

The Robert Graham Center
Policy Studies in Family Medicine and Primary Care

Seventh Year Annual Report
June 2006



BACKGROUND

The Robert Graham Center: Policy Studies in Family Medicine and Primary Care is a research center created and operated to bring a family medicine and primary care perspective to policy deliberations at a federal and state level. The Robert Graham Center exists to improve individual and population health by enhancing the delivery of primary care. The Center aims to achieve this mission through the generation or synthesis of evidence that brings a family medicine and primary care perspective to health policy deliberations from the local to international levels.

The themes guiding the work of the Graham Center are:

- The Value of Primary Care
- Health Access and Equity
- Delivery and Scope of the Medical Home
- Healthcare Quality and Safety

The Center is sponsored by the American Academy of Family Physicians (AAFP), and its \$1.1 million budget is part of the regular operating budget of the Academy. This stable funding mechanism permits a concentration on production, instead of fundraising, and agile responsiveness to needs and opportunities. The Center generates revenues through grants and contracts that change from time to time and presently involve the Health Resources and Services Administration, the Agency for Healthcare Research and Quality, the Fairfax Family Medicine Residency Program, Georgetown University, and the University of Colorado.

In addition to its research endeavors, the Center operates the Washington Primary Care Forum and the Graham Center Internship Program, and collaborates with Georgetown University in fellowship training.

At the end of its seventh year of operation, the Graham Center's staff is comprised of 7 full time positions, and a Senior Scholar in Residence (Biographies in Appendix 1). Lisa Klein administers the Center and provides research assistance. Jackie McGee provides administrative assistance support to staff and reception functions. There are three analysts: Dr. Martey Doodoo, a senior economist and demographer, Dr. Stephen Petterson, senior health policy researcher, and Dr. Xingyou Zhang, health geographer and biostatistician. There are two physicians at the Center, the assistant director, Dr. Andrew Bazemore, and Dr. Bob Phillips, the director. In addition to this regular staff, the Center contracts with the University of Colorado for 25% of Dr. Larry Green's time as our Senior Scholar in Residence. The Center continues to support interns and fellows. The Center enjoys expert information technology support from the AAFP staff in Kansas City and Washington, D.C, including support for the Center's website. The AAFP also provides organizational support including communications and media assistance and human resources.

The Center is advised by a national advisory committee as listed in appendix 2. This diverse group of experts guides overall directions of the center and offers critique of its work.

REVIEW OF YEAR SIX**INTERNSHIP:**

The Graham Center continues to offer an internship program, which provides outstanding junior scholars with an immersion experience in health policy while broadening and enriching Graham Center ideas and projects. One of the goals of the internship program, confirmed by testimonials from past interns, is to seed primary care with leaders and researchers who experience and have an understanding of evidence-based policy development. We are preparing a compendium of past interns' experiences and reflections. In 2006, most of the expense of the program moved over to our endowment and is an option for giving to the AAFP Foundation. The internship program will be officially renamed the Larry A. Green Visiting Scholar Program on September 30, 2006. The Center hosted 9 interns and two additional resident visitors this year, representing a broad array of skills and interests:

#	Name	Topic	Affiliation
1	Kristine McCoy	Usual source of care cost variation, and mental health in primary care	UCSF
2	Giridhar Mallya	Medicare Part D	Thomas Jefferson Family Medicine/UPenn RWJ Clinical Scholar
3	Lars Peterson	Role of FPs in emergency care Impact of 80 hour work rule in family medicine	Case Western University
4	Joe Kiesler	Health Policy Elective Development: First Two Elective Participants from UC visited RGC later in the year	University of Cincinnati
5	Seth Flagg	Primary Care & Mental Health Carveouts	Tufts
6	Jay Crosson	Pay for performance measures and measurement comparisons US vs UK	UMDNJ and Rutgers University
7	Tamara Miller	FP's role in public health infrastructure	University of Arizona
8	Ron Chacko	Value of Primary Care Synopsis; Primary Care to Specialty Care Ratios & Health Outcomes	Northwestern University
9	Ge Lin	Age-adjustment of primary care HPSAs; Primary care to population ratios relationship to ambulatory care sensitive hospitalizations	Baylor University/ University of West Virginia

FELLOWSHIP:

The Center continued its partnership with Georgetown University in 2006-07, hosting its fifth consecutive Health Policy Fellow, Dr. Krishnan Narasimhan.

Name	Project Interest	Current Status
Krishnan Narasimhan, MD	The impact of family physicians in local economies; Primary Care Forum exploring possibilities of rebuilding and improving primary care access after Hurricanes Katrina and Rita	Impact paper in preparation. Forum drew a sizeable crowd and resulted in an Associated Press story

Approximately 30 of the Graham Center scholars and fellows met in October at the annual meeting of the North American Primary Care Research Group in Quebec and shared career developments, work in progress and possible collaborations.

