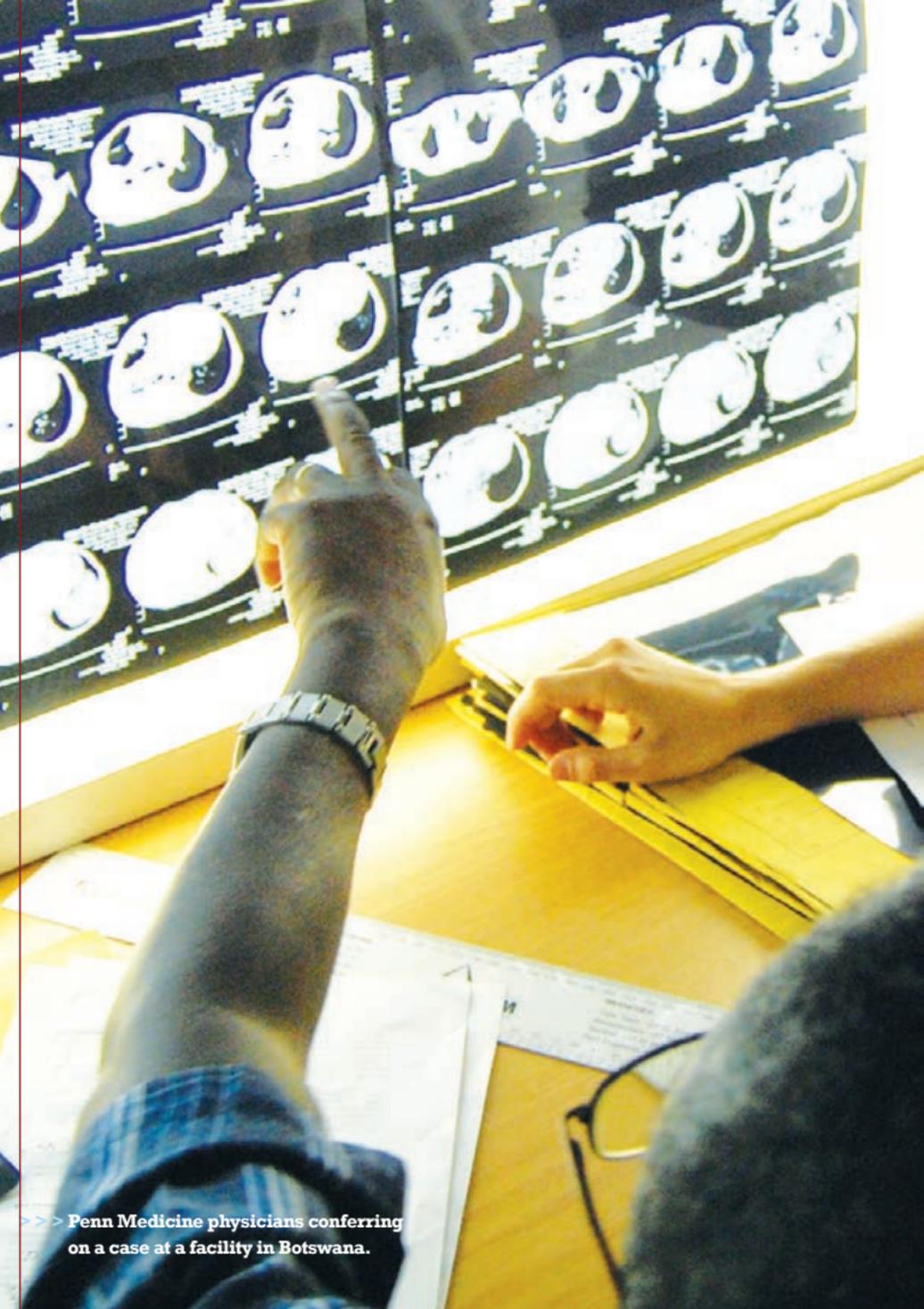




Penn Medicine

# FACTS & FIGURES

2013



>>> Penn Medicine physicians conferring on a case at a facility in Botswana.



