Session Goal:
Review the changing landscape in medical education

Describe Medical Education innovations across the continuum in the following areas:

1. Learner engagement
2. Inter-professional education
3. Leadership development
4. Patient safety & quality improvement
5. Collaborations across the continuum

Participants learn something new and look forward to inquiring further
Learner Engagement

UME
Learner Engagement
UME

- Flipping the Classroom
Learner Engagement
UME - Flipping the Classroom

Learning Pyramid

- Lecture: 5%
- Reading: 10%
- Audio/Visual: 20%
- Demonstration: 30%
- Practice by doing: 75%
- Teach others / Immediate use of learning: 90%

Activity and Average Retention Rate

Source: National Training Laboratories
Learner Engagement
UME - Flipping the Classroom

• Readings/lectures on own
• Case-based learning at school
  – Team-based learning (TBL)
  – Team-based exercises (unfolding cases)
• Outcomes
  – Deeper understanding (Chung, et al., 2009)
  – Enhanced critical reasoning skills (Pileggi and O’Neill, 2008)
  – Enhanced communication and teamwork skills (Thompson, 2007)
  – Increased learner and faculty satisfaction (Parmelee, 2009)
Learner Engagement
UME - Flipping the Classroom @ Duke

- Team-based learning integrated into Molecules and Cells (n=3) and Normal Body (n=4)
- Group application exercises in Gross Anatomy (every lab)
- Brain and Behavior delivered via team-based learning
- Team exercises through Body and Disease
Learner Engagement
UME

• Flipping the Classroom

• Flexible Learning Spaces
Learner Engagement
UME – Learning Spaces
Learner Engagement

GME
Learner Engagement GME

- **Next Accreditation System**
  - 1999 = 6 Competencies
  - NAS = educational outcomes
  - **Milestones** = developmentally based, specialty-specific achievements that residents are expected to demonstrate at established intervals as they progress through training (Nasca et al. 2012)
Learner Engagement
GME

• Next Accreditation System

• 7 Early Adopters: (July 1 implementation)
  • Neurological Surgery
  • Diagnostic Radiology
  • Emergency Medicine
  • Family Medicine
  • Pediatrics
  • Urology
  • Orthopaedics

Specialty milestones differ by:
• Number per competency
• Reporting requirement
• Development (who, when)
• Scale/anchors/levels
• Detail/wording

Institutional effort to find commonalities
# Learner Engagement GME

## Milestones

<table>
<thead>
<tr>
<th>Critical Deficiencies</th>
<th>Ready for unsupervised practice</th>
<th>Aspirational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lacks empathy and compassion for patients and caregivers</td>
<td>Consistently respectful in interactions with patients, caregivers and members of the interprofessional team, even in challenging situations</td>
<td>Demonstrates empathy, compassion and respect for patients and caregivers in all situations</td>
</tr>
<tr>
<td>Disrespectful in interactions with patients, caregivers and members of the interprofessional team</td>
<td>Is available and responsive to needs and concerns of patients, caregivers and members of the interprofessional team to ensure safe and effective care</td>
<td>Anticipates, advocates for, and proactively works to meet the needs of patients and caregivers</td>
</tr>
<tr>
<td>Sacrifices patient needs in favor of own self-interest</td>
<td>Emphasizes patient privacy and autonomy in all interactions</td>
<td>Demonstrates a responsiveness to patient needs that supersedes self-interest</td>
</tr>
<tr>
<td>Blatantly disregards respect for patient privacy and autonomy</td>
<td></td>
<td>Positively acknowledges input of members of the interprofessional team and incorporates that input into plan of care as appropriate</td>
</tr>
</tbody>
</table>

**Comments:**
### Importance of:
- **direct observation**
- **self assessment**
- **Formative feedback & summative evaluation**
Learner Engagement
GME

“Why failing med students don’t get failing grades”
New York Times February 28 2013

• *Medical educators have long understood that good doctoring, like ducks, elephants and obscenity, is easy to recognize but difficult to quantify.*

• *Have we passed/progressed students/residents who should NOT have passed/progressed? Graduated?*

• *Little “p” behaviors reflective of big “P” issues (professionalism)*

• *Problem may be not with evaluation but remediation*
Learner Engagement

CME
What do they want from me?

