New Electronic Observation Charts

Overview

The Clinical Excellence Commission (CEC) and eHealth NSW (EHNSW) have worked in close partnership with Cerner Corporation to develop electronic versions of the Standard Adult and Standard Paediatric General Observation (SAGO/SPOC) Charts for NSW public hospitals currently using the Cerner electronic medical record (eMR).

The paper SAGO and SPOC charts (Standard and Emergency Department versions) have been developed in the eMR via a customised Patient Summary ‘MPage’ in Cerner Millennium which provides a one page interactive view for each patient. The design incorporates adult and paediatric requirements.

The Between the Flags (BTF) Observation Chart page is a dynamic real-time view which enables us to view observations as trended graphs applicable to the patient’s age, against Coloured Zones:

- Rapid Response (red)
- Clinical Review (yellow), and
- Increase Observations (blue – paediatrics).

Some other data is represented in tables, as per the paper charts. The BTF Observation Chart can be found in the Menu (Table of Contents) within the electronic patient chart.

From the BTF Observation Chart, we can also enter observations and record Alterations to Calling Criteria, Variations to Frequency of Observations, Interventions/Comments, and Other Charts in Use. Also, Additional Criteria references and other Assessment forms can be opened up from the BTF Observation Chart page.
Rollout of the Electronic Observation Charts occurred at Northern NSW and Mid North Coast Local Health Districts in March 2013. During 2013 and 2014, rollout has also occurred at Southern NSW and Murrumbidgee Local Health Districts, Western NSW and Far West Local Health Districts, South Eastern Sydney and Illawarra Shoalhaven Local Health Districts, Northern Sydney and Central Coast Local Health Districts, and Western Sydney Local Health District.

The page is actively used in Emergency Departments via FirstNet, and is also available for use in Recovery Units via SurgiNet. The second phase of rollout will involve active use in Inpatient Wards via PowerChart, and this has commenced in late 2014 as part of the eMR2 state-wide project.

The roll out of the Electronic Observation Charts at other NSW Local Health Districts using the Cerner eMR has also completed, however implementation at some hospitals within these LHDs will be staggered at the discretion of the LHDs.

Watch or download a clip of clinicians talking about the automation of Between the Flags: http://vimeo.com/user19020418/review/70600926/3b3594eba4

High Level Requirements

The design was developed to meet the following baseline requirements:

- Exact replication of paper based graphs, including:
  - Airway / Breathing
  - Circulation
  - Disability
  - Temperature
- Direct links to enter Vital Signs and other nursing documentation (PowerForms, iView).
- Graphs, visual content and pop-up alerts will change according to the patient’s age and reference ranges.
- Alerting functionality based on the red, yellow and blue alerting criteria used in the SAGO and SPOC charts.
- Ability to enter new acceptable reference ranges specific to a patient’s condition. New reference ranges will also drive the alerting functionality.
- Ability to print the trended SAGO/SPOC chart for transfer purposes.

Other changes have been made in the eMR to support the BTF Observation Chart – including:

- Standardisation of vital signs Reference Ranges to match BTF values;
- Warning messages in iView when entering abnormal observations;
- Shortcut icon from the FirstNet Tracking Lists;
- An Event flag on the FirstNet Tracking Lists.