

FACTS & FIGURES

2020

Discovering the Future of Medicine



LOOKING AHEAD

The Strength of Penn Medicine—Our People

Penn Medicine's talented clinical, research, and teaching workforce is the foundation of our strength as one of the nation's premier academic medical centers. Facts & Figures 2020: Discovering the Future of Medicine provides snapshots of our activities across both the University of Pennsylvania Health System and the Perelman School of Medicine. Behind the headlines and the statistics are our people, who together ensure that we will remain on the leading edge far into the future.

We are internationally renowned scientists mapping new approaches to treating and preventing disease, and clinicians caring for our patients in clinics and at the bedside around the clock. We are the staff who go the extra mile to cheer our patients and families and help them find their way when they pass through our doors. We are teachers of the next generation of health care professionals primed to make their own imprint on the field.

Penn Medicine's team embodies a constant spirit of innovation, curiosity, and compassion. These values infuse our work across every domain of our mission—in patient care, research, education, and our efforts lending a hand within the communities we serve. No matter our individual roles, we are constantly evolving, learning, and breaking new ground. We are united to better the lives of those in our community and far beyond, and every day, we are making a difference together.

J. Larry Jameson, MD, PhD

Executive Vice President of the University of Pennsylvania for the Health System Dean. Perelman School of Medicine

Levin B. Mahony Kevin Mahoney

CEO of the University of Pennsylvania Health System

PENN MEDICINE /S



PATIENT CARE

Home of the **1st HOSPITAL** in the United States, founded in 1751

Penn Medicine's physicians, nurses, and staff provide exceptional, personalized care to patients with a wide range of medical conditions. Using state-of-the-art equipment and data science, our doctors and nurses work together to ensure that patients' needs are addressed from multiple perspectives. Pharmacists, social workers, as well as nutrition and rehabilitation professionals are all part of the care team.



RESEARCH

Recipients of over **\$908M** in research funding

Penn Medicine's researchers take an interdisciplinary approach to better understand the fundamental mechanisms of disease, which leads to more precise and personalized treatments. Faculty from dozens of institutes, centers, and departments work in multidisciplinary teams spanning the 11 other schools at the University of Pennsylvania, including experts in informatics, bioengineering, and health policy.

The University of Pennsylvania
Health System and the Raymond &
Ruth Perelman School of Medicine



EDUCATION

1st MEDICAL SCHOOL in the United States

The Perelman School of Medicine—established in 1765—is consistently ranked in the nation's top academic medical schools by *US News & World Report*. Penn offers students an innovative, comprehensive curriculum that prepares them to become leading physicians and scientists in the United States and around the world. The community of alumni numbers over 24,700 living and working across the globe.



COMMUNITY SERVICE

550+ service initiatives funded by CAREs grants

Supporting the community is a cornerstone of Penn Medicine's mission. Every day, physicians, nurses, students, and staff volunteer their time and knowledge to serve vulnerable populations. They operate free neighborhood clinics, help low-income residents manage medical appointments and wellness efforts, provide education and mentorship, and conduct other outreach initiatives. Penn Medicine also provides millions of dollars in care for underserved patients each year.

CLINICAL FACILITIES

A Growing Footprint



The Hospital of the University of Pennsylvania

is Penn Medicine's largest hospital. HUP is a busy inpatient hub for cancer, neurosciences, cardiac care, and many other specialties. It is also the oldest university-owned teaching hospital in the country.



Penn Presbyterian Medical Center

is a renowned center for cardiac care and ophthalmology. Its campus includes the Musculoskeletal Center's outpatient facility at Penn Medicine University City and the Pavilion for Advanced Care, home to Penn Medicine's Level I Regional Resource Trauma Center.



Pennsylvania Hospital

is the nation's first hospital, cofounded by Benjamin Franklin in 1751. Today its outstanding clinical programs include the Spine Center, the Center for Transfusion-Free Medicine, maternity and newborn services, and behavioral health. The campus includes Penn Medicine Washington Square, the hospital's outpatient facility.

Penn Medicine includes six acute-care hospitals and hundreds of outpatient locations throughout the region, as well as educational facilities at the Perelman School of Medicine.



