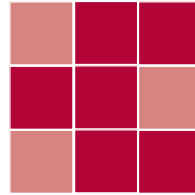
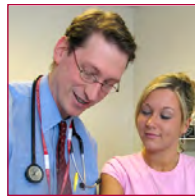


2011 CHA OVERVIEW



GR11-142



Cambridge Health Alliance



HARVARD
MEDICAL SCHOOL
TEACHING AFFILIATE

Welcome to Cambridge Health Alliance

Cambridge Health Alliance (CHA) is a nationally respected, innovative and academic healthcare system serving Cambridge, Somerville, and Boston's metro-north communities. With three hospital campuses, an extensive primary care network, a system-wide electronic medical record, and a largely employed medical staff, CHA provides high-quality care to a diverse patient population.

The Past

Cambridge City Hospital was founded in 1916 as a charity institution dedicated to the care of the city's indigent. In 1966, Harvard Medical School and the hospital affiliated to improve the quality of medical care and to provide a teaching and learning venue. Renamed The Cambridge Hospital, the institution committed itself to community-based care and engaged in the fledgling primary care movement.

Over the next 30 years, Cambridge Hospital staff embraced preventive care and renewed their focus on improving the health of all those in need.

The Birth of Cambridge Health Alliance

In 1996, CHA was formed as an independent public authority to enable the institution's expansion into adjoining cities. Since then, it has grown from a single site, municipally-owned hospital to a regional system that provides care at three community hospital campuses and 15 primary care practices. In a covenant with the Commonwealth, this growth included the creation of Network Health, the acquisition of Somerville and Whidden Hospitals and additional inpatient psychiatry units and the development of new health centers, all of which greatly improved access to care for underserved populations.

The Current Model

CHA provides a wide range of clinical services with a special focus on primary care, community wellness and prevention. In addition to its strong primary care network, CHA has a wide range of specialty services, innovative planned care programs for chronic disease, nationally-renowned behavioral health services and a three-site emergency department with 100,000 annual visits. Nearly all clinical services are operated under one unified hospital license and are vertically integrated, with department chiefs overseeing care in their respective areas. (A detailed overview of CHA services starts on page 6.)

The system also has a high degree of integration between its personal and population health functions. CHA operates the Public Health Department for the City of Cambridge and has a large community outreach team. Its public and community health staff work closely with CHA clinicians as well as municipal entities and community groups to address issues like breast health, obesity, and depression.

System Transformation

CHA is adapting to changes in the healthcare environment by developing a unique Accountable Care Organization (ACO) that will be a national model for publicly funded healthcare providers. This will include a flexible financial system to capitalize on global payments and other financial reforms. Extensive work is currently underway to support this model, including new programs to manage the care of complex patients, reducing costs while improving health status.

CHA is also transforming its clinical delivery model to leverage its strengths in primary care and behavioral health. This Patient-Centered Medical Home (PCMH) model of care, based on the TransforMED patient-centered model and the NCQA guidelines, has been under active development since 2008. In 2010, five CHA primary care sites were selected for Massachusetts' new Patient-Centered Medical Home Initiative and two were recognized as Level 3 Medical Homes by the NCQA, the highest designation. (More on CHA's Transformation can be found on page 5.)

A Commitment to Diverse and Underserved Patients

CHA's transformation will maintain access and enhance care for the large number of vulnerable and diverse patients in the region. It will continue to offer a robust interpreter services program, bilingual primary care providers (currently more than 40) and linguistic programs like the Haitian Mental Health Team (the 2010 Schwartz Center Compassionate Caregiver Award). Its award-winning Volunteer Health Advisor Program will continue to reach out to diverse populations to provide education and support. (An overview of CHA patient demographics is available on page 4.)

A Continued Academic Mission

CHA has a vibrant academic community with strong clinical, academic, and research programs. It sponsors undergraduate, graduate and continuing medical education through formal teaching affiliations with Harvard Medical School, Harvard School of Public Health, Harvard School of Dental Medicine, and the Tufts University School of Medicine. Particularly noteworthy is the Harvard-Cambridge Integrated Clerkship, an innovative third year experience with a "continuity of care" curriculum, and CHA sponsored, HMS-affiliated residencies in primary care medicine, adult and child psychiatry, psychology, a transitional internship and the Tufts family medicine residency.

CHA's academic community includes over 700 Harvard faculty who teach in ambulatory and hospital-based settings, and at its affiliated schools. This past year, CHA faculty have earned membership in the HMS Academy, received the Harvard Dean's Community Service Award, A. Clifford Barger Excellence in Mentoring Awards, HMS Faculty Prize for Excellence in Teaching and Harvard Macy Scholarships.

CHA also fosters an active and collaborative research environment with extensive work in the areas of health policy, occupational-environmental health, community-based participatory research and educational innovations. Key CHA-based research groups include the Institute for Community Health, which advances community research and evaluates health programs and policies; the Center for Multicultural Mental Health Research, which conducts innovative services research that impacts policy, practice and service delivery for multicultural populations; and the Division of Social Medicine, which assesses US health policies and lays the framework for future national health programs. (All three research entities are profiled starting on page 10.)

The Future

CHA is at an exciting stage of its history. Its clinical delivery system is embracing innovation and is well on its way to developing patient-centered medical homes at all community locations. It is in the midst of transforming into an ACO and capitalizing on national healthcare reform to ensure its sustainability. It is also poised to innovate, research and train the next generation of health professionals within the realm of community health and primary care and in context of the diverse communities it serves.

Section I – *Cambridge Health Alliance at a Glance* *

COMPONENTS

- 3 hospital campuses:
 - Cambridge hospital campus (Cambridge, MA)
 - Somerville hospital campus (Somerville, MA)
 - Whidden hospital campus (Everett, MA)
- 15 primary care practices
- Cambridge Public Health Department
- CHA Physician's Organization (CHAPO)
- Alliance Foundation for Community Health

DELIVERY SYSTEM PRIMARY SERVICE AREA

Cambridge, Somerville, Malden, Chelsea, Revere, Everett, and Winthrop, MA

NUMBER OF EMPLOYEES

Employees 4237
FTE positions 3197

CHA PHYSICIANS

Medical Staff 621
Active Medical Staff 452
Medical Students/Residents 169

KEY STATISTICS

Discharges 12,514
Patient Days 64,212
Avg. Daily Census 185
Avg. LOS (in days) 5
ED visits 96,712
Outpatient Visits 641,019
Deliveries 1,319

INPATIENT SERVICES

- Cambridge Campus
 - Medical/Surgical
 - ICU
 - OB/Nursery
 - Adult Psychiatry
 - Adolescent Psychiatry
 - Child Psychiatry
- Whidden Campus
 - Medical/Surgical
 - ICU
 - Geriatric Psychiatry
 - Adult Psychiatry

RESEARCH

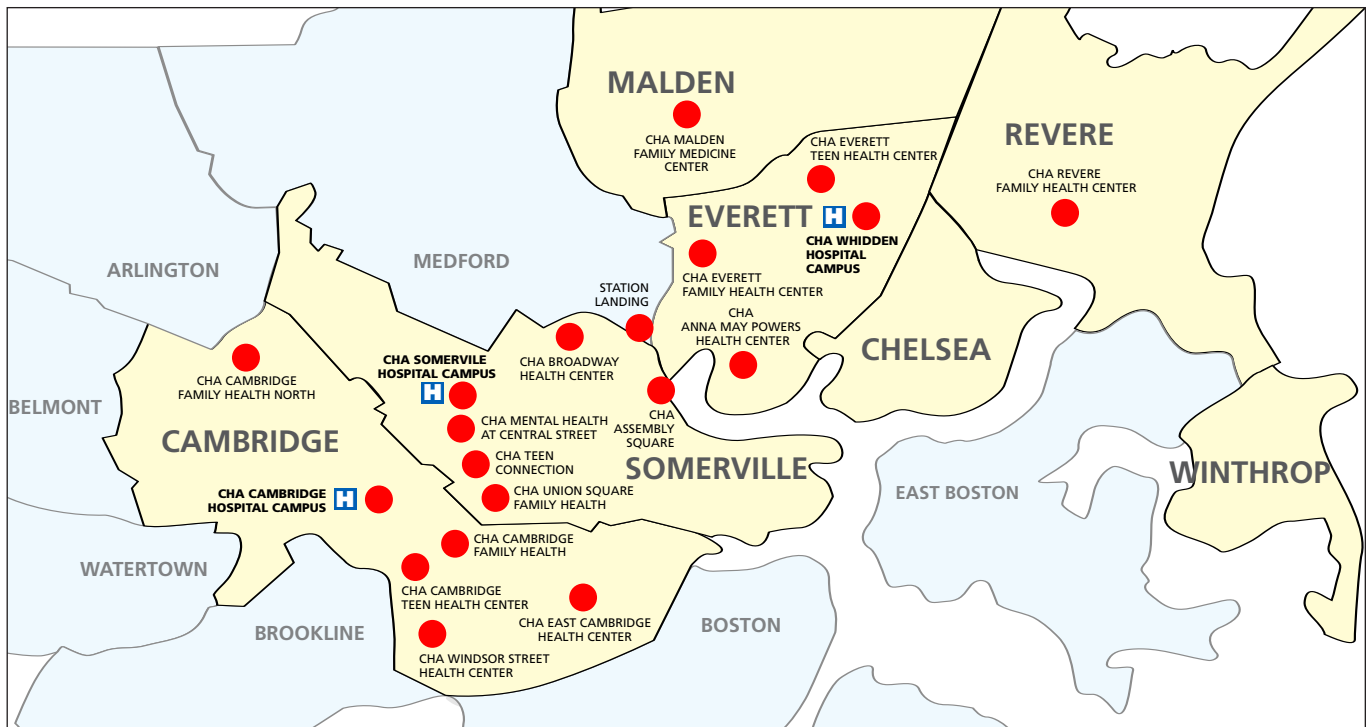
of research grant applications submitted 46
Active/funded research grants 55
Research expenditures \$5,572,373

* FY2010 Data

Section II – CHA Communities and Patient Demographics

The CHA Primary Service Area (PSA) includes Cambridge, Somerville, Malden, Chelsea, Revere, Everett and Winthrop, MA – a group of cities and towns with a wide range of socioeconomic, linguistic and cultural

identities. Several of these communities, particularly those in the metro-north region, have large underserved populations with higher-than-average poverty rates ¹.



CHA Locations

The most recent patient demographics confirm that CHA remains the provider of choice for local underserved individuals. As of 2009, 54% of CHA patients identified their race as White². FY2010 data show one third of patients

spoke a language other than English as their primary language³ and that a large majority of patients rely on public insurance sources⁴.

CHA Patients by Primary Language (FY10 Outpatient)

English	66%
Portuguese	13%
Spanish	9%
Haitian Creole	4%
Other	6%

CHA Patients by Insurance (FY10 Outpatient)

Managed Care	29%
Medicaid (including PCC)	19%
Medicaid Managed Care	15%
Health Safety Net	13%
Medicare	9%
Self Pay	9%
Other	6%

¹ 2008 Avon Foundation Proposal, CHA Department of Community Affairs.

² Staff.Net outpatient data. Report created by Irina Grubin, IT-Business Analytics. Accessed 2/22/11.

³ Staff.Net outpatient data. Report created by F. Bashar. Accessed 2/16/11.

⁴ Staff.Net outpatient data. Report created by F. Bashar. Accessed 2/16/11.

Section III – *Our Transformation*

Cambridge Health Alliance has begun its journey to become a national model for providing integrated, accountable care to a safety net population. This work will result in a higher-quality, more efficient healthcare system that is prepared for new payment models, able to provide better care at lower cost, and preserve patient access and services. This effort builds on CHA's integrated hospital and health center delivery system, employed physician model, strong academic programs, public health functions, and managed care expertise.

Key facets of this work have or will include:

- **Health System Reconfiguration.** In FY 2009 – 2010, CHA made significant changes across its system to increase efficiency and preserve core services. In collaboration with the state, CHA transitioned from 3 to 2 inpatient hospital facilities, 'right-sized' its inpatient and outpatient mental health services, and consolidated primary care sites and clinics, while retaining the essential primary, behavioral health, and acute continuum of care.
- **Service Improvements.** CHA began an emergency department redesign in 2006 that has greatly reduced wait times and length of stay in its three ED locations, while greatly improving patient satisfaction. It has also implemented a system-wide electronic medical record with e-prescribing and a patient portal.
- **Expertise with Global Payments.** CHA is currently piloting a global payment initiative with Network Health for Medicaid managed care and Commonwealth Care shared members. It also intends to be an early adopter of integrated payment models for Medicaid and other low-income care.
- **Patient-Centered Medical Homes:** Building on its advancing PCMH care model (with two CHA sites having received NCQA level three recognition), CHA plans to continue the spread of this model across its ambulatory network.
- **Complex Care Management:** Using the planned care team approach, CHA is working with patients at its initial medical home sites to improve health, manage chronic and intensive conditions, and reduce low-acuity non-emergent emergency visits and readmissions. This includes expanding its Chronic Disease Management Diabetes Initiative to reduce the burden of illness and costs. By working with Network Health, CHA has also learned what supports are needed to manage the health of safety net populations. This includes leveraging case management and community resources, and developing extensive datasets to better manage referrals and keep patients more closely engaged with their primary care teams.
- **Prevention of Readmissions:** CHA plans to further improve the transition and coordination of care from inpatient medical care to home care, post-acute care, and behavioral health follow-on care so that patients are supported in areas such as medication management, appointment follow-up, and patient education.
- **Integration of Physical and Behavioral Health:** Building on its major behavioral health role and service excellence, CHA plans to 1) continue co-locating and integrating mental health services in primary care settings and 2) develop a new "mental health care home" model for intensive mental illness with primary care clinicians within a psychiatry site.
- **Integrated Continuum of Care for Medical and Behavioral Health:** CHA will develop an integrated continuum of care (post-acute care, home-based care, community-based care, and tertiary relationships) for patients with significant medical and mental health needs. This also includes the deployment of a "transitions" clinic to help acutely ill patients integrate with behavioral health services within seven days.
- **ACO Infrastructure:** CHA plans to develop infrastructure and administrative supports to manage within new integrated care and global payment frameworks.

