Annual Workshop in Clinical Education

Our mission:
to foster collaboration
across specialties to
promote excellence in
clinical education

AAMC November 4, 2008
San Antonio, Texas

Alliance for Clinical Education Resources

Louis Pangaro, MD
President
Never doubt that a small group of thoughtful, committed citizens can change the world.
Indeed, it is the only thing that ever has

Margaret Mead

What Must Clerkship Directors Do?

• Deliver their disciplines’ core clerkship
  – Serve the students’ needs
  – Serve the departments’ needs
  – Serve the institutions’ needs

• Trouble shoot
  – Personal conflicts
  – Natural disasters
What Else Is Mandated?

- Respond to national mandates
  - AAMC standards, e.g. ED-2, ED-8
- Response to collegiate restructuring
  - Restructuring into competency language
  - Changing length of rotations
- Response to departmental requirements
  - Clinical responsibilities
  - Academic expectations

How Do We Move Forward?

- Clerkship directors need dedicated time
  - Teaching/role modeling
  - Administration
    - Development of other educators
    - Advocating for needed resources
    - Data collection, analysis, reflection, improvement
As one of Margaret Mead’s small groups of committed individuals….

The Alliance for Clinical Education defined and published the guidelines for the resource needs of clerkship directors.

2008 Alliance for Clinical Education Program

- Lou Pangaro, MD will present ACE’s guidelines for clerkship director resources
- Panelists will present findings/implications of the 06/07 national survey
- Barbara Schuster, MD will respond from the perspective of a longtime department head
### The ACE Working Group: 2005

- Kim Ephgrave MD, ASE
- Amy Brodkey MD, ADMSEP
- Darlene Shaw PhD, ADMSEP
- Richard Usatine MD, STFM
- Katie Margo MD, STFM
- Tom Painter MD, CDIM
- Maya Hammoud MD, APGO
- Chris White MD, COMSEP
- Vern Juel MD, CNCD
- Gary Beck MA, ACE
- Kristi Ferguson PhD, GEA

### National Survey of Clerkship Director Demographics, Resources, and Professional Life

- Kimberly Ephgrave, M.D. — Association for Surgical Education
- Thomas Painter, M.D. — Clerkship Directors in Internal Medicine
- Katherine Margo, M.D. — Society of Teachers of Family Medicine
- Maya Hammoud, M.D. — Association of Professors of Gynecology and Obstetrics
- Vern Juel, M.D. — Consortium of Neurology Clerkship Directors
- Christopher White, M.D. — Council on Medical Student Education in Pediatrics
- Darlene Shaw, Ph.D. — Association of Directors of Medical Student Education in Psychiatry
- Louis Pangaro, M.D. — Alliance for Clinical Education
Clerkship Directors in Internal Medicine

Demographics

<table>
<thead>
<tr>
<th>Age</th>
<th>Mean</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>47</td>
<td>30 – 70</td>
</tr>
</tbody>
</table>

Similar among specialties

Thomas D. Painter, MD
University of Pittsburgh
Clerkship Directors in Internal Medicine
### Demographics

<table>
<thead>
<tr>
<th>Years on faculty</th>
<th>Mean</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12</td>
<td>0 – 43</td>
</tr>
</tbody>
</table>

- **Years as CD**
  - Mean: 7
  - Range: 0 – 54

- Shorter (less than 5 years) in OB/Gynecology and Family Medicine
### Academic Rank

- Professor: 19%
- Assistant Professor: 38%
- Associate Professor: 38%
- Instructor: 3%
- Other: 3%
- More senior in Surgery

### Tenure

- Non Tenure Track: 74%
- Tenure Track: 26%
- Tenured (of tenure track): 67%
### % of Time Devoted to Clerkship

<table>
<thead>
<tr>
<th>Category</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>33%</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>48%</td>
</tr>
<tr>
<td>OB/Gynecology</td>
<td>42%</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>37%</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>36%</td>
</tr>
<tr>
<td>Surgery</td>
<td>35%</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>30%</td>
</tr>
</tbody>
</table>