## Penn Medicine at Home & Abroad

Penn Medicine is among the most prestigious academic medical institutions in the world. Its international prominence is built on a tradition of pioneering discoveries and innovations, excellence in training tomorrow's physicians and scientists, and safe and compassionate patient care. In addition to offering cutting-edge medical care to our patients, Penn Medicine's programs and projects extend beyond our institution and vulnerable populations in Philadelphia to those in need around the world.

Penn faculty and physicians-to-be are researching diseases, educating physicians, and treating patients in hospitals and mobile clinics around the globe. Recent locations for Penn Medicine's faculty and student outreach include: Argentina, Austria, Botswana, China, the Dominican Republic, Ecuador, El Salvador, France, Ghana, Guatemala, India, Malawi, Mali, the Netherlands, Nicaragua, Poland, Panama, South Africa, Tanzania, Uganda, Vietnam, and Zambia.



## About Penn Medicine

Penn Medicine comprises the Perelman School of Medicine and the University of Pennsylvania Health System.

### Research

Penn's Perelman School of Medicine is consistently among the nation's top three recipients of federal funding from the National Institutes of Health. Penn's physicians and scientists take an interdisciplinary approach to understanding the fundamental mechanisms of disease, leading to new strategies for treatments and cures.

Faculty from 23 institutes and centers at Penn Medicine work with their counterparts from the 11 other schools of the University of Pennsylvania in such disparate areas as bioengineering, neuroscience, and health-care policy. A University-wide initiative called Penn Integrates Knowledge (PIK) has recruited senior research scientists and scholars whose outlooks cross traditional academic disciplines. Since 2006, 14 PIK professors have become associated with the Perelman School of Medicine and other schools of the University.

### Education

Established in 1765 as the nation's first medical school, the Raymond and Ruth Perelman School of Medicine, continues a rich tradition of providing pre-eminent training and education. The School is ranked 2<sup>nd</sup> in the *U.S. News & World Report's* survey of the nation's research-oriented medical schools, marking its 15<sup>th</sup> consecutive year among the top-five medical schools in the country. Penn Medicine continues to provide its students with an innovative, comprehensive curriculum designed to meet their individual career goals.



## Patient Care

Penn Medicine's physicians, nurses, and staff provide exceptional personalized care to patients with a broad range of medical conditions, including cancer, heart and lung disease, neurological disorders, and diseases of aging, as well as care for newborns. With state-of-the-art equipment, our highly trained physicians work together to ensure that each patient's welfare is addressed from multiple perspectives, involving disease specialists, nurses, pharmacists, social workers, and rehabilitation professionals. Critical-care units at Penn Medicine are recognized by leading health-care associations for their excellence in patient care.



## Penn Medicine Clinical Facilities

The **Hospital of the University of Pennsylvania** is annually recognized as one of the nation's best hospitals by *U.S. News & World Report* in its Honor Roll of best hospitals.

**Penn Presbyterian Medical Center** is consistently recognized for delivering superior patient safety and high-quality care and as a center of excellence for cardiac surgery, cardiac care, orthopaedics, and ophthalmology.

**Pennsylvania Hospital** is the nation's first hospital (co-founded by Benjamin Franklin in 1751), with many expert clinical programs, including the Women's Cardiovascular Center, the Center for Bloodless Medicine and Surgery, orthopaedics, and maternity.

The **Perelman Center for Advanced Medicine** is a state-of-the-art, 600,000-square-foot outpatient facility containing 321 exam rooms, with diagnostic and treatment facilities designed to be in close proximity for patient-focused care.

The **Roberts Proton Therapy Center**, the largest integrated radiation oncology center in the world, uses a beam of protons traveling at near-light speed to eradicate tumors, eliminating many side effects of conventional cancer therapies.