PRIMARY CARE FORA:

The Center held 6 Washington DC Primary Care Forums at the Cosmos Club:

Forum Number	Topic	Speaker
Forum #44	Healthcare in America 2005, Initial Findings from HSC's Most Recent Community Site Visits	Paul Ginsburg, PhD
Forum #45	Improving Value: Clinical Performance Measurement and Improvement	Marc C. Rattray, MD
Forum #46	Panel Discussion: After Katrina: Healthcare Infrastructure in the Gulf	Panel: Ed Hill, MD AMA David Kibbe, MD AAFP Linda Magno CMS Karen DeSalvo, MD Tulane
Forum #47	The Workplace: A Medical Home Away From Home	Eric Hart, MD
Forum #48	Malpractice Reform: Evidence for Reforms that Make a Difference	Janelle Guirguis-Blake, MD Charles Ellington, MD, JD
Forum #49	Ways To Fund The Primary Care Medical Home Differently Than We Do Now	Francois De Brantes, eHealth Initiative

These breakfast forums draw 30-50 individuals from government (HRSA, AHRQ), academia (Georgetown University, George Washington University), professional societies (AMA, ACP, AAP, AAFP, nursing, psychology), and advocacy groups. RWJF Policy fellows attended prior to starting their Hill assignments, and there are usually a few attendees from out of town. The series has been so successful that it inspired the US Agency for Healthcare Research and Quality to develop a parallel series of forums and we now coordinate schedules, topics and invitation lists.

PUBLICATIONS:

The written word remains the primary product of the Graham Center, and since last year's report, 5 manuscripts/editorials and 15 one-pagers, were published. A synopsis of these publications is provided in appendix 3

Manuscripts:

1. **Green LA, Phillips RL.** The family physician workforce: Quality not quantity. *Am Fam Physician* 2005; 71: 2248-2253.
2. **Dodoo M, Roland M, Green LA.** UK Lessons for US primary care. *Ann Fam Med* 2005; 3:561-562.
3. **Phillips RL.** Primary care in the United States: Problems and possibilities. *BMJ* 2005; 331:1400-1402.
4. **Mallya G, Bazemore A.** Medicare Part D: Practical and policy implications for family physicians. *Am Fam Physician* 2006; 73:395-396.
5. **Zhang X, Christoffel KK, Mason M, Liu L.** Identification of contrastive and comparable school neighborhoods for childhood obesity and physical activity research. *Int J Health Geogr* 2006 Mar 30; 5:14.
6. **Guirguis-Blake J, Fryer GE, Phillips RL, Szabat R, Green LA.** The US medical liability system: Evidence for legislative reform. *Ann Fam Med* 2006; 4:240-246.

One-Pagers:

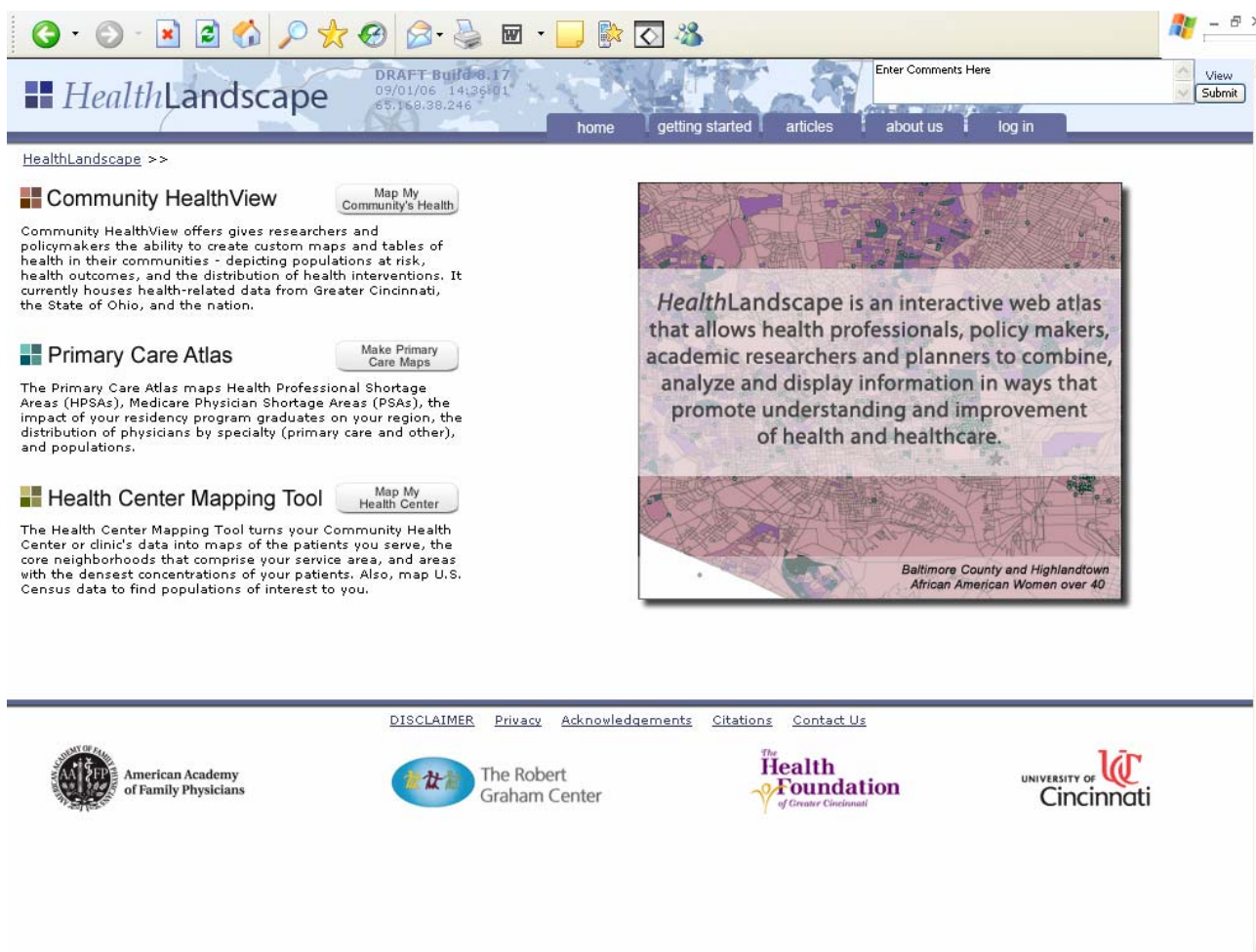
30	The Robert Graham Center (Green LA, Fryer GE, Ruddy GR, Dodoo MS, Phillips RL, McCann JL, et al.) Family physicians and the primary care physicians workforce in 2004. <i>Am Fam Physician</i> 2005; 71:2260.
31	The Robert Graham Center (Ruddy GR, Fryer GE, Phillips RL, Green LA, Dodoo MS, McCann JL, et al.) The family physician workforce: The special case of rural populations. <i>Am Fam Physician</i> 2005; 72:147.
32	The Robert Graham Center (Phillips RL, Fryer GE, Ruddy GR, McCann JL, Dodoo MS, Klein LS, et al.) Physician workforce: The special case of health centers and the national health service corps. <i>Am Fam Physician</i> 2005; 72:235.
33	The Robert Graham Center (Klein LS, Ruddy GR, Phillips RL, McCann JL, Dodoo MS, Green LA.) Who filled first-year family medicine residency positions 1997-2004? <i>Am Fam Physician</i> 2005; 72:392.
34	The Robert Graham Center (Ruddy G, Phillips RL, Klein LS, McCann JL, Dodoo MS, Green LA, et al.) Osteopathic physicians and the family medicine workforce. <i>Am Fam Physician</i> 2005; 72:583.
35	The Robert Graham Center (Dodoo MS, Fryer GE, Green LA, Phillips RL, Ruddy R, McCann JL, et al.) Patterns of visits to physicians' offices in the United States, 1980 to 2003. <i>Am Fam Physician</i> 2005; 72:762.

