The Virtual Ward

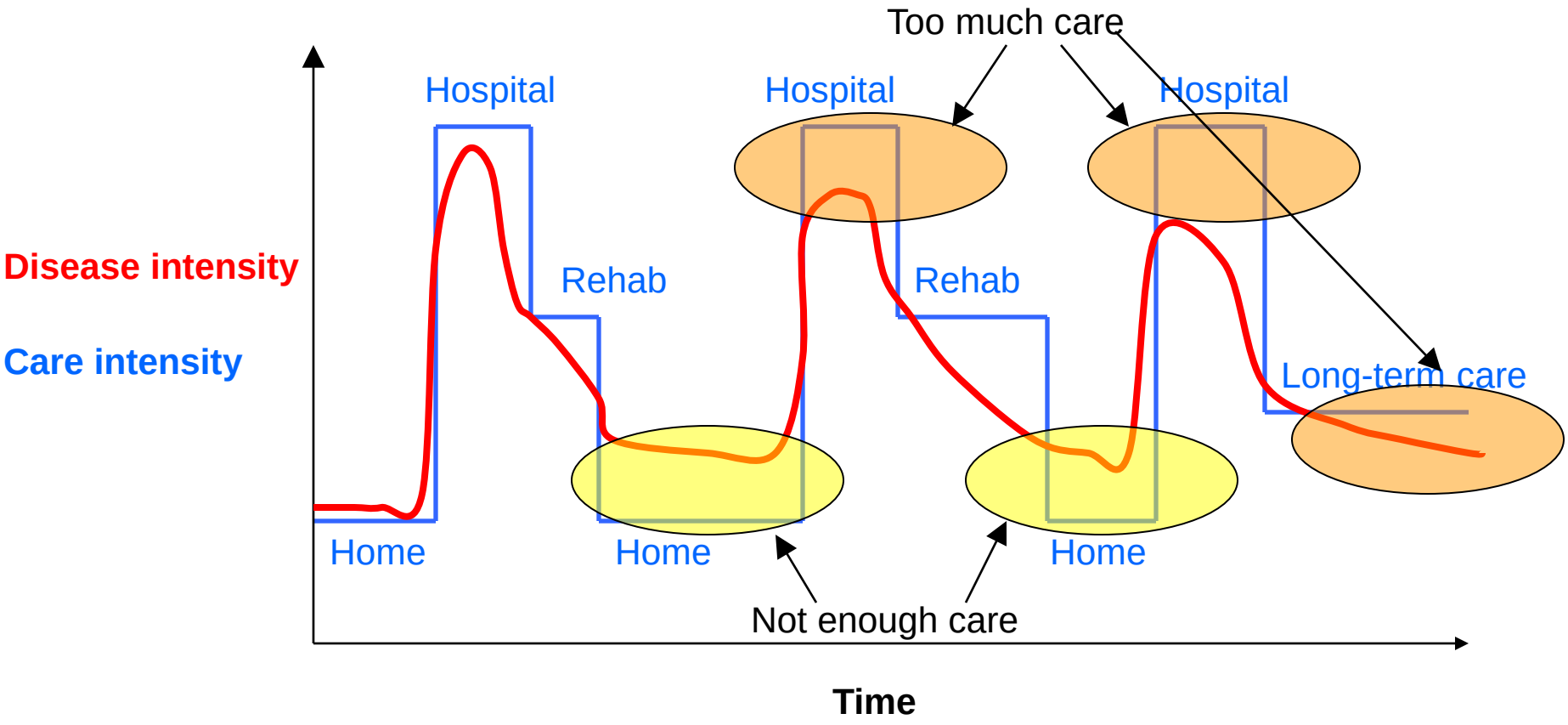
An Integrated Care Model for Hospital-to-Home Transitions for Adults with Complex Health Care Needs

