

The background is an abstract composition of organic, rounded shapes in various colors: red, yellow, teal, and dark blue. These shapes overlap and create a sense of depth and movement. In the lower half, there are stylized human figures in teal and dark blue, some appearing to be in motion or interacting. The overall texture is slightly grainy, suggesting a paper or canvas-like surface.

next

The Future of Discovery at VCU Health

Summer 2023

SPECIAL ISSUE

HEALTH EQUITY

How VCU Health has made health equity
a central part of its research and care mission

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Health. The greatest gift for all.

Dear Friends,

Welcome to this special issue of *NEXT* magazine, in which we highlight the various ways that VCU and VCU Health are living their values and mission by improving health equity and access to health care.

As Virginia's largest safety-net health system, VCU Health understands both the importance of recognizing the clinical needs of patients and the social and economic factors that may

contribute to their clinical condition. Over the past several years, the health system and the university have developed critical programs to understand and to address gaps in care — whether for vulnerable older adults in low-income housing, families without dental insurance, or community members facing a host of other challenges. The addition of a successful and growing medical-legal partnership has also helped numerous patients and families address social issues rooted in legal problems that may adversely impact their health.

VCU Massey Cancer Center has been an early leader in the effort to help address disparities in screening, care and outcomes for cancer patients. Massey serves one of the largest indigent patient populations among the 71 National Cancer Institute-designated centers in the U.S., and it remains committed to treating patients regardless of their ability to pay.

We are especially proud of this issue of *NEXT* magazine because it makes us more hopeful than ever that all populations will be healthier in the future. While our work to address health disparities must continue, we take comfort in recognizing that health access and equity are essential to VCU Health's mission. We know that patients from across Central Virginia and beyond will continue to benefit from the insights gained and advances made on our medical campus.

Best wishes,



Margaret Ann Bollmeier
PRESIDENT AND CEO



Ellen E. Spong
IMMEDIATE PAST BOARD CHAIR



14 A Future Without Cancer Disparities

VCU Massey Cancer Center is working to strike out cancer health disparities with a comprehensive approach to addressing health equity through collaborative research and community engagement.

02 Sparking Change

A VCU Health Pauley Heart Center program puts prevention first by teaching elementary school students how to measure blood pressure and educate their families about heart health.

04 Medicine and Law: Partners for Good

VCU Health's award-winning medical-legal partnership is helping patients beyond clinics and hospitals through legal aid that aims to improve health outcomes.

08 Drilling Down

The VCU School of Dentistry is working to address oral health disparities and expand access to oral health care while training tomorrow's dentists and dental hygienists.

20 A Decade of Community Care

The Richmond Health and Wellness Program helps deliver and coordinate interdisciplinary care to vulnerable older adults in Richmond, and the long-running program is looking forward to expansion.

26 Minding the Gap

VCU's Richmond Brain Health Initiative aims to tackle care and support disparities in the city's dementia deserts through a multidisciplinary program that directly engages with underserved populations.

32 Follow-Up

VCU received the largest NIH grant in its history, and the Wright Center for Clinical and Translational Research focused on reducing health disparities in its successful renewal application.



Sparkling Change 'From the Kids Up'

A VCU Health Pauley Heart Center program is teaching elementary students how to measure blood pressure and educate their families about heart health.

By Nicole van Esselstyn

Jim White paused in the middle of a buzzing, crowded elementary school room in Richmond's Church Hill, remembering that five decades earlier he attended Armstrong High School five blocks away. Now, after a successful career that included a stint in New York City, he's back in Richmond with tears in his eyes.

He's looking at fourth- and fifth-graders who remind him of his younger self and hoping they will experience less loss and greater opportunities than he did.

White, 79, is at Anna Julia Cooper School for Teach BP's family night. A VCU Health Pauley Heart Center program, Teach BP launched in 2022 at the Richmond East End school as a way to reach multigenerational populations with lifesaving information about hypertension. The program outfits students with information to educate family members and become changemakers in their communities.

During family night, students were the teachers, showing parents and caregivers how they could take blood pressure readings and explaining the impact on overall health.

They'd been equipped with the knowledge thanks to Teach BP's curriculum, taught in part by VCU students in the schools of Medicine, Pharmacy and Education.

"It was an impactful moment," said White, who was diagnosed with high blood pressure in his 20s after graduating from Virginia Union University. Receiving early intervention preserved his health — but many of his own family and friends were not so lucky. "I hoped that those kids would have an easier track to go on than I did. While I was proud and excited of what was happening, I couldn't help but wonder how many more people in this community would still be alive or in better health today if this program had started many years ago."

COMMON GROUND TO CHANGE THE HEALTH OF A COMMUNITY

As a Pauley board member, White generously supports the heart center through his time and gifts to programs like Teach BP, which got its start through philanthropic support

“I couldn’t help but wonder how many more people in this community would still be alive or in better health today if this program had started many years ago.”

Jim White, member, VCU Health Pauley Heart Center Advisory Board

Sangeeta Shah, M.D., a VCU Health Pauley Heart Center cardiologist, works with Hopewell elementary school student Gi’Shiya Broggin in April as part of Pauley’s Teach BP program. *Photo: Tyler Trumbo, MCV Foundation*

and continues to rely on private funding. In addition to Richmond’s East End, the program has expanded to Hopewell.

High blood pressure and cardiovascular events are prevalent in these communities, where life expectancy is significantly lower than neighboring areas — sometimes by as much as 20 years. Hopewell’s leading cause of death is heart disease, a condition that most often starts with hypertension.

Melody Hackney, Ed.D., superintendent of Hopewell City Public Schools, said she’s thrilled to have Teach BP’s curriculum bring much-needed health education and prevention to a younger generation.

“We have a high percentage of poverty as well as nutritional and health gaps in our community,” said Dr. Hackney, who has lived and worked in Hopewell for eight years. “When you are trying to change entrenched

behaviors, you do it from the kids up and not the adults down. This program feels like we can make a difference in an almost monumental and insurmountable challenge.”

Started by Pauley cardiologist Sangeeta Shah, M.D., Teach BP is modeled after a program she developed for Girl Scouts in New Orleans. Knowing the positive impact of that program, Dr. Shah was eager to bring a similar experience to Richmond’s youth.

“The beauty of this program is its simplicity,” said Dr. Shah, an associate professor in the School of Medicine’s Division of Cardiology. “Every parent, caregiver or grandparent has been to a school, so why not use that common ground to change the health of a community? It just makes sense. Stats show that children can change the health care of their families.”

Partnerships with like-minded organizations have helped buoy Teach BP to keep it sustainable and growing. Earlier this year, the MCV Foundation approved a grant for the program. The American Heart Association is also an official sponsor, providing blood pressure devices and cuffs for the program’s curriculum. The AHA recently accepted Dr. Shah’s research abstract on the success of Teach BP’s first year in Anna Julia Cooper School.

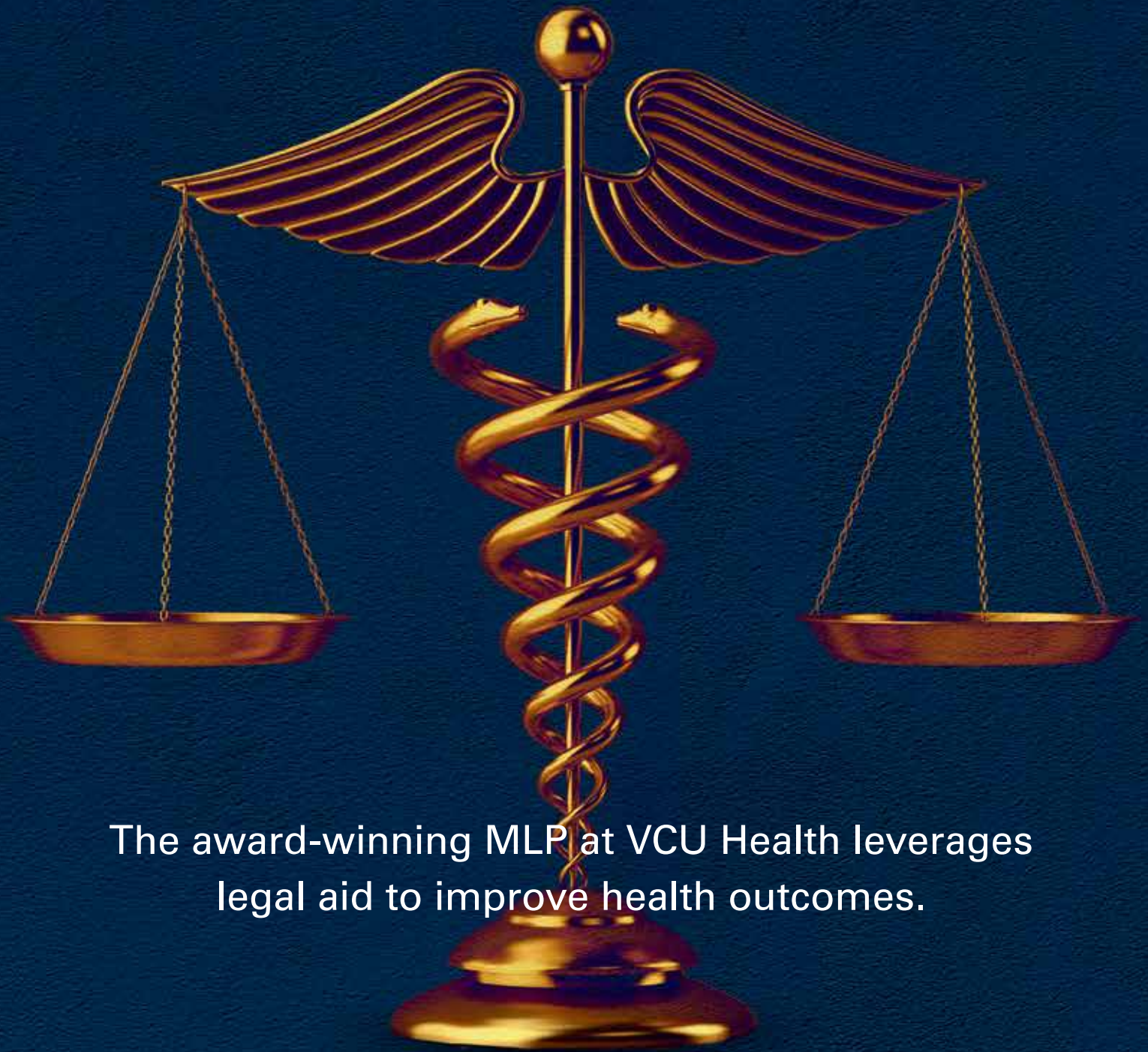
“We are addressing generational consequences and challenges here, and our children are innocently affected by that,” Dr. Hackney said. “Even though we are known for saying that there is ‘hope in the well,’ we still need help, and we are grateful for the partnerships that are coming alongside us to make a difference.”