I need to do MOC

Just another time sink...

Why can't someone make this easy?

What the heck is MOL???

What's the point - I'm a good doctor!
Can Physicians Self-Assess Their Skills?

Accuracy of Physician Self-Assessment Compared with Observed Measures of Competence

Davis D, et al.

JAMA 2006; 296: 1094-1102
Studies compared physician’s self-rated assessment with external observations

17 of 725 articles met inclusion criteria

20 comparisons btw self and external assessment

- Negative or Inverse Relationship
- Positive Relationship
WHY?
(SOUND BITES)

Public accountability and transparency.

Compare your quality of care to peers and nationally.

Fewer medical errors, better communication and clinical care.

$$$: insurers, hospitals, quality and credentialing organizations federal government requiring it.
1% Payment Adjustment
Up to $21,250

Likely 2.0% or More Payment Adjustments OR Migrates to EHR/MU Program

Incentive Payment Adjustment Future CMS Rulemaking
Up to $8,500 per Eligible Professional until 2018
Up to $15,000
Up to $12,000
Up to $8,000
Incentives End

FFS Payments at Risk at % TBD
Up to $4,000

PQRS and PQRS/GPRO
eRx (Individual EP)
Maintenance of Certification
EHR Incentive/ Meaningful Use for Medicare
EHR Incentive/ Meaningful Use For Medicaid
VBM-Vaue Based Modifier

Key:
Incentive  Payment Adjustment  Future CMS Rulemaking
Competencies and Parts

- Professionalism
- Patient Centered Care
- Medical Knowledge
- Practice Based Learning and Improvement
- Interpersonal and Communication Skills
- Systems Based Practice

- Part I: Licensing and Professional Standing
- Part II: Lifelong Learning and Self Assessment
- Part III: Cognitive Expertise
- Part IV: Practice Performance Assessment
Making it easier

In the future

- DukeCME has applied to certify:
  - ABIM Part II
  - ABP Part II
Interprofessional Education

UME
Interprofessional Education
UME
Interprofessional Education
UME

Interprofessional Education:
Students from two or more professions learning about, from, and with each other to enable effective collaboration and improve health outcomes.

World Health Organization, 2010
Interprofessional Education
UME

• The Interprofessional Collaboration in Education (ICE) group – curriculum directors for all education programs (meets monthly)
• Prevention Course - First year MS, PA, DPT
• Disaster Preparedness Course - 2nd year MS, nursing, PA, DPT
• Transitions in the Care of the Elderly – elective
• Interdisciplinary Case Conferences - MS, nursing PA, DPT, pharmacy
• Applied Genomics and Personalized Medicine – elective
Interprofessional Education

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Inter-professional Education
GME

- TeamSTEPPS

- Program and rotation specific

- Inter-disciplinary collaborations
  - “Calling for Collaboration”
  - Concentrations
  - Health Policy Lecture Series
  - PSQI Council
    - Supervision Task Force

- Importance of 360s (feedback from nurses, technologists, social workers, pharmacists, peers, patients)

- Patient-Family Centered Rounds (health system priority)
Interprofessional Education

CME
I CAN'T SPEAK UP

PROFESSIONAL!

WHY CAN'T WE WORK TOGETHER?

(INSET YOUR...)

THESE GCP??

WHAT IS...?

They want me to do a clinical trial - what is GCP??

