ACUTE CARE ENHANCED SURVEILLANCE (ACES) ADVISORY COUNCIL

MEETING MINUTES

Date: October 27, 2014   **Location:** Teleconference & Adobe Connect   **Start Time:** 1:00 pm
Chair: Dr. Kieran Moore   **Recorder:** Laura Paivalainen   **End Time:** 2:00 pm

Present: Dr. Paul Belanger, Dr. Michael Finkelstein, Cameron McDermaid, Dr. Brian Schwartz, Michael Whelan, Dr. Jaelyn Caudle, Melissa Helferty, Michael Spinks

Regrets: Dr. Howard Ovens, Clint Shingler

Guests: Adam van Dijk, Allan Varrette, Brian Mosley, Laura Paivalainen

1.0 Welcome and Introductions

- K. Moore welcomed the Council members to the first ACES Advisory Council meeting.
- Guests from KFL&A Public Health who would be presenting later in the meeting were introduced to the Council:
    - A. van Dijk, Epidemiologist
    - A. Varrette, Informatics Supervisor
    - B. Mosley, GIS Analyst
    - L. Paivalainen, Research Assistant

2.0 Approval of Agenda

- Agenda was approved

3.0 Approval of Terms of Reference

- K. Moore briefly went over the Terms of Reference that were circulated prior to the meeting.
- Concerns or comments could be e-mailed to him sometime before the next meeting – at which point they can be discussed.

4.0 Updates (presentation by KFL&A Public Health)

4.1 Update on status of ACES participants

- A. Varrette and L. Paivalainen presented on the progress of ACES with respect to current coverage, IT implementation, and status of the data sharing agreements with new participants.
- There are currently 101 hospitals sending live data to ACES, covering 24 health units.

- The system captures 12 000 visits and 3 000 admissions daily.
- M. Finkelstein asked how this coverage compared to all hospital visits throughout the province.
  - K. Moore responded that there are around 150 hospitals in the province with 17,000 to 20,000 visits a day (according to ICES). It was clarified that although the overall goal is to connect all hospitals in Ontario onto ACES, our current target is to connect all hospitals in the 2015 Pan Am & Parapan American Games (P/PAG) footprint.
- Council members were informed that a new data sharing agreement (DSA) has recently been drafted by legal counsel for KFL&A Public Health in conjunction with legal counsel for the City of Toronto, along with feedback from multiple partners.
- Currently, 14 hospitals are in the process of connecting to ACES, 5 additional hospitals have signed the DSA and are waiting final execution from their local public health unit, and 8 other hospitals have been approached with the DSA and are still reviewing it.
- Older versions of the DSA with existing partners are also in the process of being updated.

4.2   Epidemiological improvements to ACES

- A. van Dijk and P. Belanger presented on the epidemiological improvements to the ACES system.
- A. van Dijk outlined that the new ACES system has an expanded syndrome list (80 vs. 7) and better drill down capabilities (e.g. more intuitive graphing, multiple lines of data being graphed, built-in standard deviation and moving average calculations, new cross tab features, and the ability to create your own syndromes).
- Council members were also informed about the ILI Mapper – a provincial initiative that gives users up-to-date information throughout the influenza season.
- P. Belanger outlined the spatial and temporal improvements to the system, including new geographies for mapping and reporting (i.e. Forward Sortation Area, Census Division, and Census Subdivision).
- M. Spinks asked whether using LHIN as a unit of geography was considered.
  - P. Belanger responded that it hadn't been thoroughly discussed but this could be put on the work list for the next phase of deliverables.
  - A. van Dijk mentioned that part of the reason for not including this level of geography was because LHIN and health unit boundaries don't overlap.
  - The issue can be discussed further offline.
- It was also presented that new system anomaly detection methods will enable detection of visits when they are trending towards aberrant volumes (and not just waiting until an alert is triggered) and that monitoring will be in real-time.
- C. McDermaid asked about aberration detection at other levels of geography, as there will be many more alerts at smaller levels of geography.
  - P. Belanger responded that experimentation with different levels of geography within health unit boundaries could be a future project.
- M. Spinks cautioned about using postal code geography.

4.3   Technical improvements to ACES

- A. Varrette presented on the technical improvements to the ACES system.
- The system now has an improved, redesigned infrastructure that improves uptime reliability, scalability and performance.
- Examples of improvements include: a new interface engine, fully redundant architecture, redundant power options, backup generator and automatic switchover, data encryption at all points in the system, and online remote offsite backups.
- ACES now also includes automated collection of admissions data, and collects more data elements from ED visits (e.g. arrival by EMS and admission to intensive care).
- New role-based authentication will enable hospitals to use their own hospital data.
- C. McDermaid asked about hospital usability of ACES.
    - A. van Dijk responded that this still needs to be determined and that the Council will be useful to provide guidance about this moving forward – especially for the P/PAG.
    - C. McDermaid followed-up asking whether there are timelines for when hospitals will be able to use their own data.
    - There is no exact date set yet – it depends on staffing and testing.
- M. Spinks asked if it is only acute care hospitals on the system, to which KFL&A Public Health responded yes.