White agrees on the need for generational intervention and the desire for lasting change. His dream would be a Teach BP program in every elementary school across the country: “Imagine what a difference that would make.”

To support the VCU Health Pauley Heart Center’s Teach BP program, please contact Sarah Neely, associate director of development, at 804-628-8908 or sarah.neely@vcuhealth.org.



Medicine and Law: Partners for Good



The award-winning MLP at VCU Health leverages legal aid to improve health outcomes.

By Eric M. Peters

On Nov. 1, 2022, Spotsylvania County Judge William Glover asked 11-year-old Jacob Harris to come sit with him behind the bench following a hearing.

“Tap the gavel three times and it will be official,” Judge Glover told Jacob.

One. Two. Three.

With that, Jacob finalized his adoption to Judy Harris, the woman who had been caring for him since he was 1 week old.

It had been a long wait to get to this moment. For years, Judy tried to adopt Jacob, but the process was too expensive. Even when attorneys offered to reduce their fees, Judy just couldn’t make it work financially.

“I hated money being the factor that kept me from this,” Judy said. “I’ve always told him he was born in my heart. He is my son.”

Judy always *wanted* to adopt Jacob, but she also *needed* to adopt Jacob.

Jacob is prediabetic and could benefit greatly from Medicaid and other government resources. He also has had, and will have, all of the sicknesses, injuries, pharmacy visits and emergency room visits that adolescent boys tend to experience along the way as they grow up.

These situations are not easy to navigate without full legal authority. In fact, they’re nearly impossible at times.

Until, that is, help finds a way in. That help finally found Judy one fateful day on the MCV Campus at VCU Health.

“I was talking to someone at one of Jacob’s doctor visits at VCU about our challenges,” Judy said. “And a nurse happened to overhear us. She came to me and said, ‘We have a program here that could help you.’”

CENTRAL VIRGINIA’S MEDICAL-LEGAL PARTNERSHIP

The program that the nurse connected Judy with that day is the MLP at VCU Health. It is a medical-legal partnership (MLP) that works to ensure legal and social issues no longer challenge patients and their families, enabling those patients to focus instead on treatment and healing.

Like similar MLPs across the nation, the program at VCU Health embeds lawyers as part of the health care team to address social determinants of health such as unlawful evictions, poor housing conditions, insurance and public benefit denials, family challenges, employment discrimination, and domestic violence by providing free civil legal aid to low-income patients.

“The U.S. health care system is not equipped to address the many barriers that patients can face when diagnosed with a serious health problem like cancer,” said Susan Hong, M.D., director of cancer survivorship at VCU Massey Cancer Center. “When patients encounter these issues, they are often overwhelmed and desperate, unable to focus on their medical health. MLP at VCU Health serves as an important lifeline for many of our patients.”

Part of VCU Health’s Division of Community Health, the MLP launched in 2018 with the help of start-up funding from the MCV Foundation. It began by serving VCU Massey Cancer Center and Children’s Hospital of Richmond at VCU, and today it serves patients and families in nine clinical locations and offers free legal services at two community sites.

“MLP is an extremely valuable program for patients at VCU Massey,” said Dr. Hong, who works regularly with the patients and families the program serves.

“It is well documented that unmet legal needs present a significant barrier to cancer care, especially for the most vulnerable patients. At VCU Health, MLP allows us to address these barriers to ensure every patient has access to comprehensive cancer care.”

Patients are referred to the program in much the same way a physician would refer a patient to any specialist. After identifying relevant housing, custody, insurance or other legal needs during consultations, the referring physician simply uses a web form on the health system’s intranet to share case details with MLP staff members, who then determine whether they can take the case.

Allison Held is an attorney and the director of MLP at VCU Health. She began as a volunteer with the program in 2011 and became its first full-time paid employee in 2017 with the help of funding from the MCV Foundation and other organizations.

“It’s particularly rewarding, having done this work for so long, to see MLP has finally taken its rightful place in health care and legal service delivery,” she said. “When we started, social determinants of health weren’t as universally accepted for their impact as they are now. Today, it is much more well understood and accepted that long-term health outcomes are dependent on social circumstances that oftentimes a legal intervention can address. We’re one tool in the toolbox, and being part of that holistic approach to help our patients and families is deeply rewarding.”



Allison Held (left), director of the medical-legal partnership at VCU Health, and Molly Hunold (right), the partnership’s program manager, work closely with Mary Helen Hackney, M.D., and many of her physician colleagues across VCU Health to identify and address legal needs of patients who do not have access to attorneys and whose health could benefit from legal aid.
Photo: Tyler Trumbo, MCV Foundation

Through partnerships with Central Virginia Legal Aid Society, CancerLINC, McGuire Woods, Dominion Energy, Truist, the Legal Aid Justice Center, and the University of Richmond School of Law, the MLP has significantly increased the number of patients it serves each year. A \$25,000 grant from the MCV Foundation in 2020 helped the program purchase a robust case management system necessary to support its growing caseload, which now totals more than 400 cases per year.

Mahlon G. “Bud” Funk Jr. is one of the many attorneys who has taken on pro bono cases for the MLP at VCU Health. His motivations to help the program and the people it serves are quite personal.

“One of the last things my wife, Cindy, told me before she died of leukemia was that there are people out there who need my help,” he said. “She told me, ‘You have the skills to help, so keep helping.’ So, I do.”

Funk and other volunteer attorneys can point to successful cases they’ve handled that have restored retirement income for cancer patients, restored insurance coverage for cancer treatments, and improved housing conditions for families whose children suffer from asthma. They’ve restored SNAP benefits of \$495 per month and back

Studies show that when legal expertise and services are used to address social needs:



Source: National Center for Medical-Legal Partnership, medical-legalpartnership.org/impact

payment of \$4,000 for a family of four living below poverty level. They've also successfully advocated at the state and federal levels for an incarcerated patient's access to participate in a clinical trial.

This past December and January alone, the MLP at VCU Health's volunteer attorneys improved housing conditions or obtained repairs for six clients, prevented or delayed six evictions, won \$5,000 for a client after an illegal electricity disconnection, avoided or delayed utility termination for two clients and secured utility services for one client, preserved Medicaid benefits for one client, helped three families with guardianship, and helped 10 families obtain wills.

All of these issues, when left unaddressed, stand in the way of good health — from living conditions that perpetuate illness to paperwork and red tape that create anxiety and undue stress.

"For our lawyers, especially those who are in private or corporate practice, this work is particularly meaningful," Held said. "It is an opportunity for them to use their skills in a way that has a personal and immediate impact for the families they're working with."

A LIFE-CHANGING OUTCOME

Not long after that conversation at Jacob's appointment about her barriers to adoption, Judy Harris received a letter from Funk, who is a trial attorney with the Hirschler law firm and a giant in Richmond pro bono legal work who has more than 40 years of experience. The MLP had contacted and briefed him, the letter said, and he was eager to take the case.

"He said he was willing to help me and Jacob at no cost," Judy said. "I felt so excited, and I could not believe there was an organization out there that worked with you and tried to help you find the right people to make this sort of thing happen."

Funk and his team handled all of the legal work, including an expertly crafted petition and attachments that moved the case along quickly without a lengthy referral to Social Services and myriad investigations. Funk also led Judy and Jacob through that early morning court appearance on Nov. 1, 2022, which ended with cheers, tears and lots of hugs.

"I had the chance to talk to Jacob," he said. "All that boy wanted in life was a mama."

And now Jacob has exactly what he hoped for.

"Jacob is finally seen as my son at the hospital, at the Social Security office, in the eyes of the state and everywhere else," Judy said. "And that does matter.

Programs like this need to be a part of all medical facilities. It's nice to know that there are people out there who will volunteer to help with legal issues — to help give a child a home, to put them where they need to be so they can enjoy their life and not grow up with major health problems or other challenges that could be avoided."

Judy no longer has to answer questions about where Jacob's mother is when she's trying to secure for him the health care, aid and other services he deserves — but if the question does come up, the answer now is a whole lot easier.

If you would like to make a gift to support the MLP at VCU Health, please contact Brian Thomas, the foundation's vice president and chief development officer, at 804-828-0067 or brian.thomas@vcuhealth.org



Thanks to help from the medical-legal partnership at VCU Health, Judy Harris officially adopted Jacob Harris last November. The adoption provided Judy, who has cared for Jacob since he was 1 week old, full legal rights to secure and manage his access to government resources and all of his health care. *Photo courtesy of Judy Harris*

A large, white, 3D-rendered tooth is centered against a solid blue background. The tooth is shown from a slightly elevated, front-facing perspective, highlighting its crown and root. The text "Root Causes" is overlaid on the crown of the tooth in a large, white, sans-serif font. The word "Root" is on the top line, and "Causes" is on the bottom line, both centered horizontally.

