ViCTOR Fluid Balance Chart Project
Information for applicants

**Please read this before completing the Expression of Interest application form**

Background and Introduction

‘Fluid balance’ is a term used to describe the calculation ('balance') of the input compared to output of fluids into the body to allow metabolic processes to function correctly. Poor fluid management can lead to serious morbidities, with inadequate fluid documentation often a contributing factor to poor fluid management. In children, fluid balance is particularly important due to their lower circulating blood volume, however calculating a fluid balance in children can be difficult to quantify due to their communication abilities and toileting practices, yet a significant positive or negative fluid balance can have detrimental consequences.

In November 2015 recommendations were handed down by the Queensland coroner following the inquest into the death of a four year old girl as a result of the ingestion of a button battery. During the inquest it was identified that there was poor fluid documentation which contributed to a misunderstanding of the seriousness of the child’s condition. Recommendation 6 (point d) of this inquest, specified that all State Health Departments should undertake the following;

‘Re-design their 24 Hour Fluid Balance Charts and introduce protocols to ensure that it is clear where vomit and blood should be recorded, and to standardise the way in which loss of blood is described (in relation to volume, consistency and colour). The form should include the patient’s weight and a formula for calculating circulating volume. (This form re-design is a broader health issue, not just related to button battery ingestion)’

Currently Victoria does not have an agreed statewide paediatric fluid balance chart (FBC). There are a variety of FBCs being used for paediatric inpatients. Some of these are dedicated paediatric charts and some are adult fluid balance charts used in the paediatric settings.

In response to the coroner recommendations and with strong sector support, the Victorian Paediatric Clinical Network has engaged the Victorian Children’s Tool for Observation and Response (ViCTOR) team, Dr Annie Moulden (Medical Lead), Dr Sharon Kinney (Nursing Lead) and Ms Jen Sloane (Statewide Project Coordinator, ViCTOR) to develop and pilot a Statewide Paediatric FBC.

Benefits for participating health services

By participating in this project, health services will have the opportunity to:

- Provide direct knowledge, expertise and service capacity experience into the ViCTOR FBC development
- Contribute to a generic approach to for paediatric fluid documentation, orders and guidelines in Victoria
- Identify and build staff capability in best practice fluid documentation management
ViCTOR FBC project definition

For the purpose of this project, ‘paediatric’ is defined as any infant, child or adolescent in an inpatient ward, special care nursery, intensive care department, emergency department or recovery unit. The project will therefore target paediatric inpatients aged 0 – 18 years, excluding neonatal patients located in the birth suite and postnatal environment.

Project Aims & Objectives

The aim of the ViCTOR FBC project is to:
- Address Recommendation 6d of the Queensland Coronial findings into the death of Summer Alice STEER
- Provide a consistent and standardised approach to fluid orders, documentation and management for paediatric patients in Victoria.
- Provide guidelines when to be used and type of fluids required
- Build on existing Victorian, Interstate and International paediatric FBC charts
- Build on existing ViCTOR paper-chart design including, format and colours
- Be developed, piloted and evaluated in a range of inpatient services including regional and metropolitan
- Provide evaluation data to assess the impact of the fluid balance chart for useability and acceptability

Project scope

Inclusions

Trial of a paper based fluid balance chart for use in health services providing paediatric in-patient services.
- The trial will be applicable to any paediatric patient on an inpatient ward, special care nursery, intensive care unit, emergency department or recovery unit of the participating trial sites
- The trial may include any Victorian Health Service (public or private) who cares for paediatric patients.

