



An Academic Medicine Rotation & Transition from Residency to Practice

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Disclosures

No conflicts of interest or financial disclosures



Objectives

- Identify gaps and focus areas in medical education that need emphasis during residency training.
- Designing a novel curriculum to train residents on leadership, quality improvement, teaching skills and critical appraisal of the literature.
- Prepare residents in practice management issues pertaining to operating room management, practice evaluation, contract negotiations, billing arrangements, professional liability, as well as legislative issues and regulatory issues.



ACGME Program Requirements for Graduate Medical Education in Anesthesiology



Int.B. Definition and Scope of the Specialty

The Review Committee representing the medical specialty of anesthesiology exists in order to foster and maintain the highest standards of education and educational facilities in anesthesiology, which the Review Committee defines as the practice of medicine dealing with the peri-operative management of patients. This includes the peri-operative/peri-procedural management of patients during surgical and other therapeutic and diagnostic procedures. This management encompasses the pre-operative preparation of the patient and their peri-operative maintenance of normal physiology, as well as the post-operative relief and prevention of pain. An anesthesiologist is skilled in the management and diagnosis of critically-ill patients, including those experiencing cardiac arrest, and in the diagnosis and management of acute, chronic, and cancer-related pain. These goals are achieved through a thorough understanding of physiology and pharmacology, and the ability to conduct, interpret, and apply the results of medical research. Finally, the anesthesiologist is skilled in the leadership of health services delivery, prudent fiscal resource stewardship, and quality improvement, as well as the supervision, education, and evaluation of the performance of personal, both medical and paramedical, involved in peri-operative and peri-procedural care.

Anesthesiology, 2017 Accreditation Council for Graduate Medical Education (ACGME) Page 4 of 29

Clinical skills
Technical skills
Medical knowledge



Leadership
Communication
Analytical thinking
Willingness to learn
Ability to judge
Hard worker
Adaptability
Accountability
Teamwork
Cooperation

Why focus on the softer skills?



Leadership, the seventh competency

Leadership training in a family medicine residency program

Cross-sectional quantitative survey to inform curriculum development

Erin Gallagher MD CCFP Ainsley Moore MD MSc CCFP Inge Schabert MD MSc CCFP CFP

| Statement | Mean Rating |
|--|-------------|
| I am a leader | ~4.5 |
| Leadership training in residency would be beneficial | ~5.5 |
| I have had role models for effective leadership in the FM program so far | ~4.5 |
| I aspire to be a leader in my clinical or community setting | ~5.5 |
| Family physicians should take on leadership roles in their clinical settings | ~5.5 |

- Survey of 152 PGY1 and PGY2 family medicine residents @ McMaster University
- 50% desired more training:
 - Personal mastery
 - Mentorship and coaching
 - Conflict resolution
 - Teaching
 - Effective teamwork
 - Administration

Canadian Family Physician - Le Médecin de famille canadien | VOL. 63: MARCH • MARS 2017

Moving Beyond Accidental Leadership: A Graduate Medical Education Leadership Curriculum Needs Assessment

LTC Joshua D. Hartzell, MC USA; COL Clifton E. Yu, MC USA; MAJ Brian M. Cohee, MC USA; COL Michael R. Nelson, MC USA; LTC Raney L. Wilson, MC USA

| Group | Mean Rating |
|----------|-------------|
| Faculty | 5.02 |
| Trainees | 4.69 |

MILITARY MEDICINE, 182, 7/8:e1815, 2017

NIH Public Access

Author Manuscript

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Hard evidence on soft skills*

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^bAmerican Bar Foundation, 750 North Lake Shore Drive, Chicago, IL 60611, USA
^cUniversity College Dublin, Ireland

Abstract

This paper summarizes recent evidence on what achievement tests measure, how achievement tests relate to other measures of "cognitive ability" like IQ and grades, the important skills that achievement tests miss or mismeasure, and how much these skills matter in life.

Achievement tests miss, or perhaps more accurately, do not adequately capture, *soft skills*—personality traits, goals, motivations, and preferences that are valued in the labor market, in school, and in many other domains. The larger message of this paper is that soft skills predict success in life, that they causally produce that success, and that programs that enhance soft skills have an important place in an effective portfolio of public policies.

