The Johns Hopkins
General Internal Medicine Residency Program
At the
Johns Hopkins Bayview Medical Center

Program Description
2012-2013
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The Johns Hopkins
General Internal Medicine Residency Program
at the
Johns Hopkins Bayview Medical Center

The General Internal Medicine Residency Program (GIMRP) at Johns Hopkins Bayview Medical Center provides a unique track for those interested in career pathways in primary care medicine, public health and health policy, medical education, geriatrics, hospitalist practice, or any medical subspecialties where a strong grounding in outpatient primary care medicine is advantageous. The GIMRP at Bayview, established in 1979, has one of the longest track records of any institution in training primary care general internists, and has graduated numerous individuals into the related fields mentioned above. The faculty of the Division of General Internal Medicine at Johns Hopkins Bayview includes some of the nation's leading experts in primary care medicine, medical education, faculty development, and mentoring. The opportunity to work closely with these faculty – as teachers, advisors, and mentors – is one of the distinguishing features of the program.

Both the Categorical and GIM programs provide equal and superb inpatient training as well as a variety of other rotations. In terms of camaraderie, and in the eyes of all faculty, GIM and Categorical residents are indistinguishable – all are part of the Bayview family. The major difference between the two tracks is that GIM residents enjoy a more extensive and varied outpatient continuity experience and primary care curriculum, whereas Categorical residents focus on subspecialty clinical or research experiences. In addition to the 3-year hospital-based continuity clinic that all residents participate in, GIM residents have two other continuity experiences:

- Community-Based Practice (CBP) Resident Firms, a two-year continuity clinic at a community-based site where residents are precepted by Johns Hopkins teaching faculty and learn the art and science of ambulatory primary care medicine.
- Elder House Call Program, a two-year continuity clinic where residents follow a panel of 6 to 8 frail, homebound elderly patients through home visits every third month, under the preceptorship of faculty from the Division of Geriatrics.

The section below further details some of the important similarities and differences between the Categorical and GIM tracks.

**GIM and Traditional Tracks Compared**

**What are the similarities between the GIM and Traditional Track residencies?**

- All residents receive intensive training in **Ward Medicine, ICU, CCU, and Emergency Medicine**. All residents have scheduled rotations in **Neurology, Hematology, Oncology, HIV Care, and Chemical Dependency**.
- **Three ambulatory rotations in the PGY-1 year** for all medicine residents, include Immersions in Outpatient Medicine, a two-week rotation focused on learning the skills of outpatient medicine; **Foundations of Clinical Excellence: Relationship-Centered Care**, a month for focusing on interviewing skills, psychosocial medicine and physical diagnosis, and **Evidence-Based Medicine/Systems-Based Practice**, a month for focusing on the retrieval, assessment, and presentation of evidence for effective medical practice, and on the principles of quality improvement in medical practice. In both months, emphasis is on the diagnosis and management of common ambulatory problems. Additionally, all PGY-1 residents spend two weeks at the beginning of the intern year in an
Immersions rotation in the Medical Housestaff Practice, allowing them to focus on learning skills of outpatient practice early in the intern year.

- **Ambulatory training in traditional medical subspecialties**, including cardiology, endocrinology, gastroenterology, geriatrics, hematology, oncology, pulmonary medicine, nephrology, and rheumatology, is an essential feature of the PGY-2 and PGY-3 curricula for both GIM residents and categorical track residents. Categorical residents spend 3 months training in these outpatient clinics at Johns Hopkins Bayview Medical Center; this is part of the every third-month Ambulatory Rotations for GIM Residents.

- All residents spend one half day each week in a **hospital-based primary care practice** precepted by GIM faculty (the Randy Barker Medical Group). Residents care for their own panel of patients and follow them over three years of residency. In the third year, all residents spend **one month in the resident practice full time**, providing acute care and intercurrent care for patients in the practice, and precepting PGY-1 residents in a “New Patient” clinic.

- All residents participate in the **General Medicine Consultation (GMC) Service and Curriculum**. Every resident spends two weeks in each of the PGY-2 and PGY-3 years providing general medical and preoperative consultations on non-medicine services, under the supervision of faculty general internists. Weekly GMC teaching rounds include presentation of interesting and challenging cases. There is also a monthly didactic GMC Conference, and a syllabus of reference materials, which complement clinical experiences during GMC Rotations.

**What are the differences between the GIM and Traditional Track residencies?** In addition to the above curricula, GIM residents receive more intensive ambulatory training designed to prepare them to practice in primary care settings and in managed care networks.

- **Every 3 months** during the PGY-2 and PGY-3 years, GIM residents spend a month in an **ambulatory practice rotation**. During each week of the rotation, 3 half-day sessions are spent in a **community-based practice (CBP)**. Three residents, who form a “firm” or small group practice with core GIM faculty preceptor(s), follow a shared panel of patients in the CBP. One half-day per week is spent in a unique continuity clinic called Elder House Call Program, making scheduled visits to homebound patients under the supervision of faculty in the Geriatric Division. The other half-day sessions are divided between ambulatory training in the medical subspecialties (listed above), as well as training in non-internal medicine specialties relevant to primary care (dermatology, gynecology, ENT, ophthalmology, and orthopedics).