Section IV – *Scope of Services*

CHA provides a wide range of clinical services with a special focus on primary care and prevention. In addition to its strong primary care network, CHA offers excellent specialty services, innovative planned care programs for chronic disease, nationally renowned behavioral health services and a three-site emergency department with 100,000 annual visits.



- CHA offers **Primary Care** in a variety of settings. The system currently operates 15 local practices, including teen health centers in three area high schools. Additional services are available for some of the region's most vulnerable patients: seniors (House Calls, Senior Care Program, Elder Service Plan), the homeless (Healthcare for the Homeless program) and patients with HIV/AIDS (Zinberg Clinic).

With more than 100 providers, CHA offers the entire spectrum of primary care specialties: Pediatrics, Internal Medicine, Geriatrics and Family Medicine. These staff care for more than 100,000 patients during more than 250,000 annual visits.

All CHA primary care sites use the Epic Electronic Medical Record and many are now involved in the development of the patient-centered medical home. CHA also offers planned care programs for childhood asthma, diabetes and depression at many of its primary care sites.

- **Specialty care** is available for a wide range of health needs through the departments of Medicine, Surgery, Orthopaedics and others. Services are available at each hospital and some community sites. Highlights include:

- An excellent general surgery team, with board certified and fellowship trained staff. CHA has a relationship with BIDMC and is a rotation site for its surgery residency.
- A nationally accredited Breast Center.
- A multidisciplinary Sports Medicine team serving CHA patients, Boston's professional lacrosse and soccer teams and many local universities and schools.
- A state-of-the-art GI Center at the Somerville Hospital campus.
- An ACS-recognized Community Hospital cancer program.
- Infectious Disease care with a dedicated HIV clinic, TB clinic and Hepatitis service.
- Pediatrics specialty clinics with MGH physicians at the Cambridge Hospital campus. CHA has a longstanding relationship with MGH and Mt. Auburn Hospital for pediatric care.
- Cardiology care with interventional procedures done at MGH and Mt. Auburn Hospital.

- CHA has one of the state's largest **Emergency Departments**, seeing 100,000 patients annually. Emergency care is available at each hospital campus (Cambridge, Somerville and Whidden), with all sites designated as a primary stroke service. CHA also operates a stand-alone Psychiatry Emergency Service at the Cambridge campus and separate Pedi exam rooms at the Cambridge ED staffed by MGH residents. Over the past 5 years CHA has implemented a full-scale ED redesign to reduce overcrowding and improve patient flow - the largest process improvement program in CHA's history. This highly successful effort included the launch of Epic ASAP, a patient triage and tracking system that coordinates care among providers, and new rapid assessment protocols.

Section IV – Scope of Services

These changes resulted in major improvements in ED efficiency, quality and patient experience of care. Today, most patients are seen within 5 minutes of arrival, versus more than 90 minutes before the redesign, and the average length of stay has decreased by 13% to 2.5 hours. The percentage of patients who leave without being seen has fallen from 4.2% to a record .83%. These data resulted in CHA being named a national model for emergency care by the National Association of Public Hospitals and Health Systems.



- **Women's Health** services are provided by the Departments of Obstetrics & Gynecology and Family Medicine for patients across the system. Services include routine gynecology, specialty care and maternity care, with deliveries at the Cambridge campus.

CHA has two childbirth locations. The Maternity Suite offers a traditional, in-hospital experience for families and has more than 1200 annual births. The Cambridge Birth Center offers women with low-risk pregnancies natural childbirth from Certified Nurse Midwives. In 2010, the Cambridge Birth Center was named an international Baby-Friendly birth facility, a designation from the United Nations Children's Fund and the World Health Organization.

CHA also has a nationally accredited Breast Health program funded in part by the Avon Foundation and the Susan G. Komen Foundation.

- The **CHA Department of Psychiatry** has a national reputation for outstanding clinical care and is a two-time recipient of the American Psychiatric Association Gold Achievement Award, which recognizes national models of creative service delivery. Its multidisciplinary staff offers comprehensive services to evaluate and treat people with medical and psychological problems, developmental impairments, learning, emotional or behavioral disorders, and/or addiction issues. This includes emergency care, designated inpatient psychiatric services for children, adolescents, adults, and seniors, and the full spectrum of outpatient care for all ages.

CHA also offers specialty programs in multiple languages, based on specific health needs. One such effort, the Haitian Mental Health Program, earned the 2010 Schwartz Center Compassionate Caregiver Award for outstanding care.

- The **CHA Department of Radiology** helps maintain and restore the health of patients using diagnostic tools and therapeutic interventions. Over the past decade, Radiology has effectively leveraged technology to improve patient care and operations. As a result, it has become a highly efficient, state-of-the-art service with a 100% digital and paperless environment (PACS) and voice recognition for instant report turnaround.

CHA's expert Radiology team works across the system to enhance patient care in all departments. It has also helped make major improvements in breast health services across the system. CHA was one of the first facilities in the area to have digital mammography at all sites and in 2009 was named a Breast Imaging Center of Excellence by the American College of Radiology. CHA has now improved access to breast care and outcomes for thousands of diverse, underserved women in its service area.

Section V – Quality of Care

CHA has high standards for health care quality and has dedicated extensive resources into improving its delivery system. This includes major investments in medical information technology, improving its policies and procedures and enhancing overall patient safety efforts. The system is now performing well in key strategic areas including all CORE, HEDIS, and other publicly reported measures, patient safety indicators, and key operational measures of care integration and coordination. Highlights are as follows:

CORE Measures

- Since 2005, the care teams at CHA have achieved a 40% improvement in pneumonia care, 75% improvement in heart failure care and 20% improvement in heart attack care (AMI).

HEDIS Indicators

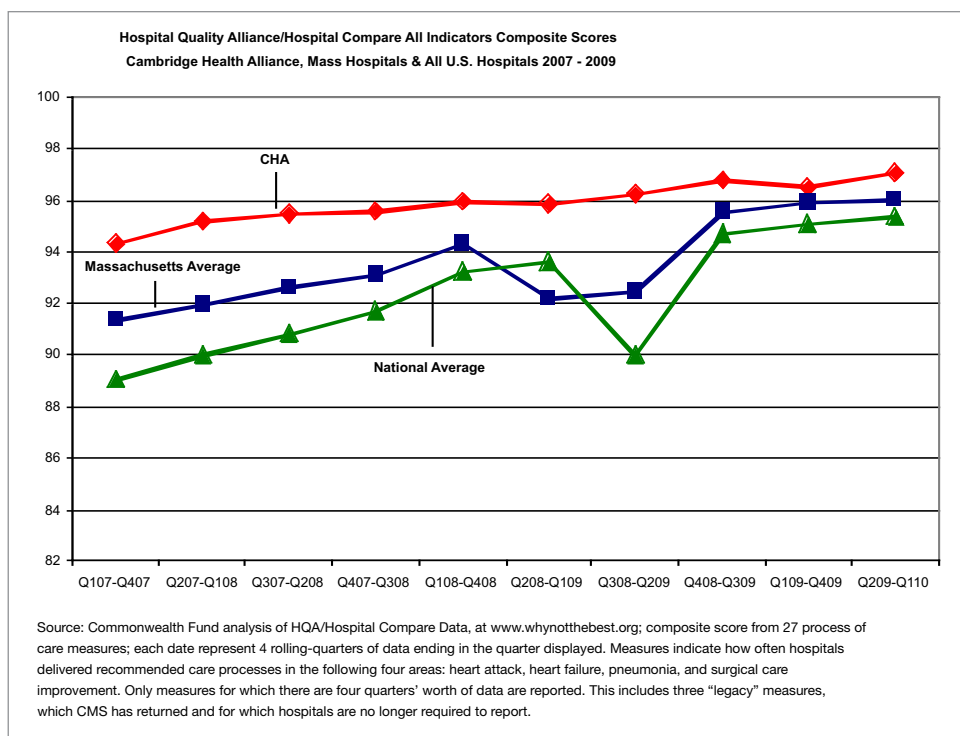
- CHA's ambulatory care quality results are in the 90th percentiles when compared to both regional and national benchmarks for performance in Medicaid MCOs for the following indicators:
 - Breast Cancer screening rates
 - 30-day and 7-day mental illness hospital follow up
 - Effective continuation phase antidepressant medication management

For pediatric patients:

- Well visits for children at 15 months and 3-6 years
- Appropriate testing for children with pharyngitis, and with Upper Respiratory Infection
- Appropriate use of imaging for Low Back Pain
- Appropriate use of Beta Blocker medication
- Appropriate use of antibiotics for adults with bronchitis
- For patients with diabetes: twice yearly A1c testing, appropriate LDL screening, and monitoring for diabetic neuropathy

CHA's overall performance has also been high (see chart below). In fact, CHA has been tracking in the top 25% of hospitals nationwide for these measures and continues to outperform the average of all Massachusetts hospitals. It continues to exceed the national average for all Safety Net hospitals by a wide margin.

External validation of this work has come from several health insurers. In 2010, CHA was named an Enhanced Benefits Tier provider by Blue Cross Blue Shield of Massachusetts. It was also named to the Harvard Pilgrim Healthcare Hospital and Pediatric Honor Rolls.



1. Innovation in Medical Education – the Cambridge Integrated Clerkship

Over the last decade, CHA faculty have created and nurtured a new model for third year medical education called the Cambridge Integrated Clerkship (CIC). First piloted in 2004, the CIC has become a highly sought alternative experience for third year Harvard medical students. Its “continuity of care” curriculum, which aims to emphasize whole patient care and promote professionalism and connection with patients, has been recognized nationally and internationally for innovation⁵.

Each year, twelve students are enrolled in the program and assigned a cohort of more than 75 patients. Students follow their patients longitudinally during a full year and through all major venues of care. Weekly case-based tutorials integrate the basic sciences with clinical medicine. An additional social science curriculum includes self-reflection, communication skills, ethics, population sciences and cultural competence. Year-long mentoring and extensive interactions with a multidisciplinary faculty ensure the progressive advancement of students’ clinical competencies and professional development.

Evaluations show that CIC students report increased connection with patients, greater self-awareness and a greater responsibility for their own learning when compared to other students⁶. They also perform better on NBME shelf exams, retain information longer and maintain the idealism that drew them to the profession. (More details available in Appendix I on page 25.)

In addition to contributions at HMS, the CIC has spawned an international movement that is changing the face of medical education. Innovative longitudinal clerkships have recently been created in Australia, Canada, South Africa and the US – most recently at Kaiser Permanente in California (launched in April 2011⁷). The CIC has been the subject of numerous media articles and was highlighted in the 2010 book *Practical Wisdom*⁸.

CHA faculty remain active participants in the international Longitudinal Integrated Clerkship Consortium, consulting on program development around the globe.

CIC Student Excerpts

“Imagine being welcomed in any department or exam room at any hour of the night or day. Imagine the feeling of ownership and responsibility that comes with being paged by an attending emergency medicine physician who just met and now wishes to discuss your patient – at a time when most third year medical students’ utility is relegated to collecting vital signs before rounds or retracting during a long operation.”

“The true weight and wonder of a physician’s job come not from thousands of pages of required readings or years spent awake on the wards, they come from moments when patients and loved ones trust us to care. When they trust us

to be the people our mothers and grandmothers knew we could be and that our brothers and husbands think we are. We all fall short, and always will. But trying is just as much a core discipline as Medicine or Surgery. And I remain grateful to my patients and indebted to the Cambridge Integrated Clerkship for teaching me how.”

“I became the doctor I am today while a student at Cambridge.”

Dante Foster, MD, HMS Class of 2006
Fellow, Brigham and Women’s Hospital
Center for Surgery and Public Health

⁵ Most recently in the 9/3/10 NY Times. See http://www.nytimes.com/2010/09/03/nyregion/03medschool.html?_r=1

⁶ Academic Medicine, April 2007, Vol. 82, No. 4

⁷ http://mydoctor.kaiserpermanente.org/nca/facilities/region/eastbay/area_master/about_us/KLIC.jsp

⁸ Schwartz B, Sharpe K. Practical Wisdom: The Right Way to Do the Right Thing. Riverhead, December 2010.

2. *Building a Nexus of Community Health Research – The Institute for Community Health (ICH)*

The institute for Community Health (ICH) led by Dr. Karen Hacker, executive director and HMS Associate Professor, is a unique collaboration among three Harvard teaching hospitals to improve the health of Cambridge, Somerville, Everett and Malden as well as surrounding communities. ICH was founded in 2000 by CHA, Mount Auburn and Massachusetts General Hospitals.



Karen Hacker, MD
HMS Associate
Professor of Medicine

The goals of ICH are to advance community health research; promote community health education and training; develop community action programs and policy; and forge linkages among health care systems, community partners and academic institutions with shared community health objectives. ICH works in communities with ethnically, economically and culturally diverse populations. It is committed to understanding and respecting these individuals and families, safeguarding privacy and building lasting relationships among partners.