Needs Assessment Pre-AMR Survey

10 PGY-1s, November 2011

Academic Medicine Rotation: Structure

- 5 week rotation: 4 key tenets
 - Critical appraisal of the literature
 - Teaching
 - Quality Improvement
 - Leadership
- No clinical commitment
- > 60 hours instructor led sessions
- Daily self-directed learning
 - Complete several online Institute for Health Care Improvement Open School courses
- Involved all core competencies except direct patient care
- Fits within the ACGME, ABA requirements

Academic Medicine Rotation: Timing

| | Block 1 | Block 2 | Block 3 | Block 4 | Block 5 | Block 6 | Block 7 | Block 8 | Block 9 | Block 10 | Block 11 | Block 12 |
|---|---------|---------|---------|---------|---------|---------------|---------|---------|---------|----------|----------|----------|
| | 6/24 | 7/18 | 8/15 | 9/19 | 10/17 | 11/15 - 12/20 | 1/2 | 1/30 | 2/27 | 3/27 | 4/24 | 5/22 |
| A | SRT | SICU | PAC | NEPH | PED | AMR | OB/GYN | REDPED | MICU | MED | CARD | ANES |
| B | MICU | SRT | REDPED | PAC | NEPH | AMR | SICU | PAIN | MED | CARD | PED | ANES |
| C | CARD | MICU | PED | SRT | PAC | AMR | REDPED | MED | SICU | PAIN | NEPH | ANES |
| D | MED | CARD | MICU | PED | SRT | AMR | PAC | NEPH | PAIN | SICU | REDPED | ANES |
| E | REDPED | MED | SRT | MICU | SICU | AMR | PED | PAC | CARD | NEPH | PAIN | ANES |
| F | PAIN | NEPH | CARD | MED | MICU | AMR | SRT | SICU | PED | REDPED | PAC | ANES |
| G | PAC | PAIN | MED | CARD | REDPED | AMR | MICU | SRT | NEPH | PED | SICU | ANES |
| H | SICU | PED | PAIN | REDPED | CARD | AMR | NEPH | MICU | SRT | PAC | MED | ANES |
| I | NEPH | PAC | SICU | PAIN | MED | AMR | CARD | PED | REDPED | MICU | SRT | ANES |
| J | PED | REDPED | NEPH | SICU | PAIN | AMR | MED | CARD | PAC | SRT | MICU | ANES |

Course Faculty



- Experts within and outside of our department and institution:
 - Anesthesiologists
 - Health science librarians
 - IRB members
 - Researchers
 - Grant experts
 - Legal staff
 - Clinical faculty
 - Pediatricians
 - Obstetricians
 - Surgeons
 - Non-clinical faculty
 - School of Public Health
 - Business School
 - Risk-managers
 - Members of the NC medical board

| Academic Medicine Rotation | | | |
|--|---|-----------------------------------|---|
| Critical Appraisal | Leadership / Professional Development | Teaching | Quality Improvement |
| An overview of the HSL-Anesthesiology Library Resource Guide | Coping Strategies | Simulation in Medical Education | Bringing ERAS to UNC using Lean Six Sigma |
| Understanding and Working with the IRB | Personality Inventory Sessions | Anesthesia Olympics | QI Statistics |
| EBM and Outcomes Research | Healthcare Policy | Optimizing Problem-based Learning | Making a Charter and A3 |
| Asking a Question and Searching for Answers: An Overview | Leadership Series: Planning your Future in an Anesthesiology in a Knowledge-based Environment | Educational scholarship | Yellow Belt Training |
| Introduction to Anesthesiology Resident Research | Leadership Series: Skills Workshop | An Academic Medicine Career | Creating Surveys |
| Review of Study Designs and Smart Searching | Financial and Benefits Planning Workshop | Generations Workshop | M&M Talk |
| Journal Club Selfie Moment | Leadership Series: Conflict Resolution | Feedback in Learning and teaching | Quality Improvement Exercises |
| Journal Club Lunch | TeamSTEPS | Social Media Workshop | A3 Workshop |
| Abstract writing workshop and brainstorm | Advancement | | Overview of Risk Management at UNCH |
| EBM: Clinical Application | Wellness | | National Surgical Quality Databases |
| Designing and Making a Poster | Benefits of Advanced degrees | | AQI, AIRS and NACOR: Specialty quality tools |
| Writing an Abstract | Leadership Series: Persuasion and Negotiation | | An Overview of Health Care System Based Quality Reporting |
| Research Workshop | Health Care Policy Advocacy and UNC | | |
| Excel Workshop | Understanding MOCA and Lifelong Learning | | |
| PowerPoint Presentations Fine Tuning | Leadership Series: Public Speaking Getting your point across | | |
| Public Speaking Lecture | NC Tort Reform and Malpractice Case Walkthrough | | |
| How to give an Entertaining Scientific Presentation | How to get involved in Regional and National Meetings/QI Emphasis | | |
| | Role of the NCSA and Specialty Advocacy | | |
| | Demonstrating value outside of clinical care | | |
| | Understanding Anesthesia Billing | | |
| | CRNA/AA Issues | | |