A partnership between acute, community and primary care providers

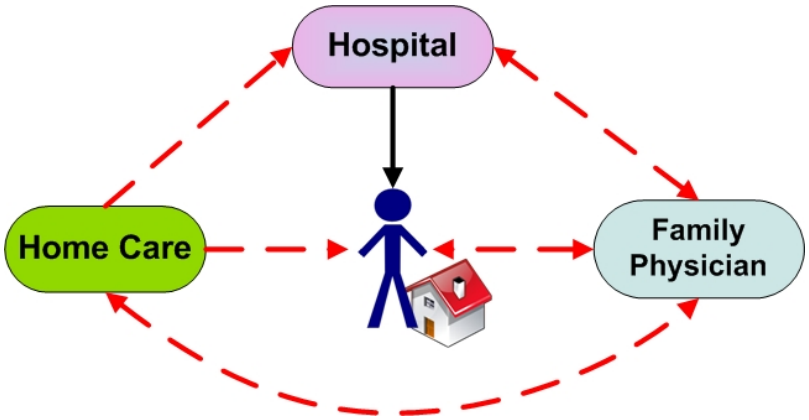
The scale of the problem

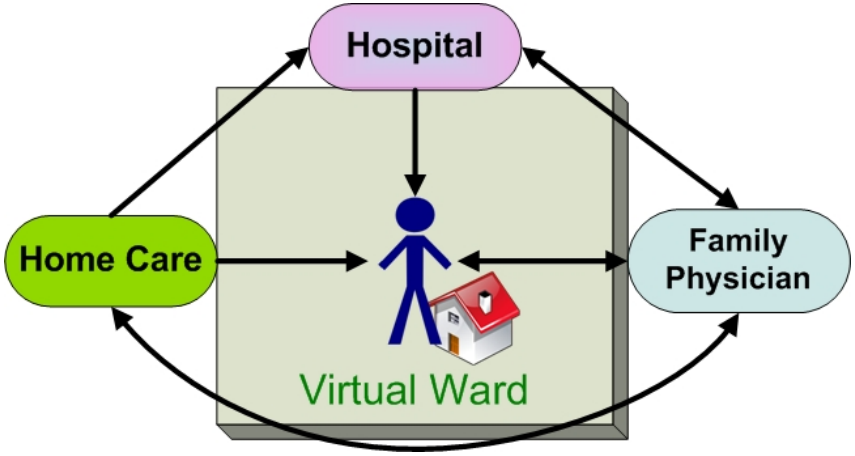
- 26 000 adult medical admissions in Toronto Central LHIN each year
  - 30 day readmission rate is 13% = 3270 readmissions
  - 90 day readmission rate is 21% = 5440 readmissions
- Average readmission costs ~$11000 in hospital costs alone
- Total cost of readmissions to hospital within 90 days
  - Approximately $60 000 000 in Toronto Central LHIN alone
- If we could reduce readmissions by 50%
  - Cost savings of $30 000 000 in TC LHIN alone
- If we could reduce readmissions by 25%
  - Cost savings of $15 000 000 in TC LHIN alone

Why focus on care after discharge?