### Solo Clerkship Director

<table>
<thead>
<tr>
<th>Category</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>48%</td>
</tr>
<tr>
<td>Neurology</td>
<td>81%</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>60%</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>49%</td>
</tr>
<tr>
<td>OB/Gynecology</td>
<td>48%</td>
</tr>
<tr>
<td>Surgery</td>
<td>47%</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>41%</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>31%</td>
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</table>
## Compensation

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>% salary as CD</td>
<td>20</td>
<td>0 – 100</td>
</tr>
<tr>
<td>Decrease % Clinical</td>
<td>16</td>
<td>0 – 80</td>
</tr>
</tbody>
</table>

## Administrative Support

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>% FTE</td>
<td>68%</td>
<td>0 – 300</td>
</tr>
</tbody>
</table>

75% paid for by Department 25% by Dean
### Professional Medical Educator

- Yes: 19%
- No: 81%
- Paid for by Department: 31%
- Paid for by Dean: 38%

### Is There a Line Item in Department Budget for Student Education?

- Yes: 39%
- No: 20%
- Don’t Know: 41%
### Do You Control Any Discretionary Funds?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>40%</td>
<td>51%</td>
<td>9%</td>
</tr>
</tbody>
</table>

### Do You Know the Source of Funds for Your Clerkship?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>58%</td>
<td>42%</td>
</tr>
</tbody>
</table>
Range of CDs Clinical Responsibilities

Katherine Margo, MD
University of Pennsylvania School of Medicine
Society of Teachers of Family Medicine

“Expectations paper” Recommendations

- 25% for administrative activities
- 25% for teaching and research
- Leaves 50% maximum for clinical activities
### Our Survey

#### Questions asked

<table>
<thead>
<tr>
<th>Questions asked</th>
<th>FM</th>
<th>IM</th>
<th>Neuro</th>
<th>Obgyn</th>
<th>Peds</th>
<th>Psych</th>
<th>Surg</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>12) How many half days of outpatient clinics do you staff in a typical week?</td>
<td>4.2</td>
<td>3.7</td>
<td>4.1</td>
<td>4.7</td>
<td>3.7</td>
<td>3.3</td>
<td>2.7</td>
<td>3.7</td>
</tr>
<tr>
<td>13) How many weeks per year do you typically have inpatient clinical responsibilities?</td>
<td>8.3</td>
<td>11.7</td>
<td>11.4</td>
<td>22.5</td>
<td>12.9</td>
<td>23.0</td>
<td>40.7</td>
<td>17.7</td>
</tr>
</tbody>
</table>

#### Outpatient Clinical Responsibilities

![Bar chart showing half days/week by specialty](chart.png)
Outpatient Responsibilities

- Mean: 3.7 half days, Standard Deviation 2.1
- High: Obstetrics/Gynecology at 4.7 half days
- Low: Surgery at 2.7 half days

Inpatient Clinical Responsibilities

Weeks/year

- All
- Family Medicine
- Internal Medicine
- Neurology
- Obstetrics/Gynecology
- Pediatrics
- Psychiatry
- Surgery
Inpatient Responsibilities and Discipline

- Overall mean 17.9 weeks/year, standard deviation 17.7
- Range 0-52
- High: Surgery @ 40.7 weeks/year
- Medium: Ob/Gyn and Psychiatry@ 23
- Low: Family Medicine, Internal Medicine, Neurology, Pediatrics @ < 13 weeks/year
- Hard to assess how much time involved

Results - Statistically Significant

- Half days of outpatient clinics
  - FM, IM, Neuro, OB> Psych, Surgery
- Weeks of inpatient clinical responsibilities
  - Surgery>OB, Psych, FM, IM, Neuro, Peds
How Are We Doing?

