A Novel Hospital Medicine Training Track for Internal Medicine Residents: Description and Program Evaluation of the First 15 Years

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ABSTRACT

Background The growth of hospital medicine has resulted in a parallel growth of hospital medicine training within internal medicine residency programs (IMRPs), but the experience and outcomes of these training offerings have not yet been described.

Objective To describe the first dedicated hospitalist track and the program evaluation data.

Methods The University of Colorado Hospitalist Training Track (HTT) is a 3-year track within the IMRP with robust inpatient clinical training, specialized didactics, experiential improvement work, and career mentorship. We collected data on graduates' current practices and board certification pass rates. To further evaluate the track, we electronically sent a cross-sectional survey to 124 graduates from 2005 to 2019 to identify current practice settings, graduate roles, and assessment of the training track.

Results Among 124 graduates, 97 (78.2%) practice hospital medicine, and the board certification pass rate was slightly higher than the overall IMRP pass rate for those graduating classes. Sixty-two (50%) graduates responded to the survey. Among respondents, 50 (80.6%) currently practice hospital medicine and 34 (54.8%) practice in an academic setting. The majority (50, 80.6%) hold leadership roles and are involved in a variety of scholarship, educational, and operational projects. Dedicated clinical training, didactics, and mentorship were valued by respondents.

Conclusions This represents the first description and program evaluation of a HTT for IM residents. A dedicated HTT produces graduates who choose hospital medicine careers at high rates and participate in a wide variety of leadership and nonclinical roles.

Introduction

Hospital medicine is a rapidly growing field, and among internal medicine (IM) sub-specialties, second in size only to general IM. 1,2 Specialties outside of IM are also incorporating hospital-based providers into their care delivery models, including obstetrics and gynecology, surgery, IM subspecialties, neurology, otolaryngology, and pediatrics. 3-8 The hospitalist model has evolved to address the need to deliver high-value care for an inpatient population with increasing acuity and complexity while also considering quality of life factors with physician coverage models. 3,5,6 Hospitalists develop a mastery of inpatient clinical care and provide increased on-site availability in the hospital setting, while also enhancing delivery of high-value care. 1,9

For IM hospitalists, a significant portion of the clinical work is in neurology, consultative medicine, surgical co-management, and palliative care, areas historically underemphasized in internal medicine residency programs (IMRPs).^{10,11} There are also gaps

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in traditional IM training in nonclinical areas important for hospital medicine clinicians: health care economics, patient safety and quality improvement (QI), practice management, continuums of care, leadership skills, and communication.¹²

To meet these needs, some IMRPs have developed dedicated hospital medicine curricula and clinical training. 13-16 Most incorporate curricular content on career development and core competencies in hospital medicine, including hospital-based clinical experiences, QI, and health care economics. 13,15,17 At the same time, hospital medicine fellowships were developed to meet the needs of graduating residents entering hospital medicine who did not have specific residency training.¹⁸ To date, graduate outcomes or program evaluation for IM-based fellowship programs or residency tracks have not been described, and the optimal training to prepare physicians for the current landscape of hospital medicine is unknown, including whether it should be a residency track, a fellowship program, or both.

Training paths and board certification also currently differ across hospital-based specialties. Pediatrics created dedicated fellowships, and completion of a pediatric hospital medicine fellowship is now required to be board-eligible for pediatric hospital medicine.¹⁹

The American Board of Internal Medicine (ABIM) has a focused practice in hospital medicine certification, but it is considered a variation of IM certification, not a subspecialty. Similar to IM, surgery and obstetrics and gynecology have created acute care or hospital-based fellowships that are not accredited by the Accreditation Council for Graduate Medical Education. 18,21,22

We aim to describe the first and longest running Hospitalist Training Track (HTT) embedded within an IMRP and to track evaluation data, including graduate feedback, graduate practice patterns, and track feasibility.