Exclusions

- Neonatal patients located in the birth suite and postnatal environment.
- Services currently or imminently using electronic medical record (EMR)

Eligibility

Any Victorian Health Service (public or private) who cares for paediatric patients as defined in the ‘ViCTOR FBC project definition’

Participant site selection

Eight (8) sites will be selected based on the quality of the application, organisational support, readiness to participate in the pilot project, and the geographical distribution of participating including sites and wards /units identified to pilot. Applicants will be advised on the outcome of their application by Monday 14th August.
Project roles and responsibilities

The ViCTOR project team will:

- Work with participant health services to ensure overall project objectives are met
- Co-ordinate meetings, teleconferences and provide a point of contact for any concerns
- In consultation with the expert advisory group, develop a fluid balance chart or charts incorporating best available evidence, human factor elements and paper chart identification requirements
- Provide ViCTOR FBC for the duration of the project
- Provide education on how to use the charts
- Provide advice on data collection and evaluation requirements
- Share information, results and resources related to the project.

Selected pilot sites will be responsible for:

General responsibilities:

- Attendance at planning and development meetings at The Royal Children’s Hospital, Melbourne
- Attendance and participation in teleconferences as required
- Working on your organisation readiness to implement ViCTOR FBC
- Sharing relevant knowledge, expertise and materials with other pilot sites
- Regularly communicating with the Statewide Coordinator about project progress in order to keep the project on track

Project specific responsibilities:

1. Preparation and planning
   - Assemble a project team and identify up to two (2) local project champions
   - Support for the project champion(s) to attend project development meetings (release time, travel and accommodation if required)
   - Develop local project reporting lines and timetable within the pilot site organisation
   - Develop a range of communication mechanisms to ensure relevant clinicians and staff at your health service are aware, supportive and engaged in the project
   - Ensure appropriate reporting and process is followed at your health service to introduce the pilot charts e.g. liaising with Health Information Service and relevant forms committees

2. Undertaking the project
   - Introduce the chart within the specified project timelines
   - Develop a range of communication mechanisms to ensure relevant staff remain engaged in the project
   - With support of the project team facilitate hospital quality assurance and if required ethics approval for evaluation purposes (if required)
   - Complete all project feedback and reporting requirements
   - Assist in the coordination and participation of staff in on-site focus group meetings/workshops, chart audits and user surveys

3. At the end of the project period
   - Share results, tools and processes within your health service and with other Victorian health services of similar capacity
Project Evaluation

The ViCTOR team will work with the successful pilot sites to coordinate an evaluation including on-site focus groups, chart audits and user surveys which will inform changes to the final chart. This project is deemed a quality improvement project, however if ethics is required by an individual site, this will be supported by the ViCTOR Project team.

Proposed timeframes

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<th>Timeframe</th>
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<tr>
<td>July – August 2017</td>
<td>Phase 1: Planning/Engagement</td>
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<td>Process mapping, sector engagement, EOI released, sites selected</td>
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<td>August – October 2017</td>
<td>Phase 2: Chart Development</td>
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<td>Pilot chart established with pilot sites and EAG group, printer engaged, site-specific preparation undertaken</td>
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<td>October 2017 - March 2018</td>
<td>Phase 3: Pilot site implementation, evaluation and refinement (PDSA cycle x 2)</td>
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<td>Cycle 1: Chart implementation 4 sites, multi-method evaluation, feedback and changes to chart</td>
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<td>Cycle 2: Chart re-implementation to a total of 8 sites, 2nd multi-method evaluation, feedback and changes to chart ratified by pilot sites and expert working group.</td>
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<td>March – June 2018</td>
<td>Phase 4: Write up and finalisation</td>
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<td>• ViCTOR team to develop educational video, website and FBC implementation package</td>
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<td>• Charts ratified by ViCTOR Governance Group</td>
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<td>Post pilot completion</td>
<td>Phase 5: Integration</td>
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<td>Charts released to the greater Victorian Paediatric sector</td>
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How to apply

To apply to become a ViCTOR FBC pilot site, please complete the Expression of Interest application form and submit via email to Jen Sloane, Statewide Project Coordinator – ViCTOR. Please note that late applications will not be considered.

Applications close 5pm, Friday 11th August

Further information

Jen Sloane
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Phone: 93455214 or 0402843901