Chester County Hospital

is an acute care facility in West Chester specializing in heart and vascular care, cancer, orthopaedics, and women's health. With satellite locations in Exton, West Goshen, New Garden, Jennersville, Kennett Square, and West Grove, the hospital is the largest in Chester County, with a 250,000-square-foot expansion which opened in early 2020.



Lancaster General Health

includes the Lancaster General Hospital, the Women & Babies Hospital, and a network of more than 60 outpatient facilities and physician practices in Lancaster. Chester, and Lebanon counties.



Penn Medicine Princeton Health

joined Penn Medicine in 2018 and is among the most comprehensive healthcare systems in New Jersey, including facilities offering acute-care hospital services, behavioral healthcare, ambulatory surgery, and wellness services. In late 2019, Princeton Medical Center celebrated its 100-year anniversary and 100 years of caring for residents of central NJ.

SPECIALIZED FACILITIES

Care Close to Home

The Perelman Center for Advanced Medicine is a state-of-theart outpatient facility, with diagnostic and treatment facilities for cancer, neurological, and cardiac conditions, among other types of specialty care. It is connected to the Smilow Center for Translational Research, which brings basic scientists and physicians together to collaborate and speed translation of research from the lab to patients.

Penn Medicine Rittenhouse includes a rehabilitation facility, a long-term acute-care specialty hospital, and an inpatient hospice.

Multispecialty Ambulatory
Locations are located throughout
our region, offering convenient
access to care across many disciplines,
as well as laboratory testing and
radiology services:

- Radnor
- Bucks County
- Cherry Hill
- Southern Chester County
- University City
- · Valley Forge
- Washington Square
- · Woodbury Heights

Good Shepherd Penn Partners is the post-acute care provider for Penn Medicine. It provides inpatient and outpatient physical rehabilitation and specialized long-term acute care.

Princeton House Behavioral Health and Lancaster Behavioral Health provide a range of inpatient and outpatient services for patients with mental health, substance abuse, or co-occurring disorders.

Penn Medicine at Home, which includes Penn Hospice, Penn Home Health, and Penn Home Infusion Therapy, offers a full range of home health needs.

Penn Urgent Care South
Philadelphia offers fast, convenient
care for patients of all ages with minor
illnesses and injuries. Patients can walk
in seven days a week, including holidays.



FUTURE-FORWARD FACILITIES

Building for the Future

The Pavilion

The Pavilion rises 17 stories on Penn Medicine's Philadelphia campus as a hospital built to support the future of medicine. Opening in 2021, the \$1.5 billion facility

Opening in 2021, the \$1.5 billion facility will house 504 private patient rooms and 47 operating rooms.



Hybrid operating rooms for surgeries & interventional procedures



Telemedicine functionality allows remote monitoring & consultations



In-room technology strengthens communication between patients, families, & care teams

Outpatient Innovations

A fully reimagined Penn Medicine Radnor will open in the summer of 2020, setting the standard for the nation's most advanced ambulatory care. The four-story, 250,000-square-foot multispecialty outpatient facility will expand options for patients to receive care typically only available through inpatient facilities. The campus includes space for a hotel, where patients who come for same-day surgeries, such as joint replacements, can recover with the help of Penn E-lert® elCU remote care monitoring.



PATIENT

On the Forefront of Medicine

From emergency departments to inpatient units to outpatient clinics across the region, Penn Medicine physicians, nurses, pharmacists, social workers, and other members of the care team put patients first in every setting. Staff leverages telemedicine, mobile apps, and remote monitoring technologies to provide options that offer patients more convenience and enhance their safety—both when they're in our facilities and at home.

Penn Medicine's Abramson Cancer Center, designated as a Comprehensive Cancer Center by the National Cancer Institute since 1973, is a world leader in cancer research, patient care, and education. At the Roberts Proton Therapy Center, the largest integrated radiation oncology center in the world, patients are treated with this highly precise form of radiation, which eradicates tumors while sparking healthy surrounding tissue and eliminating many side effects of conventional radiation treatment. Many Penn physicians also see patients at Children's Hospital of Philadelphia and the Corporal Michael J. Crescenz VA Medical Center.