4.4   Pan Am & Parapan American Games (P/PAG)

- B. Mosley presented on the use of ACES during the upcoming 2015 P/PAG to monitor communicable and non-communicable threats.
- Maps and information were presented on the P/PAG event locations, and coverage of ACES with hospitals in this region.
- Almost all hospitals in the P/PAG footprint are either already participating in ACES or are in the process of joining.
- B. Mosley also presented on PHIMS – another project at KFL&A Public Health that can be used in collaboration with ACES.
- PHIMS uses real-time environmental and demographic data to create maps that enable visualization and analysis of the data as it relates to geographic locations.
- PHIMS will also be used during the P/PAG to monitor environment conditions such as heat and air quality.
- M. Finkelstein asked if PHIMS can also monitor conditions like wind speed and direction.
    - B. Mosley responded that it can, along with humidity, cloud cover etc. The data collected is in real-time and PHIMS can also show forecasted data.
- M. Spinks enquired as to why material deprivation information is included in PHIMS.
    - K. Moore responded that this information is useful in times of emergency to assist emergency response efforts and predict evacuations zones by outlining where vulnerable populations are concentrated.

4.5   Knowledge translation activities

- L. Paivalainen presented on recent knowledge translation activities for ACES.
- The KFL&A Public Health Informatics website is a platform used to provide updates, post important documents, and provide an updated list of participating hospitals.
- A brochure is in the process of being made that describes ACES and outlines examples of how it has been used.
- The ACES team makes efforts to present about ACES at conferences and meetings whenever possible. Several recent examples were provided.
- We have submitted a proposal to conduct a workshop on ACES at the 2015 TOPHC, and are also considering hosting another conference/workshop in 2015 prior to the P/PAG.
- K. Moore mentioned that PHAC (in conjunction with PHO and the Emergency Management Branch of the MOHLTC) will be hosting a series of webinars on surveillance for epidemiologists and would like ACES to get involved.
    o M. Helferty mentioned that she is attending a meeting about this soon and can bring it up at the meeting.
    o B. Schwartz also mentioned that this could also be included in the similar 2-day event in February.

4.6   Demo

- A. van Dijk gave a demo using screenshots for ACES, demonstrating some of the improvements to the system.
- A Council member asked a question about historical data referring to how much information this includes, and how this works with the new syndromes.
    o A. van Dijk responded that the data can go as far back as the health unit has been on the system, and that the data includes both the previous RODS data and the 2014 data.
- Another question was asked about the syndrome descriptions from the list provided to members prior to the meeting, which was followed up with an enquiry about whether syndromes were being validated – internally or otherwise.
    o It was discussed that the syndrome descriptions are correct and are based off of the Canadian Emergency Department Information Systems (CEDIS) descriptions.
    o Syndromes are internally validated using the gold standard for specific syndromes. We will prioritize which syndromes to validate and re-validate as new hospitals join.
    o It was suggested that there be validation with Emergency Department Information System (EDIS) CEDIS list vs. chief complaint free-text.
    o This was considered a good idea that will be looked into by KFL&A Public Health staff.
    o It was brought forward by KFL&A Public Health that there has been recent discussions with a francophone hospital (Montfort) about adding French syndromes. Here, we will start with the top 7-8 syndromes.

- M. Finkelstein asked whether individual health units could be separated into sub-regions (i.e. neighbourhood) that can be saved, as certain subdivisions are too small, but the whole city is too large.
  - K. Moore responded that we can look into getting more specific geographies.
- C. McDermaid enquired about aberration detection and asked how the user will understand and separate true aberrations from false alarms.
  - A. van Dijk responded that part of it is users gaining experience using ACES with their own data. We still have to go through and make sure that the thresholds are correct, but there will also need to be some level of local understanding (knowledge of what is typical in their region).
  - It was discussed that seasonal comparisons are also very beneficial.

5.0   Discussion Items

- Most of the discussion topics were brought up and discussed throughout the meeting/presentation.
- K. Moore mentioned that we have funding from Queen's to host a meeting/conference/workshop for ACES with a tentative date of March 2015. This way, even if our TOPHC proposal for a workshop on ACES does not get accepted, we will have an opportunity to inform and teach users about ACES prior to the P/PAG.
- M. Helferty invited A. van Dijk to present at the meeting of local public health unit communicable disease managers in November, and will get in touch with A. van Dijk directly about this.
- M. Finkelstein mentioned that a demo of ACES with the heath units that will be affected by the P/PAG prior to the event would be valuable.
- K. Moore mentioned that the plan during the P/PAG is to have Public Health and Preventative Medicine residents available to the health units in the P/PAG region for daily reports and that reports will also be shared with PHO, MOHLTC, and others necessary stakeholders.
- K. Moore encouraged members to bring forward any potential opportunities for knowledge translation.
- Members were asked to e-mail K. Moore if there is any feedback on today's meeting and how it was organized.
- K. Moore will make a call for agenda items a month before the next meeting

Next Meeting: April 2015

Chair signature: _____

Recorder signature: _____