How do I implement guideline-based care in an affiliate?
Interprofessional Education
CME

• TeamSTEPPS
  National CME certifier
CT Surgery: The 3rd Floor Project

• One of 7 SOM in US to be Jointly Accredited:
  Physicians/Nurses/Pharmacists

• Longitudinal programs
  CHAMBER: Collaborations for HeAlth IMprovements in HER2+ Breast CancER

• Clinical Trials Education – CREATe

www.medicalpracticetrends.com, thyroid.about.com
CHAMBER: Collaborations for HeAlth IMprovements in HER2 Breast CancER

• A regional, collaborative model for performance gaps/outcomes in HER2+ Breast CA

• Key educational partners: Duke Oncology Network and affiliates in NC, SC, VA, WV, FL

• On-line content, live/virtual mentoring, live focus groups, hands-on skill-based workshops, point-of-care support tools, PI support

• For Physician, NP, PA, Pharmacist, Nurse
CREATe: An Integrated Solution

**Clinical Research Education**
- Self-paced comprehensive education program
- Training for conducting FDA and EMEA compliant studies
- Customized to local regulatory requirements

**Communication & Collaboration Portal**
- Portal as a communication tool for sponsors
- Sites access custom information
- Forum for networking and knowledge exchange

**Registry of Trained Researchers & Sites**
- Data on investigators and qualifications
- Information on sites and potential study populations
- Clean, up-to-date data that can facilitate recruitment
Leadership Development

UME
Leadership Development
UME

- **Primary Care Leadership Track**
  - Developed to train leaders in primary care
  - Builds on partnership between Duke and Durham community
  - Longitudinal Integrated Clinical (LIC) year
  - Scholarly focus

- **Development of Leadership Curriculum**
Leadership Development

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Leadership Development
GME

- GME Concentrations
- Feagin Leadership Program
- The Management and Leadership Pathway for Residents
Leadership Development
GME

GME Concentrations
(http://sites.duke.edu/dukegmeconcentrations/)

• Areas:
  – Resident as Teacher
  – Health Policy, Law & Ethics
  – Patient Safety & Quality Improvement
  – Leadership

• Any resident/fellows after PGY1 year with Program Director approval
• Interdisciplinary Advisory Committees oversee Concentration requirements and participant performance
• Concentrations include didactics, assignments (readings, journal clubs, trainings), mentored individualized projects
• Funding for participants for conferences/training
Leadership Development
GME

Feagin Leadership Program
(http://dukesportsmedicine.org/modules/ctr_sptmed_feagin/index.php?id=1)

- Sports medicine fellows, orthopaedic residents, medical and undergraduate students
- 1-18 scholars/year
- 9 month program
- Scholars competitively selected
- Seminars + individualized project
Leadership Development
GME

The Management and Leadership Pathway for Residents
(http://residency.medicine.duke.edu/duke-program/pathways/management-and-leadership-pathway)

- Open to duel-degree residents (or those with extensive experience) from any Duke residency program
- 2 graduates; 6 enrolled by July 1
- Extends training by 15-18 months
- 3-6 month rotational experiences
- Bridges clinical practice and management skill building
- Project based rotations in (1) Patient Quality Improvement and Safety, (2) Financial Management and Planning, (3) Health Systems Management and Operations, and (4) Electives
- Graduate accepted joint appointment in hospital care and administration!
Leadership Development

CME
Should Hospitals Be Run by Doctors?

Are the best hospitals run by medical doctors or business managers?

The conventional wisdom is that doctors should focus on patient care, and managers with a business or administrative background are better suited to running the day-to-day operations of a hospital. Among the nearly 6,500 hospitals in the United States, only 235 are run by physician administrators, according to a 2009 study in the journal Academic Medicine.

But now new research suggests that having a doctor in charge at the top is connected to overall better patient care and a better hospital.