Critical Appraisal

- An overview of the HSL-Anesthesiology Library Resource Guide
- Understanding and Working with the IRB
- EBM and Outcomes Research
- Asking a Question and Searching for Answers: An Overview
- Introduction to Anesthesiology Resident Research
- Review of Study Designs and Smart Searching
- Journal Club
- Abstract writing workshop and brainstorm
- EBM: Clinical Application
- Designing and Making a Poster
- Writing an Abstract
- Research Workshop
- Excel Workshop
- PowerPoint Presentations Fine Tuning
- Public Speaking Lecture
- How to give an Entertaining Scientific Presentation

Leadership / Professional Development

- Coping Strategies
- Personality Inventory Sessions
- Healthcare Policy
- Leadership Series: Planning your Future in an Anesthesiology in a Knowledge-based Environment
- Leadership Series: Skills Workshop
- Financial and Benefits Planning Workshop
- Leadership Series: Conflict Resolution
- TeamSTEPS
- Advancement
- Wellness
- Benefits of Advanced degrees
- Leadership Series: Persuasion and Negotiation
- Health Care Policy Advocacy and UNC
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- Demonstrating value outside of clinical care
- Understanding Anesthesia Billing
- CRNA/AA Issues

Teaching

- Simulation in Medical Education
- Anesthesia Olympics
- Optimizing Problem-based Learning
- Clinical teaching while you work and getting started in educational scholarship
- An Academic Medicine Career
- Generations Workshop
- Feedback in Learning and teaching
- Social Media Workshop



Quality Improvement

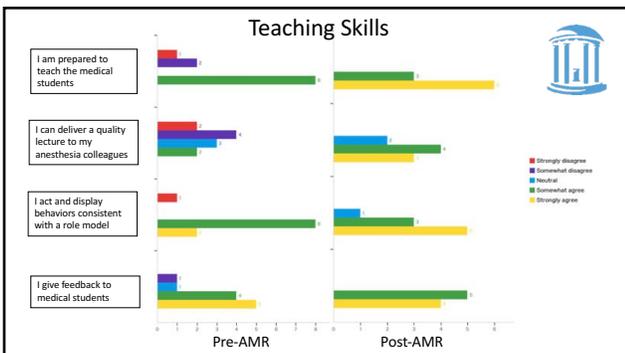
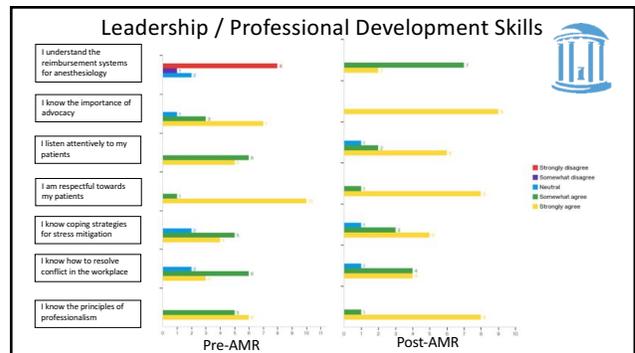
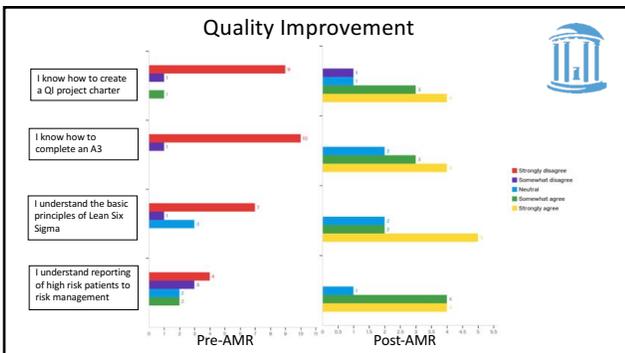
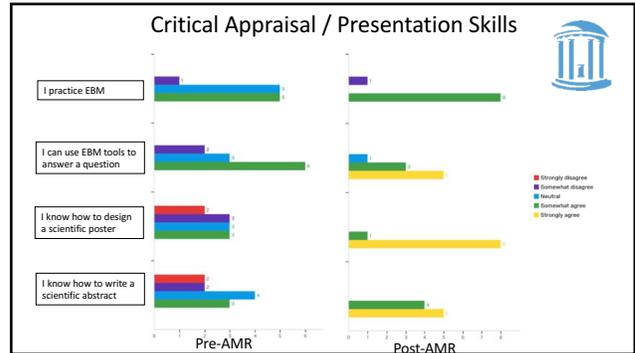
- Bringing ERAS to UNC using Lean Six Sigma
- QI Statistics
- Making a Charter and A3
- Yellow Belt Training
- Creating Surveys
- M&M Talk
- Quality Improvement Exercises
- A3 Workshop
- Overview of Risk Management at UNCH
- National Surgical Quality Databases
- AQI, AIRS and NACOR: Specialty quality tools
- An Overview of Health Care System Based Quality Reporting



