

► **DynaBOARD™ DASHBOARD AND ACCOUNTABILITY ANALYSIS TOOLKIT** 1



► **MAKING PATIENT OUTCOMES MEANINGFUL THROUGH DATA** 2

○ October | ○ 2006

Dynawords

by **Emerald**
Health Information Systems Ltd.

Providing Client Focused Decision Support Solutions Today for Tomorrow's Healthcare Challenges

Emerald Launches Dynaboard™ Dashboard and Accountability Analysis Toolkit

More than ever, hospitals are being held accountable to deliver accessible, appropriate services, to meet agreed upon performance targets within available resources. In the province of Ontario, hospital performance is evaluated by the Ministry of Health in terms of:

- Financial Health – improving the fiscal health, efficiency and sustainability of the hospital;
- Organizational Health – ensuring a healthy workforce, maintaining a healthy workplace, promoting staff engagement and healthy productivity;
- Patient Access and Outcomes – increasing the efficiency and effectiveness of patient stay, reducing waiting times and ensuring access to intensive care services;
- System Coordination and Integration – increasing coordination among hospitals and connecting hospitals to other parts of the health system.

In response to this emerging trend, Emerald Health Information Systems Ltd. has released **Dynaboard™**, a Dashboard and Accountability Analysis Toolkit. **Dynaboard™** supports internal performance analysis for all hospitals and complies with the requirements of the Ontario Hospital Accountability Agreement (HAA).

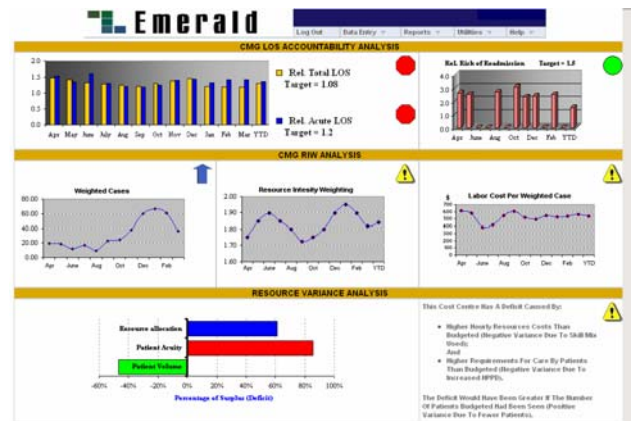
See the Performance Picture Instantly - Analyze Poor Performance Quickly

Emerald's **Dynaboard™** provides capacity to track results for externally mandated indicators such as "Total Margin" and "Risk of Readmission", as well as to create and track specific indicators of interest to organizations, such as "Length of Stay" and "Operational Efficiency". Indicators are graphically presented and trends identified. Interactive analysis makes problem discovery simple and allows proactive identification of opportunities for improvement.

Reduce Data Manipulation

Dynaboard's infrastructure houses the data required for analysis of performance indicators whether those data sources are externally defined (e.g., DAD and Trial Balance) or internally defined such as patient satisfaction or incident data.

The application warehouses data from multiple sources and makes it available for the calculation of indicators and analyses.



EMERALD WATCH

Booth 2009 - HealthAchieve 2006 OHA, November 6 & 7th, 2006, Toronto (Metro Toronto CC)
Booth 3842 - HiMSS07, Feb 25 - Mar 1st, 2007, New Orleans (Ernest N Morial Convention Center)
Booth TBD - e-Health 2007 COACH, May 27-30, 2007, Quebec, (Quebec Convention Center)

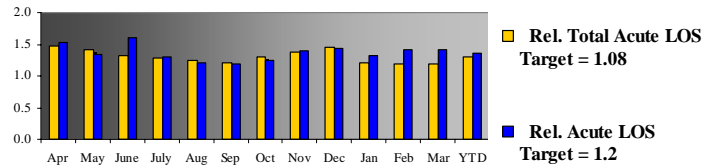
Emerald Launches Dynaboard™

(continued /2)

Users can follow a structured logic path to examine the root causes of problems, or use Wizards and data cubes to explore data relationships. For example, the embedded tools allow the user to determine if prolonged Length of Stay is a result of:

- One/several/all CMG's;
- One or more age groups; or
- One/several/all physicians;
- Increasing complexity of patients over time.
- Excess ALC usage;

Dynaboard analysis eliminates irrelevant data, focuses on current problems, and highlights meaningful trends.



Align all Levels of Management with Corporate Performance Targets

With Emeralds' **Dynaboard**, hospitals can now monitor departmental activities as they impact corporate performance, aligning stakeholders on organization wide objectives. Using **Dynaboard**, a Hospital can establish a corporate indicator (e.g., revenue to expense) and provide managers with departmental indicator targets (e.g., resource utilization) that link to the corporate target and boundaries for acceptable performance.

Hospitals driven by the need to meet performance targets and accountability agreement, or by a desire to become a leading benchmark facility, should consider Emerald's **Dynaboard** as their decision support tool.

Create Positive Patient Outcomes

Today's emphasis on patient outcomes creates enormous opportunities for the integration of data to produce value added information. Ontario hospitals will soon begin the collection of nurse sensitive outcome data in support of the Health Outcomes for Better Information and Care Project (HOBIC) ¹. In 2007, collection will be expanded to Allied Health areas.

The opportunity for improvements in patient outcomes can only be realized if clinicians have tools to analyze the large amounts of data generated. Emerald's **Dynaboard** Dashboard and Analysis Toolkit is structured to support this type of analysis easily. St. Peter's Hospital (Hamilton), in conjunction with Emerald Health Information Systems Ltd., evaluated the relationships between the occurrence of decubitus ulcers and the consumption of nursing, occupational therapy and physiotherapy resources (2005). The study used MDS assessment data and workload from *Dynamine*™². The outcomes study can be downloaded from www.emeraldhis.com.

Linking data sources and data analysis of large amounts of data is easy using tools such as **Dynaboard**, allowing clinicians to:

- Question, test and quantify the linkages between clinical interventions provided to patients (and their frequency) and patient outcomes.
- Share data analysis with other similar organizations to determine facility specific differences and/or confirm consistency of results across clinical settings.

Importance of Understanding the Impact of Staffing Decisions on Clinical Outcomes

Outcome as an indicator has the power to effect positive change only when effectively linked to the inputs and outputs that create the outcome. Worked Hours (input) and workload (output), linked to other data (such as provider and facility characteristics), can provide outcomes with contextual meaning powered to drive change in healthcare policy and delivery.

In the study cited on our web site, the outcome showed that the overall costs of preventing ulcers are less than the costs of treating patients with existing ulcers. However, prevention required a specific set of nursing and allied health skills and interventions. Being able to easily conduct operational performance analysis on all outcomes will allow hospitals/Ministries of Health determine the right balance of resources for effective use of health care budgets.

Welcome to the Emerald Team!

Soldiers' Memorial Hospital (Orillia)
St. Joseph Health Centre (Guelph)

Congratulations to:
North York General Hospital on your
Dyna-versary!

¹ For detailed information refer to the HOBIC web site at http://www.health.gov.on.ca/english/providers/project/nursing/nursing_mn.html

² *Dynamine* is a trademark of Emerald Health Information Systems Ltd. and refers to their Workload Decision Support Module.