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# Urban Telehealth – Making it Work

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# Preamble: Remote and Local Telehealth Videoconferencing

- Canada – Well developed Telehealth Programs for rural and remote locations
- Local (Urban) Telehealth comparatively under developed
- Underserved urban populations



<http://www.map-of-canada.org/canada-map-742.jpg>

# Presentation Overview

Definition of Urban Telehealth

Geographical and Hospital Settings

Examples of Urban Telehealth Initiatives

High Patient Volume Initiatives

Benefits of Urban Telehealth



# Presentation Objectives

- Understanding the term 'Urban Telehealth'
- Awareness of opportunities for Urban Telehealth usage
- Appreciation of the benefits of Urban Telehealth
- Encourage experimentation in the use of Urban Telehealth



# Urban Telehealth

The use of videoconferencing technology for the synchronous delivery of healthcare and clinical information within a community



# Hospital and Geographical Settings for Urban Telehealth Initiatives



# University Health Network (UHN)



**Toronto General  
Hospital (TGH)**



**Toronto Western  
Hospital (TWH)**



**Princess Margaret  
Cancer Centre (PMH)**



**Toronto  
Rehabilitation  
(multi-site)**



# UHN Strategic Directions 2016: Global Impact – Local Accountability

*Establishing the Research  
Hospital of the Future*

Strategic Directions



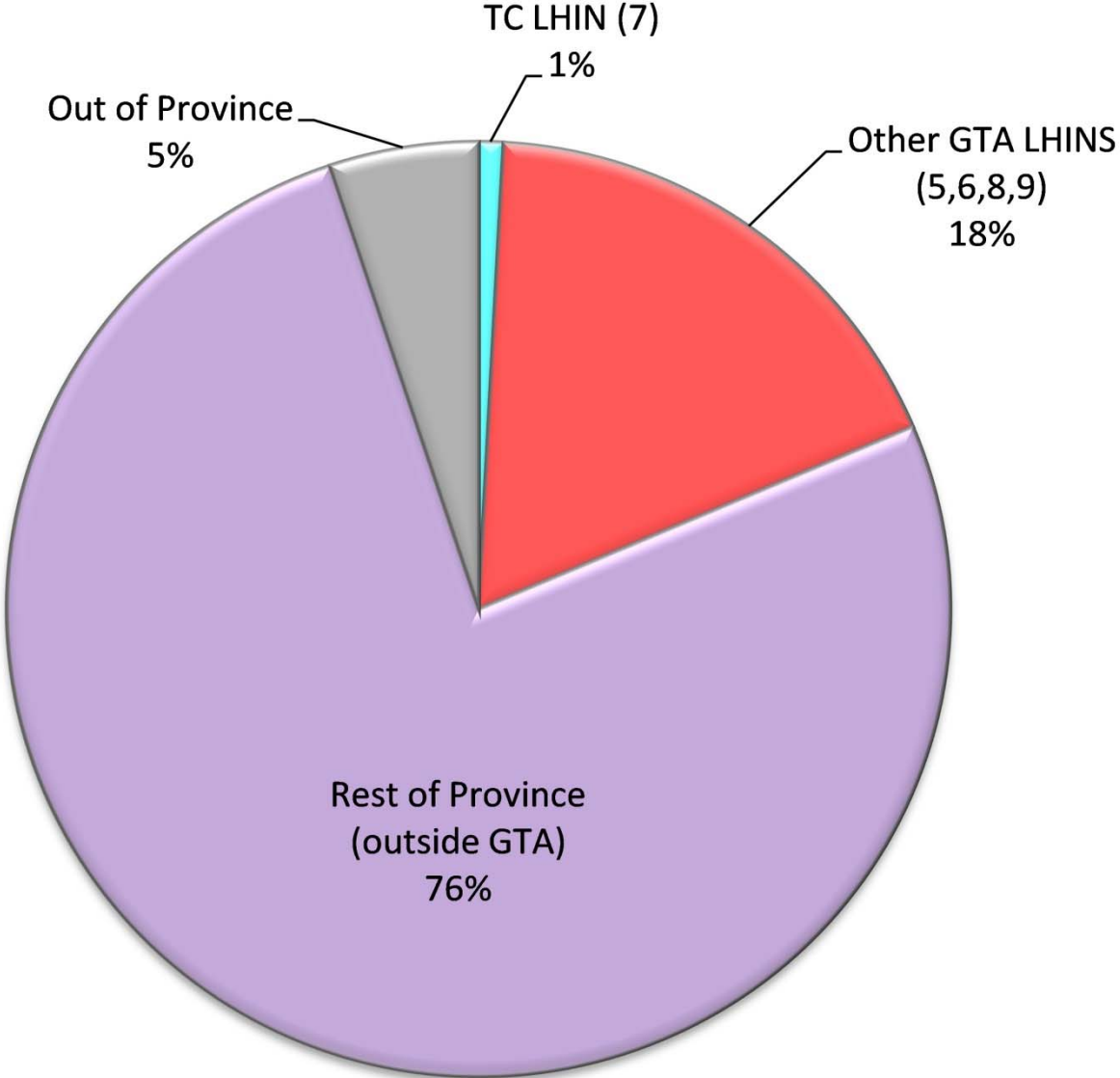
Toronto General  
Toronto Western  
Princess Margaret  
Toronto Rehab

