2015

Annual Update
Achieving New Heights

Hospital Medicine Group
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS
Table of Contents

Forward by Our Interim Director
Page 1

Message from Our Founding Director
Page 2

Associate Directors’ Reports
Pages 5-12

HMG Learners
Page 13

Hospital Medicine Group Numbers of Note
Pages 14-15

HMG Impact
Page 16

Meet the Hospital Medicine Group
Page 20

Accolades & Publications
Page 23

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Forward: Achieving New Heights

A Note from the Interim Director

Read Pierce, MD

There has never been a more exciting time in the history of the Hospital Medicine Group (HMG). Our faculty and staff are immensely talented, engaged, and committed to our success. The group is poised to accelerate its growth, achievement, and reputation as a top-tier academic hospital medicine program, and I have great confidence that the future is, and will remain, bright. Our pursuit of new heights together will be inspiring and energizing.

The overarching interest all of us share in this time of transition—what’s next?—is simple and simultaneously complex. As we plan our search for the permanent director, we will remain intensely focused on maintaining momentum across the many initiatives that make the HMG great. Specifically, we will continue growing support for our clinical programs, facilitating scholarship and faculty advancement, pursuing high quality and cost efficient care, and sustaining our long, rich tradition of educational excellence and innovation.

In addition, for the next 12 months, we’ll need to have a unified focus that extends beyond and across the numerous and essential day-to-day operations that keep the group running and make us successful. That single, most important focus is talent: hiring, developing, and promoting great people, who make the HMG a top-tier academic group and a desirable place to work. Indeed, becoming the #1 academic hospital medicine group in the country will not be possible without this focus. I look forward to a great year, full of productive evolution, meaningful work, and fulfilling relationships among the exceptionally talented people who share their time and energy with the HMG.

Read G. Pierce, MD
Interim Director | Hospital Medicine Group
Associate Director | Institute for Healthcare Quality, Safety, and Efficiency
Assistant Professor | Division of General Internal Medicine | University of Colorado School of Medicine
Looking Back and Moving Forward:
A Message from Our Founding Director
Jeffrey Glasheen, MD, FACP

My finger is still, hovering nervously over the return key on my keyboard.

My office is silent, but my brain is not. My inner wheels are spinning; I’m filled with anxiety and—perhaps—a degree of panic. I’ve read and reread the email at least half a dozen times. I can’t seem to bring myself to hit send. Doing so signifies finality, a profound end-point.

I finished writing the email two hours earlier. It’s an email I started six days ago, after I made my decision to become the inaugural Chief Quality Officer at the University of Colorado Hospital. In it, I’m relaying my decision to step down as the HMG Director. It’s an email I never thought I’d write.

My mind wanders to my freshman year in college. It’s holiday break, and I’m home for the first time since leaving six months earlier. I ask my mom, “what’s up with dad?”

My dad is not one of those stereotypically stoic men, but he’s never going to win a sentimentality award either. Which is why his behavior that fall was so odd. Surprisingly, my father had written me a letter nearly every single day of my freshman year of college. His letters were short, meaningless, and inconsequential. Yet somehow he knew the importance, the value they would have for a lonely, homesick teenager anxiously seeking a small slice of home in his dorm mailbox. I told my mom that she could tell him to stop now; I didn’t need his letters anymore. My homesickness had abated.

She told me I had it all wrong. She told me that after I left home, she would find him standing in my now vacant bedroom almost every night, a tear in his eye, reflecting on the past: remembering. My dad wasn’t doing this for me. He was doing it for himself.

It was his way of grieving.

Because I was nineteen, and naturally knew it all, I found this a bit pathetic. “I mean,” I told myself, “I get missing someone, but come on dad, get over it; you’re a grown man.”

My mind wanders again, to the recent past. I now have a son and a daughter, and my perspective is suddenly different. I’ve felt it viscerally—that same mix of emotions my dad felt when I was nineteen. I dread the day I will come home to find my children’s bedroom filled only with memories. Grown, away at college, no longer needing me to offer a guiding hand or my counsel each day.

Along the way there were trials, tribulations, triumphs, and moments of profound inspiration.

Now I’m back in the present, and I realize that, in many ways, the HMG is part of my family in precisely the same way. I played a central role in creating it twelve years ago, and, with invaluable help from many, we supported and shaped it through its infancy, early years, and adolescence to fashion it into the young adult we see today—full of energy, ambition, and promise. Along the way there were trials, tribulations, triumphs, and moments of profound inspiration. Through it all I had the privilege of being the leader: the deeply invested caretaker, the guiding hand, the counselor.

Now our paths part, and I grieve. But, like my father, I don’t grieve for the HMG. It will be fine and will do well in the world. Indeed, it will surprise and inspire me—again and
again—with continued progress, achievement, and impact within and beyond our academic world. I leave the directorship in the very capable hands of our Interim and Associate Directors, who will shepherd us until we identify our new, permanent director. In turn, that director will bring new energy, new ideas, and new perspectives on how to accelerate our progress toward our vision: being the undeniably best academic HMG in the country. Of this I have no doubt. Rather, I grieve for me, for my loss.

I’m confident it will move forward to achieve new heights, led by a new director and the **extraordinary combination of talent**, drive, and skills that makes the HMG a unique and strong entity, all its own.

This is one of the hardest decisions I’ve ever made, and it leaves me with deep sadness. And an unsent email. Standing, I leave the keyboard and walk into the hall, circling our office space. Like my father, I stare off into the distance, a tear in my eye, relishing the past. It was impossible to imagine, back in 2003, that we’d become a world-class program with two Deans, two Vice Chairs, two residency Associate Program Directors, a Medical Staff President, a SHM Board Director, an Institute Director and Associate Director, stroke ambulance innovators, funded researchers, and extraordinary clinicians, who care for a third of our hospital’s patients, while also developing the country’s first training programs in hospital medicine for internal medicine residents and advanced practice providers.

And with that reflection, my sadness shifts to joy, my grief lifts. The HMG has matured and grown beyond my wildest dreams. I’m confident it will move forward to achieve new heights, led by a new director and the extraordinary combination of talent, drive, and skills that makes the HMG a unique and strong entity, all its own.

