



Using a Dashboard in GME: A Snapshot of Resident Performance

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Disclosure



- All educational materials are free of vendor or pharmaceutical identification, advertising, trade names, or group product messages.
- There are no real or apparent conflicts of interest that may have a direct bearing on the subject matter, such as relationships with pharmaceutical companies, biomedical device manufacturers, or corporations.

Who we are

- Jill M. Simonson, BA
 - 6 years experience in program management
 - 13 years experience in GME
 - GME Committee's:
 - Housestaff Health & Welfare, July 2008
 - Residents as Educators, July 2009
 - TAGME, sat for examination April 2010
 - New member of the ARCS Steering Committee, January 2010
- Alonzo P. Walker, MD
 - Ruth Teske Professor in Surgical Oncology
 - Chief, Division of General Surgery
 - Program Director, General Surgery
- Joanne Walters, MS
 - Medical Education Specialist
 - 5 years experience in medical education
 - GME Committee's
 - GME Educators, September 2008
 - Housestaff Mentoring, September 2008

Who we are



- Medical College of Wisconsin Affiliated Hospitals
 - Located in Milwaukee, Wisconsin
 - Academic Medical Center
 - Primary Teaching Institutions
 - Froedtert Memorial Lutheran Hospital
 - Children's Hospital of Wisconsin
 - Clement J Zablocki Veterans Affairs Medical Center
 - 3 Integrated Teaching Institutions
 - Columbia/St. Mary's Hospital
 - St. Joseph's Hospital
 - Waukesha Memorial Hospital

Who we are



- Medical College of Wisconsin Affiliated Hospitals
 - 35 categorical residents
 - 2 preliminary residents
 - 2 integrated Plastic Surgery residents - 2 years
 - 1 integrated CT resident - 3 years (July 2010)
 - Sub-specialty residents
 - ENT, Urology, Oral Surgery, Neurosurgery, Anesthesiology, Emergency Medicine
 - 2 PGY IV visiting residents from the Marshfield Clinic Program
 - Transplant, Trauma Surgery
 - Mark B. Adams Post Graduate PA Surgical Program

Session Overview

- What is a dashboard?
- Our objectives
- The development process
- The components of our dashboard
- Consolidated reporting
- Key points
- Implications
- Conclusions



What is a dashboard?

- A dashboard provides a snapshot and continual review of performance over time.
- Dashboards are primarily used in Sales and Marketing
 - Product trends
 - Seller performance
 - Align business strategy
 - Focus on Key Performance Indicators (KPI's)
 - Measure progress
 - Reflect success

What is a dashboard?

- The Purpose of our dashboard is....
 - To improve and enhance the reporting and reviewing of resident data.
 - To provide a snapshot and continual review of resident performance over time.

**Think of a
dashboard
as a score card**



Our Objectives



- Changes in the learning environment created a need to redesign the evaluation process of resident performance.
- An easy way to recognize potential gaps or excellence in achievement in the delivery of effective patient care.
- To minimize paperwork in the evaluation process.
- To quickly communicate resident performance at a glance.

The Development Process



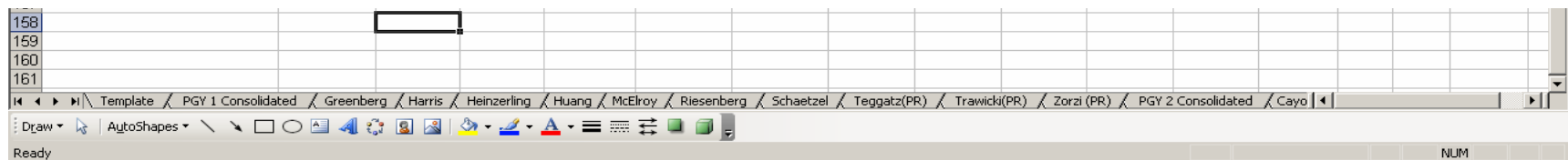
- Discovery through discussion
 - Selection of categories based upon program usage
 - Appropriateness of data in the evaluation process
 - Usefulness of data by faculty and residents
- Time
 - Initial design and data entry will take time.

