

University of Minnesota  
Medical School  
2013-2014  
Graduate Medical Education  
Annual Report  
&  
Annual Institutional Review

## Table of Contents

Meet the GME Staff.....	2
From the Desk of the DIO .....	3
Resident Leadership Council (RLC) Initiatives.....	3
Preparing for the Next Accreditation System .....	3
Influenza Vaccination Process:.....	4
GME Grand Rounds Lecture Series .....	4
NRMP Match Summary 2014 .....	5
Educational Opportunities for Residents & Fellows .....	5
Program Director Recognition.....	6
Program Coordinator Recognition.....	7
Annual Program Coordinator Excellence Award .....	8
Coordinator Appreciation Event.....	9
GME Initiatives.....	9
Annual Institutional Review .....	11

## Meet the GME Staff

- John S. Andrews, MD, Designated Institution Official and Associate Dean for Graduate Medical Education
- Michael J. Cullen, PhD, Director of Evaluation
- Erica King, Visa Manager and Program Specialist
- Tanya Madson, Resident and Fellow Affairs Specialist
- Brittany Marcus-Blank, Evaluation Intern
- Carla Nelson, Administrative Coordinator
- Lori Payne, Agreement and Policy Manager and Program Specialist
- Carol Sundberg, Director of Operations



### **From the Desk of the DIO**

John S. Andrews, MD, Designated Institution Official  
Associate Dean for Graduate Medical Education

I am pleased to provide this report on the activities of the Graduate Medical Education Office and our sponsored programs for the academic year 2013-2014. This year, changes associated with the ACGME's Next Accreditation System (NAS) became practical realities as our programs submitted milestones evaluations for their learners directly to ACGME for the first time. As NAS is implemented, monitoring activities including site visits and internal reviews have been retired. Without these regular points of contact with programs, the GME Office has been challenged to define new methods to fulfill its responsibility for institutional oversight of our programs. In response, we have developed surveys to gather data from our programs and from our trainees. Much of the data gathered through those surveys forms the basis for this report. As with any new initiative, we've learned about the process along the way and also received helpful feedback from our programs. We will incorporate those learnings and suggestions into future iterations of our data collection. In the meantime, I hope you find the information in this report useful to understand Graduate Medical Education at the University of Minnesota. I appreciate your interest and welcome your feedback.

### **Resident Leadership Council (RLC) Initiatives**

- 2014: Resident/fellow access to secure bike parking in UMMC parking facilities
- 2014: Establishment of Transition to Practice curriculum and sessions
- 2014: Improvements made to resident workrooms (UMMC)
- 2014: RLC Mission Statement revised
- 2014: Cleanliness concerns addressed by UMMC
- 2014: UMMC web browsers updated
- 2013: Additional computers purchased for UMMC 6<sup>th</sup> floor Resident/Fellow Lounge
- 2013: Increased food amounts/improved food choices for 6<sup>th</sup> floor Resident/Fellow Lounge
- 2013: Audible overhead paging re-established in resident workrooms

### **Preparing for the Next Accreditation System**

GME Administration has been conducting an Annual GME Workshop for the past several years. In May of 2014 the focus of the topics was on the ever-evolving Next Accreditation System. Topics included information on milestone reporting, annual program evaluation, communications from the ACGME, Clinical Competency Committee efficiencies, GME funding, working with trainees with disabilities and the development of a structured interview process for screening applicants to residency and fellowship programs. This annual workshop is a venue for program directors, coordinators, education managers, affiliate site faculty and staff to come together to share ideas and learn best practices from each other.

## **Influenza Vaccination Process**

In the fall of 2013, our Graduate Medical Education Committee mandated influenza vaccination for all trainees in our programs. This was consistent with policies for the professional staffs at our affiliated hospitals. The GME Office communicated this information to our programs and trainees, and we instituted a reporting system to monitor compliance. The effort was a great success, as over 98% of our trainees reported their vaccination status. We were able to communicate this information to our hospitals to complement their respective databases of employee vaccination status.

## **GME Grand Rounds Lecture Series**

Our community-wide Grand Rounds is a new initiative that brings our GME stakeholders together for a quarterly update and to provide a forum to hear from local, national and international experts about relevant and timely topics such as:

### **Joint Medical Student-GME Grand Rounds and Deans' Health Care Quality Forum:**

The Medical School and Graduate Medical Education Administration hosted a health care quality forum on Friday, September 6, 2013 from 5:00-7:30 PM. T.R. Reid, who has become one of the nation's best-known reporters through his coverage of global affairs for *The Washington Post*, his books and documentary films, and his light-hearted commentaries on National Public Radio, presented "Is Health Care a Human Right? The Lesson From Other Rich Democracies." He is the author of *The New York Times* bestseller *The Healing of America* and host of the PBS program *Sick Around the World*.



### **GME GRAND ROUNDS:**

Graduate Medical Education Administration hosted GME Grand Rounds, a quarterly gathering of the local GME community, on December 10, 2013. Dr. Muriel Bebeau presented "A Theory-driven, Evidence-based Approach to Integrating Professional Identity Formation into Graduate Medical Education." Dr. Bebeau is Professor, Department of Primary Dental Care, School of Dentistry; Affiliate Faculty, Center for Bioethics; Adjunct Professor, Department of Educational Psychology; and Director Emerita of the Center for the Study of Ethical Development at the University of Minnesota.



### **GME GRAND ROUNDS:**

Graduate Medical Education Administration hosted GME Grand Rounds, a quarterly gathering of the local GME community, on Tuesday, June 10, 2014.

Dr. David C. Goodman presented “**Improving the Physician Workforce through Graduate Medical Education Reform.**” Dr. Goodman is Professor of Pediatrics, Professor of Community and Family Medicine, Professor of the Dartmouth Institute, Co-PI Dartmouth Atlas of Health Care; and Director of the Wennberg International Collaborative, Geisel School of Medicine, Dartmouth.



## **NRMP Match Summary 2014**

In the 2014 Main Match, three programs did not match their quota: Anesthesiology, Family Medicine-Duluth, and Pathology. Pathology participated in the main match and the Supplemental Offer and Acceptance Program (SOAP), but was unable to fill their one vacant position. Anesthesiology did not fill one of their open positions, but did fill the last advanced position through SOAP. Family Medicine-Duluth had three open spots after the match, but was able to fill their open spots through SOAP.

The 2014 subspecialty programs had similar results, with most programs matching all positions, and a limited number having to fill outside the match.

## **Educational Opportunities for Residents & Fellows**

### ***Chief Resident Orientation — Friday, April 11, 2014***

This session provided new Chief Residents with tips, tricks, tools and resources to assist them in preparing for their role as Chief Resident. They were welcomed by our DIO, Dr. John Andrews. Presentations included Navigating UMMC; Presentation Dos and Don'ts (Communication Skills); Giving and Receiving Effective Feedback; Surviving as Chief Resident (Chief Resident Panel); Residents in Difficulty - Remediation; and Quality Improvement and Patient Safety Initiatives.

### ***Twin Cities Resident Council – Wednesday, May 28, 2014***

On May 28, 2014, over 80 faculty, residents, fellows and medical students gathered in the Great Hall at the University of Minnesota's Coffman Union to view 40 quality improvement and patient safety projects from medical students, residents, and fellows from various Twin Cities training programs. We would like to congratulate Katie Glasrud, Adam Jones and Zeke McKinney, who won \$500.00 each for their poster presentations, and give special thanks to the MMCGME Board, Raj Bhui, and Ryan Greiner, who made the event possible.

## ***International Medical Graduate Orientation—June 17, 2014***

The International Medical Graduate (IMG) Orientation session was held on June 17, 2014, on the evening of the new intern GME orientation. Approximately 19 trainees from 8 programs attended the session. The session provided IMGs with a forum to learn more about how medicine is practiced and delivered in the United States through discussion with a panel of current IMG faculty members and trainees. A presentation by the DIO was also provided. IMGs were encouraged to review additional materials and resources via the [IMG webpage on the GME website](#), prior to their arrival at the UMN.

This session is historically well received by the attendees, as indicated by the positive feedback, and plans are under way to continue the same session in 2015.

## ***New Resident and Fellow Orientation — June 17, 2014 & July 2, 2014***

This annual orientation session was focused on trainees who had not completed a residency or fellowship at the University of Minnesota. The sessions on June 17 and July 2 were presented strictly in a large-group format for the first time in 2014, with a variety of speakers presenting on their area of expertise; a special small-group session for off-cycle and/or late start trainees was held on September 10. A total of 125 trainees (primarily interns) attended on June 17, with another 153 trainees (primarily fellows and advanced residents) attended on July 2. Materials from the sessions are available on the [GME website](#).

## **Program Director Recognition**

We are fortunate to have outstanding Program Directors and would like to recognize the following Program Directors who started their role during academic year 2013/14.

<b>Incoming Program Director</b>	<b>Program</b>
Alan Baldridge	Pediatric Gastroenterology
David Anderson	Vascular Neurology
David McKenna	Blood Banking and Transfusion Medicine
Dennis Dykstra	Physical Medicine and Rehabilitation
Ganesh Raveendran	Interventional Cardiology
Heather Pett Taylor	Duluth Family Medicine
John Lake	Transplant Hepatology
Jon Ritter	Surgical Pathology

Michael Rosenberg	Vascular Interventional Radiology
Supreet Deshpande	Pediatric Physical Medicine and Rehabilitation
Tara Holm	Pediatric Radiology

We also recognize the following Program Directors who stepped down during academic year 2013/14.

<b>Outgoing Program Director</b>	<b>Program</b>
Charmaine Stewart	Transplant Hepatology
Erik Cressman	Vascular Interventional Radiology
Glenn Gourley	Pediatric Gastroenterology
J. Carlos Manival	Surgical Pathology
Jeffrey McCullough	Blood Banking and Transfusion Medicine
Kim Kruger	Duluth Family Medicine
Linda Krach	Physical Medicine and Rehabilitation
Marcie Ward	Pediatric Rehabilitation
Robert Taylor	Vascular Neurology
Robert Wilson	Interventional Cardiology

### **Program Coordinator Recognition**

We are fortunate to have outstanding program coordinators and would like to recognize the following coordinators who started their role during academic year 2013/14.

<b>Coordinator</b>	<b>Program</b>
Amy Palmer	Internal Medicine
Carly Anderson	Physical Medicine and Rehabilitation
Deb Egger-Smith	Obstetrics and Gynecology
Erin Mustonen	Internal Medicine

Kelly Grahek	Rheumatology
Lisa Wichman	Nephrology
Nicole Castro	Pediatric Physical Medicine and Rehabilitation
Pamela Coppa	IMED Infectious Disease and Endocrinology
Rossi Cannon	North Memorial Family Medicine
Tammy Pederson	Methodist Family Medicine
Tracy Hollom	Pediatric Rehabilitation

We also recognize the following coordinators who stepped down during academic year 2013/14 to pursue other opportunities.

<b>Coordinators</b>	<b>Program</b>
Brenda Mueller	Methodist Family Medicine
Erin Mustonen	Internal Medicine
Jo Belvedere	IMED Infectious Disease and Endocrinology
Lauren Mathie	Physical Medicine and Rehabilitation
Nicole Castro	Pediatric Rehabilitation
Pamela Coppa	North Memorial Family Medicine
Tracy Barbot	Pediatric Rehabilitation
Zhac Rahkonen	Hematology/Oncology and Transplant

### **Annual Program Coordinator Excellence Award**

GME Program Coordinators are vital members of our Graduate Medical Education enterprise. Their management of our programs, particularly their investment in innovation and process improvement, is important to our overall success. In recognition of the role Program Coordinators play, the GME office established the Annual Program Coordinator Excellence Award to honor and recognize significant contributions by these individuals to Graduate Medical Education at the University of Minnesota. The award recipient is acknowledged each year at the June GME Grand Round. In addition to presenting the recipient with a plaque, we provide a monetary award and plaque in the GME office that maintains a record of awardees.



## ***Coordinator Excellence Award Recipient***

Betsy Wehrwein was the recipient of the 2014 University of Minnesota GME Program Coordinator Excellence Award. This prestigious award was presented to Ms. Wehrwein at GME Grand Rounds on June 20, 2014. We appreciate Ms. Wehrwein's dedication to operational excellence as well as her accomplishments towards broadening the reach of her program both locally and nationally. Please join us in congratulating Ms. Wehrwein on this tremendous achievement.



## **Coordinator Appreciation Event**

GME Administration recognizes and appreciates our program coordinators' contributions to the Graduate Medical Education enterprise and community of practice. On February 14, 2014 GME Administration hosted a picnic lunch in honor of our GME program coordinators.

## **GME Initiatives**

### ***Onboarding and Advancing***

The GME office facilitated its first year of centralized onboarding/advancing for new and continuing trainees in 2014. Residents and fellows beginning new programs or advancing to the next level of their training successfully completed transitional requirements via the oversight of the GME office. The centralization of trainee transitions has led to visibility in many areas in need of improvement. The GME office is in the midst of several improvement projects, which will lead to a smoother resident and fellow transition process for the trainees, the programs, and other UMN stakeholders for AY 2015-2016.

### ***Transition to Practice***

GME Administration, in partnership with its Resident Leadership Council, the Minnesota Medical Association and MMCGME Services established a Transition to Practice program for residents and fellows. The curriculum includes financial planning, asset protection planning, clinical practice options and contract negotiations. The program held its first session on May 15, 2014. The first session was well attended and the evaluations of the curriculum were favorable. The program will roll-out a more formal schedule of sessions with additional content in academic year 2014/2015.

## ***Structured Interviews for Residency and Fellowship Applicant Screening***

Although many large organizations use structured interview questions to screen applicants, these questions have been used infrequently in residency selection contexts. Building on a pilot study conducted last year, the GME office introduced a set of sixteen past-behavior structured interview questions that programs can use during the residency and fellowship applicant screening process. The interview questions assess traits that are crucial to successful performance in residency, such as dependability, work commitment, conflict management, cooperation, respect for diversity, stress tolerance, adaptability, integrity, tolerance for ambiguity, and communication skill. The structured interview protocol includes training on how to use and score the questions, as well as how to incorporate interview scores into the decision making process. Contact Michael Cullen, the Director of Evaluation for GME, if you would like to learn more about how these questions could be incorporated into your program's applicant screening process.

