

# Hospital Medicine Curricular Guidelines or Track Recommendations for Family Medicine Residencies

A Society of Hospital Medicine/ Society of Teachers of Family Medicine White Paper

> Prepared by: The SHM/STFM Joint Task Force for Hospital Medicine Training of Family Medicine Residents

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# I. Introduction and Explanation of Need

An increasing number of family physicians are pursuing careers in hospital medicine. According to a 2011 survey conducted by the Council of Academic Family Medicine Educational Research Alliance (CERA), 9.2% of graduating family medicine (FM) residents are entering directly into immediate practice as hospitalists. Society of Hospital Medicine (SHM) membership data also demonstrates the growth of hospitalists trained in family medicine (HTFM), who comprise 10% of active SHM memberships (as of November 2016). Additionally, when hospital medicine physician groups were surveyed by SHM in 2017 for the creation of the society's biannual report, 64.9% of employer groups reported hospitalists with family medicine certification within their ranks. Unfortunately, HTFMs do face employment discrimination. There is data denoting hospital medicine groups' reluctance to hire family physicians (in contrast to internists) who have not had additional training in hospital medicine. This sentiment, on the part of the hiring bodies, may stem from the heterogeneity of family medicine resident inpatient training experiences. The required inpatient training in family medicine residency is variable across programs and may result in inconsistent critical care exposure and inpatient procedural training.

The Accreditation Council for Graduate Medical Education (ACGME) Review Committee for Family Medicine requires the exposure to adult inpatient medical patients outlined in Table 1.

Certainly, many programs far exceed these requirements and local factors seem to strongly influence curricular content when it comes to family medicine inpatient training. We know from previous CERA survey data that certain residency program characteristics are associated with higher rates of graduates choosing hospital medicine as a career. For example, hospitalists are produced at twice the rate in non-university-affiliated programs in smaller southern communities compared to university-based programs.¹ This may speak to the decreased density of other specialties or trainees in the hospital environment for these programs, or of regional variations in training expectations for family medicine residents. Additionally, program directors' attitudes about training to be a hospitalist seem to have an impact. Program Directors who agreed with the statement, "Hospitalist skills are different from traditional FM inpatient skills," reported a significantly higher percentage of recent graduates working as hospitalists.¹ This suggests that Program Directors who believe that additional or concentrated training is necessary to work in the hospital are more likely to foster an interest in their learners for hospital medicine focused careers.

Table 1. ACGME Requirements for Family Medicine Inpatient Encounters

| Clinical Element                       | Hours / Months Required | AND/OR | <b>Encounters Require</b> | d                             |                 |
|--|-------------------------|--------|---------------------------|-------------------------------|-----------------|
| Care of hospitalized adult patients    | 600 / 6                 | AND    | 750                       |                               |                 |
| Care of ICU patients                   | 100 / 1                 | OR     | 15                        |                               |                 |
| Adult ED patients                      | 200 / 2                 | OR     | 250                       |                               |                 |
| Care of children in the hospital or ED | 200 / 2                 | AND    | 250                       | 75 pediatric inpatient        |                 |
|  |                         |        |                           |                               | 75 pediatric ED |
|  |                         |        |                           | 100 pediatric inpatient or ED |                 |
| Care of surgical patients              | 100 / 1                 | N/A    | Not outlined              |                               |                 |

#### Hospital Medicine Curricular Guidelines or Track Recommendations for Family Medicine Residencies

Residency program director survey data show that there is currently highly varied methodology and volume in regards to training family medicine residents in inpatient medicine and that certain curricular factors do play a role in a graduate's propensity to choose hospitalist work.<sup>5</sup>

The SHM/STFM Joint Task Force for Hospital Medicine Training of Family Medicine Residents was established to create guidance for family medicine residency programs that wish to institute a dedicated track in hospital medicine for their residents. We feel this is important and timely in light of increasingly higher rates of family medicine residency graduates choosing hospital medicine careers and the disparate training experiences that prevent employers from easily assessing a hospitalist candidate's preparedness. Completion of such a track provides an assurance of rigor through standardized competencies in hospital medicine, but it should be noted that completion of a hospital medicine track is not a requirement for family medicine residency graduates to practice as hospitalists.

Though this task force recognizes that many HTFM, particularly at community and rural hospitals, participate in the care of pediatric and newborn patients, we will not be addressing pediatric inpatient training in this curricular guide.

These curricular guidelines comprise several sections, some of which mirror the Society of Hospital Medicine's Core Competencies in Hospital Medicine. The Program and Track Characteristics section advises how programs may structure a hospital medicine curriculum to ensure sufficient clinical experience to prepare graduates for careers in hospital medicine. The Clinical Conditions section lists some of the common diagnoses that hospitalists must be proficient in managing. The Procedural Training section describes the procedural skills that residents should learn as they prepare for hospital medicine careers. The Healthcare Systems section describes the additional knowledge, skills and attitudes specific to caring for hospitalized patients that may not be part of every family medicine residency's core curriculum. Finally, the career planning and mentoring section provides guidance on how programs can support residents' preparation to enter the hospitalist workforce.

Family medicine organizations have developed a list of Entrustable Professional Activities (EPAs)<sup>78</sup> that define the type of care that the public should expect family physicians to deliver. In addition, the ACGME Review Committee for Family Medicine (ACGME RC-FM) has published developmental milestones in family medicine,<sup>9</sup> which programs are required to report on semiannually. These milestones are organized around the six ACGME core competencies: Patient Care (PC), Medical Knowledge (MK), Practice-Based Learning and Improvement (PBLI), Systems-Based Practice (SBP), Professionalism (PROF) and Interpersonal and Communication Skills (C). The curricular recommendations herein are mapped to EPAs and ACGME sub-competencies and milestones where appropriate for the benefit of Family Medicine Residency (FMR) Clinical Competency Committees.



## II. Program and Track Characteristics

Family medicine residency programs seeking to implement these hospital medicine track recommendations from SHM should establish a well-defined mechanism for ensuring exposure and competency in the knowledge, skills and attitudes of the core clinical conditions, procedures and hospital systems that are outlined in Section III. Such monitoring mechanisms will support the integrity of the hospital medicine track for the program as well as the employment and credentialing process for the individual resident after graduation.

In many cases, programs may already have monitoring mechanisms for inpatient (and other) exposures in place that can be audited for the training recommendations in this document for an individual learner. In the absence of an established process, we recommend utilizing one of the following monitoring mechanisms:

- Learner-entered patient management logs
- Billing data linked to the specific resident in question
- Completion of knowledge and clinical skills modules that demonstrate proficiency
- Faculty attestation to demonstrated and directly observed competency (skills, attitudes and knowledge) in clinical conditions, procedures or involvement with the healthcare system

In the context of a hospital medicine track, it is important to address adequate inpatient volumes necessary to achieve educational goals. Although the ACGME RC-FM does not specify upper limits on the number of inpatients family medicine interns and residents may simultaneously manage, evidence suggests that busier services produce some undesirable educational outcomes, including resident perception of workload, conference attendance, duty hour violations and readmission rates. Conversely, limited inpatient volume may not allow for consistent exposure to a wide breadth of medical conditions nor provide the appropriate learning environment in which to develop triage skills and efficiency. In these situations, programs may choose to supplement standard inpatient rotations with additional learning opportunities to achieve these goals. There does seem to be an association between inpatient volume and choosing hospitalist careers after graduation for FM residency graduates. There are not clear service size recommendations conveyed in the literature, and it is likely that programs must determine this optimal number based on their specific patient mix and the acuity at their training site(s). Using these factors as a guide, this task force recommends a graduated level of responsibility over the course of an individual trainee's residency to approach the volume typical of hospital medicine work.



A family medicine residency program that offers a hospital medicine track should present inpatient training experiences that contain broad general medicine exposure or the program should be willing to augment through off-site rotations to ensure adequate exposure to general inpatient medicine. This is necessary to develop the wide breadth of skills and knowledge required for the inpatient care of diverse patients. Inpatient experiences that are specialty-driven or have a narrow focus do not offer robust development of a broad spectrum of inpatient skills. That said, this task force does recognize that the learner may benefit from locally derived expertise and focus and, therefore, local rotations may comprise some of the trainee's experience. Additionally, specialized training around a particular disease or set of diseases may exemplify programmatic efforts to meet a community's health needs, and it is not our intention to undervalue this.

