

## COVID Project

Minutes for Monday, August 17, 2020 - 10 AM - 11 AM PDT via Microsoft Teams Meeting

**Present:** John Braun, Patrick Brown, Maggie Ma, Kaitlyn Hobbs, Ngan Lyle (Minutes), Shahrukh Alvi

### Agenda

- Review CANSSI proposal
- Spatial modeling of LTC data presented (Maggie & Patrick)

### Meeting Notes

#### *Review CANSSI proposal*

##### 1 — Statistics Canada involvement

- Collaboration with Bruno St-Aubin
  - PhD student at Advanced Real Time Simulation Laboratory at Carleton University
  - <https://arslab.sce.carleton.ca/index.php/covid-19-publications/>
  - Interest in modeling the spread of disease with cellular automata models based on GIS data (Zhong and the Hoya models)
  - Working mostly at the DA (dissemination area) and CSD (census subdivision) level
  - Team of comp. sci. and comp. sys. with interest in expanding the models to better use GIS data based on defensible spatial statistics
- Other possible collaborators at Statistics Canada?
  - Need to report back to Statistics Canada

##### 2 — CANSSI goals

- Expand statistical analyses of ON data (spatial models)
- Create a database for BC
- A national scale analysis

#### *Modeling of ON LTC homes data presented (Maggie & Patrick)*

- Focus is on the LTC homes analysis
- Zero inflated poisson model
  - Spatial sd is very small, independent variation is large
- Binomial model (outbreak vs no outbreak)
  - There is a spatial effect e.g. Toronto Ottawa have high likelihood of having an outbreak and Hamilton and Kingston not

### Action Items

- Revisit the collaboration with Statistics Canada (Ngan).
- Finalize the LTC homes data for ON (UBCO team)
- Complete and finalize the LTC homes data for BC (UBCO team)
  - Manual review of geodata for the BC LTC homes (KT and Shahrukh)
  - Send final BC dataset to Maggie by the end of the week
- Maggie and Patrick to share the ON spatial analysis so that UBCO team can better understand and verify

### Next Meeting:

- **Meeting Tuesday Aug 18, 2020 10am PDT/1pm EDT** with Bruno, Ngan and John
- **Meeting Thursday Aug 27, 2020 1230pm PDT/330pm EDT** team meeting
  - Discuss first draft paper