## 2014 ANNUAL INSTITUTIONAL REVIEW

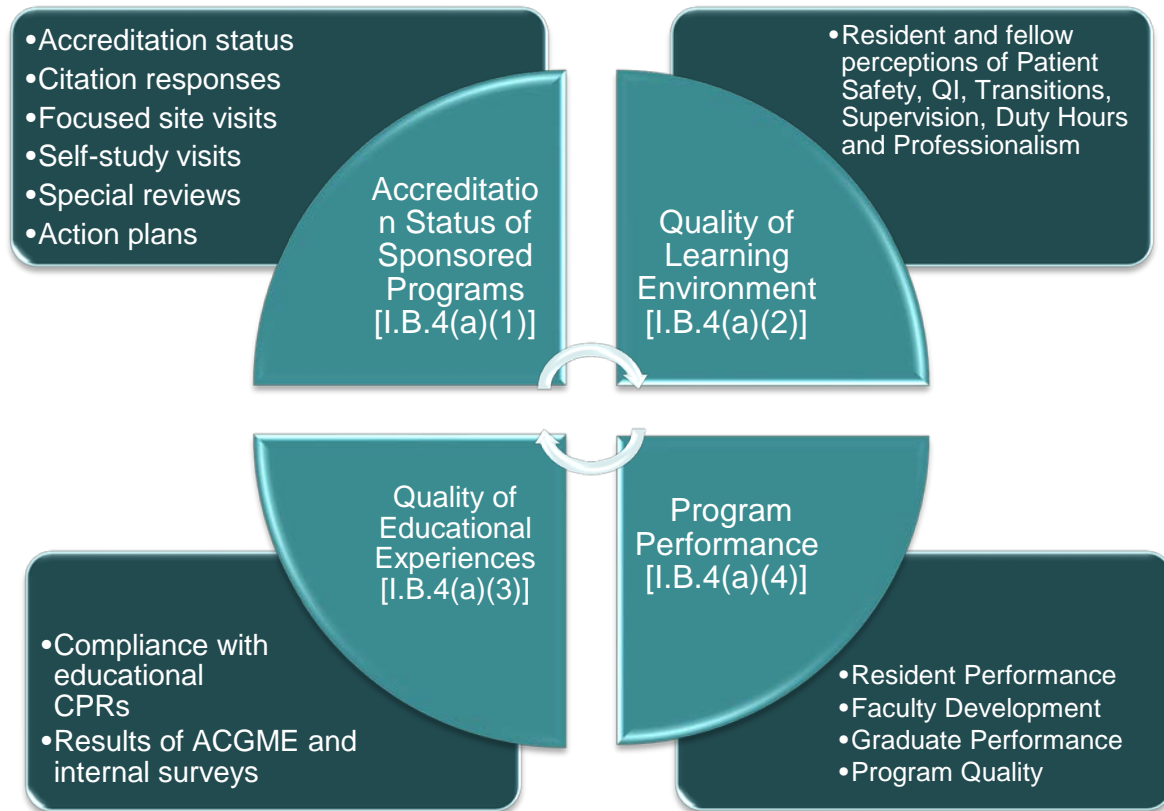
### INTRODUCTION

This is the first annual report completed under the ACGME's Next Accreditation System (NAS). As such, it has been significantly restructured to address new institutional requirements, which came into effect on July 1, 2014 for existing sponsoring institutions. Pursuant to these new requirements, sponsoring institutions must conduct an Annual Institutional Review (AIR) [I.B.5] of their programs. To streamline reporting processes under NAS, this annual report will now constitute our institution's AIR.

The new institutional requirements state that each sponsoring institution's GMEC must identify institutional performance indicators for the AIR. In deciding on the appropriate performance indicators, the GMEC was guided by its obligation to maintain oversight over:

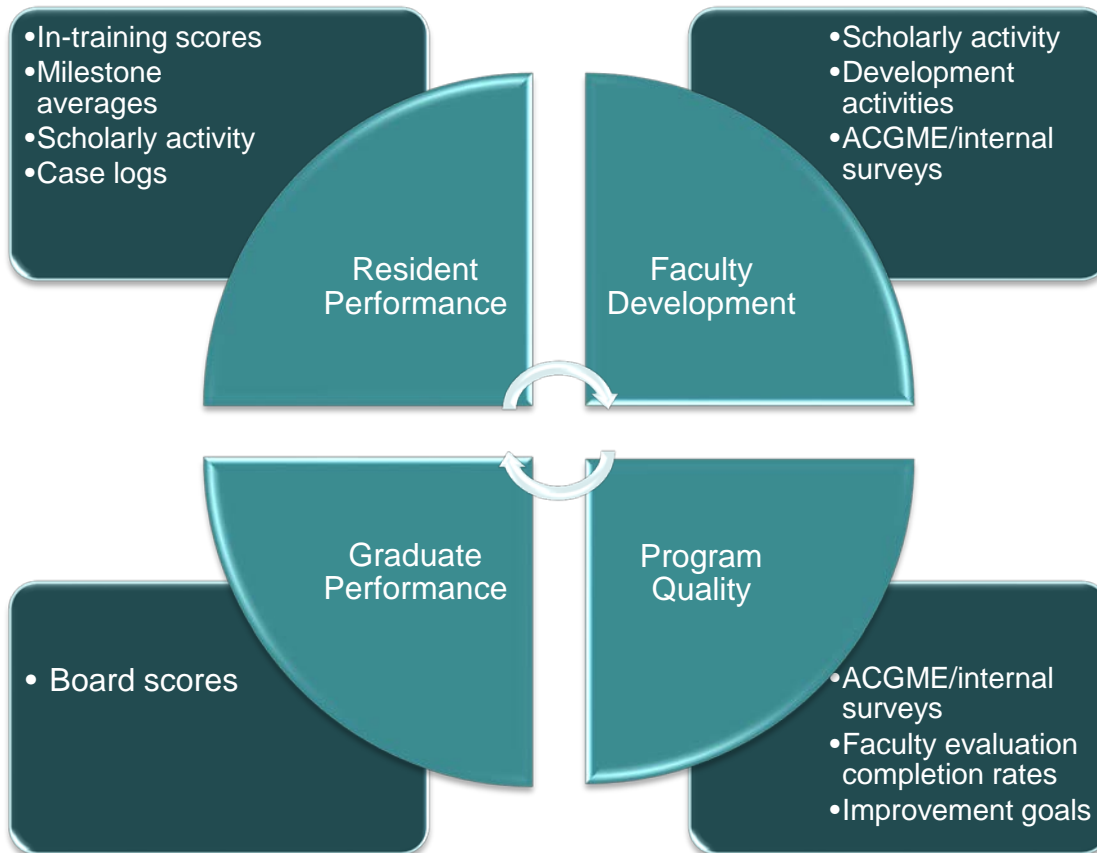
1. The ACGME accreditation status of the sponsoring institution and its ACGME-accredited programs [I.B.4(a)(1)];
2. The quality of the GME learning and working environment within the sponsoring institution, its ACGME-accredited programs, and its participating sites [I.B.4(a)(2)];
3. The quality of educational experiences in each ACGME-accredited program that lead to measurable achievement of educational outcomes as identified in the ACGME Common and specialty/subspecialty specific Program Requirements [I.B.4(a)(3)];
4. The ACGME-accredited programs' annual evaluation and improvement activities [I.B.4(a)(4)]

As Figure 1 indicates, these areas for institutional oversight can be conceptualized as four broad institutional performance domains: (1) The Accreditation Status of Sponsored Programs, (2) The Quality of the Learning Environment, (3) The Quality of Educational Experiences, and (4) Individual Program Performance. Many possible performance indicators could be chosen to assess performance in these domains. The GMEC decided to limit the set of performance indicators to those that are: (a) clearly relevant to assessing program and institutional performance, and (b) not contaminated by factors outside of our programs' or the institution's control. In addition, in choosing performance indicators, the GMEC took into account the fact that the data collected must be capable of serving a variety of purposes. For instance, in addition to allowing the GMEC to perform its oversight functions, the collection of data tied to the performance indicators should help: (a) programs prepare for site visits, (b) programs identify areas for improvement, (c) the institution prepare for clinical learning environment (CLER) visits, and (d) the GMEC identify cross-program trends requiring institutional attention, or deserving institutional praise.



**Figure 1. Institutional Performance Indicators**

The performance indicators chosen to assess institutional performance in these four broad domains are displayed in Figure 1. The performance indicators for the Accreditation Status domain are self-explanatory. They include the accreditation status of our programs, responses to existing citations, the results of focused site visits and special reviews conducted by the GMEC, and action plans arising from these visits and reviews. The performance indicators for Learning Environment Quality include resident and fellow perceptions of the clinical learning environment in the key areas of Patient Safety, Quality Improvement (QI), Transitions-in-Care, Supervision, Duty Hours, and Professionalism. We intentionally chose resident and fellow perceptions in these areas because they map onto the six areas of learning environment quality the ACGME will focus on in its clinical learning environment review (CLER) visits. The performance indicators for Educational Quality include programs' compliance with key educational requirements of the Common Program Requirements (CPR) and residents', fellows', and faculty's perceptions of the quality of educational experiences. The performance indicators for individual Program Performance include key metrics related to (a) resident performance, (b) graduate performance, (c) faculty development, and (d) program quality. We chose metrics in these areas because, under the CPR, programs are required to monitor these areas in their annual program evaluations.



**Figure 2. Individual Program Performance Metrics**

The specific metrics chosen to assess individual program performance are listed in Figure 2. These metrics include in-training exam scores, board scores, resident and faculty scholarly activity, case log compliance, faculty development activities, resident and fellow terminations, program improvement goals, and other metrics.

For the new AIR, the data connected to these performance indicators were gathered from different sources. For instance, accreditation status data were largely collected by the GME office through its ongoing communications with programs. In contrast, learning environment data were collected via a new GME survey of graduating residents. Finally, much of the data regarding our residents' and fellows' educational experiences, and individual program performance, were collected from programs themselves in a new institutional AIR survey. Supplementary data for these areas were provided by the ACGME surveys and internal program surveys.

The Institutional Requirements state that the GMEC must maintain oversight over underperforming programs through a Special Review process. In this inaugural year of the AIR, we will not institute special reviews in response to the data collected. Rather, we will carefully examine the data collected to determine variability in performance across programs. This examination will allow us to determine which metrics to consider when making decisions about special reviews, and what the minimum performance thresholds should be for key metrics.

Future AIR reports will describe the criteria for special reviews, the programs asked to undergo special reviews, and the quality improvement goals, corrective actions, and process for the GMEC monitoring the outcomes of these reviews.

In this inaugural AIR, therefore, we focus on describing the variability in the data collected, lessons learned, and institutional action plans arising from interpretation of this data. In reviewing the results presented, it is worth noting that the University of Minnesota sponsors both ACGME-accredited and non-ACGME-accredited programs. The vast majority of our programs are ACGME-accredited. For this reason, the results focus on these programs. However, whenever possible, we present results for both sets of programs.

## INSTITUTIONAL AND PROGRAM BACKGROUND

### *Institutional Background*

The University of Minnesota is one of the largest sponsoring institutions of GME trainees in the United States. We sponsor a total of 82 ACGME-accredited and 60 non-ACGME-accredited programs. In total, 946 residents and fellows train in our programs. This includes 907 trainees in ACGME-accredited programs, and 39 trainees in non-ACGME-accredited programs. These residents are supervised by 886 core faculty members. Eight hundred and twenty-six core faculty members teach in our ACGME-accredited programs, and 60 core faculty members teach in our non-ACGME-accredited programs.

Table 1 presents key demographic characteristics for first-year trainees in our ACGME-accredited programs. Table 1 indicates that a majority of our first-year trainees attended medical school in Minnesota. However, a significant minority attended medical school in other states or in other countries. The vast majority of our first-year trainees are Caucasian. A significant minority are Asian, and a much smaller minority are African American, American Indian, Native Hawaiian, or identify with two or more races.

***Table 1. Background Characteristics of First-Year Trainees in ACGME Programs***

---

Attended Medical School *		
	In MN	55%
	Outside MN	25%
	Outside US	20%
Racial/Ethnic composition**		
	Black/ African American	4%
	American Indian/ Alaskan Native	1%
	Asian/ Asian American	16%
	Native Hawaiian/ Pacific Islander	0%
	White/ Caucasian	77%
	Two or more races	2%

---

\*Includes data for 55 ACGME programs

\*\* Includes data for 54 ACGME programs

### ***Basic Program Data***

Table 2 presents basic program data for our residency programs. With the exception of the Medicine-Dermatology program, all of these programs are ACGME-accredited. Table 2 indicates that overall, our program directors have significant tenure in their current role. Tenure for our residency program directors ranges from less than one month to nearly 23 years, with a mean tenure of more than 5 years. Table 2 also indicates that the board pass rate is very high for most programs. Approximately 71% of our residency programs with written board data available (N=24) achieved a board pass rate of 90% or higher on their written board exams. A small percentage of programs (17%) had written board exam pass rates under 70%. Trainees in nine programs completed oral board exams in addition to written board exams. The oral board exam passing rates for these programs ranged from 33% to 100%.

Table 3 presents basic program data for our ACGME-accredited fellowship programs. As was the case with our residency programs, a large number of program directors have significant tenure in their current role. Tenure for these program directors ranges from 1 month to 25 years, with a mean tenure of approximately 5 years. Table 3 indicates that the board pass rate is very high for most programs. Approximately 88% of programs with written board data available (N=25) had written board pass rates of 90% or higher. Only two programs had a written board pass rate less than 70%. All programs reporting oral board exam data (N=3) had pass rates of 100%.

Table 4 reports basic program data for our non-ACGME-accredited fellowship programs that had at least one trainee during AY 2013-14. For programs reporting program director appointment dates, tenure ranges from one year to almost 21 years, with a mean tenure of more than 4 years. Board pass rate data is not available for many of these fellowships. Accordingly, this data is not published separately for each program. However, all programs with written board data available (N=8) had written board pass rates of 100%. Similarly, all programs reporting oral board exam data (N=4) had pass rates of 100%.

### ***Graduation Data***

Table 5 reports graduation data for our residency programs. Table 5 indicates that the proportion of graduating residents entering practice varies across programs. For instance, although the majority of our family program residents entered practice immediately following residency, most orthopaedic surgery residents went on to pursue fellowships. In most programs, the majority of residents who entered practice following residency entered practice in Minnesota. As Table 5 indicates, the internal medicine program supported 10 additional year chief residents, the pediatric program supported 4, and the medicine-pediatrics program supported four additional year chief residents.

Table 6 reports graduation data for our ACGME-accredited fellowship programs. Table 6 indicates that the majority of graduating fellows entered practice following their fellowships. In most programs, the majority of those entering practice entered practice in Minnesota. Several programs did not have any graduating fellows in AY 2013-14.



