



MEDICAL EDUCATION

ELECTIVE IN ACADEMIC
HOSPITAL MEDICINE FOR INTERNAL
MEDICINE RESIDENTS

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As Hospital Medicine has grown as a specialty in recent years, academic institutions are shifting more and more attention to training residents in this discipline. As a result, an increasing number of training programs have begun to offer electives for residents in this field.¹⁻³ Among the institutions that have publicized their elective descriptions, significant variability exists regarding clinical experiences, extent of administrative and non-clinical opportunities, and elective duration. According to the Hospitalist Elective National Survey, the most recent data show that the majority of programs that offer such rotations are now incorporating non-clinical activities such as teaching, research, and quality improvement (QI)/patient safety. Most elective descriptions that have been publicized are often offered only in four-week blocks³. Few opportunities exist for residents to complete a shorter, two-week elective that provides non-clinical and perioperative experiences as well as the traditional clinical rounding roles. We have created a unique elective in Academic Hospital Medicine that addresses both clinical medicine and value-added services relevant to hospital medicine physicians in a two-week timespan. This article disseminates information on our elective to Hospital Medicine programs and physicians with similar goals of exposing trainees to the careers of academic hospitalist physicians within the confines of limited resident elective time.

Senior internal medicine residents at Duke University Hospital (DUH) have the option of taking a two-week elective course in Academic Hospital Medicine. The resident on the DUH Academic Hospital Medicine elective manages acutely ill patients as a member of the Hospital Medicine service. The following two major learning areas are emphasized:

1. Clinical Roles:

- a. Inpatient acute care of general medicine patients, including independently developing and executing

the plan of care and communication with multidisciplinary team members, with education on topics including effective clinical documentation and discharge planning.

- b. General medicine consultations for management of perioperative risk assessment, arrhythmias, hypertension, diabetes, delirium, hypoxemia, and other common inpatient questions.
 - c. Observation of transfer request calls for experience in triage of potential patient transfers from referring facilities.
 - d. Participation in the Rapid Response Team (RRT) with expectation to lead clinical decision-making with support of the supervising attending during clinical decompensation and emergencies.
 - e. Procedures including paracentesis, thoracentesis, lumbar puncture, arthrocentesis through direct observation and practice.
2. Administrative and Academic Roles: One-on-one pairing with hospitalists for direct observation of their non-clinical roles, focusing on quality improvement, hospital administration, and patient safety for a unique perspective on future career opportunities.

In addition to the required end-of-course residency program evaluations, we have collected the following three separate surveys from our participants:

- **Pre Survey for Residents: assesses their baseline comfort with a variety of Hospital Medicine topics and career preparedness.**
- **Post Survey for Residents: assesses their change in comfort as an effect of the elective.**
- **Post Survey of Faculty: surveying faculty after the rotation helps capture any impact on their job satisfaction as this elective intervention requires additional effort from faculty members.**

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We are collecting data from participating residents and faculty members over the academic years 2017-2018, 2018-2019, and 2019-2020. We anticipate 14 total residents and 46 faculty members over this time period. We hope to conduct a robust evaluation of this new educational elective using this data. Results will inform continued future improvements and refinements to the curriculum.

Our data thus far is comprised of responses to surveys during the academic years 2017-2018 and 2018-2019. We have received feedback from 11 residents during this time. Our qualitative feedback from residents to date is overwhelmingly positive and reflects increased confidence and knowledge related to both clinical and non-clinical roles. Recurrent themes emerging from the comments include the following:

1. Significant learning benefit from the unique and exclusive experience of administrative shadowing and QI meetings and
2. Valuable learning/teaching opportunity to perform general medicine consults and educate other specialty physicians and advanced practice providers.

Potential areas of improvement addressed in resident comments include the following:

1. More guidance for residents on the General Medicine Consult service for maximum benefit.
2. Option to spend more time on General Medicine Consults/procedures/RRTs rather than primary inpatient care of hospitalized patients which is already heavily emphasized in residency training.
3. More observation of patient transfer request calls in order to fully understand this process and the health system's clinical mission.

Regarding faculty perceptions, we have obtained 40 responses to our surveys to date. Quantitative data shows that 52% of respondents strongly agreed that they enjoyed working with a resident on a non-clinical role; 70% strongly agreed that they would like to work with a resident on the elective again; and 64% agreed that the experience provided valuable teaching opportunities. Qualitative feedback from the faculty is generally positive and supports the idea of resident exposure to the hospitalist career. Suggestions for improvement include providing more intentional preparation for the faculty member to align with resident learning objectives, as this elective has a unique purpose that differs from the usual teaching attending role. Faculty also expressed an interest in viewing resident perceptions/feedback on attending the administrative meetings and conferences.

The sustainability of Hospital Medicine lies in the many opportunities that hospitalists have to contribute to a safer, more effective, patient-centered environment, and it is important to recognize that such opportunities exist outside of direct patient care. By exposing residents to value-added experiences in Hospital Medicine, we hope to create the necessary foundation for those interested in this career path and to perpetuate the values of the field among future generations of hospitalists. We feel that our elective offers a unique experience for residents interested in Hospital Medicine by providing direct, individualized exposure to non-clinical roles including quality improvement, hospital administration, and patient safety alongside the opportunity to practice clinical medicine in a more autonomous setting than offered during traditional resident rotations. Our elective also has the advantage of addressing these various aspects of Hospital

Medicine in just two weeks, making it possible for the resident to partake in this experience alongside other elective pursuits that may be a part of the learner's individual educational plan. Additionally, we feel that this elective provides a unique supervisory teaching role for hospitalists aside from the traditional Hospital Medicine-based teaching services. Opportunities for improvement based on our preliminary data include potentially adjusting the elective to weigh more heavily on clinical experiences outside of General Medicine inpatient care, providing a more robust resident curriculum for the General Medicine consult service (which we plan to achieve by formalizing their consult training using available curriculum modules), and allowing more opportunity to observe triage and decision-making surrounding patient transfer requests from referring facilities. For our faculty participants, we plan to emphasize the uniqueness of the resident learning objectives of this elective compared with those of more traditional general medicine rotations in order to shape the experience into a more valuable teaching opportunity and ultimately benefit job satisfaction. We will continue to collect qualitative and quantitative data during the academic year 2019-2020 and address additional areas of opportunity to refine the curriculum as they arise, embracing the principle of continuous quality improvement.

In the meantime, we feel confident that through this elective in its current form, we continue to expose learners to the value added by an academic hospitalist to patient care and the health system while simultaneously empowering them to direct their educational experience.

References

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