ICH utilizes a community based participatory research approach, has led the CBPR initiative of Harvard Catalyst for the last three years, and is deeply involved in primary care research. Staff of ICH represents a multi-disciplinary group of nutritionists, primary care physicians, epidemiologists and anthropologists. Close collaborations also exist with Harvard faculty at Massachusetts General, Brigham and Women's and Children's hospitals and with the Harvard School of Public Health. ICH has obtained over 100 grants and contracts in collaboration with community partners to support community health improvement. Sources range from the Maternal and Child Health Bureau of HRSA, to Robert Wood Johnson, the US Department of Education, NIH and others.

Projects have focused on a variety of topic areas driven by community need and include:

- **Healthy Living Cambridge:** a community based project focused on preventing childhood obesity. With strong relationships with schools and community based organizations, BMIs are available on all Cambridge school children and support a system of surveillance that allows the city to track its progress. Recently ICH has focused on BMI disparities.
- **Integrated behavioral and physical health care for children:** working with community partners and CHA providers, ICH led a project to screen children for behavioral health issues and worked with MassHealth to implement this across the state. Today over 10,000 children have been screened and the state has adopted mandatory screening for Medicaid children.
- **Local Public Health infrastructure:** ICH is working with 351 Massachusetts cities/towns to improve public health infrastructure. Starting with emergency preparedness and moving to regionalization, ICH has led the evaluation of these efforts and is currently acting as the evaluator for the CDC state initiative around public health regionalization.
- **Harvard Catalyst:** ICH is the lead organization for the CBPR initiative of the Harvard Catalyst. This has included providing education, consulting and technical support to Harvard investigators and community partners interested in community engaged research.
- **Primary care research:** ICH has supported and initiated a number of primary care research projects with CHA including domestic violence screening, building an ADHD registry, HIV care and assessing the use of language services among diabetics. ICH is now co-leading the "safety net" infrastructure initiative of Harvard Catalyst with colleagues at Brigham and Women's Hospital to build capacity for research in safety net provider organizations including CHA and community health centers.

3. Investigating Health Disparities – The Center for Multicultural Mental Health Research (CMMHR)

The CMMHR is a unique center conducting vital research on health service disparities. Led by Dr. Margarita Alegría, HMS Professor of Psychiatry, the CMMHR (along with international collaborators) are undertaking major investigations to understand ethnic and racial disparities in care to inform policy, practice and delivery of mental health services.



Margarita Alegría, PhD
HMS Professor of
Psychiatry

The center is also a breeding ground for young mental health researchers. In the past 5 years, junior investigators mentored through the Center have participated as authors in more than 30 published peer reviewed journal articles and have generated an impressive array of grant funding. Many are currently undertaking independent research projects both at the Center and in faculty positions.

Current center highlights:

- **Reducing Ethnic and Racial Bias in Screening for Psychiatric Disorders in Adolescents.** Funded through the extremely competitive 2-year NIH Challenge grants, part of the American Recovery and Reinvestment Act of 2009, this study is designed to improve the effectiveness of identification, referral and screening for mental health disorders potentially associated with ethnic/racial disparities in adolescent receipt of mental health care.
- **The EXPORT project** (Excellence in Partnerships for Community Outreach, Research on Health Disparities and Training). This Comprehensive Research Center of Excellence continues recent work with the University of Puerto Rico and Harvard Medical School to understand the multiple and complex factors contributing to

mental health disorders (including substance abuse) and pediatric asthma disparities among mainland and island Latino populations. The overall goal is to generate and test models of improved service delivery to eliminate these disparities. It is funded by the National Center on Minority Health and Health Disparities.

- **The Advanced Center for Mental Health Disparities** is a five year project funded by the National Institute of Mental Health to understand factors which affect mental health service disparities in Latinos and to generate knowledge of how best to eliminate them.

The Center has been recently awarded two new grants, addressing research and mentoring to improve mental health care for ethnic/racial minorities:

- **The CERED** study, funded by the NCMHD, is a two year project aimed at filling the knowledge gap of Comparative Effectiveness Research for mental health care for Latinos. The research team, with Dr. Alegría as a Co-Principal Investigator, will work in collaboration with the University of Puerto Rico and will expand the UPR/CHA Research Center of Excellence, provide training for junior investigators and clinicians, and help build on the data infrastructure and research base for CER for Latinos.
- **The Mentoring Training grant**, funded by the Robert Wood Johnson Foundation (RWJF), looks to expand the diversity of perspectives that inform RWJF program strategy and introduce new researchers and scholars to RWJF from historically underrepresented research communities.

4. The Division of Social Medicine – Influencing Health Policy and Advocacy for the Underserved

CHA has a dedicated faculty that has made major contributions to healthcare advocacy and policy. In addition to their commitment to their patients and teaching prowess, these physicians show an enthusiasm and creativity in research that has transcended academics, influenced national policy decisions, and permeated popular culture.

Key highlights from the last 24 months include:

- A 2010 study that details the extent to which life and health insurance companies are major investors in the fast food industry – to the tune of nearly \$2 billion. Initially published in the *American Journal of Public Health*⁹, this research was touted by *CNN*¹⁰, the *Wall Street Journal Blog*¹¹, all four major networks, and many other venues.
- A 2010 study that indicated that Medicaid recipients and the uninsured get substandard migraine care. Initially published in *Neurology*¹², this research was profiled online in *Time Magazine*¹³, *Boston.com*¹⁴, and dozens of health-related and local news outlets.
- A 2010 study showing that the majority of drug studies fail to directly compare effectiveness of available treatments, the first formal investigation of drug analyses. Originally published in *JAMA*¹⁵, it was covered by news outlets as varied as *Scientific American*¹⁶, *Newsweek*¹⁷, and the *Huffington Post*¹⁸.
- A 2010 study that identified that poor breastfeeding rates cost the US healthcare system \$13 billion annually. Originally published in the journal *Pediatrics*¹⁹, this important finding was covered by all major news outlets, in popular outlets like the *Huffington Post*²⁰, and was cited by the US Surgeon General²¹ in calling for increased breastfeeding by new mothers.
- A 2009 study showing that uninsured American adults with chronic illnesses like diabetes or high cholesterol often go undiagnosed and undertreated, leading to an increased risk of costly, disabling and even lethal complications of their disease. Originally published in *Health Affairs*²², this study was highlighted in *US News and World Report*²³ and many other outlets.

CHA is also incorporating advocacy into the medical education curriculum. For example, each student in the Cambridge Integrated Clerkship does a health advocacy project as part of their Patient-Doctor III tutorial.

Danny McCormick, MD, MPH, also directs an HMS elective on Health Advocacy that is open to Harvard medical and public health students and CHA post-graduate trainees.

⁹ Life and Health Insurance Industry Investments in Fast Food." *American Journal of Public Health* Vol. 100, No. 6

¹⁰ http://articles.cnn.com/2010-04-15/health/insurance.fast.food.stock_1_fast-food-investments-fast-food-industry-fast-food-stock?_s=PM:HEALTH

¹¹ <http://blogs.wsj.com/health/2010/04/15/harvard-docs-to-insurance-companies-drop-the-big-macs/>

¹² <http://www.neurology.org/content/74/15/1178.abstract>

¹³ <http://healthland.time.com/2010/04/12/uninsured-medicaid-patients-receive-poor-migraine-care/>

¹⁴ http://www.boston.com/news/health/blog/2010/04/uninsured_migra.html

¹⁵ <http://jama.ama-assn.org/content/303/10/951.abstract>

¹⁶ <http://www.scientificamerican.com/article.cfm?id=comparative-effectiveness>

¹⁷ <http://www.newsweek.com/blogs/the-human-condition/2010/03/11/smackdown-why-we-need-more-head-to-head-drug-trials.html>

¹⁸ http://www.huffingtonpost.com/michael-hochman/in-defense-of-comparative_b_564678.html

¹⁹ <http://pediatrics.aappublications.org/cgi/content/abstract/125/5/e1048>

²⁰ http://www.huffingtonpost.com/2010/04/05/breastfeeding-study-on-be_n_525180.html

²¹ <http://www.hhs.gov/news/press/2011pres/01/20110120a.html>

²² <http://content.healthaffairs.org/content/28/6/w1151.abstract>

²³ <http://health.usnews.com/health-news/diet-fitness/diabetes/articles/2008/08/04/one-third-of-uninsured-are-chronically-ill>

5. Crossing the Boundary between Occupational & Environmental Medicine and Public Health

As a system, CHA has worked to bridge the gaps between primary care, academics and public health to improve the health of its patients and communities while influencing health policy in a positive manner. One example of this work occurs in its Division of Occupational and Environmental Medicine (OEM).

CHA has a busy Occupational Health Program with nearly 10,000 annual visits. It also hosts a combined four-year Internal Medicine and Occupational Medicine residency training program jointly administered by Harvard Medical School and Harvard School of Public Health faculty and approved by the American Board of Internal Medicine and the American Board of Preventive Medicine. This confluence of activities has developed a fertile environment for OEM research.

Staff led by **Stefanos Kales, MD, MPH**, have done extensive work in several areas that straddle the line between OEM and Public Health. This includes research on firefighter health, results of which have influenced medical standards for firefighters' fitness for duty and identified the need for improved



Stefanos Kales, MD,
MPH
HMS Associate
Professor of Medicine

wellness programs. He also led an important study, published in the *New England Journal of Medicine*²⁴, on causal relationships of heart disease in firefighters to their job activities and other factors. He is currently the PI on a \$1 million research award from the United States Department of Homeland Security to study future predictors of cardiovascular health in this occupation²⁵.

His additional work on obstructive sleep apnea in truck drivers has identified a significant public health hazard. Dr. Kales' team showed that commercial truck drivers have a high likelihood of obstructive sleep apnea and suggested that mandating screenings could reduce the risk of truck crashes. These crashes cause thousands of deaths and injuries each year, with driver fatigue and sleepiness being major causes. His study, published in the *Journal of Occupational and Environmental Medicine*²⁶, has influenced the Federal Motor Carrier Safety Administration in their deliberations to require sleep apnea screening for all obese drivers based on body mass index.

He is currently PI of a Harvard Catalyst project (NIH Award #UL1 RR 025758) investigating the impact of a Company-Based Sleep Apnea Screening, Diagnostic and Treatment Program on Truckers' Health and Safety.

²⁴ <http://www.nejm.org/doi/full/10.1056/NEJMoa060357>

²⁵ <http://www.hsph.harvard.edu/research/firefighters-study/investigators-and-staff/>

²⁶ <http://journals.lww.com/foem/toc/2009/03000>

6. Emerging Leaders in Primary Care

Pieter Cohen, MD, is a rising star at CHA in the areas of clinical care and education. As Associate Program Director of the Internal Medicine Residency and Director of Ambulatory Education at CHA, he completed an innovative redesign of continuity clinic and created the core didactic series for primary care residents and CIC students. His teaching prowess resulted in the 2007 SGIM Regional Medical Educator Award and the 2009 HMS Charles McCabe Prize for Excellence in Clinical Teaching.



Pieter Cohen, MD
HMS Assistant
Professor of Medicine

He has also become known for his groundbreaking research with dietary supplements and immigrant healthcare. These efforts have identified the rampant use of amphetamine-based diet pills among Brazilian immigrants, work which led, in part, to him being named the 2009 Best Doctor in Massachusetts by the *Brazilian Journal*. He is also rapidly becoming a national expert on dietary supplements and has contributed his expertise to the *New York Times*²⁷, *Wall Street Journal Health Blog*²⁸, *CNN.com*²⁹, two visits to the *Dr. Oz*³⁰ show and many other media venues.

Somava Stout, MD, MPH, is CHA's newly appointed Vice President for Patient-Centered Medical Home Development. In this capacity, she provides oversight and medical leadership for CHA's clinical transformation to this new practice model. She is also heavily involved in staff training and team development to change the culture of CHA's ambulatory practices to become more coordinated,



Somava Stout, MD, MPH
HMS Instructor of
Medicine

integrated and patient/family-centered through staff training and team development.

Dr. Stout has shared her patient-centered medical home experiences in multiple venues across the US and has consulted with programs as diverse as the Arizona Telemedicine Program, the Guyana "Youth Can Move the World" program and India's School of Tropical Medicine to develop strategies to empower communities in need. In 2011, she received the Partners Healthcare Primary Care Recognition Award for Innovation.

Kathe Miller, MD, is the Family Medicine advisor for Harvard Medical School. With the re-establishment of the Family Medicine Interest Group, she has seen a large increase in the number of students taking the fourth year Family Medicine elective and renewed student interest in primary care in general. She is currently a member of both the steering committee and the educational committee for the Harvard Primary Care Center. She relocated to the Boston area after spending five months teaching principles of



Kathe Miller, MD
HMS Clinical Instructor
in Population Medicine

medical education in Argentina, through the Fulbright Counsel of International Exchange of Scholars. Prior to this move she was working as a clinician in Tucson, Arizona and teaching for the departments of Family and Community Medicine and Obstetrics and Gynecology for the University of Arizona. Since her arrival in 2000 she has been teaching part time at the Tufts University Family Medicine Residency, and serving as the Family Medicine pre-doctoral director for Tufts University School of Medicine from 2001-2004. She is currently a clinician at a busy urban community health center where she serves mostly South and Central American immigrants.