Root Causes

The VCU School of Dentistry is working to address oral health disparities.

By Holly Prestidge

Cheerful, bustling dentists' offices in rural coastal communities and sleepy mountain towns, all many miles from Richmond. An efficient, high-tech machine in a lab that cranks out crowns and dentures in a matter of minutes and saves patients the emotional and financial angst of making return trips to the dentist.

Water bottles with fluorinated drinking water in the hands of little ones.

Telehealth screentime. Interpretation services.

The list goes on.

The VCU School of Dentistry is attacking oral health disparities from all angles — one tooth, one patient, one community at a time.

Oral health today is widely recognized as vital to overall health. Yet despite gains made in recent decades to align its importance with general medical awareness and understanding, large gaps remain in oral health access and equity for many families and communities around Virginia and the nation.

Cavities, severe gum disease and tooth loss — the top three oral health conditions, according to the Centers for Disease Control and Prevention — plague low-income, elderly and other communities two to three times more than other groups. That causes a ripple effect that leads to millions of hours of lost school time for children and upward of \$45 million in lost U.S. productivity for adults.

Tooth pain or losing teeth makes it hard to eat and, sometimes, even hard to speak. Improper nutrition sets off any number of health issues. Oral pain affects social interactions and can derail employment opportunities.

As Virginia's only dental school, VCU sees those disparities and is working to change the oral health landscape across the commonwealth.

Faculty and senior students go to the farthest reaches of the state to see patients who otherwise have no dental care options. Faculty work with local school divisions to implement hydration programs that encourage children to drink water and not sugary beverages, which can lead to cavities but also other problems, such as obesity.

The School of Dentistry is investing in technology. It's reaching out to patients in new ways to meet them where they are, and the school is structuring its curriculum so that students not only understand oral health disparities but also are equipped to face them.

It's all about filling in the gaps where people need it most.

EXPANDING ACCESS

Bill Broas, D.D.S., took a break from seeing patients and shared that he has fitted more dentures in the last two years than he did in nearly 30 years of private practice.

Dr. Broas oversees the dental office within the Northern Neck-Middlesex Free Health Clinic, a busy place off state Route 3 in Kilmarnock. Under one roof are a health clinic, pharmacy and dental practice, the latter of which looks like any other modern dental practice. On most weekdays, its six dentists' chairs remain occupied as patients rotate in and out.

The clinic's patients fit the mold of many in rural communities. Most don't have private insurance and can't afford to pay costly dental bills out of pocket. Many

34
million

The number of school hours lost for children's emergency, unplanned dental care.

\$45
billion

Amount of dollars in lost U.S. productivity annually because of untreated dental disease.

80%

of adults who reported unmet dental needs cited their inability to afford care.

Source: CDC fact pages on oral health disparities



rely on Medicaid. They work jobs that make it hard to get to the dentist, or they don't have reliable transportation. They haven't received regular dental care, so they come to the clinic with severe oral health conditions. Many need to have teeth pulled.

Last year alone, the clinic welcomed nearly 600 new patients for medical and dental care. In one year, its staff fitted more than 100 patients with dentures, some as young as 35 and others as old as 90.

Part of the influx of new patients stems from a July 2021 change in Medicaid policies in Virginia, which included, for the first time, comprehensive dental coverage. The change opened the door for hundreds of thousands of Virginians to get dental care for everything from routine cleanings, X-rays and fillings to dentures, root canals, oral surgeries and more.

Additionally, to address that sizeable new patient cohort and as an incentive to get private dentists to take on more Medicaid patients, the Medicaid reimbursements to dentists increased by 30% last year — the first dental reimbursement increases in nearly two decades. Even with the increase, reimbursements still fall short, with most providers getting about 70% of their costs reimbursed.

In Virginia, about 20% of private dentists accept Medicaid, and of those, roughly 5% actively take Medicaid patients.

It means, simply, that patients using Medicaid rely heavily on places like the Northern Neck-Middlesex Free Health Clinic for low-cost dental care because they can't get into private dental practices.

The clinic relies heavily on its VCU student cohort, which consists of three dental students and one hygiene student each week for about nine months out of the year. The students each have about 17 appointments per week. The clinic is just one of 14 external rotation sites around Virginia that VCU's dental students visit throughout their senior year. Dental hygiene students rotate through nine of those.

Jean Nelson, CEO for the Northern Neck-Middlesex Free Health Clinic, works tirelessly to promote the clinic as a valuable dental resource for Virginia's Northern Neck. *Photo: Tyler Trumbo, MCV Foundation*



"Without the students, it would choke us," said Jean Nelson, the clinic's CEO and a tireless advocate for both the clinic itself and the community it serves. She recalled that when COVID-19 forced the clinic to close in early 2020, by the time it opened back up later that year, it had 750 missed dental appointments on the books that its staff had to begin addressing. The students have been crucial to meeting this demand.

Dr. Broas, who came out of early retirement to oversee the dental clinic, echoed those thoughts.

"It's unbelievable how committed they are," he said about the students. "They put their nose to the grindstone here, and they work — they don't shy away."

Not only do VCU dental students provide necessary care, but they also are exposed to populations that epitomize the faces of oral health disparities. In some cases, that exposure opens their eyes to the importance of public health.

Marim Hanna, a VCU dental student working in the clinic, said traveling to external sites like the clinic is rewarding.



Bill Broas, D.D.S., works with a VCU School of Dentistry student in the dental clinic at the Northern Neck-Middlesex Free Health Clinic, one of 14 external rotation sites around Virginia where senior VCU dental and hygiene students get hands-on dental experience.
Photo: Tyler Trumbo, MCV Foundation

“The patients are happy and so appreciative,” she said. “In places like Kilmarnock, there are no other dentists that accept Medicaid, and we provide good, high-quality services.”

VCU RESEARCHER CONTRIBUTES TO NATIONAL REPORT

A 2022 National Institutes of Health report on oral health disparities underscored and expanded on *Oral Health in America: A Report of the Surgeon General*, which was last released in 2000.

Tegwyn Brickhouse, D.D.S., Ph.D., a professor in the School of Dentistry and an authority on oral health disparities within vulnerable communities, contributed to the 2022 report.

While both reports point out the significance of oral health problems, Dr. Brickhouse said, the newest iteration pushes the need to address those disparities, not just by individual dentists and patients, but systemically, through community programs, hospital systems and schools, as well as state and federal policies.

A Richmond-area pediatric dentist, Dr. Brickhouse leads by example. She helped start a hydration program in Richmond Public Schools that encourages students to drink water. Oral health as a measure of overall health means addressing equity, even for something many take for granted, like clean, drinkable water.

In many vulnerable communities, “People don’t trust their water,” Dr. Brickhouse said. Maybe they don’t trust the pipes where they live, or they’ve seen national incidents of other low-income people suffering from unhealthy pollutants in their water supply.

Bottled water is expensive, and it’s not fluoridated — a key component for healthy teeth.

Dr. Brickhouse also works in local schools to provide telehealth dentistry services where she can.

Addressing disparities starts with providers, health systems and others focusing on each family’s and each patient’s needs. But challenges remain, including a significant disconnect between the providers’ assumptions about

2x

The CDC reports that children ages 5 to 19 from low-income families are twice as likely to have cavities compared to their peers from higher-income homes.

26%

Among low-income adults aged 20 to 64, roughly 26% have 1 to 3 teeth with untreated cavities (vs. 13.2% of higher-income people).

1 in 6

Overall, 1 in 6 adults age 65 or older had lost all of their teeth.

but

1 in 3

1 in 3 adults age 65 or older who are low-income or those with less than a high school education had lost all of their teeth.



why patients were not accessing dental care and the reasons offered by the patients themselves.

“Providers tend to think that people in these communities aren’t prioritizing their oral health, especially those within the Medicaid or low-income populations,” she said, explaining that some providers equate a lack of dental literacy with devaluing oral health.

“That’s actually quite the opposite,” Dr. Brickhouse said, explaining that the inadequacies of the oral health care system are barriers to care that are mainly out of patients’ control. Barriers include the cost of dental care and coverage, lack of availability of appointments, culture, language and health literacy, and awareness of care options.

“Most people who work hourly jobs can’t come to appointments between 8 a.m. and 5 p.m., and they can’t miss a whole day of work for a two-hour appointment,” she said. “The systems and the way the care is delivered means it’s very hard for people to access.”

Those issues are further complicated if the patients don’t have transportation or they have language barriers and no access to translators or interpretation services.

“The system is not really in line with what these communities need,” she said, explaining that above all, patients reported delaying dental care due to feeling embarrassed about their oral health and not welcomed or respected in the dental office.

“They may have delayed their care for so long that now it appears they haven’t taken care of themselves,” she said. “But they do value it, and they do know it’s important — they just aren’t able to balance that with all the other issues and barriers.”

In the fall of 2020, the School of Dentistry added to the curriculum a mandatory course on diversity, equity and inclusion that ensures students understand the history and are trained to examine biases in health care. Since then, the school has implemented a dental public health course that dives into social determinants of health and health equity by looking through the lens of COVID-19 and the growth of teledentistry and medical-dental integration.

LOOKING TO THE FUTURE

Inside the school’s digital dentistry lab on the MCV Campus, Brandy Greer pointed to a large machine and remarked frankly, “That’s a workhorse.”

Greer, assistant manager for digital dentistry and a dental assistant, was referring to a digital mill that routinely cranks out crowns and dentures of various materials. The machine itself looks ordinary, and while patients will never see it, its presence at VCU is a game-changer in closing the gap in oral health disparities.

The School of Dentistry facilitates about 100,000 appointments annually for more than 32,000 patients. Of those, 42% are covered by Medicaid.