- Average - CDs spend 1/3 of year doing in-patient work (16-78%)
- Average - CDs spend about 40% time in out-patient work (27-47%)
- Likely more than the 50% recommended by expectations paper

Advantages of Clinical Time for CD

- Pays the department bills
- Allows you to be an active teacher during clinical activities
  - Role model to students and other faculty
  - Experience first hand challenges of various clinical sites
- Allows interaction with other preceptors and staff
Disadvantages of Amount of Clinical Time

- Always takes longer than time scheduled
- Conflict of interest if teaching some and not all students with regards to accessibility and evaluation
- Takes away time from doing other things - educational research especially

Research Associations

- Hemmer et al Acad Med 2001
  - Factors positively associated with publishing articles and receiving grants:
    - ≤ Three clinical half days weekly
    - Fellowship/faculty development program
    - Teaching other courses
    - Discussing expectations with department chair
Conclusions

- CDs in general are doing more than the expectations paper recommends
- Probably influences academic productivity
- Not clear if it is realistic to decrease time

Academic Productivity and the Clerkship Director

Vern C. Juel, MD
Duke University Medical Center
Consortium of Neurology Clerkship Directors
ACE Clerkship Survey: Academic productivity items

14) How many national or regional MEDICAL EDUCATION presentations have you contributed to in the last 5 years?

15) How many national or regional presentations IN TOTAL (not just related to medical education) have you contributed to in the last 5 years?

16) How many MEDICAL EDUCATION publications have you published in the last 5 years?

17) How many TOTAL publications (including those pertaining to medical education) do you have for the last 5 years?

20) If you have specific examples of how your clerkship director role has affected your professional development and/or satisfaction with your career, please describe:

Traditional Measures of Academic Productivity

- Scholarly work
  - Peer-reviewed publications
  - Invited reviews/Book chapters
  - Books
  - Presentations
    - Scientific
    - Teaching

- Funding
  - Competitive grant support (e.g. NIH)
  - Other funding (gifts, contracts)
CD Tenure Status

- 26% overall are tenure track
  - Surg/Neuro > FM/IM/Peds/Psych
- 67% of identified tenure track are tenured
  - Neuro > Psych

Q 20. Describe specific examples of how CD role has affected your professional development

- “Although teaching is satisfying, I spent years preparing for clinical research.”
- “My [non-educational] research output is zero since taking on the clerkship.”
- “[The clerkship] has really limited my time to do clinical research…I have had little time to devote to grant writing.”
- “…no time to do research…but it has increased my interest even further in teaching.”
Correlations with Academic Productivity

- **All academic presentations w/**
  - Age 0.09
  - Years on faculty 0.12
  - Years as CD 0.14
  - Time staffing outpatient clinics -0.18

- **All publications w/**
  - Time staffing outpatient clinics -0.23
  - Time staffing inpatient services 0.10
  - **FTE self-estimate for CD activity** -0.13
  - Correlation .08 to .10, p < .05 >.11, p < .01

Conclusions

- Conflicts may exist between CD duties and non-education related academic productivity.

- Although the amount of academic productivity is not significantly different, there are wide differences in the relative amounts of education-related and non-education related scholarship between clinical disciplines.

- Excessive outpatient clinical responsibilities may impair CD academic productivity. Inpatient service time and academic productivity are correlated, however.
Clerkship Director Productivity in Educational Research

Chris White, MD
Medical College of Georgia
Council on Medical Student Education in Pediatrics

Clerkship Director Medical Education Scholarly Productivity

- All
- Fam Med
- Int Med
- Neurology
- Ob/Gyn
- Pediatrics
- Psychiatry
- Surgery

<table>
<thead>
<tr>
<th>Presentations/5 years</th>
<th>Publications/5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
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<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
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</tbody>
</table>
### Pediatric Clerkship Director