The Development Process

■ Methods

■ Excel

- The initial template was developed and implemented.
- After one year the format was reviewed, revised and enhanced.
- Consolidated reports were developed to complement the evaluation process and provide a comparative analysis of resident peers.



The Development Process



- We continue to review and enhance our dashboard.

- Next Steps
 - The addition of new categories
 - American Board of Surgery (August, 2008)
 - Advanced Cardiac Life Support (ACLS)
 - Advanced Trauma Life Support (ATLS)
 - Fundamentals of Laparoscopic Surgery (FLS)

How we use the dashboard



- Four annual structured resident performance review
 - September Bi-Annual Housestaff Evaluation Meeting
 - January APD annual meeting
 - February Bi-Annual Housestaff Evaluation Meeting
 - June PD annual meeting and exit interviews
- On demand

The Components

- Resident Demographics
- USMLE Scores
- Advancement Standing
- Evaluation Scores by Competency
- Operative Experience & Defined Categories
- Competency Assessments

The Components



- Conference Attendance
- ABSITE Score
- Mock Oral Boards
- Protected Block Curriculum
- Certifications
- Rotation Schedule/Vacation/Time Off
- Research

The Components



- Demographics

Name:

Advisor:

Start Date:

Medical School:

Advanced Degrees:

Research Plans:

The Components



■ USMLE Scores

	Step 1	Step 2	Step 3
USMLE Score			
Date Taken			
Location			

■ Advancement

	PGY 1	PGY 2	PGY 3	PGY 4	PGY 5
Advancement Standing					

The Components



■ Evaluations

Evaluation Scores	Jul-Aug 2009	Sept-Dec 2009	
Medical Knowledge			
Patient Care			
PBL & Improvement			
Interpersonal & Communication Skills			
Professionalism			
System Based Practice			
Operative Skills			
Overall Competence			
Number of Evaluations			

The Components



- Operative Experience

Operative Experience		
Total Majors (750 Req)		
Chief Cases		
Op Log Date of Last Entry		

- Defined Categories (sample)

	SS&B	H&N	ALTR	AB	LV
Defined Categories	25	24	72	65	4
Number Completed					

The Components



■ Miscellaneous Scores

Competency Assessments		
CVL		
Chest Tube		

Conference Attendance		
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ABSITE Score	2009	2010
% Correct		
Percentile		
Mock ABSITE Percent Score		

Mock Boards		

The Components



■ Protected Block Curriculum (sample)

Curriculum	PGY 1 Session 1	PGY 1 Session 2	PGY 1 Session 3	PGY 1 Session 4	PGY 1 Session 5	PGY 1 Session 6	PGY 2 Session 1
Pre Test Results							
Post Test Results							

PGY 3	PGY 3-5 Session 1	PGY 3-5 Session 2	PGY 3-5 Session 3	PGY 3-5 Session 4	PGY 3-5 Session 5	PGY 3-5 Session 6	PGY 3-5 Session 7
Pre Test Results							
Basic Science Test							

PGY 4	PGY 3-5 Session 1	PGY 3-5 Session 2	PGY 3-5 Session 3	PGY 3-5 Session 4	PGY 3-5 Session 5	PGY 3-5 Session 6	PGY 3-5 Session 7
Pre Test Results							
Basic Science Test							

PGY 5	PGY 3-5 Session 1	PGY 3-5 Session 2	PGY 3-5 Session 3	PGY 3-5 Session 4	PGY 3-5 Session 5	PGY 3-5 Session 6	PGY 3-5 Session 7
Pre Test Results							
Basic Science Test							

The Components



■ Certifications

	Date Completed
Basic Laparoscopic Course	
Basic Ultrasound Course	
IRB Training	

*Next Step: Add Advanced Cardiac Life Support (ACLS), Advanced Trauma Life Support (ATLS), Fundamentals of Laparoscopic Surgery (FLS)