I walk back to my computer, dry-eyed, and hit send. The future is upon us, and the future for the HMG could not be more exciting.

Jeffrey J. Glasheen, MD  
Chief Quality Officer – University of Colorado Hospital  
Associate Dean for Clinical Affairs – Quality and Safety Education  
Director, Institute for Healthcare Quality, Safety and Efficiency  
Professor | Division of General Internal Medicine | University of Colorado School of Medicine
Faculty Career Advancement Report

*Ethan Cumbler, MD, FACP*

**The Big Picture**
In the past year we have continued expanding our academic pursuits, developing an impressive national footprint in the field of hospital medicine. We continue to increase our output of publications, have formed new ties and collaborations with other top tier academic hospital medicine groups, and are gaining recognition for our research as reflected by national awards.

*Innovations, Accomplishments, and Evolution*
Scholarship remains a vital aspect of who we are as a group and one of the most important means to lead in the field of Hospital Medicine. To support our growth, we have transitioned from an Associate Director role with responsibility for Scholarship to one which takes the larger view of the career success for each member of our faculty. In this context, we asked “what is the role of scholarship”? Acknowledging that scholarship represents a marker of work we have done, a method for sharing our work with others to influence the care of patients beyond the walls of our organization, and a mechanism to create future opportunities for our faculty, we believe scholarly work is not an end unto itself, but rather is the consequence of motivated and fulfilled faculty seeking to learn, teach, discover, and invent.

In the last academic year we had 58 posters that were presented at major conferences: two international, 36 national, and 20 local/regional presentations. This represents an 18% increase compared to the prior year. A number of our original research and innovations abstracts were selected for highly competitive oral presentations at national meetings, and we were the recipient of the award for top Innovation at the Annual Society of Hospital Medicine (SHM) conference in Washington, DC. Members of our group published peer reviewed articles in *JAMA Internal Medicine, Neurology, American Journal of Emergency Medicine, the Journal of Hospital Medicine, Journal of the American Geriatrics Society, and the Cleveland Clinic Journal of Medicine* among others. Our educational scholars published in the *Journal of Graduate Medical Education, American Medical Student Research Journal, Medical Teacher,* and Med Ed Portal. Given our group’s identity and commitment to quality we are proud of major contributions in the arena of quality improvement and patient safety with publications in *Joint Commission Journal of Quality and Patient Safety,* *American Journal of Medical Quality, American Medical Informatics Association, American Journal of Infection Control,* and *BMC Health Services Research.*

**Pursuing Excellence Across the HMG Strategic Priorities**

*Strategic Priority 1: Creation of Longitudinal Scholarship Teams*
A core value of our group is collaboration. Two systemic structures we designed to promote the collaborative science of discovery are beginning to bear fruit over the last year. Within the faculty development structure of LaunchPad, cohorts of faculty are engaging as teams in studies of what drives academic job satisfaction and inter-professional team function. Our flagship HMS service’s Longitudinal Scholarship Team has built a novel survey to examine elements which positively influence perception of nurse practitioners and physician assistants in hospital medicine groups across Denver. We are proud of the individual accomplishments of our faculty and at the same time we often are at our best when we learn the methods of hypothesis-driven research and share in the success as teams.
**Strategic Priority 2: Structured Scholarly Mentorship for All HMG Members to Develop and Promote Individual Interests**

Core to the success of our faculty is mentorship. Part of our “Roadmap to Academic Success” calls for each of us to serve as a mentor to more junior learners and faculty over the course of our careers, and also take ownership of the relationships in which we are a mentee. We have a strong mechanism in place to connect new hires to career and project mentorship—a key priority of our group and a facilitator of success in academic medicine. In the past year, we have added an assessment, which looks beyond confirmation of a mentor-mentee relationship to also examine how effective the mentoring relationships are at meeting the needs of each of our faculty. This has allowed us to take action to build and enhance fully functional mentorship teams. We continue to lead the Visiting Professor in Hospital Medicine program nationally. Last year the we exchanged faculty with Johns Hopkins, and for the upcoming year we will do so with Northwestern University. The program offers a chance to create relationships with other top academic hospital medicine programs across the country and provides our junior faculty an opportunity to receive career counseling from exemplary faculty nationally, form collaborations, and build their professional networks. It is also a chance for the University of Colorado HMG to highlight our own rising stars and help to advance the careers of our faculty.

**Strategic Priority 3: Share All Significant Scholarly Work with the HMG**

We have progressively increased dissemination of scholarship by our group, ranging from writing for the SHM blog to professional society publications. In the last year 23 of our hospitalist faculty were authors on scholarship, and half of group participated in writing 48 unique publications. Authors have included HMG faculty at all levels—including physicians, nurse practitioners, and physician assistants—and our administrative staff. We celebrate the successes of members of our group in our business meetings each month. The scholarship display on the screen at the entrance to the hospitalist offices, which include pictures of scholarly products paired with photos of our faculty enjoying time with friends and loved ones, reminds us that fulfillment, fun, and achievement are intimately tied to our work and our broader lives.

In closing, we should recognize and celebrate how far this group has come over the last five years since I assumed the role of Associate Director for Scholarship. We have made tremendous progress on our path towards excellence, both as individuals and as a top academic hospital medicine group.
Clinical Operations Report

Debra Anoff, MD, FACP

The Big Picture
The HMG clinical enterprise continues to grow and flourish every year and now includes over 70 members. The group is comprised of 54 faculty—43 physician and 12 Advanced Practice Provider (APP) faculty—as well as 10 Advanced Practice Fellows (APFs) and a Hospital Medicine QI and Systems Leadership fellow, all working in concert with an administrative staff of 7. Our clinical footprint crosses 10 service lines, now composed of 18 discrete inpatient teams, and the local outpatient setting and the UHealth System through the neurohospitalists’ work in clinic and the rapidly expanding telestroke program.

Volumes and Revenue
The HMG cared for 13,045 new patients and completed 52,476 total encounters in Academic Year (AY) 2015, a climb of 13% from the prior year. This accounted for approximately 31% of all patients admitted to the University of Colorado Hospital. The rise in clinical volume resulted in a net patient income of over $6.4 million, up from $5.1 million in AY 2014 (a 25% increase).