It is necessary to ensure sufficient exposure to and experience with all 21 clinical conditions described in the SHM Core Competencies listed in Table 2.12 This may be achieved through standard inpatient and critical care curriculum or may be supplemented through hospital medicine and subspecialty electives. The Core Competencies are online, non-proprietary and available for use by Program Directors and residents and will provide in-depth discussion and specific learning objectives for each.

For specific suggestions regarding curricular content including core clinical hospital medicine topics, please access the Society of Hospital Medicine's Core Competencies (http://www.journalofhospitalmedicine.com/jhospmed/article/135231/hospital-medicine/core-competencies-hospital-medicine-2017-revision-section) or the American Academy of Family Physicians' curricular guide for care of the critically ill patient (http://www.aafp.org/dam/AAFP/documents/medical\_education\_residency/program\_directors/Reprint291\_Critical.pdf).

Table 2. Core Competencies in Hospital Medicine 2017 Revision. Section 1: Clinical Conditions

| Acute Coronary Syndrome               | Delirium and Dementia                                    | Perioperative Medicine          |
|---------------------------------------|--|---------------------------------|
| Acute Kidney Injury                   | Diabetes Mellitus  | Sepsis Syndrome                 |
| Alcohol and Drug Withdrawal           | Gastrointestinal Bleeding                                | Skin and Soft Tissue Infections |
| Asthma                                | Heart Failure  | Stroke                          |
| Cardiac Arrhythmia                    | Hospital Acquired and Healthcare<br>Associated Pneumonia | Syncope                         |
| Chronic Obstructive Pulmonary Disease | Hyponatremia   | Urinary Tract Infection         |
| Community Acquired Pneumonia          | Pain Management  | Venous Thromboembolism          |



# IV. Hospital Medicine Track Elements: Procedural Training

While the ACGME Program Requirements in Family Medicine mandate that residents must demonstrate proficiency in interpretation of basic clinical tests and images, the document does not contain specific language regarding the scope of training in invasive procedures, stating only that residents "must appropriately use and perform all diagnostic and therapeutic procedures" that are "considered essential for the area of practice." In addition to the more cognitive skills of chest radiograph interpretation and electrocardiogram interpretation, the Core Competencies in Hospital Medicine list arthrocentesis, lumbar puncture, paracentesis, thoracentesis, vascular access and endotracheal intubation among the skills of a hospitalist. In its Consensus Statement for Procedural Training in Family Medicine Residency, the Council of Academic Family Medicine (CAFM) recently endorsed a list of invasive procedures performed by family physicians, classifying all of the above procedures as those "for which all family medicine residencies are expected to offer training." However, of those, arthrocentesis is the only one for which competency for independent practice is expected of all residents by graduation.

While individual residents' learning curves vary with respect to procedural competency, and residency programs may set their own training targets, the CAFM Consensus Statement for Procedural Training in Family Medicine Residency recommends the minimum volume of experience needed to achieve technical proficiency for common inpatient procedures, although many residents may need more than the minimum exposure in order to demonstrate proficiency. A hospital medicine track may include electives in anesthesia, interventional radiology, or critical care on- or off-site to help residents gain sufficient procedural experience. Procedural courses may supplement this training. The CAFM task force also developed evaluation instruments called Procedural Competency Assessment Tools. Table 3 lists the CAFM recommended minimums for each of the above procedures and contains embedded links to the evaluation instruments.

Table 3. Recommended Procedural Exposures for Family Medicine Residents

| Procedure               | Minimum Volume of Exposure | Procedural Competency<br>Assessment Tool (PCAT)      |
|-------------------------|----------------------------|--|
| Thoracentesis           | 3                          | <u>Thoracentesis</u>                                 |
| Paracentesis            | 3                          | <u>Paracentesis</u>                                  |
| Central Line            | 10                         | Central Venous Cannulation                           |
| Arterial Line           | 5                          | Arterial Cannulation                                 |
| Endotracheal Intubation | 10                         | Endotracheal Intubation                              |
| Lumbar Puncture         | 3                          | <u>Lumbar Puncture</u>                               |
| Arthrocentesis          | 5                          | Joint, Bursa, Soft Tissue<br>Aspiration or Injection |



# V. Hospital Medicine Track Elements: Healthcare Systems

As with clinical and procedural training, strong understanding of healthcare systems is essential to the practicing hospitalist. Again, SHM has provided competencies to refine expected learning outcomes in this domain, enable curriculum developers and content experts to select instructional strategies, and ensure context relevance. <sup>16</sup> These specific sub-systems are shown in Table 4.

Many elements of healthcare systems and healthcare systems management are well covered in standard family medicine residency curriculum. We have provided additional rationale, guidance and mapping to EPAs and family medicine ACGME milestones/subcompetencies for the items that have aspects that are either (1) unique to hospital medicine, or (2) such essential components of inpatient practice that highlighting them within a hospital medicine curriculum is recommended. These are highlighted in the table below. In addition, key resources associated with these subject areas have been provided for ease of use by both faculty and trainees.

Table 4. Core Competencies in Hospital Medicine Healthcare Systems.

| Care of the older patient                                     | Evidence-based medicine               | Nutrition and the hospitalized patient        | Prevention of healthcare-associated infections and antimicrobial resistance |
|---|---------------------------------------|---|---|
| Care of vulnerable populations                                | Hospitalist as educator               | Palliative care                               | Professionalism and medical ethics  |
| Communication   | Information management                | Patient education                             | Quality improvement   |
| Diagnostic decision-making                                    | Leadership                            | Patient handoff                               | Risk management   |
| Drug safety,<br>pharmacoeconomics and<br>pharmacoepidemiology | Management practices                  | Patient safety                                | Team approach to multidisciplinary care                                     |
| Equitable allocation of resources                             | Medical consultation and comanagement | Practice-based<br>learning and<br>improvement | <u>Transitions of care</u>  |

#### Drug safety, pharmacoeconomics and pharmacoepidemiology

Pharmacotherapy is a key part of a physician's work. Physicians in almost any specialty must understand how to evaluate the benefits, harms and financial costs of drug therapy for individual patients. Pharmaceutical costs have grown more than any other sector of healthcare, as have concerns about adverse drug events. Hospitalists often participate in the development and implementation of protocols and clinical pathways that recommend preferred drug therapies within their institutions. In order to participate effectively in these decisions, they must be able to interpret outcomes measurement (pharmacoepidemiology) and economic analyses (pharmacoeconomics).

Hospitalists may participate in institutions' pharmacy and therapeutics committee or antimicrobial stewardship programs. These topics are not covered directly in the ACGME requirements for family medicine or in the family medicine milestones.

# Knowledge, Skills and Attitudes:

- Residents should develop the knowledge to evaluate the parameters (clinical efficacy, adverse effects, kinetics and cost) that can affect the choice of pharmacotherapy, rationale for prophylactic drug therapies, principles of antimicrobial stewardship and interpretation of pharmacoeconomic analyses.
- Skills of the inpatient resident must include the ability to individually tailor pharmacotherapy based on comorbid conditions or altered kinetics, apply antimicrobial treatment guidelines to reduce cost and slow the emergence of resistance, use best practices with regard to medication ordering and administration to reduce adverse drug events, and arrange adequate follow-up for therapies that require outpatient monitoring.
- Expected resident attitudes include recognition of the importance of accurate medication reconciliation at
  admission and discharge, education of patients and families about acquiring medication information and
  communicating medication history to clinicians at each transition of care, integration of knowledge of risks
  and benefits of drug therapies into medical decision making for individual patients, and application of the
  principles of pharmacoepidemiology and pharmacoeconomics to develop and implement institutional
  protocols and clinical pathways that recommend preferred drug therapies.

