Fellowship Curricular Development:
New ways to solve new and old problems

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APPD Forum for Fellowship Directors
April 27, 2012
Agenda

- Brainstorming of curricular struggles (15 min)
- Presentation of two examples of curricular innovations (20 min)
- Small group work addressing curricular challenges (30 min)
- Large group discussion (25 min)
ACGME requirements I

- Biostatistics
- Research methodology
- Study design
- Preparation of manuscripts
- Critical literature review
- Principles of EBM
- Ethics in research
- Teaching
- Pathophysiology of disease
- Reviews of advances in clinical medicine/research
- How to address complications and death
- Informed consent
ACGME requirements II

- QI
- Self-evaluation
- Use IT to optimize learning
- Participate in education of patients/families/other health care professionals
- Assume administrative roles
- Communication skills
- Professionalism
- Systems-based practice
Brainstorming

What curricular areas do you want to improve in your program?
Examples of Curricular Innovations
Pediatric Pulmonary Fellowship Boot Camp
Example - Pediatric Pulmonary Fellowship

- Clinical exposure, teaching experiences and procedural training are variable
- No formal training with simulation
- No formal training in difficult conversations
- Other issues not yet identified
Example-Needs Assessment

- Current Fellows  (7/8)
- Current Faculty  (14/18)
- Former Fellows  (15/23)
- Pediatric Pulmonary Training Directors  (33/49)
- Nurses  (4/6)
Format of Boot Camp

- Three 4 hour sessions

- Combination of
  - High fidelity simulation
  - Skills task training
  - Professional actors
Chest tube placement

<table>
<thead>
<tr>
<th></th>
<th>Absolutely essential</th>
<th>Nice, but not essential</th>
<th>Not necessary</th>
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<tbody>
<tr>
<td>CHB faculty</td>
<td>14%</td>
<td>71%</td>
<td>14%</td>
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<tr>
<td>National PD</td>
<td>0%</td>
<td>85%</td>
<td>15%</td>
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<td>Former Fellows</td>
<td>27%</td>
<td>47%</td>
<td>27%</td>
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<tr>
<td>Current Fellows</td>
<td>0%</td>
<td>86%</td>
<td>14%</td>
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No sig differences btwn groups
How adequately trained are fellows in:

- Chest Tubes
- Career Dev
- QI research

% superb/adequately trained

- CHB faculty
- Program Directors
- Former Fellows
- Current Fellows

p<0.05
Summary - Usefulness of simulation

- Absolutely essential
  - Complications of FB
  - Management of hemoptysis
  - Management of PTX
  - End-of-life care
  - New diagnosis of CF

- Nice, but not essential
  - Thoracentesis
  - Conscious sedation
Summary - Usefulness of simulation

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Learning Objectives

● Recognize pneumothorax as complication during bronchoscopy

● Treat pneumothorax

● Skills
  – Chest Tube Placement
  – Pleurovac troubleshooting
Structure of Session

- High fidelity simulation
  - Bronchoscopy with transbronchial biopsies
- Patient develops pneumothorax
Structure of Session

- High fidelity simulation
  - Bronchoscopy with transbronchial biopsies
- Patient develops pneumothorax

- Skills session- Chest tube placement
Structure of Session

- High fidelity simulation
  - Bronchoscopy with transbronchial biopsies
- Patient develops pneumothorax

- Skills session - Chest tube placement

- Skills session - Pleurovac Jeopardy
Did we meet our learning objectives?