The Components



- Rotations/Vacations/Time Away

Rotations	Jul	Aug	Sep
PGY 1 2009 - 2010			
PGY 2 2010 - 2011			
PGY 3 2011 - 2012			
PGY 4 2012 - 2013			
PGY 5 2013 - 2014			

The Components



- Research

Research/Presentations

Resident Research Project

Topic:

Advisor:

GR Presentation Date:

Other Presentations/Papers:

The Components



- The last of the data

Resident Meeting:

Awards Received:

Examples



Name: **SAMPLE - Resident 1**
Start Date: July 1, 2006
Advisor: Webb
Medical School: University of Illinois College of Medicine in Chicago, IL
Advanced Degrees: University of Illinois Urbana Champaign, BS/Chemistry

	Step 1	Step 2	Step 3
USMLE	230	216	
Date Taken			
Location			

	PGY 1	PGY 2	PGY 3	PGY 4	PGY 5
Advancement Standing	X				

Examples



Evaluation Scores	Jan 2007 - May 2007	Jul 2007 - Aug 2007	Sep 2007 - Jan 2008	Feb 2008 - May 2008
Medical Knowledge	4.20	2.75	3.83	3.89
Patient Care	4.00	2.80	4.00	4.11
PBL & Improvement	4.70	2.25	3.86	3.96
Interpersonal & Communication Skills	4.30	3.00	4.18	4.27
Professionalism	4.20	3.00	4.26	4.32
System Based Practice	4.10	4.00	4.08	4.34
Operative Skills	3.80	2.40	3.78	3.86
Overall Competence	4.19	2.89	4.00	4.11
Number of Evaluations		1	10	25

Examples



Operative Experience				
Total Majors (750 Req)		42	74	100
Chief Cases				
Op Log Date of Last Entry		9/2/2007	10/5/2007	6/4/2008

	SS&B	H&N	ALTR	AB
Defined Categories	25	24	72	65
	16	37	32	24

Examples



Competency Assessments	
CVL	PGY 2 = 1 Manikin, 1 Clinical
Chest Tube	PGY 2 = 1 Manikin, 1 Clinical

Conference Attendance		78%	77%

ABSITE Score	2007	2008	2009
% Correct	81%	78%	63%
Percentile	92%	70%	40%
Mock ABSITE Percent Score	75.63	74.49	

Mock Boards	2009	2010	2011
	Pass		

Examples



Curriculum	PGY 1 Session 1	PGY 1 Session 2	PGY 1 Session 3
Pre Test Results	57%	47%	53%
Post Test Results	87%	70%	70%

PGY 3 2008/2009	PGY 3-5 Session 1	PGY 3-5 Session 2	PGY 3-5 Session 3
Pre Test Results	80%	86%	68%
Basic Science Test		90%	83%

PGY 4 2009/2010	PGY 3-5 Session 1	PGY 3-5 Session 2	PGY 3-5 Session 3
Pre Test Results	100%	100%	44%
Basic Science Test	93%	93%	71%

PGY 5	PGY 3-5 Session 1	PGY 3-5 Session 2	PGY 3-5 Session 3
Pre Test Results			
Basic Science Test			

Examples



	Date Completed
Basic Laparoscopic Course	8/31/2007
Basic Ultrasound Course	8/15/2008
IRB Training	7/1/2009

Rotations	Jul	Aug	Sep	Oct
PGY 1 2006 - 2007	Col	GS 1	GS VA 9/18-24	CT
PGY 2 2007 - 2008	CC	TX 8/13-19	Ped Surg	Col
PGY 3 2008 - 2009	Vasc FMLH 8/11-17		GS2	

Consolidated Reporting



- Consolidated data by post graduate year compares resident performance to their peers.

Consolidated Reporting



- Data is transferred from the dashboard to the report.
- Sub-specialty resident data is added.
- National statistics and evaluation averages are added.
- BUT not all categories from the dashboard are included and a few new categories are added.