Growth Outlook
The HMG continues to strive for annual growth of at least 5%, so that we can serve the growing number of patients at University of Colorado Hospital (UCH) in need of our expertise and continuously extend our high value, patient-centered care model to achieve superior clinical outcomes. In an era when many hospitalist practices around the country are shrinking with falling inpatient volumes, the HMG remains fortunate to grow our clinical practice year-over-year.

The hospitalist led Medicine Oncology service expanded to two teams in July 2014, which enabled the HMG to provide comprehensive inpatient care for established patients at the Anschutz Cancer Center, as well as patients with active solid tumor malignancies followed elsewhere and patients requiring inpatient care who presented with a newly suspected malignancy. The second Medicine Oncology service further assisted in capacity management, by assuming care for general medical patients as well as assisting with Medicine Consults. It also became the home for our new Hospital Medicine sub-internship, offered to fourth year medical students across the nation.

Having launched UCH’s Telesstroke service in AY14, the neurohospitalists began their first venture into telehealth across the University of Colorado Health System. The program began providing around-the-clock stroke alert coverage at Memorial Hospital in Colorado Springs, with expansion to Pikes Peak Regional in Woodland Park, CO, in AY15. The continued goal for Telesstroke is rapid expansion to new sites, to enhance our reputation as the region’s premier stroke center. Planning is underway for a new relationship across state lines in Wyoming. As the program grows, AY16 will feature a new stroke ambulance—or Mobile Stroke Treatment Unit—as another innovative approach to acute stroke care.

In AY15, the usual winter peak in volume remained high through the spring on the general medicine services. In response, we successfully created a “daylighter” role to admit new patients, allowing for expansion of our HMS 3 service capacity from 8 to 16
patients. In order to manage anticipated peak volumes during the winter in AY16, HMG physicians have volunteered to participate in a compensated Winter Surge service, starting in January 2016. We plan to transition the Surge service to a fully staffed, year-round inpatient team starting in July 2016.

In July 2015, we launched a second Medicine Consult service to manage growth in calls for general consultation and, in particular, our successful and expanding co-management relationships with Orthopedic Surgery and Urology. In its first year, this service will assist with the increasing consult volume as well as care for general medicine patients. It also offers a second spot for the Hospital Medicine Sub-Internship, which has proved extremely popular.

Given that our volume growth means busier nights as well, we have added our first APP nocturnists on weeknights, an extremely valuable addition after hours to ensure timely, safe care. Further expansion to provide APP Nocturnist coverage for weekend nights is planned during the coming year.

Pursuing Excellence Across the HMG Strategic Priorities

**Strategic Priority 1: Create a Recruitment Program that Ensures a Pipeline of Talented Applicants to Anticipate and Meet Future Growth**

To recruit and retain top talent, we continually work to improve our recruitment process. In AY15, we began sending personalized notes and gift subscriptions of 5280 magazine, funded by members of the HMG leadership team, to candidates who are offered positions. In addition, we created a pre-arrival new hire orientation held via teleconference, which aims to introduce new faculty members to one another, establish a foundation of operational knowledge, and accelerate learning during in-person orientation. In person orientation now includes a personalized note from the HMG Director, in addition to the usual gifts (white coat, business cards), and in the coming year we plan to assign an onboarding coach for each new faculty member.

**Strategic Priority 2: Create a Personal Development Program to Enhance Satisfaction, Fulfillment, and Wellness**

In the fall of 2014, we held individual meetings with HMG members to gain a deeper understanding of the unique needs and challenges our group members navigate in pursuit of meaningful work. Those meetings demonstrated a need to create a formal program to enhance personal success, fulfillment, and wellness. In addition to the HMG Above and Beyond Program, which allows HMG members to recognize and celebrate their colleagues, we have piloted a personal development program in partnership with the Medical Group Management Association (MGMA) and Impact Leadership Solutions (ILS). The program teaches leadership skills and helps create a shared mental model within the HMG around how we optimize our professional talent by focusing on enhancing interpersonal effectiveness, moving from conflict to collaboration, coaching for performance, giving feedback, and time, energy, and stress management. The first cohort (approximately 20 faculty and staff) is currently underway, with hopes for future expansion.

**Strategic Priority 3: Reduce Waste in Clinical Service Delivery**

As the complexity of systems through which we deliver care continues to rise, we are committed to helping providers work better—not longer—through increased efficiency managing clinical processes and day-to-day tasks. A major breakthrough in this pursuit was moving the General Internal Medicine admission triage and team assignment role from our busy HMG clinical providers to the Patient Placement office during daytime hours, 5 days a week. In addition to enhancing focus on patient care and teaching, this change has facilitated substantial improvement in our quest toward geographic co-horting of patients—which further improves efficiency, multidisciplinary communication, and provider satisfaction. In fall 2015, we expect the Patient Placement office to begin performing this role 24/7. Finally, HMG faculty created a standard template, now shared across the Department of Medicine, which helps providers more efficiently and effectively document important information for patients transferred to UCH from clinics and referring facilities.

**Strategic Priority 4: Develop a Program to Ensure Documentation Optimizes Professional Clinical Billing**

Accurate and complete clinical documentation is crucial for capturing revenue from patient encounters. In the fall of 2014, we began an initiative to minimize the frequency with which patient encounters are down-coded to a lower level charge because of missing documentation elements, such as family history. Through faculty and resident education sessions, targeted personalized feedback, and regular meetings with University Physicians, Incorporated (UPI), a third party company that internally audits all code submissions, our group was able to reduce the proportion of initial inpatient encounters that were downgraded from 14% to 9%, and in AY16 we will strive to meet our goal of 4% (the national average for academic hospital medicine).
Patient Safety & Quality Report
Patrick Kneeland, MD & Read Pierce, MD

The Big Picture
In the past year, we have accelerated our efforts to expand the HMG’s quality improvement and patient safety program, established as part of the 2013 strategic planning process. Through collaborative case review, the new Best Practices series, intensive QI training for HMG members, increasingly rigorous data collection and analytics, and hospitalist-led improvement projects across the hospital and School of Medicine (SOM), the HMG continues to set a high standard for excellence and leadership in clinical systems redesign. These efforts translate directly to excellent patient care—the HMG ranks in the top 20% nationally compared to our academic peers in length of stay, mortality, readmissions, and costs of care.