- Traditional track residents have more elective time to pursue subspecialty interests than do GIM residents, who gain broader exposure in outpatient subspecialty medicine during their 8 ambulatory months in the PGY-2 and PGY-3 years. GIM residents get, on average, 3 to 3 ½ months of elective time over the three years of residency.
GENERAL INTERNAL MEDICINE CURRICULUM CONTENT

PGY-I: 2-week Immersion Rotation in Outpatient Medicine

Each PGY-I internal medicine resident spends two weeks in an Immersions rotation in outpatient medicine. During either July or August of the intern year, each intern spends 2 weeks in the Randy Barker Medical Group. About half of the time is spent seeing patients, and the other half of the rotation consists of teaching sessions around key aspects of outpatient practice. These include: Organizing a Visit, Preventive Care, Getting to Know Office Staff and Their Roles, Home Visits, and Intercurrent Care.

PGY-I: 2-week Transitions of Care Rotation

Each PGY-I internal medicine resident spends 2 weeks on the Transitions of Care rotation. The purpose of the TOC rotation is to encourage the learner to see the role of a primary care physician as the “information hub” during care transitions of patients into and out of acute settings.

The following learning objectives are emphasized throughout the rotation:

1) Learners demonstrate an understanding and appreciation of the importance of 1) primary care physician involvement; 2) medication reconciliation; 3) discussion of goals of care and advance directives; 4) functional assessment; and 5) transitional care, during care transitions through reflective writing and conference presentation.

2) Learners demonstrate the skills and behaviors of 1) medication reconciliation; 2) discussion of goals of care and advance directives; and 3) functional assessment during care transitions through their documentation in inpatient and outpatient medical records and performance of Transition Audits.

3) Learners identify barriers within the current system that lead to poor care transitions and contribute to the development of a library of quality improvement projects designed to address these barriers through collaboration with members of a multidisciplinary team of healthcare professionals.

The rotation utilizes the following educational activities to meet these objectives.

Transition Modules:

Learners receive self-directed learning modules at the start of the rotation and meet with course facilitators to review what they've learned about these key components of care transitions:

1) Medication reconciliation
2) Advance Directives and Goals of Care
3) Functional assessment
4) Transitional Care

Transition Audit:

As part of the rotation, learners perform ~3 Inpatient Transition Audits during 3 half days early in the rotation. Learners actively follow these patients as they experience a care transition from the outpatient to inpatient setting; during this time the learner performs a Transition Audit to assess the quality of the care transition experienced by the patient. Each audit requires an interview of the patient and review of the medical records from the admitting team and the outpatient primary care physician via Centricity. The final product of each audit is a Transition Record- which guides directed feedback to the
inpatient team related to the quality of the care transition and assists the patient and medical team with future care transitions.

Learners see ~2-4 patients in a Discharge Clinic in the Randy Barker Medical Group, during which time they perform a Transition Audit on each patient to assess the quality of their care transition from the inpatient to outpatient setting.

Site visits to Transitional Care Settings:

Learners experience ~4 site visits to various transitional care settings. These experiences are designed to provide the learner with a basic understanding of the services provided in various care settings including inpatient physical/occupational therapy, acute and subacute rehabilitation facilities, assisted living facilities, and in-home nursing.

Reflective Writing Exercise:

Learners complete a reflective writing exercise during the TOC rotation as a means of evaluating the impact of the curriculum on their attitudes and future practice patterns and to facilitate their preparation for the Transition Conference. They submit and discuss a draft in a small group setting with co-rotators and a course facilitator at midpoint; the final draft is submitted at the end of the rotation.

Transition conference:

By the end of the rotation, the learner develops and presents a 20-minute patient-based discussion at the Transition Conference. This is an opportunity for the learner to display what they have learned during the rotation. The learners are encouraged to collaborate with at least one interdisciplinary member of the health care team to create this presentation. Learners identify barriers to providing high-quality care transitions encountered during the TOC rotation, and highlight opportunities for quality improvement projects.

PGY-1: Foundations of Clinical Excellence: Relationship-Centered Care and Physical Diagnosis Skills Rotation

Each intern spends a 2-week protected block with no inpatient or night call responsibilities. Two RBMG (continuity practice) clinics sessions are scheduled per week during this rotation. Seven PGY-1 residents take this rotation together each block from August to November.

Relationship-Centered Care Skills

Relationship-centered care begins with being able to translate the values of building and nurturing relationships in patient care into a more systematic framework of communications practice and understanding the often the psychosocial context of our patient’s lives.

Interviewing and communication skills training focuses on:

1) Enhancing knowledge and skills related to relationship-centered care;
2) Organizing the office visit and gathering medical and psychosocial data;
3) Short term counseling skills;
4) Motivational interviewing;
5) Cross-cultural competence;
6) Breaking bad news;
7) Obtaining advance directives;
8) Obtaining informed consent;
9) Applying a 4-topic approach to medical ethics.