Report Samples



Medical College of Wisconsin
Department of Surgery

SAMPLE - PGY 4 Consolidation of Evaluation Ratings
For The Period July - August 2009

Evaluation Comparison	Medical Knowledge	Patient Care	PBL & Improvement
Resident 2	4.80	4.82	4.74
Resident 4	4.50	4.70	4.61
SAMPLE - Resident 1	4.56	4.65	4.56
Resident 6	4.17	4.60	4.50
PGY 4 Average	4.37	4.49	4.39
Resident 5	4.12	4.20	4.04
Resident 3			

Operative Skills	Overall Competence	Number of Evals Completed	Number of Delinquent Evals
4.85	4.83	5	8
4.50	4.66	6	
4.40	4.56	8	
4.86	4.46	3	12
4.39	4.44		
4.15	4.15	15	
		0	

Report Samples



ABSITE Comparison	Dec 2007 Mock ABSITE Percent Score	2008 ABSITE % Correct	2008 ABSITE Percentile	Dec 2008 Mock ABSITE Percent Score	2009 ABSITE % Correct
National Average		73%			67%
SAMPLE - Resident 1	48.38	67%	21%	72.45	68%
Resident 4	62.94	77%	65%	65.82	67%
Resident 7 ⁺	61.93	65%	15%	59.69	65%
Resident 8 ⁺	75.63	78%	70%	74.49	63%
Resident 5	58.88	61%	7%	76.53	54%
Resident 6				57.65	75%**
Resident 10 ⁺	76.65	71%	48%	84.69	66%*
Resident 9 ⁺	65.48	71%	48%	78.06	72%*
Resident 3	51.78	74%	49%	61.22	66%*
Resident 2	67.51	70%	25%	65.31	63%*

* Residents in research who examine at the PGY 3 level.

** Junior Exam/PGY 2 level

Report Samples



MOCK Boards Comparison	2009	2010	2011
SAMPLE - Resident 1	Fail		
Resident 4	Pass		
Resident 5	Fail		
Resident 6	Pass		
Resident 8 ⁺	Pass		
Resident 7 ⁺	Pass		

Operative Cases	Total Cases	Chief Cases	Date of Last Entry
Resident 3	638		9/20/2009
SAMPLE - Resident 1	416		9/1/2009
Resident 4	359		9/15/2009
Resident 5	283		9/18/2009
Resident 2	425		9/21/2009
Resident 6	346		9/8/2009

Report Sample



Conference Attendance	% Attended
Resident 3	85%
SAMPLE - Resident 1	85%
Resident 4	100%
Resident 5	100%
Resident 2	100%
Resident 6	77%

PGY 4 Curriculum	Session 1		Session 2	
	Pre Test	Basic Science	Pre Test	Basic Science
Resident 3	57%	47%	57%	47%
SAMPLE - Resident 1	29%	60%	29%	100%
Resident 4	14%	67%	14%	67%
Resident 5	43%	67%	43%	67%
Resident 2	na	na	na	na
Resident 6	na	33%	na	33%

Key Points

- The design of the template is key
 - Categories
 - Alignment
 - Text attributes
 - Color
 - Boldness
 - Alignment
 - Print set up

Key Points



- The Data
 - Accuracy is a must
 - Keeping up to date with the data eliminates the need to “scurry”.

Implications

- The dashboard
 - Improved our review of resident performance.
 - Allows us to recognize any potential gaps or excellence in achievement in the delivery of effective patient care.
 - Faculty rely on data to make informed decision of resident promotion.
 - Action plans for resident improvement or receipt of an award can be determined by a review of the trend data contained in the dashboard.

Conclusions

- Accessible to faculty and residents at all times.
- The dashboard minimizes the need for additional paperwork in the evaluation process.
- The dashboard allows for quick communication.
- The dashboard addresses the ACGME requirement to have multiple sources of evaluation data and includes a summative evaluation rating of each of the six competencies.

Contact Information



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Thank you.