In short, having in-house services speeds up the workflow and eliminates the need for outside resources. Patients benefit in lots of ways.

“We have a lot of patients who have to get rides or take the bus to get here,” she said. “Having services in-house means that if they need adjustments during their visit, we can refabricate something right here and have them stay, so they don’t have to make another appointment.”

Some crowns, for example, can be milled in less than a half hour, then stained and glazed and fired in ovens – all in about an hour. The fees normally associated with sending lab work away are cut, and those savings are passed along to patients.

“They don’t have to miss a full day of work or worry about someone watching their kids all day,” Greer said. “It cuts back on missed work time, child care, finding rides or taking the bus, and it’s very affordable.”

The lab also has various printers that create implant placement surgical guides for students as well as orthodontist materials – services that used to be done off-site.

She added: “We’re helping in pretty much every way we can.”

The School of Dentistry’s commitment to health equity and access marches forward. Earlier this spring, Carlos S. Smith, D.D.S., was named inaugural associate dean for inclusion excellence, ethics and community engagement. Dr. Smith joined the faculty in 2015 and has served in several roles that underscore and facilitate the school’s mission to provide high-quality care to all.

Since 2020, he’s been an associate professor in the Department of Dental Public Health and Policy and served as the school’s first director of diversity, equity and inclusion. He also directed its ethics curriculum.

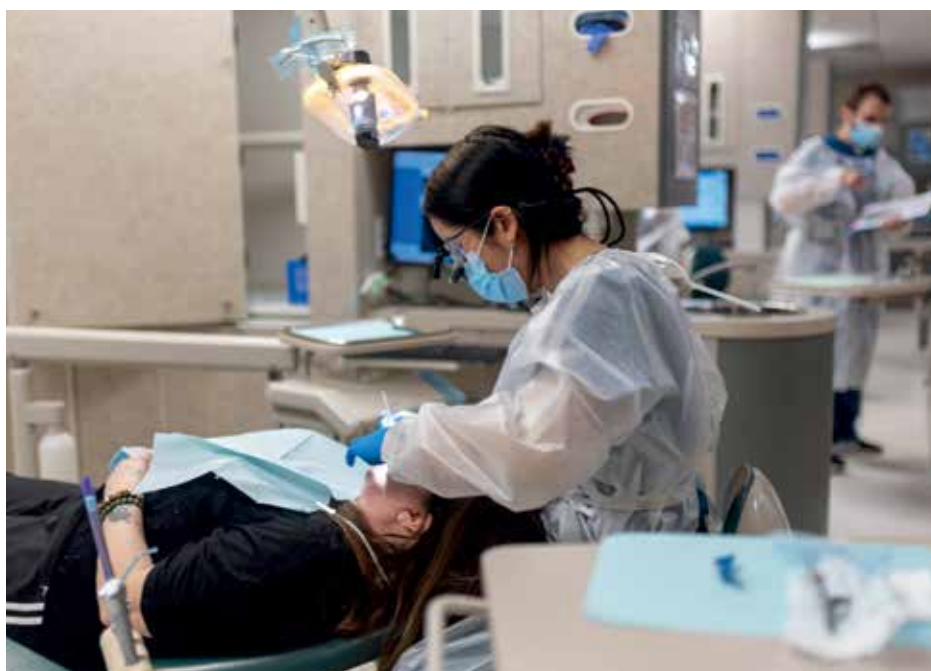
Dr. Smith’s new role involves leading comprehensive and integrated strategies to ensure inclusive excellence for all stakeholders, from patients and students to faculty and staff. He’ll expand on community engagement opportunities that are critical to improving access to care.

“This role aligns closely with the priorities outlined in our new five-year strategic plan, impacting not only our efforts to create an inclusive and welcoming environment for our students, faculty and staff, but also focusing resources on improving the experiences of our patients daily,” said Lyndon Cooper, D.D.S., dean of the School of Dentistry.

Dr. Smith said he’s particularly excited to grow the school’s DEI infrastructure and team, and to align the ethics curriculum with the school’s organizational values in ways that mitigate barriers to access for many people.

“Ensuring an understanding of our ethical commitments to health equity and access to care is key for me,” Dr. Smith said. “I am elated to take on this new role to champion our community engagement efforts with collaborative partnerships and patient demographic groups, both across the commonwealth and specifically in the Richmond area.”

If you would like to support the VCU School of Dentistry, please contact Gloria Greiner-Callihan, the school’s associate dean for development, at 804-828-8101 or gfcallihan@vcu.edu.



Tiffany Duong, a VCU School of Dentistry student, works on a patient at the Northern Neck-Middlesex Free Health Clinic in Kilmarnock. The clinic is one of 14 external rotation sites around Virginia in which dentistry students work in communities that lack dental resources and much-needed dental care. *Photo: Tyler Trumbo, MCV Foundation*

2-3
times

Tooth decay is 2 to 3 times more prevalent in certain groups, including:

Mexican Americans: 36%

Smokers: 34%

Low-Income People: 33%

Non-Hispanic Black People: 29%

A Future Without CANCER DISPARITIES

VCU Massey Cancer Center is working to wipe out cancer health disparities with a comprehensive approach to addressing health equity through collaborative research and community engagement.



By Paul Brockwell Jr.

Cancer's burden falls unequally. It's a reality that compounds the pain and fear that comes with a diagnosis, and it is a problem tangled inextricably with long-term, systemic gaps in education and access to screenings and care that vary wildly depending on a person's ZIP code.

Disparities in cancer care transcend the rural and urban divide and have grown and spread over generations. But they are also the very issues that VCU Massey Cancer Center seeks to understand. The center is looking to develop ways to reduce the inequities by designing

This year, VCU Massey Cancer Center is deploying two mobile health education units to serve parts of Central and Southside Virginia. *Rendering courtesy of VCU Massey Cancer Center*



education and outreach efforts that overcome barriers and connect people with often lifesaving knowledge and care.

Massey has always thought critically about health disparities and how to mitigate the barriers to education and care for underserved populations, and that's in part because of the people Massey has served since its founding. The center's first director, Walter Lawrence, M.D., was a tireless advocate for equitable care and increasing diversity in clinical trials research.

A NATIONAL LEADER

A year after it was founded in 1974, Massey became one of the 71 cancer centers across the U.S. now designated by the National Cancer Institute (NCI) to help lead and shape the country's cancer research efforts. Of those, Massey is both among the oldest designated cancer centers and has the largest number of indigent patients in its catchment area. This area includes 66 counties and cities spanning the eastern, central and southern portions of Virginia. That territory includes 72% of Virginia's Black population, and cancer rates are higher and life expectancy is lower than average in some communities. That persistent and pernicious problem has animated Massey to become a community-engaged cancer center to understand the causes of and develop solutions to the disparities.

"Massey's commitment to ensuring equal access to health care and information is deeply important to me," said Robert A. Winn, M.D., director of Massey Cancer Center and Lipman Chair in Oncology. "Whether it is working to relieve suffering and death from cancer or helping to address long-standing health disparities that are exacerbated by the pandemic, Massey's mission is perfectly aligned with my own values and priorities."

Since his tenure as director began in December 2019, Dr. Winn has focused on taking Massey's mission into its wider service area. Dr. Winn's outreach includes educating health care partners, patients and donors, many in traditionally underserved communities, about how



“Every person should have equal access to critical information and tools to help prevent and detect cancer, and to the most innovative treatments and care available.”

Robert A. Winn, M.D.,
director of Massey Cancer Center
and Lipman Chair in Oncology,
VCU Health

engagement with the community is a critical part of Massey’s research and care mission.

“The engagement piece is truly bidirectional,” Dr. Winn explained. “We’re giving and we’re getting information that allows us to tweak our strategies for providing care and health education that encourages residents to keep their preventive and wellness visits, to be tested at community sites if needed and to find the treatment they need to stay healthy.”

COMMUNITY OUTREACH, EDUCATION AND RESEARCH

Massey’s outreach and engagement efforts promote disparities-related research, provide access to cancer prevention and education, enable access to cancer screening, treatment and clinical trials, and advocate for public policy to reduce the cancer burden.

In 2023, Massey is rolling out the second phase of its Community Grant Initiative — known as cultivate grants — that invests in community-led efforts to promote health, health equity and person-centered care. The grants support local projects and connect community leaders to researchers at Massey in ways that will increase the impact and bridge the gap between resources and healthier outcomes.

“Cultivate grants allow us to focus on research that is truly important to our community partners,” said Vanessa Sheppard, Ph.D., Massey’s associate director for community outreach and engagement and founding interim dean of the VCU School of Population Health. “Communities can lead research and drive the agenda.”

In addition to supporting community organizations working to increase cancer education and screenings, Massey will deploy two mobile health education units this summer to serve parts of Central and Southside Virginia. Once operational, the vans are expected to reach hundreds of community members in these areas monthly and will provide cancer education, prevention, screening and care coordination services to underresourced communities in Massey Cancer Center’s service area, including Petersburg, Colonial Heights, Hopewell, Portsmouth, Martinsville and Brunswick County, as well as other priority areas of Virginia with the highest mortality rates for screenable cancers.

These mobile health education units are a vital part of Massey’s mission to combat cancer health disparities and improve outcomes for those diagnosed with cancer.

“Every person, no matter who they are or where they live, should have equal access to critical information and tools to help prevent and detect cancer, and to the most innovative treatments and care available,” Dr. Winn said.

“Reducing cancer disparities and improving outcomes for everyone in our community is our driving force. We will not rest until we achieve cancer health equity for all.”

