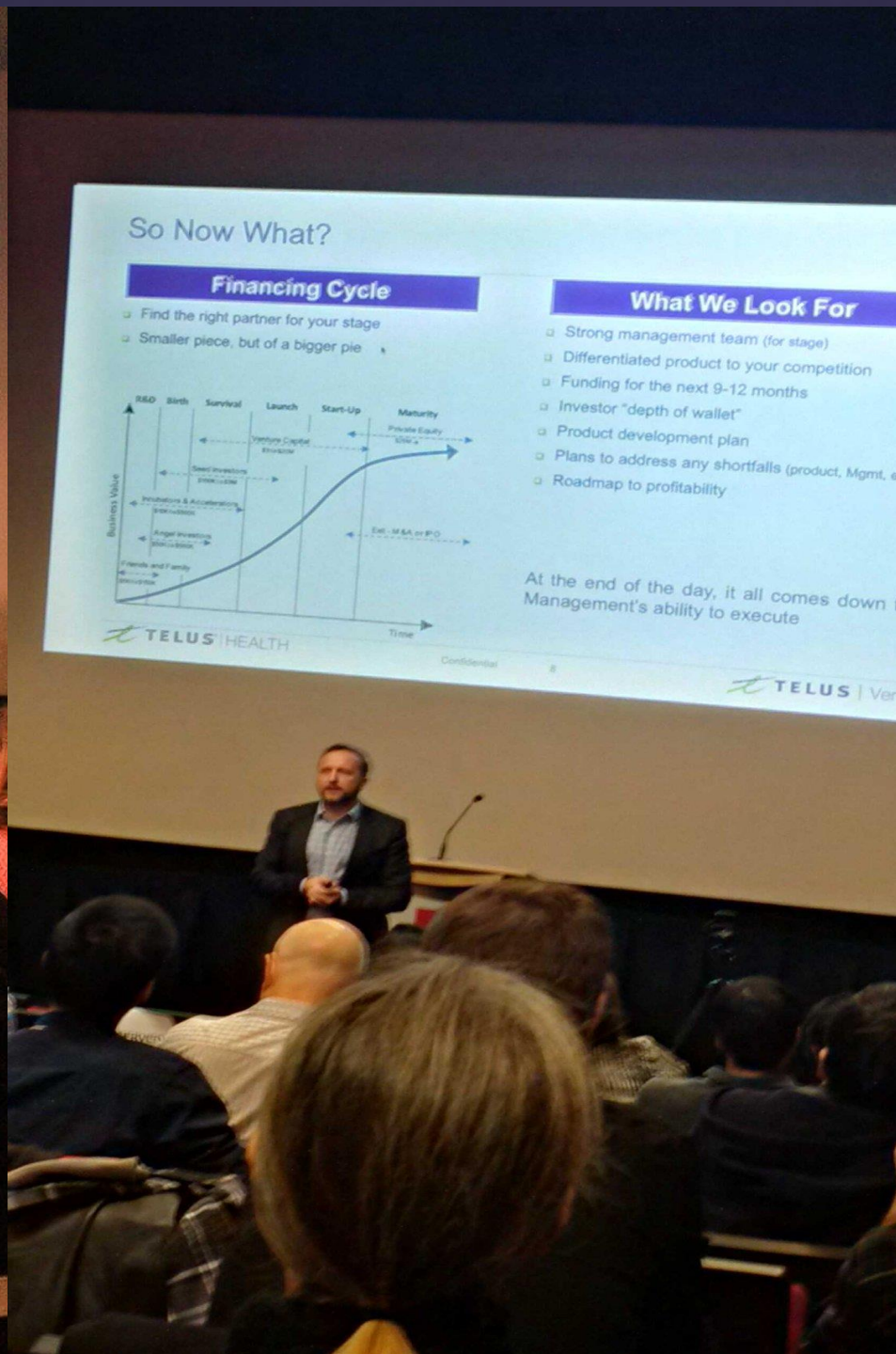
So Now What?
Financing Cycle
Find the right partner for your stage
Smaller piece, but of a bigger pie
R&D
Birth
Survival
Launch
Start-Up
Maturity
Business Value
Time
TELUS | HEALTH
What We Look For
Strong management team (for stage)
Differentiated product to your competition
Funding for the next 9-12 months
Investor "depth of wallet"
Product development plan
Plans to address any shortfalls (product, Mgmt,
Roadmap to profitability
At the end of the day, it all comes down
Management's ability to execute
Confidential
TELUS

Fraser Health Hackathon
Awards

Prize Package A: Innovation Boulevard: Health Tech Innovation Foundation (IB:HTIF) Prize Package

- *$700 Cash prize*
- *Two tickets to the BC Tech Summit in March 2017*
- *Professional Business and Financial Plan Review*

Prize Package B: TELUS Prize Package

- *$1500 Cash prize from TELUS Health*
- *a 49-inch HD TV*
- *opportunity to spend up to a full day with TELUS' Chief Dreamer for a "dream workshop" utilizing TELUS Garden Innovation space*
- *opportunity to further develop the prize winner's ideas with key TELUS Venture thought leaders (up to 2 one hour sessions)*

X-Factor Prize Package

- *Dinner with Fraser Health's President and CEO, Michael Marchbank*

Fraser Health Hackathon
Awards

Additional Surprize Prize

Additional teams are being considered for an opportunity to collaborate further with Fraser Health and the Innovation Boulevard Health Tech Innovation Foundation.

A 16-20 week incubator period will allow teams to engage with clinical and operational leadership to refine a solution before presenting it to Fraser Health's executive team.

Fraser Health Hackathon

Innovation Boulevard

Health Tech Innovation Foundation Prize

Fraser Health Hackathon
Telus Prize

Fraser Health Hackathon
X-Factor Prize

Fraser Health Hackathon
16-20 week engagement Prize

- Winning Teams to be determined
- Engagement Agreement to be developed (Legal)
- Collaboration with Innovation Boulevard
- Fraser Health Operational team to be determined

Fraser Health Hackathon

Steering Committee

- Dr. Victoria Lee
- Philip Barker
- Kevin Hare
- Cindy Convey
- Eduardo Garza
- Karen Reutlinger
- Jacqueline Blackwell
- Diane Wild
- Julie Makranyi
- Holly Bliss Lewis
- Geoffrey Ramler
- Robin Suprun
- Tiffany Chui
- Dr. Daniel Schwartz
- Dale Min

- Mark Masongsong (UL)
- Arvinder Sing Kang (UL)
- Arun Dawit (UL)

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