36	The Robert Graham Center (Fryer GE, Dodoo MS, Green LA, Phillips RL, Ruddy R, McCann JL, et al.) Number of persons who consulted a physician, 1997 and 2002. <i>Am Fam Physician</i> 2005; 72: 1007.
37	The Robert Graham Center (McCann JL, Phillips RL, O'Neil EH, Ruddy GR, Dodoo MS, Klein LS, Et al.) Physician assistant and nurse practitioner workforce trends. <i>Am Fam Physician</i> 2005; 72:1176.
38	The Robert Graham Center (Dodoo MS, Phillips RL, Green LA, Ruddy R, McCann JL, Klein LS. Physician workforce: Legal immigrants will extend baby boom demands. <i>Am Fam Physician</i> 2005; 72: 1459.
39	The Robert Graham Center (Dodoo MS, Green LA, Phillips RL, Fryer GE, McCann JL, Klein LS, et al.) Excess, shortage, or sufficient physician workforce: How could we know? <i>Am Fam Physician</i> 2005; 72:1670.
40	The Robert Graham Center (DeVoe JE, Dodoo MS, Phillips RL, Green LA. Who will have health insurance in 2005: <i>Am Fam Physician</i> 2005; 72:1989.`
41	The Robert Graham Center (Mallya G, Bazemore AW, Phillips RL, Green LA, Klein LS, Dodoo MS.) Medicare Part D: Who wins, who loses? <i>Am Fam Physician</i> 2006; 73:401.
42	The Robert Graham Center (Mallya G, Bazemore AW, Phillips RL, Green LA, Klein LS, Dodoo MS.) Out-of-pocket prescription costs a continuing burden under Medicare Part D. <i>Am Fam Physician</i> 2006; 73:402.
43	The Robert Graham Center (Mallya G, Bazemore AW, Phillips RL, Green LA, Klein LS, Dodoo MS.) Mind the Gap: Medicare part D's coverage gaps may affect patient adherence. <i>Am Fam Physician</i> 2006; 73:404.
44	The Robert Graham Center (Peterson LE, Bazemore A, Dodoo MS, Phillip RL.) Family physicians help meet the emergency care needs of rural America. <i>Am Fam Physician</i> 2006; 73:1163.
45	The Robert Graham Center (Bazemore A, Phillips RL, Dodoo MS, McCann JL, Klein LS.) The diminishing role of FPs in caring for children. <i>Am Fam Physician</i> 2006; 73:1518.

PROJECTS:

HealthLandscape

The Center also focused many of its resources on unpublished work in 2006. This included the building of a web-based mapping tool, led ably by Andrew Bazemore (See screenshot). This tool is designed to get around the limitations of our fixed staff size and give access to many of our data sets in a mapping environment. The site will go 'live' in the fall of 2006, and enter a period of beta-testing and staged rollouts to targeted user groups. This platform permits users to produce maps and tables of related data and geography. Individual physicians will be able to find out whether their practice is in a Medicare bonus payment area. Residency programs will be able to produce 'footprint' maps of counties dependent on their graduates for access to care. Foundations and communities will be able to upload and map community health data and produce maps of population health with the option of overlaying political boundaries or drawing on Census data. Community Health Centers will be able to upload their patient data and visually depict their community of patients and identify where other needs of their services exists.