**Table 2. Residency Program Background Data**

Program	Program Director	PD Appt. Date	Complement		Board Pass Rate
			ACGME Approved	Filled #	
Anesthesiology	Mojca Konia, MD, PhD	7/1/2010	28	24	100%
Dermatology	Neal A. Foman, MD, MS	7/1/2008	18	15	100%
Diagnostic Radiology	Tim Emory, MD	7/1/2004	44	41	100%
FMED - Duluth	Heather Pett Taylor, MD	6/7/2013	30	31	100%
FMED - Mankato	John C McCabe, MD	7/1/2003	15	14	100%
FMED - Methodist	Jeremy S. Springer, MD	10/1/2000	18	18	100%
FMED - North Memorial	Michael Wootten, MD	3/18/2010	30	28	ND
FMED - St Cloud	Joseph M. Blonski, MD	7/1/2003	15	15	100%
FMED - St Johns	William O. Roberts, MD, MS	7/1/2007	18	18	100%
FMED - St. Joseph's	Casey Martin, MD	7/1/2008	24	25	ND
FMED - UMMC	Patricia Adam, MD, MSPH	1/1/2009	24	18	100%
Internal Medicine	Alisa Duran, MD	6/16/2010	95	90	89%
Medicine/Dermatology	Kimberly Bohjanen, MD	11/1/2006	10	10	100%
Medicine/Pediatrics	Michael J. Aylward, MD	7/1/2012	48	42	90%
Neurological Surgery	Matthew A. Hunt, MD	1/22/2013	14	14	100%
Neurology	Anthony Santiago, MD	6/24/2014	24	26	100%
Obstetrics & Gynecology	Phillip Rauk, MD	11/13/2006	36	36	85%
Ophthalmology	Martha Wright, MD	8/1/1991	12	12	100%
Orthopaedic Surgery	Jonathan P. Braman, MD	3/27/2012	40	39	100%
Otolaryngology	Seth C. Janus, MD	7/1/2010	20	20	NA
Pathology	John Crosson, MD	4/1/2009	26	19	66%
Pediatrics	Emily Borman-Shoap, MD	5/1/2012	70	70	60%
Physical Medicine/Rehab	Dennis Dykstra, MD, PhD	3/6/2014	18	18	75%
Psychiatry	Katharine Nelson, MD	7/1/2012	33	25	100%
Radiation Oncology	Margaret Reynolds, MD	7/1/2009	6	6	100%
Surgery	Jeffrey G. Chipman, MD	3/1/2012	38	38	67%
Urology	J. Kyle Anderson, MD	6/11/2012	12	12	66%
Summary			766	724	

*Note:* The program directors listed were program directors on 6/30/14. The board pass rate is for residents who graduated from programs during AY 2012-13 or earlier, who took the written board exam for the first time during AY 2013-14. NA=Not Available; ND= No Data.

**Table 3. ACGME Fellowship Program Background Data**

Department	Program	Program Director	PD Appt. Date	Complement		Board Pass Rate
				ACGME Approved	Filled #	
Anesthesiology	Adult Cardiothoracic Anesthesiology	Ioanna Apostolidou, MD	7/1/2013	1	1	NA
Dermatology	Procedural Dermatology	Peter K. Lee, MD, PhD	9/1/2008	1	1	NA
Diagnostic Radiology	Neuroradiology	Stephen A. Kieffer, MD	5/21/2003	4	3	NA
Diagnostic Radiology	Nuclear Radiology	Jerry Froelich, MD	7/1/2008	1	0	NA
Diagnostic Radiology	Pediatric Radiology	Tara Holm, MD	7/1/2013	2	0	ND
Diagnostic Radiology	Vascular and Interventional Radiology	Michael Rosenberg, MD	4/15/2014	4	5	NA
Family Medicine	Hospice & Palliative Medicine	Drew Rosielle, MD	7/1/2010	4	3	ND
Family Medicine	Sports Medicine	Suzanne Hecht, MD	7/1/2011	4	2	ND
LMP	Blood Banking/Transfusion Medicine	David McKenna, MD	9/1/2013	2	2	100%
LMP	Cytopathology	Hannah Krigman, MD	9/15/2012	2	2	NA
LMP	Hematology	Robert McKenna, MD	7/1/2009	2	2	100%
LMP	Molecular Genetic Pathology	Michelle Dolan, MD	10/1/2008	1	1	100%
LMP	Selective Pathology	Jon Ritter, MD	6/29/2013	2	2	NA
Medicine	Advanced Heart Failure & Transplant Card.	Gary Francis, MD	1/18/2012	3	0	ND
Medicine	Cardiovascular Disease	Ganesh Raveendran, MD	7/1/2011	28	21	100%
Medicine	Clinical Cardiac Electrophysiology	Scott Sakaguchi, MD, FACC	12/28/1998	3	0	100%
Medicine	Endocrinology, Diabetes, & Metabolism	Bruce Redmon, MD	11/1/2008	6	5	100%
Medicine	Gastroenterology	John Lake, MD	3/1/2009	12	11	100%
Medicine	Hematology and Medical Oncology	Linda Burns, MD	7/1/2009	18	15	100%
Medicine	Infectious Diseases	Bryan R. Rock, MD	9/1/2011	7	7	100%
Medicine	Interventional Cardiology	Ganesh Raveendran, MD	1/1/2014	3	3	100%
Medicine	Nephrology	Marc Weber, MD	10/1/2011	14	10	100%
Medicine	Pulmonary Disease & Critical Care Med.	Melissa King-Biggs, MD	7/1/2001	13	11	86%
Medicine	Rheumatology	Anne G. Minenko, MD	5/27/2008	4	4	100%
Medicine	Transplant Hepatology	John Lake, MD	7/2/2013	1	0	ND
Neurology	Clinical Neurophysiology	John Tulloch, MD	7/1/2006	5	4	100%
Neurology	Endovascular Surgical Neuroradiology	Ramachandra Tummala, MD	3/13/2012	3	0	NA
Neurology	Vascular Neurology	David C. Anderson, MD	6/3/2014	3	2	ND
Orthopaedic Surgery	Adult Reconstructive Orthopaedics	Edward Y. Cheng, MD	6/1/2004	2	1	100%
Orthopaedic Surgery	Pediatric Orthopaedics	Kevin Walker, MD	4/6/2007	1	1	NA
Otolaryngology	Neurotology	Samuel Levine, MD	9/15/2009	1	1	NA
Otolaryngology	Pediatric Otolaryngology	James D. Sidman, MD	7/1/2012	1	1	NA
Pediatrics	Neonatal-Perinatal Medicine	Catherine Bendel, MD	12/1/1998	6	5	100%

**Table 3. ACGME Fellowship Program Background Data (continued)**

Department	Program	Program Director	PD Appt. Date	Complement		Board Pass Rate
				ACGME Approved	Filled #	
Pediatrics	Pediatric Adolescent Medicine	Nimi Singh, MD, MPH	9/1/1999	6	1	ND
Pediatrics	Pediatric Cardiology	Elizabeth Braunlin, MD, PhD	1/1/2002	6	6	ND
Pediatrics	Pediatric Critical Care Medicine	Marie E. Steiner MD, MS	9/5/2006	6	4	50%
Pediatrics	Pediatric Developmental-Behavioral	Andrew Barnes, MD, MPH	4/1/2013	1	0	ND
Pediatrics	Pediatric Endocrinology	Brandon Nathan, MD	5/1/2010	3	3	ND
Pediatrics	Pediatric Gastroenterology	Alan Baldrige, MD	1/6/2014	1	0	100%
Pediatrics	Pediatric Hematology/Oncology	Emily Greengard, MD	7/1/2012	6	5	ND
Pediatrics	Pediatric Infectious Diseases	Mark Schleiss, MD	1/1/2005	3	3	ND
Pediatrics	Pediatric Nephrology	Clifford Kashtan, MD	8/1/2010	4	1	0%
Pediatrics	Pediatric Pulmonology	Warren Regelman, MD	6/1/1991	3	0	ND
Pediatrics	Pediatric Rheumatology	Bryce A. Binstadt, MD, PhD	7/1/2009	3	1	ND
PMR	Pain Medicine	Miles Belgrade, MD	12/31/1998	2	2	100%
PMR	Pediatric Rehabilitation	Supreet Deshpande, MD	7/2/2013	4	3	100%
Psychiatry	Addiction Psychiatry	Scott McNairy, MD	11/1/2001	2	0	ND
Psychiatry	Child and Adolescent Psychiatry	Jonathan B. Jensen, MD	1/1/1989	10	10	ND
Psychiatry	Geriatric Psychiatry	Susan Czapiewski, MD, MS	7/1/2005	2	1	ND
Psychiatry	Psychosomatic Medicine	Jan Apple, MD	8/1/2007	2	0	ND
Surgery	Colon and Rectal Surgery	Judith L. Trudel, MD, MSc, MHPE	6/30/2007	5	4	100%
Surgery	Plastic Surgery	James Fletcher, MD	11/28/2012	6	6	100%
Surgery	Plastic Surgery Integrated	James Fletcher, MD	11/28/2012	12	4	ND
Surgery	Surgical Critical Care	Melissa Brunsvold, MD	7/1/2013	4	4	ND
Surgery	Thoracic Surgery	Herbert B. Ward, MD, PhD	7/1/2008	6	5	100%
Surgery	Vascular Surgery	Steven Santilli, MD, PhD, MBA	1/1/2009	5	4	100%
Summary				266	193	

*Note:* The program directors listed were program directors on 6/30/14. The board pass rate is for fellows who graduated from programs during AY 2012-13 or earlier, who took the written board exam for the first time during AY 2013-14.

**Table 4. Non- ACGME Fellowship Program Background Data**

Department	Program	Program Director	PD Appt. Date
Diagnostic Radiology	Breast Imaging	Tim Emory, MD	5/10/2007
LMP	Cytogenetics Pathology	Betsy Hirsh, PhD	11/11/2010
Medicine	Advanced Cardiovascular Imaging	Uma Valeti, MD	5/10/2012
Medicine	Gastroenterology - Advanced ERCP/EUS	Martin Freeman, MD	3/1/2009
Medicine	Integrated/Advanced Clinical/Cardiac Electrophysiology	Scott Sakaguchi, MD, FACC	7/1/2011
Medicine	Renal Transplant	Richard Spong, MD	7/1/2012
Neurology	Movement Disorders	Anthony Santiago, MD	11/8/2013
Neurology	Neurocritical Care	Mustapha Ezzeddine, MD	10/1/2010
Neurosurgery	Neuroanatomy Research	Andrew Grande, MD	5/10/2013
OB GYN	Gynecologic Oncology	Rahel Ghebre, MD, MPH	9/1/2011
OB GYN	Maternal Fetal Medicine	Kirk Ramin, MD	7/1/2003
Ophthalmology	Cornea, External Disease & Refractive Surgery	Stephen C. Kaufman, MD, PhD	7/1/2007
Ophthalmology	Medical & Surgical Vitreoretinal	Erik van Kuijk, MD, PhD	7/1/2013
Ophthalmology	Neuro-Ophthalmology	Michael S. Lee, MD	7/1/2013
Ophthalmology	Ophthalmic Plastic and Reconstructive Surgery	Andrew R. Harrison, MD	7/1/2006
Ophthalmology	Pediatric/ Strabismus Ophthalmology	Erick D. Bothun, MD	7/1/2008
Orthopaedic Surgery	Adult Reconstruction/Trauma Track	Scott Marston, MD	9/14/2012
Orthopaedic Surgery	Orthopaedic Trauma	Peter Cole, MD	9/14/2012
Otolaryngology	Facial Plastic and Reconstructive Surgery	Peter Hilger, MD	7/1/1993
Pediatrics	Pediatric Bone Marrow Transplant	Angela Smith, MD, MS	10/1/2011
Psychiatry	Addiction Medicine	Sheila Specker, MD	NA
Surgery	Bariatric Minimally Invasive	Sayeed Ikramuddin, MD	7/1/2001
Surgery	Genitourinary Trauma and Reconstruction Fellowship	Sean Elliott, MD, MS, FACS	7/1/2013
Surgery	Abdominal Transplant Surgery	Raja Kandaswamy, MD	7/1/2011

*Note:* Only non-ACGME-accredited programs with at least one trainee during AY 2013-14 are listed.

**Table 5. Residency Program Graduation Data**

Program	2013-14 Residency Program										
	2013-14 Graduates	Entering Practice				Continuing Education				Add'l Year Chief Res.	Other
		Total #	Minnesota		Non MN	Total #	Fellowships				
			#	%			MN	Non MN			
Anesthesiology	7	5	4	80%	1	2	1	1	0	0	
Dermatology	4	3	3	100%	0	1	1	0	0	0	
Diagnostic Radiology	12	0	0	0%	0	12	5	7	0	0	
FMED – Duluth	10	10	10	100%	0	0	0	0	0	0	
FMED - Mankato	6	4	1	25%	3	2	0	2	0	0	
FMED - Methodist	6	5	5	100%	0	1	1	0	0	0	
FMED - North Memorial	9	8	4	50%	4	0	0	0	0	1	
FMED - St Cloud	5	5	4	80%	1	0	0	0	0	0	
FMED - St. Johns	6	6	5	83%	1	0	0	0	0	0	
FMED - St Joseph's	9	9	8	89%	1	0	0	0	0	0	
FMED - Fairview	7	6	3	50%	3	1	0	1	0	0	
Internal Medicine	32	9	9	100%	0	23	6	7	10	0	
Medicine/Dermatology	2	2	1	50%	1	0	0	0	0	0	
Medicine/Pediatrics	11	5	4	80%	1	6	1	1	4	0	
Neurological Surgery	2	1	0	0%	1	1	1	0	0	0	
Neurology	6	1	1	100%	0	5	2	3	0	0	
Obstetrics & Gynecology	9	8	8	100%	0	1	0	1	0	0	
Ophthalmology	4	3	2	67%	1	1	0	1	0	0	
Orthopaedic Surgery	8	2	1	50%	1	6	1	5	0	0	
Otolaryngology	4	2	1	50%	1	2	0	2	0	0	
Pathology	5	1	1	100%	0	4	3	1	0	0	
Pediatrics	24	9	6	67%	3	15	6	5	4	0	
Physical Medicine/Rehab	3	1	1	100%	0	2	1	1	0	0	
Psychiatry	5	5	5	100%	0	0	0	0	0	0	
Radiation Oncology	1	1	0	0%	1	0	0	0	0	0	
Surgery	6	2	1	50%	1	4	3	1	0	0	
Urology	3	2	2	100%	0	1	0	1	0	0	
Summary	206	115	90		25	90	32	40	18	1	