The findings, published in the journal Social Science & Medicine, are based on a review of 300 top-ranked American hospitals in the specialties of cancer, digestive disorders and heart surgery. Amanda Goodall, a senior researcher at the Institute for the Study of Labor in Bonn, Germany, tracked the professional background of each hospital’s chief executive and then compared the performance of physician-run hospitals with that of hospitals overseen by someone with a nonmedical background.
Why there are so few leaders in medicine and how to fix it
KEVIN | POLICY | FEBRUARY 3, 2010

Originally published in HCPLive.com

by Jeff Brown, MD

A quick look at a newspaper will tell any clinician what has become, and increasingly so, in health care. The professions that make up our field are in a historically weak situation, in which leaders are expected to be effective in their roles. There are many other roles in which being effective is considered important. But it is limited...
Volatile market dynamics

- Healthcare policy changes
- Consolidation / hospital administration
- Accelerated medical product innovation
- Legal / regulatory hurdles
- Workforce demographics
- Healthcare IT Developments
- Reimbursement / cost constraints
- Relationship management
Required physician knowledge & skills

Vendor / customer relationship management

Fundamental finance / accounting

Policy impact on practice management

Contract / price negotiation

Business strategy & decision-making

Healthcare IT

HR leadership & communication
Healthcare requires a leadership & management training continuum
Some Examples at Duke

- Master of Health Sciences in Clinical Leadership
- MD-MBA, Exec MBA
- C-CHAMP
- LEADER Program
- MLPR
- Primary Care Leadership Track (PCLT)
- City of Medicine Academy
- Feagin Leadership Program
- HSM
- MMCI

*Need for alignment, coordination and planning*
Home for Leadership Development:

Duke Institute for Health Innovation

Mission:

To promote transformative innovation in health and healthcare through high-impact research, leadership development and workforce training and cultivation of a community of entrepreneurship
DIHI domains of innovation

**Implementation and Health Delivery Science**
- Multidisciplinary teams focused on improving health and healthcare through high-impact research & innovation in health care delivery
- Structured interface to DUHS
- A living laboratory to incubate, refine, validate and scale new ideas

**Health Technology Innovation**
- Incubator for health technology innovation
  - Develop enabling infrastructure
  - Interdisciplinary collaboration

**Health Leadership & Workforce Development**
- Goal to train current and future leaders across health care in
  - Leadership
  - Management
  - Innovation
  - Quantitative health sciences
Health Leadership Development: Curriculum

We are defining a Health Leadership Development core curriculum, from which we can create multiple learning experiences from customized training to degree programs.

- Strategy
- Leadership
- Financial Decision Making
- Finance
- Healthcare Ethics
- Customer Relationship Management
- Marketing
- Service Operations
- Negotiation
- Managing Human Resources
- Effective Decision Making
- Healthcare Law
- Healthcare System Overview
- Innovation
- Quality and Safety Management
- IT for Healthcare
Wherever you go, PELI goes

Based on leading-edge technology, PELI is easily accessible 24/7 - whether via laptop, iPad or other mobile devices.

Mobile Learning with the Physician Executive Leadership Institute.
Patient Safety & Quality Improvement

UME
Patient Safety & Quality Improvement
UME

• Start early; Emphasis throughout clinical education

• Specifics
  – Year 2: Clinical Skills course
  – Year 4: Capstone course (Medical + Nursing students)
Patient Safety & Quality Improvement

GME
Patient Safety & Quality Improvement
GME

• Next Accreditation System

• **Clinical Learning Environment Review (CLER)** assesses institutions in the following areas:

  1. **Patient Safety** – including opportunities for residents to report errors, unsafe conditions, and near misses, and to participate in interprofessional teams to promote and enhance safe care

  2. **Quality Improvement** – including how sponsoring institutions engage residents in the use of data to improve systems of care, reduce health care disparities and improve patient outcomes

   3. Transitions in Care
   4. Supervision
   5. Duty Hours oversight, Fatigue management and mitigation
   6. Professionalism
SCHEMATIC OF FLOW OF CLER SITE VISIT