These skills are then applied to learning how to recognize and manage the following psychosocial issues:

1) Psychosocial distress, caused by responses to life crises, and to physical illness;
2) Non-adherence to medical regimens;
3) Substance abuse (alcoholism);
4) Prescribing controlled substances;
5) Harmful health habits (smoking);
6) Lifestyle change (weight loss);
7) End-of-Life care (bad news, care choices in terminal stage).

A series of didactic sessions is given, focusing on the diagnosis and treatment of the following psychiatric disorders:

1) Anxiety disorders;
2) Depressive disorders;
3) Psychotic disorders;
4) Organic mental syndromes (dementia, delirium).

Each resident has the opportunity to explore a psychosocial topic in more depth and give a brief presentation to peers at the end of the rotation.

Interprofessional collaboration is addressed during sessions focused on caring for complex community-based patients, co-facilitated by nursing and GIM faculty.

Community partnerships are emphasized through participation in the following activities in the community after an introduction to the community-oriented primary care curriculum:

1) Alcoholics Anonymous;
2) Creative Alternatives (Community psychiatric center);
3) Home visits to patients on your outpatient panel.

The following learning processes are emphasized throughout the rotation:

1) Self-assessment at the beginning and end of the rotation and during sessions;
2) Identification of personal learning objectives before each session;
3) Enhancement of knowledge through syllabus readings;
4) Observation of faculty preceptors modeling skills, and of hospital and community resources (e.g. Alcoholics Anonymous);
5) Practice of skills live patient interviews, video review with faculty and practice with simulated patients;
6) Application of new skills and knowledge during continuity care sessions and during time spent doing liaison psychiatric consultations;
7) Obtaining verbal feedback from each other, simulated patients and faculty preceptors;
8) Reflecting individually and with each other on challenging situations, and identifying assumptions.

Physical Diagnosis Curriculum:

An average of three half-days per week are spent in a special Physical Diagnosis Curriculum, learning the fine points of key parts of the physical exam from expert clinicians who integrate state-of-the-art teaching tools in their bedside instruction. For example, the cardiovascular examination is taught using an electronic
teaching stethoscope, which allows up to five residents to simultaneously listen to a patient's heart sounds along with a cardiologist. The accuracy of the cardiac physical examination is enhanced as residents learn to use a hand-held ultrasound machine, a device that is only slightly bigger than a notebook. Ultrasound is also used to help diagnose pleural effusions and ascites.

Another key focus of this curriculum is performing an “evidence-based” physical exam, rather than strictly the head-to-toe physical examination learned in medical school. Many areas of the physical examination are covered, including special instruction in the female pelvic examination.
PGY-1: Evidence-Based Medicine/System Based Practice Rotation (EBM/SBP)

A second ambulatory medicine rotation in the PGY-1 year focuses on the basic sciences and skills of ambulatory medicine, using an evidence-based approach. Educational methods include small group sessions, self-directed learning, and independent learning projects. Six to seven PGY-1 residents each month take this rotation from February to April.

EBM/SBP Content

The content consists of the following topic areas: core principles of EBM, medical informatics, common clinical problems, issues in doctor-patient communication, skills for ambulatory practice, critical appraisal of published research, teaching and presentation skills, and principles of quality improvement. More intensive experience in the Medical House Staff Practice will also occur during this month.

Other than two half-days per week in the Medical House Staff Practice, the rest of the week is spent in small group sessions with one of 30 faculty members who teach in the curriculum. Ample time is left free for self-directed learning, reading, and to prepare for an end of month presentation and journal club.

Core Principles of EBM

In order to be able to practice evidence-based medicine, several skills must be learned and refined. They include:

1) Asking pertinent, answerable questions
2) Finding the best evidence
3) Critically appraising the data
4) Extracting the clinical message
5) Applying this information to an individual patient.

Additional important topics such as absolute risk reduction (ARR), relative risk reduction (RRR), and number needed to treat (NNT) are covered in a group of interactive, problem-based teaching sessions.

Medical Informatics

Physicians live in a world of information, and its efficient management is mandatory in order to remain an informed clinician. The informatics curriculum has three major goals:

1) Residents become familiar with different sources of medical information and ways to manage them.
2) Residents learn how to search medical databases that are available through JHBM and Johns Hopkins University School of Medicine.
3) Residents become familiar with hardware and software now available to physicians and are given Welch Library cards and unlimited access to the Internet.

Common Clinical Problems

Since ambulatory medicine has special attributes, this course attempts to display them through the examples of common clinical problems. The problems were selected from the National Ambulatory Medical Care Survey of the most common problems presenting to primary care doctors, including:

- High blood pressure
- Diabetes
- HIV care
- Common cold
- COPD
- Cardiac testing
These sessions focus on a multi-disciplinary and evidence-based approach to each problem.