The **Abramson Cancer Center** has more than 70,000 outpatient visits each year and over 9,000 inpatient stays. Since 1973, it has been designated a Comprehensive Cancer Center by the National Cancer Institute, one of 41 such Centers in the nation.

## Expansions at Penn Medicine Campuses

The combined cost of the capital projects is about \$235 million over the next two-plus years.



> Penn Medicine at Washington Square  
/// Summer 2013



> New Advanced Care Hospital Pavilion at Penn Presbyterian  
/// Winter 2015



> Perelman Center expansion /// Fall 2014

**Good Shepherd Penn Partners** offers inpatient rehabilitation and outpatient care at 29 comprehensive outpatient facilities in southeastern Pennsylvania and southern New Jersey, including a specialty hospital at **Penn Medicine Rittenhouse**.

**Penn Home Care & Hospice Services** offers a full range of home health-care needs by partnering with Penn Wissahickon Hospice, Penn Care at Home, and Penn Home Infusion Therapy.

**Penn Medicine Community Practices** are located in Valley Forge, Radnor, Bucks County, Cherry Hill, and Woodbury Heights.

The **Clinical Care Associates** and **Clinical Health Care Associates of New Jersey** are networks of primary and specialty care physicians, with more than 50 locations throughout the Philadelphia region.

## Penn Medicine Profile | FY12

Annual Operating Revenue . . . . . \$4.3 billion

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### Research & Education

Total Sponsored Program Awards . . . . . \$587 million

NIH Awards . . . . . \$398 million

State Research Funding . . . . . \$5 million

New Patents Awarded . . . . . 57

Full-Time Faculty . . . . . 1,975

MD Students . . . . . 769

PhD Students . . . . . 775

Residents & Fellows . . . . . 1,135

Postdoctoral Fellows . . . . . 789

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### Philanthropy

Gifts . . . . . \$156 million

Donors . . . . . 18,357



## Patient Care

	<b>Penn Medicine Total</b>	<b>HUP</b>	<b>PAH</b>	<b>PPMC</b>
Licensed Beds	<b>1,632</b>	784	517	331
Physicians	<b>2,593*</b>	1,923	811	911
Adult Admissions	<b>78,262</b>	37,849	23,603	16,810
Outpatient Visits	<b>2,080,269<sup>+</sup></b>	1,316,001	87,060	131,659
Emergency Dept. Visits	<b>136,374</b>	64,423	38,465	33,486
Births	<b>8,971</b>	4,128	4,843	n/a

## Facilities & Employees

	<b>Penn Medicine Total<sup>†</sup></b>	<b>PSOM</b>	<b>HUP</b>	<b>PAH</b>	<b>PPMC</b>
Employees	<b>21,864</b>	5,413	6,898	2,780	1,850
<sup>‡</sup> Net Sq. Ft. of Building Space	<b>6.6 million</b>	2.4m	1.9m	957,000	617,900

\* Includes physicians with privileges at more than one hospital.

+ Includes CCA/CHCA.

† Includes UPHS and PSOM.

<sup>‡</sup> **PSOM**: 10 interconnected buildings on the core campus, plus 27 sites in and around West Philadelphia.

**HUP**: 16 interconnected buildings. **PAH**: 15 buildings. **PPMC**: 10 interconnected buildings.

### Key to abbreviations used in table:

**CCA**: Clinical Care Associates

**CHCA**: Clinical Health Care Associates

**HUP**: Hospital of the  
University of Pennsylvania

**PAH**: Pennsylvania Hospital

**PPMC**: Penn Presbyterian Medical Center

**PSOM**: Perelman School of Medicine

## Research

Penn Medicine is an internationally recognized leader in the discoveries that advance science and pave the way for new therapies and procedures to improve human health. Seventy-five Penn Medicine researchers are elected Members of the Institute of Medicine, one of the highest honors in medicine.

