Dashboards and Audit Tools for Quality Management and Performance Improvement

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OBJECTIVES

- Discuss Quality dashboards as auditing and Reporting Methods for Quality Management

- Provide examples of Administrative/Operational and Clinical Dashboards in different size transplant organizations

- Discuss Auditing and Reporting Methods for Quality Management though use of Dashboards.
Questions

- What is a Dashboard? What should it display? How do I use it? Why Now?

- What are common Issues – Survey results

- How do other centers use Dashboards?

- What are Core measures for transplant programs? – What’s going on?
Why Dashboards

- Government and other regulatory reporting requirements – *Show me the Data*

- Payer and Accreditation organization requests for information and Standards compliance – *Show me the data*

- Report to High level Administrative boards *Show me the data*

- *Monitoring patient safety and quality of the care we provide our patients. WOW*
Why Dashboards? Why Now?

“Driving for Quality in Acute Care: A Board of Directors Dashboard” Government-Industry Roundtable

On November 10, 2008, the Office of Inspector General (OIG) of the U.S. Department of Health and Human Services and the Health Care Compliance Association (HCCA) cosponsored government-industry roundtable called Driving for Quality in Acute Care

Dashboards were recommended as means to assess and oversee an organization’s performance based on quality of care metrics.
DOGBERT CONSULTS

YOU NEED A DASHBOARD APPLICATION TO TRACK YOUR KEY METRICS.

THAT WAY YOU'LL HAVE MORE DATA TO IGNORE WHEN YOU MAKE YOUR DECISIONS BASED ON COMPANY POLITICS.

WILL THE DATA BE ACCURATE?

OKAY, LET'S PRETEND THAT MATTERS.
What is a dashboard?

- A Dashboard is designed to display data, be intuitive and simple — expanding data access from highly trained data analysts to the casual user.

- Insight from the dashboard is used to determine program viability, identify areas for improvement, make changes, and reallocate resources if necessary.

- Goals are to track data, improve operational and clinical performance and promote accountability and transparency.
Risk Governance Dashboard

Number of Meetings

A few loads

Weight of Risk Reports

Audit Overkill

Well, that's all right then.
Dashboard basics for Quality

- Determine *Key objectives* or areas for display

- Develop *Key performance indicators/measures* for areas related to structure, process and outcomes.

- Select *best practice benchmarks* externally and or internally.

- Develop *scorecard*, monitor/audit overtime.

- Use *Quality management principles* to identify areas which require “Closer look” exceed or below benchmark. Focus on High risk High volume indicators.

- Use Quality Management principles of *process mapping and step analysis* to develop an improvement plan or document acceptable outcome
1. Do you utilize a dashboard for monitoring key performance indicators

2. Are you:
an administrator/
quality specialist/
department manager/
Other
3. What is the volume of transplants performed annually at your center?

- 15.8% of respondents reported 0-100 transplants annually.
- 26.3% reported 100-200.
- 28.9% reported 200-300.
- 23.7% reported 300-400.
- 5.3% reported greater than 400.

4. Do you use a quality dashboard for reporting during quality meetings?

- 66.7% use a quality dashboard quarterly.
- 22.2% use a quality dashboard monthly.
- 13.9% use a quality dashboard annually.
- 5.6% use a quality dashboard other than monthly, quarterly, or annually.
5. Describe your dashboard focus

![Dashboard Focus Chart]

- Clinical: 40.5%
- Administrative/operational: 8.1%
- Combined: 67.6%

6. What is the biggest challenge you feel in using the dashboard effectively

![Challenge Chart]

- Getting internal data: 7.7%
- Getting external benchmarks: 46.2%
- Selecting meaningful indicators: 17.9%
- Other: 28.2%
7. Do you feel the use of a dashboard has led to identifying a need for improvement or has led to improvements in your transplant program

![Survey Results]

- **Yes**: 55.3%
- **No**: 44.7%
- **Unsure**: 0.0%
Key findings

- Getting external benchmarks 46.2%
- Selecting meaningful indicators 28.2%
- Getting internal data 17.9%

Our Challenges continue to be:

- Developing Quality Management Programs which includes the selection of Key performance indicators based on regulatory and accreditation requirements and program needs.