#### These map to the following Entrustable Professional Activities:

- **1.** EPA 5: Provide care that speeds recovery from illness and improves function.
- 2. EPA 9: Diagnose and manage acute illness and injury.
- **3.** EPA 13: Manage inpatient care, discharge planning, transitions of care.
- **4.** EPA 14: Manage care for patients with medical emergencies.
- **5.** EPA 16: Use data to optimize the care of individuals, families and populations.
- **6.** EPA 17: In the context of culture and health beliefs of patients and families, use the best science to set mutual health goals and provide services most likely to benefit health.
- 7. EPA 18: Advocate for patients, families and communities to optimize health care equity and minimize health outcome disparities.
- **8.** EPA 19: Provide leadership within interprofessional health care teams.

This above section aligns most closely to the ACGME family medicine sub-competencies: SBP-1, Provides Cost-Conscious Medical Care; and SBP-2, Emphasizes Patient Safety.<sup>19</sup>



#### **Additional Resources:**

The Family Medicine Digital Resource Library contains two PowerPoint slide sets from the same author (from 2006 and 2007) about pharmacoeconomics. (resourcelibrary.stfm.org).

SHM offers a toolkit for antimicrobial stewardship (hospitalmedicine.org/clinical-topics/antibiotic-resistance/).

The Agency for Healthcare Research and Quality (AHRQ) offers a toolkit for reduction of Clostridium difficile infections through antimicrobial stewardship (ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/resources/cdifftoolkit/).

AHRQ offers a toolkit for implementing medication reconciliation (MATCH) (ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/resources/match/).

#### **Equitable allocation of resources**

The United States spends more than any other country on healthcare, with expenditures totaling \$3.2 trillion in 2015 (\$9,900 per capita or 17.8% of gross domestic product). Hospital care has consistently accounted for the largest portion. As providers of cost-conscious care, hospitalists are involved in the coordination and allocation of healthcare resources. Differences in race, ethnicity and socioeconomic status make patients vulnerable to healthcare inequalities. Hospitalists are positioned to identify such disparities and advocate for equitable allocation of resources to optimize care for all patients.

The ACGME Program Requirements for Graduate Medical Education in Family Medicine<sup>13</sup> address equitable allocation of resources insomuch as they relate to quality improvement. They mandate "training and experience in quality improvement processes, including an understanding of health care disparities," and "the opportunity to participate in interprofessional quality improvement activities ... aimed at reducing healthcare disparities."

Knowledge, Skills and Attitudes:

- Residents should be knowledgeable about the concepts of equity and cost-effectiveness; be able to
  distinguish between decision analysis, cost-effectiveness analysis and cost-benefit analysis; identify
  health resources and patient populations that are at risk for inequitable allocations; and recognize that
  equity in healthcare is cost effective yet these concepts may conflict in healthcare policies.
- Skills of the inpatient resident must include the ability to monitor for equity in healthcare among
  hospitalized patients through measurement of patient access to hospital resources, and practice
  evidence-based, high-value care for all patients.
- Residents should maintain the attitude of advocating for every patient's needed healthcare services; act on cultural differences or language barriers that may inhibit healthcare quality; coordinate or participate in multidisciplinary teams to track utilization and outcomes; decrease costs; and provide evidence-based, cost-effective care with equitable access.

#### These map to the following Entrustable Professional Activities:

- **1.** EPA 16: Use data to optimize the care of individuals, families and populations.
- **2.** EPA 17: In the context of culture and health beliefs of patients and families, use the best science to set mutual health goals and provide services most likely to benefit health.
- **3.** EPA 18: Advocate for patients, families and communities to optimize health care equity and minimize health outcome disparities.
- **4.** EPA 19: Provide leadership within interprofessional health care teams.

This above section aligns most closely to the ACGME family medicine sub-competencies SBP-1. Provides Cost-Conscious Medical Care and PROF-3. Demonstrates Humanism and Cultural Proficiency. 19



#### **Additional Resources:**

The *Choosing Wisely*® initiative of the ABIM Foundation is a good source of information regarding unnecessary diagnostics or therapeutic interventions and can inform cost-conscious care (<a href="http://www.choosingwisely.org">http://www.choosingwisely.org</a>).

The American Hospital Association offers a toolkit to address eliminating disparities in healthcare outcomes (http://www.aha.org/disparities).

#### Leadership

As family medicine residents gain knowledge and skills throughout their training, they are called upon to effectively lead both in the outpatient and inpatient settings. Family physicians are trained to think critically and act creatively during difficult situations and in times of crisis. Hospitalists trained in family medicine must acquire and demonstrate competency in these effective leadership skills, which will also equip them to attain other leadership roles, specifically, within the hospital setting.

Knowledge, Skills and Attitudes:

- Residents should demonstrate knowledge of how to be an effective leader, including how to foster
  the development of mentor/mentee relationships and continue to develop these relationships in
  their future practice of hospital medicine and recognize the differences between management and
  leadership.
- Skills of the inpatient resident must include serving in the mentor role to fellow residents and medical students as well as by effectively leading the multidisciplinary inpatient team. Additional skills include demonstrating professional conduct and accountability, identifying performance metrics and implementing goals for improved outcomes, problem solving, conflict resolution and educational scholarship.
- Expected resident attitudes include a willingness to lead by example and actively seeking professional mentorship.

#### These map to the following Entrustable Professional Activities:

**1.** EPA 19: Provide leadership within interprofessional health care teams.

This above section aligns most closely to the ACGME family medicine sub-competencies: PROF-1. Completes the Process of Professionalism, PROF-2. Demonstrates Professional Conduct and Accountability, SBP-4. Coordinates Team-Based Care and C-3. Develops Relationships and Effectively Communicates With Physicians, Other Health Professionals and Health Care Teams.



#### Additional Resources:

The American College of Physicians' Principles and Practice of Hospital Medicine textbook chapter 25 provides and outlines leadership and teamwork management development, and chapter 39 gives practical tools for mentorship.<sup>20</sup>

The AAFP provides leadership training experiences particularly aimed at chief residents: <a href="mailto:aafp.org/medical-school-residency/program-directors/chiefs.html">aafp.org/medical-school-residency/program-directors/chiefs.html</a>

#### **Management practices**

Traditionally, as ambulatory care-based family physicians are responsible for demonstrating competency in ambulatory practice management, hospitalists trained in family medicine are also responsible for competency in hospital-based practice management. Family medicine residents should demonstrate competency in inpatient practice management to allow them to define their future role and value as a hospitalist.

Knowledge, Skills and Attitudes:

- Residents should demonstrate knowledge and understanding of the importance of providing costconscious inpatient medical care, awareness of different models of hospital physician compensation and incentives, potential impacts of healthcare reform and other policies, as well as basic billing and coding requirements.
- Skills of the inpatient resident must include the provision of cost-conscious inpatient medical care, demonstration of competency in inpatient billing, utilization of Current Procedural Terminology® (CPT) codes and relative value units (RVUs), and the utilization of average length of stay and case mix index.
- Expected resident attitudes include a willingness to value the importance of routine critical analysis of all aspects of practice operations, as well as demonstrating a willingness to manage a multidisciplinary inpatient team while modeling leadership and teamwork skills.

#### These map to the following Entrustable Professional Activities:

- **1.** EPA 13: Manage inpatient care, discharge planning, transitions of care.
- **2.** EPA 16: Use data to optimize the care of individuals, families and populations.
- **3.** EPA 18: Advocate for patients, families and communities to optimize health care equity and minimize health outcome disparities.

This above section aligns most closely to the ACGME family medicine sub-competencies SBP-1. Provides Cost-Conscious Medical Care and SBP-4. Coordinates Team-Based Care.



#### **Additional Resources:**

The American College of Physicians and the Alliance for Academic Internal Medicine have jointly designed the High Value Care (HVC) Curriculum to teach high-value care, payment models, and waste minimization in a resource designed for both educators and residents. <a href="https://www.acponline.org/clinical-information/high-value-care/medical-educators-resources/curriculum-for-educators-and-residents">https://www.acponline.org/clinical-information/high-value-care/medical-educators-resources/curriculum-for-educators-and-residents</a>

#### Medical consultation and co-management

Hospitalists may provide expert medical opinion regarding the care of hospitalized patients or may serve as consultants for patients under the care of other medical and surgical services. The hospitalist consultant may provide opinions and recommendations or actively manage the patient's hospital care. Effective and frequent communication between the hospitalist and the requesting physician ensures safe and quality care. Hospitalists should promote communication between services to improve the care of the hospitalized patient, optimize resource utilization and enhance patient safety.