#### Scholarly Activity (5 years)

<table>
<thead>
<tr>
<th></th>
<th>1995</th>
<th>2004 (range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer-reviewed articles</td>
<td>18.4</td>
<td>10.7 (0-78)</td>
</tr>
<tr>
<td>Non Peer-reviewed articles</td>
<td>4.5</td>
<td>4.7 (0-65)</td>
</tr>
<tr>
<td>Book chapters (editor or author)</td>
<td>3.4</td>
<td>4.6 (0-42)</td>
</tr>
<tr>
<td>Books (editor or author)</td>
<td>0.5</td>
<td>0.4 (0-5)</td>
</tr>
<tr>
<td>Total publications in last 5 years</td>
<td>8.3</td>
<td>7.3 (0-58)</td>
</tr>
</tbody>
</table>


### Pediatric Clerkship Director

#### Medical Education Productivity (5 years)

<table>
<thead>
<tr>
<th></th>
<th>1995</th>
<th>2004 (range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer-reviewed articles</td>
<td>0.8</td>
<td>1.3 (0-12)</td>
</tr>
<tr>
<td>Non Peer-reviewed articles</td>
<td>0.5</td>
<td>0.7 (0-7)</td>
</tr>
<tr>
<td>Book chapters (editor or author)</td>
<td>0.4</td>
<td>0.4 (0-15)</td>
</tr>
<tr>
<td>Books (editor or author)</td>
<td>0.05</td>
<td>0.05 (0-1)</td>
</tr>
<tr>
<td>Total publications in last 5 years</td>
<td>1.6</td>
<td>1.6 (0-20)</td>
</tr>
</tbody>
</table>

Reflections on Decreased Clerkship Director Academic Productivity

- Increased clinical demands
  - In ACE Survey, increased outpatient responsibilities were negatively correlated with all and medical education scholarly productivity
- Increased requirements on Clerkship Directors:
  - ED-2: Types of patients defined with oversight for ensuring all students meet objectives
  - ED-8: There must be comparable educational experiences and equivalent methods of evaluation across all instructional sites
- Fewer faculty tenured or on tenure track

Additional Reflections on Clerkship Director Academic Productivity

- Internal Medicine:
  - CDIM Annual Survey: Rich source of data for multiple publications each year

![Graph showing presentations and publications over 5 years for different medical specialties]
Additional Reflections on Clerkship
Director Academic Productivity

• Internal Medicine:
  – CDIM Annual Survey: Rich source of data for multiple publications each year

• Online Resources
  – MedEdPORTAL
  – Family Medicine Digital Resources Library
  – Health Education Assets Library

• Non-Traditional Scholarship: Example ➔ Pediatrics
  – CLIPP (Computer-Assisted Instruction)
  – Curriculum Development
  – Workshops
## Pediatric Non-Traditional Scholarly Activity (5 years)

<table>
<thead>
<tr>
<th>Category</th>
<th># of Products</th>
<th># Peer-reviewed and/or studied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum</td>
<td>113</td>
<td>57 (0-40)</td>
</tr>
<tr>
<td>CD-ROM</td>
<td>57</td>
<td>40 (0-16)</td>
</tr>
<tr>
<td>Web site</td>
<td>83</td>
<td>44 (0-4)</td>
</tr>
<tr>
<td>Audio tape</td>
<td>65</td>
<td>41 (0-3)</td>
</tr>
<tr>
<td>Video tape</td>
<td>69</td>
<td>39 (0-5)</td>
</tr>
<tr>
<td>CAI</td>
<td>68</td>
<td>46 (0-10)</td>
</tr>
<tr>
<td>Other media</td>
<td>59</td>
<td>39 (0-2)</td>
</tr>
<tr>
<td>Workshops</td>
<td>102</td>
<td>54 (0-250)</td>
</tr>
<tr>
<td>Peer Reviewer</td>
<td>71</td>
<td>54 (0-15)</td>
</tr>
</tbody>
</table>


## Quality and Quantity

### Educational Activity
- Teaching, Curriculum, Assessment, Mentoring/Advising/Leadership/Administration

### Engagement with Education Community

### Scholarly Approach to Education Activity
- Draws from Existing Resources

### Educational Scholarship
- Product
- Peer-Reviewed
- Publicly Disseminated

### Q² + Engagement

Adapted from AAMC GEA Consensus Conference on Educational Scholarship (Pub 2007) and R. Fincher, MD.
Effect of Clerkship Director Role on Satisfaction with Work