**Table 6. ACGME Fellowship Program Graduation Data**

Department	Program	Total 2013-14 grads	Entering Practice			Continuing Education			Other
			Total	MN #	Non MN %	Total	MN	Non MN	
Anesthesiology	Adult Cardiothoracic Anesthesiology	1	1	0	0%	1	0	0	0
Dermatology	Procedural Dermatology	1	1	0	0%	1	0	0	0
Diagnostic Radiology	Neuroradiology	3	1	0	0%	1	2	2	0
Diagnostic Radiology	Nuclear Radiology	0	0	0	0%	0	0	0	0
Diagnostic Radiology	Pediatric Radiology	0	0	0	0%	0	0	0	0
Diagnostic Radiology	Vascular and Interventional Radiology	4	4	1	25%	3	0	0	0
Family Medicine	Hospice & Palliative Medicine	2	2	1	50%	1	0	0	0
Family Medicine	Sports Medicine	2	2	2	100%	0	0	0	0
LMP	Blood Banking/Transfusion Medicine	2	1	0	0%	1	0	0	1
LMP	Cytopathology	2	1	0	0%	1	1	1	0
LMP	Hematology	2	1	0	0%	1	0	0	1
LMP	Molecular Genetic Pathology	1	1	1	100%	0	0	0	0
LMP	Selective Pathology	2	1	0	0%	1	0	0	1
Medicine	Advanced Heart Failure & Transplant Card.	2	2	1	50%	1	0	0	0
Medicine	Cardiovascular Disease	4	1	1	100%	0	3	2	1
Medicine	Clinical Cardiac Electrophysiology	0	0	0	0%	0	0	0	0
Medicine	Endocrinology, Diabetes, & Metabolism	1	1	1	100%	0	0	0	0
Medicine	Gastroenterology	3	1	1	100%	0	2	1	1
Medicine	Hematology and Medical Oncology	4	3	2	67%	1	1	1	0
Medicine	Infectious Diseases	7	7	6	86%	1	0	0	0
Medicine	Interventional Cardiology	3	1	0	0%	1	2	2	0
Medicine	Nephrology	2	2	2	100%	0	0	0	0
Medicine	Pulmonary Disease & Critical Care Med.	4	4	3	75%	1	0	0	0
Medicine	Rheumatology	2	2	0	0%	2	0	0	0
Medicine	Transplant Hepatology	0	0	0	0%	0	0	0	0
Neurology	Clinical Neurophysiology	3	2	2	100%	0	1	0	1
Neurology	Endovascular Surgical Neuroradiology	0	0	0	0%	0	0	0	0
Neurology	Vascular Neurology	1	0	0	0%	0	1	1	0
Orthopaedic Surgery	Adult Reconstructive Orthopaedics	1	1	0	0%	1	0	0	0
Orthopaedic Surgery	Pediatric Orthopaedics	1	1	0	0%	1	0	0	0
Otolaryngology	Neurotology	0	0	0	0%	0	0	0	0
Otolaryngology	Pediatric Otolaryngology	1	1	0	0%	1	0	0	0
Pediatrics	Neonatal-Perinatal Medicine	2	2	1	50%	1	0	0	0
Pediatrics	Pediatric Adolescent Medicine	0	0	0	0%	0	0	0	0
Pediatrics	Pediatric Cardiology	2	2	0	0%	2	0	0	0

**Table 6. ACGME Fellowship Program Graduation Data (continued)**

Department	Program	Total 2013-14 grads	Entering Practice			Continuing Education			Other	
			Total	MN #	%	Non MN	Total	MN		Non MN
Pediatrics	Pediatric Critical Care Medicine	1	1	1	100%	0	0	0	0	
Pediatrics	Pediatrics Developmental-Behavioral	0	0	0	0%	0	0	0	0	
Pediatrics	Pediatric Endocrinology	1	1	0	0%	1	0	0	0	
Pediatrics	Pediatric Gastroenterology	0	0	0	0%	0	0	0	0	
Pediatrics	Pediatric Hematology/Oncology	2	1	0	0%	1	1	0	1	
Pediatrics	Pediatric Infectious Diseases	1	1	0	0%	1	0	0	0	
Pediatrics	Pediatric Nephrology	0	0	0	0%	0	0	0	0	
Pediatrics	Pediatric Pulmonology	0	0	0	0%	0	0	0	0	
Pediatrics	Pediatric Rheumatology	1	1	1	100%	0	0	0	0	
PMR	Pain Medicine	2	2	0	0%	2	0	0	0	
PMR	Pediatrics Rehabilitation	2	2	0	0%	2	0	0	0	
Psychiatry	Addiction Psychiatry	0	0	0	0%	0	0	0	0	
Psychiatry	Child and Adolescent Psychiatry	5	5	4	80%	1	0	0	0	
Psychiatry	Geriatric Psychiatry	1	1	1	100%	0	0	0	0	
Psychiatry	Psychosomatic Medicine	0	0	0	0%	0	0	0	0	
Surgery	Colon and Rectal Surgery	4	4	0	0%	4	0	0	0	
Surgery	Plastic Surgery	2	2	0	0%	2	0	0	0	
Surgery	Plastic Surgery Integrated	0	0	0	0%	0	0	0	0	
Surgery	Surgical Critical Care	4	3	1	33%	2	1	1	0	
Surgery	Thoracic Surgery	2	2	0	0%	2	0	0	0	
Surgery	Vascular Surgery	2	2	0	0%	2	0	0	0	
Summary		95	77	33		44	15	11	4	3

## **INSTITUTIONAL PERFORMANCE INDICATORS**

### ***I. ACCREDITATION STATUS OF SPONSORED PROGRAMS***

#### ***Current Accreditation Status of Programs***

Most of our programs fall under the Continued Accreditation category. We have four programs currently under Initial Accreditation and one program under Continued with Warning.

#### **Initial Accreditation Status:**

- 1) Adult Cardiothoracic Anesthesia
- 2) Advanced Heart Failure and Transplant Cardiology
- 3) Plastic Surgery Integrated
- 4) Pain Medicine

#### **Continued with Warning:**

- 1) Child & Adolescent Psychiatry

#### ***Response to Existing Citations***

As programs transitioned into the New Accreditation System they received letters from their Residency Review Committees outlining the citations that have been either resolved or are ongoing. GME Administration reviews the citations and responses each year prior to the ADS annual update to ensure responses have been appropriately revised.

#### ***Site Visits and New Citations***

The Pediatric Critical Care Medicine Fellowship program underwent a focused site visit on April 15, 2014. The program received its response from the ACGME on August 6, 2014. The letter stated that two of the six outstanding citations were extended and the rest were resolved.

#### ***Self-Study Visits***

There were no self-study visits in the 2013-2014 academic year.

#### ***Special Reviews***

As indicated earlier in this report, special reviews will commence in AY 2014-15 following review of the data in this year's AIR, and discussion with the GMEC about the appropriate metrics to use in determining when a special review is warranted.

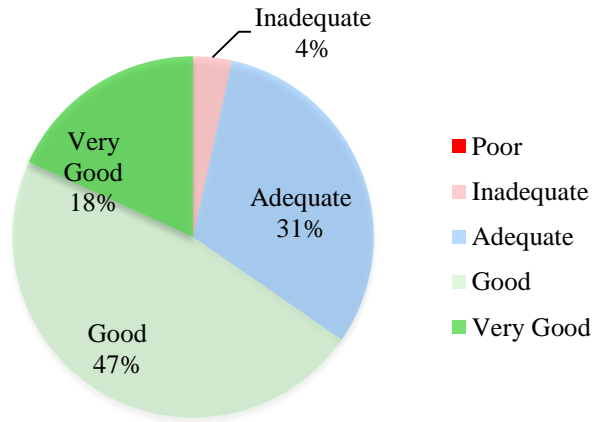


## ***II. QUALITY OF THE LEARNING ENVIRONMENT***

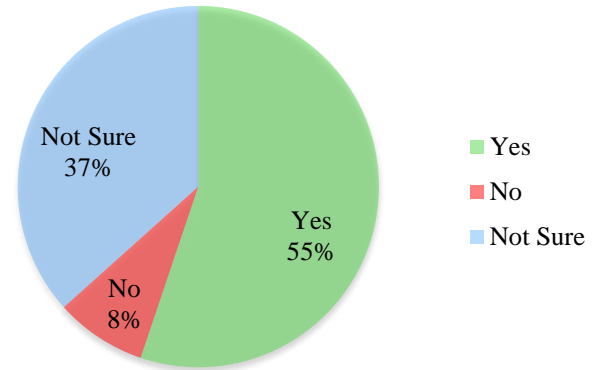
One key element of the ACGME's Next Accreditation System (NAS) is the Clinical Learning Environment Review (CLER) (Nasca, Philbert, Brigham, & Flynn, 2012). Pursuant to NAS, sponsoring institutions must monitor trainee engagement in six core areas: (a) Patient Safety, (b) Transitions-In-Care, (c) Fatigue Management, (d) Supervision, (e) Quality Improvement, and (f) Professionalism. To understand how institutions are meeting this obligation, a CLER team will visit each sponsoring institution every 18 months.

To obtain a clearer understanding of the quality of our trainees' learning environment, as reflected in these CLER areas, we developed a 103-item questionnaire and administered it to 334 graduating residents and fellows. The questions targeted key elements of trainees' experience in the clinical learning environment. They focused on: (a) the adequacy of training in transitions-in-care, mitigating fatigue, and quality improvement initiatives, (b) comfort level in reporting patient safety, supervisory, and professionalism issues, (c) the quality of transitions-in-care, (d) participation in QI initiatives, and (e) perceptions of the frequency of unprofessional behavior. To minimize inaccurate reporting, we instructed respondents to limit responses to the site at which they were currently rotating. Using this methodology, we obtained responses for 234 respondents (for a 70% response rate) in 85 different programs across over 20 different clinical sites.

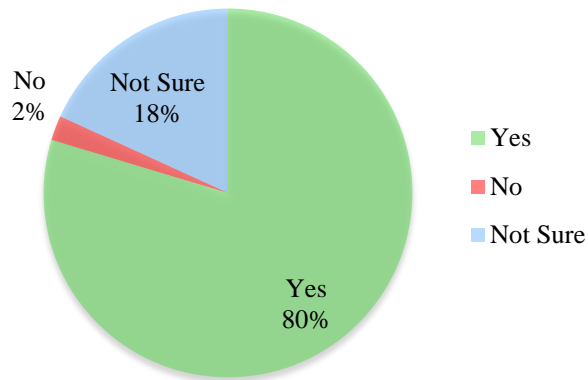
***Adequacy of Training and Procedures***



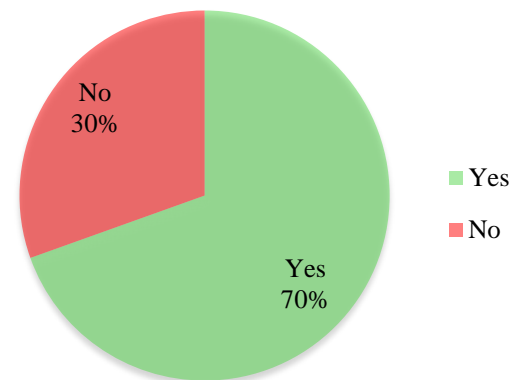
***Figure 3. Average Quality of Trainings in Transitions In Care, Fatigue Management and QI Initiatives***



***Figure 4. Is There an Easy Way to Determine Which Procedures Other Residents/Fellows Can Perform?***

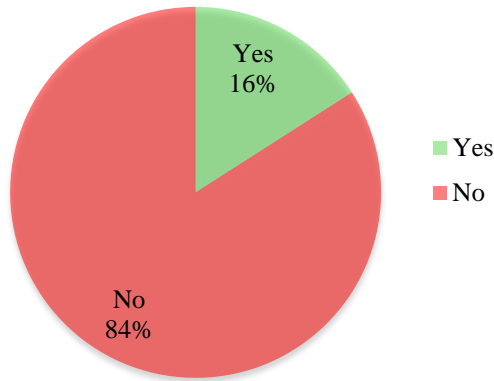


***Figure 5. Is There a Well-Documented Procedure for Reporting Medical Errors?***

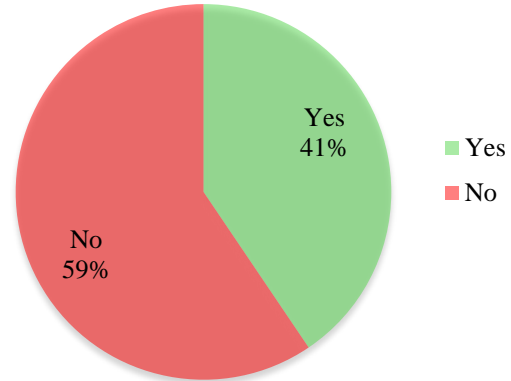


***Figure 6. Have You Received Training on Which Behaviors Constitute Unprofessional Conduct?***

As Figure 3 indicates, most trainees (65%) agreed that the overall quality of training in transitions-in-care, fatigue management, and QI initiatives was good. However, as Figures 4, 5, & 6 indicate, 37% were not sure if they could easily determine the procedures other residents could perform, 18% were not sure if there was a well-documented procedure for reporting medical errors, and 30% did not receive training regarding which behaviors were unprofessional.



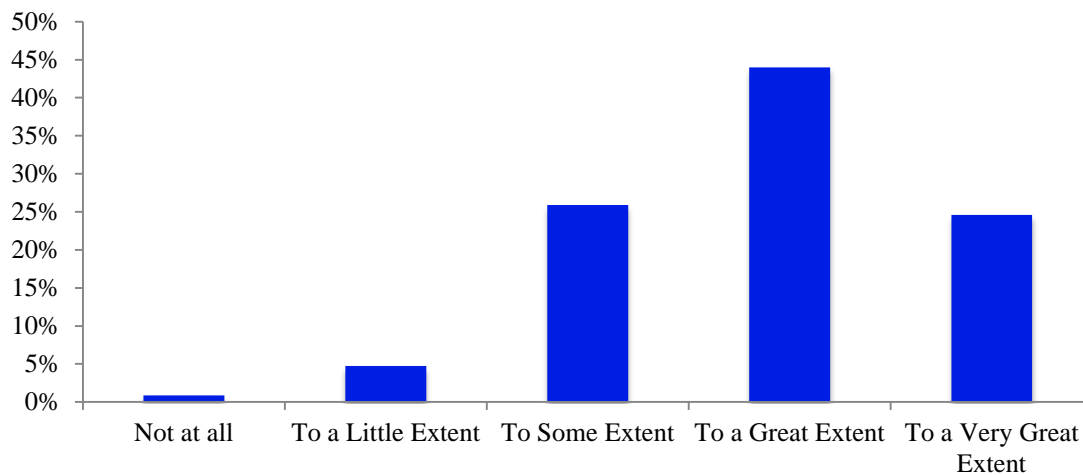
**Figure 7. Did You Report any Medical Errors at this Site During the Past Year?**



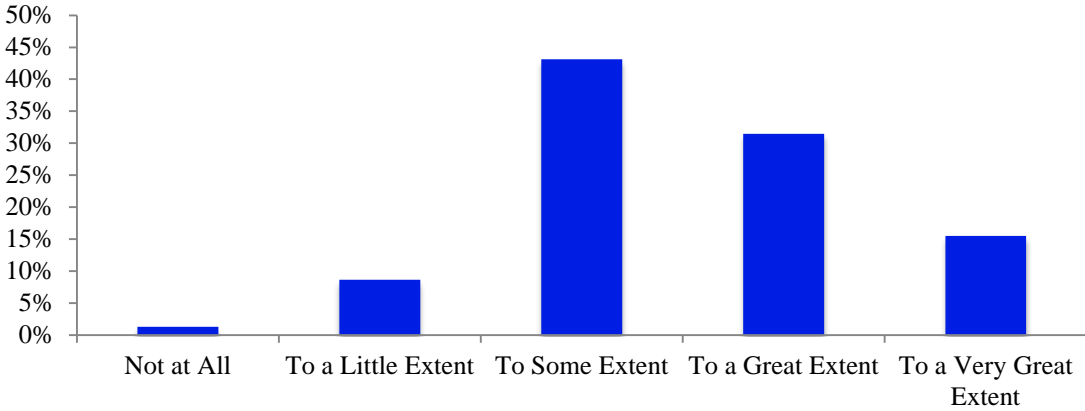
**Figure 8. Did You Receive Feedback Regarding the Types of Errors Reported?**

The survey disclosed that there are opportunities for enhancing the level of feedback provided when errors are reported. As Figures 7 and 8 indicate, of the 16% who indicated they reported medical errors at a given site, only 41% received feedback regarding those errors.