# The Greater Toronto Area (GTA)



[https://www.ic.gc.ca/eic/site/smt-gst.nsf/vwimages/6094-img1.jpg/\\$file/6094-img1.jpg](https://www.ic.gc.ca/eic/site/smt-gst.nsf/vwimages/6094-img1.jpg/$file/6094-img1.jpg)

# Telehealth Videoconference Site Patient Origin\*



\*Based on videoconference site patient attended/ FY 2014-15 Clinical Telehealth Consultations

# Urban Telehealth Initiatives



# Hepatology

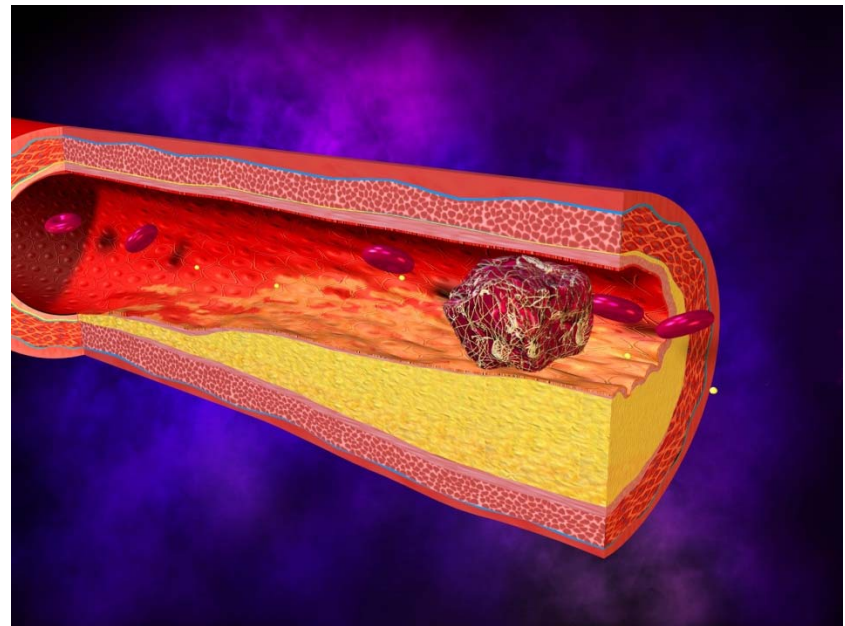
- Post Liver Transplant
- Toronto General Hospital (TGH)  
– St. John's Rehab. Hospital (SJRH)
- 4 – 6 Week Stay
- Typically Weekly Follow Up
- Diagnostic tests done at SJRH
- Cost savings (ambulance) and more rehabilitation time