**Issues in Doctor-Patient Communication**

Building on skills learned in Foundations of Clinical Excellence, several sessions address more advanced skills. Among them will be:

1) HIV counseling
2) Assessing decision-making capacity and helping to set up advance directives.

**Skills for Ambulatory Practice**

Skill development that began in the Foundations of Clinical Excellence rotation is reinforced. Specific issues include:

1) Review of documentation for ambulatory-patient visits, self-audits and discussion with faculty.
2) Prevention and health promotion.
3) Issues in cost-effective, efficient, and safe patient care.

**Critical Appraisal of Published Research**

A goal of this curriculum is to encourage residents to use evidence from patients, colleagues, the literature, and themselves to guide their activities in diagnosis, prognosis, and treatment. By the end of the curriculum, each resident should be a “learned skeptic,” and should opt for practice based on the best evidence wherever possible.

Each resident prepares and presents an evidence-based evaluation of a medical treatment, practice or guideline at a housestaff noon conference scheduled at the end of the month, and also leads and participates in several journal clubs.

**Teaching and Presentation Skills**

Interns will have the opportunity to improve their teaching and presentation skills during this rotation. A session dealing with effective ways to provide feedback should help interns in other components of their residency training. Interns will also receive guidance and specific feedback about the journal club and end-of-month presentations. All interns will also learn to use Microsoft PowerPoint and to deliver presentations more effectively.

**Principles of Quality Improvement/Health Care Systems**

Interns learn the principles and explore the application of quality improvement initiatives to the practice of medicine. A series of four sessions focus on this critical component of systems-based practice, emphasizing a multi-disciplinary and evidence-based approach to continuously improving healthcare delivery and outcomes. A series of sessions focuses on the overall structure of the U.S. healthcare system and financing structures.

**Clinical Practice**
In the Medical House Staff Practice (RBMG), residents attend 2 sessions per week: their own afternoon session and a morning session focusing on new patients during both the Foundations of Clinical Excellence and Evidence-Based Medicine and Practice rotations. During the morning session, the residents work closely with the PGY-3 Ambulatory Block resident, who supervises their patient care and moderates practical one-hour sessions on outpatient prescribing issues, diabetic education, nutrition, and telephone medicine.

**PGY-2 and PGY-3: Ambulatory Practice Months**

The foundation for longitudinal ambulatory practice training in the GIM Residency Program is the Community-Based Practice (CBP) Firm. Each GIM resident joins a CBP Firm for their PGY-2 and PGY-3 years, and returns to their practice at this site every 3 months, for a total of 8 months. At each site, three residents (one each month at each site) manage a patient panel of approximately 500 patients with faculty preceptors. During each month they hone skills in providing longitudinal primary care, acute care, and telephone medicine. The CBP sites for the Ambulatory Firms and the characteristics of the patients at these practices are described below (see “Ambulatory Care Training Settings”).

Additional longitudinal ambulatory practice experiences scheduled during the CBP/Ambulatory Rotations include continued participation in the Randy Barker Medical Group (RBMG), a hospital-based continuity practice, and participation in the Elder House Call Program (EHCP).

Every GIM and traditional track resident cares for a panel of primary care patients in the RBMG. Clinic sessions are held weekly, and physicians are available to consult with their patients by phone at other times. Over 3 years, residents work closely with a faculty preceptor to provide primary care and acute care for patients with complex medical and social and behavioral problems. GIM residents also work closely with a preceptor from the Division of Geriatrics to provide home care for frail elderly or otherwise homebound patients in the Elder House Call Program. Each GIM resident cares for a panel of patients at home, and spends one-half day each week visiting them during ambulatory months.

Ambulatory training in medicine subspecialty areas is accomplished through the BASIC (Bayview Ambulatory Subspecialty Interdisciplinary Curriculum) rotations. For GIM residents, BASIC training is included in the eight CBP/Ambulatory months over the second and third years of training. Currently, BASIC includes ambulatory training in cardiology, endocrinology, gastroenterology, rheumatology, pulmonary, allergy/Immunology, hematology, and oncology. There are also clinical experiences in primary care-relevant non-Internal medicine specialties, including dermatology, wound clinic, otolaryngology, ophthalmology, musculoskeletal clinic, podiatry, and gynecology.

**Friday Ambulatory Curriculum**

Weekly small group learning sessions during ambulatory rotations complement the residents’ practical experiences and comprise the Ambulatory Curriculum. Planned curricula given during these weekly one-half-day small group didactic sessions include:

- selected core topics in primary care medicine and non-internal medicine specialty topics designed to support clinical experiences in these areas (e.g., Musculoskeletal Medicine, Dermatology, ENT, podiatry, ophthalmoscopy, gastroenterology).
- scheduled time for self-directed learning via a web-based ambulatory care curriculum covering over 30 separate topics.
- seminars designed to enhance knowledge and skills in practice management, informatics, and promote better understanding of health insurance and the broader health care system.
- a series of sessions emphasizing Community Oriented Primary Care (COPC).
• a twice-monthly Ambulatory Morning Report and a monthly Geriatrics Ambulatory Morning Report.