COLLABORATIVE, COMMUNITY-ENGAGED RESEARCH

The community-based research that Massey supports is a driving force behind its health equity work. The cancer center’s Health Equity & Disparities Research team is a developing shared resource. The team will offer assistance and guidance to researchers and community partners to facilitate, develop and promote community-engaged research in cancer health equity and cancer disparities with the goal of improving research participation among minority, rural and underserved communities, enhancing bidirectional data management and guiding future researchers and community-initiated research on best practices for conducting community-engaged research.

Early projects have been aimed at known areas where interventions can make a big difference. One effort is examining how to design and test educational programs that successfully increase screenings for colorectal cancer among Black men. Colorectal cancer can be successfully treated in early stages when diagnosed through recommended screenings. Despite this, it remains the third leading cause of cancer-related death among men in the U.S. The American Association for Cancer Research’s 2022 Cancer Disparities Progress Report found Black individuals have the highest colorectal cancer incidence and mortality rates of all racial and ethnic groups in the U.S.: They have a 20% higher likelihood of getting colorectal cancer and a 40% greater chance of dying from it. Colorectal cancer is the second most common cancer and is the second leading cause of cancer death among Native Americans.

Massey’s team is eager to learn more about individual behaviors in underscreened demographics in order to design, test and implement ways to encourage greater screening and treatment. It is even set to explore how it might deliver more successful interventions by meeting community members where they are in settings like local barbershops, which can be an important social center for Black men.

Cervical cancers are another target that, with colorectal cancers, formed into Project COALESCE, a pilot program that made strong headway in understanding racial disparities in screening rates for both cancer types, thanks to funding from a \$400,000 award from Pfizer Global Medical Grants and with oversight from the American Cancer Society.

“The systemic, race-related barriers that our community partners have already identified are critical to our mutual efforts to increase access to colorectal and cervical cancer screenings,” said Katherine Tossas, Ph.D., M.S., director for catchment area data access and alignment and member of the Cancer Prevention and Control Program at Massey. “Together, we can chip away at the figurative walls standing between patients and the routine tests that can save lives.”

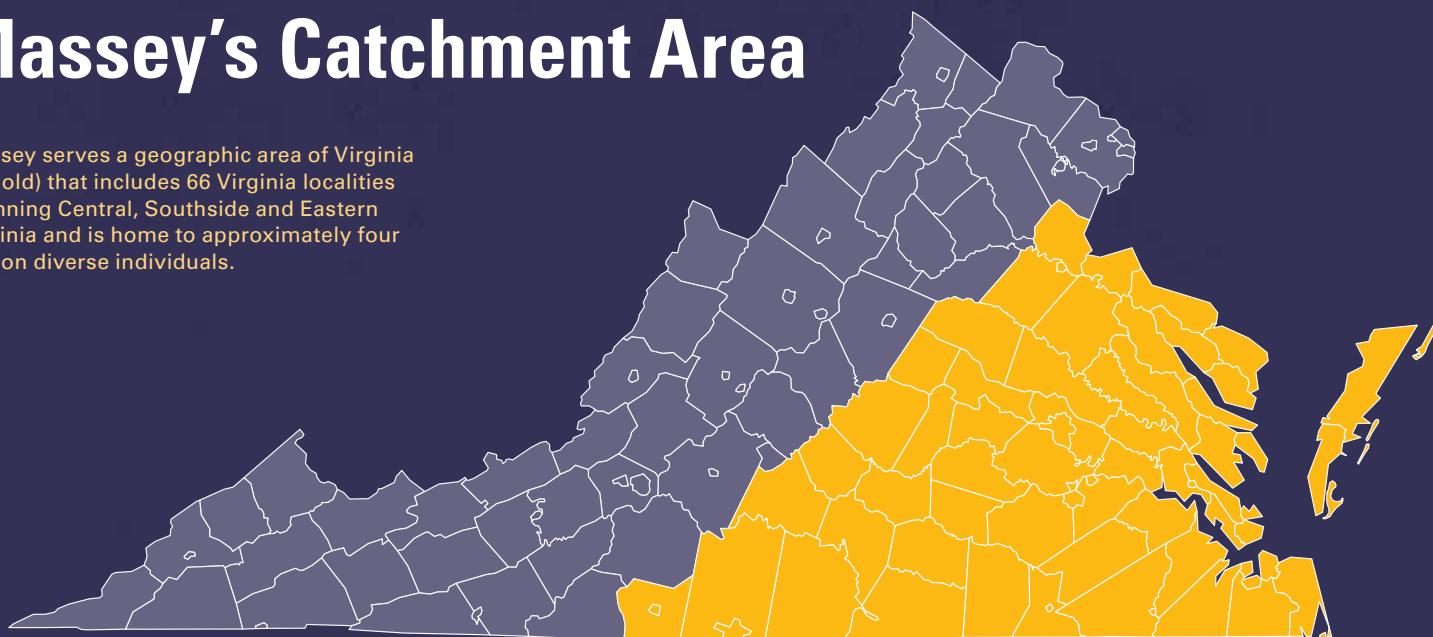


“Cultivate grants allow us to focus on research that is truly important to our community partners. Communities can lead research and drive the agenda.”

Vanessa Sheppard, Ph.D., associate director for community outreach and engagement, Massey Cancer Center, founding interim dean, VCU School of Population Health

Massey's Catchment Area

Massey serves a geographic area of Virginia (in gold) that includes 66 Virginia localities spanning Central, Southside and Eastern Virginia and is home to approximately four million diverse individuals.



SPECIALIZED RESEARCH WITH NATIONAL IMPACT

Recent prestigious grants have also elevated the level of nationally prominent research at Massey. In 2021, the National Cancer Institute announced that Massey won a highly competitive SPORE grant of around \$3 million — the first ever awarded in the state of Virginia — intended to move research findings quickly from the laboratory to patients to address the disproportionate effects of lung cancer on the Black community.

Lung cancer continues to be one of the leading causes of morbidity and mortality among racial and ethnic minorities and individuals from other medically underserved groups. This is due to several determinants, including molecular and genetic factors, exposure to psychosocial stress and structural stressors in neighborhoods and communities.

The Translational Research Center in Lung Cancer Disparities (TRACER) grant established a multiregional consortium among three NCI-designated cancer centers — Massey Cancer Center, USC Norris Comprehensive Cancer Center at the University of Southern California and the City of Hope Comprehensive Cancer Center — to address racial disparities in lung cancer morbidity and mortality by developing more precise strategies for lung cancer prevention and early detection.

Massey's SPORE project is composed of two initial research projects and a Developmental Research Program, providing the mechanism to solicit, develop, fund and evaluate new research concepts. These projects will be supported by a Biospecimen/Pathology Core, a Community Engagement Core and a Biostatistics and Bioinformatics Core, coordinated by an Administrative Core. TRACER

will also engage a host of community groups across Virginia, California and South Carolina, including local health departments, community health centers, marginalized populations, civic activists, educational institutions, faith-based groups and cancer survivors.

"It's important that the community has a seat at the table," said Dr. Winn, who is a nationally-recognized expert on lung cancer disparities and TRACER's principal investigator. "We're optimistic that this dream team of researchers and community stakeholders will translate our basic science into clinical impact in reducing lung cancer disparities."

MAKING THE GRADE: A REPORT CARD FOR HEALTH EQUITY

Massey leadership has been steering a national effort to create the Health Equity Report Card (HERC), an initiative that aims to improve the quality and equity of cancer care nationwide. A working group on elevating cancer equity has offered actionable recommendations to reduce racial disparities in access to cancer care.

"Your ZIP code and the neighborhood where you live impact many aspects of health, including cancer onset and outcome; beyond that, we know there is also implicit and explicit bias in care delivery," Dr. Winn said. "These factors leave minority patients with an undue burden of cancer and impact incidence and survival rates. We're excited about the potential of the Health Equity Report Card to help ensure the same standards of guideline-driven care are provided to every cancer patient, no matter their background or geographic location."

The Health Equity Report Card was developed in early 2021 to recommend practice changes that, if implemented,

would help providers and health care organizations identify and avoid discriminatory behaviors and bias in care delivery, address social determinants of health and overcome systemic barriers to optimal care.

The 17 actionable practice changes from the HERC have been refined into an implementation plan including concrete metrics, sources of evidence and a scoring methodology, all of which were vetted by oncology administrators and health care providers. It is now being piloted at five leading academic cancer centers to assess the feasibility of implementing the HERC as a tool that can both meaningfully and feasibly measure and report on equitable care practices. The Merck Foundation, through its Alliance for Equity in Cancer Care, is providing grant funding to partially support implementation of the HERC.

“We expect quality and safety reports from our health care institutions. Health equity reports should become the norm as well,” Dr. Winn said. “When we commit ourselves to that level of accountability, we can better earn and deserve the trust of our communities.”

WHAT'S NEXT?

Health equity efforts are infused throughout Massey’s care and research mission, and the center’s leaders know that the fight against cancer health disparities will take patience, tenacity and a strong network of community organizations and resources dedicated to eliminating the barriers and gaps that result in disparate outcomes.

In June, Massey Cancer Center received official news that will help take that effort to the next level. The National Cancer Institute has designed Massey a “Comprehensive Cancer Center,” which is the highest federal rating a cancer center can achieve. This designation is the gold standard for cancer programs and is achieved only by the nation’s top cancer centers in recognition of their scientific leadership, depth and breadth of research, effective community outreach, and cancer research training and education.

“We can reimagine what cancer centers can do for the next 50 years in extending new drugs and new approaches while also thinking about population health and science,” Dr. Winn said. “The reality is, where people live matters. With comprehensive status, Massey will show our peers in oncology and our patients in Virginia that we are driving the science-community conversation. We are taking it to the national level and finding answers to the question: What can we do to improve places and spaces to impact overall health?”



“The systemic, race-related barriers that our community partners have already identified are critical to our mutual efforts to increase access to colorectal and cervical cancer screenings.”

