Welcome to the panel:

Citizen-centric Digital Services

Moderator
Marike Hettinga, Windesheim University of Applied Sciences, the Netherlands
Panel on 2 conferences:

**ICDS 2017**
The Eleventh International Conference on Digital Society and eGovernments

**eTELEMED 2017**
The Ninth International Conference on eHealth, Telemedicine, and Social Medicine
Research Group IT Innovations in Health Care

Smart & Connected Health

eHealth & business implementation

eHealth & health care practice
Panelists

Michael Green, Canada Health Infoway, Canada
Seung Hee Lee, University of Tsukuba, Japan
Britt Östlund, Royal Institute of Technology, Sweden
Lasse Berntzen, University College of Southeast, Norway
Panel: Citizen-centric Digital Services

eTELEMED 2017
Nice, France
March 20, 2017

Michael Green, President and CEO
@MGreenonHealth
Moving People from Patients to Partners in Managing their Health
How Can we Apply Consumer Innovation in Other Industries to Health Care?

A doctor in your pocket.
On-demand access to Canadian healthcare professionals by secure text and video.
Bending the Cost Curve by Shifting from Acute to Virtual Care

- **e-Request for prescription renewal**: 7% 22% 70%
- **Online access to medical records (e-view)**: 6% 20% 69%
- **e-Booking at regular point of care**: 7% 17% 67%
- **Consult with health care provider online (e-visit)**: 7% 14% 55%

- Blue: % of Canadians who can access, 2014
- Red: % of Canadians who can access, 2016
- Yellow: % of Canadians who can't currently access but would like to, 2016
THANK YOU!
SeungHee Lee is Associate Professor and Group Leader of the Kansei (Affective Engineering) Design and Interactive Laboratory at the Graduate School of Comprehensive Human Sciences of the University of Tsukuba. She has started to research on Kansei Science since 1996 and after her PhD in Tsukuba, she has experienced researching and publications on Kansei at TUDelft and TU/e in the Netherlands. “Pleasure with Products”, published in 2002 by Taylor & Francis was the first reviewed paper on Kansei in Europe. She integrate her research with Brain Sciences to find “Creative Experiences in the Brain” since 2004.
What is Kansei?

Kansei Communication

External Stimuli

Information

Kansei

Emotion Feeling

Image

Creativity

Human

Knowledge

Chisei

Logics

Word

Communication

S.H. Lee (1998 in Tsukuba)
KID’S FRIENDLY DESIGN

- Children would be **willing to wear** the device themselves.
- The device should **not obstruct** children’s activities.
- The **lighter, the better**.
- The **camera** on the device can take **accurate views** of what a child is seeing while events happened.
- The device should be **fit closely** to the child’s body to properly detect acceleration of the child’s movement.
Self Driving Car

Relax mode vs. Alert mode
Interior Installation to improve positive Emotion

Emotion detecting experiment using physical data such as sweat, heart rates, brain waves...

Excitement わくわく感
Proper tension 程よい緊張感
Comfortable 安心感
Etc. など
Interactive Mobility for Accessibility

Beautiful Attitude, Easy Access, Comfortable Stay and Gentle Care for all
Practical Design Development in Kansei
Her recent researches focus on the design development of industrial products and IT, ICT wearable devices for **Children’s security** using Kansei approach concerning social relations. She recently manages design development of **Auto Drive mobility** of barrier free in 2020 Tokyo Olympic games.
Citizen Centric Digital Services

Panel on eTelemed IARIA 2017

Britt Östlund
Royal Institute of Technology, KTH & Swedish Red Cross University College, SRCUC, Sweden
Being CyBorgs from reparations with artificial technology, implantat, exoskeletons and monitoring with sensors and selfmanaging tools:

- How will this affect relations between patients and health care professionals?
- Will we communicate with patient data or with patients?
- Will patients invite us into their lives?
- What about the meaning of an extended life?
From Innovation Research we learn that:
Requirements for successful innovation processes correspond very well with the experiences of older populations!

- High demands and complex problems that offer resistance
- Critical attitudes combined with long experience
- Patience

2. How can we apply consumer innovation in other industries to health care?
3. Bending the cost curve by shifting from acute to virtual care.

Probably true, but how to evaluate efficiency in virtual care?

It requires, among other things, that we apply and further develop concepts and methods that help us understand technology and users in context, outside controlled environments, labs and hospitals.
Panel (ICDS/eTELEMED 2017, Nice, France)
Citizen-Centric Digital Services
Lasse Berntzen
What is Citizen-Centric?

• Involving citizens in all stages of product/service/process development
Citizen-Centric Innovation

• Systematic collection of user input
• Collaboration, participation
• Users may be co-creators of the service
• Adding their wishes and expectations
• But also their competence

• Mindset
Lean Startup Methodology

- Eric Ries
- Startups as a learning process
- Based on Lean methodology
- Experiment and validate
Lean Startup

- Key point: Validated learning
- Startups exist to learn how to build a sustainable business
- Scientifically validated learning through frequent experiments where vision is tested
  - Minimum viable product (MVP)
- Build-Measure-Learn (feedback loop)
Citizen involvement
Requirement analysis and specification

1) Identify the users
2) Build scenarios with help from the users
3) Use cases – the things users will do..

• Interviews
• Focus groups
• Observation
• Mock-ups
Citizen involvement

Design

Users are consulted on all design aspects

- Mock-ups
- Prototypes
- “Proof of concept”
- Usability testing
- Accessibility testing

Requirement analysis and specification

Implementation and testing

Evaluation
Citizen involvement
Implementation and testing

- Testing product with real users
- Alpha/Beta releases

- User perception
- User behavior

Design

Requirement analysis and specification

Implementation and testing

Evaluation
Citizen involvement
Evaluation

- Requirement analysis and specification
- Implementation and testing

Frequently monitor the users and how they use the product.

Evaluation

- User feedback
- User surveys
- Interviews
- Analysis of use
Questions

• What I showed you is a process
• But what else is needed?