Institutional Leadership
In the past year, HMG members have reached new heights as leaders across our institution. Nearly a dozen members of our group now play a formal role in the Department of Medicine Mortality & Morbidity (M&M) Conference, focused on safety events and root cause analysis. HMG members participate in more than 30 different quality committees, task forces, and QI project teams. In addition, our faculty hold numerous quality and safety leadership positions across the school, hospital, and health system (see Table 1).

Innovation
The HMG continues to serve as a major catalyst for innovation in quality and safety. Our educational programs dedicated to QI (see Education Director’s report pgs. 10-11) stand out as national models, and have generated successful presentations at numerous national meetings, as well as scholarly publications. The group’s implementation of just-culture principles for learning from medical errors has served as a guide for multiple departments in the SOM and UCH, driving productive change in safety culture. Our clinical programs—such as the Mobile Stroke Treatment Unit and Multi-Disciplinary Rounds/Transitions of Care pilot (see Innovations Section pg. 19)—offer creative, high-impact models that are reducing treatment times, improving patient communication, and reducing readmissions. In addition, several HMG faculty working with our Institute for Healthcare Quality, Safety, and Efficiency (IHQSE) won SHM’s National Innovation Award in 2015 for facilitating improvement work with two-dozen clinical teams across our delivery system.

Pursuing Excellence Across the HMG Strategic Priorities

<table>
<thead>
<tr>
<th>Table 1: HMG Members Hold High-Level Leadership Roles in Quality and Safety in Numerous Areas</th>
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<tbody>
<tr>
<td>• Physician Advisor for Utilization Management at UCH (Anoff)</td>
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<tr>
<td>• Medical Staff President at UCH (Cumbler)</td>
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<tr>
<td>• Medical Directorships of 2 inpatient units (AIP1-12 and AIP1-6) at UCH (Cumbler, Wolfe)</td>
</tr>
<tr>
<td>• Chief Quality Officer at UCH (Glasheen)</td>
</tr>
<tr>
<td>• Director, Associate Director, and Core Faculty of CU’s Institute for Healthcare Quality, Safety, and Efficiency (Glasheen, Pierce, Kneeland, Cumbler)</td>
</tr>
<tr>
<td>• Medical Director of the UCHealth’s Mobile Stroke Treatment Unit (W. Jones)</td>
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<tr>
<td>• Chair of Peer Review Committee at UCH (Kneeland)</td>
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<tr>
<td>• Medical Director for Patient and Provider Experience at UCH (Kneeland)</td>
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<tr>
<td>• Medical Director of UCH’s Stroke Service (Poison)</td>
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<tr>
<td>• Director, Quality Improvement for CU’s Department of Neurology (Simpson)</td>
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<tr>
<td>• Associate Program Director for CU’s Internal Medicine Residency Program, focused on Quality and Safety (Tad-y)</td>
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<tr>
<td>• GME Director of Quality and Safety Programs (Tad-y)</td>
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<tr>
<td>• Program Director, Clinical Effectiveness and Patient Safety Small Grants Program at UCH (Virapongse)</td>
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<tr>
<td>• Vice Chair of Quality and Safety for CU’s Department of Medicine (Wald)</td>
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Strategic Priority 1: Promote a Culture of Continuous Improvement
We continue to support individual, team, and HMG improvement through learning about performance. We have made an ongoing commitment to: (1) A proactive, collaborative case review process; (2) The steady refinement of the breadth and depth of data that populates the HMG balanced scorecard, service-line dashboards, and individual data reports; (3) The alignment of scorecard data with OPPE (ongoing professional practice evaluation); and (4) An annual HMG culture assessment (which heavily informed the 2015 HMG retreat and our conversations about making our group the best place to work).
In the coming year, we aim to continue and expand all of these efforts. Specifically, we are increasing group involvement in collaborative case review by integrating all LaunchPad participants into our monthly case meetings. We are creating a system to share updated HMG balanced scorecards quarterly, and will work with our service line directors to improve and expand their respective dashboards. In parallel, we aim to extend a pilot of jointly led physician-nurse quality and safety meetings on our Med-Surg units, focusing on data analysis and rapid action to engage interprofessional teams to address quality and safety concerns. Finally, we will align individual-level HMG faculty data reports with both Ongoing Professional Practice Evaluation (OPPE) and minimum qualifications for the new General Internal Medicine (GIM) Clinical Incentive Plan in order to streamline the focus of important quality and safety metrics and increase the likelihood of individual and collective improvement.

**Strategic Priority 2: Promote the Professional Development of Quality and Safety Competencies for Learners and Faculty**

We believe that all HMG learners, faculty, and staff should possess a foundational understanding of quality and safety, with more intensive training and mentorship for those who aspire to a quality and safety-based career. Once again, HMG quality and safety leaders spent the year teaching and coaching in a broad range of settings, including the medical school, residency program, the advanced practice and physician fellowships, HMG’s LaunchPad, and a variety of faculty development courses supported by the IHQSE.

In the past year, several of our newer faculty members founded the HMG Best Practices series, a monthly event that explores evidence-based practice related to important hospital medicine topics and promotes high-value care. In the coming year, we aim to sustain this new innovation, and take advantage of training embedded in LaunchPad and external programs, including the IHQSE and Intermountain Healthcare, to support the transformation from personal learning to systematic practice of quality principles by all group members—in essence, continue our evolution from quality as the domain of a few HMG experts to a set of behaviors and values all share.

**Strategic Priority 3: Develop a Workplace Infrastructure that Supports Individuals Engaged in Quality and Safety Initiatives**

The past year saw impressive growth in our infrastructure, including expansion of our data analytics capacity, multiple winners of the University of Colorado Hospital/School of Medicine small grants program, expansion of the HMG-led transitions of care pilot with hospital-provided support, the addition of Hemali Patel, MD, to the quality and safety leadership team, and appointment of Essey Yirdaw, MPH, as the HMG’s Program Manager for Quality and Safety.

In AY16 we look forward to accelerating support for individuals and service lines, using the resources now in place, as well as the close partnership between the HMG and the IHQSE. We are actively developing a program to help our providers connect more quickly and effectively with their patients, through improved business cards and a focus on simple methods for meaningfully improving patient/family experience of care. We plan to continue aggressive pursuit of external funding, from both grant programs and our hospital-based partners, who increasingly wish to sustain and scale the innovative improvement work led by HMG members and service lines.