Methods

Setting and Participants

The University of Colorado HTT is embedded within the IMRP with the first graduating class in 2005 and a total of 124 graduates from 2005 to 2019. Currently, medical students can match directly into the track through the National Resident Matching Program, or University of Colorado IM residents can apply to transfer to the track via a letter of interest after their career interests solidify.

Intervention

The HTT is evaluated and refined yearly; current track components are detailed in the FIGURE. The clinical curriculum now consists of 20 weeks of inpatient rotations (FIGURE). Trainees not in the hospitalist track may do outpatient-based oncology/ bone marrow transplant, neurology, and geriatrics, and they can take the Hospitalist Preceptorship and Consults/Perioperative electives if space is available. An additional 24 half-days are dedicated to systems of care exploration. Residents not in the track spend those half-days in a subspecialty clinic or additional time in their primary care continuity clinic. Each resident participates in a longitudinal team-based QI project focused on initiatives that align with resident interest and health care system priorities. Trainees not in the track continue to participate in clinic-based QI projects.

IMRP career development didactics include preparing a curriculum vitae and cover letter and participation in mock interviews; residents in the hospitalist track also attend a hospitalist career panel and a session reviewing the application process and contract negotiation. All residents in the IM program are assigned a faculty coach and connect with a scholarship mentor. Residents on the hospitalist track receive additional mentoring from a faculty QI coach, a faculty mentor aligned with future career interests, monthly journal clubs combined with faculty

Objectives

To describe the longest running Hospitalist Training Track (HTT) for internal medicine residents and the program evaluation data.

Findings

A dedicated HTT is valued by graduates for the tailored clinical training and skill development. It is feasible to embed within an internal medicine residency program, and graduates hold a variety of leadership and nonclinical roles.

Limitations

Generalizability limited by a single track description, and respondents are skewed toward recent graduates, limiting the ability to draw conclusions about long-term career outcomes after graduation.

ottom Line

This represents the first description and graduate outcomes for a HTT for internal medicine residents and can offer guidance to other programs constructing hospital medicine training experiences.

discussion of career path, and program director mentorship. The goals of mentorship are to expose residents to the variety of career trajectories in hospital medicine, enhance their experience and skill development with project work so they can more readily take on projects as junior faculty, and support them through the job application process.

Outcomes Measured

For all 124 graduates from 2005 to 2019, we determined their current practice location utilizing personal connections, hospital medicine group websites, and LinkedIn. We obtained ABIM Internal Medicine Initial Certification Examination pass rates for these graduates and compared these to the overall IMRP pass rates. We had contact information for 112 of 124 graduates with prior consent received to contact them and we sent a 14-question survey (provided as online supplementary data) electronically via REDCap 9.5.28 (Vanderbilt University). Graduates received an email from current program leadership requesting voluntary participation followed by 2 reminder emails between January and May 2020.

The survey was developed based on a review of prior alumni survey questions and input from program leadership. Survey domains included (1) Current practice; (2) Graduates' roles and projects; and (3) HTT assessment. We pilot-tested the survey using cognitive interviewing techniques among 3 currently practicing physicians chosen to obtain diverse perspectives from University of Colorado IMRP graduates and non-University of Colorado graduates in addition to community and academic providers.

Hospitalist preceptorship Half-day educational sessions: total of 12 during Medicine consults and surgical co-management Clinical Patient safety, business of medicine, Oncology hospitalist Didactic billing/coding/documentation, leadership, medical Inpatient neurology **Rotations** malpractice, systems of care, high-value care Inpatient geriatrics Career development sessions POCUS/clinical decision-making Mock interviews, career panel, CV/cover letter session, hospitalist job market sessions, faculty career/leadership discussions Longitudinal quality improvement project Systems of Care Exploration 4 half-days during their clinic block **Experiential** Dedicated faculty mentorship experiences include: addiction medicine, home Annual retreat health/home hospice, university transfer center, Journal club at faculty houses virtual health, outpatient rapid response team, perioperative clinic

FIGURE

Overview of Hospitalist Training Track Curriculum

^a New program content, implemented after 2019 graduation class, combined 2-week elective. Abbreviation: POCUS, point-of-care ultrasound.

