Capturing and Using Data from Quality Improvement

University of Texas MD Anderson Cancer Center
Margaret Bell, DNP, MPH, RN, CMPE
Susan McBride PhD, RN-BC, CPHIMS
713-745-1201
mabell@mdanderson.org

Aim
Identify components (factors) associated with quality improvement projects within a large healthcare system. Utilize prior quality improvement projects to inform the design of a data repository strategy that enables easy retrieval and use of data.

Design & Rationale: This retrospective analysis identified two important characteristics:
1. Common characteristics and patterns within the retrospective projects to inform strategies for the design of data structures.
2. Data points to store in metadata (detailed structured and unstructured data fields).

Solution
Technology Solution
Defining specific and unique metadata (data that describes other data) enables the aggregation, query and analysis of large datasets. Metadata which links the data elements enables traceability because the original data can be identified (de Lusignan, 2005; de Lusignan, 2011; van Vlymen & de Lusignan, 2005).

Imagine a journey to a new world with .... ........................a powerful tool in your arsenal.
• Utilizing the data mart to manage all quality projects
• Accessing a tool to allocate resources
• Ability to focus on specific areas of improvement

Workflow Design
Strategy & Design Phase Complete
We can “improve outcomes for patients through data collection and analysis, designing and implementing service improvement strategies, and then reevaluating the quality of the care” (Selman & Harding, 2010, p. 8).

Data Sample:
Quality Improvement Project Database: n = 1,878

References

Why capture data from quality improvement projects?
Data from quality projects can be leveraged to improve care across a hospital or system:
- Minimize data loss
- Confirm previous findings
- Reduce time
- Decrease repetition
- Decrease variability
- Increase efficiency and effectiveness
- Explore projects with similar aims

Data mart would enable others to:
- Build on successful methods
- Improve return on investment (ROI) for quality improvement
- Use common language or taxonomy
- Leads to standardization
- Reduces variability, decreased cost
- Leads to sustainable care improvements
- Advances the science of quality improvement
- Provide leadership with information impacting decisions on deployment of resources
- Set appropriate priorities
- Supports evidence-based practice

Imagine a journey to a new world with .... ........................a powerful tool in your arsenal.
• Utilizing the data mart to manage all quality projects
• Accessing a tool to allocate resources
• Ability to focus on specific areas of improvement

Workflow Design
Strategy & Design Phase Complete
We can “improve outcomes for patients through data collection and analysis, designing and implementing service improvement strategies, and then reevaluating the quality of the care” (Selman & Harding, 2010, p. 8).

Data Sample:
Quality Improvement Project Database: n = 1,878