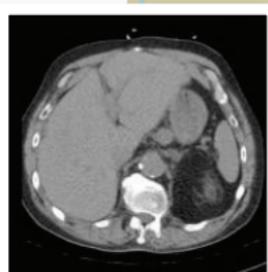
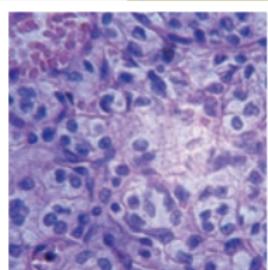
The basic and clinical research findings emerging from Penn Medicine's laboratories and hospitals advance the treatment of a wide range of diseases and medical conditions, as well as provide the foundation on which many of medicine's next generation of cures will be developed.

Penn's culture has always encouraged close collaboration between basic scientists and clinicians, exemplified by centers such as the **Abramson Family Cancer Research Institute**. From these fruitful partnerships, new approaches and innovative technologies are better identifying the molecular basis of disease. Translating this knowledge into new and enhanced treatments takes place in Penn Medicine's physically integrated research and clinical buildings. For example, the **Ruth and Raymond Perelman Center for Advanced Medicine**, the **Roberts Proton Therapy Center**, and the newly named 14-story **Smilow Center for Translational Research** are all connected in the same facility to maximize communication among Penn clinicians and basic researchers.



## Delivering the Promise of Research

- A novel immunotherapy turns patients' own T cells into "serial killers" aimed at tumors in adults and children with blood cancers.
- A spinal fluid "signature" chemical test, positron emission tomography, and arterial-spin labeling are improving early detection of Alzheimer's disease.
- A dendritic-cell vaccine triggers complete tumor eradication in about 20% of women with ductal carcinoma in situ, a breast cancer that makes up more than 25% of new cases.
- Understanding the molecular basis for hundreds of rare and orphan diseases is helping to expedite the development of novel therapies.
- New findings about the molecular cues that tell young cells what to become are being used to develop new treatments in such areas as dermatology, pulmonology, and gastroenterology.





## Education

The drive toward patient-centered care, with its multidisciplinary approach, is transforming how medicine is taught. The **Perelman School of Medicine** is at the forefront of such medical education, with several pioneering programs:

- Simulation training in state-of-the-art medical techniques and procedures.
- Standardized Patient program that helps students develop skills in interviewing and examination techniques.
- Longitudinal Experience to Appreciate Patient Perspective program to understand the biological, psychological, and social aspects of chronic illness.
- Each medical-school class engages in global health education and training opportunities, and residents participate in international clinical service.
- The School's 17-year tradition as an innovator in utilizing cyber-teaching tools continues today with a Penn-wide partnership with Coursera, an online education platform that extends Penn Med's reach beyond campus to millions of learners around the world.

## Interdisciplinary educational programs and dual degrees

- MD/PhD program, currently with 186 students.
- MD/Master of Bioethics, MD/Master of Business Administration, MD/Master of Public Health, MD/Master of Science in Clinical Epidemiology, MD/Master of Science in Health Policy Research, MD/Master of Science in Translational Research, MD/JD.
- Biomedical Postdoctoral programs, Certification and Non-Degree Programs, Patient Oriented Research Certification, Clinical Research Certification, The Robert Wood Johnson Clinical Scholars Program.
- Penn Medicine's PhD training programs enroll 627 full-time students in Biochemistry & Molecular Biophysics, Cell & Molecular Biology, Epidemiology & Biostatistics, Genomics & Computational Biology, Immunology, Neuroscience, and Pharmacology.

## Clinical Experiences

- 10 tertiary/quaternary hospitals used for inpatient clinical training.
- 70 ambulatory sites for required clerkship and elective experiences, including individual outpatient practices, group practices, and multidisciplinary clinics throughout the Philadelphia region.
- 6 community health clinics for the underserved, run by students and faculty.