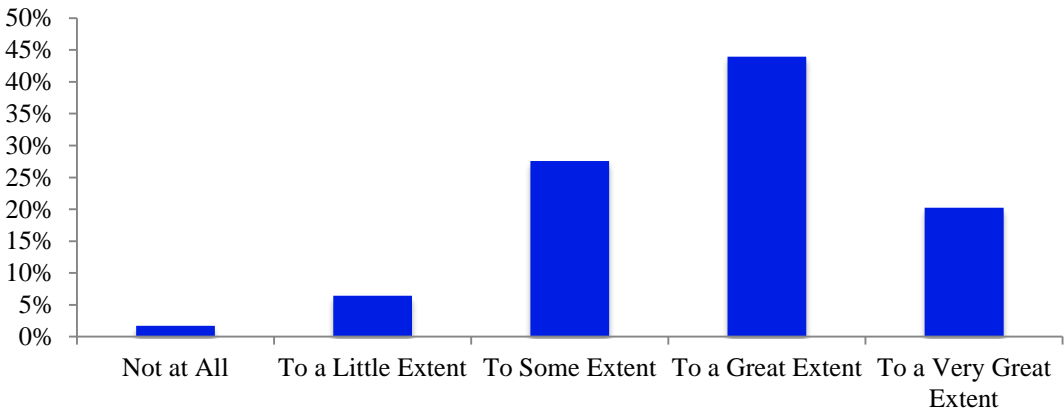
***Comfort Level Reporting Patient Safety, Supervision and Professionalism Issues***



**Figure 9. Does Site Foster a Culture of Openness in Reporting Patient Safety Issues?**



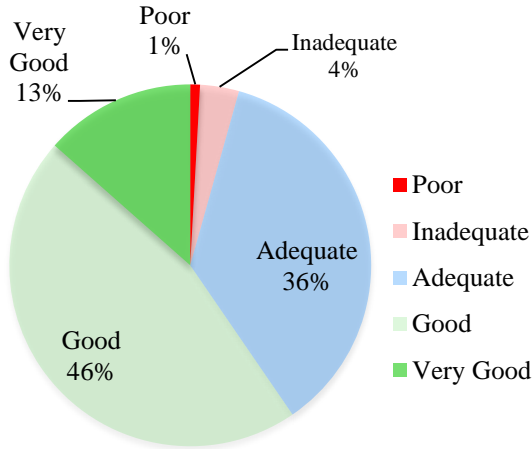
***Figure 10. Does Site Foster a Culture of Openness in Reporting Supervision Issues?***



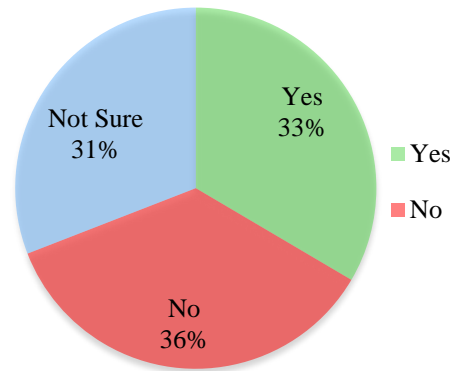
***Figure 11. Does Site Foster a Culture of Openness in Reporting Unprofessional Conduct?***

Figure 9 indicates that most trainees (69%) agreed that our sites foster a culture of openness for reporting patient safety issues (to a great extent or more). Figure 10 indicates that 47% of respondents believed our sites foster a culture of openness in reporting supervision issues, and Figure 11 indicates that 64% believed they foster a culture of openness in reporting professionalism issues.

***Transitions-in-Care***



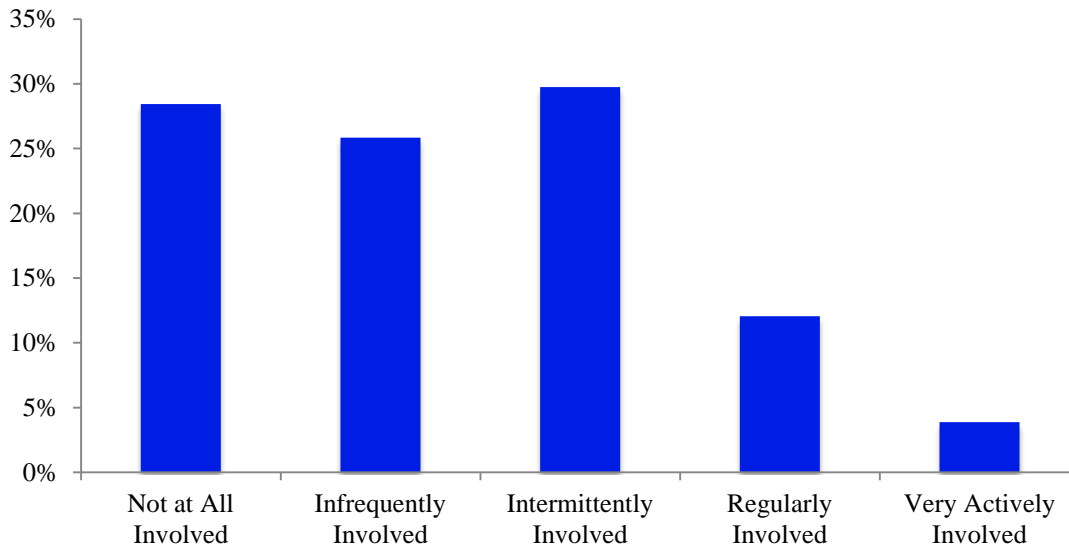
***Figure 12. Is the Atmosphere at this Site Conducive to Conducting Effective Handoffs?***



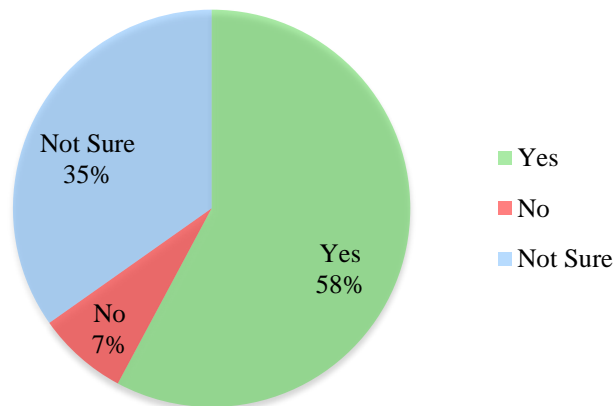
***Figure 13. Does this Site have a Uniform Process for Conducting Handoffs Between Specialties?***

Figure 12 indicates that the majority of respondents (59%) believed the atmosphere at their site was conducive to conducting effective handoffs. It was unclear to many respondents (31%) whether there was a uniform process for conducting handoffs across specialties.

***Participation in Quality Improvement Initiatives***



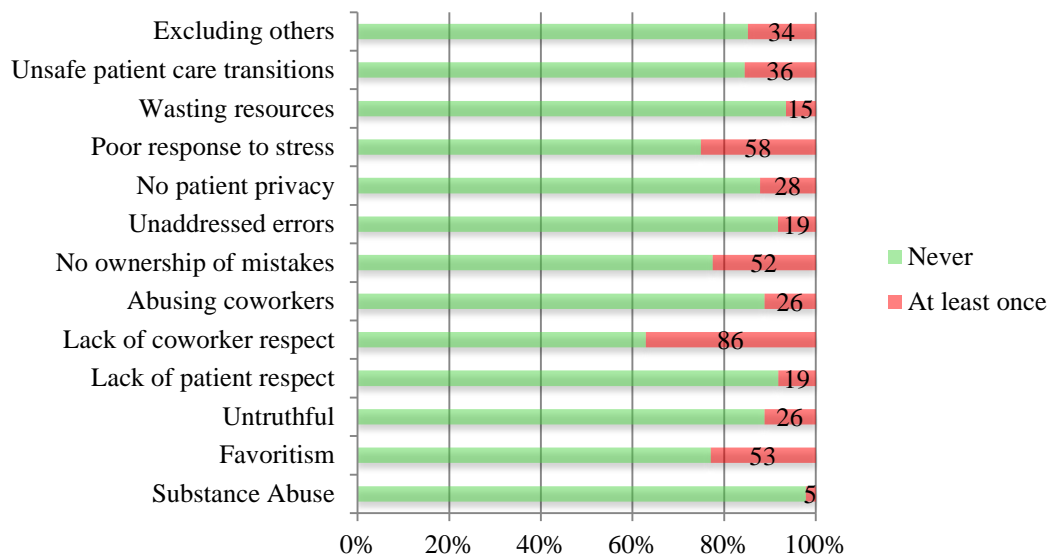
***Figure 14. How Involved are you in this Site's Quality Improvement Initiatives?***



**Figure 15. Does this Site Have a Well-Documented Procedure for How to Participate in Quality Improvement Initiatives?**

The survey revealed opportunities for enhancing trainee participation in QI initiatives. Figure 14 indicates that only sixteen percent of respondents were regularly involved in their site’s QI initiatives. Figure 15 indicates that thirty-five percent of respondents were not sure if there was a well-documented procedure for participating in QI initiatives.

**Professionalism**



**Figure 16<sup>1</sup>. How Frequently did you Observe the Following Unprofessional Behaviors by Healthcare Workers at this Site?**

<sup>1</sup> The numbers on this figure are counts, not percentages.

Results revealed opportunities for enhancing professionalism. As Figure 16 indicates, the overall number of unprofessional behaviors displayed was low. However, at least 20% of respondents had observed healthcare workers displaying: (a) lack of respect towards others, (b) favoritism, (c) inappropriate responses to stress, and (d) a failure to take responsibility for errors during the past year.

### ***Summary***

The CLER survey of the quality of the clinical learning environment revealed areas of institutional strength as well as developmental opportunities. Importantly, the majority of respondents felt the culture for reporting patient safety and professionalism issues was open at our training sites. In addition, the number of professionalism issues reported overall was small. However, the survey revealed opportunities to improve training in how to report medical errors, and what constitutes unprofessional conduct. In addition, it revealed opportunities to increase resident engagement in quality improvement initiatives. Finally, survey results suggest there are opportunities to increase the level of feedback provided when errors are reported, create systems to track the procedures residents can perform, and target select unprofessional behaviors for reduction.

## ***III. QUALITY OF EDUCATIONAL EXPERIENCES***

### ***Compliance with Common Program Requirements***

One important indicator of the quality of trainees' educational experience is the degree to which their programs comply with the ACGME's common program requirements (CPR) for educational experiences. These requirements include a detailed set of curriculum and program evaluation elements (see Table 7).

Table 7 indicates that a high percentage of our ACGME-accredited programs (over 90%) comply with the vast majority of the CPR's basic educational requirements. One exception is the requirement to have a written description of the responsibilities of the Clinical Competency Committee (CCC). Some Phase II programs which do not need to report Milestone scores until December, 2014 or later have not yet fulfilled this requirement. In addition, a very small number of programs have not yet complied with some of the other basic CPR educational requirements. Affected programs have pledged to remedy these deficiencies. We will work directly with these programs to address these areas.

**Table 7. Program Compliance with Common Program Requirements**

Common Program Requirements	% Programs that Comply		
	Total (N=80)	Residency (N=27)	Fellowship (N=53)
1. The overall educational goals for the program are made available to residents/fellows and faculty (IV.A.1)	96%	100%	98%
2. Program curriculum contains competency-based goals and objectives for each assignment, at each educational level, that are distributed to residents/fellows and faculty annually (IV.A.2)	95%	96%	98%
3. Program curriculum contains regularly scheduled didactic sessions (IV.A.3)	96%	100%	98%
4. Program curriculum contains written policies/guidelines that specify resident/fellow responsibilities for patient care, over the continuum of the program (IV.A.4)	96%	100%	98%
5. Program curriculum contains written policies/guidelines that specify how residents/fellows will be supervised, over the continuum of the program (IV.A.4)	95%	96%	98%
6. Program has a written description of the responsibilities of the Clinical Competency Committee [V.A.1(b)]	82%	89%	81%
7. Residents/fellows have the opportunity to evaluate the program confidentially and in writing and at least annually [V.C.2(d)(1)]	96%	100%	98%
8. Faculty have the opportunity to evaluate the program confidentially and in writing at least annually [V.C.2(d)(1)]	96%	100%	98%
9. Program evaluates, at least annually, faculty performance as it relates to the educational program (V.B.1)	93%	96%	94%
10. All residents/fellows participate in interprofessional teams (VI.F.)	95%	100%	96%
11. Program provides each resident/fellow with documented semi-annual evaluations of performance with feedback [V.A.2(b)(4)]	94%	100%	94%
12. Program director provides a summative evaluation for each resident/fellow upon completion of the program that verifies the resident/fellow has demonstrated sufficient competence to enter practice without direct supervision [V.A.3(b)]	95%	100%	96%
13. Residents/fellows have the opportunity to evaluate faculty performance confidentially and at least annually (V.B.3)	*97%	96%	**98%

\*N=79; \*\*N=52



## ***Resident and Faculty Perceptions of Educational Experiences***

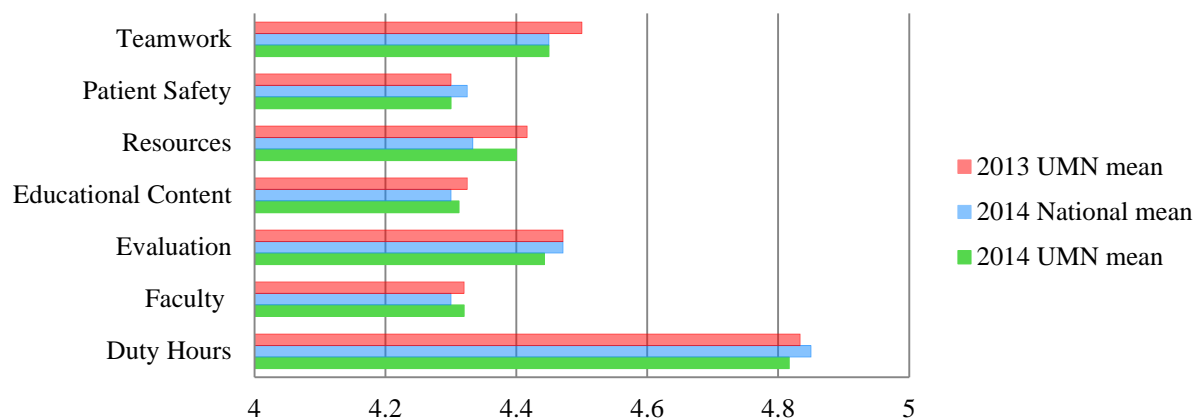
Two important sources of data regarding the quality of trainee educational experiences are resident and faculty perceptions of those experiences. These perceptions are captured in two places: (1) ACGME surveys, and (2) internal program surveys. We discuss the results of the ACGME surveys in this section, and internal program surveys in the next section.

### ***ACGME Surveys***

The ACGME surveys inquire into resident and fellow perceptions of the following aspects of their educational experience: (a) duty hours, (b) faculty, (c) evaluation, (d) educational content, (e) resources, (f) patient safety, and (g) teamwork. The faculty survey content areas are similar, except that the duty hours and evaluation areas are omitted. Each content area is linked to several questions, the majority of which are on a 5-point Likert scale. We do not have access to the specific questions asked in the survey. However, we do know that the main set of questions asked is identical for all programs, and that, in general, higher scores indicate more favorable responses on each question.