Sustainable Growth Rate

The Graham Center also spent a great deal of time working with Academy staff and The Lewin Group studying options for redesigning payment systems to ensure access to primary care. We now have a much better appreciation of the complexity and pitfalls of the Medicare Sustainable Growth Rate formula and historical patterns of healthcare utilization it has produced.

IMPACT :

Below are an exemplary sample of the settings and fora in which the Graham Center staff have impacted the family medicine and primary care community over the past year:

Advisees

- | | |
|--------------------------|--|
| Grace Kuo, PharmD, | AHRQ K08 Baylor University |
| John Orzano, MD | AHRQ K08 UMDNJ/RWJ Medical School |
| Jennifer Devoe, MD DPhil | AHRQ K08 Oregon Health Sciences University |

Consultations/Invited Seminars

Institute of Medicine	The Learning Healthcare System: A Workshop of the IOM Roundtable on Evidence- Based Medicine
University of Cincinnati	Primary Care Leadership Group Care of Underserved Populations Course
Georgetown University	Introduction to Health Care course
George Washington University	Health Care Policy course
AAFP Residency Assistance Program	Stern Invited Plenary Lecture
Front Royal Residency Program	Health Policy lecture
Columbia University	Town Hall meeting on Primary Care (and consultation to President of Columbia University about Family Medicine)
STFM Patient Education Conference	Enhancing Research in Patient Education Seminar

Committees/Service

National Health Data Organizations	Conference Planning Committee
e-Health Initiative	Value Creation & Finance Workgroup
NAPCRG	Research Committee
Northeast Regional STFM 2008 Conference	Planning Committee Kickoff Meeting Host

State Chapters

Georgia AAFP	Footprint maps of Emory and Mercer residency programs for advocacy efforts
Ohio AAFP	Used HPSA and FP Withdrawal Maps to advocate for State residency training funding

Residency Programs

John Peter Smith, Texas	Data support for local advocacy campaign
KUSM-Wichita, Kansas	Graduate footprint analyses

Media/Press

Health Economics	Cited on Physician Workforce
Academy News Now	Many articles about publications and forums Letter to the editor praising National Health Service Corps study
Congressional Quarterly	Katrina Primary Care Forum
Family Practice Management	Caring for Children: Reexamining the Family Physician's Role
AMNews	Workforce study review and debate
This American Life	Panel discussion of healthcare in America
With Dennis Wholly	

AAFP

Government Relations	Sustainable Growth Rate formula analyses Congressional GPCI Floor removal analysis
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Multiple state HPSA withdrawal and residency footprint maps
TransforMed

Maps of demonstration site applicants to aid selection

CHiT

Mapping national EHR sites

AAFP Leaders

Slides, data, maps for Vice Presidents, EVP, President-elect, Past Board Chair

The Task Force on the Care of Children

The Task Force accepted our recommendations on child workforce and are being incorporated into AAFP policy.

Congress

Reintroduction of S40 (Lincoln, Bingaman, Murray, Landrieu, Boxer, Sarbanes, Collins)
Geriatric and Chronic Care Management Act

Robert Wood Johnson Foundation

Drs. Green and Dodoo continued their roles in the Prescription for Health research program and translating findings for general use

Practice Based Research Networks and Academic Primary Care Research

We are contractual partners with the Colorado Developing Evidence to Inform Decisions about Effectiveness (DEcIDE) Research Center (AHRQ funded) and are submitted to join the SNOCAPS USA (Colorado PBRN) PBRN resource center if AHRQ funds it. We continue to do cross-sectional analyses of national datasets, practice-mapping, analyses of primary data, and other support functions for practice based research networks across the US. Dr. Bazemore also serves on the Board of the local CAPRICORN network, Dr. Dodoo advises the New Jersey Family Physicians Research Network and Drs. Bazemore, Phillips, Zhang and Petterson continue to explore collaborations with and offer analytic support of the regional ACORN network.

YEAR EIGHT

Over the next year, the Graham Center will be seen as:

- A prodigious source of credible, timely, relevant and targeted evidence for health policy-makers
- A producer of research and advocacy tools/methods
- A creative team of researchers that can develop questions, do analyses, and digest complex evidence for a variety of audiences
- A place for new researchers to develop skills and projects
- A place for mature researchers to develop ideas
- A place for high risk collaborations and concepts to be discussed

We anticipate both delight and disappointment with HealthLandscape

It will be initially rolled out in September of 2006 but with certain limitations and ongoing design/management needs for the next year. We will likely begin planning for version 2.0 in late fall or early spring. We will build out collaborations with the National Association of Community Health Centers, Rural Health Center Association, AMA, and Family Medicine organizations to develop content and utility to a broader audience. We have been invited to submit a grant to RWJF and may explore funding from CMS (Medicare).

Data and evidence resources

We are finishing a core set of slides that present frequently requested data. These will have a regular update plan and be available on our website. We are also finishing a set of “core” articles that offer evidence that is frequently requested of us. It is now more than 80 articles long and is a searchable database. We will continue to maintain and add to this set which will also be accessible via the web with hyperlinks to article location or citation (we will also keep pdfs for all of them)

Implications of newly reconfigured staff

Mental Health:

Dr. Petterson has brought a strong focus on mental health, creating a new portfolio of work for the Graham Center. This is the most anemic piece of the Future of Family Medicine, an embarrassing ‘carve-out’ of care from primary care, and a very policy relevant topic. This will include a series of secondary studies but we are also exploring a grant-funded study in the AAFP National Research Network

Geospatial Analyses:

Dr. Zhang has greatly enhanced our capacity to explore and display the direct and organizing effects of geography on health and health care. We may quickly become a recognized center of excellence for geospatial analyses and for deriving new knowledge from public data sets, whose elements offer untapped linking due to their common geographies. Xingyou also offers real help in the next upgrade of HealthLandscape

International Health:

Dr. Bazemore is a national leader in international health and has many consultations ongoing. He is on the Board of the Global Health Education Consortium, and also of Shoulder to Shoulder International, the latter group supporting the global health education experiences and work of 6

departments of Family Medicine in Honduras, Ecuador, and Tanzania. He is the current STFM International Committee chair, is a guest editor of an upcoming special Global Health edition of *Family Medicine*, and will staff and assist the AAFP's International Health division in their Annual International Health Consultation in the Fall of 2006. He also has a 2-year consulting relationship with the University of Cincinnati Dept. of Family Medicine to teach and advise in their International Health-Care of Underserved Populations curriculum, and has inspired a new international health curriculum at the Family Medicine residency teaching program in which he practices.

Economics:

Dr. Dodoo is becoming less burdened with the general analytic needs of the Graham Center and will be exploring more novel economic analyses related to primary care.

Internship Program and Fellowship:

We will be renaming the Internship program, now the Larry A. Green Visiting Scholar program, and are compiling a compendium of the experiences of our interns for the first 7 years along with their quotes about how it affected their careers. We are working to secure funding for this now that we had to take it off of our operating budget and move it to our endowment. It continues to be a source of 25-50% of our products, a teaching/mentoring outlet for our staff, and a tremendous source of pride as these young researchers regale us with their news of research and career successes.

KEY GOALS FOR YEAR EIGHT INCLUDE:

- An initial 'launch' of HealthLandscape, our web-based data mapping tool
- Continued development of specific tools within HealthLandscape, and pursuit of funding partnerships for them
- Focusing our studies of the healthcare workforce and identifying policy options for alleviating distributional and access disparities
- Probing the ability to use geographically linked healthcare data to reveal neighborhood-level relationships that matter to people and their health
- Studying the patterns of care of people with poor mental health and what it may mean for clinical arrangements and healthcare funding
- Advancing understanding of the economics of primary care, and the policy options that they suggest for transforming practice
- Secure funding for our Visiting Scholar program and Health Policy Fellowship
- Exploring opportunities to collaborate on new studies of patient safety in the outpatient setting

CONCLUSION

At 7 years of age, the Graham Center has nearly completed an 80% turnover in its staff but is thriving and never so neatly outfitted to accomplish its mission. It continues to operate with a unique relationship to a (parent) professional medical organization that is unparalleled in Washington, DC. This relationship continues to be source of strength with increasing evidence of how the relationship promotes the translation of objective evidence into advocacy and policy. We also continue to mature and define the parameters of our relationship and of editorial independence in ways that can be challenging but also reinforcing of both. The Center continues to be an important source of evidence about the value of and opportunities for family medicine, primary care, and public health. The way in which we promote this evidence still leans heavily on publications and presentations, but is increasingly turning to “democratized” means of sharing data in customizable tools that don’t directly rely on our staff. We consider our visiting scholar programs to be a critical part of our mission and function, and among the most productive of our programs. The next year will continue to challenge us to find ways to support these. We welcome conversations with fellow researchers, policy makers, learners, and clinicians.

Appendix 1 Robert Graham Center Staff

Robert L. Phillips, Jr., MD, MSPH **Director**

Robert L. Phillips, Jr., MD, MSPH graduated from the University of Florida College of Medicine in Gainesville, Florida with honors for special distinction. He did residency training in family medicine at the University of Missouri-Columbia where he remained for a research fellowship, completing a Masters of Science in Public Health. He has served on the American Medical Association's Council on Medical Education and as the President of the National Residency Matching Program. His research interests include physician-health system interactions and their effects on quality of care, geographic information systems, and collaborative care processes. He is married to Katherine A. Phillips, PhD and they have two sons, Blake and Ethan.

In 2004, Dr. Phillips became the Director of the Robert Graham Center: Policy Studies in Family Practice and Primary Care, a research center sponsored by the American Academy of Family Physicians, dedicated to bringing a family practice and primary care perspective to health policy deliberations. He is on the faculty of the Department of Family Medicine at Georgetown University, in the School of Public Health at George Washington University, and practices in Fairfax, Virginia.

Andrew Bazemore, MD, MPH. **Assistant Director**

Andrew Bazemore, M.D. joined the Graham Center as its Assistant Director in July 2005. Prior to his current position, Dr. Bazemore was an Assistant Professor in the University of Cincinnati's Department of Family Medicine, where he also completed his residency training and faculty development fellowship. As a member of the Research Division as well as Director of the International Health Program, Dr. Bazemore developed interests in access to care for underserved populations both domestically and internationally, and on the application of geographic information systems to the study of the U.S. safety net.

A member of the American Academy of Family Physicians, he will practice and teach residents in Fairfax, VA, and serve on the faculty of the Department of Family Medicine at Georgetown University. Dr. Bazemore received his B.A. degree from Davidson College, his M.D. from the University of North Carolina, and completed his M.P.H. at Harvard University in 2005.

Martey S. Dodoo, Ph.D. **Senior Economist**

Martey S. Dodoo is the economic and demographic analyst at The Robert Graham Center. He has held previous economist and statistician positions with the PSC: Western Integrity Center, New Jersey Department of Health and Senior Services, and MDRC in New York. He has also served on the Economics faculty of Pennsylvania State University and the University of Ghana and has also taught courses in Statistics and Research Methods.