²⁷ http://www.nytimes.com/2009/07/24/sports/24steroids.html?_r=1

²⁸ <http://blogs.wsj.com/health/2010/10/11/meridia-is-gone-but-sibutramine-may-remain-in-dietary-supplements/>

²⁹ <http://pagingdrgupta.blogs.cnn.com/2010/08/04/report-dietary-supplements-pose-health-risks/>

³⁰ <http://www.doctoroz.com/videos/hidden-dangers-dietary-supplement>

Section VI – *Academics at Cambridge Health Alliance*

Allen Shaughnessy, PharmD, Professor of Family Medicine at Tufts University and Associate Director of the Tufts Family Medicine Residency Program, is one of the rare individuals who has effectively bridged the gap between primary care medicine, pharmacy, and medical education. His work with Dr. David Slawson pioneered the



Allen Shaughnessy,
PharmD
TUSM Professor of
Family Medicine

concepts of Information Mastery, which received the Innovative Program Award by the Society of Teachers of Family Medicine. He has written over 120 papers in the areas of family medicine education, pharmacology and medical information management that have been published in the *Journal of Family Practice*, *JAMA*, *British Medical Journal*, and *American Family Physician*. Most recently, he launched a Family Medicine Master Teaching Fellowship program in concert with the University of Dundee, Scotland.

Anne Fabiny, MD, is the Chief of Geriatrics at CHA, overseeing numerous hospital-based and community programs to improve the care and wellbeing of seniors in the local communities. Given the importance of Geriatric care today, and in the years ahead, she has become deeply committed to providing



Anne Fabiny, MD
HMS Assistant
Professor of Medicine

meaningful, evidence-based education in the care of older adults in a variety of settings. Today, she is Associate Director of the Cambridge Integrated Clerkship and also of the Harvard Medical School/Reynolds Foundation Award for Advancement of Geriatrics Education. In 2010, she earned the HMS Excellence in Tutoring Award.

7. *Professional Development at CHA*

In 2010, CHA created a **Center for Professional Development** as a system-wide infrastructure to nurture and sustain careers of faculty members. Led by Elizabeth Gauferg, MD, MPH, a double-boarded internist-psychiatrist, the goals of the Center are to support overall career development including faculty scholarship and academic advancement.



Elizabeth Gauferg,
MD, MPH
HMS Assistant
Professor of Medicine
and Assistant Professor
of Psychiatry

Highlights of current and planned Center activities are as follows:

- 1. Professional Education and Development.** The Center's key focus is to enhance professional development throughout physicians' careers. This is done through a variety of offerings, including workshops and other programming (including on Academic Promotion, Writing for Publication, Leadership, Communication Skills and Professionalism), an annual Academic Poster Session, and support for faculty participation in external opportunities (Harvard Macy Program, etc.)
- 2. A Comprehensive Longitudinal Physician Orientation Program.** Understanding that professional development opportunities start upon hire, the orientation focuses on helping new faculty understand the complexities of CHA and meet peers across the system. The Center is also working with the Physician Recruitment team to maintain and enhance CHA's diverse faculty.
- 3. Mentorship Opportunities.** The Center has established a formalized mentor network and is developing mentor/mentee trainings. It is also coaching those in new leadership roles.
- 4. Support for Physician Health and Wellbeing.** This resource enhances the Joint Commission-mandated Physician Health Committee and provides confidential support and referral regarding career/life challenges, and consultation around troubled/impaired physicians.
- 5. Networking Events.** A variety of forums that unite faculty around the CHA mission and build a greater sense of community.
- 6. Strengthening CHA's Connection to Harvard Medical School.** The Center serves as a source for information about events and programs at the medical school. It also coordinates efforts with the HMS Office of Faculty Affairs, the HMS Academy and the other Harvard Affiliated Offices for Faculty Development and Diversity.
- 7. Medical Humanities.** CHA has a thriving Medical Humanities Program started in 2004 with seed funding from the Schwartz Center and the Society for the Arts in Healthcare, now housed within the Center for Professional Development. CHA publishes annually the award-winning *Auscultations Literary Arts Journal*, supports a gallery space for employee and patient artwork, and has active educational collaborations with the Harvard Art Museum and the American Repertory Theater.

8. *The Academic Council*

The Academic Council (AC) seeks to assure that CHA pursues its academic mission with the highest integrity and creativity and in concert with the organization's strategic evolution. The AC oversees medical staff educational and research programming and CHA's institutional review board. The AC includes academic and administrative leaders and reports directly to the CHA Board of Trustees.

The Board adopted an academic mission statement in 2001:

- *CHA supports education, research, and other scholarly activities to fulfill its academic mission.*
- *Education of health care personnel helps provide skilled clinicians for future generations living in the communities we serve.*
- *Research, to discover new knowledge about the causes of illness and the best ways to prevent, treat, and stabilize them, enhances our ability to serve our patients and communities.*
- *By fostering curiosity, innovation, and continuous learning, a scholarly environment provides the strongest framework for state-of-the-art clinical and public health practice, and guarantees our communities the most equitable, efficient, effective, and economical health system.*

CHA tracks its progress through a **balanced scorecard**, which includes the academic mission as well as measures of quality and safety, growth and integration, financial position, and leadership and workforce. Year after year, the AC scorecard has demonstrated progress as CHA pursues its academic mission. Points are allocated as follows:

1. Medical Education Publications, Presentations and Conferences

Disseminate reports concerning CHA's educational programming.

Scoring:

- 1 = 2 manuscripts accepted
- 2 = 3 ms. accepted
- 3 = 4 ms. accepted
- 4 = 5 ms. accepted

- 1 manuscript accepted =
- 2 formal inter-institutional consultations =
- 2 meeting/poster presentations =
- organizing 1 formal conference

2. Research

Increase the number of CHA faculty or staff submitting IRB applications as the Principal Investigator in FY07

Scoring:

- 1 = 25 Unduplicated PIs
- 2 = 28
- 3 = 30 unduplicated PIs plus adoption of written research plan
- 4 = 32 unduplicated PIs plus implementation of at least 2 major research plans

3. Faculty Development

Award competitive Faculty Development Fellowships or Scholarships

Scoring:

- 1 = One fellowship awarded
- 2 = Two fellowships
- 3 = Three fellowships
- 4 = Four or more fellowships
- 1 point for >50 hours commitment, e.g., Macy, Hatem, HMS leadership fellowships or equivalent;
- 2 points for >200 hour commitment, e.g., Shore 50th anniversary fellowship.

4. Faculty Development

Advance medical school promotions for CHA faculty members.

Scoring:

- 1= One promotion points
- 2= Two promotion points
- 3= Four promotion points
- 4= Six or more promotion points
- 1 point for promotion to 2nd level;
- 2 points for appointment at 2nd or 3rd level or promotion to 3rd level;
- 3 points for appointment at or promotion to 4th level.

Section VI – *Academics at Cambridge Health Alliance*

Developmental Steps

Step 1:

1. **Develop oversight of academic activities**

- a. Formation of a Research and Education Council with policy oversight of all academic matters supported by the Alliance; reporting to the CEO and Board

(1) Initial phase:

- Oversight of IRB and research compliance efforts
- Development of research support
- Grant administration
- Grants office (information, budget preparation, etc)

(2) Later phases

- Oversight of medical library
- Development of ancillary services (computers, operations, etc.)

- b. Delineation of academic responsibilities of each clinical or public health department in the Alliance
- c. Develop annual reports of research and education activities at CHA

2. **Strengthen research infrastructure**

- a. Interim research director – Dr. John Potts
 - (1) Review existing resources
 - (2) Develop strategic plan for research support and funding
- b. Investigate contracting with MGH or HMS on research grant support
- c. Incorporation of space needs into facilities planning
- d. Integration of research into educational programs (residents, fellows)
- e. Extend coordination with main HU campus researchers

3. **Support Faculty Development efforts**

- a. Coordination with Mary Clark, Associate Dean for Faculty Affairs
- b. Consultation from other hospitals (Partners, CareGroup)
- c. Establish mentoring program for junior faculty

Step 2:

- 1. Identify priority areas for emphasis
 - Serving the mission of an academic public health system
- 2. Philanthropy to support research on special areas or special populations

CHA Academic Council Membership

Allison Bayer, Acting CEO

David Bor, Chief of Medicine (Chair)

Jay Burke, Chairman and Chief of Psychiatry

Elizabeth Cadigan, Senior VP, Chief Nursing Officer

Elizabeth Gaufberg, Director of Professional Development

Karen Hacker, Executive Director, Institute for Community Health

Judy Klickstein, Senior VP, Information Technology Planning;
Chief Information and Strategy Officer

David Link, Chief of Pediatrics

Richard Pels, Director of Graduate Medical Education

Steven Schwaitzberg, Chief of Surgery

Gerald Steinberg, Chief Medical Officer

Glover Taylor, Chief Compliance Officer and
Institutional Officer for Research Administration

Ronald Weintraub, Emeritus Chief of Surgery

Randy Wertheimer, Chairman and Chief of Family Medicine

Section VI – *Academics at Cambridge Health Alliance*

9. *Medical Education Overview*

Harvard Undergraduate Medical Education provided by CHA Faculty

HMS COURSE CODE	COURSE TITLE	COURSE DIRECTOR OR CHA CONTACT	CHA FACULTY INVOLVED	LOCATION
AC700M.6c	Prim Care Core Clerkship (CIC)	A. Fabiny, D. Hirsh	Many	CHA
AE505M.40	Family Medicine Elective	K. Miller	1	HMS
Freshman Seminar 43m	Psychology of Religion	W. Boyd	1	Harvard College
HSDM	Dental Education	J. Zdanowicz	5	CHA
IN750M.6c	Patient-Doctor III (CIC)	E. Gaufberg	Many	CHA
IN761.6	Patient Doctor II	A. Fabiny, D. Hirsh	50	CHA
MA750.0	Medical Ethics and Professionalism	W. Boyd	1	CHA
ME501M.6a	Advanced Medicine Clerkship	M. Batalden	Many	CHA
ME529M.6	Clinical Management of Addiction	H. Barnes, M. Albanese	6	CHA
ME536M.6	Primary Care Elective Clerkship	D. Epstein	Many	CHA
ME600M.6c	Medicine Core Clerkship (CIC)	B. Ogur	24	CHA
NN500M.6c	Neurology Core Clerkship (CIC)	R. Nardin	7	CHA
OB600M.6c	OB/GYN Core Clerkship (CIC)	A. Spector	13	CHA
PD600M.6c	Pediatric Core Clerkship (CIC)	R. Meyer	13	CHA
PM504M.J	Clinical Experience in OEM	R. Goldman	2	Multiple
PS500M.6c	Psychiatry Core Clerkship (CIC)	T. Griswold	14	CHA
PS509M.6	Advanced Psychiatry Clerkship	T. Griswold	19	CHA
PS700M.J	Psychopath/ Intro Clin Psychology	T. Griswold	4	CHA
PS717.6	Readings in Psychiatry	T. Griswold	4	CHA
RD500M.6c	Radiology Core Clerkship (CIC)	A. Shabashov, A. Chang	9	CHA
RELI S-43m	Summer Seminar— Psychology of Religion	W. Boyd	1	HMS
SU600M.6c	Surgery Core Clerkship (CIC)	A. Ghosh	8	CHA

Graduate Training

CHA offers premier community-based training experiences in an integrated public health care system, and tertiary care training opportunities at other Harvard-affiliated institutions.

It hosts a number of graduate training programs including the following:

- **Internal Medicine Residency**

Program Director: Richard Pels, MD
HMS Assistant Professor of Medicine

The IM residency provides a solid experience with added emphasis on prevention, cross-cultural medicine, community-based service-learning, and special opportunities in occupational medicine, public health, international medicine, and clinical epidemiology.

There are also ambulatory continuity clinic opportunities within both public and private sectors and structured teaching in addictions medicine and psychiatry.

Graduates of the program in the past decade have pursued varied career paths. As of 2009, 50% were engaged in primary care practice at least part time, many in underserved areas³¹. Thirteen of these graduates (19%) are still working at CHA today.

- **Transitional Year Residency**

Program Director: Slava Gaufberg, MD
HMS Assistant Professor of Medicine

This rigorous 1-year Harvard training experience is designed to give our residents a solid foundation in clinical medicine that will prepare them for any future training program. Our Transitional Residency is closely intertwined with our IM Training Program and is a preferred destination for HMS students. Over the past decade more than 30 HMS students have started their careers here, accounting for 43% of all Transitional Year program enrollees.

- **Psychiatry Residency**

Program Director: Marshall Forstein, MD
HMS Associate Professor of Psychiatry

CHA offers a comprehensive 4-year Harvard training experience designed to foster the development of ethical, independent and responsible psychiatrists who will make significant contributions to the mental and global health of adults and their families. It is one of four HMS Adult Psychiatric Residencies and has 32 total residency positions.

- **Child/Adolescent Psychiatry Residency**

Program Director: Cindy Teligator, MD
HMS Assistant Professor of Psychiatry

This 2-year Harvard training experience aims to develop responsible physicians who use an integrative approach to meet the needs of children and their families. It is one of three HMS Child Psychiatric Residencies and has 10 total residency positions. It accepts physicians who have completed their PGY-III year of training (or beyond).

Graduate Training Programs Based at CHA

Transitional Year Residency	(HMS)
Internal Medicine Residency	(HMS)
General Medicine Fellowship	(HMS)
Occupational Medicine Residency	(HMS/HSPH)
Psychiatry Residency	(HMS)
Child/Adolescent Psychiatry Res.	(HMS)
Geriatric Psychiatry Fellowship	(HMS)
Psychosomatic Medicine Fellowship	(HMS)
Clinical Psychology Programs	(HMS)
Psychotherapy Training	(HMS)
Social Work Training	(HMS)
Podiatric Surgery Residency	(HMS)
Dental Residency	(HSDM)
Family Medicine Residency	(Tufts)
Family Medicine Teaching Fellowship	(Tufts)

Other Major Clinical Graduate Teaching

BIDMC Surgery Residency	(HMS)
MGH Pediatrics Residency	(HMS)
General Medicine Fellowship	(HMS)

³¹ Data from CHA Department of Medicine.