For each institution, the ACGME reports that institution's program means, and overall institution means, for the questions included in each content area. It also reports national means for these questions for each specialty and for all institutions. This reporting structure allows us to make two useful comparisons: (a) how the *University of Minnesota* compares to other institutions in each content area, and (b) how each *program* compares to its specialty nationwide in each of these areas. These comparisons provide different insights into our trainees' educational experience. The first set of comparisons provide insight into how our institution as a whole fares in the eyes of residents, fellows and faculty in these key educational areas. The second set of comparisons allow us to highlight outstanding programs in specific areas, or ones that require greater institutional oversight. We present institutional comparisons first, and then specialty comparisons.

### **Institutional Comparisons**

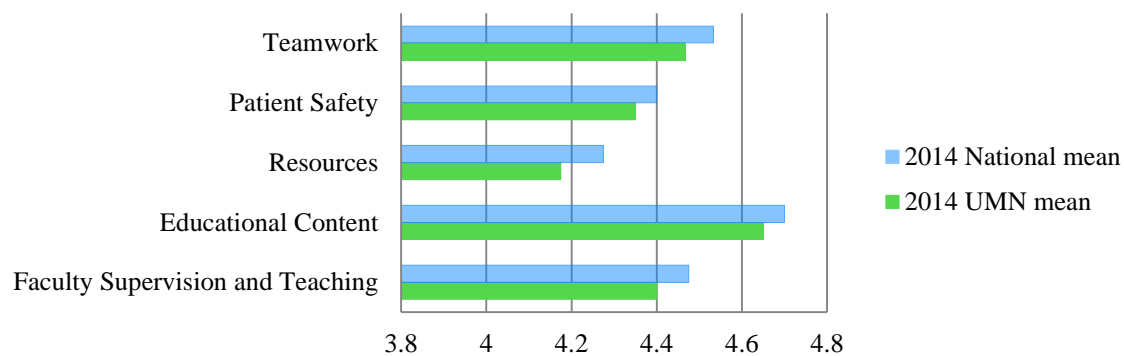


***Figure 17. Resident/Fellow Institutional Comparisons***

Figure 17 presents comparisons of resident/fellow perceptions of their educational experiences for (a) the 71 residency/fellowship programs at the University of Minnesota for which survey data are available (for AY 2013-14 and the prior year), and (b) all residency and fellowship programs nationwide, regardless of specialty (for AY 2013-14). Results are presented for each educational content area by averaging the means for each question within content areas. Thus, the unit of measurement in Figure 17 is at the institutional, rather than the program, level. The sample size for the means displayed for the University of Minnesota is therefore 71, and the sample size for the national means is 9032.

Prior to discussing these comparisons, it is important to make two observations. First, because the means displayed in Figure 17 are averaged across 71 individual residency/fellowship programs, they hide important variations in resident/fellow perceptions of their educational experiences across programs. For several programs, the results were more or less or favorable in a specific content area than they were for all 71 programs in the aggregate. These program-level variations become evident when viewing the specialty comparisons. Second, because the ACGME does not provide the information necessary to determine the standing of a given institution relative to other institutions (e.g., percentile information or standard deviations), it is difficult to determine the relevance of specific mean differences in the comparisons presented in Figure 17. In particular, it would not be appropriate to attempt to interpret relatively minor differences in means for any one content area.

Figure 17 indicates that, across the 71 programs for which data are available, resident/fellow perceptions of their educational experiences are quite positive in each educational content area. They also track national averages in most categories very closely. Overall, residents have a slightly more positive view of the resources available to them than their counterparts in other institutions. In all content areas, perceptions of educational quality were almost identical to perceptions in 2013.



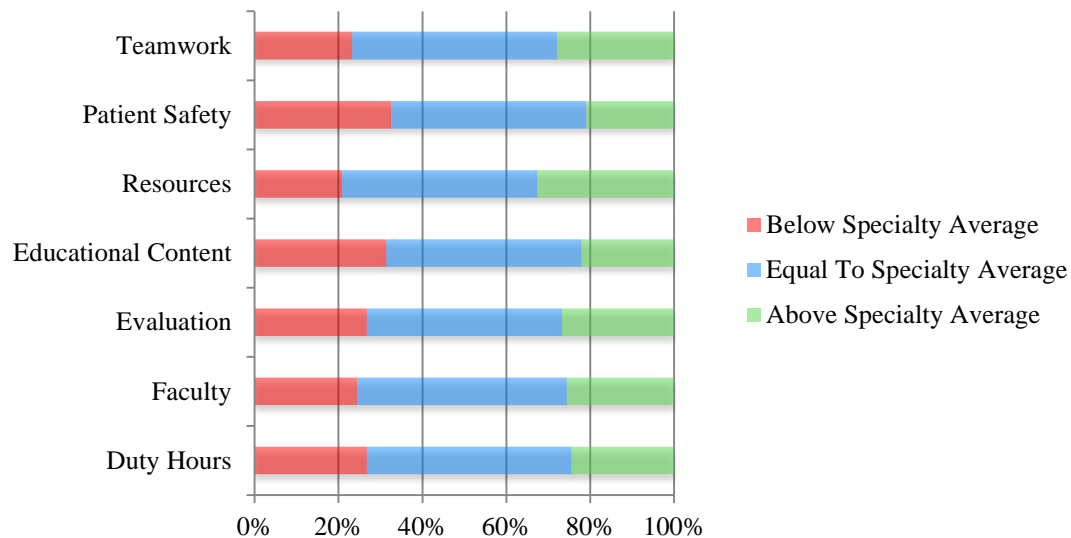
**Figure 18. Faculty Institutional Comparisons**

Figure 18 indicates that, across the 71 programs for which data are available, faculty perceptions of the educational content of their programs is quite positive. However, in every category, these perceptions are slightly less positive than they are nationally, across institutions. Responses to specific survey questions reveal that there are opportunities for enhancing faculty instruction in supervising and educating residents and fellows. In addition, faculty desire increased feedback about their own performance.

## **Specialty Comparisons**

In addition to the institutional comparisons described above, we present comparisons of how our programs fared relative to their respective specialties. As mentioned earlier, these comparisons reveal variability in perceptions of the educational environment in specific programs that are masked by the institutional comparisons. They also allow us to identify programs that are exceling in specific areas, and that have the opportunity to improve in specific areas. As we did with the institutional comparisons, we present these comparisons for both residents/fellows and faculty in Figures 19 and 20.

Ideally, to compare programs to their specialties nationwide, we would compare programs on the basis of their percentile standing nationally. However, the ACGME does not provide the information necessary to determine the standing of a given program relative to other similar programs (e.g., percentile information or standard deviations). For this reason, we examined whether programs were below, at, or above their specialty means in each educational category.

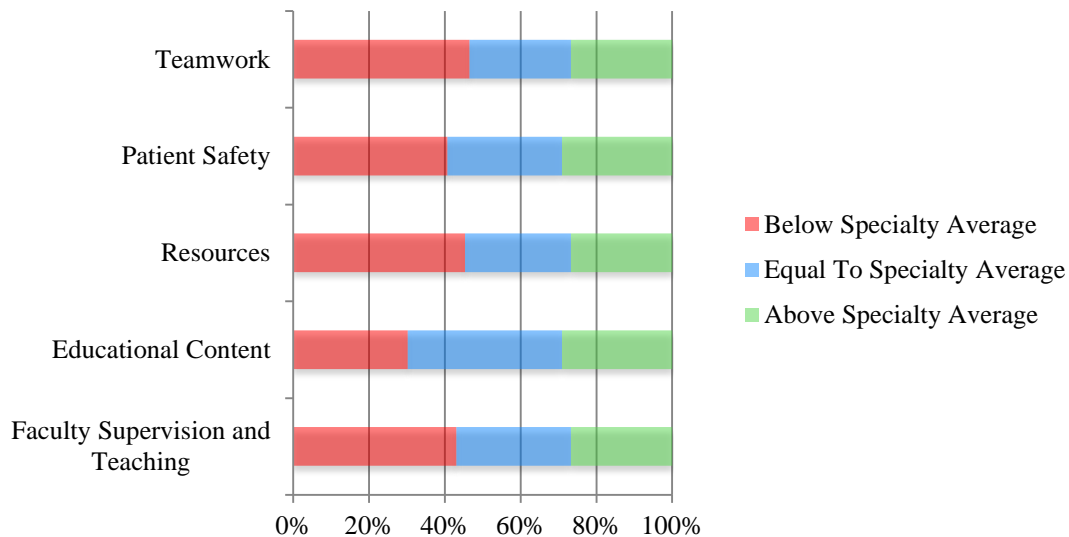


**Figure 19. Resident/Fellow Specialty Comparisons**

Figure 19 indicates that the distribution of resident perceptions in the duty hours, faculty, and evaluation content areas were what would be expected at an “average” institution. In each of these content areas, approximately ½ of our programs had means equal to their specialty averages, approximately ¼ had means below their specialty averages, and approximately ¼ had means above their specialty averages. Figure 19 indicates that resident perceptions of the resources available to their programs and teamwork were quite positive. In both these content domains, a greater percentage of programs exceeded their specialty averages than fell below them. In contrast, resident perceptions of the educational content of their programs and patient safety were more negative. In these areas, a greater percentage of programs fell below their specialty averages than exceeded them.

In most content areas, specific programs stood out as having very positive resident and fellow perceptions of the educational learning environment. For the faculty content domain, our family medicine programs at Fairview and North Memorial, and our radiation oncology program,

had category averages that were more than 0.5 points above their specialty averages. In the educational content area, the radiation oncology program was also more than 0.5 points above its specialty average. Considering that most specialties have category averages above 4.0, these individual program results are impressive. In several content domains, a small number of programs were more than 0.5 points below their specialty averages. We will work with these programs to identify opportunities for improvement in the relevant content domains.



**Figure 20. Faculty Specialty Comparisons**

Figure 20 presents a similar set of comparisons, but from the perspective of our faculty. Figure 20 indicates that, on the whole, faculty perceptions of the educational environment are less positive than those of residents. In particular, a greater percentage of programs fell below their specialty averages in the faculty supervision and teaching, patient safety, resources, and teamwork domains than exceeded those specialty averages.

In the resources category, the family medicine (Methodist) program stood out as having a category average that was more than 0.5 points above its specialty average. A small number of programs were more than 0.5 points below their specialty averages in specific content areas. We will work with these programs to identify opportunities for improvement in the relevant domains.

***Internal Surveys of Educational Issues***

**Faculty Teaching**

Feedback from faculty performance evaluations and annual program evaluations disclosed two important educational trends: (a) low faculty engagement in teaching, and (b) insufficient feedback from faculty regarding performance. In many programs, faculty disengagement takes the form of dissatisfaction with teaching requirements, missed weekly meetings, lack of participation in didactic sessions, and untimely or low quality evaluations of residents/fellows. While some programs are still struggling with how to increase faculty engagement, others have had success by changing meeting times to better accommodate faculty

schedules, increasing the structure of evaluations (through auditing and tracking evaluation compliance and standardizing expectations), and involving the department chair in faculty engagement discussions. Insufficient feedback regarding performance is also noted by residents and fellows in many programs. Programs note that insufficient feedback can be mitigated by providing more structure to the evaluation process and faculty development on short, focused approaches to giving feedback.

**Other Educational Trends**

Apart from faculty teaching, annual program evaluations disclosed four other major trends related to educational issues: (a) deficits in research progress, (b) education compromised by service, (c) non-participation in QI initiatives, and (d) problems maintaining confidentiality of evaluations. Due to funding cuts and increasing demands on trainees’ time, participation and progress in scholarly activities is lacking. In response to these cuts, programs are applying for more funding, restructuring trainee schedules to allow for more research time, and increasing oversight of research progress to increase the scholarly output of their programs. Many trainees cited their service obligations as the reason they are unable to participate in education opportunities, such as the Morning Report, and the Morbidity and Mortality conferences. To correct this unbalance, programs have instituted new policies that decrease service expectations, such as requiring trainees to work in the continuity clinic on a bi-monthly basis or not at all while on rotation. Programs discovered trainees were unaware which activities qualified as QA/QI. After clearly identifying these activities, programs expect reported participation in them will increase. Many residents reported issues with the confidentiality of faculty evaluations, and some residents report being uncomfortable voicing their true opinion. Program directors have taken more extreme measures to ensure faculty cannot access the identity of their evaluators in the RMS, and some programs are moving towards group evaluations of faculty by residents.

***Quality Improvement Initiatives***

***Table 8. Sample of Quality Improvement Projects***

Program	Project Title
Anesthesiology	Blood product utilization quality improvement project
Cardiovascular Disease	Increasing/improving the level of communication/quality of communication between fellows and nurses/allied health professionals/staff in the hospital and clinic
Child & Adolescent Psychiatry	Monitoring for metabolic side effects of second-generation antipsychotics
Hospice & Palliative Medicine	Methadone documentation in clinic
Molecular Genetic Pathology	Evaluating the causes of low-level false positive PCR results
Otolaryngology	Free flap monitoring initiative
Pediatric Cardiology	Improving communication, provider knowledge and delegation of responsibilities regarding post-catheterization patients
Pediatrics	Reducing readmissions for hyperbilirubinemia
Plastic Surgery	Reduction of cost in the OR by minimal draping technique
Family Medicine (St. John’s)	Obstetrical labor patient sign-out process improvement project

Another important index of the quality our trainees' educational experiences is the range of quality improvement initiatives undertaken by their programs. As Table 8 illustrates, programs were involved in a vast array of important quality improvement initiatives during AY 2013-14. However, as the CLER survey results indicate, relatively few residents and fellows are regularly involved in these projects.

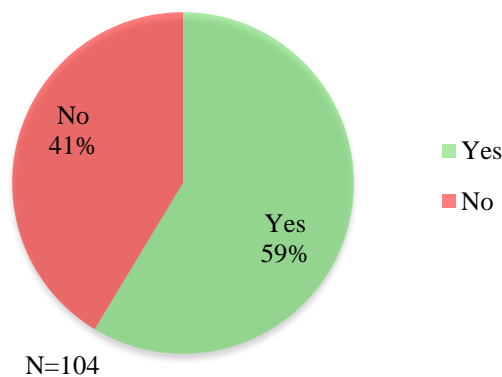
### **Summary**

In general, the data collected regarding the educational experiences of trainees indicate that those experiences are of high quality. The vast majority of programs comply with mandatory common program requirements for educational experiences, and trainees' and faculty's perceptions of the educational environment as reported in the ACGME surveys are generally positive, and track national norms. However, this data also reveal that there are several opportunities for improving trainees' educational experience. One opportunity is increasing faculty's engagement in teaching. In particular, faculty voice concerns about the lack of specific feedback about their performance, a desire for increased faculty development in trainee supervision and education, and insufficient time to engage in research with trainees. Residents and fellows are also concerned about deficits in research progress. In addition, trainees express a desire for greater opportunities for participation in QI initiatives, more direct feedback regarding performance, and heightened confidentiality when completing evaluations.