## Patient Care

The University of Pennsylvania Health System (UPHS) comprises: the Hospital of the University of Pennsylvania (HUP), Penn Presbyterian Medical Center, and Pennsylvania Hospital, as well as a partnership with Good Shepherd Penn Partners, a rehabilitation and long-term acute-care hospital at Penn Medicine Rittenhouse. UPHS also includes Penn Home Care and Hospice Service and many outpatient facilities and service programs. Penn Medicine physicians work hand in hand with their colleagues at The Children's Hospital of Philadelphia and the Philadelphia VA Medical Center.

### **Commitment to excellence in patient care is reflected in the many honors we receive:**

- Penn Medicine again had the most recommended physicians in the region featured in the *Philadelphia* magazine "Top Docs" list.
- The nursing staffs of HUP and Presbyterian have each been awarded Magnet status from the American Nurses Credentialing Center.
- Penn's Abramson Cancer Center was rated "exceptional" — the highest rating — by the National Cancer Institute.
- Penn Medicine is the first health system in the region to have all member hospitals certified as Primary Stroke Centers by the Joint Commission.
- The Hospital of the University of Pennsylvania is annually recognized by *U.S. News & World Report* in its Honor Roll of best hospitals.

### **Commitment to Quality and Patient Safety**

Penn Medicine is committed to providing world-class care that is firmly rooted in best practices and evidence-based medicine. The Blueprint for Quality and Safety, a system-wide strategy for quality, safety, and satisfaction, continues to drastically reduce health care-associated infections, prevent medication errors, and lower rates of readmission to the hospital. The Center for Evidence-Based Practice, the first in the region, is a specially trained team of experts who perform independent and objective evaluations of drugs, devices, processes of care, and other high-impact clinical procedures to produce better guidelines for improving care.



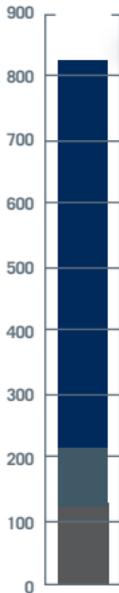
## Better Clinical Medicine through Research

- The first bilateral hand transplant performed in the Philadelphia region is paving the way for similar procedures to enhance the quality of life for persons who have lost multiple limbs.
- A multicenter randomized trial at Penn comparing coronary CT angiography and conventional cardiac testing methods found that a detailed CT scan of the heart can more safely and quickly rule out a heart attack among many patients who come to emergency rooms with chest pain.
- Among patients with malignant pleural mesothelioma, treatment with lung-sparing surgery in combination with photodynamic therapy — pioneered at Penn — is yielding better survival rates.
- Penn researchers found that an HIV drug that redirects immune cells significantly reduces the incidence of a dangerous complication that often follows bone marrow transplants in blood cancer patients.
- A new mental health drug developed at Penn, which recently received FDA approval, is significantly decreasing the debilitating side effects in people who take antidepressants from 40% to less than 5%.

## Penn Medicine in the Community

Improving lives and health in communities throughout the Philadelphia area is among Penn Medicine's highest priorities. Every day, Penn's physicians, nurses, medical students, and staff volunteer their knowledge and skills to benefit residents in our community. We work with local schools to operate free neighborhood clinics, help low-income residents obtain primary care health services, serve as a major source of care and preventive education for those with HIV, and provide care and resources for people who are homeless. To learn more, visit [PennMedicine.org/community](http://PennMedicine.org/community).