**At the 2015 Society of Hospital Medicine annual meeting in Washington, D.C., four HMG faculty, who help lead and teach in the Anschutz Medical Campus’s Institute for Healthcare Quality, Safety, and Efficiency (IHQSE), won the top prize in the Innovations Competition. The presenters, led by Jeffrey Glaasen, MD, Director of the IHQSE, were recognized for creating the Certificate Training Program (CTP), a one-year program that focuses on enhancing clinical microsystem team performance, developing leaders, and process improvement. Across two CTP cohorts, totaling 82 participants representing 25 clinical leadership teams, program participants reported improvements in leadership, team building, quality improvement, patient safety, and efficiency skills. Projects led by participants have positively impacted length of stay, readmissions, patient experience, use of evidence-based standards, and physician and staff engagement across the Anschutz Medical Campus. Overall cost avoidance and revenue benefit from the program has exceeded $5 million to date.**
The Big Picture

Medical education continues to inform our identity within the HMG, and in many ways remains our common foundation. Over the past year, our faculty continued to push the boundaries of educational innovation and demonstrated excellence in many domains as educators across our campus.

Accomplishments and Innovations

Keeping with HMG tradition, our faculty continued to garner recognition by winning prestigious teaching awards. Eight faculty members were nominated by their Foundations of Doctoring student for the “Best Internal Medicine Preceptor” award, and three earned the Excellence in Education award given by the Division of General Internal Medicine for significant contributions to the education of medical students, residents and faculty in our division. Finally, Dr. Ethan Cumbler earned the President’s Excellence in Teaching Award from the School of Medicine, given annually to the best teachers across all of our University of Colorado campuses.

Our faculty also demonstrated their excellence as educators through multiple leadership roles. In addition to traditional positions overseeing student courses, clerkships, residency program initiatives, and fellowships for physician learners, our faculty have taken on new leadership roles in the University’s Physician Assistant program, Advanced Practice Provider Fellowship program at University of Colorado Hospital, and the Department of Neurology clerkship.

In AY15, our educational innovations focused on the challenges and opportunities presented by the ever-changing healthcare landscape. The Hospitalist Training Program’s (HTP) Systems of Care curriculum, aimed at providing hospitalist residents a broader perspective on navigating the health care system, won a grant from the Alliance for Academic Internal Medicine recognizing its novel curriculum. Our faculty also spearheaded the development and implementation of Clinical Quality and Safety for Interprofessional Education as part of the Nexus grant program, funded by the National Center for Interprofessional Education and Clinical Practice. Lastly, the Leadership Education for Aspiring Doctors (LEAD) program was launched as an offshoot of our CU Hospitalist Scholars program (CUHSP), and aims to bring a greater number of diverse students into the healing professions.

Pursuing Excellence Across the HMG Strategic Priorities

Priority 1: Develop a Longitudinal Professional Development Program to Accelerate Excellence in Educational, Clinical, Quality, and Research Domains

The LaunchPad, our comprehensive, three-year faculty development program had a successful second year. Our newest cohort of faculty included advanced practice provider and neurohospitalist faculty. The program facilitated the publication of two non-peer reviewed articles authored by our first-year cohort and the start of two new research projects by these faculty. As we near graduation of the LaunchPad’s first cohort, which started in 2013, we anticipate seeing the outcomes—enhanced academic productivity, stronger mentoring relationships, and increased engagement and sense of belonging—we hoped for when we created the program.

22 Graduates
Health Innovations
Scholars Program
(2015 Graduates with Program Directors & Staff)
Priority 2: Increase the HMG’s Educational Scholarly Output
As we pursue our vision of being the undeniably best academic hospitalist group in the nation, our excellence as educators must correlate with scholarly output. In addition to increasing the number of peer reviewed educational publications by 20%, our faculty are participating in numerous multi-center educational studies, receiving national grants to fund educational innovations, and to present at national educational meetings in ever greater numbers. While we have been—and remain—known for training hospitalists, the HMG has become an influential voice in national conversations about the best and most innovative ways of training the healthcare workforce of the future.

Priority 3: Build on Our Strengths by Evaluating and Improving Our Current Programs
Maintaining and evolving existing programs remains a key source of educational innovation and dissemination for our group. Between our dedicated programs for undergraduates, students throughout medical school, residents, and physician and advanced practice provider fellows, we now have nearly 10 dedicated educational programs focused on hospitalist practice, high value care, systems redesign and leadership—among them, several that are unique or best in class nationally. Simply put, the depth, breadth, and quality of these programs is unmatched by any academic institution in the country. A key outcome—beyond scholarly publications and the consistently positive evaluations by our learners—is what our students and residents go on to do upon completion of their training with us. This year, two graduates of our Hospitalist Training Program were selected as chief residents, one as the VA Chief Resident in Quality and Safety, and a third graduate has gone on to pursue our fellowship in Quality Improvement and Systems Leadership. In addition, several graduates of our APF joined the HMG as advanced practice provider faculty. More than any single statistic, the trajectory and success of our graduates is a powerful marker that our commitment to a strong educational pipeline is bearing fruit.

AY15 Division of General Internal Medicine Excellence in Education Awards
Amira del Pino-Jones, MD
Read Pierce, MD
Nichole Zehnder, MD

Where are they Now?
A look at our Hospitalist Training Program Graduates*

*Information based on annual HTP alumni survey
Meet the **HMG** Learners

Residents & Fellows

Tyler Anstett, DO, Quality and Systems Leadership Fellow  
Holli Barber, MD, Hospitalist Training Track - R2  
Benjamin Beatty, MD, Hospitalist Leaders Track - R2  
Andrew Berry, MD, Hospitalist Training Track - R2  
Nicholas Berry, MD, Hospitalist Leaders Track - R1  
Erin Bredenberg, MD, Hospitalist Leaders Track - R1  

Cara Chao, NP, Advanced Practice Fellow  
Steven Clements, MD, Hospitalist Leaders Track - R3  
Richard Clews, NP, Advanced Practice Fellow  
Elizabeth Corey-Pacheco, MD, Hospitalist Leaders Track - R3  
Santiago de la Garza, MD, Hospitalist Training Track - R2  
Laura Erdman, PA, Advanced Practice Fellow  