His current research interests are in health access and coverage, workforce, labor and demographic economics, program evaluation, patient safety and health quality, utilization, cost and fiscal impact analysis. He also has interests in the application of micro-economic modeling and econometrics, multilevel or HLM modeling techniques, and cost-benefit analysis in health care.

He earned his Ph.D. (Demography and Economics) degree from the University of Pennsylvania. He also has graduate degrees in Economics from the University of Western Ontario (Canada), the University of Ghana, and an undergraduate degree in Biochemistry. He is a member of the International Health Economics Association, the Society of Government Economists, and the Society for Clinical Data Management.

Stephen Petterson, Ph.D.
Senior Health Policy Researcher

Stephen Petterson is a Senior Health Policy Researcher at Robert Graham Center. Previously, as a sociologist and social statistician he was on the faculty at the University of Virginia and a researcher at the Southeastern Rural Mental Health Reserch Center. He has taught courses in statistics, welfare policy, problems of urban life and sociology of work.

His research interests are in national and state health policy, access to care and health insurance, the relationship between primary care and mental health treatment and global health. He has a particular interest in understanding the barriers faced by disadvantaged populations in the health care system.

He earned his Ph.D. (1993, Sociology) from the University of Wisconsin and an undergraduate degree from Haverford College (1984, Sociology and Anthropology).

Xingyou Zhang, Ph.D.
Health Geographer and Biostatistician

Xingyou Zhang is a Health Geographer and Biostatistician at Robert Graham Center. Previously, he was an Assistant Professor in Geography at Georgia Southern University and a Senior Research Scientist/Demographer at Children's Memorial Hospital/Northwestern Medical School in Chicago. He has taught courses in advanced Geographic Information Systems (GIS) and applied GIS.

His research interests are in spatial disparities in health and health care, geospatial technologies (GIS, Remote Sensing and GPS) for health applications, multilevel modeling, and Bayesian statistics. He is particularly interested in combining geospatial analytical tools and multilevel spatial structural equation modeling to better understand the spatial relationships between social and built environments, and health outcomes and primary care access and delivery.

He earned his Ph.D. in geography (2004) and M.S. in Statistics (2003) from the University of Cincinnati. He also has an M.S. in Geography (1996) from Lanzhou University and a B.S. in Geography (1993) from Hunan Normal University in China. He is a member of the Association of American Geographers (AAG) and the American Statistical Association (ASA).

Larry A. Green, MD
Senior Scholar in Residence

Larry A. Green, M.D. is Senior Scholar in Residence at The Robert Graham Center: Policy Studies in Family Medicine and Primary Care in Washington, D.C. He completed his residency in family medicine at the University of Rochester and Highland Hospital and entered practice in Arkansas in the National Health Services Corps, after which he joined the faculty at the University of Colorado. Dr. Green was the Woodward-Chisholm Chairman of the Department of Family Medicine at the University of Colorado for 14 years, and he continues to serve on the faculty of the University of Colorado, where he is Professor of Family Medicine and Director of the National Program Office for Prescription for Health. Prescription for Health is a five-year practice-based research initiative launched in 2002 that is focused on health behavior change, sponsored by the Robert Wood Johnson Foundation and the Agency for Healthcare Research and Quality. Much of his career has been focused on developing practice-based, primary care research networks. Dr. Green practices as a certified Diplomate of the American Board of Family Practice. He is a member of the American Academy of Family Physicians, the Society of Teachers of Family Medicine, the World Organization of Family Doctors, and the North America Primary Care Research Group. Dr. Green received his B.A. degree from the University of Oklahoma and his M.D. from Baylor College of Medicine, Houston, Texas. He is a member of the Institute of Medicine.

Lisa Klein
Office Administrator/Research Assistant

Lisa Klein was born and raised in Indiana. After graduating from Indiana University with degrees in History and Political Science, she entered the workforce as a retail manager in Kokomo, Indiana. In 1993, she moved to Indianapolis to take a position as Library Assistant with The American Legion Headquarters, the world's largest veterans' organization. While at the Legion, she was promoted to their Public Relations Division where she was the Administrative Assistant.

She came to the Graham Center in 1999 as the first employee. She organized the development of the Graham Center's Office. In 2003, she was promoted to Office Administrator and Research Assistant. She is married to Michael Klein and they have one son, Griffin.

Jackie McGee
Senior Administrative Assistant

Jackie grew up in North Reading, Massachusetts. She graduated from Peru Central High School in Peru, New York. Her undergraduate studies in business were in Long Island, New York. After graduating she began her employment with a private entrepreneur in the hospitality industry. During a career that spanned 24 years, she held such positions as human resources and benefits coordinator, director of marketing and director of finances.

In 2001, Jackie relocated to the Washington, DC/Maryland area to be closer to her family. After working in the retail warehouse industry, Jackie joined The Robert Graham Center in February of 2005.

Appendix 2

The Robert Graham Center: Policy Studies in Family Medicine and Primary Care

Advisory Board Members

Francois DeBrantes, M.B.A.
General Electric Company
Fairfield, CT

Ed O'Neil, Ph.D.
Center for Health Professions
University of California
San Francisco, CA

Ann-Louise Kinmonth, MA, MB, BChir, MSc, MD
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Richard D. Lamm
Institute for Public Policy
Former Governor of Colorado
Denver, CO

Alma Littles, M.D.
Florida State University
Tallahassee, FL

Appendix 3

MANUSCRIPTS

Green LA, Phillips RL. The family physician workforce: Quality not quantity. *Am Fam Physician* 2005; 71: 2248-2253.