The ACGME Program Requirements for Graduate Medical Education in Family Medicine specify that residents are expected to "act in a consultative role to other physicians and health professionals."

Knowledge, Skills and Attitudes:

- Residents should have the knowledge to define the role of the hospitalist consultant and describe the components of an effective consultation.
- Skills of the inpatient resident must include the ability to synthesize, document and communicate concise
  but specific recommendations to the person requesting consultation based on a thorough gathering of
  subjective and objective data.
- Expected resident attitudes include responding promptly to requests for consultation, determining the
  consultant's role in collaboration with the requesting physician, informing and educating the requesting
  physician of potential complications and opportunities to mitigate them, and providing frequent followup to ensure that critical recommendations have been followed.

#### These map to the following Entrustable Professional Activities:

EPA 2: Care for patients and families in multiple settings. 2. EPA 5: Provide care that speeds recovery from illness and improves function. EPA 6: Evaluate and manage undifferentiated symptoms and complex conditions. 3. 4. EPA 7: Diagnose and manage chronic medical conditions and multiple co-morbidities. 5. EPA 8: Diagnose and manage mental health conditions. EPA 9: Diagnose and manage acute illness and injury. 6. 7. EPA 10: Perform common procedures in the outpatient or inpatient setting. 8. EPA 12: Manage end-of-life and palliative care. 9. EPA 13: Manage inpatient care, discharge planning, transitions of care. EPA 14: Manage care for patients with medical emergencies. 10. 11. EPA 16: Use data to optimize the care of individuals, families and populations. 12. EPA 17: In the context of culture and health beliefs of patients and families, use the best science to set mutual health goals and provide services most likely to benefit health. EPA 18: Advocate for patients, families and communities to optimize health care equity and minimize health outcome disparities. 13. 14. EPA 19: Provide leadership within interprofessional health care teams. EPA 20: Coordinate care and evaluate specialty consultation as the condition of the patient requires.

The above section aligns most closely to the ACGME family medicine sub-competencies PC-1. Cares for Acutely III or Injured Patients in Urgent and Emergent Situations and in All Settings, SBP-4. Coordinates Team-Based Care and C-3. Develops Relationships and Effectively Communicates With Physicians, Other Health Professionals, and Health Care Teams.<sup>19</sup>



#### **Additional Resources:**

The SHM Learning Portal offers a number of resources involving perioperative medicine, which is a frequent reason a hospitalist may act as consultant (shmlearningportal.org).

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#### **Nutrition and the hospitalized patient**

Malnutrition contributes to hospital morbidity, mortality, readmission and increased healthcare cost. Approximately 50% of patients are already malnutrished on admission, and others are prone to develop malnutrition. Prompt recognition of malnutrition in hospitalized patients is necessary.

Knowledge, Skills and Attitudes:

- Residents should have the knowledge to screen for malnutrition in hospitalized patients, to properly
  monitor and treat electrolyte abnormalities associated with re-feeding syndrome, and to understand
  the indications and contraindications to providing enteral nutrition, parenteral nutrition, as well as other
  specialized nutritional supplementation.
- Skills of the inpatient resident must include identification of a malnourished patient, assessment of the severity, provision of the appropriate enteral and/or parenteral nutritional support, identification and treatment of electrolytes abnormalities associated with re-feeding syndrome, and consultation with a nutrition specialist when indicated.
- Expected resident attitudes include acknowledging the importance of early recognition of malnutrition and the need for a multidisciplinary approach in management of malnourishment and willingness to ensure proper coordination of a patient's nutritional needs at discharge.

#### These map to the following Entrustable Professional Activities:

- 1. EPA 1: Provide a usual source of comprehensive, longitudinal medical care for people of all ages.
- **2.** EPA 2: Care for patients and families in multiple settings.
- 3. EPA 5: Provide care that speeds recovery from illness and improves function.
- **4.** EPA 13: Manage inpatient care, discharge planning, transitions of care.
- **5.** EPA 16: Use data to optimize the care of individuals, families and populations
- **6.** EPA 19: Provide leadership within interprofessional health care teams.
- 7. EPA 20: Coordinate care and evaluate specialty consultation as the condition of the patient requires.

This above section aligns most closely to the ACGME family medicine sub-competencies PC-1. "Cares for Acutely III Patients in All Settings and SBP-4. (SBP-4) "Coordinates Team Based Care."



#### Additional Resources:

SHMConsults course provides an overview for hospitalists of developing nutrition plans for hospitalized patients.

http://www.shmconsults.com/Archive/CE-Data.aspx?case\_id=313

UNC-Chapel Hill's "Nutrition in Medicine" web site offers an evidence-based collection of clinical nutrition modules <a href="http://nutritioninmedicine.org">http://nutritioninmedicine.org</a>

#### **Palliative care**

Residents should be able to compassionately and empathetically care for seriously ill patients as they are often hospitalized. Hospital medicine physicians are optimally positioned to introduce and provide palliative care services. This helps provide comprehensiveness of care and relief from symptoms often associated with progressed disease. Key roles include identifying a need for palliative care, leading a discussion surrounding advance care planning, goals of care and family support; identifying common physical symptoms such as pain, nausea, anxiety, depression, delirium, etc.: and transitioning palliative care goals to hospice or community services for continuity.

# Knowledge, Skills and Attitudes:

- Residents should demonstrate knowledge sufficient to define palliative care and describe its purpose in
  the care of the patient to colleagues, specialists, trainees, families and the patient. They should have an
  understanding that palliative care can be provided alongside other therapies or on its own and have the
  knowledge to provide or utilize palliative care consultation with the imminence of death. Residents should
  know data on efficacy of life support, cardiopulmonary resuscitation and artificial nutrition. They should
  understand the ethics surrounding competency of patients and their right to refuse medical treatments,
  legal considerations for surrogate decision making and advance directives.
- Skills of the inpatient resident must include the ability to screen and treat patients for palliative care needs
  including pain, nausea, vomiting, anxiety, depression and delirium. They should demonstrate skill in
  the provision of psychosocial and spiritual support for both patient and family; lead discussions around
  advance care planning, code status, goals of care and prognosis; and deliver bad news in a
  compassionate way.
- Expected resident attitudes include an appreciation that palliative care is appropriate for any serious stage of illness, valuing empathic communications and willingness to build a relationship. Residents should seek social, cultural and spiritual practices that may impact a patient's preference regarding care.

#### These map to the following Entrustable Professional Activities:

| 1.  | EPA 2: Care for patients and families in multiple settings.   |
|-----|---|
| 2.  | EPA 6: Evaluate and manage undifferentiated symptoms and complex conditions.  |
| 3.  | EPA 7: Diagnose and manage chronic medical conditions and multiple co-morbidities.  |
| 4.  | EPA 9: Diagnose and manage acute illness and injury.  |
| 5.  | EPA 12: Manage end-of-life and palliative care.   |
| 6.  | EPA 13: Manage inpatient care, discharge planning, transitions of care.   |
| 7.  | EPA 14: Manage care for patients with medical emergencies.  |
| 8.  | EPA 15: Develop trusting relationships and sustained partnerships with patients, families, and communities.                     |
| 9.  | EPA 18: Advocate for patients, families and communities to optimize health care equity and minimize health outcome disparities. |
| 10. | EPA 19: Provide leadership within interprofessional health care teams.  |
| 11. | EPA 20: Coordinate care and evaluate specialty consultation as the condition of the patient requires.                           |

This above section aligns most closely to the ACGME family medicine sub-competency C-2. Communicates Effectively With Patients, Family, and the Public.