Three phases of Visit

- Foundational Learning
- Exploration and Inquiry
- Review, Clarify & Feedback

Note: each walk around with resident host/escort, opportunity for nursing staff and patient contact. Also as yet not certain on role of a governance interview.
The Annual Harrison Survey Report is Now Available!
Comparing results over a five-year period, the Academic CME: The 2012 AAMC/SACME Harrison Survey demonstrates:

- growth in the number and types of evidence-based educational interventions—and in measures to assess the impact of those activities
- strong commitment to internal alignment, especially between CME units and allied health professional education, and GME
- a vigorous attempt to reach regional practitioners and communities
- increased value as witnessed by institutional support levels
- a significant proportion of units dedicated to research and scholarship

Partnering to Improve Evidence, Quality, and Patient Safety in Medical Education
Society for Academic CME (SACME) Spring Meeting
April 10-13, 2013 — Fluno Center — Madison, Wisconsin
Hosted by the University of Wisconsin

Innovations in Medical Education: Aligning Values and Competencies
NEGEA 2013 Educational Retreat
April 12-13, 2013 — New York
Hosted by the Weill Cornell Medical College, Irving, School of Medicine

2013 Integrating Quality Meeting: Improving Value and Educating for Quality
June 8-7, 2013 — InterContinental Chicago O’Hare Hotel — Rosemont, Illinois
This highly interactive, interprofessional program is designed to facilitate sharing of strategies and approaches to improving health care quality and value and networking with colleagues from a variety of organizations and disciplines that share a common interest in improving the performance of the nation’s health care workforce.

Teaching for Quality (Te4Q) Update
Published in January, Teaching for Quality: Integrating Quality Improvement and Patient Safety Across the Continuum of Medical Education. Report of an Expert Panel is available as both the Executive Summary and the full report. A major recommendation of the report is ensuring that clinical faculty are prepared to teach and assess learners in quality improvement and patient safety (QIPS). An expert planning committee has convened to develop a QIPS faculty development program. Planning is underway for a team-based program designed to enhance teaching and assessment skills for those with basic proficiency in healthcare quality improvement. The program will include self-assessment, an organizational readiness assessment, live cohort activities, on-line and social networking activities, and a workplace project. For further information, visit the Teaching for Quality (Te4Q) webpage or contact Nancy Davis, Ph.D. at ndavis@aamc.org.
Patient Safety & Quality Improvement
GME

• **Faculty Development:** AAMC calls for need for proficient, expert & master educators of QI/PS

  – **Three recommendations:**
    1. Integrate QI/PS concepts into meaningful learning experiences across the continuum
    2. Clinical faculty proficient in QI/PS competencies and able to create, implement and evaluate training and education in QI/PS for learners
    3. Institutions committed to QI/PS and align academic and clinical enterprises that helps produce excellent outcomes

• **Learner Involvement:**
  – **Duke GME Patient Safety & Quality Council**
    • DUHS Board of Directors mandates representatives from all programs be involved
  – **PSQI Concentration**
Patient Safety & Quality Improvement

CME
Patient Safety, Quality and Professional Education: CME AT THE INTERSECTION
What the ACCME Expects

Process Improvement
CME

Level 7: Community health outcomes attributable to practice changes adopted by participants as influenced by the educational activity

Level 6: Individual patient health outcomes attributable to practice changes adopted by participants as influenced by the educational activity

Level 5: Pre-activity versus post-activity measures of applications of learners' acquired knowledge and competence, assessed in the practice setting

Level 4: Pre-activity versus post-activity measures of learners' conceptual and/or practical applications of acquired knowledge, assessed in the educational setting

Level 3: Pre-activity versus post-activity measures of (a) declarative knowledge; (b) procedural knowledge; and (c) self-reported understanding, commitment to change practices, values about the educational topic, and self-directed learning behaviors

Level 2: Ratings of faculty effectiveness, scientific rigor, programobjectivity, and the extent to which learning objectives were achieved

Level 1: Number of educational activity participants, distribution of participants by health care profession, and numbers of patients treated or managed