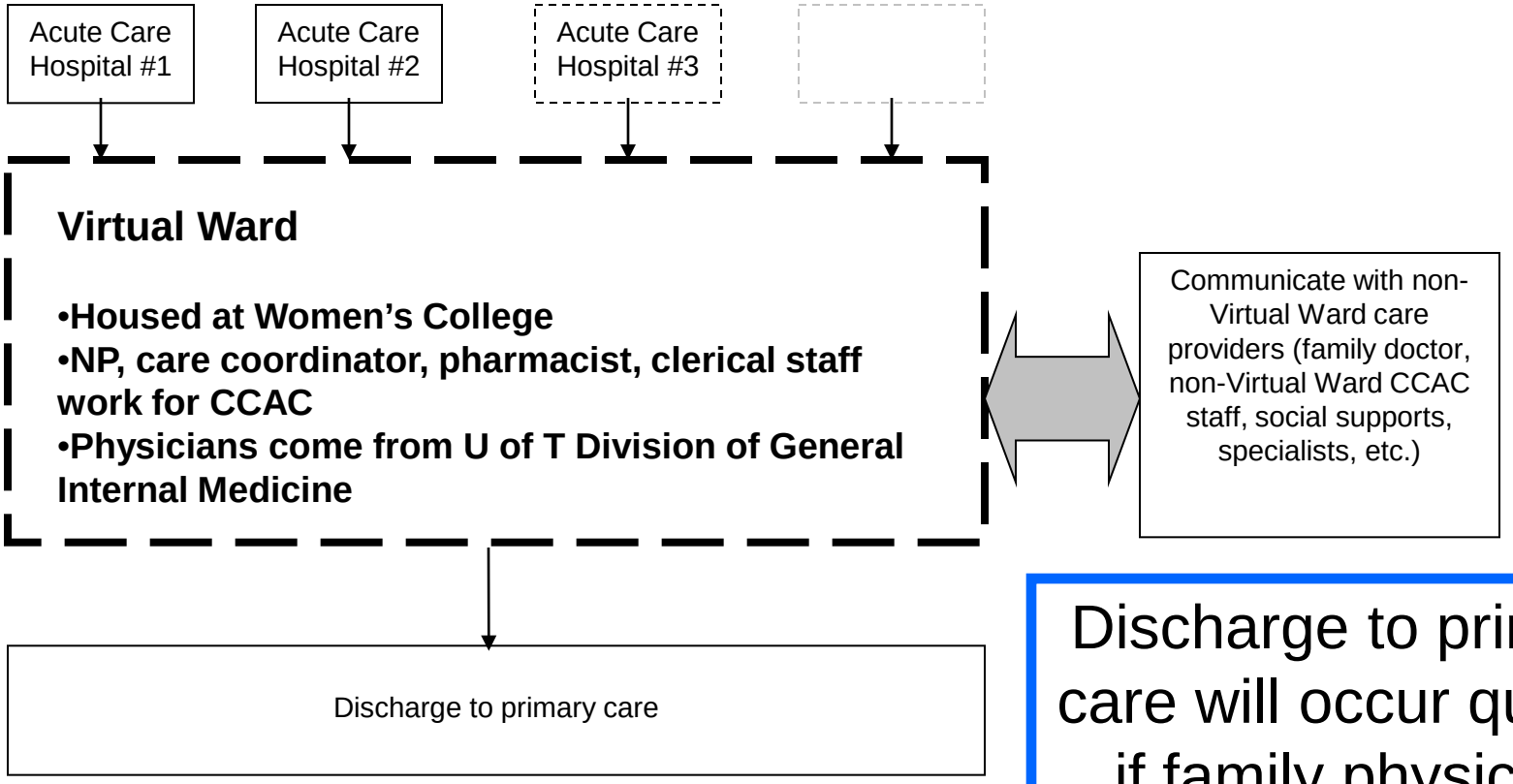
The Virtual Ward model





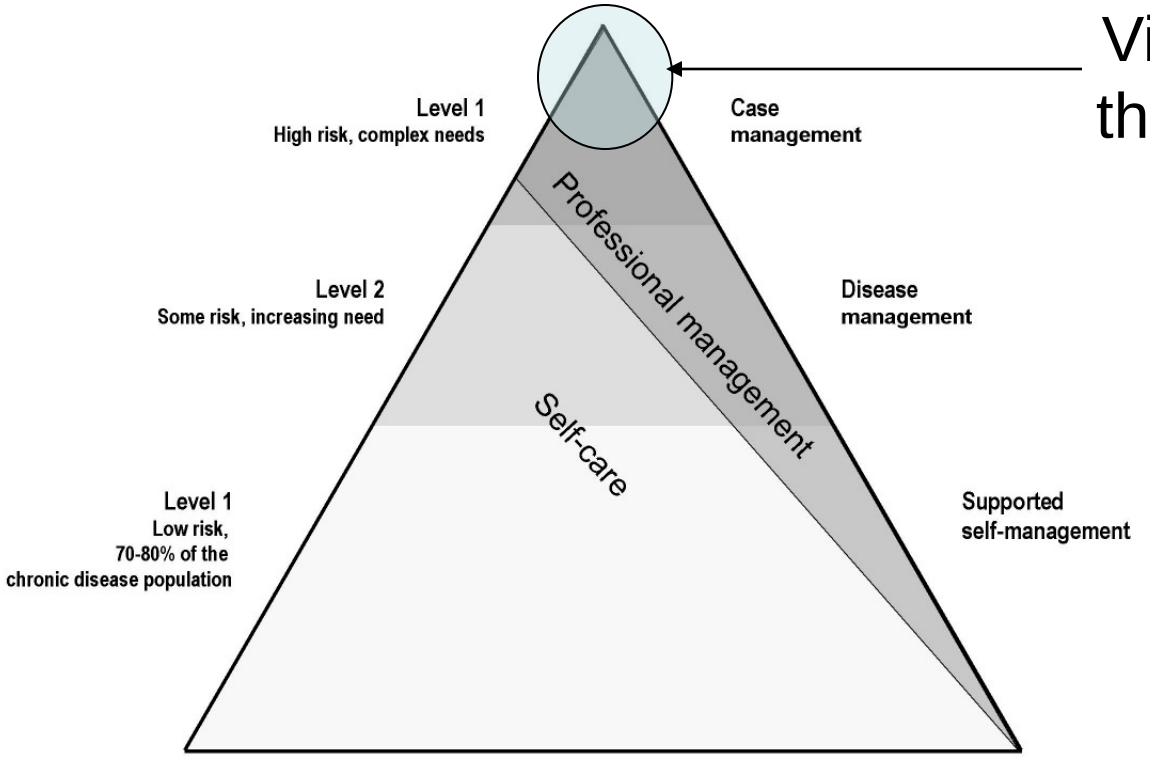
- Interdisciplinary team (including a VW physician)
- Family physician involved throughout
- Daily rounds to discuss patients
- Care coordination
- Shared notes
- Single point of contact with 24/7 physician availability

The Virtual Ward model



Discharge to primary care will occur quickly if family physician keen to assume care

Chronic care pyramid



Virtual ward focuses on the highest-risk patients

Readmission risk

- Can be predicted at the time of discharge using the LACE index (van Walraven et al, CMAJ 2010)
- 1/3 of TC LHIN discharges have a predicted 90 day readmission of 32%
- Virtual ward will focus on these high-risk patients

Why focus on care after discharge?

- Lots of “low-hanging fruit”
  - Communication could be strengthened
  - Collaboration could be improved
  - Medications could be reconciled
  - Patients could be monitored more closely
  - Social supports could be increased or tailored
  - Patients could be educated about how to manage their health problems
  - Very few places to seek urgent (but not emergent) post-discharge care→patients end up back in ER

Benefits of a Virtual Ward

- **Reduced ED use and therefore ED wait times**
- **Increased ability to "age at home"→reduced LTC use (and fewer ALC days)**
- Improved patient outcomes
- Fewer patients "falling through the cracks"
- **Increased support for primary care providers**
- Platform for interdisciplinary education

- **Cost saving→cost of readmissions likely to exceed cost of running a virtual ward**

- **Opportunity to test a model for integrating multiple sectors/organizations**

How will family doctors be involved?

- Discussion with family physician
  - on Day 1 of admission
  - as needed/desired during Virtual Ward admission

- Discharge plan from Virtual Ward created by VW team and family physician

Evaluation

- **Researchers from ICES, Li Ka Shing Knowledge Institute and Women's College Research Institute working collaboratively**
- **Primary evaluation will focus on readmissions**
  - **Final results in 2 years**
- **Additional evaluations will focus on**
  - **Provider/patient perspectives (qualitative)**
  - **Process/utilization tracking**
  - **Quality improvement**
  - **Economic evaluation**

Acknowledgements

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