#### **Additional Resources:**

Prognostication scales:

Karnofsky index: <a href="http://www.hospicepatients.org/karnofsky.html">http://www.hospicepatients.org/karnofsky.html</a>

Eastern Cooperative Oncology Group (ECOG) scale: http://ecog-acrin.org/resources/ecog-performance-status

Palliative Prognostic Score: <a href="http://tools.farmacologiaclinica.info/index.php">http://tools.farmacologiaclinica.info/index.php</a>

Advance Care Planning resources.

https://www.compassionandsupport.org/index.php/for\_professionals/molst/molst\_form

http://polst.org/

#### **Patient handoff**

Patient handoff is the interaction, communication and planning required to seamlessly transition care from one provider to another. Hospitalists transfer care of patients on a daily basis and having an effective handoff is extremely important. This avoids medical errors and adverse events and provides high-quality medical care. Two important components are for the handoff to be effective and timely.

According to the Clinical Learning Environment Review<sup>22</sup> put forth by the ACGME, residents should be able to demonstrate competency in performing a standardized, effective, efficient handoff, which is a prerequisite for safe patient care. This should include an opportunity to ask and respond to questions.

# Knowledge, Skills and Attitudes:

- Residents should have the knowledge to describe key elements of high-quality patient handoffs. They
  should be successful communicators. They should understand barriers to effective handoffs and ways to
  avoid them. Residents should include interprofessional and patient/family participation when able.
- Skills of the inpatient resident must include the ability to communicate effectively and efficiently using read-back techniques, create patient summaries, and evaluate medications and critical tasks. Additionally, residents should develop the skills to summarize recent clinical information, limit interruptions and identify sick patients. Residents should develop the skills to participate in the development of protocols to optimize handoffs.
- Expected resident attitudes include recognition of the importance and priority of a quality handoff in regards to patient safety, the value of real-time dialogue between providers and the viewing of handoffs as a professional responsibility.

#### These map to the following Entrustable Professional Activities:

1. EPA 1: Provide a usual source of comprehensive, longitudinal medical care for people of all ages. 2. EPA 2: Care for patient and families in multiple settings. EPA 5: Provide care that speeds recovery from illness and improves function. 3. 4. EPA 6: Evaluate and manage undifferentiated symptoms and complex conditions. EPA 7: Diagnose and manage chronic medical conditions and multiple co-morbidities. 5. 6. EPA 9: Diagnose and manage acute illness and injury. 7. EPA 13: Manage inpatient care, discharge planning, transitions of care. 8. EPA 14: Manage care for patients with medical emergencies. EPA 15: Develop trusting relationships and sustained partnerships with patients, families and communities. 9. EPA 16: Use data to optimize the care of individuals, families and populations. 10. EPA 19: Provide leadership within interprofessional health care teams. 11. 12. EPA 20: Coordinate care and evaluate specialty consultation as the condition of the patient requires.

This above section aligns most closely to the ACGME family medicine sub-competencies SBP-2. Emphasizes Patient Safety, SBP-4. Coordinates Team-Based Care and C-3. Develops Relationships and Effectively Communicates With Physicians, Other Health Professionals, and Health Care Teams.



#### **Additional Resources:**

 $Hand off Toolkit: {}^{23,24} \underline{\ http://www.ucdenver.edu/academics/colleges/medicalschool/education/graduatemedicaleducation/GMEDocuments/Documents/Hand-Off%20Tool%20Kit.pdf$ 

I-PASS:25 http://ipassstudygroup.com

#### **Patient safety**

Medical error is the third leading cause of death in the United States, with hospitalization posing high risk for potential harms. It is therefore incumbent upon hospitalists, hospitals and healthcare systems to make every effort to prevent and ameliorate avoidable adverse events.

Knowledge, Skills and Attitudes:

- Residents should demonstrate knowledge of patient safety issues including the role of human factors, process and system failures, and highly functioning teams. Recognition of the spectrum of harms produced by error both by prospective and retrospective evaluation is needed. Understanding the need for a culture that promotes reporting as well as systematic review employing tools such as Root Cause Analysis is also recommended.
- Skills of the inpatient resident must include the ability to follow protocols developed to prevent harm, as well as develop guideline-based pathways of care within a multidisciplinary team. Continued assessment of data and ongoing use of tools are required to further improve individual and system performance that demonstrates prevention of harm and promotion of safety.
- Expected resident attitudes include self-directed, ongoing pursuit of safe practices; identifying and
  reporting of error including promotion of a workplace culture that encourages non-punitive response
  to adverse events as well as addresses workplace risk factors such as burnout. Hospitalists should role
  model daily use of established patient safety practices, as well as contribute via multidisciplinary team
  efforts aimed at further strengthening established safe practices and developing new processes to
  reduce preventable harms.

#### These map to the following Entrustable Professional Activities:

- **1.** EPA 2: Care for patients and families in multiple settings.
- **2.** EPA 4: Provide preventive care that improves wellness, modifies risk factors for illness and injury, and detects illness in early, treatable stages.
- **3.** EPA 9: Diagnose and manage acute illness and injury
- **4.** EPA 13: Manage inpatient care, discharge planning, transitions of care.
- **5.** EPA 19: Provide leadership within interprofessional healthcare teams

This above section aligns most closely to the ACGME family medicine sub-competency: SBP-2. "Emphasizes Patient Safety."



#### **Additional Resources:**

Patient safety:

The Institute for Healthcare Improvement (IHI) provides numerous areas of information relevant to patient safety and may be found at: <a href="http://www.ihi.org/Topics/PatientSafety/Pages/Resources.aspx">http://www.ihi.org/Topics/PatientSafety/Pages/Resources.aspx</a>

## Prevention of healthcare-associated infections and antimicrobial resistance

Just as family physicians in an ambulatory environment are responsible for antibiotic stewardship, family medicine trained hospitalists are tasked with the prevention of nosocomial infections in the hospital setting. Nosocomial infections often lead to increases in length of hospitalization and result in excess costs annually. Hospital physicians should work in concert with other members of the healthcare organization to reduce healthcare-associated infections, develop institutional initiatives for prevention, and promote and implement evidence-based infection control measures.

Knowledge, Skills and Attitudes:

- Residents should have the knowledge to understand isolation precautions, know common healthcareassociated infections and risk factors for such, and to use a hospital antibiogram to select empiric antibiotics.
- Skills of the inpatient resident must include the consistent performance of indicated infection control and
  prevention technique (hand hygiene during procedures), establishment of isolation precautions for patients
  with high-risk transmissible disease, and utilization of antibiograms and infection control officers.
- Expected resident attitudes include avoidance of procedures or removal of devices that are more likely to
  cause hospital-acquired infections if available alternatives are safe and effective, and the attitude to lead,
  coordinate or participate in multidisciplinary teams that implement and study infection control protocols
  regimen.

#### These map to the following Entrustable Professional Activities:

- **1.** EPA 4: Provide preventive care that improves wellness, modifies risk factors for illness and injury, and detects illness in early, treatable stages.
- **2.** EPA 16: Use data to optimize the care of individuals, families and populations.

This above section aligns most closely to the ACGME family medicine sub-competencies SBP-1. Provides Cost-Conscious Medical Care, SBP-2. Emphasizes Patient Safety, MK-1. Demonstrates MK of Sufficient Breadth and Depth to Practice Family Medicine, PC-3. Partners With the Patient, Family, and Community to Improve Health Through Disease Prevention and Health Promotion and PBLI-1. Locates, Appraises, and Assimilates Evidence From Scientific Studies Related to the Patients' Health Problems.



#### **Additional Resources:**

 $\label{lem:control-includes} Centers for Disease Control-Includes tool kits and assessment instruments. \\ \underline{http://www.cdc.gov/hai/prevent/prevention.html}$ 

Agency for Healthcare Research and Quality outlines statistics and AHRQ's efforts for reduction of healthcare-associated infections. <a href="https://psnet.ahrq.gov/primers/primer/7/Health-Care-Associated-Infections">https://psnet.ahrq.gov/primers/primer/7/Health-Care-Associated-Infections</a>

#### **Quality improvement**

Hospitalists practice within the healthcare delivery system and processes of their organizations and institutions. As such, participation in the quality improvement (QI) of these systems is an essential competency of the hospitalist.