Section VI – *Academics at Cambridge Health Alliance*

- **Clinical Psychology Programs**

Director: Kimberlyn Leary, PhD
HMS Associate Professor of Psychology

These APA-approved Harvard training programs teach clinicians to understand and treat persons suffering with a broad spectrum of emotional distress. Current programs are an internship in clinical psychology, a post-doctoral training program in clinical psychology and advanced practicum experiences.

- **Podiatric Surgery Residency**

Program Director: Harry Schneider, DPM

The Podiatric Medicine and Surgery Residency is a three-year program approved by the Council on Podiatric Medical Education. The residency has a total of 6 positions.

- **Dental Residency**

Program Director: John Zdanowicz, DMD
HSDM Instructor in Oral Health Policy and Epidemiology

The General Practice Dental Residency is a one-year Harvard dental experience that combines training in the provision of limited primary preventive care as oral physicians with responsibilities for dental care. The curriculum includes rotation in Medicine, Emergency Medicine, Anesthesia, OMFS and pediatric dentistry which familiarizes residents with knowledge and experience about the reciprocal relationship between oro-facial and systemic illness.

- **Tufts Family Medicine Residency**

Program Director: Gregory Sawin, MD, MPH
Tufts Assistant Professor of Family Medicine

CHA has joined with the Tufts University School of Medicine to offer a three-year Family Medicine Residency. The program is one of just 14 family residency programs in the nation involved in the P4 national demonstration project to lead the way in educational re-design to train the next generation of family physicians. The residency has a total of 24 positions.

10. CHA Faculty

As of February 2011, there are 713 Harvard faculty members who list CHA as their affiliated institution³².

When cross referenced with CHAPO Members list³³ we find 318 “core faculty” who provide the bulk of the clinical and teaching responsibilities at the institution³⁴. These highly accomplished individuals are committed to the CHA Mission, passionate about clinical care and teaching and represent a wide range of cultures.

Faculty Demographics

In looking at the full list of CHA core faculty, we find that 24% are bilingual. However, when our list is sorted by primary care physicians only, we find that the majority are bilingual (44 of 86 or 51%).

GENDER

Men:	151
Women:	167

HMS FACULTY RANK

Professor:	5	Instructor:	240
Associate Professor:	16	Lecturer:	7
Assistant Professor:	46	Fellow:	4

BILINGUAL FACULTY (SELF-REPORTED)

Total:	65 (24%)
Spanish:	45 (17%)
Portuguese:	15 (5.5%)
French:	9 (3%)
Haitian Creole:	2 (<1%)
PCPs only:	44 of 86 (51%)

³² Harvard White Pages (<http://whitepages.med.harvard.edu/>). Accessed 2/18/11.

³³ The CHAPO Member list is used as a proxy for “core faculty”. For these purposes we used employees and leased staff only. We did not include consultants.

³⁴ Data generated by CHA Planning & Marketing 3/3/11.

Section VI – *Academics at Cambridge Health Alliance*

Harvard Medical School Academy

CHA currently has eight members of the HMS Academy³⁵.

NAME	CREDENTIALS	DEPARTMENT	ACADEMIC RANK
Anne Fabiny	MD	Medicine	Assistant Professor
Elizabeth Gauferg	MD, MPH	Medicine & Psychiatry	Assistant Professor
Lior Givon	MD, PHD	Psychiatry	Senior Lecturer
Arundhati Ghosh	MBBS, FRCS, FACS	Surgery	Instructor
David Hirsh	MD	Medicine	Instructor
Barbara Ogur	MD	Internal Medicine	Associate Professor
Steven Schweitzberg	MD, FACS	Surgery	Associate Professor
Rebecca Starr	MD	Geriatrics	Instructor

Recent Awards and Recognition

CHA is proud that its faculty and programs have been recognized numerous times for academic achievements:

Harvard Dean's Community Service Awards

- Jaine Darwin, PsyD, and Kenneth Reich, EdD (2010)
- Malou Jean-Baptiste, MD (2009)

Other Teaching Awards

- Margarita Alegría, PhD – HMS Harold Amos Diversity Award (2011)
- Jay Burke, MD, MPH – HMS Harold Amos Diversity Award (2011)
- Arun Ghosh, MBBS, FRCS, FACS – HMS Young Mentor Award (2011)
- Anne Fabiny, MD – HMS Excellence in Tutoring Award (2010)
- Rachel Nardin, MD – American Academy of Neurology Teacher Recognition Award (2010)
- Maren Batalden, MD, MPH – HMS Charles McCabe Prize for Excellence in Clinical Teaching (2010)
- David Bor, MD – HMS Best Clinical Teacher at CHA (2010)
- David Hirsh, MD – Anne L. Brodie Medical Education Scholar, University of Virginia School of Medicine (2010)
- Sanjay Gulati, MD – HMS Harold Amos Diversity Award (2009)
- Pieter Cohen, MD – HMS Charles McCabe Prize for Excellence in Clinical Teaching (2009)
- Rose Goldman, MD, MPH – HMS Academic Clinical Faculty Teaching Award (2009)
- Steffie Woolhandler, MD, MPH – Clifford Barger Excellence in Mentoring Award (2009)
- Assaad Sayah, MD – Award of Recognition for Teaching, AAFM (2009)
- Richard Pels, MD – Clifford Barger Excellence in Mentoring Award (2008)

Harvard Macy Scholars in the Program for Educators in the Health Professions

- Arun Ghosh, MBBS, FRCS, FACS (2011)
- Todd Griswold, MD (2011)
- Maren Batalden, MD, MPH (2010)
- Dan Randall, MD (2010)
- Yamini Saravanan, MD, MPH (2009)

Recognition from the Arnold Gold Foundation

- Elizabeth Gauferg, MD, MPH - Gold Foundation National Humanism Honor Society Award (2010)
- David Hirsh, MD - Leonard Tow Humanism in Medicine Award (2009)

Section VI – *Academics at Cambridge Health Alliance*

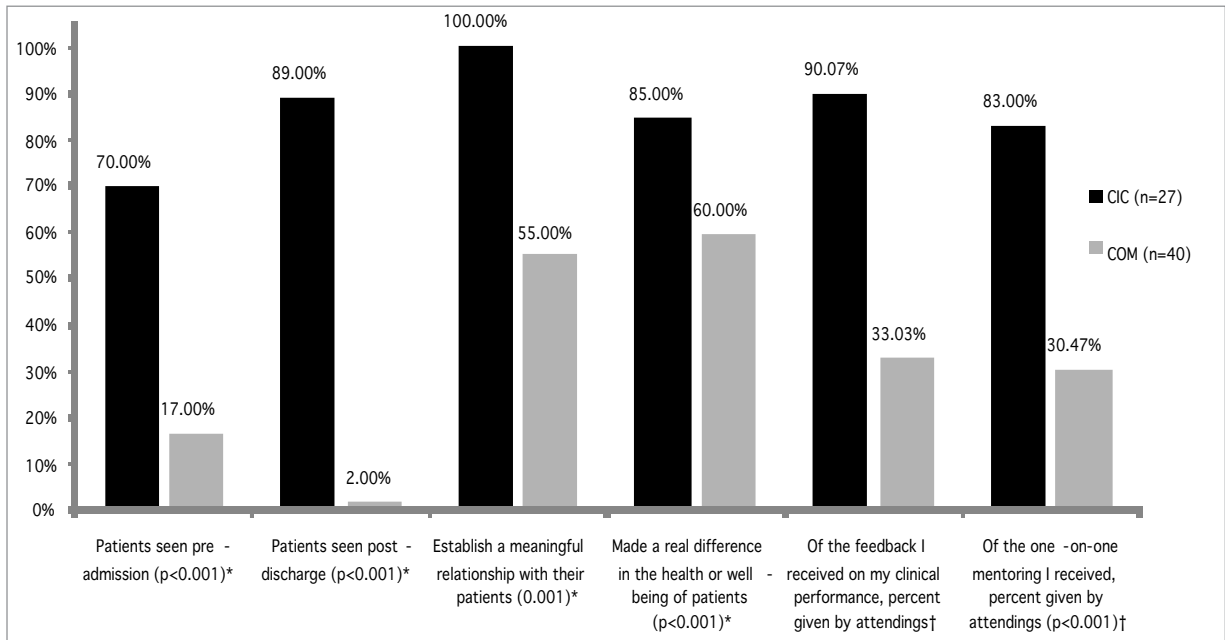
Other Physician Highlights

- Steven Schwartzberg, MD – President of The Society of American Gastrointestinal and Endoscopic Surgeons (SAGES), term beginning April 2011
- Soma Stout, MD, MPH – Partners Primary Care Recognition Award for Innovation (2011)
- David Bor, MD – CHA Art of Healing Award (2010)
- Luis Lobon, MD – President, MA College of Emergency Physicians (2010)
- Gregory Hagan, MD – President, MA Chapter, American Academy of Pediatrics (2010)
- Karen Hacker, MD, MPH – Sister Jeanette Normandin Award, Cambridge Cares About AIDS (2009)
- Randy Wertheimer, MD – Chair of Family Medicine at Tufts University School of Medicine (2009)
- Pieter Cohen, MD – named the Best Doctor in Massachusetts, *Brazilian Journal* (2009)
- Jay Burke, MD, MPH – named to DSM-5 Task Force and Chair of its Diagnostic Assessment Instruments Study Group

Non-Academic Awards and Recognition

- CHA recognized for Culturally and Linguistically Competent Care, AHA Institute for Diversity (2010)
- Haitian Mental Health Team, Schwartz Center Compassionate Caregiver Award (2010)
- SDI Top 100 Most Integrated Health Systems (2010)
- Harvard Pilgrim Healthcare Hospital Honor Roll (2010)
- Harvard Pilgrim Healthcare Pediatric Honor Roll (2010)
- NAPH Award for Political Engagement of the Community (2009)
- Cambridge Breast Center, first in the state to earn National Accreditation (2009)
- Breast Imaging Center of Excellence, American College of Radiology (2009)
- CHA Emergency Department, Award of Recognition, NAPH (2009)

Figure 1. Program assessment: comparisons of “continuity of care” and “continuity of supervision” of 27 Cambridge Integrated Clerkship students (CIC) and 40 Comparison students (COM) at Harvard Medical School 2004-2007.



* Percentage of students in CIC and COM groups reporting having done the following activities “often” or “very often.”

† Percentage of students in CIC and COM reporting receiving feedback and mentoring from attending physicians “often” or “very often.”

Table 1. Learning environment: comparisons of students’ descriptions by 27 CIC students and 40 comparison students (COM) at Harvard Medical School 2004-2007. Using a 6 point Likert scale at year’s end, students answered: “At this point, how well would you say that the following adjectives describe your clerkship experience? One equals ‘describes it not at all’ and 6 = ‘describes it perfectly.’”

	CIC (n=27)	COM (n=40)	p-Value
Satisfying	5.41	4.67	<0.005
Confidence-building	4.96	3.87	<0.005
Rewarding	5.78	4.77	<0.001
Humanizing	5.44	3.88	<0.001
Transformational	5.44	4.62	<0.01
Boring	1.44	1.90	<0.05
Marginalizing	1.89	3.43	<0.001
Hectic	5.37	4.65	<0.005
Stressful	5.26	4.62	<0.005
Frustrating	3.63	3.75	0.709

Appendix I – Integrated Core Clerkship

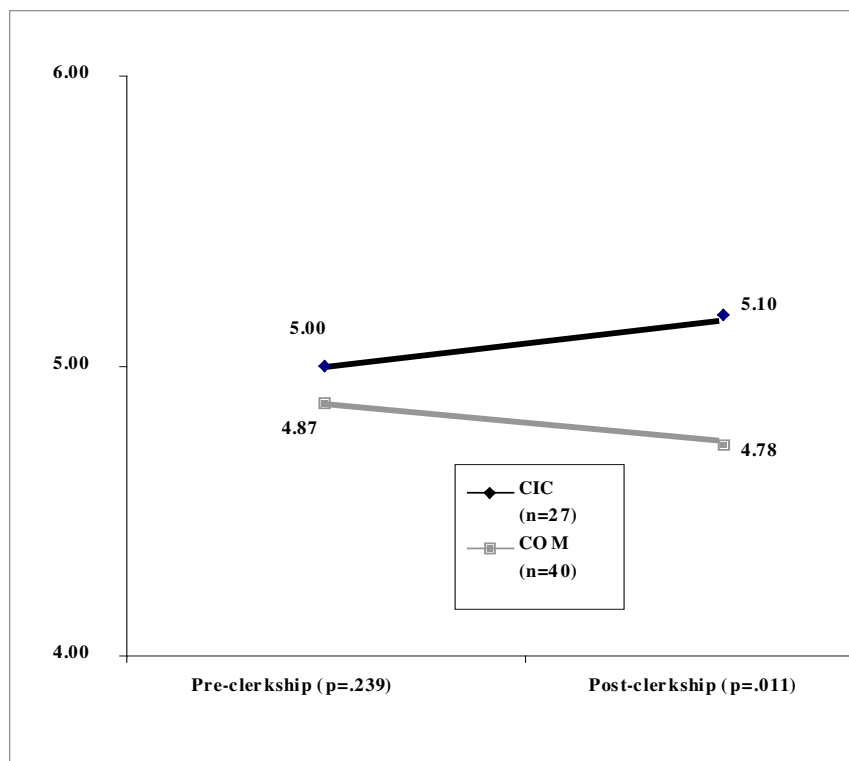
Table 2. Student assessment:

comparisons of mean score of tests of knowledge and clinical skills. The authors compared 27 CIC students and 40 Comparison students (COM) at Harvard Medical School 2004-2007. Values below for NBME are actual scores below. The OSCE data is the percent correct. The Step II CK data is the actual score.

