Delivery System Science Fellowship 2019 Cohort

Host Site Descriptions

Host Site Name	Host Site Location
Atrius Health-Harvard Medical School Department of Population Medicine at Harvard Pilgrim Health Care Institute	Boston, MA
DentaQuest Institute	Columbia, MD
Geisinger Health System	Danville, PA
Kaiser Permanente Northwest	Portland, or and Southern Washington
MedStar Health Research Institute	Washington, D.C.
New York University Langone Health	New York, NY
Northwell Health	Hempstead, NY
University of Colorado Anschutz Medical Campus and the Data Science to Patient Value Initiative	Denver, CO
U.S. Department of Defense Military Health System Health Services Research	Falls Church, VA
U.S. Department of Veteran Affairs Quality Enhancement Research Initiative (QUERI) and Health Services Research and Development Service (HSR&D)	Various locations

See featured descriptions for each of the listed host site locations below.

Atrius Health-Harvard Medical School Department of Population Medicine at Harvard Pilgrim Health Care Institute, Boston, MA

The Delivery Science Fellowship at Atrius Health and the Harvard Medical School Department of Population Medicine (Atrius Health-DPM) is designed to provide exceptionally promising future healthcare leaders with an opportunity to learn about and participate in healthcare innovation, adoption, implementation, evaluation and spread within a setting that combines the resources of a progressive multispecialty physician group practice and a nationally-renowned academic department.

Atrius Health is an innovative leader in healthcare delivery and value-based care. With over 70% of its revenues coming from full risk (upside/downside risk) capitation across Commercial, Medicare and Medicaid populations, Atrius Health has decades of experience maturing and improving an integrated system of care for more than 750,000 adult and pediatric patients in eastern and central Massachusetts. Care is delivered at 30 medical practices with more than 1100 providers in 50 specialties who work closely with preferred hospital partners, community care specialists, and skilled nursing facilities. An independent physician-led organization, Atrius Health focuses on developing effective strategies to deliver high quality care in the most appropriate setting. One of the original Pioneer Accountable Care Organizations (ACOs) since 2012, Atrius Health was selected in 2017 to participate in the Centers for Medicare & Medicaid Services' (CMS) Next Generation ACO Model. Atrius Health recently partnered with the innovative program Medically Home whose goal it is to improve healthcare outcomes and lower costs by shifting more acute care into the home setting.

The Department of Population Medicine is a research and academic partnership between Harvard Medical School and Harvard Pilgrim Health Care (HPHC), one of the country's premier health plans. HPHC has over 1,200,000 insured members in 4 New England states, about 15% of whom receive care in Atrius Health. With 35 academic faculty and 20 research fellows, DPM is deeply committed to improving health care delivery and population health through high quality academic research and teaching. DPM faculty members conduct a broad range of delivery science research in partnership with several local, national, and international health care delivery organizations, including Atrius Health. As the coordinating center for the FDA Sentinel and PCORNet programs, DPM is at the forefront of the development of approaches to using large-scale distributed healthcare data for health surveillance and health system improvement.

The Atrius Health-DPM Delivery Science Fellowship includes a year-long orientation to management structure and key administrative departments within Atrius Health; a core curriculum on delivery science; academic mentorship within DPM; and development, implementation, and evaluation of a strategic project within Atrius Health during the fellowship. The curriculum includes guided readings, seminars, and individual meetings with experts on population health management, information technology, healthcare data analytics, quality and safety improvement, finance and revenue cycle, contracting and pay for performance, external relations and marketing, human resources and legal/regulatory issues. Requirements for admission to the Fellowship include clinical training as a medical doctor, nurse practitioner, or physician's assistant, and at least two years' experience working in health care delivery or health administration. Candidates are expected to work one clinical shift per week (0.10 FTE) in an Atrius Health center during the Fellowship program.

DentaQuest Institute: Columbia, Maryland

The DentaQuest Institute is a not-for-profit organization focused on improving the efficiency and quality of the care provided by the dental care delivery system. The DentaQuest Institute's Safety Net Solutions program is a practice management technical assistance program supporting safety net dental programs across the U.S. to become more efficient, effective and financially viable which leads to more access for underserved populations. Since the program began in 2006, the DentaQuest Institute's Safety Net Solutions program has worked with over 300 safety net dental programs in 34 states.

In addition, the Institute's Quality Improvement team leads learning collaboratives with dental practices across the U.S. to implement more effective care protocols with an emphasis on prevention and disease management that are able to achieve the Triple Aim. For more information about the DentaQuest Institute and its programs, visit DentaQuestInstitute.org.