Katherine Tossas, Ph.D., M.S., director for catchment area data access and alignment and member of the Cancer Prevention and Control Program at Massey

If you would like to support the work of VCU Massey Cancer Center, please contact Jasmine Davis, Massey’s interim senior director of development, at 804-484-4903 or jjdavis3@vcu.edu.



A DECADE OF COMMUNITY CARE

The Richmond Health and Wellness Program delivers interdisciplinary care coordination to vulnerable members of the Richmond community and is looking forward to expansion.

By Zaynah Qutubuddin

When one 80-year-old woman received a complicated letter from her nephrologist, she found it hard to understand what the words meant for her and her health. Luckily, she knew who to call for help to understand the letter: the Richmond Health and Wellness Program (RHWP).

The program assigned a home visit to Elvin Price, Pharm.D., Ph.D., director of geriatric pharmacotherapy and the Victor A. Yanchick Associate Professor at the VCU School of Pharmacy, who has been working with the program since 2017.

It was Dr. Price's first day, and what should have been a simple task was anything but.

Tangled between cumbersome medical terms were the results of the woman's last exam, which indicated kidney failure. As Dr. Price sat with her in her living room, he patiently helped the woman comprehend what these words meant, words that had not been explained to her clearly over the phone or in the doctor's office.

"It was sad to deliver that information," Dr. Price said, "but it was a dignified kind of interaction in a space where she was most comfortable: her own home."

Health literacy is one of the most important factors influencing how patients access and manage their own health care, especially as they get older.

Aging is complex, and many of the most vulnerable members of our community live on a fixed income, facing several health issues without access to care. This is where RHWP comes in. Established in 2012, the program provides care coordination to support the elderly population by proactively managing health issues and related social needs before they can develop into a trip to the emergency room.

In the 2021–22 academic year, the program served 437 unique individuals over a total of 2,883 visits.

Led by the VCU School of Nursing, RHWP has earned a national reputation as a model for holistic care coordination. The program delivers weekly wellness clinics that focus on health assessment, monitoring and coaching regarding healthy living and chronic disease self-management. RHWP currently serves in five community-based sites across the Richmond region, with recent expansion into three new communities — Mecklenburg, Tappahannock and Petersburg — and a new site in Southside Richmond.

Each semester, approximately 100 students from across VCU participate, including those from nursing, pharmacy, medicine, social work, physical therapy, occupational therapy, kinesiology and psychology. They are guided by faculty like Dr. Price as the program offers education on effective chronic disease self-management, wellness coaching through healthy cooking demonstrations and diet management education.

"One of the unique aspects of this program is being able to place students in a clinical setting where research, practice and service are integrated to provide the best possible care, education and attention for both our students and the participants," said Jean Giddens, Ph.D., dean of the VCU School of Nursing and Doris B. Yingling Endowed Chair.

Dr. Price's first-day home visit was more than a technical transaction for the woman who learned that she had kidney failure. It was an interaction that let her know there was someone who cared and someone who heard her needs.

LISTENING AS AN ACT OF CARE

Listening is a key ingredient of RHWP's success, said Ellie Gillespie, who graduated from the VCU School of Nursing this spring.

"Our job is to listen, to really hear what the program's participants really have to say, where they feel there are deficits in care, and then we do our best to coordinate to fill those gaps," Gillespie said. "It's about building trust."

For Gillespie, RHWP is more than part of the nursing curriculum. The program's mission to bring care coordination to the doorstep of vulnerable communities and help improve health inequities and health disparities in Central Virginia aligns with her core tenets.

"I've always been passionate about social justice," she said. It's the reason she accepted a position on VCU Health's Secure Care Unit, working with people who are incarcerated.

Originally from a small town of 8,000 people in rural North Carolina, Gillespie recognizes the importance of the work she and fellow students are doing with RHWP to meet needs by helping participants manage their own health. The experiences have enriched her approach to the profession, and she credits her training to mentors like RHWP co-founder Pam Parsons, Ph.D.



Ellie Gillespie, a graduate of the VCU School of Nursing, visits Dominion Place senior living apartments on Thursdays with RHWP to provide wellness checks to program participants like Fredda Redd. *Photo: Tyler Trumbo, MCV Foundation*

“We’re training health professional students on how to complete activities related to care coordination, health promotion, population health and prevention. That integration across health care is extremely complex,” said Dr. Parsons, clinical professor and associate dean for practice and community engagement and the Judith B. Collins and Joseph M. Teefey Distinguished Professor at the VCU School of Nursing.

But to manage one’s health, certain issues must first be addressed in order to make progress. A person’s access to housing, food and transportation is inherently linked to health issues. When one link in the chain is broken, it’s often very difficult to move forward.

“We’re working with people who are experiencing housing instability or food insecurity,” Dr. Parsons said. “Individuals are not able to focus on the importance of taking their diabetes medications if they don’t have a place to live or something to eat.”

Over the last 18 months, RHWP partnered with Homeward, Senior Connections, Dominion Place apartments, and the MLP at VCU Health to assist five homeless individuals to secure permanent housing. The program provided several follow-up visits to ensure the transitions into stable housing were successful and that medical needs were being met, thus avoiding uninsured emergency department visits.

Once housing is secure, the program can tackle the next gap, like food insecurity. A prescription for fresh produce is one way the program has addressed food access through a partnership with Shalom Farms. For six weeks, participants such as retired civil engineer Randy Guill can receive fresh vegetables.

Guill is one of 250 residents at Dominion Place senior living apartments. He lives independently in his 452-square-foot, one-bedroom apartment and enjoys auditing history courses at VCU. He also has high blood pressure and diabetes.

Participating in the Prescription Produce Plan and learning from students about healthy eating habits has helped him make a lot of small but important changes over time.

“For example, I don’t eat canned food anymore,” he said. “You could get fresh vegetables for free, and they made that happen.”

REBUILDING AND STRENGTHENING CONNECTIONS

When the COVID-19 pandemic hit, community housing sites such as Dominion Place and Church Hill House were forced to prevent outside organizations from coming in. After years of what was often the only stable, weekly social and wellness interaction for residents, the temporary halt of the program was a loss felt deeply.

“We’re training health professional students on how to complete activities related to care coordination, health promotion, population health and prevention. That integration across health care is extremely complex.”

Pam Parsons, Ph.D., clinical professor and associate dean for practice and community engagement,
Judith B. Collins and Joseph M. Teefey Distinguished Professor, VCU School of Nursing

“Whenever I had a medical question, I would always ask them, because they were here and there was never any judgment from them,” said Guill, a native of Richmond who has been part of the program at Dominion Place since its inception. “When COVID-19 came, it was a bad time for everybody, but they did what they could.”

Like the rest of the world, RHWP got creative. It quickly converted to conducting wellness visits by telephone or videoconference to provide social support to participants in isolation as well as wellness support, including weekly check-in calls.

Guill still remembers one of the first meetings about the program with Dr. Parsons, and for 11 years, the Thursday clinics at Dominion Place kept him oriented as to what day it was.

When in-person visits returned in 2022, it was like a reunion.

“I felt joy,” Guill said. “Thursdays are a booster shot every week for me socially as much as medically.”

Despite that joy, challenges persist.

Prior to the pandemic, the program had several strong agency collaborators, but since then, Dr. Parsons and her team have had to rebuild those partnerships in light of the staff and management turnover at partner sites and the added strains of life after the pandemic.

Sheryl Finucane, Ph.D., assistant professor and co-director of the interdisciplinary Rehabilitation and Movement Science Ph.D. program at the College of Health Professions, has also dealt with challenges. During the COVID-19 lockdowns, much of the screening for fall risk and assisting residents in mitigating risks couldn’t be done.

Dr. Finucane and interprofessional teams of students at RHWP provide physical screenings and in-home assessments to help decrease the risk of trips and falls for participants and recommend solutions like installation of grab bars in bathrooms and assist with rollator repair. Together with

the students, Dr. Finucane also provides education on steps residents can take to improve their balance.

“We rely on the students to do the educational pieces,” Dr. Finucane said. “Our role as faculty is to help the students understand why it’s important to help the residents understand things like their fall risk and what the resident can do to reduce that risk.”

But it’s as much about the participants educating the students as it is the other way around.

In one instance, Dr. Finucane had a resident in his 70s who refused a cane or a rollator, relying solely on a small shopping cart as his support.

“He didn’t want to look old,” she said, so using the program’s methods of motivational interviewing and engaging participants, she provided education in stability exercises and then asked if he could teach them to the students at his next visit.

“It was a fun twist,” Dr. Finucane said. “The residents do so much education for our students, and it’s really meaningful for them.”

Meanwhile, Dr. Price has been conducting research on how individual gene variants affect a patient’s response to medications to help minorities who are vastly underrepresented in health care studies, particularly among the Black population.

Dr. Price’s research, Translational Approaches to Personalized Health, examines data such as pharmacogenomics and blood pressure. Seventy-two percent of the 130 participants of the study self-identified as Black American, with an average age of 69 +/- 5.9 years, and 78% taking more than five medications. About 26% of the participants have self-reported at least one adverse drug reaction.

The long-term goal for any pharmacogenomics study like Dr. Price’s is to help doctors identify the best drugs and doses for each individual.

After collecting all the data, Dr. Price's team provides participants with a small card like a personalized mini report that includes information such as base blood pressure readings and which drugs they may react to poorly. Participants can then take this card to their primary care provider at their next visit for improved care.

"Just having that research has made people feel seen and heard," Dr. Price said.

WHAT'S NEXT?

Following the success of its model, RHWP has begun to expand into rural communities. Over the next four years, this nurse-led program will use two vans, one purchased internally through the School of Nursing and the other through a partnership with Capital Area Health Network (CAHN). Through the partnership with the CAHN Federally Qualified Health Center, the program will be able to provide urgent and transitional care services to the Richmond and rural areas starting this summer.