Analysis of Outcomes

We used descriptive statistics to categorize graduates' roles and current practices using Microsoft Excel 2007. Thematic content analysis was used to evaluate free text responses for leadership roles and graduate assessment of the program, which was completed by 3 coders (J.L., E.G., M.J.D.). For each free response question, we first independently reviewed the responses and identified general categories of the responses. Consensus was developed for each general category and responses were independently reviewed and coded in at least one category; some responses fit in multiple categories. A fourth reviewer (T.A.) independently examined the uncoded data and reviewed the categories derived by the other coders and helped to resolve any coding discrepancies. We tabulated the frequency of responses by category using Excel.

The Colorado Institutional Review Board deemed this study exempt as program evaluation and non-human subjects research (COMIRB 19-2421).

Results

Outcomes Measured

Of the 124 graduates from 2005 to 2019, 97 (78.2%) practice hospital medicine. Among hospitalists, 45 (46.4%) are academic hospitalists (defined as full-time faculty in a medical school) and 52 (53.6%) practice in a community- or university-affiliated setting. The most common subspecialties graduates completed fellowships in are pulmonary critical care (9 of 124 graduates, 7.3%), cardiology (6, 4.8%), and gastroenterology (3, 2.4%). The ABIM Internal Medicine Initial Certification Examination pass rate for HTT graduates between 2005 and 2019 was

96.7% (120 of 124); the pass rate for all University of Colorado IMRP graduates in this time frame was 95.5% (687 of 719).

The survey was sent to the 112 graduates for whom we had a current email address. Out of 124 graduates, 62 completed the survey (50%); their practice settings are described in TABLE 1. The majority of respondents (46, 74.2%) graduated between 2013 and 2019, but there were respondents from every graduating year except 2005. Graduates have participated in a variety of projects and roles during their careers, and most respondents (50, 80.6%) have held leadership roles (TABLE 1).

We asked graduates to identify the most valuable components of the HTT for their professional development (TABLE 2). Three main areas were identified from their free text responses: nonclinical teaching (42 respondents, 67.7%), clinical experiences (39, 62.9%), and career development/mentorship (21, 33.9%); TABLE 2 details the specific aspects identified. The free text responses describing graduates' recommendations for additional content were organized into 4 areas: nonclinical teaching, clinical experiences, career development, and transition to independent practice (TABLE 2).

Feasibility

The resources required for successful integration of a hospital medicine track are outlined in TABLE 3.

Discussion

To our knowledge, this represents the first report of graduate outcomes and program evaluation from a HTT for IM residents and the first report from any hospitalist training program outside of pediatric

TABLE 1Hospitalist Training Track Graduate Survey Responses (n=62)

Current Graduate Practice Specialty/Setting	n (%)
Hospital medicine	50 (80.6)
Addiction medicine	2 (3.2) ^a
Cardiology	2 (3.2)
Gastroenterology	2 (3.2)
Geriatrics	1 (1.6)
Primary care	1 (1.6)
Pulmonary/critical care	5 (8.1)
Traditional medicine	1 (1.6)
Practice setting	
Community- or university-affiliated	28 (45.2)
Academic	34 (54.8)
Graduates' Projects and Roles	n (%)
Education	45 (72.6)
Operations	26 (41.9)
QI/patient safety	42 (67.7)
Graduates' Scholarship Production ^b	29 (46.8)
Graduates' Leadership Roles	n (%)
Any leadership role	50 (80.6)
Educational leadership	25 (40.3)
Chief resident/fellow	7
Curriculum director/other educational leader	11
Educational program director (eg, leading a local Academy of Medical Educators, directing educational efforts for their hospital medicine group)	12
Residency associate program director	4
Medical student course or clerkship director	6
Assistant/associate dean	2
Project/committee leadership	21 (33.9)
Local/national organization leadership	9 (14.5)
Nonclinical program leadership (QI, research, IT, wellness)	14 (22.6)
Clinical service or clinical operations leadership	16 (25.8)
Hospital medicine group directors	7 (11.3)
Division head	2 (3.2)
Department of medicine chair	1 (1.6)
Chief medical officer	1 (1.6)

^a 2 graduates reported currently practicing addiction medicine and hospital medicine.