	CIC (n=27)	COM (n=45)	p-Value
NBME Ob/Gyn exam	73.70	71.73	0.377
NBME Pediatrics exam	80.62	74.79	<0.01
NBME Surgery exam	76.85	73.33	0.099
NBME Psychiatry exam	80.22	71.86	<0.05
Comprehensive OSCE	68.13	64.34	<0.05
Step II CK	240.63	234.14	0.232

Figure 2. Student assessment:

comparisons of patient-centeredness. A comparison of 27 CIC students and 40 comparison students (COM) at Harvard Medical School 2004-2007. Using the Patient-Practitioner Orientation Scale (PPOS), faculty compared the mean scores of CIC and COM groups pre- and post-clerkship. On a six point scale, 6.0 is the highest possible score indicating patient-centeredness.



Appendix I – *Integrated Core Clerkship*

Table 3 Student assessment: preparation for practice. The authors compared 27 Cambridge Integrated Clerkship students (CIC) and 40 comparison students (COM) at Harvard Medical School 2004-2007. The authors compared mean year end scores of CIC and COM students on how well they felt prepared: 1 = “prepared me very poorly” and 6 = “prepared me very well.”

	CIC (n=27)	COM (n=40)	p-Value
To practice in the hospital setting	4.63	5.07	<0.05
To practice in the ambulatory setting	5.89	4.22	<0.001
To have the knowledge base necessary to be a competent practitioner	5.11	4.47	<0.005
To be truly caring in dealing with patients	5.93	5.07	<0.001
To deal with ethical dilemmas	5.33	4.17	<0.001
To know your strengths and limitations	5.44	4.85	<0.05
To deal with patient problems that do not have clear answers	5.48	4.55	<0.001
To be a self-reflective practitioner	5.70	4.62	<0.001
To see how the social context affects patients and their problems	5.89	4.67	<0.001
To involve patients in decision making	5.59	4.55	<0.001
To relate well to a diverse patient population	5.96	4.72	<0.001
To relate to people at different stages of the life cycle	5.74	5.07	<0.005
To understand how the health care system works	5.26	4.07	<0.001
To practice evidence-based medicine	4.89	4.97	0.739

Appendix II – Selected Bibliography of CHA Faculty Publications

Medical Education

Gaufberg E., The Moral of the Story. *Academic Medicine* 2011; Vol 86 Issue 1, p 97

Gaufberg E., On Courage. *Academic Medicine*. Vol 85 No 5 May 2010 p 805.

Williams B, Warshaw G, Fabiny A, Lundebjerg N, Medina-Walpole A, Sauvigne K, Schwartzberg J, Leipzig R. Medicine in the 21st century: Recommended essential geriatrics competencies for Internal Medicine and Family Medicine residents. *Journal of Graduate Medical Education*. 2010; 373-383.

Bell S, Wideroff M, Gaufberg E., Student Voices in Readers' Theater: Exploring Communication in the Hidden Curriculum Patient Education and Counseling 2010, 80: 354-357.

Ogur B, Hirsh D. Learning through longitudinal care – narratives from the Harvard Medical School-Cambridge Integrated Clerkship. *Academic Medicine*. 2009; 84:844–850

Cohen PA. Training for expertise: The Harvard Medical School-Cambridge Integrated Clerkship tutorial. *Clinical Teacher* 2009; 6: 28-33

Gaufberg E., Learning to Listen, *Academic Medicine*, Vol 83, No 4/April 2008 p. 389

Gaufberg E., Time to Care, *Health Affairs* Vol 27 No 3 May/June 2008; 845-849

Bortnick R, Gaufberg E., Injustice. *Medical Education* 2008; 42: 1108-1109.

Gaufberg E., Fitzpatrick A., The Favor; a professional boundaries OSCE station, *Medical Education* 2008; 42: 529-530.

Ho M, Lee K, Gaufberg E., Stigma: A Curriculum to Change Attitudes, Knowledge, and Skills *Medical Education* 2008; 42: 530–531.

Ho, Ming Jung, Gaufberg E., Problem-Based Learning: Hidden Curricular Messages and Cultural Competence. *Medical Education* 2008; 42: 1124-1125.

Gaufberg E, Shtasel D, Hirsh D, Ogur B, Bor D., The Harvard Medical School Cambridge Integrated Clerkship: Challenges of Longitudinal Integrated Training. *The Clinical Teacher* 2008; 5:78-82.

Gaufberg E, Baumer N, Hinrichs M, Krupat E., Professional Boundaries: The Perspective of the Third Year Medical Student in Negotiating Three Boundary Challenges. *Teaching and Learning in Medicine* 2008, 20 (4), 334-339.

Ogur B, Hirsh D, Krupat E, Bor D. The Harvard Medical School-Cambridge Integrated Clerkship: An Innovative Model of Clinical Education. *Academic Medicine*. 2007;82(4):397-404

Hirsh DA, Ogur B, Thibault GE, Cox M. "Continuity" as an organizing principle for clinical education reform. *N Engl J Med*. 2007;356(8):858-66.

Pharmaceuticals

Givon L, Porter S, Padamanabhan B, Goren J, Cohen PA. Levetiracetam, seizures and suicidality. *Harvard Review of Psychiatry* 2011; 19:47-55

Goldman, RH, Stason WB, Park SK, Kim R, Mudgal S, Davis RB, Kaptchuk TJ. Low-dose amitriptyline for treatment of persistent arm pain due to repetitive use. *Pain*. 2010 Apr 149(1):117-23

Public Policy/Advocacy

Nardin, R, Fogerson PM, Nie R, Rutkove SB., Foot temperature in normal subjects: effects of ambient temperature and age. *J Am Pod Med Assoc*, (in press).

Bartick M, Reinhold, A., The Burden of Suboptimal Breastfeeding in the United States: A Pediatric Cost Analysis. *Pediatrics*. 2010 4(125):e1048-56.

Bartick M, Edwards R, Walker M, Jenkins L., The Massachusetts Baby-Friendly Collaborative: Lessons learned from an innovation to foster implementation of best practices. *Journal of Human Lactation*. Sept. 2010.

Himmelstein DU, Woolhandler S., Obama's reform: no cure for what ails us. *BMG*, 2010 Mar 30, 340:c1778

Himmelstein DU, Woolhandler S., Proposals for payment reform in Massachusetts, *N Engl J Med*, 2009 Dec 17, 361(25):2492

Himmelstein DU, Wright A, Woolhandler S., Hospital computing and the costs and quality of care: a national study *Am J Med*. 2010 Jan 123(1):40-6

Himmelstein DU, Woolhandler S., The regressivity of taxing employer-paid health insurance. *N Engl J Med*. 2009 Sep 3:361(10):e101

Himmelstein DU, Thorne D, Warren E, Woolhandler S., Medical bankruptcy in the United States: 2007: results of a national study. *Am J Med*. 2009 Aug 122(8):604-5

Woolhandler S. Despite the reform law, don't write off single payer. *Managed Care*. 2010 Apr 19(4):1029-30

Appendix II – Selected Bibliography of CHA Faculty Publications

Clinical Care

- Balaban RB, Williams MV. Improving care transitions: hospitalists partnering with primary care. *Journal of Hospital Medicine*. 2010; 5:375-77.
- Brusch JL. Infective Endocarditis and its mimics in the critical care unit. In; Cunha BA editor *Infectious diseases in critical care medicine* 3rd ed. Informa health care. New York 2010:221
- Brusch, JL., ED & Author; *Endocarditis Essentials*. Boston: Physicians Press 2011. (sole author of 14 of 16 chapters).
- Rattner DW, Hawes R, Schwaitzberg S, Kochman M, Swanstrom L. The Second SAGES/ASGE White Paper on natural orifice transluminal endoscopic surgery: 5 years of progress. *Surg Endosc*. 2011 Feb 27. [Epub ahead of print]
- Gould J, Ellsmere J, Fanelli R, Hutter M, Jones S, Pratt J, Schauer P, Schirmer B, Schwaitzberg S, Jones DB. Panel report: best practices for the surgical treatment of obesity. *Surg Endosc*. 2010 Dec 7. [Epub ahead of print]
- Chu T, Chandhoke RA, Smith PC, Schwaitzberg SD. The impact of surgeon choice on the cost of performing laparoscopic appendectomy. *Surg Endosc*. 2010 Sep 11. [Epub ahead of print]
- Logan CA, Wu RY, Mulley D, Smith PC, Schwaitzberg SD. Coordinated clinical and financial analysis as a powerful tool to influence vendor pricing. *Health Care Manage Rev*. 2010 Jul-Sep; 35(3):276-82.
- Sankaranarayanan G, Lin H, Arikatla VS, Mulcare M, Zhang L, Derevianko A, Lim R, Fobert D, Cao C, Schwaitzberg SD, Jones DB, De S. Preliminary face and construct validation study of a virtual basic laparoscopic skill trainer. *J Laparoendosc Adv Surg Tech A*. 2010 Mar;20(2):153-7.
- Schwaitzberg SD. Raising the technology bar in minimally invasive surgery: look how far we've come. *Surg Endosc*. 2010 May; 24(5):983. No abstract available.
- Raman A, Sternbach J, Babajide A, Sheth K, Schwaitzberg SD. When does testing for GERD become cost effective in an integrated health network? *Surg Endosc*. 2010 Jun;24(6):1245-9. Epub 2009 Dec 9.
- Schwaitzberg SD, Kochman ML, Hawes RH, Rattner DW. Natural orifice transluminal endoscopic surgery (NOTES): is it time for introduction to clinical practice? *Surgery*. 2009 Nov;146(5):841-2. Epub 2009 Jul 24.
- Derevianko AY, Schwaitzberg SD, Tsuda S, Barrios L, Brooks DC, Callery MP, Fobert D, Irias N, Rattner DW, Jones DB. Malpractice carrier underwrites Fundamentals of Laparoscopic Surgery training and testing: a benchmark for patient safety. *Surg Endosc*. 2010 Mar;24(3):616-23. Epub 2009 Aug 18.
- Goldfarb M, Brower S, Schwaitzberg SD. Minimally invasive surgery and cancer: controversies part 1. *Surg Endosc*. 2010 Feb;24(2):304-34. Epub 2009 Jul 2. Review.
- Schwaitzberg SD, Godinez C, Kavic SM, Sutton E, Worthington RB, Colburn B, Park A. Training and working in high-stakes environments: lessons learned and problems shared by aviators and surgeons. *Surg Innov*. 2009 Jun;16(2):187-95.
- Bell AK, Zhou M, Schwaitzberg SD, Cao CG. Using a dynamic training environment to acquire laparoscopic surgery skill. *Surg Endosc*. 2009 Oct;23(10):2356-63. Epub 2009 Mar 5.
- Powers K, Rehrig ST, Schwaitzberg SD, Callery MP, Jones DB. Seasoned surgeons assessed in a laparoscopic surgical crisis. *J Gastrointest Surg*. 2009 May;13(5):994-1003. Epub 2009 Feb 4.
- Schwaitzberg SD. Reimbursement for new technologies: the GERD maze is not patient-friendly. *Medscape J Med*. 2008 Jan 18;10(1):14.
- Pisano ED, Hendrick E., Yaffe MJ, Baum JK et al. Diagnostic accuracy of Digital Versus Film Mammography: Exploratory analysis of Selected Population Subgroups in DMIST. *Radiology* 2008; 246:376-383
- Pisano ED, Hendrick RE, Yaffe MJ, Baum JK, Acharyya S, Cormack JB, Hanna LA, Conant EF, Fajardo LL, Bassett LW, D'Orsi CJ, Jong RA, Rebner M, Tosteson AN, Gatsonis CA; DMIST Investigators Group. Diagnostic accuracy of digital versus film mammography: exploratory analysis of selected population subgroups in DMIST. *Radiology*. 2008 Feb; 246(2):376-83. 47.
- Dialani V, Metha TS, Baum JK. Sonographic Features of Gynecomastia. *J Ultrasound in Medicine* 2010 (29):539-547.
- Baum, JK, Hanna LG, Acharyya S, Mahoney M, Conant E, Bassett L, Pisano ED. Use of BI RADS 3 – Probably Benign in the American College of Radiology Imaging Network Digital Mammographic Imaging Screening Trial (DMIST). Accepted fall 2010, awaiting publication. *Radiology*

Appendix II – Selected Bibliography of CHA Faculty Publications

Institute for Community Health

Tendulkar SA, Chu J, Opp J, Geller AC, DiGirolamo A, Gandelman E, Grullon M, Patil P, King S, and Hacker KA. Funding initiative for community-based participatory research: Lessons from the Harvard Catalyst seed grants. *Progress in Community Health Partnerships: Research, Education and Action* (in press-Spring 2011).

Chomitz VR, Aske DB, McDonald JC, Cabral HJ, and Hacker KA. The role of recreational spaces in meeting physical activity recommendations among middle school students. *J Phys Act Health* 2011, 8(suppl 1), s8-s16.

Murphy JM, Masek B, Babcock R, Jellinek MS, Gold J, Drubner S, Sklar K, and Hacker K. Measuring outcomes in outpatient child psychiatry: The contribution of electronic technologies and parent report. 2011. *Clinical Child Psychology and Psychiatry* 16 (1): 146-160.