HEART of the Matter

Transcatheter Aortic Valve
Replacement (TAVR) gives options
to those with aortic stenosis who,
due to age or health, are not
candidates for traditional open-heart
valve replacement surgery. As early
adopters and pioneers of clinical
trials using the approach, Penn
cardiologists are among the nation's
leaders in using this innovative
catheter-based treatment.



1ST

in the region to perform the TAVR procedure in 2007



TOP 5

TAVR program in the country

CONFRONTING The Opioid Crisis

Penn Medicine is on the front lines of innovations to drive down opioid addiction and overdose in the community. New efforts such as the Center for Addiction Medicine Policy and the Center for Opioid Recovery and Engagement (CORE) are mapping the most innovative models to build infrastructure and deliver care to patients struggling with substance use.



staff received Narcan



patient consults in the PPMC emergency department since the launch of CORF



estimated overdoses each vear prevented by the CORE program



3,500+

TAVR procedures performed at Penn Medicine

EVIDENCE BASED

Connected Care

Way to Health, a Penn-developed technology platform, automates and tailors engagement between patients and clinicians while guiding patients towards healthier decisions.

patients enrolled in Way

to Health projects

projects have been conducted in nearly all 50 states

vears in

texts with patients in one pilot program for COPD care, Breathe Better Together

RESEARCH

Tomorrow's Cures, Today



Penn Medicine is an internationally recognized leader for discoveries that advance science and patient care. Seventy-eight Penn Medicine researchers are Members of the National Academy of Medicine of the National Academy of Sciences, one of the highest honors in medicine.

The fundamental and discovery science and clinical research from Penn Medicine's laboratories and hospitals improves care for a wide range of medical conditions and provides the foundation for the next generation of therapies. The culture and campus of the University of Pennsylvania encourages close collaboration between scientists and clinicians, exemplified by its dozens of interdisciplinary clinical and research institutes, centers, and programs.

VANGUARDS of Neuroscience Research

The Mahoney Institute for Neurosciences (MINS) focuses on integrated neuroscience research and training, supporting interdisciplinary fundamental, pre-clinical, and clinical research. MINS projects span a wide spectrum, from addiction to neurodegeneration to issues related to cognition and decision making.

214

faculty members from

32

departments, representing

6

of Penn's schools

40+

seminars and community events hosted by MINS each year, including the Philly Science Festival and Brain Awareness Week





Students, post doctoral trainees, residents, & fellows





COLLABORATIVE RESEARCH

By the Numbers



Basic & clinical departments

CANCER

Research Leaders

The Abramson Cancer Center is a world leader in cancer research, patient care, and education. It includes 9 research programs that bring together investigators from 40 departments and eight University schools.



approvals supported since 2017



members of the ACC



~870



subjects enrolled in clinic trials in 2019



Free-standing interdisciplinary centers & institutes

CAR-T Innovations

CAR-T cell therapy—which

harnesses patients' own cells to fight cancer-has been hailed as one of the world's most pivotal medical research breakthroughs in the past decade. This technology is now being leveraged to address other common illnesses, including heart disease and autoimmune diseases.

EDUCATION

Trailblazers in Medical Education



The Perelman School of Medicine has an international reputation for innovative training programs in areas ranging from leadership to global health. Its groundbreaking curriculum has set a new standard for medical education nationwide and is a model for other academic medical schools. The curriculum integrates basic sciences and clinical experience, fosters interdisciplinary teamwork, and is built on a foundation of evidence-based medicine and patient-centered care.



INCOMING CLASS: 2019/2020







represented







minorities in medicine

WHAT'S NEXT for the 2019 Graduates?

states where the graduates will train

graduates training at Penn, CHOP, or the Scheie Eye Institute

received dual degrees or certificates

Top Specialties



Internal Medicine





GRADUATE Medical Education

ACGME-accredited residency and fellowship programs

non-ACGME fellowships sponsored by departments residents at HUP.

PPMC, PAH, and LGH

fellows at HUP. PPMC, and PAH



GLOBAL ENGAGEMENT

Improving Health Around the World



The Center for Global Health launched in 2015 to synthesize and expand Penn Medicine's efforts to improve worldwide health equity. The center's vision for the future is to build a healthier world by training tomorrow's leaders, addressing global health disparities, supporting regional centers of engagement in underserved locations, and uniting the Penn global health community through workshops, pilot projects, and seminars.