Knowledge, Skills and Attitudes:

- Residents' knowledge should include guidelines and protocols that have been developed based on
  outcome measures, as well as required institutional reporting of these outcome measures and recognition
  of institutional variation in care delivered and the potential contributing factors for these quality gaps.
  Residents should demonstrate understanding of the role of organizational culture and reliability,
  multidisciplinary teamwork, and use of tools and protocols to ensure highest quality performance.
- Resident skills should include the ability to collect and apply data using evidenced-based tools to continuous multidisciplinary QI efforts aimed at reducing care variation, enhancing patient safety and satisfaction, and addressing inefficiencies and inequities.
- Resident attitudes should encompass the hospitalist role modeling use of QI-derived protocols and practices, and initiating further evidenced-based strategies and initiatives. Continuous multidisciplinary QI participation or leadership at the institutional level or beyond is anticipated.

#### These map to the following Entrustable Professional Activities:

- **1.** EPA 2: Care for patients and families in multiple settings.
- **2.** EPA 9: Diagnose and manage acute illness and injury.
- **3.** EPA 13: Manage inpatient care, discharge planning, transitions of care.
- **4.** EPA 16: Use data to optimize the care of individuals, families and populations.
- **5.** EPA 17: In the context of culture and health beliefs of patients and families, use the best science to set mutual health goals and provide services most likely to benefit health.
- 6. EPA 18: Advocate for patients, families and communities to optimize health care equity and minimize health outcome disparities.
- **7.** EPA 19: Provide leadership within interprofessional healthcare teams.

This above section aligns most closely to the ACGME Family Medicine family medicine sub-competency PBLI-3. Improves Systems in Which the Physician Provides Care.



#### **Additional Resources:**

Quality Improvement: Society of Hospital Medicine's Center for Hospital Innovation and Improvement offers access to numerous quality and innovation resources and can be found at: <a href="https://www.hospitalmedicine.org/thecenter">https://www.hospitalmedicine.org/thecenter</a>

Annual Quality and Safety Educators Academy (QSEA) national SHM conference focused on quality improvement and patient safety, as well as development in quality leadership and education.

#### Team approach and multidisciplinary care

Multidisciplinary care refers to active collaboration between various members in the healthcare system to develop optimal care plans for each patient. The hospital environment is well suited for team-based, multidisciplinary care since team members work in the same physical space and patients are present to participate in decisions about their care.

Knowledge, Skills and Attitudes:

- Residents should have the knowledge to understand and describe the major elements of teamwork, list
  major barriers to effective team interactions, and describe aspects within an institution that can impact the
  structure and function of multidisciplinary teams.
- Resident skills should include the ability to determine an effective team composition, demonstrate group
  dynamic skills, integrate the assessments and recommendations of all contributing team members into the
  care plan, and conduct efficient and effective multidisciplinary team rounds.
- Expected resident attitudes include employing active listening techniques, engaging team participation, communicating frequently, practicing shared decision making with all members of the multidisciplinary team, and promoting and modeling professional conflict resolution and mutual respect.

#### These map to the following Entrustable Professional Activities:

**1.** EPA 19: Provide leadership within interprofessional health care teams.

This above section aligns most closely to the ACGME family medicine sub-competencies SBP-4. Coordinates Team-Based Care and C-3. Develops Relationships and Effectively Communicates With Physicians, Other Health Professionals, and Health Care Teams.



#### **Additional Resources:**

Institute for Healthcare Improvement How-to Guide for Multidisciplinary Rounds: <a href="http://www.ihi.org/resources/Pages/Tools/HowtoGuideMultidisciplinaryRounds.aspx">http://www.ihi.org/resources/Pages/Tools/HowtoGuideMultidisciplinaryRounds.aspx</a>

#### **Transitions of care**

Transitions of care refers to any transfer of patient location, service or provider including admission to the hospital, transfer to another hospital or service, elevation of care to the ICU, discharge to home, a rehabilitation center or nursing center, and the communication and dialogue necessary to ensure that these transitions are done safely and effectively.

Knowledge, Skills and Attitudes:

- Residents should demonstrate sufficient knowledge to define relevant information that should be retrieved
  and communicated during each care transition to ensure patient safety and maintain the continuum of care.
   Residents should describe the value of available ancillary services that can facilitate patient transitions.
- Resident skills should include the ability to identify and utilize the most efficient, reliable and expeditious
  communication modalities for each care transition; ensure that communication is succinct; and develop a
  care plan early that includes information received from referring physicians.
- Expected resident attitudes include the appreciation of the impact of care transitions on patient outcomes
  and satisfaction, recognition of the importance of a multidisciplinary approach to transitions of care,
  preparation of the patient and family for care transitions, and utilization of real-time dialogue with other
  clinicians.

#### These map to the following Entrustable Professional Activities:

**1.** EPA 13: Manage inpatient care, discharge planning, transitions of care.

This above section aligns most closely to the ACGME family medicine sub-competencies SBP-2. Emphasizes Patient Safety, PROF-2. Demonstrates Professional Conduct and Accountability and C-3. Develops Relationships and Effectively Communicates With Physicians, Other Health Professionals, and Health Care Teams.



#### **Additional Resources:**

AHRQ's toolkit for improving care transitions: <a href="http://ahhqi.org/images/uploads/AHHQI\_Care\_Transitions">http://ahhqi.org/images/uploads/AHHQI\_Care\_Transitions</a>
Tools Kit\_roll314.pdf

The Joint Commission's Transitions of Care Portal: https://www.jointcommission.org/toc.aspx



# VI. Professional Development

As highlighted in the Society of Hospital Medicine-American Academy of Family Physicians Joint Statement on Hospitalists Trained in Family Medicine, <sup>26,27</sup> the rigorous and comprehensive nature of family medicine residency training programs enables many graduates to gain sufficient training and confidence to provide hospitalist-level care. Family medicine trained residents should understand the importance of the skills and knowledge they have acquired in their residency and hospitalist training that enable them to provide excellent hospital-based care, and be able to describe and attest to the merits of family medicine trained hospitalist training. Trainees benefit from structured mentorship programs that can be tailored to their personal, professional and academic needs. Mentorship is separate from evaluation and feedback, and ideally is completely detached from these other necessary functions of a residency program. Preparation for the hospital medicine workforce is different and distinct from preparation for ambulatory practice, and as such, programs should have the ability to assist residents in the inpatient setting. This section includes guidance and recommendations for both residency programs and trainees in regards to finding a job, finding a mentor, career networking, and further advancement. Also included is a list of relevant professional meetings and publications.

Residency programs training family medicine residents specifically in hospitalist work should support graduating residents planning to work in hospital medicine, as outlined below.

- The residency should provide training in writing curricula vitarum (CVs) and cover letters; contract negotiation; malpractice insurance, etc.
- The residency should identify one or more faculty with experience in writing CVs and cover letters to provide focused education for the residents.
- The program should ensure that instruction in practice management, malpractice insurance, and coding and billing includes information on hospital-based practice and inpatient employment models.
- The residency program should be able to share Medical Group Management Association (MGMA) data, or similar, with residents to permit informed compensation negotiations.

### Residents in family medicine hospitalist training programs will be expected to utilize faculty mentors to assist them in preparing professionally for hospital medicine careers.

- It is essential that the trainees write and maintain a CV, updating it regularly. They should demonstrate understanding of the differences between CV types and formats used by academic medical centers/academic jobs and non-academic.
- Trainees should be comfortable discussing with peers, faculty and colleague physicians their intention to practice hospital medicine, and in what geographical location.
- Trainees should be empowered to request introductions if they have connections to relevant groups.
- Trainees should be provided with opportunities for additional elective rotations in areas or location relevant to their inpatient medicine or critical care goals.
- Trainees should be able to identify the different physician or hospital groups practicing in their desired geographic location, utilizing the approaches outlined below.
  - Research these groups in terms of size, type of hospitals served, services provided, privileging expectations, patient populations, etc.
  - Identify group leaders or individuals responsible for hiring and recruitment. Contact them about employment opportunities (whether or not there is a posted job).
- Trainees should be educated about and able to use web-based resources to identify job openings (example: SHM Career Center, www.shmcareercenter.org).
- Trainees should understand that persistence is often required when applying for a desired job, as well as a knowledge of their skills and how to sell themselves to the desired hospital or group practice.
  - In particular, trainees should maintain confidence in the skills they possess, and be empowered to demonstrate to a hiring hospital why it should hire them as capable, family medicine-trained hospitalists rather than or in addition to internists.
- Trainees should be encouraged to prepare to take the examination for the Recognition of Focused Practice in Hospital Medicine, offered by ABFM/ABIM.
- Trainees should be expected to perform a quality improvement (QI) project in the inpatient setting to augment his or her preparation for hospitalist expectations.