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<th>Sample CBP/Ambulatory Month Schedule</th>
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<td><strong>Monday</strong></td>
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<td>AM</td>
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<tr>
<td>PM</td>
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PGY-3 RBMG Ambulatory Block (“Doctor of the Day”)

Every senior resident spends approximately one month as the cross-covering and coordinating resident physician for the Randy Barker Medical Group.

This rotation provides senior residents the opportunity to manage intercurrent illnesses in patients from their colleagues’ panels. Patient logs are kept and are reviewed with the attending for the rotation. In addition, this resident teaches PGY-1 residents about generic skills of ambulatory practice and supervises their care of new patients each Wednesday morning.

A Quality Improvement project, focused on the RBMG, is planned and completed by each Doctor of the Day. The project is supervised by the Doctor of the Day rotation attending for that month. The findings are usually communicated to all residents and to the RBMG attendings; and improvements, based on the findings and on group input, is usually implemented.

During this rotation, the Doctor of the Day has responsibility for all prescription refills for his/her RBMG colleagues.

Special Courses and Conferences

Each year, several GIM residents have attended the regional or national conferences of the Society of General Internal Medicine (SGIM), to present clinical vignettes or research, and to learn about the academic activities encompassed by general internal medicine and about career possibilities. Attendance at the meetings, together with associate membership in SGIM (sponsored by the training program), fosters a sense of professional identity as general internists. Residents are encouraged to submit material for presentation at both regional and national meetings.

GIM and other housestaff have enjoyed a wide variety of GIM-oriented electives; including rotations at the Agency for Healthcare Research and Quality; overseas clinical or research electives in the developing world; block rotations on Johns Hopkins Bayview’s Community Care-a-Van (a mobile health clinic providing care to local underserved populations); a new and intensive on-line curriculum on Sexually Transmitted Infections through the Bloomberg School of Public Health; and many others.

Public Health & Serving the Underserved

From its inception, the GIM residency program was founded on a commitment to train physicians to provide high quality care to underserved populations. The diverse clinical experiences – including the inpatient ward service, the Medical Housestaff Practice, the Comprehensive Care Practice, the chemical dependency rotation, and Elder House Call – enable residents to care for underserved populations in the neighborhoods around JHBMC.
Residents may also pursue elective rotations in developing countries. For example, recent graduates have worked in India and Uganda to provide prevention education and services to populations at risk for, or with, HIV/AIDS. The residency program can facilitate these electives abroad through our own faculty and our colleagues throughout the Johns Hopkins School of Medicine and Johns Hopkins Bloomberg School of Public Health. The program has also helped provide financial support for these electives, which have nurtured residents’ interests in careers in public health and serving the underserved. These residents have also enriched the education of other residents and faculty by sharing their experiences back home.

Beyond clinical training, our program offers several opportunities to study or improve health care delivery using a public health approach.

Through a grant from the Robert Wood Johnson Foundation, Drs. Belinda Chen and Nicholas Fiebach created a unique longitudinal curriculum for residents in Community-Oriented Primary Care (COPC). This approach to primary care integrates clinical medicine, epidemiology, social sciences, and health service research in a complementary fashion to develop programs to meet the health needs of a community. The curriculum is integrated into the Foundations of Clinical Excellence, EBM/SBP, and Friday Ambulatory Curriculum.

Finally, the GIM faculty will mentor residents who interested in scholarly projects related to public health or care for underserved populations.
AMBULATORY CARE TRAINING SETTINGS

A strength of the Johns Hopkins GIM Residency Program at JHBMC is that each resident develops continuity practices in three different settings, each of which provides distinct educational opportunities, practice populations, and methods of practice management. The three settings are described below.

AMBULATORY PRACTICE SITES

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<tr>
<th>Site</th>
<th>Practice Type</th>
<th>Practice Size</th>
<th>Typical Patient Profile</th>
<th>Location</th>
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<tbody>
<tr>
<td>Johns Hopkins Bayview Medical House Staff Practice (RBMG)</td>
<td>Hospital-based house staff group practice.</td>
<td>About 2500 patients. 37-38 resident doctors 10 preceptors</td>
<td>Middle-aged to elderly Poor Medicare&gt;Medicaid &gt;3rd party&gt;self pay</td>
<td>CHANGE Ambulatory Building at JHBMC</td>
</tr>
<tr>
<td>Elder House Call Program</td>
<td>Home Care</td>
<td>130 patients 1 geriatrician 10-12 residents</td>
<td>Homebound elderly. Lower to middle income</td>
<td>Based at hospital, but all visits in patients' homes</td>
</tr>
<tr>
<td>Johns Hopkins at Greater Dundalk (GD)</td>
<td>Community based</td>
<td>9,000 patients 5 internists 1 nurse practitioner</td>
<td>All ages Middle income HMO and fee-for-service</td>
<td>2.5 miles southeast of JHBMC</td>
</tr>
<tr>
<td>Johns Hopkins at Water’s Edge (WE)</td>
<td>Community-based</td>
<td>12,000 patients 4 internists</td>
<td>All ages including elderly</td>
<td>20 miles north of JHBMC</td>
</tr>
<tr>
<td>Johns Hopkins at White Marsh (WM)</td>
<td>Community-based</td>
<td>61,000 patients 10 internists 2 physician assistant 1 nurse practitioner</td>
<td>All ages Middle income</td>
<td>5 miles north of JHBMC</td>
</tr>
<tr>
<td>Comprehensive Care Practice</td>
<td>Community-based</td>
<td>5 internists 1 nurse practitioner 1 nurse educator</td>
<td>All ages All income levels Some focus on patients with HIV and chemical dependency issues</td>
<td>On JHBMC campus</td>
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All sites: 1) are staffed by full- or part-time faculty general internists; 2) provide first contact, comprehensive, longitudinal, and preventive medical care; 3) emphasize continuity of provider; and 4) have medical record systems that emphasize longitudinal care and facilitate confidential record review/audit (problem lists, medication lists, flow sheets, etc.). All sites admit patients to Johns Hopkins Bayview Medical Center.