Hacker K, Friedman E, and Tendulkar S, Melvin P, Jerz M, Lambert L. Using a community participatory research approach to understand satisfaction with psychopharmacology among families of children with psychiatric co-morbidities. *J Child Adolesc Soc Work* 28(1): 63-78.

Hacker K, and Arsenault L, Williams S, DiGirolamo A. Mental and behavioral health screening at preventive visits: Opportunities for follow-up of patients who are non-adherent with the next preventive visit. *J Pediatr*. 2010 Nov 10. [Epub ahead of print]

Blanchifield BB, Gazelle, GS, Khalif M, Arocha IS, and Hacker K. A framework to identify the costs of providing language interpretation services. Accepted to *Journal of Health Care for the Poor and Underserved* Sept 2010.

Frank DA, Rose-Jacobs R, Crooks D, Cabral HJ, Gerteis J, Hacker KA, Martin B, Weinstein ZB, Heeren T. Adolescent initiation of licit and illicit substance use: Impact of intrauterine exposures and post-natal exposure to violence. *Neurotoxicology and Teratology*, 2010; Jun 23 [Epub ahead of print]

Chomitz VR, McGowan R, Wendel J, Williams S, Cabral H, King S, Olcott D, Cappello M, Breen S, Hacker K. Healthy Living Cambridge Kids: A community-based participatory effort to promote healthy weight and fitness. *Obesity*, Volume 18, Supplement 2, February 2010.

Dryden E, Hyde J, Livny A, Tula M. Phoenix rising: Use of participatory approach to evaluate a federally funded HIV, hepatitis and substance abuse prevention program. *Evaluation and Program Planning*, 2010; 33(4): 386-393.

Tendulkar S, Buka S, Dunn E, Subramanian SV, Koenen KC. A multilevel investigation of neighborhood effects on parental warmth. *Journal of Community Psychology*, 2010; 38(5): 557-573.

Hacker K, Williams S, Myagmarjav E, Cabral H, and Murphy M. Persistence and change in pediatric symptom checklist scores over 10-18 months. *Academic Pediatrics Online* publication June 1, 2009 print 2009; 9(4):270-277.

Arsenault L, Matthan N, Scott T, Dallal G, Lichtenstein A, Folstein M, Rosenberg I, and Tucker K. Validity of estimated dietary eicosapentaenoic acid and docosahexaenoic acid intakes determined by interviewer-administered food frequency questionnaire among older adults with mild-to-moderate cognitive impairment or dementia. *American Journal of Epidemiology* May 11, 2009; 170:95-103.

Hyde J, Leslie L. Physical safety and permanency are not enough: Perspective on the need for a focus on well-being for working with adolescents aging out of foster care. *Center for Advanced Studies in Child Welfare* Spring 2009: 20.

Tavares M, Chomitz V. A healthy weight intervention for children in a dental setting: A pilot study. *J Am Dent Assoc* 2009 Mar; 140(3):313-6.

Chomitz VR, Slining MM, McGowan R, Mitchell S, Dawson GF, Hacker KA. Is there a relationship between physical fitness and academic achievement? Positive results from public school children in the northeastern. *Journal of School Health* January 2009, Vol. 79, No. 1.

Hyde J and Kammerer N. Adolescents' perspectives on placement moves and congregate settings: Complex and cumulative instabilities in out-of-home care. *Children and Youth Services Review* 31; 2009; 265-273.

Burke NM, Chomitz VR, Rioles NA, Winslow SP, Brukilacchio LB, and Baker JC. The path to active living: Physical activity through community design in Somerville, Massachusetts. *Am J Prev Med* 2009. 37(6 Suppl 2): p. S386-94.

Occupational and Environmental Medicine

Parks PD, Durand G, Tsismenakis AJ, Vela-Bueno A, Kales SN. Screening for Obstructive Sleep Apnea during Commercial Driver Medical Examinations. *J Occup Environ Med*. 2009;51:275-282.

Tsismenakis AJ, Christophi CA, Burrell JW, Kinney AM, M Kim, Kales SN. The Obesity Epidemic and Future Emergency Responders. *Obesity*. 2009;17:1648-1650.

Appendix II – Selected Bibliography of CHA Faculty Publications

- Durand G, Kales SN. Obstructive Sleep Apnea Screening during Commercial Driver Medical Examinations: a Survey of ACOEM Members. *J Occup Environ Med*. 2009;51:1220–1226.
- Belayneh A Abejie BA, Kales SN, Christiani DC. Patterns of Pulmonary Dysfunction in Asbestos Workers: a cross-sectional study. *Journal of Occupational Medicine and Toxicology*. 2010, 5:12. (<http://www.occup-med.com/content/pdf/1745-6673-5-12.pdf>)
- Baur DM, Klotzsche J, Hamnvik OR, Sievers C, Pieper L, Wittchen HU, Stalla GK, Schmid RM, Kales SN, Mantzoros CS. Type 2 diabetes mellitus and medications for type 2 diabetes mellitus are associated with risk for and mortality from cancer in a German primary care cohort. *Metabolism*. (in press)
- Hamnvik OP, Liu X, Petrou M, Gong H, Chamberland JP, Kim EH, Christophi CA, Kales SN, Christiani DC, Mantzoros CS. Soluble leptin receptor and leptin are associated with baseline adiposity and metabolic risk factors, and predict adiposity, metabolic syndrome, and glucose levels at 2-year follow-up: the Cyprus Metabolism Prospective Cohort Study. *Metabolism* (2010), doi:10.1016/j.metabol.2010.09.009.
- Poston, WSC, Haddock CK, Jahnke SA, Jitnarin N, Tuley BC, Kales SN. The prevalence of overweight, obesity, and standard fitness in a population-based firefighter cohort. *J Occup Environ Med* (in press).
- Durand G, Tsismenakis AJ, Jahnke SA, Baur DM, Christophi CA, Kales SN. Firefighters' Physical Activity: Relation to Fitness and Cardiovascular Disease Risk. *MSSE* (in press).
- Kales SN, Tsismenakis AJ, Zhang C, Soteriades ES. State of the Art. Blood Pressure in Firefighters, Police Officers, and other Emergency Responders. *Am J Hypertens*. 2009;22:11-20.
- Leiba A, Hu H, Zheng A, Kales SN. A Safe Strategy to Decrease Fetal Lead Exposure in a Woman with Chronic Intoxication. *Journal of Maternal-Fetal & Neonatal Medicine*. 2010;23:932-4.
- Kales SN, Saper RB. Ayurvedic Lead Poisoning: an Under-Recognized, International Problem. *Indian Journal of Medical Sciences*. 2009;63:379-380. (Editorial)
- Parks, PD, Pransky GS, Kales SN. Case Report: "Iatrogenic Disability and Narcotics Addiction after Lumbar Fusion in a Worker's Compensation Claimant". *Spine* 2010;35:E549-52.
- Soteriades ES, Smith DL, Tsismenakis AJ, Baur DM, Kales SN. Cardiovascular Disease in U.S. Firefighters: A Systematic Review. *Cardiology in Review* 2011 (in press).
- Kales SN, Kim M, Islam T. Carbon Monoxide. WHO second technical report on quantifying disease from inadequate housing. WHO, Bonn (in press).
- Thompson A, Kales SN. Occupational Lung Disease in Police, Firefighters and the Military. In: Tarlo SM, Cullinan P, Nemery B ed. "Occupational and Environmental Lung Disease", subtitled "Diseases from Work, Home, Outdoor and other Exposures", Wiley Blackwell, Oxford, UK 2010.
- Lee EC, Kales SN. Genetic, molecular, neuroanatomic, and electrophysiologic mechanisms of chemically induced seizures. In: Tang FR ed. "Chemical-induced seizures: mechanism, consequences and treatment". Bentham e-books. Bentham Science Publishers (in press)
- Zhang C, Kales SN, Malhotra A. Diagnosis of sleep apnea, Polysomnography, and portable monitoring". In: Badr, MS ed. "Essentials of Sleep Medicine: What the Pulmonologist Needs to Know". Springer, NYC, NY (in press).
- Lee EC, Bleek PC, Kales SN. Chemical Weapons. In: Levy BS, Sidel V, eds. War and Public Health, 3rd ed. Oxford University Press (in press).
- Kim JY, Christophi CA, Soteriades ES, Kales SN. The Occupation of Firefighting and Cancer Risk: an Updated Review and Meta-Analysis of the Available Evidence. Prepared for the Workplace Safety and Insurance Board (WSIB) of Ontario, Canada 2009.
- Spaeth K, Tsismenakis AJ, Kales SN. Ed. Kales SN. Heavy Metals: A Rapid Clinical Guide to Neurotoxicity and Other Common Concerns. Nova Science Inc., New York, 2010.
- Stewart-Patterson C, Kales SN. Assessing Medical Fitness to Return to Work. Harvard Medical School, On-line CME. 2010. (http://cmeonline.med.harvard.edu/course_descriptions.asp?Course_id=138).

Public Health – Dietary Supplements

- Cohen PA, McCormick D, Casey C, Dawson GF, Hacker KA., Imported compounded diet pill use among Brazilian women immigrants in the United States. *J Imm Minority Health* 2009; 11: 229-236
- Cohen PA., Imported fenproporex-based diet pills from Brazil: a report of two cases. *J Gen Intern Med* 2009; 24: 430-433
- Cohen PA., American roulette – contaminated dietary supplements. *N Eng J Med* 2009; 361:1523-5
- Smith B, Cohen PA., Dependence on the Brazilian diet pill: a case report. *Amer J on Addictions* 2010; 19(3): 291-2
- Cohen PA, Ernst E. Safety of herbal supplements: a guide for cardiologists. *Cardiovascular Therapeutics* 2010; 28:246-53
- Cohen PA., Contaminated dietary supplements. *N Eng J Med* 2010; 362:274.

Appendix II – Selected Bibliography of CHA Faculty Publications

Department of Psychiatry

- Albanese MJ. The self-medication hypothesis: what's the evidence? *Psychiatric Times* (In press).
- Albanese MJ, Nelson SE, Peller AJ, Shaffer HJ. Bipolar disorder as a risk factor for repeat DUI behavior. *Journal of Affective Disorders* 2010;121:253-257.
- Albanese MJ, Albanese AM. Insomnia in dual diagnosis patients. *American Journal on Addictions* 2010;19:382-383.
- Schuman-Olivier Z, Albanese M, Nelson SE, Roland L, Puopolo F, Klinker L, Shaffer HJ. Self-treatment: illicit buprenorphine use by opioid-dependent treatment seekers. *Journal of Substance Abuse Treatment* 2010;39:41-50.
- Alegría, M., Canino, G., Shrout, P. E., Woo, M., Duan, N., Vila, D., et al. (2008). Prevalence of Mental Illness in Immigrant and Non-Immigrant U.S. Latino Groups. *American Journal of Psychiatry*, 165(3), 356-369.
- Alegría, M., Polo, A., Gao, S., Santana, L., Rothstein, D., Jiménez, A., et al. (2008). Evaluation of a Patient Activation and Empowerment Intervention in Mental Health Care. *Medical Care*, 46(3), 247-256.
- Bates, L., Acevedo-Garcia, D., Alegría, M., & Krieger N. (2008). Immigration and Generational Trends in Body Mass Index and Obesity in the United States: Results of the National Latino and Asian American Study, 2002-2003. *American Journal of Public Health*, 98(1), 70-77.
- Canino, G., & Alegría, M. (2008). Psychiatric diagnosis - is it universal or relative to culture? *Journal of Child Psychology and Psychiatry*, 49(3), 237-250.
- Canino, G., Alegría, M., Vega, W., Sribney, W., & Torres, M. Social Relationships, Social Assimilation and Substance-use Disorder Among Adult Latinos in the U.S. *Journal of Drug Issues*. 2008;38(1):69-101.
- Cortés, D., Mulvaney-Day, N., Fortuna, L., Reinfeld, S., & Alegría, M. Patient/Provider Communication: Understanding the Role of Patient Activation for Latinos in Mental Health Treatment. *Health Education & Behavior*. 2009 Feb;36(1):138-54. Epub 2008 Apr 15.
- Davis M. "The Psychological Toll of Early Onset Alzheimer's Disease." published on ABCNews.com, May 13, 2009. <http://abcnews.go.com/Health/AlzheimersNews/story?id=7571166&page=1>
- Davis M and M Schlieff. "How Can the Flu Kill You?" published on ABCNews.com May 7, 2009. http://blogs.abcnews.com/health_insider/2009/05/how-can-the-flu.html
- Duan, N., Meng, X.-L., Lin, J. Y., Chen, C.-n., & Alegria, M. (2008). Disparities in Defining Disparities: Statistical Conceptual Frameworks. *Statistics in Medicine*, EPub.
- Ehrlich M, Ruble MW. Gender Identity Disorder. In: *Psychiatry: Just The Facts* (Ronald Albucher, ed.). New York NY: McGraw-Hill;2008. p. 115-118.
- Ehrlich M, Ruble MW. Paraphilias. In: *Psychiatry: Just The Facts* (Ronald Albucher, ed.). New York NY: McGraw-Hill;2008. p. 111.
- Ehrlich M, Ruble MW. Sexual Dysfunction. In: *Psychiatry: Just The Facts* (Ronald Albucher, ed.). New York NY: McGraw-Hill;2008. p. 112-114.
- Forgey, M and DeJong, S. Attention Deficit/Hyperactivity Disorder. In: Albucher, RC. Editor, *Psychiatry: Just the Facts*. San Francisco: McGraw Hill; 2008. pp. 87-88.
- Forgey, M and DeJong, S. Mental Retardation. In: Albucher, RC. Editor, *Psychiatry: Just the Facts*. San Francisco: McGraw Hill; 2008. pp. 88-91.
- Forstein M, *Is It All In Your Head?: How your mental health can affect living with HIV*, Positively Aware, Chicago, Ill, May/June 2010, pgs 28-31.
- Forstein M, *Young Adulthood, Serodiscordant Couples and Reproductive Issues*, In: Gorman J, Cohen, M, Eds. *Comprehensive Textbook of AIDS Psychiatry*, Oxford University Press, New York, 2008
- Fortuna, L., Porche, M., & Alegria, M. Political violence, psychosocial trauma, and the context of mental health services use among immigrant Latinos in the United States. *Ethnicity and Health*. 2008 Nov 1;13(5):435-63.
- Ghaemi SN. General Psychopathology: Its main themes, significance, and influence in contemporary psychiatry. In *The Cambridge Companion to Karl Jaspers*. Edited by Kurt Salamun and Gregory Walters. Cambridge, UK: Cambridge University press. In press.
- Lewis-Fernandez, R., Horvitz-Lennon, M., Blanco, C., Guarnaccia, P., Cao, Z., & Alegria, M. (2009). Significance of Endorsement of Psychotic Symptoms by U.S. Latinos. *Journal of Nervous and Mental Disease*. May 2009 - Volume 197 - Issue 5 - pp 337-347
- Mendelsohn M, Herman JL, Schatzow E, Coco M, Kallivayalil D, Levitan J. *The Trauma Recovery Group: A Guide for Practitioners*. (Guilford Press, 2011, 193 pages).
- Meyer F, Ehrlich M, Petet JR. *Psycho-oncology: a review for the general psychiatrist*. FOCUS: The Journal of Lifelong Learning in Psychiatry. 2009;7:317-331