Carrie Evavold, MD, Hospitalist Training Track - R2  
Geoffroy Fauchet, MD, Hospitalist Leaders Track - R1  
Robert Fraser, MD, Hospitalist Leaders Track - R3  
Isaak Hernandez, MD, Hospitalist Leaders Track - R2  
Jeremy Hua, MD, Hospitalist Leaders Track - R1  
Daniel Juneau, MD, Hospitalist Training Track - R2  

Susan King, NP, Advanced Practice Fellow  
Julie Knoeckel, MD, Hospitalist Training Track - R3  
Stefan Law, MD, Hospitalist Leaders Track - R3  
Frannie Lorenzi, PA, Advanced Practice Fellow  
Bryan Lublin, MD, Hospitalist Leaders Track - R2  
Charlie Lundquist, MD, Hospitalist Training Track - R3
Amber Maniates, PA, Advanced Practice Fellow  
Roxana Naderi, MD, Hospitalist Training Track - R3  
Tyson Oberndorfer, MD, Hospitalist Training Track - R3

Franklin O’Donnell, PA, Advanced Practice Fellow  
Eleanor Perry, PA, Advanced Practice Fellow  
Michelle Pinelle, NP, Advanced Practice Fellow

Dale Shamburger, MD, Hospitalist Leaders Track - R1  
Jackson Turbyfill, MD, Hospitalist Training Track - R3  
Heather Wayne, PA, Advanced Practice Fellow

Jennifer Weiskopf, MD, Hospitalist Leaders Track - R2  
Sarah Witowski, PA, Advanced Practice Fellow  
Amy Yu, MD, Hospitalist Leaders Track - R2
HMG Numbers of Note...

All figures shown are for the Academic Year 2015 (July 1, 2014—June 30, 2015)

52,476 Clinical Encounters

5 HMG Faculty Serve on the UCH Ebola Response Team

33% of HMGers Prefer Quiero Arepas Food Truck to Others on Campus

25% Growth in Clinical Revenue

9 HMG Faculty Hold UCH Leadership Roles
10 Minutes
Median Connection Time for Telestroke Activation to Physician on Screen

14
HMG Faculty/Staff Serve on SHM Committees

134%
Growth in Clinical Encounters Since AY11

8365
Average Steps HMGers Walk Each Day

2015 SHM Annual Conference at National Harbor

24%
Increase in HMG Peer Reviewed Publications in AY15
Service Line

Oncology Service

Dimitriy Levin, MD

The Oncology Hospitalist service specializes in providing expert care for hospitalized patients with solid tumor cancer diagnoses. In AY15 our teams managed 1742 patients, a 78% increase from the prior year—growth we supported via the addition of a second hospitalist team to manage the high demand for our services from patients and learners. The expanded clinical capacity has allowed all patients with new or suspected solid tumor diagnoses to directly benefit from our multidisciplinary team experienced in evaluation and management of these conditions. The second team has also allowed the addition of an Advanced Practice Provider (APP) and an Advanced Practice Fellow (APF), as well as continued development of the hospital medicine sub-internship rotation and education for internal medicine residents. In AY16, we look forward to refining our innovative teaching curriculum and supporting UCH’s growing cancer patient population.

Consultative Medicine Service

Mary Anderson, MD

The Medicine Consult Service specializes in consultative and perioperative medicine, with a strong focus on orthopedic and urology co-management, and responds to stroke alerts alongside the Stroke Team. In AY15, the Medicine Consult Service, Orthopedic Trauma Service, and nursing leadership partnered to create the University of Colorado Hospital (UCH) Geriatric Hip Fracture Program, supported by the Institute for Healthcare Quality, Safety, and Efficiency. Our three initial interventions included: (1) geographically cohorting all geriatric hip fracture patients on the Orthopedic Unit, (2) admitting all patients to the Orthopedic Surgery Service with co-management by the Medicine Consult Service, and (3) developing streamlined, evidence-based admission and post-operative order sets. Since its introduction in October 2014 through June 2015, the Geriatric Hip Fracture Program has successfully maintained a 2.3-day decrease in average length of stay for the geriatric hip fracture population. It has also markedly improved rates of appropriate osteoporosis work-up and treatment to > 90%. On the educational front, we have continued the innovative “Perioperative Systems of Care” and “Stroke Systems of Care” curricula for our hospitalist residents, and received a grant from the Alliance for Academic Internal Medicine to develop interprofessional stroke simulation scenarios at the WELLS Center on campus. Finally, we have continued to experience steady clinical growth, with an average daily starting census of 9.7 in AY13, 10.1 in AY14, and 11.6 in AY15. To manage this growth, we aim to expand to two teams in AY16.

Peak Hospitalist Preceptorship Service

Patrick Kneeland, MD

In AY15, the flagship rotation of the Hospitalist Training Track continued to evolve in exciting ways. The Peak service capitalized on its talented faculty and unique service structure to drive innovation around hospitalist resident education – largely through the ongoing evolution of the “High-Value Care” curriculum. Elements of this curriculum have been presented at national conferences and have been used by other institutions as a model. The Peak’s “Cost Consciousness” and “Efficiency Accelerator” teaching modules continued to draw accolades from our residents, and we updated the high-value care project conference to create a platform for residents to enhance presentation skills around the value implications of common elements of hospital-based care. In the coming year, Peak will continue to seek strategies for hardwiring “High-Value Care” into the clinical learning environment in addition to facilitating meaningful connections between resident insights and HMG quality improvement work.
**General Medicine Ward Services**

*Emily Gottenborg, MD*

The General Medicine Ward service is dedicated to providing an exceptional educational experience for resident and medical student learners. Though the service is primarily staffed by hospitalist faculty, this year we added a “Physician Scientist Team” (Medicine 4), which included a curriculum focused on application of basic science principles at the bedside. Subspecialist faculty from the Department of Medicine attended on this service to provide further exposure to subspecialty medicine and mentoring opportunities. In AY15, the Medicine Ward teams each staffed approximately 10-12 encounters per day, a decrease from the prior academic year that was based on resident feedback and was designed to better balance workload with education. Other educational innovations included addition of a medical librarian to the ward service daily rounds to enhance incorporation of evidence based medicine in daily clinical decisions, and creation of a “High Value Care” conference to encourage delivery of cost conscious care. We continued to provide monthly attending feedback from the residents in an effort to support improvement of attending teaching skills. Key QI initiatives included a pilot program for a structured multi-disciplinary discharge rounds with a team-based case manager, which will continue into AY16 based on early success. In the coming year, we also aim to improve the discharge process for medicine inpatients and develop a related curriculum for residents.