The Randy Barker Medical Group (RBMG)

RBMG is part of the General Internal Medicine Practice. The practice includes all GIM faculty who follow their primary care patients at JHBMC. The practice utilizes Centricity, an electronic medical record (EMR) designed to support all aspects of longitudinal primary care.

About 1,600 patients are followed in RBMG. The average patient makes about 3 visits per year. About 20% of the patients seen per year are referred as new continuity-care patients from the medical wards, from other services, or from the Emergency Department. Another 10% per year are self-referred. The majority of RBMG patients have been followed in RBMG in previous years and continue to return for care. Many live and work locally and can be classified in low to lower middle income level groups. The
majority of these patients are covered by Medicare or Medical Assistance. Some are uninsured. Most have one or more chronic conditions, and many have a history of one or more hospitalizations.

RBMG sessions begin with a focused learning activity in the form of a “Clinical Pearls,” where each resident shares a clinical pearl they learned during their last clinic session.

Beginning July 2011, the RBMG house officers from each group (Monday, Tuesday, Thursday, Friday) were organized into four Practice Groups of 11 (two or more from PG 1-3) so that patients would be able to see a member of their Personal Physician’s Practice Group if their Personal Physician was not available.

The clinic is supervised by core senior faculty general internists (Drs. Randy Barker, Wendy Bennett, Belinda Chen, Laura Hanyok, David Kern, Leah Wolfe, Jessica Colburn, Brad Strunk, and Stasia Reynolds). General Internal Medicine Fellows, Geriatrics Fellows and Chief Residents also attend in the RBMG, so that for every session there are two attendings including one of the senior preceptors. Faculty preceptors are chosen because of their knowledge of ambulatory medicine, their teaching ability, and their enthusiasm. The preceptors are not scheduled to see patients and are fully available during each RBMG session for educational, consultative, and administrative support. Visit notes are reviewed by the faculty preceptor, with written or verbal feedback provided as necessary. Real time observation of housestaff by faculty preceptors, and a system of chart self audits, are part of the RBMG training experience.

Certified Medical Assistants are assigned to each resident to facilitate patient care during and between RBMG sessions.

The RBMG has a dedicated Social Worker, Ms. Joan Zelinka, who is available to see patients as needed, and who actively participates in the education of housestaff on numerous financial and psychosocial aspects of primary care.

Information derived from the computerized appointment system provides each resident with a regularly updated roster of all patients in his/her panel. Junior and senior residents take night and weekend call for the RBMG. Intercurrent and urgent care is provided by the PGY-3 “Doctor of the Day” when the patient’s primary resident provider is unavailable.

**Elder House Call Program**

PGY-2 and PGY-3 GIM residents provide longitudinal, comprehensive, primary care to patients in the Elder House Call Program. The aim of this is to provide routine and urgent care to frail homebound patients, and avoid unnecessary hospitalization.

The patient population consists of frail (25% annual mortality) mostly elderly, homebound persons who wish to remain at home and whose families are devoted to helping them. About 130 patients are in the program. Patient ages range from 21 to 95, with the mean about 75. They are referred from JHBMC, local physicians, families, social services agencies, and other hospitals in the area.

The Home Visiting Team includes a geriatrics faculty member, a first year geriatrics fellow, PGY-2 and PGY-3 general internal medicine residents (who provide continuity), a nurse, and a patient care coordinator. In addition, the program frequently utilizes the services provided by Johns Hopkins Home Care such as skilled nursing, personal care, physical therapy, occupational therapy, speech therapy, social work, and hospice care.

A faculty geriatrician or a geriatrics fellow supervises each house staff member. Initial orientation and the first several house calls are done jointly by a house officer and a member of the faculty or a fellow. The attending and fellow review resident visits after their completion. The attending or fellow is available to
the resident for phone consultation during the time of each visit and when addressing patient issues during non-CBP blocks.

