CHALLENGES IN PEDIATRIC HOSPITAL MEDICINE

TRANSITIONS FROM TRAINING AND CHALLENGES WITHIN THE WORKFORCE
DISCLOSURES

• None
• Dr. Sophia Sterner, MD FAAP
  • Pediatric Hospitalist at Children’s Mercy Kansas City – Kansas City, MO
  • Physician Lead 5HH High Reliability Unit – Children’s Mercy Hospital
  • Assistant Professor of Pediatrics – Univ. of Missouri Kansas City School of Medicine
GOALS/OBJECTIVES

• Recognize the general model for pediatric training as stipulated by the ACGME
  • Accreditation Council for Graduate Medical Education

• Briefly discuss the recent literature available that addresses changes made in residency training – specifically duty hour reform and patient handoff

• Highlight different forms of hospitalist programs available in the United States and discuss the challenges that practicing hospitalists have in these settings

• Through discussion with the audience - identify possible interventions that can help overcome difficulties faced by training programs, new graduates and practicing hospitalists today.
PANEL SESSION 1 - INTRODUCTIONS

• Dr. Angie Etzenhouser, MD  
  • Pediatric Hospitalist at Children’s Mercy Kansas City – Kansas City, MO  
  • Associate Director, Pediatric Residency Program – Children’s Mercy Hospital  
  • Assistant Professor of Pediatrics – Univ. of Missouri Kansas City School of Medicine

• Dr. Heather Dahlquist, MD  
  • Pediatric Hospitalist at Yale-New Haven Children’s Hospital – New Haven, CT  
  • Assistant Clinical Professor of Pediatrics – Yale University School of Medicine

• Dr. Alex Hogan, MD, MS, FAAP  
  • Pediatric Hospitalist at Connecticut Children’s Medical Center – Hartford, CT  
  • Assistant Professor of Pediatrics – University of Connecticut School of Medicine
BACKGROUND

• Long hours adversely affect resident well-being and patient safety

• Human performance declines after approx 16 hrs of wakefulness

• Lapses of attention, performance failures increase when <4-5 hours of sleep/24 hours
DUTY HOUR REFORM

• 2003 ACGME
  • No more than 30 consecutive hours
  • No more than 80 hours/week
  • 1 day in 7 free from educational/clinical responsibilities
  • 10 hour rest period between shifts after in-house call
DUTY HOUR REFORM

• 2011 ACGME
  • Max 16 hour shifts for interns (first year residents)
    24+4 hours for senior residents (2nd year +)
  • Max of 6 consecutive night shifts
  • Rest period of 8 hours after standard shift, 14 hours after 24 hour shift
    Breaks can be shorter than 8 hours for extenuating circumstances

• 2016 ACGME
  • FIRST and iCompare studies
  • Eliminated 16 hour rule for interns
  • All residents max 24+4 hours
PERCEPTIONS OF DUTY HOUR REFORM

Positive Impact

• Improved compliance with guidelines (prescribing d/c meds, reduced mean LOS)
• Regulation of extended work hours, night shifts have most impact
• Benefit to patient safety, resident well-being

Negative/No Impact

• Most studies show no change or improvement in complication/mortality rates
• Overall increase in cost – hire more faculty, extenders to cover resident workload
• Decreased perception of professionalism
• Concern for work compression
• No actual change for resident sleep
PERCEPTIONS OF DUTY HOUR REFORM

• Unknown
  • Quality of training
  • Transition to faculty life – no duty hour limitations
  • Increase in handoffs
2010 Joint Commission
• Root cause of sentinel events
  • Communication involved in 80%

2011 ACGME
• Training programs required to teach, monitor handoffs

2017 Joint Commission Sentinel Event Alert
• Recommendation for standardization of handoff process
HANDOFFS

- Effective handoffs should have:
  - Structured format (written and verbal)
  - Environment free from interruptions
RECENT GRADUATE EXPERIENCES AND CHALLENGES

• Heather Dahlquist, MD
  • Graduated residency in 2016
  • Now works at Yale Children’s Hospital and Lawrence + Memorial Hospital