- Working to develop internal quality reporting data systems

- Collaborating to identify core measures for transplant programs for external benchmarking
Organizations and groups

- NMDP – National Marrow Donor Program
  [http://www.bethematch.org](http://www.bethematch.org)

- CIBMTR – Center for International Blood & Marrow Transplant Research–Stem Cell Therapeutic Outcomes Database(SCTOD)

- ASBMT–American Society for Blood and Marrow Transplantation

- C4QI Comprehensive Cancer Center Consortium
  [http://www.c4qi.net/](http://www.c4qi.net/)

- UHC –University Healthcare Consortium
  [https://www.uhc.edu/](https://www.uhc.edu/)

- BMT Quality Roundtable Googlegroup
  [http://groups.google.com/group/bmt-quality-roundtable](http://groups.google.com/group/bmt-quality-roundtable)
CITY OF HOPE
NATIONAL MEDICAL CENTER
COMPREHENSIVE CANCER CENTER

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Department of Quality, Risk, and Regulatory
City of Hope is a National Cancer Institute designated “Comprehensive Cancer Center.”

Recognized for translating basic laboratory research into innovative patient care.

The Hematopoietic Cell program is the largest provider of Blood and Marrow Transplantation (BMT) in California

- Over 11750 transplants completed, More than 600 BMT procedures performed annually.
- Adult and Pediatric transplant programs
- AUTO, ALLO, URD, CORD, Haplo
- Only center for 9th year in a row, to perform above expectations according to the Stem Cell Therapeutics Outcomes Database.(CIBMTR) transplant outcomes data.
Key administrative focus

- Volume
- Length of stay
- Readmissions
- Cost/Payer contracts and reimbursement
- Staffing and staff competency
- Coding and documentation compliance
- Electronic Medical Record Development and use
- Utilization
<table>
<thead>
<tr>
<th>Some Key Clinical Performance Indicators</th>
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<tbody>
<tr>
<td>Total transplant volumes by type and cell type</td>
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<tr>
<td>Other cellular therapy-DLI, HPC., volume and outcomes</td>
</tr>
<tr>
<td>Length of stay by transplant type</td>
</tr>
<tr>
<td>Readmissions within 30 days of discharge</td>
</tr>
<tr>
<td>Marrow collections volume, AE, product cell counts, recipient outcomes</td>
</tr>
<tr>
<td>Mortality -30, 100, and 1 year, Treatment related(non-relapse).</td>
</tr>
<tr>
<td>Engraftment, by transplant and cell type, ANC and Platelet, median time to engraftment</td>
</tr>
<tr>
<td>Critical event/quality reviews- Adverse events, ICU admits, data audits</td>
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<tr>
<td>Trans Med Service indicators: collection, processing and administration and infusion, mobilization, positive microbial reports.</td>
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<tr>
<td>Known Complications GVHD,ECP for GVHD, Infectious disease monitors.</td>
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<tr>
<td>Chemo-verification procedure audits, ADR’s.</td>
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<tr>
<td>Donor and recipient screening and consent</td>
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<tr>
<td>Support Service reports and focus compliance audits</td>
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## Scorecard metrics use at quality meetings

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Benchmark</th>
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<tbody>
<tr>
<td>Engraftment ANC</td>
<td>≥95% of HCT by Day +28</td>
</tr>
<tr>
<td>Time to engraftment Autologous</td>
<td>100% 10-11 days</td>
</tr>
<tr>
<td>Time to ANC engraftment ALLO Sib/MRD</td>
<td>100% 14-16 days</td>
</tr>
<tr>
<td>Time to ANC engraftment MUD</td>
<td>100% 14-28 days</td>
</tr>
</tbody>
</table>

![Graph showing distribution of transplant events by days from engraftment](image)
### Scorecard metrics use at quality meetings

<table>
<thead>
<tr>
<th>Treatment Related Mortality</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment Related Mortality-Autologous</td>
<td>&lt;5% day +100 Day</td>
</tr>
<tr>
<td>Transplant related Mortality-ALLO-SIB/MRD</td>
<td>&lt;10% day +100 Day</td>
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#### Dashboard Graphs

![Overall TRM (Non-relapse Mortality)100 Days](chart.png)
Questions

- Do we need Core measures (Indicators) for Blood and Marrow Transplant Program Quality reporting and standardize for External Benchmarks?

- Does it matter how you display and or report your data internally?

- Do we need to collaborate and support each other?