The DentaQuest Institute is supported by DentaQuest, a leading oral health company administering dental benefits to more than 23 million individuals across the United States. DentaQuest's mission is to improve the oral health of all and does so through the work of its benefits business, DentaQuest Institute, DentaQuest Foundation, and DentaQuest's Care unit.

Our DQI/AcademyHealth Fellows will collaborate with program teams and leadership to develop "rigorous, relevant and timely evidence to increase the quality, accessibility, and value of health care, to reduce disparities, and to improve ORAL health". They will be part of hypothesis formulation, determination of research design, and selection of data collection procedures and instruments. The Fellow will be supported in conducting modeling, data mining, and database analytics using advanced statistical methods. They will have access to internal and external data sources to transform the data and information into actionable knowledge about effective and efficient care and how that knowledge can be used to improve the care system and better inform policy and financing of care. The candidate will have support to design tests, develop and implement measurement plans, build predictive and analytic models and present results to diverse audiences. They will have the opportunity to collaborate with The National Institute of Dental and Craniofacial Research (NIDCR) and the National Library of Medicine (NLM) Fellows in Oral Health Informatics (OHI). The ideal candidate for this position will have a strong clinical and foundation in statistical theory and practice and is a proactive thinker, self-starter, who enjoys working in a fast-paced and challenging environment with the ability to work independently.

Geisinger Hospital: Danville, PA

Geisinger Hospital (GH) was founded in 1915, and has evolved from a single hospital in Danville, PA, into a fully integrated health system that serves central, south central and northeast Pennsylvania, spanning across 45 counties, and 7 counties in southern New Jersey and serving approximately 4.2 million residents. Geisinger has a national reputation for quality of health service delivery and has been listed repeatedly as one of the Best Hospitals in America. About one-third of Geisinger patients are also insured by the health system, through Geisinger Health Plan and collaboration between the providers and health plan has been an important component in developing the culture of innovation for which Geisinger is now known.

Thirty-two of the 45 counties in Geisinger's coverage area are designated as rural. Many of these counties have Medically Underserved Areas, as designated by the U.S. Department of Health and Human Services' Health Resources and Services Administration, a population traditionally underrepresented in research. The Geisinger Clinic service area average household income is 15.3% lower than the US; 13.1% have household income less than $15,000/year.

Geisinger is committed to evolving as a learning health care system, and as such encourages and supports a broad range of research topics throughout our clinical enterprise as well as in our research centers and institutes. The theme of the Research Strategic Plan is Personalized Healthcare Research with an emphasis on developing and testing innovative approaches that will enable us to identify the unique differences between patients - genetic, environmental, or social - so that each patient receives the 'right care at the right time in the right way' to increase quality and improve outcomes.

The Geisinger MyCode Community Health Initiative was launched in 2007 and includes a system-wide biobank that incudes broad consent for DNA research including return of results. Over 200,000 participants have consented into MyCode. The robust clinical and informatics infrastructure of this precision health program, along with review of metrics, and input from advisory committees allows for identification of opportunities for process improvements – which can then be developed and implemented. Geisinger has sponsored multiple DSSF Fellows and has a robust mentoring program for fellows and faculty. Fellows will have a lead faculty mentor and the opportunity to join or link with new and ongoing projects. Various projects in precision health and implementation are ongoing. Fellows with expertise or interest in implementation science, communication, decision making, genomic medicine, and behavioral science are particularly encouraged to apply.

Kaiser Permanente Northwest: Oregon and Southwest Washington

Kaiser Permanente, founded in 1945, is committed to helping shape the future of health care. As the largest integrated care delivery organization in the United States, Kaiser Permanente is recognized as one of America's leading health care providers and nonprofit health plans. Kaiser Permanente's mission is to provide high-quality, affordable health care services and to improve the health of our members and the communities we serve.

Kaiser Permanente Northwest (KPNW) — made up of over 11,000 employees, more than 1,300 physicians and 150 dentists — provides and arranges medical care exclusively for health plan members. In the Portland-Vancouver area, Kaiser Permanente operates 34 medical offices and 2 hospitals. Today, the Northwest Region serves more than 576,000 medical and 244,000 dental members, whose care is largely provided by Northwest Permanente, P.C., (NWP) and Permanente Dental Associates (PDA).

MedStar Health Research Institute: Washington, D.C.