Abbreviations: QI, quality improvement; IT, information technology.

hospital medicine fellowships.²³ By surveying graduates we identified the essential components of the current training track and uncovered important aspects of practicing hospitalist roles that should be considered in a comprehensive HTT or program. Graduates valued the clinical experiences, particularly

the hospitalist preceptorship and perioperative electives, nonclinical training, and structured mentorship provided by the track. With the unique perspective of at least 1 year of independent practice after foundational hospital medicine training, graduates had multiple suggestions regarding what to include to better prepare residents for their future careers. The responses also reflect the evolution of hospital medicine, including the incorporation of point-of-care ultrasound and expanded hospitalist roles in systems of care. ^{2,24,25}

The majority of graduates (97 of 124, 78.2%) currently practice in hospital medicine, in line with published data of graduates from other specific clinical tracks within IM.²⁶⁻²⁸ Additionally, a significant proportion of respondents have held leadership roles (50, 80.6%) and produced scholarship (29, 46.8%), similar to a report of graduates from a pediatric hospital medicine fellowship.²³ We believe this reflects the mentorship, leadership training, and project experience in the track.

Leadership education was perceived to be valuable by graduates but was nonetheless recognized as an area for further enhancement. Current programs should consider evaluating and refining their leadership training offerings, and new programs should construct this as a programmatic cornerstone. Most hospitalist training incorporates participation in QI work and exposure to health care economics. 13 Our results support this approach as many of our graduates play a key role in QI initiatives and hold leadership positions including division and group leadership that require budgetary oversight and a basic understanding of finances. 29,30 However, very few hospitalist training programs include exposure to hospital operations, such as patient flow, census management, and triaging, which could be better represented in future training offerings as a significant portion of respondents hold clinical leadership roles or reported involvement in clinical operations projects.

There are a few important limitations to this study. First, the survey response rate was 50%. However, this is in line with other medical education graduate survey response rates, ^{26,31} and respondents closely matched our overall program graduates in terms of proportion of hospitalists and practice settings. Second, the respondents were skewed toward more recent graduates from the last 7 years, likely due to more accurate contact information and closer ties to the program, introducing the likelihood of self-selection bias. Although feedback from this time frame is more applicable for the evaluation of the current track, the higher proportion of recent graduates also reduces the ability to draw

^b Scholarly projects included publications, national presentations, and participation in clinical trials.

TABLE 2
Hospitalist Training Track Feedback

What Were the Specific Components of the Hospitalist Training Track That Were Most Valuable to Your Professional Development?				
Category	Domain	No. of responses		
Nonclinical training: 42 respondents (67.7%), total of 70 responses	QI project/training	30		
	Leadership	9		
	Billing and coding	8		
	Business of medicine/health care economics	8		
	Systems of care	7		
	High-value care	2		
	Transitions of care	1		
	Organizational structures	1		
Clinical experiences:	Consults, perioperative medicine elective	28		
39 respondents (62.9%), total of 66 responses	Hospitalist preceptorship elective	23		
	Palliative care	5		
	Inpatient neurology/stroke	5		
	Inpatient geriatrics	3		
	Oncology hospitalist	2		
Mentorship/career development:	Dedicated faculty mentorship	10		
21 respondents (33.9%), total of 26 responses	Career development/job search education	7		
	Smaller cohort, culture of the group	9		
What Else Do You Think Could Have B	een Included in the Hospitalist Training Track/Residency Progr	am to		
	ter Prepare You for Your Career?			
Nonclinical teaching:	Billing/coding and documentation	12		
31 respondents (50%), total of 39 responses	Leadership	8		
	Health systems training	5		
	Health care economics	4		
	Scholarly work	4		
	Adjust QI training	3		
	Bioinformatics	2		
	Medical education	1		
Clinical experiences: 17 respondents (27.4%), total of 25 responses	Procedures	6		
	POCUS	4		
	Neurology	3		
	Oncology/BMT	3		
	Interprofessional training	2		
	Additional hospitalist preceptorship time	2		
	Rural training	1		
	Addiction medicine	1		
	Palliative care	1		
Career development: 9 respondents (14.5%), total of 10 responses	Contract and salary negotiation	3		
	Specialized career development for individual resident interests	3		
	Exposure to different hospitalist careers	2		
	More career mentorship			
Attending transition:	·	2		
Attending transition: 4 respondents (6.5%), total of 4 responses	How to supervise learners Introduction to faculty development	1		
4 respondents (6.5%), total of 4 responses				