Individual Project

- Evidence based review vs. QI project
- Apply principles of Lean Six Sigma
- Faculty mentor
- Graduation symposium
 - oral presentation





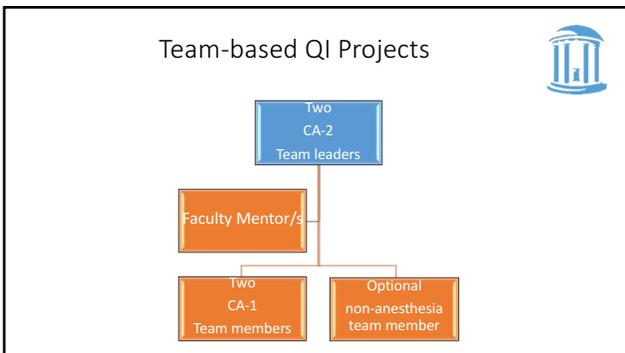
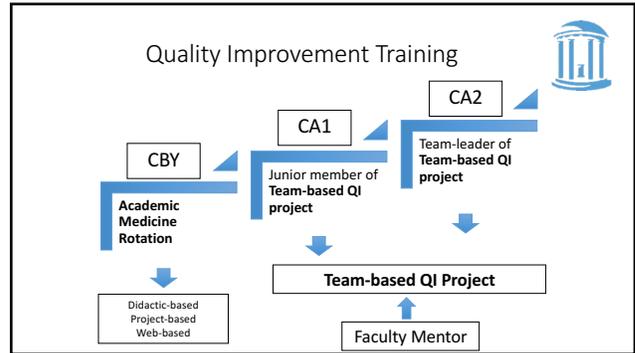
Is this a Worthwhile Investment?

- Several AMR projects presented at regional / national conferences - 19/41
- Provides foundation / motivation for future scholarly work
- Development of interpersonal and communication skills
- Leadership skills
- Better teachers
- Positive feedback
- Camaraderie and team-building



How can other programs do it?

- Connections with other departments
 - School of Public Health
 - Health Sciences Library
 - Business School
- Intern time off rotations
- Need approval from DIO



A vertical timeline from August 2017 to April 2018 detailing project milestones:

- Aug 17: Teams created
- Aug 18, 2017: Charter / A3 presentation, First Team meeting
- Aug 25, 2017: Resident project teams build project charter in conjunction with faculty mentor, Teams submit team charter by August 25th
- Aug 30, 2017: Resident project teams present project charter to Resident Quality Improvement Project Advisory Group
- Sept 17: IRB application submission (if applicable), Team leaders designate work and expectations to other project team members
- Sept 17: Plan, Do, Study, Act (PDSA), Regular team meetings (2nd Monday of every month 6:45-7:15 am)
- Oct 17: Project data finalized, Data analysis
- Jan 18: Teams prepare 1-page abstract (ASA format), Abstracts submitted to Program Director
- Apr 18: All projects presented at the Resident Symposium

Practice Management: ACGME Requirements

| ACGME Requirement | Practice Management to Address Issues such as: |
|------------------------|---|
| IV.A.5.b.(1).(a) | practice management to address issues such as: |
| IV.A.5.b.(1).(a).(i) | operating room management; (Outcome) |
| IV.A.5.b.(1).(a).(ii) | evaluation of types of practice; (Outcome) |
| IV.A.5.b.(1).(a).(iii) | contract negotiations; (Outcome) |
| IV.A.5.b.(1).(a).(iv) | billing arrangements; (Outcome) |
| IV.A.5.b.(1).(a).(v) | professional liability; (Outcome) |
| IV.A.5.b.(1).(a).(vi) | legislative and regulatory issues; and, (Outcome) |
| IV.A.5.b.(1).(a).(vii) | fiscal stewardship of health services delivery; (Outcome) |

Program directors in surgery agree that residents should be formally trained in business and practice management

Vincent C. Lusco, M.D., Serge A. Martinez, M.D., J.D., Hiram C. Polk, Jr., M.D.*

- 189/242 General Surgery PDs responded
- 70% believed their current residents received inadequate TTP training

The bar chart shows the percentage of program directors who believe residents should receive instruction in business and practice management. The categories are: Strongly Agree (~35%), Agree (~55%), Neutral (~10%), Disagree (~2%), and Strongly disagree (~0%).