• Alex Hogan, MD, MS, FAAP
  • Graduated hospitalist fellowship in 2017
  • Now works at Connecticut Children’s Hospital
CHALLENGES TRANSITIONING FROM MEDICAL TRAINING TO INDEPENDENT PRACTICE

Residency Training

- Large, university affiliated hospital
- Pediatric trained support staff available
- Pediatric specialty doctors in the hospital to help with complex patients

Independent Practice

- Wide variety of settings
- Availability of pediatric trained support staff varies
- Availability of pediatric subspecialty doctors varies
Additional Challenge: getting “back to the bedside”

- **Problem**: Documentation in the electronic medical record is time consuming
  - For billing and legal purposes, documentation needs to be detailed

- **Problem**: making appointments, calling other providers, coordinating lab tests and imaging is time consuming
  - This all takes time away from spending time with patients

- **Interventions in place**: Documentation templates, unit coordinators
# Fellowship Curriculum

<table>
<thead>
<tr>
<th>Domain</th>
<th>Examples</th>
<th>Additional Requirements</th>
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<td>Core Clinical Rotations</td>
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<td>Critical Care</td>
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<td>Systems and Scholarship</td>
<td>General Training in ALL, with Focus in 1: Quality Improvement</td>
<td>Must meet requirement for “Scholarly Activity” in at least 1 domain. (National</td>
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<td>Individualized Curriculum</td>
<td>Clinical or Non-Clinical activities. Must be determined by learning needs</td>
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<td></td>
<td>and career plans of each fellow along with mentorship.</td>
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PERCEIVED NEEDS

• Fellowship-trained attendings feel MORE competent in:
  • Management medical complexity
  • Undertaking research projects
  • Leading QI programs and
  • Educating Trainees

• Feel LESS competent in:
  • Newborn Care
  • Pain Management

• Fellowship trained physicians perceived needs after fellowship:
  • Hospital program management
  • Practice guideline design
  • Development of educational curricula
  • Research skills
  • Procedural skills
BREAKOUT SESSION 1 TOPICS

Variations in training causing limitations or experience gaps in the workforce

Beth, Sonia, Sophia

Handoffs

*Increasing number/frequency
*Lack of consistency in format and information delivered

Alex & Angie

Getting back to the bedside

Increasing amount of time spent away from the patient – documenting, coordinating care

Heather & Lisa
When you have seen one hospitalist program.....you have seen one hospitalist program
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<th>Hospital</th>
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<th>Staffing</th>
<th>Residents</th>
<th>PICU</th>
<th>Nursery coverage</th>
<th>Specialty services</th>
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<td>Lawrence + Memorial Hospital</td>
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<td>Level 3 NICU night coverage, ED consults, nursery and newborn deliveries</td>
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PANEL SESSION 2 - INTRODUCTIONS

• Dr. Sonia Chaudhry, MD
  • Neonatal Hospitalist at Connecticut Children’s Medical Center – Hartford, CT
  • Medical Director Newborn Nursery – Connecticut Children’s Medical Center
  • Assistant Professor of Pediatrics – University of Connecticut School of Medicine

• Dr. Beth Natt, MD, MPH, FAAP, SFHM
  • Pediatric Hospitalist at Danbury Hospital – Danbury, CT
  • Director of Pediatric Hospital Medicine, Regional Programs – Connecticut Children’s Medical Center
  • Visiting Associate Professor – University of Connecticut School of Medicine

• Dr. Lisa Carney, MD FAAP
  • Pediatric Hospitalist at Children’s Mercy Kansas City – Kansas City, MO
  • Medical Director Code Blue Prevention – Children’s Mercy Hospital
  • Simulation Coordinator – Division of Pediatric Hospital Medicine
  • Assistant Professor of Pediatrics – Univ. of Missouri Kansas City School of Medicine
PEDIATRIC COMMUNITY HOSPITALIST

• ~2000 hospitals in the United States with designated pediatric inpatient units
  • Community Based Hospitals
  • Excluding Children’s Hospitals / University Hospitals

• Role of Pediatric Hospitalists in a community hospital setting
  • Inpatient Pediatric Care
  • Newborn Nursery Care / DR resuscitations/stabilization
  • Emergency Department Consultations
  • Consultation to outpatient providers
  • Advocacy for the needs of children within an adult – oriented system
  • Liaison between the tertiary/academic centers, subspecialist and care of patients in the community

