ACUTE CARE ENHANCED SURVEILLANCE (ACES) ADVISORY COUNCIL

MEETING MINUTES

Date: 2017-05-11	**Location:** Teleconference	**Start Time:** 10:00am
Chair: Dr. Kieran Moore	**Recorder:** Lara Gardner	**End Time:** 11:00am

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Present: Dr. Kieran Moore, Dr. Paul Belanger, Dr. Michael Finkelstein, Dr. Howard Ovens, Dr. Brian Schwartz, Clint Shingler, Don McGuiness, Melissa Helferty

Regrets: Lara Segan

Guests: Adam van Dijk, Allan Varrette, Derek Battams, Lara Gardner

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1. Recruitment and Membership Updates

1.1. L. Gardner and K. Moore provide recruitment updates, noting that 19 new facilities have joined the system in the past fiscal year. Of these, 11 are part of the London Health Sciences Centre, alleviating a previous coverage gap in the southwest. Also of note is the joining of the Weeneebayko Area Health authority, K. Moore notes that monitoring their data for mental health and substance abuse are particularly important for that region.

1.2. M. Helferty updates the group on efforts underway by the MOHLTC towards recruiting all outstanding hospitals. A letter has been sent by the EDMs requesting that hospitals contact K. Moore and P. Belanger to implement ACES. M. Helferty adds that Dirk Huyer, Ontario's Chief Coroner, has also been advocating to outstanding hospitals to join the system.

1.3. A. van Dijk provides updates on the 143 active users, and 7 training sessions attended by 42 new users during this fiscal year. He also notes that as per the ACES audit policy, routine purges of inactive users continue to occur. Amongst these purges are often hospital level users, who are thought to find the most value in the public-facing products such as ILI Mapper and Surge Monitor. Further investigation is merited.

2. Infrastructure Changes and Improvements

2.1. A van Dijk notes the following changes that were made in the past fiscal year:

- Self-registration page for new users.
- Removal of 6/12 original alerting algorithms that are now redundant.
- Option for users to graph admission data by elective vs. emergent.
- Moving average feature now allows for customizations.

- Epicurves can now render up to 5 different syndromes on the same graph.
- Email alert function based on user defined keywords.
- Smaller items (hospital layer added to amps, improving error/warning messages, removal of old EDSS classifier, x-axis bug when graphing 90+ days).

2.2. Finally, A. van Dijk shares plans to turn ACES user manual into an html file for ease of updating. This work is currently underway and will be completed shortly.

3. Auditing Programme

3.1. P. Belanger refreshes group on the impetus and follow-through by the KFL&A ACES team with regards to the requirements identified in last year's audit. There are two modes of accessing the data within ACES, the first is as an end user. A. Varrette speaks to what is monitored by the team at KFL&A about end-user access:

- date, time, and time zone of event
- event type
- originating IP address/originating hostname
- authorization credentials
- requests made
- results returned

Techniques used to detect suspicious activity are:

- reverse geocoding of IPs
- multiple password attempt failures
- access from multiple IP addresses
- access metrics, attempted access of non-existent pages (DOS, Robots, etc.)
- utilization metrics

3.2. A. Varrette describes the second mode of access, which is internally by project staff. The ACES leadership team now employs the following measures to monitor access of ACES at the back end by its project staff:

- Generating access control reports to see which staff have access to which features, and whether that access is still timely with their prescribed duties towards the application.
- All queries (read, write, and execute) are logged on to a 3rd party application with tamper proof protection (APEX SQL Audit).
- Data is reviewed monthly for anomalies.
- An auditing hierarchy is in place whereby the Supervisor reviews all project team records, the Director audits the Supervisor, and the (A)MOH audits the Director.

4. Demonstration of Opiate and Surge Monitors

4.1. A. van Dijk demonstrates the Surge Monitor first. In summary, the tool gives users a synopsis of ED visits for Ontario hospitals in the last hour and 24-hour period, broken down by CTAS score, age cohort, and if available, EMS arrival mode. Surge max for each hour is calculated using the

previous year's data for every day, at that hour. The current hour is then colour coded based on that surge max to indicate how close each hospital is to reaching their historical max. There is also functionality to see hospitals by LHIN, see graphs for a specific hospital or for all hospitals in a LHIN or PHU by CTAS and surge status over the last 24 hours.

K. Moore notes that it would be helpful to have emergency medicine experts review the tool to see whether it can be improved. C. Shingler was pleased with the product, and would be happy to contribute feedback in a more formal setting in the future.

4.2. A. van Dijk demonstrates the opiate monitor, which uses data from both ACES and NACRS ICD 10 codes (dating back to 2010) to monitor emergency departments for incidence of opiate intoxication. This product has not yet been shared publicly. A. van Dijk notes that the dashboard is presented in much the same way as the surge monitor, however it is worth selecting data per year instead of the default of all time, because as different hospitals have come online at different times, it can create a false impression of comparison. K. Moore adds that it will be helpful to have discharge diagnosis at some point so we can validate the triage classification. Improvements to the real-time triage complaints coming into ACES would also go a long way towards improving data quality for ACES. A briefing note is being drafted to eventually share with every hospital in an effort to help improve the accuracy of the ACES opiate records.

5. Other/Closing Remarks

5.1. K. Moore notes that it is imperative to improve data quality for ACES, the opioid monitor, and other reporting mechanisms. H. Ovens adds that ECTAS will be in 111 sites by mid-2018, and that gathering the infection control screening data from this source will be an important consideration.

5.2. H. Ovens points out the need to have coordinated and consistent messaging across the health care continuum when communicating with coding groups and clinical teams.

5.3. M. Helferty speaks about the opioid Surveillance Working Group, which H. Ovens has been invited to attend to present some of the challenges of CIHI reporting.