This invited editorial is based off of Graham Center One-Pager #30 on physician workforce in 2004. The editorial was a means for the Graham Center to introduce the subsequent nine one-pagers on physician workforce.

Dodoo M, Roland M, Green LA. UK Lessons for US primary care. *Ann Fam Med* 2005; 3:561-562.

This commentary was published on the North American Primary Care Research Group (NAPCRG) pages of the *Annals of Family Medicine*. Drs. Dodoo and Green meet with the National Primary Care Research and Development Centre in Manchester, England to discuss the redesign of primary care in both countries. The primary purpose of the visit was to discuss GP compensation and the quality framework for GPs in the context of the new GP contract. This commentary provides six conclusions of what Drs. Dodoo and Green learned.

Phillips RL. Primary care in the United States: Problems and possibilities. *BMJ* 2005; 331:1400-1402.

This invited article was part of series in the *BMJ* on the UK's planned market reforms on the delivery of primary care. This article describes the market approach in the US primary care healthcare delivery workforce and suggests policy options to improve access to high quality primary care for all people in the US.

Mallya G, Bazemore A. Medicare Part D: Practical and policy implications for family physicians. *Am Fam Physician* 2006; 73:395-396.

This editorial was an introduction to the Graham Center's three one-pager's on Medicare Part D. The piece addresses the need for family physicians to be aware of the implications of Medicare Part D prescription drug benefit and how it will affect their patients. With family physicians being the primary care givers to the older population in the US, they should be aware the Part D will help many but there could be a risk of patients going without medications.

Zhang X, Christoffel KK, Mason M, Liu L. Identification of contrastive and comparable school neighborhoods for childhood obesity and physical activity research. *Int J Health Geogr* 2006 Mar 30; 5:14.

The neighborhood social and physical environments are considered significant factors contributing to children's inactive lifestyles, poor eating habits, and high levels of childhood obesity. Understanding of neighborhood environmental profiles is needed to facilitate community-based research and the development and implementation of community prevention and intervention programs. We sought to identify contrastive and comparable districts for childhood obesity and physical activity research studies. We applied GIS technology to manipulate multiple data sources to generate objective and quantitative measures of school neighborhood-level characteristics for school-based studies. We generated school neighborhood-level social and built environment indicators for all 412 Chicago public elementary school districts. The combination of GIS and

cluster analysis allowed us to identify eight school neighborhoods that were contrastive and comparable on parameters of interest (land use and safety) for a childhood obesity and physical activity study. The combination of GIS and cluster analysis makes it possible to objectively characterize urban neighborhoods and to select comparable and/or contrasting neighborhoods for community-based health studies.

Guirguis-Blake J, Fryer GE, Phillips RL, Szabat R, Green LA. The US medical liability system: Evidence for legislative reform. *Ann Fam Med* 2006; 4:240-246.

Despite state and federal efforts to implement medical malpractice reform, there is little evidence on which to base policy decision. This study uses data collected in the National Practitioner Data Bank for the period of 1999 to 2001 as a means to evaluate the effects of previous malpractice tort reforms on malpractice payouts and premiums. For every state and the District of Columbia, claims data were analyzed for number of malpractice awards, total amount paid, and average payment. States vary widely on all three measures. Premiums were assessed for three specialties (ObGyn, Surgery, internal medicine) using premium reports for each state. The reforms most associated with lower payments and premiums were total and non-economic damage caps. Mean payments were 26% lower in states with total damage caps and 22% less in states with non-economic damage caps.

One Pagers

#30: Family physicians and the primary care physicians workforce in 2004. *Am Fam Physician* 2005; 71:2260. (Green LA, Fryer GE, Ruddy GR, Dodoo MS, Phillips RL, McCann JL, et al.)

In 2004, there were 91,600 family physicians and general practitioners and 222,000 primary care physicians actively caring for patients, one for every 1,321 persons. These primary care physicians represent the largest and best-trained primary care physician workforce that has ever existed in the United States.

#31: The family physician workforce: The special case of rural populations. *Am Fam Physician* 2005; 72:147. (Ruddy GR, Fryer GE, Phillips RL, Green LA, Dodoo MS, McCann JL, et al.)

People living outside metropolitan areas, especially those living in rural counties, depend on family physicians. Resolving the disparities in physician distribution nationwide will require solutions to make rural practice a viable option for more health care workers.

#32: Physician workforce: The special case of health centers and the national health service corps. *Am Fam Physician* 2005; 72:235. (Phillips RL, Fryer GE, Ruddy GR, McCann JL, Dodoo MS, Klein LS, et al.)

Federally funded Health Centers and the National Health Service Corps (NHSC) depend on family physicians (FPs) and general practitioners (GPs) to meet the needs of millions of medically underserved people. Policy makers and workforce planners should consider how changes in the production of FPs would affect these programs.

#33: Who filled first-year family medicine residency positions 1997-2004? Am Fam Physician 2005; 72:392. (Klein LS, Ruddy GR, Phillips RL, McCann JL, Dodoo MS, Green LA.)

Graduates of U.S. allopathic schools have filled less than one half of the family medicine positions offered in the National Resident Matching Program Match since 2001. Overall fill rates in July have been relatively stable at approximately 94%. Family medicine has become reliant on international medical graduates, who in 2004 made up 38% of first-year residents.