 $Abbreviations: QI, \ quality \ improvement; \ POCUS, \ point-of-care \ ultrasound; \ BMT, \ bone \ marrow \ transplant.$

TABLE 3

Description of Resources Required to Successfully Implement a Hospital Medicine Training Track

Resource	Description	Funding or Support
Faculty leadership	2 HTT program directors, also serve as APDs for IMRP and report directly to IMRP program director	0.3 total FTE salary support dedicated for HTT, additional 0.3 FTE funding for hospital site director and APD roles; total support for both program directors is 0.6 FTE
Core faculty engagement	Invested faculty within hospital medicine to teach didactic content and coach QI projects Faculty with expertise in key content areas	Unfunded, on average 2-10 hours annually per faculty member
Hospitalist services availability	Inpatient service lines with sufficient volume to support resident rotations on hospitalist preceptorship, medicine consults, neurology, oncology, and geriatric services	Dependent on program size, for 6-12 residents/year need space on each service line for 1 learner Service line directors funded by Division of Hospital Medicine
Administrative support	Support in scheduling, evaluations, and event planning	1.0 FTE education administrator position dedicated to all educational endeavors of division, allocates 0.1-0.2 of administrative funded time to HTT
Recruitment resources	For trainees entering as first-year residents: interview and review 80 applications through ERAS For trainees entering as second-year residents: interview and review 3-6 letters of interest from current residents	Each year approximately 120 hours spent by faculty leadership on resident selection and recruitment and approximately 40 hours dedicated to HTT recruitment independent of IMRP recruitment
IMRP resources and support for curricular time	20 weeks clinical rotations	Clinical rotations built into elective time or replace inpatient ward medicine
	24 half-day clinical exposures	Clinical exposures built into continuity clinic months
	48 hours didactic time	Didactic time built into weekly resident didactics which replaces time spent on core categorical clinical content

Abbreviations: HTT, Hospitalist Training Track; APD, associate program director; IMRP, internal medicine residency program; FTE, full-time equivalent; QI, quality improvement; ERAS, Electronic Residency Application Service.

conclusions about long-term career outcomes after graduation. Next, we relied on self-reported survey data for roles, projects, and scholarly output; however, given our independent knowledge of graduates we were able to identify and independently verify most leadership roles. Finally, this represents graduate outcomes and evaluation from a single program within an IMRP, limiting generalizability. Nevertheless, because this graduate population represents a diverse set of practice settings from an established HTT, we believe these findings can offer guidance to other programs constructing hospital medicine training experiences.

While this track was embedded within an IMRP, these findings are not limited to this specialty. Many other specialties have hospitalist models to support inpatient care and over half of newly graduated specialists are interested in hospital-based work in their specialty.³² While the clinical rotations would

differ, the overarching structure of the program and the nonclinical work could be utilized to similarly prepare graduates in other specialties. Future directions of study could include collaboration between specialties to examine when fellowship training should be implemented compared to tracks or programs within residency training.