- Recognize Pneumothorax during bronch
- Treat Pneumothorax
- Skills
  - Chest Tube Placement
  - Pleurovac troubleshooting
Humanism and Professionalism in Pediatrics (HPP)

Fellowship Curriculum
Rationale

- Humanism and professionalism are integral to the practice of medicine
- Deterioration of these attributes during graduate medical training is a concern
- ACGME requires programs to teach professionalism to their trainees, and looks for evidence that programs attend to the mental health of trainees
- In pediatrics, recent efforts in H&P training have focused on residents...but what about fellows?
In 2007, we started the HPP curriculum for the Boston Combined Residency in Pediatrics (BCRP)

- Small-group curriculum for PL1 and PL2
- 2-3 faculty facilitators + 10-12 residents per group
- 10 monthly theme-based noon sessions
- Case vignettes as reflective triggers
- Readings from narrative literature
Background: Residency HPP (2)

- Resident and facilitator feedback
  - E-surveys (satisfaction, utility) distributed to residents and faculty after each session
  - Resident ratings of facilitator effectiveness
  - Annual facilitator focus groups and survey

- Peer Feedback
  - Published as peer-reviewed curriculum on AAMC’s MedEdPORTAL, 2010
  - National presentations (Workshops at PAS, APPD)
  - HPP curriculum modified for use at Stanford
Aim: Adapt our residency HPP curriculum to trainees across multiple pediatric fellowships
Fellowship Initiative

Step 1: Needs Assessment

- National survey of gastroenterology fellows at the North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition fellows’ conference

- 140 fellows total (>95% response rate for both 1st and 2nd year fellows)

- 60% of sample = 1st year fellows, 54% = female
Please tell us how frequently the following strategies help you to develop your skills in humanism and/or professionalism:

- Medical literature
- Lectures
- Small-group fellows' learning
- Retreats
- Professional mentor
- Role model fellows
- Friends/Family
- Informal discussion fellows
- Role model attendings
- Informal discussion attendings

Percent Respondents

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Sometimes</th>
<th>Often</th>
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<tr>
<td>Medical literature</td>
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<tr>
<td>Lectures</td>
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<td>Small-group fellows' learning</td>
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<tr>
<td>Retreats</td>
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<td>Professional mentor</td>
<td></td>
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<tr>
<td>Role model fellows</td>
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<td>Friends/Family</td>
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<tr>
<td>Informal discussion fellows</td>
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<td>Role model attendings</td>
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Percent Respondents
Needs Assessment Results (2)

Please tell us how helpful it would be for you to receive more formal teaching on the following issues:

- Difficult patients: 88%
- Demands of fellowship: 84%
- Depression and burnout: 81%
- Angry patients: 79%
- Medical errors: 78%
- Work-life Balance: 72%
- The illness experience: 71%
- Death and dying: 63%
- Bereavement: 60%
- General Principles of Bioethics: 57%
- Cultural sensitivity: 50%

Percent Responding "Very Helpful" or "Helpful"
Curricular Materials

Step 2: Fellow HPP Case Materials

- Developed 3 case vignettes on topics most desired by fellows in needs assessment
  - Depression/burnout
  - Difficult patients
  - Demands of fellowship/work-life balance
- Cases accompanied by facilitator guides
The Entitled Demander

Part A

You are the cardiology fellow covering consults from the Emergency Department. You are paged by an attending in the ED about Jamie, a 16 year old female with palpitations and dizziness who had presyncope today. This problem has been ongoing and the patient is scheduled for a cardiology clinic appointment next month. The ED informs you that her mother, Ann, a nurse practitioner at an adult hospital, is demanding an echo and an urgent clinic appointment.

When you arrive, Jamie is more interested in texting than she is in your evaluation. However, she endorses almost everything on your review of systems. The history is lengthy but the physical exam is reassuring and you do not feel an echo is indicated. Jamie’s mother is furious and states “My pediatrician sent us in for the echo. If he knows she needs this, and you are a cardiologist, why isn’t it obvious to you that this test must be done now? How long have you been a cardiologist anyway?”
The Entitled Demander

Part B

You try to explain your differential diagnosis to Jamie and her mother and recommend testing other than an echo that might be useful. However Jamie’s mother remains combative and fixated on the echo. She ultimately demands to speak with an attending cardiologist with “more experience.”