### Residency programs training family medicine residents specifically in hospitalist work are to provide and encourage mentoring opportunities for their residents.

- The program should consider establishing a formal mentorship program, if one does not exist.
- The training program must ensure that faculty available to residents as mentors include physicians who practice hospital medicine.
- There should be a compiled list of faculty, indicating areas of interest/expertise, to allow residents to easily identify appropriate mentors.
- The training program should permit and encourage residents to have mentors outside the residency program as well as internal mentors.
- Residents should be permitted to have more than one mentor if desired, but must include one residency faculty member.
- The program should allow residents to change mentors if their area of focus or interest changes (or, add an additional mentor in this area).

Residents in family medicine hospitalist training programs should seek a hospitalist mentor.

- When considering a mentor, the resident should look for a mentor within the training program who includes hospital medicine as all or part of their practice. If this is not possible, the resident should find a hospital medicine physician mentor who is not a part of the training program.
- Residents should look for mentors who are approachable, and interested in them and their education; mentors who will serve as their advocate.
- When the resident asks the physician to be a mentor, the resident should define what they expect of the mentor.
  - The mentee's expectations for a mentor should include giving advice, assisting in the location of a job after graduation, helping to decide if the hospitalist field is right for the resident, as well as coaching and encouraging the resident.
  - The resident should know what they want from the hospitalist mentor, and confidently ask for it.
  - The resident is expected to meet with the mentor regularly at least twice a year.

Residency programs training family medicine residents specifically in hospitalist work should encourage the residents to seek out networking and professional development opportunities within the field of hospital medicine. These opportunities should include a mixture of involvement in national level hospitalist meetings, as well as regional and local hospital committee participation.

- The residency program should advocate on behalf of the resident's participation.
- The program should support and expect resident membership in professional societies of benefit to hospitalists (see list below).
- The program should permit resident attendance at local, state and national medical meetings.
- The program should encourage its associated training hospitals and clinics to include a resident representative on major committees and advisory boards.

Residents in family medicine hospitalist training programs are expected to demonstrate development in leadership at their hospital, regional and national levels. Since hospitalists have come to be defined as leaders within their communities and forefront advocates of change and advancement of quality within their hospitals, residents interested in hospital medicine careers should endeavor to cultivate similar characteristics.

- Locally, the resident should develop hospitalist relationships, and seek scholarship and advisory roles.
  - The resident should get to know the hospitalists with whom they work.
  - The resident should look for scholarship activities and research in inpatient medicine, hospital practices, QI, etc.
  - Each resident should serve on at least one of their hospital's committees.
- Regionally, the resident is expected to join medical societies and any relevant specialty societies.
  - These may include the local Society of Hospital Medicine (SHM) chapter, American Academy of Family Physicians (AAFP) chapter, county or state medical societies, etc.
- Nationally, residents should participate in online communities such as HMX (online forum for SHM) and AAFP Member Interest Group (MIG) for Hospital Medicine, and they should attend national meetings applicable to hospital medicine.
  - Attendance in the second year of residency may be particularly high-yield (see below).

#### Society of Hospital Medicine Annual Meeting

- Held in spring, usually April/May
- Annual track entitled "Early Career Hospitalists" with career advice and tips
- Look for local SHM chapter meetings as well (currently not present in all states)

#### Pediatric Hospital Medicine (PHM)

- Held in July
- Exclusively pediatric hospitalist focused, for those providing inpatient pediatric or nursery care
- Multiple workshops aimed at residents, fellows and early career hospitalists with career advice

#### American College of Physicians (ACP) Internal Medicine Meeting: annualmeeting.acponline.org

- Held in April
- Dedicated hospital medicine track of >30 topics
- Career and Professionalism topic area

#### AAFP Family Medicine Experience (FMX): aafp.org/events/fmx

- Held in September or October
- Increased inclusion of hospital medicine topics and special track of lectures
- Annual meeting of Hospital Medicine Member Interest Group as well as MIG social activity

#### Regional hospital medicine meetings (various sponsors)

- Midwest Hospital Medicine Conference (October): midwesthospitalmedicine.com
- Southern Hospital Medicine Conference (October): southernhospitalmedicine.org
- Rocky Mountain Hospital Medicine Symposium (October/November): thececonsultants.com/hospitalmedicine.html
- Mid-Atlantic Hospital Medicine Symposium (October): icahn.mssm.edu/education/cme/courses
- Management of the Hospitalized Patient (University of California, San Francisco; date varies, August-October): ucsfcme.com

#### **Further Training/Fellowship**

Some family medicine residency graduates may consider a hospital medicine fellowship following completion of residency. There are costs and benefits to such additional training, and each individual must consider this opportunity in the context of one's immediate and long-term goals. Fellowships are diverse and may promote enhanced clinical experiences, focused critical care or procedural exposures, leadership training, quality improvement training, faculty development and, in some cases, increased access to certain future professional opportunities.<sup>4</sup> However, many residency graduates will feel sufficiently prepared for hospital medicine work immediately following graduation.

Because hospital medicine is not a separate specialty, hospital medicine fellowships do not have ACGME accreditation. This can make searching the available fellowship sites more challenging as there is not ready access to a compiled database like the American Medical Association's Fellowship and Residency Electronic Interactive Database (FREIDA Online®). SHM maintains a page with information about possible fellowship opportunities and contact emails.

https://www.hospitalmedicine.org/membership/hospitalist-fellowships/?hkey=7faea954-15f1-4eef-aa6c-ca29674d0838

#### For further reading:

https://www.todayshospitalist.com/is-a-hospital-medicine-fellowship-right-for-you https://acphospitalist.org/archives/2015/09/hospitalist-fellowships.htm

#### **Useful publications**

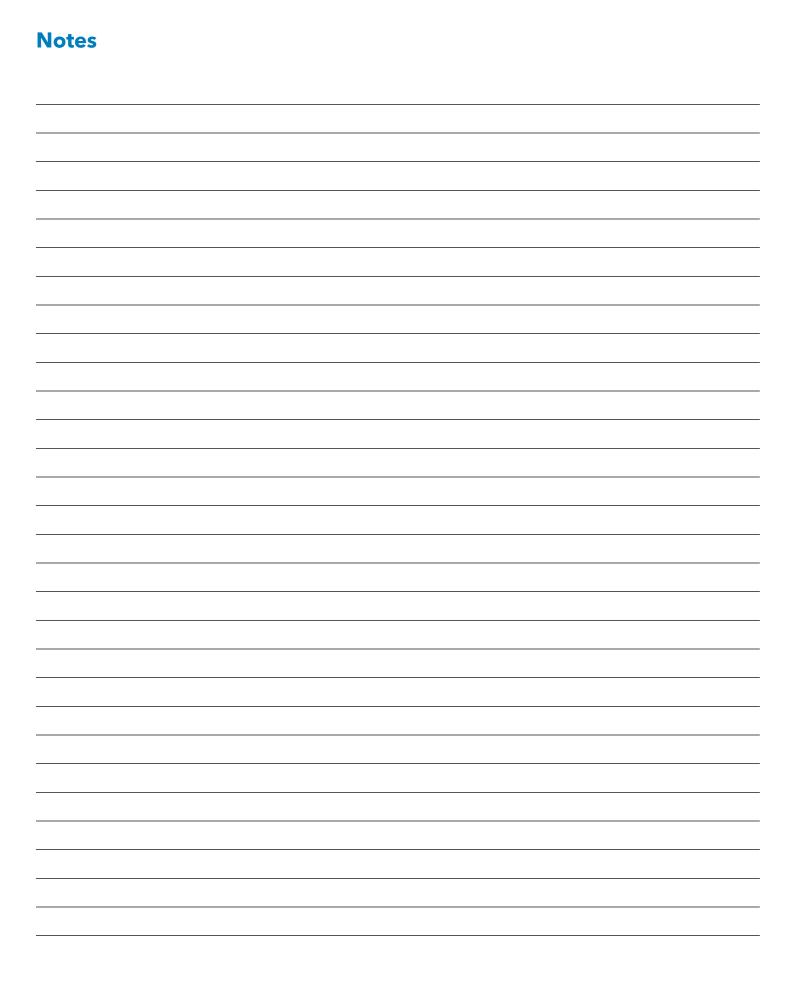
- Journal of Hospital Medicine: <u>www.journalofhospitalmedicine.com</u>
- Today's Hospitalist: www.todayshospitalist.com
- The Hospitalist: www.the-hospitalist.org
- Society of Hospital Medicine Career Guide https://shm.hospitalmedicine.org/acton/media/25526/download-shm-career-guide-for-hospitalists
- State of Hospital Medicine biennial report https://www.hospitalmedicine.org/practice-management/shms-state-of-hospital-medicine/