Conclusions

A dedicated HTT embedded within an IMRP is feasible and produces graduates who choose hospital medicine careers at high rates and participate in a wide variety of leadership and nonclinical roles, highlighting the diverse and changing field of hospital medicine. Graduates valued tailored clinical training and skill development in leadership, quality and safety, and the business of health care to meet career needs.

References

- 1. Wachter RM, Goldman L. The emerging role of "hospitalists" in the American health care system. N Engl J Med. 1996;335(7):514-517. doi:10.1056/ NEJM199608153350713
- 2. Wachter RM, Goldman L. Zero to 50,000—the 20th anniversary of the hospitalist. N Engl J Med. 2016;375(11):1009-1011. doi:10.1056/ NEIMp1607958
- 3. Swain C, Simon M, Monks B. Organizing an effective obstetric/gynecologic hospitalist program. Obstet Gynecol Clin North Am. 2015;42(3):519-532. doi:10. 1016/j.ogc.2015.05.009
- 4. Maa J, Carter JT, Gosnell JE, Wachter R, Harris HW. The surgical hospitalist: a new model for emergency surgical care. J Am Coll Surg. 2007;205(5):704-711. doi:10.1016/j.jamcollsurg.2007.05.008
- 5. Hughes M, Sun E, Enslin S, Kaul V. The role of the gastroenterology hospitalist in modern practice. Gastroenterol Hepatol (N Y). 2020;16(11):571-576.
- 6. Ramotar MW, Sectish TC. Pediatric hospital medicine: where we are, where we are headed: state of the specialty, looking forward. Pediatr Clin North Am. 2019;66(4):891-895. doi:10.1016/j.pcl.2019.03.013
- 7. Klein JP. The academic neurohospitalist: building a successful career and practice. Ann Neurol. 2015;78(4):515-519. doi:10.1002/ana.24483
- 8. Russell MS, Eisele D, Murr A. The otolaryngology hospitalist: a novel practice paradigm. Laryngoscope. 2013;123(6):1394-1398. doi:10.1002/lary.23834
- 9. Rifkin WD, Holmboe E, Scherer H, Sierra H. Comparison of hospitalists and nonhospitalists in inpatient length of stay adjusting for patient and physician characteristics. I Gen Intern Med. 2004;19(11):1127-1132. doi:10.1111/j.1525-1497. 2004.1930415.x
- 10. Glasheen JJ, Epstein KR, Siegal E, Kutner JS, Prochazka AV. The spectrum of community-based hospitalist practice: a call to tailor internal medicine residency training. Arch Intern Med. 2007;167(7):727-728.
- 11. Plauth WH 3rd, Pantilat SZ, Wachter RM, Fenton CL. Hospitalists' perceptions of their residency training needs: results of a national survey. Am J Med. 2001;111(3):247-254. doi:10.1016/s0002-9343(01)00837-3
- 12. Glasheen JJ, Siegal EM, Epstein K, Kutner J, Prochazka AV. Fulfilling the promise of hospital medicine: tailoring internal medicine training to address hospitalists' needs. I Gen Intern Med. 2008;23(7):1110-1115. doi:10. 1007/s11606-008-0646-5
- 13. Sweigart JR, Tad-Y D, Kneeland P, Williams MV, Glasheen II. Hospital medicine resident training tracks: developing the hospital medicine pipeline. J Hosp Med. 2017;12(3):173-176. doi:10.12788/jhm.2703