• Pediatric hospitalists in the community setting
  • CLINICAL CARE
    • Increase in breadth of clinical knowledge and skills
    • Generally addressed by subspecialists at the tertiary level / children’s hospital

• RECOGNIZING THE UNIQUE NEEDS OF PEDIATRIC PATIENTS in Adult Oriented Areas in the Community
  • Pediatric patients are “NOT SMALL ADULTS”
  • Pharmacy
  • Radiology
  • Laboratory Services
  • Respiratory Therapy

• LEADERSHIP
  • Advocating for pediatric patients and families
  • Building services within the hospital to benefit patients
PEDIATRIC COMMUNITY HOSPITALIST

• Community Representation / Liaison
  • Build a relationship between the Primary Care Providers and Academic Center
  • Provide continuing education to varied learners
    • Families/Patients
    • Nursing Staff / Hospital Staff
    • Administration
    • Public

• Unique Opportunity to provide care for patients and families
  • Tertiary Level Care closer to home

• Challenges for the Pediatric Hospitalist
  • Maintaining Skills Set
  • Subspecialist Care
    • Adult Specialists
    • Co-Management
  • Caring for Pediatric Patient in an Adult Setting
Working within a non children’s hospital

- Majority of children cared for in US are in a Community Hospital Setting

- Community Hospitals and Non-Free Standing Children’s Hospitals have challenges that are different from Free-Standing Children’s Hospitals
PATIENT CARE SETTINGS

Free Standing Children’s Hospitals

• Dedicated Equipment
• Pediatric Focused System
  • Pharmacists
  • Equipment
  • Safety (Code Systems)
  • Electronic Medical Record

Non-Free Standing Hospitals

• Resource allocation can vary
  • Pediatrics less “lucrative” than other departments
• Variable resources
  • Pharmacy expertise
  • Pediatric Nurses/ Specialists
  • Time of day changes
  • Breadth not Depth
PEDIATRIC HOSPITALISTS AS ADVOCATE

- Recognize need for Pediatric Specific Systems
- Learn to Finesse Adult system to “fit” pediatric needs
- Speak up for potential patient safety concerns and develop guidelines to assist non pediatric staff in caring for pediatric patients
AFFECTING HOSPITAL SYSTEMS

At a Free Standing Children’s Hospital, these roles would typically be covered by multiple key leaders; in the Community setting, often the head of the department

• Big Fish in a Small Pond

• Representation on Committees

• Soft Leadership
MAINTENANCE OF SKILLS & COMPETENCIES AT CMH KC

• 45+ Hospitalists all currently expected to have the same scope of practice; same competency level/skill set

• 2015 Needs/Self-Assessment Survey Completed with 98% response rate (47/48)

• Experience ranged from <1 to > 20 years (median 4 yrs; 1 completed fellowship training)
MAINTENANCE OF SKILLS & COMPETENCIES AT CMH KC

• Faculty Development Curriculum 2016-2017 utilizing Simulation with content experts; hands on, didactic, e-learn

• CME and MOC Part 2 credit

• Overall identified gaps/content areas for further training:
  • Complex Medical Patients/Co-Management
  • Advanced Airway Management
  • Vascular Access/Medications/Code Cart
MAINTENANCE OF SKILLS & COMPETENCIES AT CMH KC

Significant Differences with years experience/education needs noted for two areas:
  • Team/Communication Skills and Post-Resuscitation Care

Resident survey: Dip in self reported competency in resuscitation skills between PGY-3 and new faculty (0-2 years)

Future areas of focus based on Need/Scope of Practice: Endocrine, Sedation/Airway, Team Communication/Code Prevention, Newborn (PHM Boards)
BREAKOUT SESSION 2 TOPICS

Maintaining hospitalist skill sets & competencies
*Variations for each setting as needs & patient population vary
*Use of a simulation lab vs not having access to one

Angie & Lisa

Working as a pediatric hospitalist in an adult setting

Beth & Sonia

Practicing in a setting lacking subspecialty support

Alex, Heather, & Sophia
CLOSING REMARKS
REFERENCES


REFERENCES CONTINUED