As the largest healthcare provider in the Baltimore- Washington, DC, metropolitan region, MedStar Health has 10 hospitals, 20 diversified healthcare entities and nearly 300 service locations. With more than 200,000 inpatient admissions, 4 million outpatient visits and 300,000 home health visits annually, we care for a racially/ethnically and socioeconomically diverse population in urban, suburban and rural settings. Furthermore, MedStar Health has one of the largest graduate medical education programs in the country, training more than 1,100 medical residents annually. As a result, MedStar Health is a microcosm of U.S. healthcare and offers a unique setting for applied experience in conducting research in a real-world delivery system. MedStar Health Research Institute, the research division of MedStar Health, will be the host site for the 2019 AcademyHealth Delivery Systems Science Fellowship.

The MedStar Research Institute is committed to achieving excellence in health services research through its MedStar Health Services Research Network. Investigators in the MedStar Health Services Research Network conduct patient-centered outcomes research that can be applied and disseminated to improve the health of the general population. This research stimulates innovation, promotes a culture of excellence, and generates research that can be translated into clinical practice, health promotion, and policies to inform the health of individuals and populations.

MedStar's vision is to be the "trusted leader in caring for people and advancing health". We are fueled by a commitment to, and passion for research, education, innovation, quality, and safety. To achieve this vision, MedStar Health has formed the "Advancing Health" initiative which is supported by a research institute, an innovation institute, a quality and safety institute, and an academic partnership with Georgetown University all working collaboratively to improve the health of our communities. MedStar's Advancing Health initiative is built on the premise that MedStar represents the crossroads between academics and real world medicine, where we can advance medical knowledge and in a practical sense, apply that knowledge to help people get better. In an effort to advance the health of the communities that we serve, MedStar is 1) utilizing the research capability and scope of the system to create new discoveries; 2) creating a vibrant innovation ecosystem that is transforming care and; 3) provide a robust learning environment to advance health through new knowledge, simulation, and skills development and is committed to teaching and nurturing our next generation. MedStar's commitment to high quality and safe clinical care is woven throughout each of these imperatives.

We strive to be the model of a continuous learning system that translates research into practice while addressing questions of effectiveness, safety, quality, affordability, access, health equity, health economics, aging, palliative care, surgical outcomes, human factors in healthcare, and population health. We are currently seeking a potential AcademyHealth DSSF Fellow with interests in any of these areas.

The AcademyHealth DSSF Fellow will have access to:

- Patient populations and care settings that represent a microcosm of U.S. healthcare
- MedStar Health's administrative, billing, and clinical data
- A team of highly reputable and funded investigators at MedStar Health Research Institute and Georgetown University
- Dedicated administrative, statistical, biomedical informatics, and research support
- Regulatory and policy institutions, given the close proximity to Washington, DC

New York University Langone Health: New York, NY

New York University Langone Health is a large not-for-profit medical center located in the heart of Manhattan. NYU Langone is comprised of over 2,500 physicians, the NYU Hospitals Center, the NYU School of Medicine, five hospitals, 50 centers, 29 academic departments in clinical and basic sciences, and multiple outpatient clinic sites located throughout NYC's five boroughs. U.S. News & World Report consistently ranks NYU Langone Health in the top 20 in the nation, and twelve of its specialty programs are nationally ranked. NYU School of Medicine is currently ranked third in the nation for research.
The Department of Population Health, housed within NYU Langone Health and the NYU School of Medicine, includes over 85 full-time faculty in six divisions. The mission of the department is to advance the health of populations, by discovering new knowledge that informs policy and practice, educating tomorrow's leaders, and serving local, national, and global communities.
The Center for Healthcare Innovation and Delivery Science (CHIDS) at NYU Langone Health was founded in October, 2014. CHIDS bridges NYU Langone Health's delivery system with academic expertise to advance innovation in health care delivery, improve quality of care, reduce costs, and enhance health outcomes. Over 30 NYU clinicians, researchers, educators and administrators are CHIDS Fellows, creating a network of collaborators working together to redesign healthcare and create a learning healthcare system both at NYU Langone Health and nationally. The center has a robust supporting infrastructure, including a full-time program manager, full-time administrative assistant, two full-time data analysts, biostatistical support, research assistant support and dedicated office space. CHIDS awards 5-6 pilot grants each year to innovative clinical redesign initiatives around NYU Langone Health; includes a Predictive Analytics Unit that develops machine learning models to support clinical and operational work; runs a Rapid Randomized Trial laboratory that conducts over a dozen randomized trials of health system interventions each year; provides strategic and evaluation assistance to departments around the institution; and leads grant-funded research to redesign health care – including the AHRQ-funded Patient Imaging Quality and Safety Laboratory and the CMMI-funded Greater New York City Practice Transformation Network. DSSF fellows will have the opportunity to work on any of these projects.
In addition, the AcademyHealth Delivery System Science Fellow will participate in the School of Medicine's Population Health Scholars Program, an interdisciplinary training program with academic homes in three departments (Population Health, Pediatrics and Medicine). This AHRQ-funded program seeks to improve health care delivery for individuals and to advance population health science by preparing a cadre of scholars for academic careers and leadership at the interface of health care delivery and health services research. Scholars graduate with the methodologic skill, institutional savvy, and social capital to bridge the gap between ivory tower research and real-world, health care delivery systems. Each year it includes at least 4 predoctoral and 4 post-doctoral trainees.
DSSF fellows have the opportunity to work with our researchers and affiliated faculty in the following areas:
- Health Care Delivery Redesign
- Population and Community Health
- Health Services Research
- Patient Engagement
- Clinical Informatics
- Predictive Analytics
- Quality Improvement and Patient Safety
- Practice Transformation
- Health disparities