- 14. Ludwin S, Harrison JD, Ranji S, Sharpe BA, Kneeland P. Training residents in hospital medicine: the hospitalist elective national survey. J Hosp Med. 2018;13(9):623-625. doi:10.12788/jhm.2952
- 15. Kumar A, Smeraglio A, Witteles R, et al. A residentcreated hospitalist curriculum for internal medicine housestaff. J Hosp Med. 2016;11(9):646-649. doi:10. 1002/jhm.2590
- 16. Ranji SR, Rosenman DJ, Amin AN, Kripalani S. Hospital medicine fellowships: works in progress. Am J Med. 2006;119(1):72.e1-72.e7. doi:10.1016/j.amjmed. 2005.07.061
- 17. Nichani S, Crocker J, Fitterman N, Lukela M. Updating the core competencies in hospital medicine-2017 revision: introduction and methodology. J Hosp Med. 2017;12(4):283-287. doi:10.12788/jhm.2715
- 18. Society of Hospital Medicine. Hospitalist Fellowships: Internal Medicine Fellowships. Accessed November 9, 2021. https://www.hospitalmedicine.org/membership/ hospitalist-fellowships/
- 19. American Board of Pediatrics. Pediatric Hospital Medicine Certification. Accessed November 9, 2021. https://www.abp.org/content/pediatric-hospitalmedicine-certification
- 20. American Board of Internal Medicine. MOC Requirements: Focused Practice in Hospital Medicine. Accessed November 9, 2021. https://www.abim.org/ maintenance-of-certification/moc-requirements/ focused-practice-hospital-medicine
- 21. American Association for the Surgery of Trauma. Approved ACS Fellowship Sites. Accessed November 9, 2021. https://www.aast.org/acute-care-surgery/newprogram-directors-program-coordinators/approved-sites
- 22. Vintzileos AM. Obstetrics and gynecology hospitalist fellowships. Obstet Gynecol Clin North Am. 2015;42(3):541-548. doi:10.1016/j.ogc.2015.05.012
- 23. Oshimura JM, Bauer BD, Shah N, Nguyen E, Maniscalco J. Current roles and perceived needs of pediatric hospital medicine fellowship graduates. Hosp Pediatr. 2016;6(10):633-637. doi:10.1542/hpeds.2016-0031
- 24. Soni NJ, Schnobrich D, Mathews BK, et al. Point-ofcare ultrasound for hospitalists: a position statement of the Society of Hospital Medicine. J Hosp Med. 2019;14:e1-e6. doi:10.12788/jhm.3079
- 25. Wachter RM. Hospital medicine in 2015: remarkable successes and a crucial crossroads. J Hosp Med. 2015;10(12):830-831. doi:10.1002/jhm.2398
- 26. Stanley M, O'Brien B, Julian K, et al. Is training in a primary care internal medicine residency associated with a career in primary care medicine? I Gen Intern Med. 2015;30(9):1333-1338. doi:10.1007/s11606-015-3356-9
- 27. Lipkin M, Zabar SR, Kalet AL, et al. Two decades of Title VII support of a primary care residency: process

- and outcomes. *Acad Med.* 2008;83(11):1064-1070. doi:10.1097/ACM.0b013e31818928ab
- 28. Petrany SM, Gress T. Comparison of academic and practice outcomes of rural and traditional track graduates of a family medicine residency program. *Acad Med.* 2013;88(6):819-823. doi:10.1097/ACM. 0b013e318290014c
- 29. Perry J, Mobley F, Brubaker M. Most Doctors Have Little or No Management Training, and That's a Problem. *Harvard Business Review*. Accessed November 9, 2021. https://hbr.org/2017/12/most-doctors-have-little-or-no-management-training-and-thats-a-problem
- Nguyen HB, Thomson CC, Kaminski N, et al. Leadership primer for current and aspiring pulmonary, critical care, and sleep medicine academic division chiefs. *Ann Am Thorac Soc.* 2018;15(6):655-661. doi:10.1513/AnnalsATS.201801-033FR
- 31. Patel MS, Arora V, Patel MS, Kinney JM, Pauly MV, Asch DA. The role of MD and MBA training in the professional development of a physician: a survey of 30 years of graduates from the Wharton Health Care Management Program. *Acad Med.* 2014;89(9):1282-1286. doi:10. 1097/ACM.0000000000000366
- 32. Shute D. Sub-specialty hospitalist on the rise. *HealthLeaders*. Accessed November 9, 2021. https://www.healthleadersmedia.com/strategy/sub-specialty-hospitalists-rise



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