<http://www.utmedicalgroup.com/Medicine/Hepatology/>

# Thrombosis

- Anticoagulation – Deep Venous Thrombosis
- TGH – Various GTA Hospitals
- Typically one time appointments
- Saves transport costs, facilitates education and mentoring



[http://2.bp.blogspot.com/-sH\\_VNBZv65k/UQ1Do6KWOkI/AAAAAAAAASA/aPuESr\\_ossig/s1600/thrombosis.jpg](http://2.bp.blogspot.com/-sH_VNBZv65k/UQ1Do6KWOkI/AAAAAAAAASA/aPuESr_ossig/s1600/thrombosis.jpg)

# Surgery – Pre-Admission

- Anticoagulant management – Reversal
- TGH – TWH Surgical Pre-Admission Unit
- One time appointments (NP)
- Diagnostic Tests done at TWH
- Saves intra-UHN transportation, reduces fatigue and pain



# Electrophysiology

- Pacemaker management
- TGH – Womens' College Hospital ICD Clinic (NP led)
- Unscheduled
- Testing done at WCH
- Increases physician efficiency by reducing their travel between hospitals



<http://www.amc.edu/patient/services/cardiology/electrophysiology/images/heart-ekg.jpg>



# Toronto CCAC

- Homebound Patients
- UHN – Home (RN using laptop)
- Initial consultation and follow-up appointments.
- Diagnostic tests arranged by Toronto CCAC RN
- Provides expert care for patients with severely restricted access to hospital
- Saves \$\$



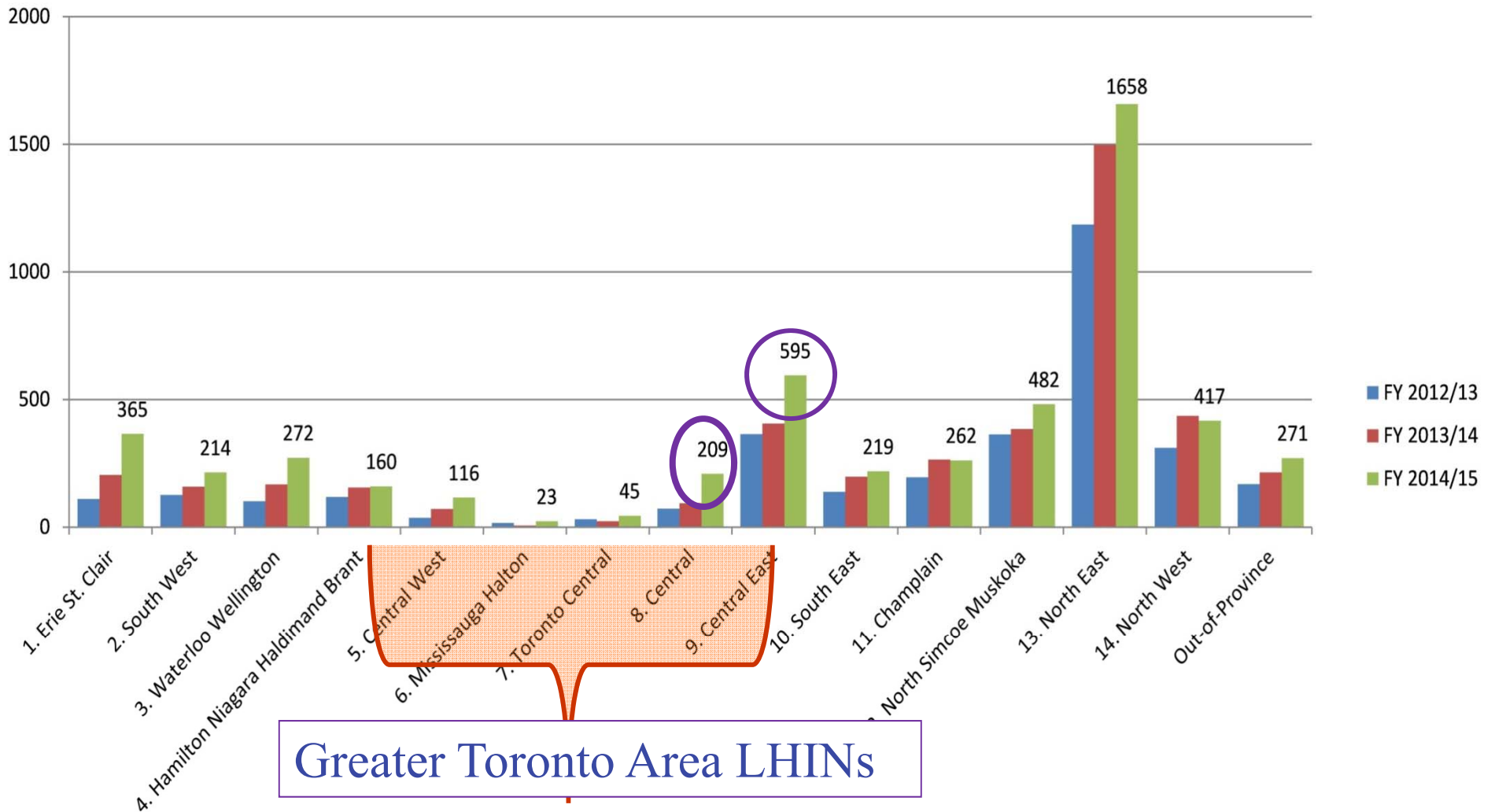
**CCAC**  
Community  
Care Access  
Centre