Darlene Shaw, PhD
Medical University of South Carolina
Association of Directors of Medical Student Education in Psychiatry

Satisfaction with the CD Role

• Question: Please rate how your clerkship director role has affected your satisfaction with your work.
• Five-point Likert Scale
  – Significantly Enhanced – Significantly Impaired
Impact of Clerkship Role on Work Satisfaction

![Bar chart showing the impact of clerkship role on work satisfaction across different specialties.](chart1)

Impact of Clerkship Role on Work Satisfaction

![Bar chart showing the impact of clerkship role on work satisfaction across different specialties.](chart2)
Discipline Comparisons

- Internal Medicine, Pediatrics, and Psychiatry were significantly more likely than Family Medicine and Neurology to report the CD role enhanced satisfaction with work.
- \( p < .001 \)

Predictors of Enhanced Work Satisfaction from CD Role

- Stepwise regression analysis
- All variables that had significant bivariate correlations with question 19
- Variables: Effect on professional advancement, years as CD, % effort devoted to CD role, decreased % of time in clinic, age, years on faculty, salary support for others, academic rank, overall number of publications, medical education publications, overall number of presentations, and medical education presentations
Stepwise Regression Analysis
Predicting Enhanced Satisfaction with Work from CD Role

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable Entered</th>
<th>Partial r-square</th>
<th>Model r-square</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CD role has affected prof advancement</td>
<td>.1879</td>
<td>.1879</td>
<td>.0001</td>
</tr>
<tr>
<td>2</td>
<td>Years as CD</td>
<td>.0349</td>
<td>.2228</td>
<td>.0002</td>
</tr>
<tr>
<td>3</td>
<td>% effort devoted to CD role</td>
<td>.0239</td>
<td>.2466</td>
<td>.0018</td>
</tr>
<tr>
<td>4</td>
<td>Decreased % of time spent in clinic</td>
<td>.0086</td>
<td>.2552</td>
<td>.0580</td>
</tr>
</tbody>
</table>

Age, years on faculty, salary support for others, academic rank, overall number of publications, medical education publications, overall number of presentations, and medical education presentations were entered but were not statistically significant in the full model.

Leadership Opportunities for Clerkship Directors

Maya Hammoud, MD
Weill-Cornell Medical College in Qatar
Association of Professors of Gynecology and Obstetrics
Leadership Opportunities for Clerkship Directors

- Role and responsibilities of Clerkship Directors allow for some unique opportunities for professional advancement at many levels:
  - Department
  - School/Institution
  - National organizations

Impact of Clerkship Role on Professional Advancement

The chart shows the impact of Clerkship roles on professional advancement across various fields such as Family Medicine, Internal Medicine, Neurology, Obstetrics/Gynecology, Pediatrics, Psychiatry, and Surgery.
Leadership Opportunities at Department Level

- Integral role in forming the medical student education program
- Integral role in Faculty (and Resident) Development Programs
- Education Leader in the department including opportunity to be Director of an Education Division
- Administrative role in budgeting, clinical education costs, and securing educational space

Leadership Opportunities at School Level

- Role in school-wide education committees:
  - Curriculum Committee
  - Promotion and Graduation Committee
  - LCME self-study
  - Curriculum Review Committees
  - Leading “Introduction to Patient Courses”
  - Directing/leading a Curriculum Component or Year
  - School Executive Committees
- Role in multidisciplinary programs and initiatives
Leadership Opportunities at National Level

- Participation in National Organizations within own discipline and interdisciplinary
  - As a participant
  - As a presenter
  - As an organizer
- Getting involved in educational research within own institution and collaborations
- Acquiring key ingredients relevant to medical school deanship and national leadership roles

Perspectives from Departmental Administration

Barbara Schuster, MD
Dean, College of Medicine
Medical College of Georgia – Athens Campus
Thank you!

TIME FOR DISCUSSION AND QUESTIONS