When your attending arrives, you get paged out of the room and leave your attending to speak with Jamie and her mother. When you return, 10 minutes later, the mood in the room has clearly changed. Jamie and her mother are both smiling, and your attending says, “We have made a plan! I really want to address Ann’s concerns. How about you call the backup fellow and ask him to do this echo. I just saw him getting ready to go home for dinner. I’m sure we can catch him before he leaves.”
Fellowship HPP: Difficult Patients

Goals:
- To reflect as a group on fellow experiences with “difficult” patients
- To discuss factors contributing to “difficult” behavior in patients
- To consider ways in which fellows can best care for these patients, given time constraints and personal frustration

Case: “The Entitled Demander”

Reading Materials:

Discussion Questions for Case:
Case Part A:
1. How does this fellow’s experience compare with your own? Have you encountered patients like this?
2. What are your memorable “difficult patient” stories?
3. What is it about Jamie and her mother that makes the situation challenging?
4. What would you say to Jamie’s mother next?
Case Part B:

1. How accommodating should a fellow be when faced with patients like this?
2. How does it feel when your supervising attending alters your plan? How would you respond to the attending?
3. If you knew that the backup fellow had not seen his kids this week, would that change your feelings?
4. What is the personal impact of dealing with patients and families like this?

General Tips

These points are meant to serve as a guide, but facilitators are encouraged to record important points and summarize for interns at the end of the session.

- Ask yourself what it is that makes the patient/family challenging or frustrating. What feelings are evoked in you, and why?
- Try to see a situation from the patient’s perspective.
- Try to form an alliance with the patient or parent, and also with the other care providers to provide a unified front.
- Practical tips from “5 rules for managing tough patients:” (1) know thyself; (2) know thy patient; (3) focus on the big picture; (4) have compassion, (5) set limits.
Step 3: Logistics

- Sessions on 3 topics conducted 2011-2012
- For each topic: 2 groups of 10-12 fellows, 1-3 facilitators
- Slots filled first-come, first-serve for a total of 25 fellows from various programs
- Faculty facilitators from experienced HPP core
- Narrative readings, electronic pre-survey sent to participants prior to session
- Post-session electronic feedback survey
- Certificate of completion sent to fellowship director
## Feedback From Pilot Sessions

<table>
<thead>
<tr>
<th>Question</th>
<th>% Strongly Agree or Agree</th>
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<tbody>
<tr>
<td>This sessions touched on important training issues</td>
<td>100</td>
</tr>
<tr>
<td>This session was helpful in letting me reflect and communicate</td>
<td>100</td>
</tr>
<tr>
<td>The case vignette was useful in stimulating discussion</td>
<td>86</td>
</tr>
<tr>
<td>The session helped me develop useful coping skills for the future</td>
<td>71</td>
</tr>
<tr>
<td>My group facilitators were useful resources</td>
<td>93</td>
</tr>
<tr>
<td>Sessions of this type are valuable for my overall training</td>
<td>86</td>
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Fellow Comments: “Most Valuable Aspects”

- Sharing experiences
- Understanding that other fellows are experiencing similar stresses
- Meeting other fellows in different departments, hearing different perspectives
- Facilitator moderation
- Discussion of hospital resources for fellows affected by depression or burnout
Next Steps

- Planning additional pilot sessions
  - Illness experience
  - Death and Dying

- Offer regular sessions, 4x/year
  - Longitudinal participation for some fellows/programs vs. one-time exposure for more fellows?
Small Group Exercise

- Each group assigned a curricular challenge
- Discuss needs assessment (10 min)
- Develop learning objectives (5 min)
- Propose curricular enhancement (10 min)
- Construct assessment tool (5 min)
Opportunities for Scholarship

- Academic credit derived from curricular development
- Meetings
  - Workshop, abstract, poster
  - ACGME, APPD, PAS, AAP, subspecialty societies
- Med Ed Portal
  - [https://www.mededportal.org/](https://www.mededportal.org/)
  - Peer-reviewed online repository of curricular interventions and materials
Publication in the Medical Literature

- Subspecialty journals
- Education journals
  - Journal of Graduate Medical Education
  - Academic Medicine
  - Academic Pediatrics
  - Medical Education: Really Good Stuff
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