Among the many international projects, two stand out as the foundation of Penn's involvement in global health. The more than 10-year-old Guatemala-Penn Partnership focuses on public health, medical, as well as projects in local anthropology and archaeology. The 20-year-old Botswana-UPenn Partnership encompasses well-established programs in HIV/AIDS, heart disease, and the education of local health care professionals.

In June 2018, the Vingroup-Penn Alliance was established to improve health care and to create new undergraduate and graduate medical training programs in Vietnam. The alliance is positioned to extend Penn's global reach through the creation of a new Center of Regional Engagement in Southeast Asia, based in Vietnam.

CENTER FOR Global Health



163
Global Health activities
worldwide in 65 countries



219Penn medical trainees involved in Global Health activities



continents where programs are established



international students
involved in Global Health activities

ENVIRONMENTAL STEWARDSHIP

A Creative Commitment to Sustainability

Penn Medicine is taking action to mitigate its impact on earth by incorporating sustainable practices into design, improving energy management and recycling, minimizing waste, and more.

An eco-friendly construction, design, and operations plan for the Pavilion fortifies Penn's commitment to the environment, through innovations like the re-use of water and use of one acre of greenery for green roofing and outdoor landscaping for patients, families, and staff to enjoy. In addition to the Pavilion, Penn Medicine is utilizing sustainable practices across its multiple campuses and facilities:



100%

The University of Pennsylvania, including the Perelman School of Medicine, has committed to a 100% carbon neutral campus by 2042



4

LEED Silver certified buildings, including PCAM, Smilow, Valley Forge, & Radnor



260



4





micro f

at the new Penn Medicine Radnor

Green Labs @ Penn

The University's Penn Sustainability initiative created the Green Labs @ Penn program, which aims to reduce the environmental impact of laboratory research.

8

Penn Medicine and Perelmo School of Medicine labs certified under Penn's Green Labs program 25,000+

pounds of e-waste—from benchtop equipment to under-counter fridges were collected in a lab clearing initiative in 2018 50+

labs participated in the clearing initiative, responsibly recycling materials while decluttering

COMMUNITY SERVICE

Making a Meaningful Impact

Caring for people living throughout Pennsylvania and New Jersey is Penn Medicine's primary mission. Every day, physicians, nurses, medical students, researchers, and staff lend their time, skills, and knowledge to help the communities the health system serves, often as volunteers outside of their work.

PENN MEDICINE CARES

Penn Medicine's CAREs grant program supports faculty, students, and staff who volunteer in community-based programs from metropolitan Philadelphia to the rural areas in Lancaster and Chester counties to the suburbs and shore communities of New Jersey.

Since CAREs was established in 2011, it has provided grants to over **550** service initiatives, including programs in community centers, farmer's markets, and places of worship.

Learn more about Penn Medicine's community engagement and opportunities to volunteer at









\$304.2M

in charity and underfunded care for Medicaid families

health improvement services

GIVING BACK

In FY19



\$135.9M

in physician training support



raised by Penn's Way

IN THE NEIGHBORHOOD

Improving the Health in our Local Communities



Perelman School students volunteer with **Cut Hypertension** to provide blood pressure readings and hypertension education for Philly Cuts patrons.



Lancaster General Health partners with the Central Pennsylvania Food Bank and Community Action Partnerships for *Fresh Express*—a mobile food pantry that brings healthy food options to high-poverty communities in Lancaster County.



Every April, instructors from Penn Medicine Princeton Health train more than 1,000 community members in lifesaving fundamentals during *Free CPR Week*.



Chester County Hospital provides a free, year-long *diabetes prevention program* that is recognized by the Centers for Disease Control and Prevention to help prevent or delay type 2 diabetes.



Faculty, staff, and students from HUP, PAH, and PPMC support the **Covenant House**, a crisis center and residence for the homeless and runaway teens, by providing immediate crisis care, donations, and other services to help prevent future homelessness.