Knowledge Acquisition and Attitudinal Change

Declarative Knowledge
Procedural Knowledge
Learning Insights, Values, and Behaviors

Participants' Assessments of Educational Activities

Participant Demographics
Public Reporting Timeline

2013
- 2011 PQRS, GPRO, eRx, & EHR Incentive Program Participation
- 2012 PQRS, GPRO, eRx, & EHR Incentive Program Participation
- Information on ABMS board certification
- Information on accepting new patients, if feasible

2014
- 2013 PQRS, GPRO, eRx, & EHR Incentive Program Participation
- 2013 PQRS Maintenance of Certification Incentive Program & Million Hearts Initiative Participation
- 2012 PQRS GPRO & ACO measures (early 2014)
- 2013 PQRS GPRO & ACO measures (late 2014)
- GPRO Composite Measures (DM & CAD)
- CG-CAHPS data for GPROs and ACOs

2015 and beyond
- 2014 PQRS, GPRO, eRX, EHR, Maintenance of Certification, & Million Hearts Incentive Program Participation
- 2014 PQRS GPRO & ACO measures
- 2014 CG-CAHPS data for GPROs & ACOs
- Individual Quality Measures (targeted for 2015)
- Specialty Society Measures
Hepatitis C

National Performance in Hep C Care

Audience: Primary Practice, Hepatologist, Internal Medicine

Hepatitis C Treatment Educational Website
1. Choice of educational programs:
   1. Webcast: Baseline and Specific
   2. Online modules: Baseline and Specific
   3. Monographs: Baseline and Specific
   4. Four optional online modules and/or monographs
2. FAQ regarding decision support tool use
3. Site to post (HIPAA compliant) questions and problems in patient care
4. Link to Online Community (and Interactive Tools)

Duke Hepatitis On-Line Community
For Patients:
1. Viral Load Tracker and Interactive Treatment Plan ‘App’
2. Patient videos
3. Patient handouts
4. Moderated message board

Overall Education: Disease State and Treatment
Webcast, Online, Monograph

Specific Education: DAA Agents integrated with current therapies
Webcast, Online, Monograph

Duke Hepatitis C Online Community
Interactive Decision Support Tools

1. Chart Review For Assessment of Adherence to Current Practice
2. Physician Self-Assessment

Qualifies for MOC, Part IV and PI-CME
Major Depressive Disorders

Using the Mindlinc Database and EMR

Longitudinal educational program

Dr. Thomas Gersing: Faculty Lead

Partner: Confluenths
Faculty Development Workshop
In
Quality Improvement

Duke University and Medical Center

Drs. Bimal Shah and Mamata Yanamadala

Location: Room- CR 1308, Duke North

Time: 5:00-6:30 PM

Dates: January 23, February 20, March 20, April 24,
May 15, and June 5, 2013
Collaborations Across the Continuum

- **Teaching Resource for Health Professions Educators**

- **Planned:** Interprofessional Clinical Training Program

- **Duke UME*GME Match Analysis** – *What is the institutional goal for training and growing our own physicians?*
Collaborations Across the Continuum

- **CME Web Portal** – Completed GME innovation projects made accessible to those inside and outside of Duke

- **Faculty Academy** - Duke AHEAD: Academy for Health Professions Education and Academic Development
Duke AHEAD
Academy for Health Professions Education and Academic Development

Recognition and Promotion
- Sponsorship of Teaching Rewards
- Development of Promotion Criteria
- Membership on APT Committee
- Advocacy/Letter of Support for faculty promotion
- Professor of the Practice of Medical Education

Faculty Development
- Core Faculty
- Teaching Workshops
- Symposiums
- Education Grand Rounds
- On-line teaching modules
- Master Educators
- Education Fellows
- Mentors

Research and Innovation
- Inter-professional education
- Interest Groups
- Research Meetings
- Staff and statistical support
- Grants/Funding
- SBR-IRB for health professions educational research