#34: Osteopathic physicians and the family medicine workforce. Am Fam Physician 2005; 72:583. (Ruddy G, Phillips RL, Klein LS, McCann JL, Dodoo MS, Green LA, et al.)

Historically, osteopathic physicians have made an important contribution to the primary care workforce. More than one half of osteopathic physicians are primary care physicians, and most of these are family physicians. However, the proportion of osteopathic students choosing family medicine, like that of their allopathic peers, is declining, and currently is only one if five.

#35: Patterns of visits to physicians' offices in the United States, 1980 to 2003. Am Fam Physician 2005; 72:762. (Dodoo MS, Fryer GE, Green LA, Phillips RL, Ruddy R, McCann JL, et al.)

In the past quarter century, the number of office visits to physicians in the United States increased from 581 million per year to 838 million per year, with slightly more than one half of total visits since 1980 being made to primary care physicians. Most visits to primary care physicians were made to family physicians and general practitioners until mid 1990s, when visit to general internists and general pediatricians exceeded visits to FPs and GPs.

#36: Number of persons who consulted a physician, 1997 and 2002. Am Fam Physician 2005; 72: 1007. (Fryer GE, Dodoo MS, Green LA, Phillips RL, Ruddy R, McCann JL, et al.)

Most people in the United States consult a general physician each year, and some see other subspecialists. However, the proportion of people consulting a general physician who sees adults and children appears to be declining.

#37: Physician assistant and nurse practitioner workforce trends. Am Fam Physician 2005; 72:1176. (McCann JL, Phillips RL, O'Neil EH, Ruddy GR, Dodoo MS, Klein LS, Et al.)

The physician assistant (PA) and nurse practitioner (NP) workforces have realized explosive growth, but this rate of growth may be declining. Most Pas work outside primary care; however, the contributions of PAs and NPs to primary care and interdisciplinary teams should not be neglected.

#38: Physician workforce: Legal immigrants will extend baby boom demands. Am Fam Physician 2005; 72: 1459. (Dodoo MS, Phillips RL, Green LA, Ruddy R, McCann JL, Klein LS.)

The baby boom generation will place large demands on the Medicare program and the U.S. health care system. These demands may be extended by a large legal immigrant population that will become Medicare-eligible soon after the baby boom generation does. The U.S. health care system should be prepared for sustained stress from this aging population.

#39: Excess, shortage, or sufficient physician workforce: How could we know? Am Fam Physician 2005; 72:1670. (Dodoo MS, Green LA, Phillips RL, Fryer GE, McCann JL, Klein LS, et al.)

At least three models have been used to project the future physician workforce, and each produces different results. No physician workforce predictions can be relied on until there is more consideration and agreement on desired health outcomes and what physicians must do to achieve them.

#40: The. Who will have health insurance in 2005: Am Fam Physician 2005; 72:1989. (DeVoe JE, Dodoo MS, Phillips RL, Green LA)

If current trends continue, U.S. health insurance costs will consume the average household's annual income by 2025. As health care becomes unaffordable for most people in the United States, it will be necessary to implement innovative models to move the system in a more equitable and sustainable direction.

#41: Medicare Part D: Who wins, who loses? Am Fam Physician 2006; 73:401. (Mallya G, Bazemore AW, Phillips RL, Green LA, Klein LS, Dodoo MS.)

The Medicare Part D prescription drug benefit aims to relieve the burden of out-of-pocket prescription drug costs for persons older than 65 years, but its effects will vary. Persons with low income and those without prior prescription coverage are projected to save the most, whereas those who lose employer-based coverage are predicted to pay more for their existing regimens.

#42: Out-of-pocket prescription costs a continuing burden under Medicare Part D. Am Fam Physician 2006; 73:402. (Mallya G, Bazemore AW, Phillips RL, Green LA, Klein LS, Dodoo MS.)

Of 29 million expected Part D beneficiaries, 6.9 million are projected to have annual out-of-pocket medications expenses greater than \$750. Accounting for one fourth of all Part D enrollees, these beneficiaries also are most likely to have high aggregate health care costs, putting them at continued financial risk unless additional policy options are considered.

#43: Mind the Gap: Medicare part D's coverage gaps may affect patient adherence. Am Fam Physician 2006; 73:404. (Mallya G, Bazemore AW, Phillips RL, Green LA, Klein LS, Dodoo MS.)

Medicare Part D will lower medication expenditures for many older patients. However, its complex design incorporates a staggered series of cost-sharing mechanisms that create gaps in coverage and may have a negative impact on medication adherence.

#44: The family physicians help meet the emergency care needs of rural America. Am Fam Physician 2006; 73:1163. (Peterson LE, Bazemore A, Dodoo MS, Phillip RL.)

Ensuring access to emergency care in rural areas remains a challenge. High costs and low patient volumes make 100 percent staffing of rural emergency departments by emergency medicine residency-trained physicians unlikely. As rurality increases, so does the dependence on family physicians to provide quality emergent care.

#45: The diminishing role of FPs in caring for children. Am Fam Physician 2006; 73:1518. (Bazemore A, Phillips RL, Dodoo MS, McCann JL, Klein LS.)

Nationwide, family physicians deliver a smaller proportion of the outpatient care of children than they did 10 years ago. Millions of children depend on FPs for care. Family medicine should reevaluate how it will contribute to the care of the nation's children.