**Hospital Medicine Service**

*Brian Wolfe, MD*

The Hospital Medicine Service (HMS), which continues to anchor clinical training for our advanced practice fellowship, experienced continued growth over the last year. In AY15, HMS managed more than 3100 patients representing over 12,000 encounters, an increase of nearly 20%. Despite this growth, service efficiency improved, with a length of stay of 4 days and more than 60% of its observation patients are discharged before 2pm. HMS continues to grow its reputation as an innovative collaboration between physicians, physician assistants (PAs), and nurse practitioners (NPs). The PA and NP faculty members have more than doubled in number from five to eleven. Both Advanced Practice Provider faculty and the HMG as a whole have benefited tremendously as NP and PA faculty members have moved beyond purely clinical roles and have distinguished themselves through teaching for Advanced Practice Fellows, participation in group committees and task forces, and an increasing number of educational and clinical leadership roles within the HMG and across the University. Thirty-five advanced practice fellows have trained on the service since the fellowship program began in 2009, and many now hold faculty positions in the HMG, bone marrow transplant and oncology services, and UCH emergency department. In AY16, we look forward to growing the educational and clinical mission on HMS yet again as we take the service to new heights.

**Acute Care for the Elderly Service**

*Ethan Cumbler, MD*

The Acute Care for the Elderly (ACE) service strives to deliver quality care to an extremely complex population, leveraging the potential of a highly functioning interprofessional team. As an educational site for learners, we pride ourselves on a robust and integrated curriculum, innovative assessments, and dedicated faculty who create a unique learning experience. Core to the mission of the ACE service is the concept of continuous improvement in order to change systems of care delivery. In the last year the ACE unit, with support from the Institute for Healthcare Quality, Safety, and Efficiency, completed a QI initiative to optimize care for patients who need skilled nursing after discharge. The project reduced LOS by almost half a day through improved lines of communication, a success we shared via poster presentations at local, regional, and national meetings. With input from diverse stakeholders (inpatient, outpatient, multiple specialties and disciplines), we also have instituted standardization of practice for prescribing and follow-up of the highest risk medications used by elderly patients. We are currently focused on the patient’s experience of how we educate them about these medications. Finally, in AY15 ACE enrolled patients in a randomized clinical trial, resulting in a publication on intensive therapy to improve functional outcomes for elderly patients. Emblematic of all of these initiatives is the concept that our care must continuously evolve to optimize efficient use of resources, reduce patient risk, and improve outcomes. The ACE unit takes pride in being a crucible for testing change in how teams can work effectively together, improve patient experience, and incorporate learners into the vibrant culture of a learning organization. The year ahead is full of opportunity.
In AY15, the neurohospitalist service lines grew in every facet of scope and operations, and enjoyed remarkable success in pursuit of clinical innovation, quality improvement, safety, and research. We have now expanded into a portfolio of integrated stroke care services, including inpatient stroke care, stroke and general neurology consultation, UCHealth’s Telestroke program, and the Mobile Stroke Treatment Unit (MSTU).

The UCH Telestroke program, which launched in June 2014 as the inaugural Telehealth program for UCH and UCHealth, has served as the prototype and platform for developing other Telehealth services for the hospital and the UCHealth system. In the first year, there were approximately 60 Telestroke patients seen for emergency consultation at remote facilities, expanding patient access and providing much needed support to our community healthcare partners at Pikes Peak Regional Hospital in Woodland Park, CO, and both of our Memorial Hospital facilities (UCH-South) in Colorado Springs. Based on the success of these partnerships, the Telestroke program will add Valley View Hospital in Glenwood Springs, CO, as a new partner in early 2016 and continues to explore other opportunities both within and beyond Colorado. An equally exciting and innovative new program is our Mobile Stroke Treatment Unit (see Innovations Section).

Our research mission remains strong and continues to grow. Several neurohospitalists are serving as local Principal Investigators (PIs) for ongoing and new clinical trials, supporting basic and translational research through the Bugher Center grant, collaborating as co-investigators for clinical trials in other departments, and adding health services research as a new focus with the creation of the MSTU.

In response to this growth, Sharon Poisson, MD, took on a primary role leading the Stroke Service and became the Co-Director of the broader Stroke Program. We look forward to another year of rapid growth in clinical volumes and opportunities for innovation, and have support from UCH leadership to expand the physician and advanced practice faculty.

At the end of June 2015, the Hospital Medicine Swing Service completed its third year of operation as our afternoon and evening admission and consult teaching service. In AY15, the service admitted 866 patients averaging 3.4 patients per night or 17 patients per week, thus supporting our operations during the busy afternoon and evening hours when many admissions arrive. Equally important, Swing continued to foster a better work-life balance and greater teaching opportunities by protecting our daytime services from large boluses of admissions/consults at the end of the workday. In AY16, Swing will continue to refine the unique didactic and case review educational hour at the beginning of the shift for the Advanced Practice Fellowship—consistently one of the best-rated learning experiences by our APFs.