## **IV. PROGRAM PERFORMANCE**

### **Resident Performance**

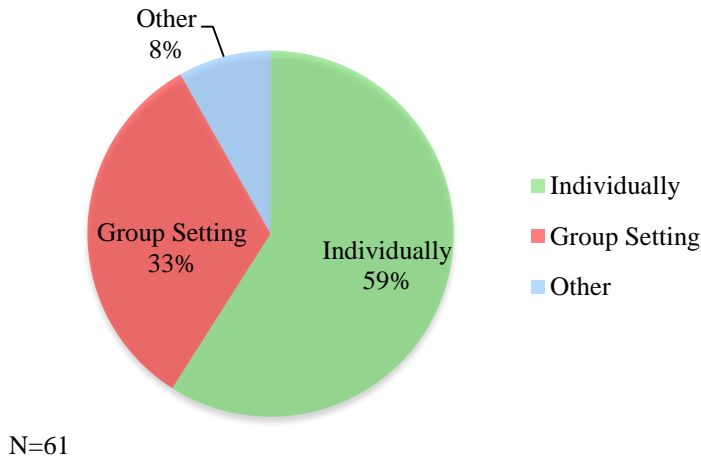
#### **In-training exams**



**Figure 21. Percentage of Programs Administering at Least One In-training Exam**

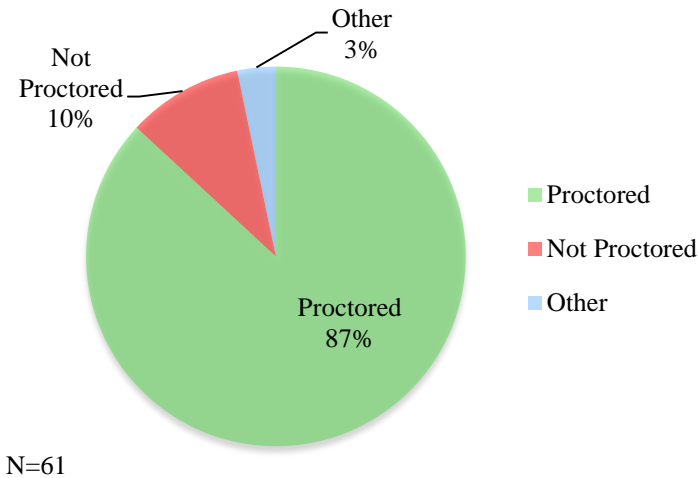
In-training exams are an important barometer of how well-prepared trainees are for their board exams. However, the importance accorded to these exams, the purposes for which they are

used, and the procedures governing their administration differ from one program to the next. As Figure 21 indicates, fifty-nine percent of programs administer at least one in-training exam.



**Figure 22. Settings Where Residents/Fellows Complete Exams**

As Figure 22 indicates, of those programs that do administer at least one in-training exam, 59% ask their trainees to complete exams on their own, 33% require trainees to complete exams in a group setting, and 8% ask trainees to complete exams individually although they take them in a testing center.



**Figure 23. Supervision of In-training Exams**

The degree of supervision over in-training exams varies considerably. As Figure 23 indicates, eighty-seven percent of programs proctor their residents' in-training exams, and 10% do not proctor them. One program sometimes proctors them.

**Table 9. Purpose of In-training Exams**

Use	Percent	Count
Practice for Board Exams	89%	54
Informal Assessment for Resident Development	89%	54
Formal Milestone Assessment	46%	28
Other	23%	14

N=61

Table 9 indicates that the vast majority of programs use in-training exams for two main purposes: (a) practice for board exams, and (b) informal assessment for resident development. Approximately half of programs use these exams for formal Milestone assessment as well. Some other uses for in-training exams include assessment of knowledge area deficiencies for future improvement, determining moonlighting qualifications, identifying low-performing trainees who are at risk of failing boards so a learning plan can be developed, and general program evaluation.

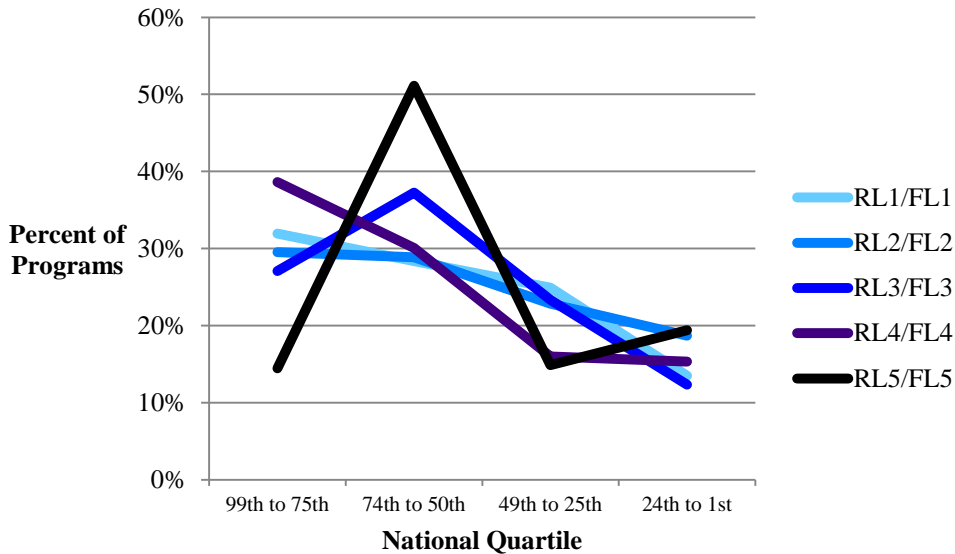
**Table 10. Percentage of Programs Scoring in Each National Quartile Per Class**

		99 <sup>th</sup> to 75 <sup>th</sup> percentile	74 <sup>th</sup> to 50 <sup>th</sup> percentile	49 <sup>th</sup> to 25 <sup>th</sup> percentile	24 <sup>th</sup> to 1 <sup>st</sup> percentile
RL1/FL1	35	32%	28%	25%	14%
RL2/FL2	34	30%	29%	23%	19%
RL3/FL3	31	27%	37%	23%	12%
RL4/FL4	16	39%	30%	16%	15%
RL5/FL5	6	14%	51%	15%	19%

N= Number of programs

Table 10 presents, for programs with available data, the in-training exam performance of their residents and fellows. Specifically, it presents the percentage of each class in these programs scoring in each quartile nationally. Figure 24 presents a graphical depiction of this data. Table 10 and Figure 24 reveal that, across all years, residents and fellows are outperforming similar programs nationwide. This is especially evident when considering the percentage of programs scoring in the top half of the distribution in each class. The percentage of trainees scoring in the top half of the distribution ranged from a low of 59% for RL2s/FL2s to a high of 69% for RL4s/FL4s. Collectively, these results indicate that trainees are performing well on these important precursors to board exams.





**Figure 24. Percent of Programs Scoring in Each National Quartile Per Class**

**ACGME Competency Milestone Scores**

For the first time this year, our Phase I programs were required to report Milestone scores for their residents. Scores are reported on a 9-point scale between 1-5 that utilizes half-point increments. The evaluation tools used to assess the Milestones differ by specialty. At a minimum, evaluations include end-of-rotation faculty evaluations. They may also include simulations, operative performance rating scales, 360 evaluations of nursing and ancillary staff, case logs, objective structured clinical encounters (OSCEs), and other evaluations. The anchors for the Milestone scale points also differ by specialty. However, in all cases, higher scores represent increasing levels of competence.

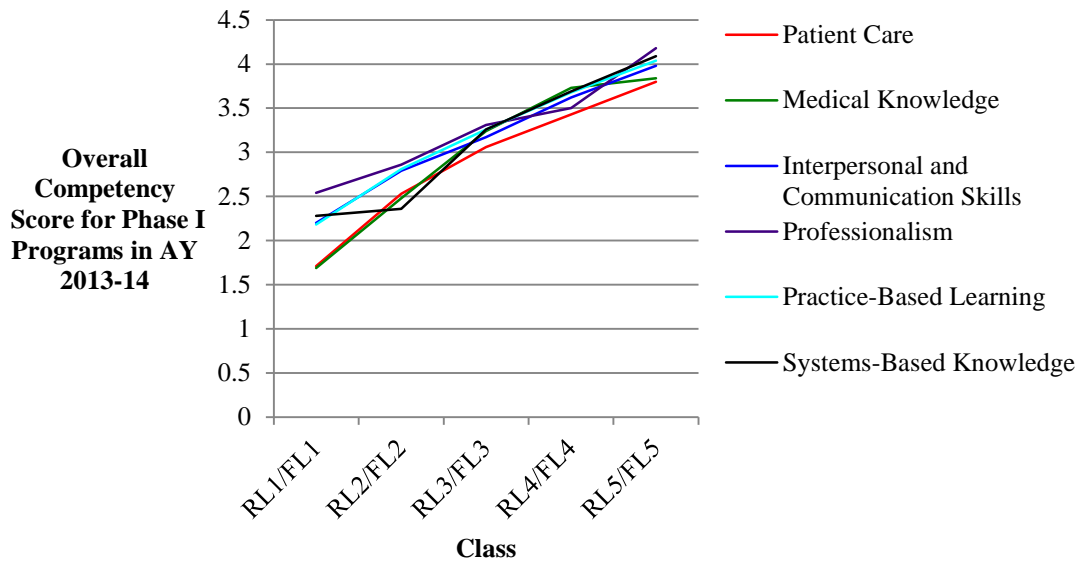
Although the Milestones differ by specialty, all Milestones are linked to the six larger competencies of patient care, medical knowledge, interpersonal and communication skills, professionalism, practice-based learning and improvement, and systems-based knowledge. Accordingly, it was possible to compute, both within and across specialties, average scores for our Phase I programs on each of these mega-competencies.

**Table 11. Average Competency Scores for Phase I Programs by Class**

Training	Patient Care	Medical Knowledge	Interpersonal and Communication Skills	Professionalism	Practice-Based Learning	Systems-Based Knowledge
RL1/FL1	1.71	1.69	2.20	2.54	2.18	2.28
RL2/FL2	2.53	2.48	2.79	2.86	2.81	2.36
RL3/FL3	3.06	3.24	3.17	3.31	3.26	3.26
RL4/FL4	3.43	3.73	3.62	3.50	3.68	3.69
RL5/FL5	3.80	3.84	3.98	4.18	4.04	4.09
Total	2.91	3.00	3.15	3.28	3.19	3.19

*Note:* Results averaged across phase I programs: Diagnostic Radiology, Internal Medicine, Neurological Surgery, Orthopaedic Surgery, Pediatrics, and Urology

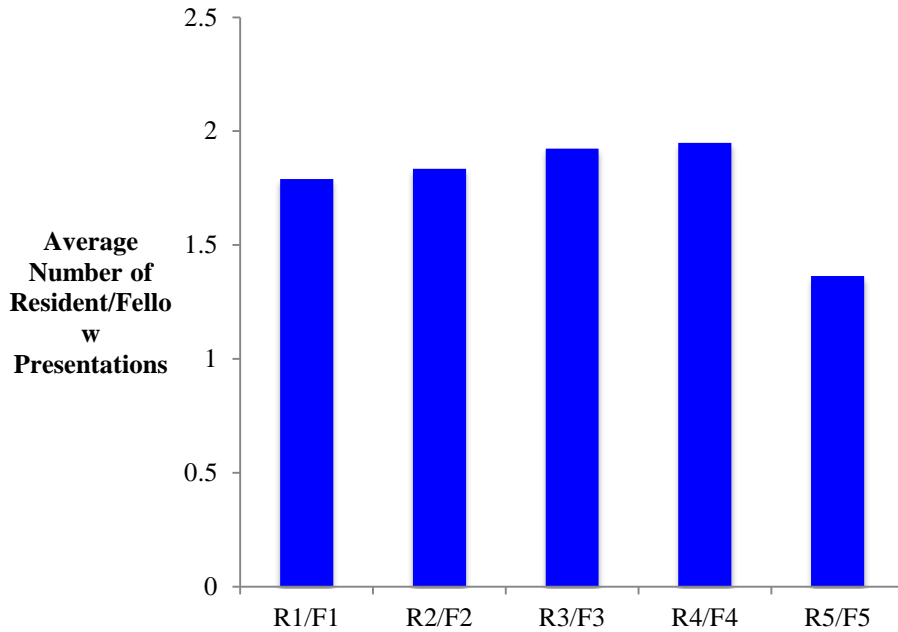
Table 11 and Figure 25 reflect these average competency scores for our Phase I programs. Table 11 indicates that, as expected, average scores for each competency increased with advancement through the program. Interestingly, however, the overall level of change in competency standing differs by competency. Whereas overall standing on patient care changed more than two points on the 5-point scale from years 1 to 5, standing on professionalism changed 1.64 points.



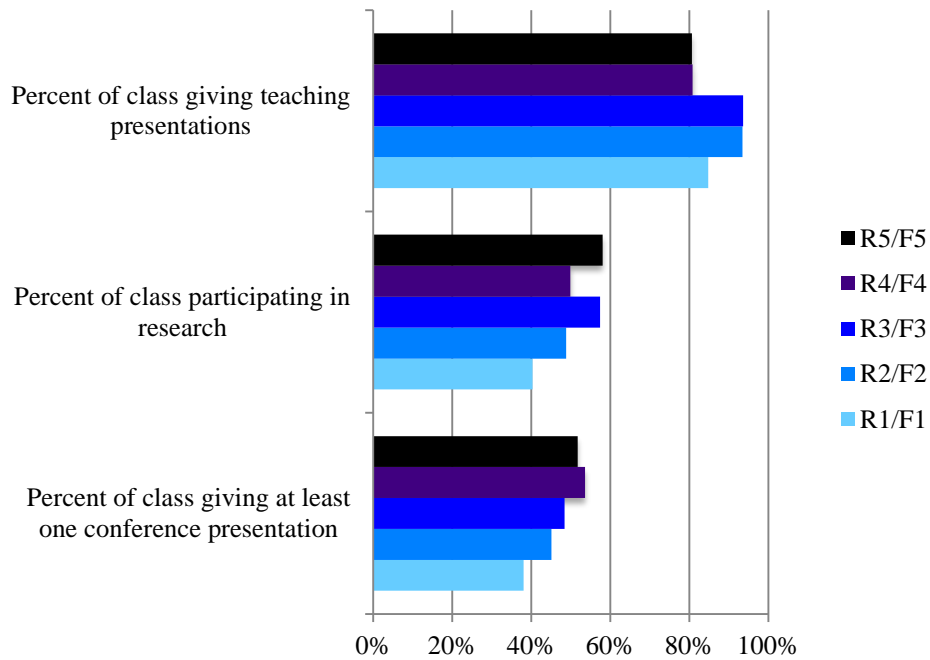
*Figure 25. Average Competency Scores for Phase I Programs by Class*

**Resident Scholarly Activity**

One important barometer of residency performance is scholarly output. Figure 26 indicates that, in each class, residents/fellows made an average of between one and two conference presentations during AY 2012-13 (the latest year for which data were available at the time of publication). The average number of publications increased gradually from years 1 to 4, climbing from 1.79 to 1.94. However, that number decreased in year 5 to 1.36.