The expansion comes after realizing the program's innovative interprofessional care coordination model can be an effective and cost-efficient way to provide high-quality care while also educating future health care professionals. The model also helps to reduce strain on hospitals by preventing acute emergency needs.

For instance, in 2022-23, the program's care coordination services helped 48 individuals avoid

unnecessary emergency department visits, which are typically three times more expensive for the health system than a visit with providers.

According to Joseph T. DeRanieri, D.M., director of the Langston Center for Innovation in Quality and Safety, these interventions reduce participant acute demands on the emergency department and have also saved the health system more than \$54,000. As operations expand, RHWP hopes to achieve similar outcomes for a larger population while reducing administrative expenses by improving the model's efficiency.

With a decade of challenges, successes and growth, the members of RHWP are eager to identify a sustainable funding model for the future that includes long-term funding to continue the program as it grows so that RHWP can do what it does best: Create wellness champions.

"The program can't be indefinitely sustained off grants," Dr. Parsons said. "We are working with the health system to determine the sustainable pathway, with a goal of maintaining a presence with the communities that we are serving over time. That's our goal."

If you would like to support the Richmond Health and Wellness Program, please contact Pam Lowe, senior director of development at the VCU School of Nursing, at 804-827-0020 or plowe@vcu.edu.

Kamryn Davis (right), a student in the VCU College of Health Professions, enjoys an outdoor site visit with two RHWP program participants during a nice spring day. *Photo courtesy of VCU School of Nursing*



Making Wellness Connections at Home

Brenda Wilson's curiosity led to a community of support.



Photo: Tyler Trumbo, MCV Foundation

A buzz of activity one Wednesday morning is what drew Brenda Wilson, 66, to the community room of her apartment building, where she discovered the Richmond Health and Wellness Program.

"I was being nosy," the native Richmonder said with a chuckle.

Like RHWP staff, caring for others runs through Wilson's veins, and she spent a fair share of her career advocating for improved conditions for those living in community housing at residences like Church Hill House. She worked as a nursing assistant, and she also served nearly 20 years as vice president of the Fulton Tenant Council under the Richmond Redevelopment and Housing Authority (RRHA).

For Wilson, who is now retired, RHWP has offered a door to expanded social connections on Wednesdays, including occasional fun and games like an afternoon of bingo mixed in with regular wellness checks.

In December 2022, Wilson found her connections to the program a valuable help after she

fractured her back in a fall at her daughter's home. After her doctor recommended a back brace, she came back home to Church Hill House with questions she could take to RHWP volunteers, who in turn offered her helpful suggestions for her recovery. The presence of the nurses and students is what has earned Wilson's utmost trust in the program and its people.

"It's a cushion," Wilson said of the program. "You know you're going to fall, but you know you have the cushion right there to catch you. So in between doctors' appointments, you know they're here on Wednesdays for any questions you may have. They listen, and whether I come down or not, it's still good to know that they are here."

Through the program, Wilson has also set two goals. The first: to cut down and eventually quit smoking cigarettes.

"They ask when you come down every week, 'How many packs of cigarettes did you smoke since the last time we visited?'" she said.

Wilson admits that while she hasn't quit, she doesn't smoke as much as before and is still working on it.

The second goal, she said, is to eat more vegetables.

Thanks to a Prescription Produce Plan in partnership with Shalom Farms, Wilson has access to locally grown produce and has begun to change her eating habits.

"I'm one person who doesn't cook a whole lot," she said. "Before this, I would just grab and go, but now I'm trying to incorporate vegetables into my meals."

Wilson is quick to praise RHWP, especially the patience and genuine support from its staff and students, and she said that many residents would be incredibly sad if the program ever ended.

"It would destroy our confidence in any type of program if this was snatched away," she said. "I can count on the program, and I would hate to see them go."

A surreal landscape featuring a dirt road that splits into two paths. The left path leads to a dark, stormy sky with heavy, grey clouds. The right path leads to a bright, sunny sky with fluffy white clouds. A single, lush green tree stands at the junction of the two paths, its canopy partially overlapping the dark sky on the left and the bright sky on the right. The ground is a mix of dark, rocky terrain on the left and green grass on the right.

Minding the Gap

VCU Richmond
Brain Health Initiative
is tackling Richmond's
dementia care deserts.

By Holly Prestidge

Trina Jones and Pam Hedgespeth flanked their mother, known as Miss Sadie, as the trio sat inside an exam room at the VCU Health Ambulatory Care Center on a spring morning earlier this year during a follow-up geriatrics appointment.

The stylishly dressed matriarch, who is 91, sat quietly as her daughters shared that among the hardest parts of taking care of someone who has dementia is understanding that it never goes away; that over time, the individual they know slowly becomes someone they don't.

They saw the signs in recent years, first in other family members, then their mother. They felt the occasional wrath, as they called it, from her mood swings, instances that the sisters and their siblings disregarded in the moment but now see very differently.

As Hedgespeth and Jones sit with their mother, they can't help but wonder about their own futures. Jones, especially, worries about the unknown.

In the last year, however, a light has pierced their darkness.

Hedgespeth and Jones receive one-on-one counseling and ongoing caregiver support through a multidisciplinary program called the VCU Richmond Brain Health Initiative.

The RBHI, as it's widely known, provides dementia-related screening, education, coaching, referrals for support and monitoring, and research opportunities in Richmond, which some call a dementia desert for its lack of brain health and memory care centers. RBHI particularly targets areas of low-income, largely Black and African American communities that are disproportionately affected by long-standing economic and social conditions that leave residents without adequate health care options.

In short, RBHI offers direct, no-cost care coordination and navigation that connects individuals living with dementia or who are at risk of it and their caregivers to the appropriate brain health resources, as well as educational, emotional and lifestyle risk health coaching.

Jones learned of RBHI through VCU's Richmond Health and Wellness Program, an early predecessor of RBHI that today remains one of its many partners. For the first time, the sisters are learning about dementia, its related symptoms and risk factors, and what they can expect with their mother. They're also learning how they can prevent its onset as they age.

Maybe most importantly, though, Hedgespeth and Jones learned that through RBHI, they have caring professionals on their side — and on speed dial at a moment's notice — who stand at the ready to walk this journey with them.

DEMYSTIFYING DEMENTIA

Dementia is the umbrella term for a group of symptoms related to brain disease that result in impairments in cognitive functions and affect one's daily functioning. The myth is that dementia is a normal part of aging, but it's not.

While many associate dementia with memory loss, the disease manifests in other ways, including loss of communication and language, the inability to focus and pay attention, lack of reasoning and judgment, and trouble with visual perception.

The Community Response

Surveys within some of Richmond's low-income communities revealed:

71%

of participants reported recent memory problems.

77%

of participants indicated a self-perception of being at risk for dementia.

67%

of participants requested memory screenings.

63%

of participants requested brain health education.

41%

of participants requested direct caregiver services.

20%

of participants within this population were at risk of losing housing within two months, and more than half reported having health issues identified as risk factors for dementia, including hypertension, depression and anxiety, and insomnia.

That could look like any number of things, from getting lost or wandering, problems recognizing friends and family, emotional flatness or the opposite, emotional outbursts, to insomnia, difficulty speaking, having trouble following orders, hallucinations or delusions, loss of coordination and more.

There are several types of dementia, including frontotemporal, Lewy body and vascular dementia, though the most widely recognized is Alzheimer's disease, which kills more people across the U.S. than breast and prostate cancers combined.

An estimated 6 million people were living with Alzheimer's in 2022, though its grasp goes beyond those diagnosed; more than 11 million people provided unpaid care for loved ones with Alzheimer's or other dementias last year at a cost of about \$272 billion.

In Virginia, it is estimated that more than 300,000 people above age 45 are living with cognitive decline, though nearly half of them have not talked to their doctors about their concerns.

Research shows that dementia's risk goes up from lifestyle factors like lack of physical activity, obesity and diabetes, excessive alcohol use, smoking, depression, social isolation, hearing loss and more.

While there is no cure, modifying unhealthy habits can substantially reduce the risk of dementia. Additionally, in a very small percentage of dementia cases – roughly 2% to 5% – the cause is reversible and can be treated. Hearing loss, for example, is a treatable risk factor.

But for Black and African American adults and those who live in low-income communities, the stats are bleaker.

Black adults are twice as likely to develop dementia as whites yet are less likely to get treatment. They have the highest prevalence of dementia-related disabilities and mortality, at nearly 15% of those over age 65.

Enter the RBHI – the origins of which began a decade earlier when VCU created community programs to address health disparities for older adults in Richmond's most vulnerable communities.

The Richmond Health and Wellness Program (RHWP) was established in 2012 (see page 20) to serve older adults in low-income housing through weekly, on-site wellness clinics. That was followed in 2016 by the VCU Center of Inclusion, Inquiry, and Innovation: Health, Wellness and Aging Core, or iCubed HWA, which expanded on RHWP's health services and programming.

From those early programs, brain health and memory care emerged as areas of need. Surveys within some of



VCU Richmond Brain Health Initiative co-directors include (from left): Faika Zanjani, Ph.D., associate professor in the Department of Gerontology within the VCU College of Health Professions; Brian Berman, M.D., professor of neurology with the VCU School of Medicine and director of VCU’s Parkinson’s and Movements Disorders Center; and Lana Sargent, Ph.D., an associate professor in the VCU School of Nursing and an affiliate faculty member for the School of Pharmacy’s Geriatric Pharmacotherapy Program. *Photo courtesy of Brian Berman*

Richmond’s low-income communities revealed that 71% of participants reported recent memory problems and 77% indicated a self-perception of being at risk for dementia. Memory screening and brain health education were cited as the most requested services by participants, at 67% and 63%, respectively, and another 41% requested direct caregiver services.