Appendix II – Selected Bibliography of CHA Faculty Publications

- Ortega, A., Canino, G., & Alegria, M. (2008). Lifetime and 12-Month Intermittent Explosive Disorder in Latinos. *American Journal of Orthopsychiatry*, 78(1), 133-139.
- Perez, D., Alegria, M., & Torres, M. (2008). Prevalence and Correlates of Everyday Discrimination Among U.S. Latinos. *Journal of Community Psychology*, 36(4), 421-433.
- Pinals SL, Morgan AC. Distinguishing Dementia with Lewy Bodies from Parkinson's Disease Dementia and Alzheimer's Disease: A Geriatric Case Study. *Clinical Geriatrics* 2008; 16(4):17-20.
- Rivera, F., Guarnaccia, P., Mulvaney-Day, N., Lin, J., Torres, M., & Alegria, M. (2008). Family Cohesion and its Relationship to Psychological Distress among Latino Groups. *Hispanic Journal of Behavioral Sciences*.
- Rondeau, Kris and Janna Malamud Smith. "Unions new role in the workplace." Op-ed. *The Boston Globe*. Saturday, August 30, 2008. p.A17
- Ruble M, Forstein M, Mental Health: Epidemiology, Assessment, and Treatment, In: Makadon, HJ, Mayer KH, Potter J, Goldhammer H., Eds. *Fenway Guide to Lesbian, Gay, Bisexual, and Transgender Health*, American College of Physicians, Philadelphia, 2008, pgs. 187-208
- Seligman, A., Weller, R., Puett, M., Simon, B. *Ritual and its Consequences: An Essay on the Limits of Sincerity* New York: Oxford University Press, 2008
- Selwyn PA, Forstein M. Overcoming the False Dichotomy of Curative vs. Palliative Care for Late-Stage HIV/AIDS. In: McPhee SJ, Winker MA, Rabow MW, et al, Eds. *Care at the Close of Life: Evidence and Experience*. JAMA evidence, American Medical Association, McGraw Hill Medical, 2011, pgs. 173-185.
- Shrout, P., Alegria, M., Canino, G., Guarnaccia, P., Vega, W., Duan, N., et al. (2008). Testing Language Effects in Psychiatric Epidemiology Surveys with Randomized Experiments: Results from the NLAAS. *American Journal of Epidemiology*. *American Journal of Epidemiology*, 168(3), 345-352.
- Sikich L, Frazier JA, McClellan J, Findling RL, Vitiello B, Ritz L, Ambler, D, Puglia M, Maloney AE, Michael E, DeJong S, Slifka K, Noyes N, Hlastala S, Pierson L, McNamara NK, Delperto-Bedoya D, Anderson R, Hamer RM, Lieberman JA . Double-Blind Comparison of First- and Second-Generation Antipsychotics in Early-Onset Schizophrenia and Schizo-affective Disorder: Findings From the Treatment of Early-Onset Schizophrenia Spectrum Disorders (TEOSS) Study. *Am J Psychiatry* 2008; 165:1420-1431.
- Simon, B. It's Really More Complicated than You Imagine: Narratives of True and False Memory in: *Psychoanalysis and Narrative Medicine*, eds. Peter L. Rudnytsky and Rita Charon (Albany: State University of New York Press, 2008). Pp.119-136
- Simon, B. History of Psychiatry in Classical Antiquity. In: J. Gach and E. Wallace, editors, *History of Psychiatry: A Handbook* (Springer, NY, 2008)
- Smith, Janna Malamud. "Personal Boundaries." *The Chicago Companion to the Child*. Chicago: University of Chicago. Spring 2009.
- Smith, Janna Malamud. "The All Women Macbeth" *The Threepenny Review*. Spring 2008.
- Smith, Janna Malamud. "Life after Mother." *The American Scholar*. March 2008.
- Suarez, L., Polo, A., Chen, C. & Alegria, M. (In Press). Prevalence, Course and Correlates of Childhood-Onset Anxiety Disorders among Latinos and Non-Latino Whites in the United States. *Psicologica Conductual*.
- Smith, Janna Malamud. "Personal Boundaries." *The Chicago Companion to the Child*. Chicago: University of Chicago. Due out Spring 2009.
- Telingator, C., Patterson, C. *Clinical Perspectives: Children and Adolescents of Lesbian and Gay Parents*, *Journal of the American Academy of Child and Adolescent Psychiatry*, Vol.47, No.12, 1364-1368 December 2008
- Telingator, C., Woyewodzic, K., *Sexual Minority Identity Development*, *Psychiatric Times* (online), Vol. 26, No. 10, October 2009
- Vega, W., Canino, G., Cao, Z. & Alegria, M. (In Press). Prevalence and Correlates of Dual Diagnoses in U.S. Latinos. *Drug Abuse and Dependence*
- Wilcox, D. (in press). "Assessing Firesetting Behavior in Children and Adolescents." In G.Koocher and S. Sparta (Eds.), *Forensic Assessment of Children and Adolescents*. New York: Oxford University Press
- J. Yellin & K. White (Eds.): *Shattered States: Disorganized Attachment and its Repair*. London, UK: Karnac, 2008
- Ziegler, RG., Howe, L., Pasternak, G. *Psychotherapeutic Debriefing of Children and Adolescents Following Exposure to Violence in Home or Community: Integrating Narrative Techniques*. In Press, Special Edition on Trauma, in: *Journal of Infant, Child and Adolescent Psychotherapy*

Appendix II – Selected Bibliography of CHA Faculty Publications

CHA Emergency Department

Daudeline DH, Sayah AJ, Kwong M, Restuccia MC, Porcaro WA, Ruthazer R, Goetz JD, Lane WM, Beshansky JR, Selker HP. Improving Use of Prehospital 12-Lead Electrocardiography for Early Identification and Transportation of Patients with STEMI. *Circulation*, May 2009.

Daudeline, DH, Sayah, AJ, Manlik, K, Reztuccia MC, Porcaro, RR, Goetz, JD, Lane, WM, Beshanski, JR, Selker, HP. Improving Use of Prohospital 12-Lead ECG for Early Identification and Treatment of Acute Coronary Syndrome and ST-Elevation Myocardial Infarction. *Circulation Cardiovasc Qual Outcomes*, 3, May 2010 pp 316-323

Fares, S, Zubaid, M, Al-Ahmeed, W, Ciottone, G, Sayah, A, Al Suaidi, J, Amin, H, Al-Atawna, F. Utilization of Emergency Medical Services by Patients with Acute Coronary Syndromes in the Arab Gulf States. Accepted for publication *JEM*.

Fares, S, Zubaid, M, Al-Ahmeed, W, Ciottone, G, Sayah, A, Al Suaidi, J, Amin, H, Al-Atawna, F. Utilization of Emergency Medical Services by Patients with Acute Coronary Syndromes in the Arab Gulf States. *European Journal of EM* 16(5) Oct 2009. S

Friedman FD, Rathlev NK, White L, Epstein SK, Sayah A, Pearlmutter M, Biddinger P, Zane R, Moyer P. A Trial to End Ambulance Diversion in Boston: Report from the Conference of Boston Teaching Hospitals Consortium. *Prehospital and Disaster Medicine* (accepted for publication)

Lobon, LF, Sayah, AJ, Rivard L, Brady, M, Skura, S. Emergency Department Rapid Assessment Unit at the Cambridge Hospital: Why and How? *Annals of Emergency Medicine*, 54(3) September 2009 p. S6.

Sayah, A. Otitis Externa. In: Rosen & Barkin. *The 5 Minutes Emergency Medicine Consult*. 4th Edition. Schaider, J., Hayden, S., Wolfe, R., Barkin, R., Rosen, P. Editors. Philadelphia: Lippincott William & Wilkins; 2011

Sayah, A. Otitis Media. In: Rosen & Barkin. *The 5 Minutes Emergency Medicine Consult*. 4th Edition. Schaider, J., Hayden, S., Wolfe, R., Barkin, R., Rosen, P. Editors. Philadelphia: Lippincott William & Wilkins; 2011

Sayah, A. Acute Chondritis. In: Rosen & Barkin. *The 5 Minutes Emergency Medicine Consult*. 4th Edition. Schaider, J., Hayden, S., Wolfe, R., Barkin, R., Rosen, P. Editors. Philadelphia: Lippincott William & Wilkins; 2011

Sayah, AJ, Lobon, LF, Rivard, L, Skura, S. Emergency Department Operational Improvements' Impact on Volume, Quality Core measures, Patient Stay, and Satisfaction. *Annals of Emergency Medicine*, 54(3) September 2009 p. S6.

Sayah, AJ, Roe, MT. The Role of Fibrinolytics in the Prehospital Treatment of ST-Elevation Myocardial Infarction, *JEM*, 34(4) May 2008 pp 405-416

Selker; Beshansky; Ruthazer; Sheehan; Sayah; Atkins; Aufderheide; Pirrallo; D'Agostino; Massaro; Griffith. Emergency Medical Service Predictive Instrument Aided Diagnosis and Treatment of Acute Coronary Syndromes and ST Elevation Myocardial Infarction in the IMMEDIATE TriAL. Accepted for publication (prehospital Emergency Care) Smulowitz, Pb, Adelman, I, Lipton, R, Burke, L, Weiner, S, Sayah, A, Baugh, CW, Burke, MC, Landon, BE, The Impact, of Health Care Reform in Massachusetts on Emergency Department Use by Uninsured and Publicly Subsidized Individuals. *Annals of Emergency Medicine*, 54(3) September 2009 p. S84.

Recent Resident Publications

Fernandes R, Shore, W, Muller, J, & Rabow, M: What's It Really Like? The Complex Role of Medical Students in End-of-Life Care. *Teaching and Learning in Medicine*. 2008; 20 (1): 69-72.

Gerson R, Davidson L, Booty A, McGlashan T, Malespina D, Pincus HA, Corcoran C. Families' experience with seeking treatment for recent-onset psychosis. *Psychiatr Serv*. 2009 Jun;60(6):812-6.

Wong C, Davidson L, McGlashan T, Gerson R, Malaspina D, Corcoran C. Comparable family burden in families of clinical high risk and recent-onset psychosis patients. *Early Intervention in Psychiatry*, in press.

Kurtz B. "Autism" in *Psychiatry: Just the Facts*, ed. Ron Albucher, January 2008)

Dutra, L, Callahan K, Forman E, Mendelsohn, M, & Herman JL (2008): Assessing maladaptive schema systems of a chronically traumatized population using the Young Schema Questionnaire. *J. Nervous and Mental Disease*.

Lynch, SM, Forman E, Mendelsohn, M, & Herman JL (2008). Attending to dissociation: Assessing change in dissociation and predicting treatment outcome. *J. Trauma and Dissociation*.

Appendix II – *Selected Bibliography of CHA Faculty Publications*

Albucher R, Meyer F, et al . Schizophrenia, Brief Psychotic Disorder, Schizoaffective Disorder. In: Psychiatry Just the Facts. USA, UK: Mcgraw Hill Professional;2008

Schuman-Olivier Z, Brendel D, Forstein M, Price BH. Palliative sedation for existential distress: A psychiatric perspective. Harvard Review of Psychiatry.

Joanna Vaz MacLean, M.D. The Effects of Spontaneous Creative Expression on Anxiety and Depression in Psychiatric Inpatients, Resident Journal, The American Journal of Psychiatry, November 2010, vol 5, #11, pg 5 and 6.

Lambrese JV. Suppression of Puberty in Transgender Children. Virtual Mentor. 2010; 12: 645-649. <http://virtualmentor.ama-assn.org/2010/08/jdsc1-1008.html>, August 3, 2010.

S. Ravven, M.B. Zimmerman, S. K. Schultz, R.B. Wallace. Twelve Month Herbal Medicine Use for Mental Health from the National Co-Morbidity Survey: Replication (NCS-R). Annals of Clinical Psychiatry. February 2011. Vol. 23 No. 1.