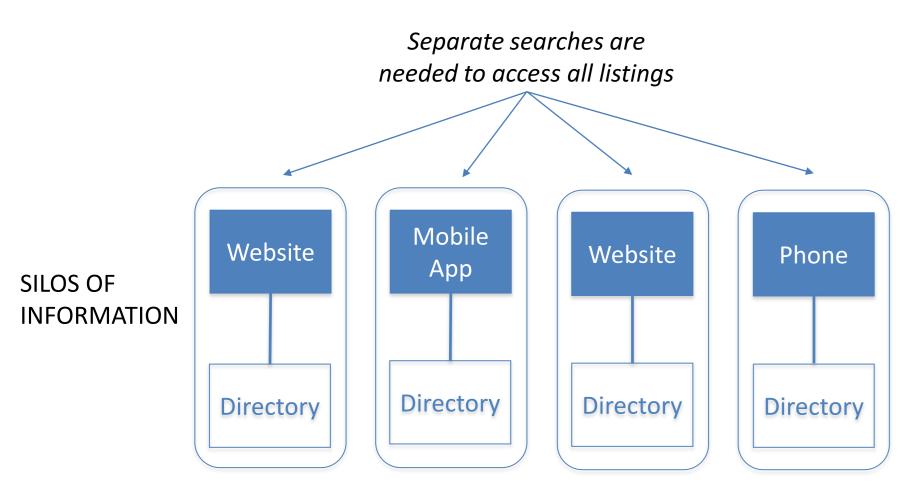


Health eConcierge: Improving Accessibility of Health and Social Services for Seniors Rossini Y.K. Yue<sup>1,2</sup>, Jacqueline L. Bender<sup>1,3,4</sup>, Mat Trudel<sup>1</sup>, Thiruvengadam Radhakrishnan<sup>5</sup>, Ashita Mohapatra<sup>1</sup>, Alejandro R. Jadad<sup>1,2,3,4</sup> <sup>1</sup> Centre for Global eHealth Innovation, University Health Network, <sup>2</sup> Institute of Health Policy Management and Evaluation, University of Toronto, <sup>3</sup> Dalla Lana School of Public Health, University of Toronto, <sup>4</sup> ELLICSR Health, Wellness and Cancer Survivorship Centre, University Health Network, <sup>5</sup> Department of Computer Science and Software Engineering, Concordia University

## Challenge

- When seniors are confronted with a health issue, it is often difficult for them and their families to find information about appropriate health and social services that could help.
- Community agencies spend significant resources to create and maintain service directories for their regions. However, it is a challenge to keep them comprehensive and up-to-date, and to publicize them effectively so that people are aware that such resources exist.
- Efforts are duplicated as each agency attempts to compile similar lists of health and social services.



#### **Figure 1: Current Health Service Information Structure**

# Objective

- To improve accessibility of health and social service information for seniors and their caregivers
- To reduce the time and effort needed for service organizations to update and maintain their service information
- To enable all service organizations, big or small, to have a platform to publish information to a wide audience as well as access the same pool of service information

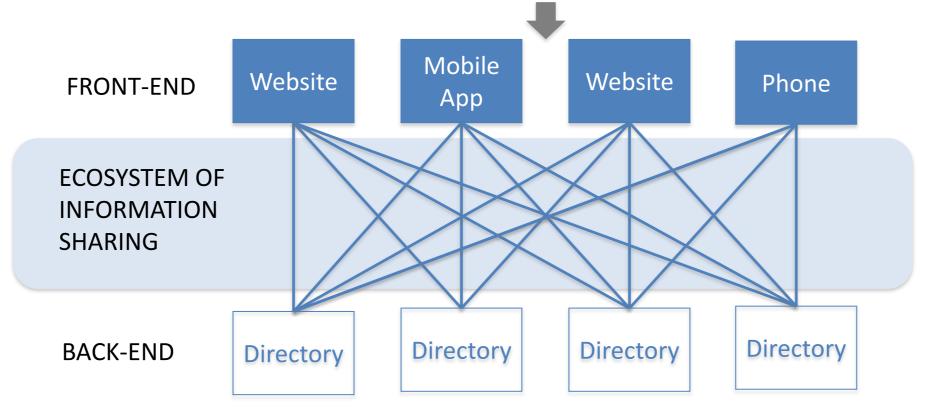
## Approach

### Health eConcierge Ecosystem

- Build data standards to connect, update and search data across multiple service databases
- Utilize open source data standards and tools from the World Wide Web Consortium (W3C) so that it is accessible to all
- Create a solution that allows any number of front-ends (e.g. websites) connect to any number of back-ends (e.g. service) databases)

Figure 2: Proposed Health Service Information Structure (Health eConcierge)

A search draws on listings from all databases in the network



### **Proof of Concept Development and Testing Process**

 Collaborate with community organizations to connect local databases to the Health eConcierge ecosystem

• Interview seniors, family caregivers and health professionals to determine their health service information needs and search preferences

• Using a user-centered design approach, iteratively develop and test a website that enables seniors and their caregivers to easily search for and connect to health and social services.

Figure 3: User-Centered Design process for front-end web-interface Semi-structured Interviews

Participatory Design Workshop

Prototyping

Iterative User Testing

## Results

- Our proof-of-concept end-to-end solution has successfully demonstrated that:
  - Multiple databases can be connected to the Health eConcierge
  - Service organizations find it easy to add and update their service information in the system
  - Seniors and their caregivers like the website, can easily use it to search for relevant services and would recommend it to their friends

**Figure 4: Front-end website** 

If this is a medical emergency, please CALL 911 immediately. This website is not

ear toronto

Read more about us; see the answers to our frequently asked questions; or view of

**Figure 5: Back-end administrator website** 

Service Catalogue heck out some serv Sign Up Login »

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The Health eConcierge addresses inequity by proposing a collaborative ecosystem that breaks down silos of information in the health system, provides a simple and economical solution for organizations to promote their services online, and improves the accessibility of health service information for seniors and their caregivers.

Significance

# Acknowledgements

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