Our Nights Service is critical to the structure and function of the Hospital Medicine Group’s clinical mission, and increasingly is central to the teaching mission as well. In AY15, our nocturnists admitted over 730 patients, while addressing the acute medical needs of existing medical patients across the hospital, taking outside transfer calls on behalf of general internal medicine and Oncology, and teaching both residents and our Advanced Practice Fellows. Continued work is underway on bi-directional assessments between residents and physician nocturnists, as well as development of a Nights curriculum. In addition, our physician nocturnists have embarked on the education of Hospital Medicine Sub-Interns who now rotate through night shifts. With increased daytime volumes, our physician nocturnists are busier than ever. In response to this growth and to support high quality clinical care and teaching at night, we have proudly added Advance Practice Provider nocturnists to our team, with plans for further expansion in AY16.
In late 2015, the neurohospitalists launched the Mobile Stroke Treatment Unit. From the outside, the MSTU resembles any ambulance. Inside, the MSTU is a highly specialized Emergency Department equipped with technology, tools, and—most importantly—an elite team of providers (Paramedic, EMT, Critical-care Nurse, CT tech, and virtual Vascular Neurologist via Telehealth) that can provide faster emergency care to individuals suffering a stroke. The MSTU, endorsed by the UCHealth Board of Directors, is the first of its kind in Colorado and the Rocky Mountain Region; moreover, it’s implementation makes us a leading partner with handful of other elite medical centers across the nation, which are collaborating to study the many anticipated benefits of MSTUs on a wider scale.

In 2015, we launched the Leadership Education for Aspiring Doctors (LEAD) program, a 4-week summer intensive for underrepresented minority (URM) undergraduate students interested in becoming physician leaders and healthcare innovators. The LEAD curriculum covers hospital medicine topics such as healthcare finance, business drivers, quality improvement, patient safety, patient experience, and transitions in care. Participants attended writing and interview workshops and practiced skills pertaining to conflict management and negotiation. They also met with leaders on campus, both physicians and non-physicians, to learn about their paths to medicine and leadership positions. In addition, students had the opportunity to round with multiple hospital medicine services and specialty services. This year’s LEAD students are interested in pursuing careers as physicians and expressed continued interest in careers as hospitalists. On completion of the program, they reported feeling more knowledgeable about hospital medicine and leadership skills.
Meet the **HMG** Faculty & Staff

Mary Anderson, MD  
Debra Anoff, MD  
Erinn Ayres, MD  
Kendall Babb, NP  
Audrey Bearden, MD  
Kasey Bowden, NP  
Sami Campbell, MHA

Julia Clemons, MD  
Dana Coutts, PA  
Ethan Cumbler, MD  
Zuzanna Czernik, MD  
Amira del Pino-Jones, MD  
Kimberly Dunn  
Megan Faga, NP

Heather Fordyce  
Kristin Furfari, MD  
Jeffrey Glasheen, MD  
Emily Gottenborg, MD  
Jeannette Guerrasio, MD  
Jeanne Harris  
Christine Jones, MD

William Jones, MD  
Kirsten Kamna  
Emilie Keeton  
Christopher King, MD  
Patrick Kneeland, MD  
Jennifer Knudson, PA  
Pearce Korb, MD
Where has the HMG **Trained**?

**Medical** Schools: Albany Medical College | Albert Einstein College of Medicine | Boston University School of Medicine (2) | Case Western Reserve University School of Medicine | Emory University School of Medicine (2) | Harvard-MIT Division of Health Sciences and Technology | Indiana University School of Medicine (2) | Johns Hopkins University School of Medicine | Medical College of Wisconsin | Oregon Health & Science University | Rocky Vista University College | St. George's University School of Medicine | University of Chicago Pritzker School of Medicine (2) | Universidad Nacional de Cordoba | University of Arizona School of Medicine | University of California, San Francisco School of Medicine (2) | University of Colorado School of Medicine (8) | University of Illinois at Chicago | University of Kansas School of Medicine | University of Kentucky College of Medicine (2) | University of Michigan Medical School | University of New Mexico School of Medicine | University of North Carolina at Chapel Hill | University of Oklahoma School of Medicine | University of Rochester School of Medicine & Dentistry | University of South Dakota, School of Medicine | University of South Florida (2) | University of Texas, Southwestern Medical Center | University of Wisconsin

**Residency/Training** Programs: Baystate Medical Center | Beth Israel Deaconess Medical Center | College of Medicine, Mayo Clinic | Dartmouth-Hitchcock Medical Center | Emory University | Good Samaritan/Phoenix Children's Hospital | Indiana University School of Medicine | Weill Cornell Medical Center | Lutheran Medical Center | New York University/Bellevue Hospital Center | University of California, San Francisco (3) | University of Chicago | University of Colorado (14) | University of Connecticut, Farmington | University of Florida | University of Michigan (4) | University of Missouri Kansas City | University of New Mexico (2) | University of North Carolina at Chapel Hill | University of Pennsylvania | University of South Dakota | University of South Florida | University of Texas, Southwestern Medical Center | University of Washington | University of Wisconsin Hospital and Clinics

**Fellowship** Programs: Blue Cross and Blue Shield of Massachusetts Greater New York Hospital Association and United Hospital Fund | Emory University | Henry Ford Hospital | Indiana University | Johns Hopkins Bayview Medical Center | National Library of Medicine Biomedical Informatics | New York Presbyterian Hospital/Weill Cornell Medical Center | Rocky Mountain Multiple Sclerosis Center at Anschutz | University of California, San Francisco (3) | University of California at Los Angeles (2) | University of Colorado Hospital (2) | University of North Carolina at Chapel Hill

*Each dot indicates the institution location, not how many faculty/staff a school ended.*
**HMG Accolades & Publications for AY15**

**Greg Misky, MD**
2015 Hospitalist Training Program Excellence in Education Award

**Read Pierce, MD**
2014 UCH Pioneer Award

**Laura Rosenthal, DNP**
2014 Allied Health Provider Leadership Award

**Jeanie Youngwerth, MD**
Gold Headed Cane Award Given by the Department of Medicine

**Hemali Patel, MD**
2015 Hospitalist Training Program Humanism Award

**Laura Rosenthal, DNP**
2015 Colorado Nurses Foundation Nightingale Award

**Ethan Cumbler, MD**
President’s Excellence in Teaching Award for the Anschutz Medical Campus

**Laura Rosenthal, DNP**
2015 STTI Biester Leadership Award from the Alpha Kappa Awards Committee


Burke RE, Guo R, Prochazka AV, Misky GJ. Identifying Keys to Success in Reducing Readmissions Using The Ideal Transitions In Care Framework. BMC Health Serv Res. 2014 Sep;23(14):423.


HMG Faculty Produced Scholarship Equating to 48% Production Rate

Total Publications From HMG Faculty

Accepted Abstracts/Posters Presented at 2015 SHM National Conference by HMG Faculty