Facts & Figures 2020

Discovering the Future of Medicine
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
Executive Vice President of the University of Pennsylvania for the Health System
Dean, Perelman School of Medicine

Kevin Mahoney
CEO of the University of Pennsylvania Health System
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.

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 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.

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.
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.

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**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.

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**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.
The Perelman Center for Advanced Medicine is a state-of-the-art 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.
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** 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® eICU remote care monitoring.
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.

800+ Penn faculty and staff received Narcan doses and training at 7 events in 2019

450 Patient consults in the PPMC emergency department since the launch of CORE

204 Estimated overdoses each year prevented by the CORE program

3,500+ TAVR procedures performed at Penn Medicine

68,000+ Patients enrolled in Way to Health projects

10 Years in operation

150+ Research and clinical projects have been conducted in nearly all 50 states

10,000+ Texts with patients in one pilot program for COPD care, Breathe Better Together
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
COLLABORATIVE RESEARCH

By the Numbers

4,000+
Students, post doctoral trainees, residents, & fellows

6,700+
Faculty & staff

48
Departmental centers

28
Basic & clinical departments

26
Free-standing interdisciplinary centers & institutes

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.

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.

7 FDA
approvals supported since 2017

324
members of the ACC

~870
manuscripts published in 2019

8,000+
subjects enrolled in clinic trials in 2019
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

150 admitted students

- 54% female
- 46% male
- 28 states represented
- 68% non-traditional applicants
- 18% pursuing MD/PhD
- 23% underrepresented minorities in medicine

WHAT’S NEXT for the 2019 Graduates?

- 149 graduates
- 19 states where the graduates will train
- 50 graduates training at Penn, CHOP, or the Scheie Eye Institute
- 60% received dual degrees or certificates
- 68% non-traditional applicants
- 18% pursuing MD/PhD
- 23% underrepresented minorities in medicine

Top Specialties

- Internal Medicine
- Pediatrics
- Anesthesiology

GRADUATE Medical Education

- 82 ACGME-accredited residency and fellowship programs
- 1,068 residents at HUP, PPMC, PAH, and LGH
- 41 non-ACGME fellowships sponsored by departments
- 408 fellows at HUP, PPMC, and PAH
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

219 Penn medical trainees involved in Global Health activities

5 continents where programs are established

89 international students involved in Global Health activities
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

- **260** trees planted

- **4** rain gardens

- **1** micro farm
  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 Perelman 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 2019

- **50+** labs participated in the clearing initiative, responsibly recycling materials while decluttering valuable lab space
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 [PennMedicine.org/Community](http://PennMedicine.org/Community).
$143.4M in research support and community health improvement services

$135.9M in physician training support

$304.2M in charity and underfunded care for Medicaid families

+$1.75M raised by Penn’s Way campaign

GIVING BACK

In FY19
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 total economic impact
Improving our region’s economic health

$208.6M total annual tax revenue

ECONOMIC IMPACT by State and City:

$13.7B total impact in Pennsylvania
70,790 jobs supported in Pennsylvania

$9.3B impact in Philadelphia
40,490 jobs supported in Philadelphia

$1.4B impact in New Jersey
9,200 jobs supported in New Jersey
Penn Medicine hospitals & physicians are recognized as among the best regionally:

#1 HUP/PPMC
in the Philadelphia Metro Area

#1 Lancaster General Hospital
in the Lancaster, PA Metro Area

#4 Pennsylvania Hospital
in the Philadelphia Metro Area

#7 Chester County Hospital
in the Philadelphia Metro Area

#11 Princeton Medical Center
in the State of New Jersey

Additional Accolades

**LGBTQ HEALTH**

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

481

Penn Medicine had 481 physicians included in 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
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.
$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, PAH, LGH) .. 1,476
Postdoctoral Fellows ................. 903

Philanthropy
Gifts ................................................ $210 Million
Donors .......................................... 23,641
Alumni Giving Participation .......... 24%
<table>
<thead>
<tr>
<th>Key to Abbreviations:</th>
<th>CCA: Clinical Care Associates</th>
<th>HCHS: Home Care &amp; Hospice Services</th>
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<tbody>
<tr>
<td>CCH: Chester County Hospital</td>
<td>HUP: Hospital of the University of Pennsylvania</td>
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<tr>
<td>CHCA: Clinical Health Care Associates</td>
<td>LGH: Lancaster General Health</td>
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<tr>
<td>CHOP: The Children’s Hospital of Philadelphia</td>
<td>PMPH: Penn Medicine Princeton Health</td>
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<tr>
<td>CPUP: Clinical Practices of the University of Pennsylvania</td>
<td>PPMC: Penn Presbyterian Medical Center</td>
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<tr>
<td>ED: Emergency Department</td>
<td>PAH: Pennsylvania Hospital</td>
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<tr>
<td>GSPP: Good Shepherd Penn Partners</td>
<td>PSOM: Perelman School of Medicine</td>
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<table>
<thead>
<tr>
<th>Total</th>
<th>HUP</th>
<th>PAH</th>
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<tbody>
<tr>
<td><strong>Outpatient Visits</strong>¹</td>
<td>5,944,652</td>
<td>1,988,654</td>
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<tr>
<td><strong>ED Visits</strong></td>
<td>359,699</td>
<td>61,821</td>
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<td><strong>Adult Admissions</strong></td>
<td>135,188</td>
<td>34,895</td>
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<td><strong>Births</strong></td>
<td>18,520</td>
<td>4,184</td>
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<tr>
<td><strong>Licensed Beds</strong>²</td>
<td>3,095</td>
<td>839</td>
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<tr>
<td><strong>Physicians</strong>³</td>
<td>8,795</td>
<td>2,638</td>
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<tr>
<td><strong>Employees</strong>⁴</td>
<td>43,907</td>
<td>7,979</td>
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## 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

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<tr>
<td>Total</td>
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<td>458,199</td>
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<td>Adult Admissions</td>
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<td>Licensed Beds</td>
<td>375</td>
<td>276</td>
<td>651</td>
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<td>Physicians</td>
<td>1,842</td>
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<td>976</td>
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<td>Employees</td>
<td>2,699</td>
<td>2,367</td>
<td>9,387</td>
<td>3,132</td>
<td>6,745$</td>
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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.