### Support in FY12

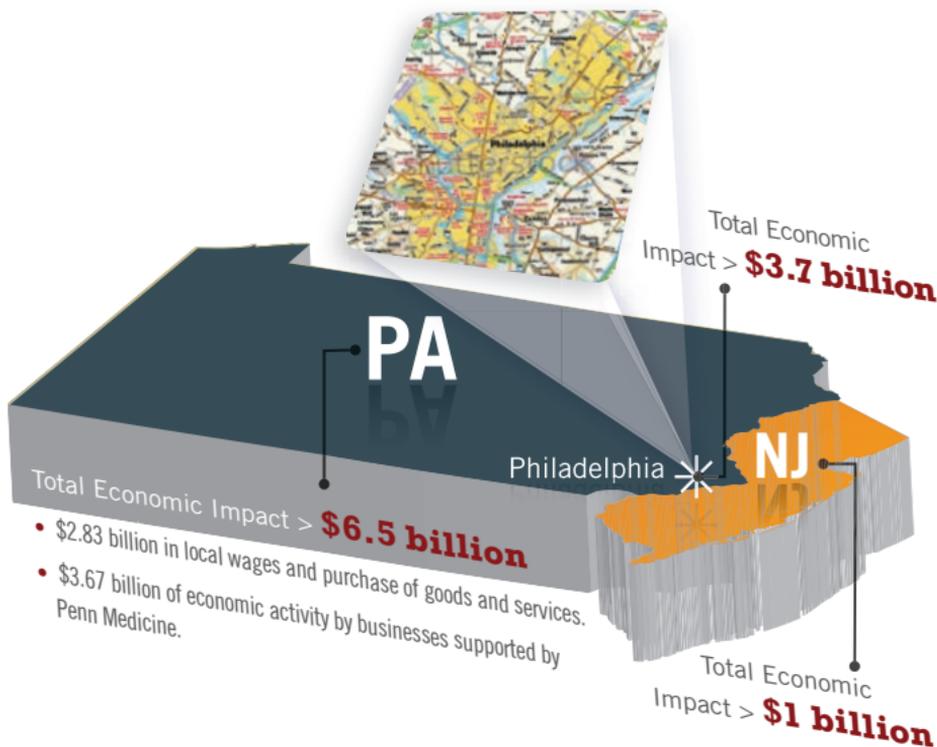


Total: **\$827 million**

Research support:  
**\$615 million**

Physician training support:  
**\$91 million**

Charity and underfunded care for Medicaid families:  
**\$121 million**



## Research that Benefits the Community

- Greening vacant lots makes neighborhood residents feel safer and is associated with reductions in certain gun crimes.
- A mobile app-driven crowd-sourcing contest sent Philadelphia residents on a search for lifesaving automated external defibrillators. Organizers are creating a mobile app to help bystanders and 911 dispatchers more quickly locate nearby AEDs.
- A \$12 million grant from the National Institutes of Health will fund a new Center of Excellence in Prostate Cancer Disparities. The center aims to develop interventions to shrink the striking disparities in mortality from the disease between African American and white men.





## What's Next

Basic biomedical research at Penn is being translated into tomorrow's clinical trials and, ultimately, readily available treatments.

- Using the power of “omics” technologies — genomics, proteomics, metabolomics — the Personalized NSAID Therapeutics Consortium, led by Penn, is developing ways to manage the risk of serious, but uncommon, side effects due to differing responses to anti-inflammatory drugs.
- Cancer biologists are using targeted genomic diagnostics to reveal which patients could benefit from new drugs that work only for those with certain mutations and prevent unwanted side effects in others.
- Microbiologists are gaining a better understanding of how beneficial microbes that reside in the human body interact with the immune system to give new insights into such conditions as allergies and chronic inflammatory diseases.
- Neurologists and bioengineers are developing an ultra-thin device capable of recording brain activity without using penetrating electrodes, which represents a new generation of brain-computer interface to one day treat neurological and psychiatric disorders.
- Immunological researchers are working on new broadly effective, “universal” seasonal influenza vaccines.



**PENN MEDICINE** is a world-renowned academic medical center dedicated to discoveries that advance science, to outstanding patient care throughout the world, and to the education of physicians and scientists who carry on our legacy of excellence.



**Penn Medicine**

**Department of Communications**

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