**Figure 26. Average Number of Conference Presentations Per Resident/Fellow in Different Classes**



**Figure 27. Research Activity Per Resident/Fellow in Different Classes**

Figure 27 indicates that across classes, the vast majority of residents and fellows (over 80%) gave teaching presentations. Between 40% and 58% of residents and fellows participated

in research activities across classes, and between 38% and 54% of residents and fellows gave at least one conference presentation.

### **Case/ Procedure logs**

94% (34 out of 36) of programs achieved a 100% compliance rate for residents/fellows meeting all case/procedure requirements. Programs did not reach 100% compliance due to a resident leaving the program mid-year for personal reasons, and a lack of cases for residents to practice certain types of procedures on. The latter is being addressed by the leadership of the program involved.

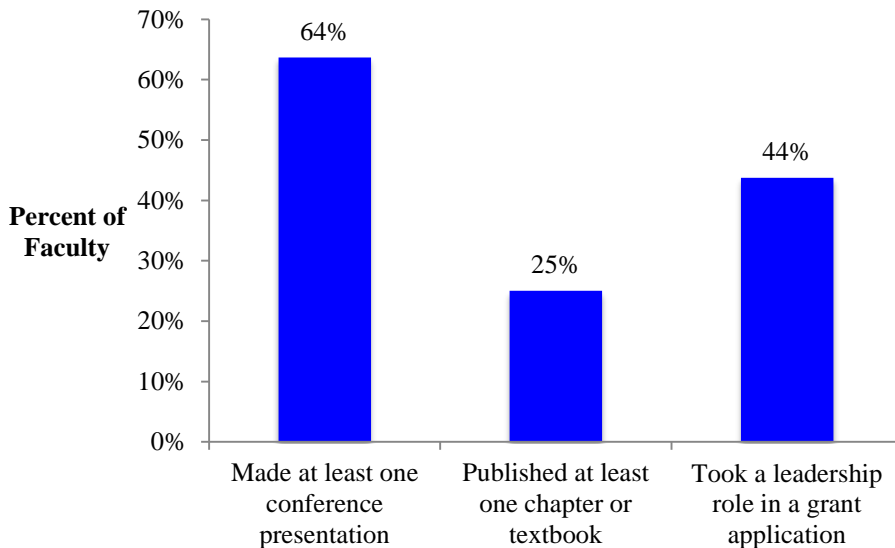
### ***Graduate Performance***

An earlier section of this report presented the board pass rates for our programs. As summarized in that section, the vast majority of our residency and fellowship programs reported high pass rates on both the written and oral board exams.

### ***Faculty Development***

#### **Faculty Scholarly Activity**

In AY 2012-13, faculty presented an average of 3.2 abstracts or poster presentations at national or international conferences. As Figure 28 indicates, 64% made at least one conference presentation, 25% published at least one chapter or textbook, and 44% took a leadership role in at least one grant application.



***Figure 28. Faculty Scholarly Activity in 2012-2013***

## **Faculty Development Activities**

In addition to facilitating participation in conferences, many programs trained faculty on the function and purpose of Milestones in NAS and the role of the Clinical Competence Committee. Some programs held training sessions on how to administer new evaluation tools, such as clinical evaluation tools, observational checklists, and journal club evaluation tools. Several programs held grand rounds on issues that were particularly important to them. For instance, the department of medicine held grand rounds presentations on dealing with generational differences between students and faculty and delivering effective feedback. Some programs targeted mentoring activities for junior faculty. For instance, the hematology program created a formal junior faculty mentoring committee and the pediatrics critical care program held didactic sessions on mentoring scholarly activity. The neurology department is planning a faculty retreat that will use the INSIGHTS assessment to facilitate better self-awareness, communication and teamwork among faculty.

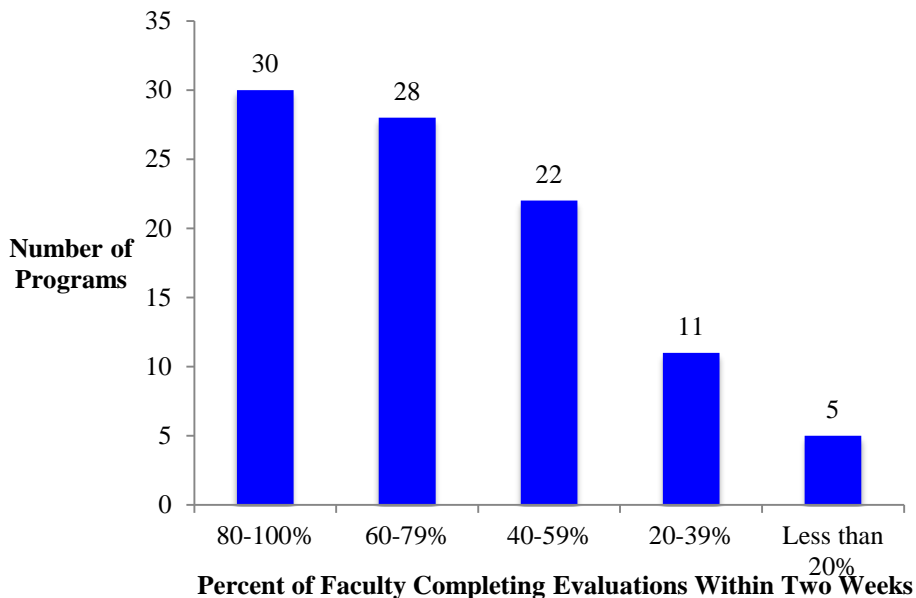
Internal program surveys revealed a desire for increased faculty development in a number of areas. These include: (a) teaching at the bedside, (b) giving effective feedback, (c) performing observation of trainees, (d) effective supervision, (e) participation in quality improvement projects, and (f) fostering time to collaborate with residents and fellows on scholarly projects. Several programs made these faculty development projects the cornerstone of their annual program improvement goals.

## ***Program Quality***

### **Terminated Residents**

One important index of program quality is the frequency of either voluntary or involuntary termination from programs prior to graduation. Across all programs, 12 residents/fellows left their programs and did not graduate, but only one was an involuntary termination. The majority of students left for personal issues/other issues although one left for academic issues.

## **Faculty Completion of Evaluations**



***Figure 29. Percent of Faculty who Complete Evaluations of Residents/ Fellows Within Two Weeks***

Another index of program quality is how diligently faculty complete end-of-rotation evaluations. Figure 29 indicates that only 31% of our ACGME-accredited programs report that between 80-100% of their faculty complete resident and fellow evaluations within two weeks.

## **Strategies to Enhance Professionalism**

Results from our CLER survey of graduating residents and fellows indicate that, on the whole, a relatively small number of unprofessional behaviors are observed at our clinical training sites. However, a small number of behaviors are observed with some frequency. One important index of program quality is the concrete steps programs take to address professionalism issues. Some of the strategies programs use to enhance professionalism in their programs include:

- Modeling of desired behaviors
- Stating expectations during orientation, bootcamp, and feedback sessions
- Including professionalism modules (e.g., patient care, HIPAA, patient safety modules) in onboarding sessions, didactic sessions, and program manuals
- Directly mentoring residents and fellows
- Documenting observed unprofessional behaviors in 360 evaluations collected from faculty, ancillary personnel, allied health care professionals and peers

In addition to implementing these strategies, several programs require residents and fellows to participate in clinic QI projects and to give professional presentations both to the medical community and local community. Some programs have their own code of

professionalism to guide faculty and residents in professional behavior, including chart completion, personal responsibility, patient care duties, and attendance expectations.

### **Program Improvement Goals**

One of the new common program requirements is for programs to select one area for improvement in the upcoming year and to indicate how they plan to monitor improvement in that area. Table 12 presents examples of some of our programs' improvement goals and how improvement will be tracked. Table 12 indicates that the program improvement goals of individual programs are quite varied. Several programs are focusing on increasing in-training and board scores. The strategies used to do this are voluminous, and include:

- Purchasing board review books
- Incorporating formal mock board exams into their programs
- Holding dedicated sessions for board review
- Developing learning plans with a faculty mentor
- Reporting back scores on practice tests to residents and fellows
- Giving homework assignments on areas covered by the exams
- Sending residents and fellows to board review courses or national meetings offering board review components

**Table 12. Sample of Program Improvement Goals**

Program	Area Targeted	Program Improvement Initiative	Metrics to Track Improvement
Clinical Cardiac Electrophysiology		Improve fellow EP procedural skill with 1-2 half day training sessions in the simulator lab	Direct observation by faculty and evaluations
Plastic and Reconstructive Surgery		Improve pass rates on in-training exams by having residents attend weekly mandatory conferences that involve question review and review of selected readings	Weekly performance answering questions and scores on the March, 2015 in-training exam
Procedural Dermatology	Resident/ Fellow Performance	Improve resident skill in specific areas by having them take Mohs layers and perform Mohs slide reading	Direct observation by faculty and evaluations
Pediatrics		Improve resident knowledge and skill in the general outpatient clinic by implementing the Yale continuity clinic curriculum	Direct observation by faculty and evaluation
Neurosurgery		Developing resident leadership skills by implementing a leadership development curriculum	Direct observation by faculty and allied health professionals and evaluations
Medicine-Pediatrics		Improve pass rates on the Pediatrics board exams by using ITE results to develop a learning objective list for each rotation and curating a collection of readings for independent study during each rotation	Observation of Pediatrics board scores trends
Neurology	Graduate Performance	Improve board pass rates by investing in board review books, creating didactic sessions for board review, and developing learning plans	Observation of board score trends
Vascular Surgery		Improve board pass rates by making mock orals more formal and/or sending second year fellows to vascular-specific board review courses	Observation of board score trends



**Table 12. Sample of Program Improvement Goals (Continued)**

Program	Area Targeted	Program Improvement Initiative	Metrics to Track Improvement
Physical Medicine and Rehabilitation		Increase faculty scholarly activity by holding a retreat for core faculty, expanding the faculty pool, clarifying faculty expectations, and encouraging scholarly collaboration with other departments	Monitor increase in yearly faculty scholarly output
Categorical Dermatology Program University of Minnesota (Duluth) Family Medicine	Faculty Development	Train faculty in the use of new NAS evaluation tools  Develop young faculty members to become great teachers by setting aside time for faculty development in specific areas, including a requirement for each faculty member to teach on a topic, and creating a curriculum of development and teaching tools for non-core and preceptor faculty	Monitor use of evaluation tools and modify training as appropriate  Survey faculty about effectiveness of development sessions, and evaluate faculty on key teaching metrics, including teaching, providing feedback, research/QI, precepting, and small group leadership
Thoracic Surgery		Work to achieve a higher volume of general thoracic cases that can be counted toward American Board of Thoracic Surgery (ABTS) requirements by providing fellows with an additional experience at another institution if necessary	Closely monitor case logs for fellows on specific rotation
Cardiovascular Disease	Program Quality	Improve rotations by using fellow feedback and working directly with rotation directors	Track improvement using semi-annual program evaluations and monthly rotation evaluations
Infectious Diseases And International Medicine		Develop a formal curriculum for IM residents by creating didactic lectures and case-based discussions that are uniform across sites	Use a pre/post test rotation assessment to assess amount learned

A number of programs hope to make strides in developing faculty in the next year. Some have made it a goal to increase faculty training in key aspects of NAS, including Milestone assessment, the use of new evaluation tools, and the function of the Clinical Competency Committee. Other programs are targeting development of specific teaching skills, including:

- Teaching at the bedside
- Giving effective feedback
- Evaluating trainees based on observation
- Leading small group discussions
- Initiating quality improvement projects
- Precepting

As indicated earlier in this report, some faculty have expressed the concern that clinical responsibilities and lack of funding have made it difficult to increase faculty scholarly activity. Programs are attempting to increase faculty scholarly activity in a number of ways, including holding periodic faculty-fellow meetings to foster collaboration, holding grant-writing sessions, and encouraging inter-departmental collaboration.

To improve overall program quality, several programs are making it their goal to improve the curriculum. In specific programs, these efforts will focus on:

- Implementing a more structured lecture system as well as a more detailed outpatient rotation schedule
- Introducing pre- and post-rotation assessments to monitor the success of a newly introduced curriculum
- Improving weekly didactic sessions, with more faculty attendance and participation.

Other initiatives to improve program quality include developing mechanisms for graduated responsibility in residents, improving specific rotations, and attempting to increase the number of applicants to fellowship programs who are seeking MD/PhD degrees.

### ***Summary***

The results of in-training exams indicate that our residents and fellows are generally doing well on these important precursors to board exams. Performance on written and oral board exams is also generally strong across programs. In a small number of programs, opportunities remain for improvement. We will work with programs to identify and share strategies for increasing performance on these exams, such as purchasing board review books, holding mock oral exams, and holding dedicated sessions for board review. The greatest opportunities for improvement in individual program performance appear to lie in faculty development in specific areas, such as providing more tailored performance feedback and effective supervision to residents and fellows, and increasing scholarly output. We will work with programs to determine how we might best support these development initiatives.

## CONCLUSION AND INSTITUTIONAL ACTION PLAN

### *Institutional Action Plan*

The data collected for this AIR reveal a number of opportunities for enhancing the learning environment of our trainees, their educational experience, and individual program performance.

With regard to the learning environment, our CLER survey of the learning environment revealed that the following interventions might be helpful:

- Improved training in how to report medical errors
- Improved training in how to participate in QI initiatives
- Improved training in which behaviors constitute unprofessional conduct
- Creation of systems to track the procedures residents and fellows can perform
- Increased feedback to residents when medical errors are reported
- Increased resident and fellow involvement in QI activities
- Develop plan to reduce incidence of unprofessional conduct in specific areas, such as (a) lack of respect towards others, (b) favoritism, (c) inappropriate responses to stress, and (d) a failure to take responsibility for errors.

With regard to educational experiences, the AIR survey data, ACGME surveys, and internal program surveys revealed that the following interventions might be helpful:

- Determine how to increase faculty's engagement in teaching
- Create systems for giving faculty direct feedback about their performance
- Create procedures for giving residents and fellows more direct and timely feedback regarding their performance
- Determine how to increase resident involvement in scholarly activities
- Determine how to prevent education being compromised by service obligations
- Create procedures for increasing the confidentiality of evaluations

With regard to individual program performance, AIR data revealed that the following interventions might be helpful:

Improved training in:

- Teaching at the bedside
- Giving effective feedback
- Performing observation of trainees
- Effective supervision
- Precepting
- Determine how to increase faculty scholarship opportunities with trainees

Although most of these developmental opportunities will require the involvement of individual programs, several of them could be advanced to some degree through institutional action.

In the coming year, the GME Office will be supporting these efforts through:

- Collaboration with our GME partners in the Twin Cities to develop a consistent error-reporting curriculum.
- Sponsorship of faculty development activities supporting effective feedback and assessment.
- Continued efforts to educate faculty and trainees about professionalism and appropriate responses to unprofessional behavior.