ECONOMIC DEVELOPMENT

An Engine for Progress

Penn Medicine is the top health care employer in the city of Philadelphia

\$15.1B

Improving our region's economic health

\$208.6M

total annual tax revenu

ECONOMIC IMPACT by State and City:



\$13.7B

70,790 jobs supported in Pennsylvania



\$9.3B impact in Philadelphia

40,490 jobs supported in



\$1.4E impact in New Jersey

9,200 jobs supported in New Jersey

NATIONAL & REGIONAL RECOGNITION

Leading with Distinction



US NEWS & World Report

The Hospitals of the University of Pennsylvania-Penn Presbyterian (HUP/PPMC) ranked among the nation's top hospitals by U.S. News & World Report in 2019. HUP/PPMC is ranked #18 in the nation in the publication's prestigious annual "Honor Roll" recognition for excellence in multiple specialties.

Penn Medicine hospitals & physicians are recognized as among the best regionally:

HUP/PPMC

in the Philadelphia Metro Area

Lancaster General Hospital

in the Lancaster, PA Metro Area

Pennsylvania Hospital

in the Philadelphia Metro Area

Chester County Hospital #7 in the Philadelphia Metro Area

Princeton Medical Center in the State of New Jersey

Additional Accolades

LGBTO HEALTH

All six of Penn Medicine's hospitals earned recognition as 2019 leaders in LGBTQ healthcare equality by the Human Rights



Penn Medicine had 481 Philadelphia magazine's "Top Docs" 2019 list



All Penn Medicine acute care facilities have achieved Magnet status from the American Nurses Credentialing Center, recognizing nursing excellence

A GROWING FOOTPRINT

Penn Medicine's talented and dedicated workforce cares for patients in our hospitals, large ambulatory facilities, and nearly 530 outpatient practices. We also have alliances with top community health systems across Southeastern Pennsylvania and Southern New Jersey, creating more options for patients no matter where they live.



PENN MEDICINE PROFILE

Fiscal Year 2019

\$8.6 BILLION

in Annual Operating Revenue



Research & Education

Total Sponsored Research	\$908.2 Million
NIH Awards	\$494 Million
PA State Research Funding	\$5.9 Million
Licensing Revenue	\$110.5 Million
New Patents Awarded	103
Full-Time Faculty (includes CHOP) .	2,710
MD Students	778
PhD Students	735
VMD-PhD Students	17
MD/PhD Students	202
Residents & Fellows (HUP, PPMC, PA	AH, LGH) 1,476
Postdoctoral Fellows	903



Philanthrophy

Gifts	\$210 Millior
Donors	23,64
Alumni Giving Participation	24%

	Total	HUP	PAH
Outpatient Visits ¹	5,944,652	1,988,654	245,105
ED Visits	359,699	61,821	40,088
Adult Admissions	135,188	34,895	17,987
Births	18,520	4,184	5,131
Licensed Beds ²	3,095	839	525
Physicians ³	8,795	2,638	1,507
Employees ⁴	43,907	7,979	2,974

Key to Abbreviations:

CCA: Clinical Care Associates CCH: Chester County Hospital CHCA: Clinical Health Care Associates CHOP: The Children's Hospital of Philadelphia

CPUP: Clinical Practices of the University of Pennsylvania

ED: Emergency Department GSPP: Good Shepherd Penn Partners

HCHS: Home Care & Hospice Services HUP: Hospital of the University of Pennsylvania

LGH: Lancaster General Health

PMPH: Penn Medicine Princeton Health PPMC: Penn Presbyterian Medical Center

PAH: Pennsylvania Hospital

PSOM: Perelman School of Medicine

PPMC	ССН	LGH	РМРН	PSOM
273,528	458,199	1,243,967	233,481	
48,621	41,770	117,867	49,532	
18,375	14,749	30,795	18,387	
	2,874	4,169	2,162	
375	276	651	429	
1,842	629	976	1,203	
2,699	2,367	9,387	3,132	6,7455

Key to Superscripts:

- (1) Includes CCA/CHCA, GSPP, HCHS
- (2) Includes newborn bassinets
- (3) Includes physicians with privileges at >1 hospital
- (4) Includes CCA, CORP, CPUP, HCHS
- (5) Includes staff and full-time faculty

Our Mission

Our mission is to advance knowledge and improve health through patient care, research, and the education of trainees in an inclusive culture that embraces diversity, fosters innovation, stimulates critical thinking, supports lifelong learning, and sustains our legacy of excellence.