Fig. 1. Results of survey question that asked whether residents should receive instruction in business and practice management.

The American Journal of Surgery 189 (2005) 11-13

Facilitating the transition to practice: a weekend retreat curriculum for business-of-medicine education of United States anesthesiology residents

Elena J. Holak · Olga Kaslow · Paul S. Pagel



How do I find a job?
 Academic anesthesia—a career for me?
 Construction of an effective curriculum vitae
 Successful interviewing strategies
 Fundamentals of coding and billing
 Medicare and Medicaid guidelines
 Regulatory compliance
 Medical malpractice insurance
 The Wisconsin Patients and Families Compensation Fund
 Life, disability, and long-term care insurance
 Fundamentals of contracts
 Negotiating an effective employment agreement
 Managing your money
 Retirement planning

— J Anesth (2010) 24:807–810

Transition from Residency to Practice



- Mentorship
- Networking
- Seminars / workshops / didactics
- Professional society resources
- Experiences designed towards transition to practice
- Other unique experiences

| Academic Medicine Rotation | | | |
|--|--|---|---|
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| Resonance Guide | Personality Inventory Sessions | IS Statistics | Anesthesia Openers |
| Understanding and Working with the IRB | Healthcare Policy | Making a Charter and A3 | Optimizing Problem-based Learning |
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| How to give an Entertaining Scientific Presentation | How of the Field and Specialty Advances | | |
| | Understanding Anesthesia Billing | | |
| | Understanding Anesthesia Billing | | |
| | EMERGENCY issues | | |

Resident Day: Transition to Practice Seminar

| | | |
|-------------|--|--|
| 8:00—8:05 | Welcome <i>Kim Nichols, MD and Fran D'Ercole, MD</i> | |
| 8:05—8:35 | Medical Regulation: The Importance of Following the Rules <i>Ernest Murphy, MD, MBA</i> | |
| 8:35—9:05 | Life as a Private-Practice Anesthesiologist <i>Marc Abrams, MD</i> | |
| 9:05—9:20 | Break | |
| 9:20—10:05 | Legal Perspectives from a Defense Attorney <i>Kelly Grant Brown, JD</i> | |
| 10:05—10:50 | Legal Perspectives from a Defending Anesthesiologist <i>Fran D'Ercole, MD</i> | |
| 10:50—11:45 | Questions/Open Discussion | |
| 12:00—1:00 | Lunch Session: Policy and Regulatory Law— <i>Judith Somo, MD</i> | |
| 1:05—1:35 | The Culture of Anesthesia: Working with CRNAs <i>Marc Levine, MD</i> | |
| 1:35—2:05 | Wealth Building: Focus for the Young Physician <i>Kevin Swan, ChFC, FISC, CASL, LUTCF</i> | |
| 2:05—2:35 | Dissecting Physician Contracts <i>Kim Koranda, JD</i> | |
| 2:35—3:15 | Alumni Panel: Life AFTER Training <i>Kim Nichols, MD—Moderator</i> Panelist: Sean Charr, MD; Mary Jeanette Judd, MD; Drew Karonz, MD | |
| 3:15—3:30 | Questions/Open Discussion | |

Professional Society Resources



- American Society of Anesthesiologists (ASA)
 - ASA Annual Conference
 - ASA Practice Management Conference
 - ASA Legislative Conference
- State Societies
 - Resident track @ North Carolina State Society
- Subspecialty Societies

Experiences geared towards TTP



- Senior call responsibilities
- Electives
 - Admin-E
- Transition to Practice rotation

Unique Experiences



- Health Policy Elective at George Washington University
- ASA's Policy Research Rotation in Political Affairs

Dual MHA / MPH Track



- Dual tracks
 - Masters in Health Administration
 - Masters in Public Health
- Executive MHA / MPH Track
 - Gillings School of Public Health (Ranked no. 2)
 - 2-year program – online with 14 days onsite sessions
 - CA-3 year: 1 day non-clinical time / week
 - CA-4 year: Instructor/Fellow position with 2 days of non-clinical time / week

Summary



- Residency training has to be all encompassing
- Softer skills (leadership, quality improvement, communication, teaching, interpersonal skills, professionalism) are teachable
- Programs should create curricula targeted towards SMOOTH transition from residency to practice