Northwell Health: Hempstead, New York

Northwell Health consists of 22 hospitals, a medical research institute, a school of medicine, a new school of graduate nursing a physician assistant studies, a home care network, a hospice network, and 550 outpatient centers, making it one of the nation's largest health care systems.

Northwell serves a patient base of nearly 11 million people residing in urban and suburban communities throughout Long Island and metropolitan New York, representing a broad spectrum of racial and socio-economic diversity. The health system is home to more than 6,675 hospital and long-term care beds, and nearly 15,000 affiliated physicians, including about 3,900 employed doctors and more than 2,800 members of Northwell Health Physician Partners, 15,000 nurses, and 1,720 residents and fellows on its medical staff and a total workforce of more than 62,000. It is New York State's largest private employer. Annually, Northwell and its members care for 286,690 inpatients and provide more than 184,323 ambulatory surgery procedures, 42,000 deliveries, 816,903 emergency department visits, and 732,171 home health visits.

The health system's unparalleled commitment to improving and advancing the quality of health care has been recognized both in its own network and throughout the country. With a philosophy that puts the patient at the center of everything it does, in 2016 Cohen Children's Medical Center earned Magnet designation from the National Nurses Credentialing Center — the first children's hospital in New York State to achieve this designation; The Healthcare Association of New York State (HANYS) presented Northwell Health with three 2016 Pinnacle Awards; and *New York magazine's* 'Best Doctors 2016' included 170 Northwell-affiliated physicians.

The research engine of the health system, the Feinstein Institute for Medical Research (FIMR), ranks in the top sixth percentile of all research institutions that receive funding from the National Institutes of Health. FIMR is comprised of 11 Centers of Excellence, 55 laboratories, 2,100 studies with 15,000 participants, and more than 1,500 scientists and researcher who have made important discoveries in many medical fields, including cancer, sepsis, inflammation, autoimmune disorders, Parkinson's disease, Alzheimer's disease and schizophrenia. Home to world leaders in innovative translational and clinical research, FIMR's scientists receive national and international peer recognition for their scholarship and mentorship through honors, awards, and publications in the world's leading high-impact biomedical journals.

In addition to world-class patient care and biomedical research, the health system's commitment to physician education and training is strong and extensive. In 2001 Northwell established the Center for Learning and Innovation (CLI) to provide continuous learning opportunities for staff to acquire the knowledge and skills necessary to support the health system's strategic and patient care goals. The Patient Safety Institute, established in 2007, is the nation's largest patient simulation center, promoting safety and quality among health care professionals. In 2008, Northwell partnered with Hofstra University to create the first new allopathic medical school in New York State in more than 40 years. The Donald and Barbara Zucker School of Medicine at Hofstra/Northwell welcomed its inaugural class in August 2011.

The Department of Medicine, under the leadership of Chairman Dr. Thomas McGinn, is nationally recognized as one of the leaders in integrating evidence-based medicine and complex decision-making tools at the point of care. Dr. McGinn is the Principal Investigator on several NIH-funded grants; he has the experience in leading health information technology grants and has effectively executed numerous research studies. He continues to validate and conduct impact analyses on several clinical prediction rules both in hospital setting and outpatient clinics.

In his/her role, the Fellow would work with:
- Large research databases in cancer, inflammatory bowel disease (IBD), hypertension, and lupus;
- Our usability lab for digital health strategies;
- Patient-centered medical home; and
- Projects in palliative and geriatric medicine with oncology.