**CASC**  
Centre d'accès  
aux soins  
communautaires

# High Patient Volume Clinics



# Clinical Telehealth Consultations at UHN by LHIN\*



\*LHIN shown is based on the location of the videoconference facility endpoint (non-UHN)



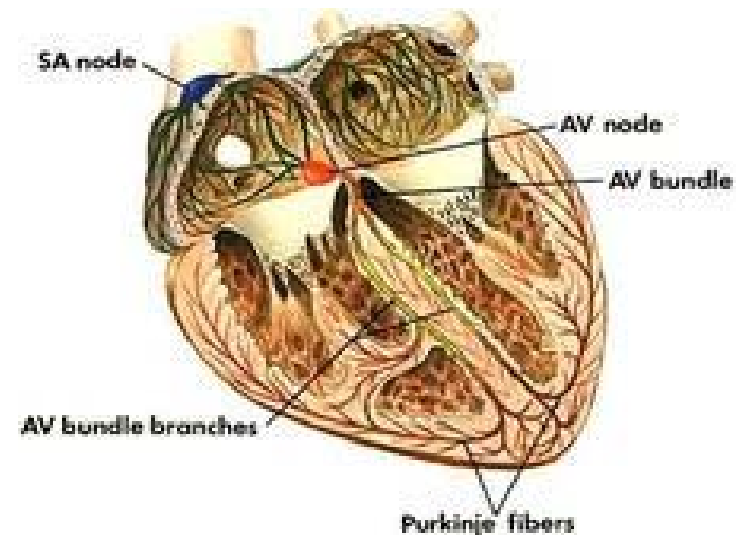
# Psychiatry

- Cognitive Behavioural Therapy
- Weekly Appointments
- Well Established relationship with clinic staff
- Self-Scheduling
- Patients reluctant to travel due to anxiety disorder



# Cardiology

- Pacemaker clinic
- Bi-weekly appts.
- Well established relationship with clinic
- Self-scheduling
- Reduced MD travel time
- Increased # patients



# Summary:

## Benefits of Urban Telehealth

- Inequitable access to healthcare is not solely dependent upon geography
- Support for underserved populations within cities
  - Homebound become virtually mobile
  - Ambulance reliant
    - Reduces costs for client and healthcare system
    - Reduces patient inconvenience and fatigue
- Physician Efficiency
  - Reduced MD travel time for appointments
  - More time for patient consultations



Thank you for your attention

