

Adverse Event Reporting Tool: How do Hospitals Improve Safety Through Comparative Analysis?

Background

The Center for Performance Sciences' (CPS) Adverse Event Reporting Tool (AER Tool) was developed to collect, via a systematic, scientific, and field-tested tool, key aspects of structures, processes and outcomes of care that have direct implications to safety of care and eventually, to accountability.

The AER Tool was built around evidence-based findings designed to report all incidents, particularly "near-miss" events that have the potential to occur repeatedly. The AER Tool is able to track and trend events based on high cost, high volume, high risk and/or whether it is an acknowledged problem-prone area. Additionally, the tool was designed to satisfy more than one organizational need, and, as the system continues to be used, improvements are made based on recommendations made by the users themselves.

The screenshot displays the AER Tool interface. At the top, there is a text box for 'Report Title' containing '2008 Incident Report'. Below this is a table for 'Grouping Order' with columns for 'Grouping Criteria', 'Sort Ascending', and 'Sort Descending'. The table lists three criteria: 'Location Name', 'Month reported', and 'Day occurred', each with a dropdown menu and radio buttons for sorting. Underneath is the 'Incident Selection Criteria' section, which includes a 'Facility' dropdown set to 'Facility 1', a 'Date Discovered' range from 'after 01/01/2008' to 'before 02/15/2008', an 'Incident Type' dropdown with options like 'Adverse Drug Reaction (ADR)', 'Assault', 'Blood Products related', and 'Burns', and a 'Subject Type' dropdown with options like 'Patient', 'Student/Faculty', 'Staff', and 'Physician'. A red text label 'Sample report request screen' is overlaid on the right side of the form.

As a global quality and safety improvement organization, CPS provides unique expertise in healthcare systems in 12 countries worldwide and the USA. The clinical, epidemiological, public health, and IT backgrounds of CPS' staff have assisted the Maryland Patient Safety Center (MPSC) and are responsible for the development of analytical tools for the MPSC as well as the conduct of all quantitative work, including database maintenance, data analysis, report generation, and research. The analytical and research strategies of the MPSC were among the attributes that earned it the NQF/JCAHO John Eisenberg Award in 2005.



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Product Overview

Primary Features and Benefits of the AER Tool

- ⇒ **Live database:** Event entries are reflected in the database immediately and updated in real-time as events are logged.
- ⇒ **Immediate, real-time notification of reports:** Automatic e-mail notification of reported events facilitates the need to meet legislated reporting requirements, strengthens awareness and utility of data, and permits responses to individual hospitals as necessary and appropriate.
- ⇒ **Real-time data management tools and reports:** Following event entries, users can run a variety of real-time data management reports. Reports can be run for any time frame, and events can be reviewed by department/unit, severity, specific type, month, etc., and can be exported into a CSV format.
- ⇒ **Real-time ability to evaluate adequacy and effectiveness of actions taken:** Action plan due dates can be assigned and progress can be monitored.
- ⇒ **Event analysis and drill-down:** Users can generate and measure data elements grouped by type, location, month, provider, staffing patterns, severity, etc. Additionally, data can be sorted by type, case ID, medical record number, etc.
- ⇒ **Comparative analyses:** Provides comparative analysis across facilities to demonstrate the extent and nature of specific events.
- ⇒ **Search events:** Search functions require only one parameter to locate a specific event, or to review all events of a specific type.
- ⇒ **Multiple department assignments:** The software allows for connecting events with multiple departments (i.e., Nursing, Pharmacy, Radiology, Laboratory, etc.) to be assigned roles and due dates in the development, implementation, and monitoring of an action plan.
- ⇒ **Easy to implement:** Web-based approach minimizes disruption to business and minimizes the need for IT/IS department involvement. Also allows for continuous update to reflect current state of knowledge, e.g. drug formulary, updated safety practices, etc.
- ⇒ **Custom development included in partnership:** Includes constant user re-evaluation resulting in improvements and updates addressed within a reasonable timeframe.

Primary Goals to be Achieved Using the AER Tool

- ⇒ **Collect uniform data:** Deploy a web-based, standardized approach to data collection across participating hospitals.
- ⇒ **Centralize data:** Access real-time data that is centralized and secure for all incidents with a high degree of specificity.
- ⇒ **Increase awareness:** Improve awareness across all hospitals as to the types of events reported.
- ⇒ **Identify opportunities:** Identify areas of common need for improving safer practices and tailoring programs, and make recommendations about better process models to all facilities.
- ⇒ **Feedback:** Provide positive reinforcement toward implementation of new or proven strategies for safer practices.
- ⇒ **Improve efficiency:** Management tools are designed to save time in monitoring and researching adverse events in real-time.

Product demonstration

For a free online demonstration of the Adverse Event Reporting Tool, please contact the Center for Performance Sciences by email at cpsinfo@mhaonline.org, by phone at +1.410.379.9540, or by fax at +1.410.379.9558.



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