University of Colorado Anschutz Medical Campus and the Data Science to Patient Value Initiative: Denver, Colorado

The University of Colorado Anschutz Medical Campus (CU Anschutz) is the largest academic health center in the Rocky Mountain region. The campus combines interdisciplinary teaching, research and clinical facilities to prepare the region's future health care professionals, provide the best available health care at two nationally recognized hospitals and be a national leader in life sciences research. Annually, CU Anschutz medical professionals educate 4,000 degree-seeking future health professionals, provide 1.5 million patient visits, and are awarded approximately $400 million in research grants.
The Anschutz Medical Campus is home to two of the top hospitals in the nation: University of Colorado Hospital, named as the top hospital in Colorado by *U.S. News & World Report*, and Children's Hospital Colorado, ranked for more than a decade as one of the best children's hospitals nationally by *U.S. News and World Report*.

Faculty
Physicians at the University of Colorado Hospital and Children's Hospital Colorado, located on the campus, are CU School of Medicine faculty focused on the latest in research and best medical practices—knowledge they share with students and patients.

Economic impact
CU Anschutz is vital to the people of Colorado and its economy. It is home to five health professional schools (School of Medicine, School of Dental Medicine, College of Nursing, Skaggs School of Pharmacy and Pharmaceutical Sciences, Colorado School of Public Health) and the Graduate School, offering 40 degree programs. CU Anschutz is estimated to have a state economic impact of $2.6 billion a year, on par with the Colorado ski industry.

CU Denver | Anschutz
CU Anschutz and its sister campus, CU Denver, a comprehensive campus located six miles west in downtown Denver and offering over 100 degree programs, together make up the consolidated University of Colorado Denver | Anschutz Medical Campus. The two campuses benefit from academic connections and partnerships, such as the bioengineering program, a collaboration between the CU Denver College of Engineering and Applied Science and CU Anschutz scientists. The campuses are part of the University of Colorado system, which includes CU Boulder and CU Colorado Springs.

Learn more about the Data Science to Patient Value Initiative.

U.S. Department of Defense Military Health System Health Services Research, Falls Church, VA

The Department of Defense Military Health System (MHS) is a one of the largest integrated health care systems in the United States and extends globally. It is a $53 billion enterprise that serves over 9.4 million beneficiaries with the primary mission to ensure the health of the warfighter and the readiness of military medical personnel to support the warfighter in the operational environment. Our mission also includes caring for military families, retirees and their families.

The MHS is composed of a "direct care" system of 54 hospitals and 377 ambulatory care clinics with almost 150,000 personnel and a "purchased care" system (TRICARE) with over 500,000 network providers including 3,777 hospitals in the network. We support a University, the Uniformed Services University of the Health Sciences (USUHS), which is composed of a medical school, dental graduate medical programs, an allied health school and a nursing school. The MHS supports almost $2 billion dollars in research and development.

A rich source of clinical and administrative databases are available to the fellow(s) to link with on-going research projects or design new studies to support MHS priorities for health services delivery. The MHS is developing advanced analytics capabilities including predictive analytic tools and machine learning capabilities and opportunities exist to leverage these for fellowship projects. Fellowship opportunities are available within the Office of the Assistant Secretary for Health Affairs (OASD(HA)) to conduct health system policy research projects or within the Defense Health Agency, a subordinate agency of OASD(HA) that manages military treatment facilities and the TRICARE health plan. Opportunities within USUHS are available as well.

U.S. Department of Veteran Affairs Quality Enhancement Research Initiative (QUERI) and Health Services Research and Development Service (HSR&D): Various Locations

The U.S. Department of Veterans Affairs hosts several core research programs and centers, notably the Health Services Research and Development program (HSR&D) and the VA Quality Enhancement Research Initiative (QUERI).

Interested applicants are encouraged to contact specific host sites available through the HSR&D Centers of Innovation, which are based at VA medical centers throughout the United States and conduct a rich portfolio of clinical, health services, and quality improvement/implementation research studies. Specific Fellowship opportunities are available through these Centers, many of which also host QUERI Program sites, are available through these Centers, many of which also host QUERI Program sites, as well as Partnered Evaluation Initiatives. Each of these has formal links to national clinical program offices based at VA Central Office and selected regional offices.

Early and mid-career Fellows will have an opportunity to join and link to ongoing research programs and design new studies based on their own interests as well as VA national priorities for health services and quality improvement/implementation research. VA's research resources include a large collection of clinical and administrative databases, drawing from our comprehensive electronic medical record system, as well as large regional and national provider networks, technical assistance, and educational resources in areas ranging from health economics to epidemiology to implementation science, and many other resources.