**Community-Based Practices: Resident Firms**

PGY-2 and PGY-3 GIM residents develop a third longitudinal, comprehensive, primary care practice at one of the community-based sites (see Table). All sites are within a 30-minute drive from the hospital. These practices provide residents with some educational opportunities not available in their other practices due to differences in patient populations and practice site:

*Patient Mix* – In several of the sites, the patients tend to be younger, and of higher socioeconomic status than the RBMG and Home Care Patients. The Comprehensive Care Practice provides a continuity clinic for residents interested in providing primary care to underserved populations with a focus on patients with HIV and chemical dependency issues.

*Health Problems* – In many of the CBP sites, patients tend to have fewer active and complex medical problems. More time can be spent on preventive care, risk factor reduction, and behavioral counseling. There is a greater expectation that the primary care physician should manage common or minor dermatologic, musculoskeletal, podiatric, ophthalmologic, and otolaryngologic problems, do routine gynecologic care, and perform minor surgical procedures.

*Practice Management* – Most of the practices serve a predominantly, but not exclusively, managed care population of patients. Emphasis is placed on cost-effectiveness, efficiency, patient flow, and patient satisfaction.

*Faculty* – Preceptors at each of the sites are community-based GIM faculty who trained in the JHU/JHBMC Faculty Development Program. Residents work one-on-one with an assigned preceptor, whose own patient schedule is reduced for that session.
FOCUS ON MEDICAL EDUCATION

The Division of General Internal Medicine at Johns Hopkins Bayview Medical Center has a long record of innovation and accomplishments in clinical teaching, medical education, and curriculum development. The GIM Residency Program benefits directly from these efforts, some of which are highlighted below.

Faculty Development and Fellowships for Clinician-Educators

The Johns Hopkins Faculty Development Program for Clinician Educators was developed and is based here. It includes two separate, year-long courses for clinical teachers: Teaching Skills and Curriculum Development. Almost all of the GIM full-time faculty and the Community-Based Practice preceptors have participated in the Teaching Skills Course, and many have also completed the Curriculum Development Course.

The Division of General Internal Medicine at JHBMC also co-sponsors (with the Division of General Internal Medicine at Johns Hopkins Hospital) a two-to-three year GIM Fellowship in Medical Education. This fellowship trains internists to be excellent teachers and facilitators, developers and administrators of educational programs, and scholars in the field of medical education. Two Medical Education Fellows are based in the GIM Division at JHBMC, and interact with residents in the GIM Residency Program in a variety of roles. For housestaff interested in exploring GIM and other fellowship pathways, there are ample opportunities to interact with leaders and current participants in the Johns Hopkins-based fellowships.

Publications

Four important reference books were produced by faculty in the Department of Medicine and Division of General Internal Medicine:

*Principles of Ambulatory Medicine* (Nicholas Fiebach, David Kern, Patricia Thomas, Roy Ziegelstein editors; L. Randol Barker, Philip D. Zieve consulting editors) is the most widely used textbook of ambulatory internal medicine. It is in its seventh edition (2007). Many of the faculty at Johns Hopkins Bayview Medical Center are contributors.

*Curriculum Development for Medical Education: A Six-Step Approach* (David Kern, Patricia Thomas, Donna Howard, Eric Bass, editors) was published in 1998. It describes a widely known approach to medical education that was developed here.

*Kammerer and Gross’ Medical Consultation: The Internist on Surgical, Obstetric, and Psychiatric Services* (Richard Gross, Gregory Kaputo, editors) is a well-known textbook on general medical consultation. The lead editor, Dr. Gross, is one of the community-based faculty in the GIM Division, and several other faculty in the Department of Medicine are contributors.

*Practical Gynecology: A Guide for the Primary Care Physician* (Janice Ryden, Paul D. Blumenthal, editors) 2nd edition published in 2009 by the American College of Physicians. Dr. Ryden is one of the GIM community faculty.