#### References

- 1. Weaver SP, Hill J. Academician Attitudes and Beliefs Regarding the Use of Hospitalists: A CERA Study. *Fam Med*. 2015;47(5):357-361. http://www.ncbi.nlm.nih.gov/pubmed/25905877.
- 2. Society of Hospital Medicine. SHM Membership Data. November 2016.
- 3. Society of Hospital Medicine. 2018 State of Hospital Medicine Report. 2018.
- 4. Gummadi SS, Geyer C, Rossi C. Employment Opportunities for Hospitalists Trained in Family Medicine [abstract]. *J Hosp Med*. 2014;9(suppl 2). http://www.shmabstracts.com/abstract/employment-opportunities-for-hospitalists-trained-in-family-medicine/. Accessed August 2, 2016.
- 5. Goldstein DJ, Seymour PL, Savageau JA. Training family medicine residents for hospital-based work: a survey of adult inpatient medicine curricula [abstract]. *J Hosp Med.* 2017;12(suppl 2). http://www.shmabstracts.com/abstract/training-family-medicine-residents-for-hospital-based-work-a-survey-of-adult-inpatient-medicine-curricula/. Accessed October 18, 2017.
- 6. Dressler DD, Pistoria MJ, Budnitz TL, McKean SCW, Amin AN. Core competencies in hospital medicine: development and methodology. *J Hosp Med.* 2006;1(1):48-56. doi:10.1002/jhm.6.
- 7. Ten Cate O. Nuts and bolts of entrustable professional activities. *J Grad Med Educ*. 2013;5(1):157-158. doi:10.4300/ JGME-D-12-00380.1.
- 8. Family Medicine for America's Health. Entrustable Professional Activities for Family Physicians. Association of Family Medicine Residency Directors. http://www.afmrd.org/page/epa. Published September 30, 2015. Accessed November 20, 2017.
- 9. Accreditation Council for Graduate Medical Education, American Board of Family Medicine. The Family Medicine Milestone Project. Accreditation Council for Graduate Medical Education. https://www.acgme.org/Portals/0/PDFs/Milestones/FamilyMedicineMilestones.pdf. Published October 2015. Accessed October 19, 2017.
- 10. Thanarajasingam U, McDonald FS, Halvorsen AJ, et al. Service census caps and unit-based admissions: resident workload, conference attendance, duty hour compliance, and patient safety. *Mayo Clin Proc.* 2012;87(4):320-327. doi:10.1016/j. mayocp.2011.12.012.
- 11. Averbukh Y, Southern W. The impact of the number of admissions to the inpatient medical teaching team on patient safety

#### Hospital Medicine Curricular Guidelines or Track Recommendations for Family Medicine Residencies

- outcomes. J Grad Med Educ. 2012;4(3):307-311. doi:10.4300/JGME-D-11-00190.1.
- 12. Nichani S, Fitterman N, Lukela M, Crocker J, Society of Hospital Medicine. The Core Competencies in Hospital Medicine 2017 Revision. Section 1: Clinical Conditions. *J Hosp Med*. 2017;12(4 Suppl 1):S1-S43. doi:10.12788/jhm.2727.
- 13. ACGME Program Requirements for Graduate Medical Education in Family Medicine. Accreditation Council for Graduate Medical Education; 2015. http://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/120\_family\_medicine\_2016.pdf. Accessed November 1, 2016.
- 14. Nichani S, Fitterman N, Lukela M, Crocker J, Society of Hospital Medicine. The Core Competencies in Hospital Medicine 2017 Revision. Section 2: Procedures. *J Hosp Med*. 2017;12(4 Suppl 1):S44-S54. doi:10.12788/jhm.2728.
- 15. Council of Academic Family Medicine Procedural Competency Task Force. *CAFM Consensus Statement for Procedural Training in Family Medicine Residency*. Association of Family Medicine Residency Directors. http://www.afmrd.org/d/do/966. Accessed November 1, 2016.
- 16. Nichani S, Fitterman N, Lukela M, Crocker J, Society of Hospital Medicine. The Core Competencies in Hospital Medicine 2017 Revision. Section 3: Healthcare Systems. *J Hosp Med.* 2017;12(4 Suppl 1):S55-S82. doi:10.12788/jhm.2729.
- 17. Health expenditure, total (% of GDP) | Data. http://data.worldbank.org/indicator/SH.XPD.TOTL.ZS?locations=US. Accessed August 22, 2017.
- 18. National Center for Health Statistics. *Health, United States*, 2016: With Chartbook on Long-Term Trends in Health. Hyattsville, MD: Centers for Disease Control and Prevention; 2017. https://www.cdc.gov/nchs/data/hus/hus16.pdf#094. Accessed August 22, 2017.
- 19. The Family Medicine Milestone Project. *Family Medicine Milestones*. Accreditation Council for Graduate Medical Education; 2015. http://www.acgme.org/Portals/o/PDFs/Milestones/FamilyMedicineMilestones.pdf. Accessed November 1, 2016.
- 20. McKean SC, Ross JJ, Dressler DD, Scheurer D. *Principles and Practice of Hospital Medicine, Second Edition*. McGraw Hill Professional; 2016. https://market.android.com/details?id=book-dpxzDQAAQBAJ.
- 21. Kirkland LL, Kashiwagi DT, Brantley S, Scheurer D, Varkey P. Nutrition in the hospitalized patient. *J Hosp Med.* 2013;8(1):52-58. doi:10.1002/jhm.1969.
- 22. Accreditation Council for Graduate Medical Education. CLER Pathways to Excellence: Expectations for an Optimal Clinical Learning Environment to Achieve Safe and High Quality Patient Care. 2017. http://www.acgme.org/Portals/0/PDFs/CLER/CLER\_Pathways V1.1 Digital Final.pdf. Accessed November 21, 2017.
- 23. Vidyarthi AR, Arora V, Schnipper JL, Wall SD, Wachter RM. Managing discontinuity in academic medical centers: strategies for a safe and effective resident sign-out. *J Hosp Med*. 2006;1(4):257-266. doi:10.1002/jhm.103.
- 24. Horwitz LI, Moin T, Green ML. Development and implementation of an oral sign-out skills curriculum. *J Gen Intern Med.* 2007;22(10):1470-1474. doi:10.1007/s11606-007-0331-0.
- 25. Starmer AJ, Spector ND, Srivastava R, et al. I-pass, a mnemonic to standardize verbal handoffs. *Pediatrics*. 2012;129(2):201-204. doi:10.1542/peds.2011-2966.
- 26. Hospitalists. http://www.aafp.org/practice-management/administration/hospitalists.html. Published July 8, 2015. Accessed November 8, 2017.
- 27. Society of Hospital Medicine (SHM)-American Academy of Family Physicians (AAFP) Joint Statement on Hospitalists Trained in Family Medicine. https://www.the-hospitalist.org/hospitalist/article/122437/society-hospital-medicine-shm-american-academy-family-physicians-aafp. Accessed November 8, 2017.



| Notes |  |
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