In addition, members of the Division of General Internal Medicine and GIM residents have authored many articles on medical education and residency training. For a list of publications, please contact the GIM Division at 410-550-0512.
<table>
<thead>
<tr>
<th>FACULTY MEMBER</th>
<th>TITLE</th>
<th>PROFESSIONAL INTERESTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heather Agee, M.D.</td>
<td>Clinical Associate</td>
<td>General Internal Medicine, Women’s Health, Obesity, Systems quality improvement</td>
</tr>
<tr>
<td>(410) 550-0530</td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="mailto:Hmages23@jhmi.edu">Hmages23@jhmi.edu</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L. Randol Barker, M.D., Sc.M.</td>
<td>Professor of Medicine</td>
<td>Psychosocial medicine, Skills of ambulatory practice, Hypertension</td>
</tr>
<tr>
<td>(410) 550-0509</td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="mailto:lrbarker3@jhmi.edu">lrbarker3@jhmi.edu</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joseph Carrese, M.D.</td>
<td>Associate Professor of Medicine</td>
<td>Medical Ethics, Cross cultural issues, Stress in residency training</td>
</tr>
<tr>
<td>(410) 550-22476</td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="mailto:jcarrese@jhmi.edu">jcarrese@jhmi.edu</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colleen Christmas, MD</td>
<td>Assistant Professor of Medicine</td>
<td>Geriatrics, Quality of care measures, Medical education</td>
</tr>
<tr>
<td>(410) 550-4453</td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="mailto:cchristm2@jhmi.edu">cchristm2@jhmi.edu</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michael Fingerhood, M.D.</td>
<td>Associate Professor of Medicine</td>
<td>Chemical dependency, HIV infection</td>
</tr>
<tr>
<td>(410) 550-1134</td>
<td></td>
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<tr>
<td><a href="mailto:mifinger@jhmi.edu">mifinger@jhmi.edu</a></td>
<td></td>
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</tr>
<tr>
<td>Laura Hanyok, M.D.</td>
<td>Assistant Professor of Medicine</td>
<td>Medical Education, Primary Care, Interprofessional Education</td>
</tr>
<tr>
<td>(410) 550-2618</td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="mailto:lhanyok2@jhmi.edu">lhanyok2@jhmi.edu</a></td>
<td></td>
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</tr>
<tr>
<td>David E. Kern, M.D., M.P.H.</td>
<td>Professor of Medicine</td>
<td>Medical education, Management of primary care practices, Psychosocial and preventive medicine</td>
</tr>
<tr>
<td>(410) 550-1828</td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="mailto:dkern@jhmi.edu">dkern@jhmi.edu</a></td>
<td></td>
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</tr>
<tr>
<td>Steven J. Kravet, M.D.</td>
<td>Assistant Professor of Medicine</td>
<td>Hospital administration, Information management, Chemical dependency</td>
</tr>
<tr>
<td>(410) 550-0577</td>
<td></td>
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<tr>
<td><a href="mailto:skravet@jhmi.edu">skravet@jhmi.edu</a></td>
<td></td>
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<tr>
<td>Rachel Levine, M.D.</td>
<td>Assistant Professor of Medicine</td>
<td>Medical Education, Physician well-being, Personal and professional growth of physicians in training</td>
</tr>
<tr>
<td>410-550-0509</td>
<td></td>
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<tr>
<td><a href="mailto:rlevine@jhmi.edu">rlevine@jhmi.edu</a></td>
<td></td>
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</tr>
<tr>
<td>Dave Martin, M.D.</td>
<td>Assistant Professor of Medicine</td>
<td>Primary care medicine, Medical Education, Addiction, Physical Exam, Herbal Medicine</td>
</tr>
<tr>
<td>(410) 550-2999</td>
<td></td>
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</tr>
<tr>
<td><a href="mailto:lmartin7@jhmi.edu">lmartin7@jhmi.edu</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Darius Rastegar, M.D.</td>
<td>Assistant Professor of Medicine</td>
<td>Chemical dependency, HIV infection</td>
</tr>
<tr>
<td>(410) 550-2999</td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="mailto:drastega@jhmi.edu">drastega@jhmi.edu</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robert Shochet, MD</td>
<td>Assistant Professor of Medicine</td>
<td>Medical Education, Communication Skills, Learning Communities, Psychosocial Medicine</td>
</tr>
<tr>
<td>(410) 502-3737</td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="mailto:rshoche1@jhmi.edu">rshoche1@jhmi.edu</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Henry Taylor, M.D., MPH</td>
<td>Senior Associate</td>
<td>Community-Oriented Primary Care, Public Health</td>
</tr>
<tr>
<td>304-610-1139</td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="mailto:hgtaylor@jhspsh.edu">hgtaylor@jhspsh.edu</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leah Wolfe, M.D.</td>
<td>Assistant Professor of Medicine</td>
<td>Primary Care, Medical education, Physician-patient communication, Health care for the underserved, Women’s health</td>
</tr>
<tr>
<td>(410) 550-0512</td>
<td></td>
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<tr>
<td><a href="mailto:lewolf@jhmi.edu">lewolf@jhmi.edu</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scott Wright, M.D.</td>
<td>Professor of Medicine</td>
<td>Evidence-based medicine, Role modeling in medicine, Personal growth of physicians</td>
</tr>
<tr>
<td>(410) 550-0817</td>
<td>Director, Division of General Internal Medicine</td>
<td>Evidence-based medicine, Role modeling in medicine, Personal growth of physicians</td>
</tr>
<tr>
<td><a href="mailto:swright@jhmi.edu">swright@jhmi.edu</a></td>
<td></td>
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</tr>
</tbody>
</table>

For further information on the GIM track, please contact:
Colleen Christmas, MD
Program Director, Internal Medicine
Johns Hopkins Bayview Medical Center
Assistant Professor of Medicine
Division of Geriatric Medicine and Gerontology
Division of General Internal Medicine
Johns Hopkins University
Baltimore, MD
410 550-4453
cchris16@jhmi.edu