Within this population, nearly 20% of participants were at risk of losing housing within two months, and more than half reported having health issues identified as risk factors for dementia, including hypertension, depression and anxiety and insomnia.

“I was totally surprised by the community’s response,” said Faika Zanjani, Ph.D., associate professor in the Department of Gerontology at the VCU College of Health Professions and one of three RBHI co-directors. “They wanted to do more, but there wasn’t a place to send people with brain health referrals.”

Thus RBHI was established in 2020. Its team spans a variety of departments and schools on the MCV Campus, including gerontology, nursing, geriatrics and neurology.

Dr. Zanjani collaborated with RBHI co-directors Lana Sargent, Ph.D., associate professor in the VCU School of Nursing and affiliate faculty in the School of Pharmacy’s Geriatric Pharmacotherapy Program, and Brian Berman,

M.D., professor of neurology with the VCU School of Medicine and director of VCU’s Parkinson’s and Movements Disorders Center.

Their team also includes Cate Newbanks-Hawks, a gerontology health coach with RBHI, and Kennedy O’Donnell, RBHI interventionist.

“The idea is to find a way, through community-based health care, to bring medical care and resources to those who don’t have access, and to provide a system that reaches out to them and screens them for cognitive issues or risk factors,” Dr. Berman said. “Then those individuals are offered health coaching and care coordination and navigation to connect them to providers and other services.”

While RBHI’s intention is to reach out directly to community members, individuals can also be referred to its program by providers or other health services. Screenings consider an individual’s cognitive and overall health, but also factors like housing and food security, in-home safety, socialization and engagement, caregiver status, health care and medication adherence and more.

Once individuals are identified, much of the program — from coaching to navigation and consultation — is carried out by telephone, Dr. Sargent said. Simply put, it’s the best way to reach many older adults.

“Together we are championing change in Richmond to create brain health spaces. As an academic health system, we are well-equipped and passionate about using science and creating innovation to support brain health in our local community.”

Faika Zanjani, Ph.D., associate professor,
Department of Gerontology, VCU College of Health Professions

“It reduces barriers like transportation, especially for older adults who are having to use family members to transport them from place to place or who don’t have transportation and can’t afford pricey transportation services,” she said.

RBHI was further bolstered in 2021 by a three-year, \$1.2 million grant from the U.S. Department of Health and Human Services’ Administration for Community Living. In addition to its VCU partners, it works with outside organizations including Riverside Center for Excellence in Aging and Lifelong Health, the Area Agency on Aging: Senior Connections, Greater Richmond Alzheimer’s Association chapters and more.

The partnerships expand a much-needed network and safety net for many who might otherwise fall through the cracks of the health system.

O’Donnell, the RBHI coordinator and interventionist, said much of his work centers around establishing a base of care that can often ward off problems for those at risk or provide some relief for those who have already been diagnosed and their caregivers.

“When we talk to people we meet through the community, our primary goal is always making sure that they have a stable relationship with a primary care provider first, because that can solve a lot of issues,” O’Donnell said. “But if a patient lacks those supports, we establish a care network for that person — it’s all about establishing a base of care.”

COMMUNITY CARE

Earlier that week, a few days before Miss Sadie and her daughters’ appointments, about a dozen residents of a low-income apartment community in the heart of Church Hill opened sealed brown paper bags and dug around inside before pulling out items to inspect them.

The bags were filled with a variety of items: whole grain granola and fruit bars, packets of nutty trail mixes, single-serve green tea teabags, dark chocolate candy and grass-fed beef jerky sticks, but also stretchy bands intended to facilitate armchair exercises, reflective neon bracelets that could be worn and seen in the dark, and small pillboxes.

As residents traded snacks or began eating, Newbanks-Hawks, a health coach with RBHI, walked the room handing out plums and bananas and cans of flavored sparkling water.

This event was a first for RBHI, though Newbanks-Hawks is no stranger to Church Hill House. She typically spends her Wednesdays there, talking with residents about their health needs, cognitive and otherwise. On this day, however, she was running a program about brain health.

The snack bags were an icebreaker, but also a tool. She explained how eating right was just one way that individuals could help themselves reduce dementia risks.

“We have to know that every part of our body is affecting what’s happening in our brains,” she said. “If you’re not taking care of your gut and your heart and your blood, you’re not taking care of your brain. You can’t take care of one part without taking care of another part.”

Newbanks-Hawks explained frankly that Black and low-income populations have an especially high risk for developing dementia, and particularly so if they live in areas without access to healthy foods and medical care.

Those sitting in front of her nodded their heads in agreement. Some called out their various chronic issues as Newbanks-Hawks talked about them, like diabetes and hypertension. Others aired concerns about the lack of information they receive from doctors. Some of those in the crowd were already working with Newbanks-Hawks one-on-one in her Wednesday sessions.



Cate Newbanks-Hawks, gerontology health coach with the VCU Richmond Brain Health Initiative, leads a discussion on brain health and dementia at the Church Hill House. Educating vulnerable communities about dementia is a key component of the RBHI, which was established in 2020.
Photo: Tyler Trumbo, MCV Foundation

“We can change our risk factors if we start leading healthier lives as soon as we can,” she told the group.

Dr. Berman emphasized that dementia is among the most feared diseases.

“Polls among those over age 55 show people are more afraid of dementia than cancer,” he said. “The fear from patients comes from their perceptions about the loss of independence and freedom, being deprived of care or not being taken seriously by providers, social stigmas, shame, isolation and more.”

Education is key, and it is a fundamental pillar of RBHI’s mission.

“When you can’t engage with your outside environment, it changes the way your brain is able to function,” Dr. Sargent said. “You’re not getting the same stimulus that you had before, so you can start to experience memory loss, loneliness, depression, and all of those things show up as cognitive issues.”

Dr. Zanjani said the early investigations into community-wide needs only underscored RBHI’s efforts to build a program to meet them.

“Our work started as feasibility, to see if the community was interested, and we found out they were much more than interested,” she said. “They are invested in creating positive change to reduce dementia burdens in the community.”

“Together we are championing change in Richmond to create brain health spaces,” she added. “As an academic health system, we are well-equipped and passionate about

using science and creating innovation to support brain health in our local community.”

For at least two people, RBHI and its mission means the world.

Like many caregivers, Hedgespeth left her job so she could take care of her mother full-time. Jones steps in when her sister needs a break.

They have regular phone calls with RBHI team members as well as scheduled in-person appointments.

“We have Kenny on speed dial,” Hedgespeth joked, referring to O’Donnell, the program’s interventionist. “Having the caregiver support has been awesome.”

The two women said they are learning a lot through the program’s support, including that their mother’s emotional ups and downs are part of the disease.

“It’s not personal, and it’s not a choice,” Jones said. “There’s no reason to be angry — why would I be angry at this person who sacrificed everything for me for the first 18 to 21 years of my life?”

Still, as dementia affects everyone differently, the sisters are taking each day with their mother as it comes.

“We really didn’t understand or know what was going on with her,” Hedgespeth said. “As we saw Mom progressing down that road, we really wanted to understand how we can help her and be supportive of her.”

Hedgespeth said her mother objected at first to the care. “She was saying she didn’t want to be a burden,” Hedgespeth said, “but she’s not a burden. I’m going to do this for her for as long as I can.”

If you would like to support the Richmond Brain Health Initiative, please contact Heather Phibbs, director of development for neurosciences in the Office of Medical Philanthropy and Alumni Relations, at 804-628-8907 or heather.phibbs@vcuhealth.org.

follow-up

Checking in with researchers on the latest developments



This latest grant to the C. Kenneth and Dianne Wright Center for Clinical and Translational Research allows the center to grow a new regional partnership to advance health equity through translational science that engages diverse communities. *Photo: Eric M. Peters, MCV Foundation*

Health Equity is Centerpiece of Successful NIH Grant Renewal for VCU's Wright Center for Clinical and Translational Research

The \$27.5 million award is the largest NIH grant in VCU history and comes amid a transformational year for the university's research enterprise.

Virginia Commonwealth University won its largest grant ever from the National Institutes of Health, a seven-year, \$27.5 million grant to renew funding for a center focused on moving new therapeutics from laboratory bench to community treatment and extending its reach to reduce health disparities across the region.

This latest grant to the C. Kenneth and Dianne Wright Center for Clinical and Translational Research allows the center to grow a new regional partnership to advance health equity through translational science that actively engages diverse communities, trains a diverse research

workforce and supports the rapid implementation of innovative clinical and translational science that advances the scientific study of human health.

The grant renewal is the latest institutional achievement for VCU's research enterprise in the past year. Last fall, the university announced that it had received a historic high of over \$405 million in sponsored research funding for the previous fiscal year. VCU was named No. 50 among the nation's top public research universities and earned multiple designations in recognition of the school's high caliber of innovation and entrepreneurship. A year ago,

VCU was the first academic health center in Virginia to receive a CTSA, joining a national consortium of more than 50 biomedical research hubs funded by the National Center for Advancing Translational Sciences.

VCU received its largest gift ever, a \$104 million donation to fund a new institute in its efforts to prevent, stop and reverse liver disease.

Last year, the Wright Center formed the Wright Regional Center for Clinical and Translational Science (CCTS) in a joint venture with Eastern Virginia Medical School, Old Dominion University and Virginia State University. This latest NIH Clinical and Translational Science Award (CTSA) will support the regional center's efforts in clinical and translational science research and practice, integrating research, providing training to grow community engagement in research, diversifying patient populations, encouraging greater diversity among new clinician researchers entering the workforce and engaging in cutting-edge research in informatics. Another collaborating institution, the Richmond VA Medical Center, extends the center's clinical research efforts to veterans and individuals who live in Virginia's rural regions.

"The new award will allow us to pursue the vision of the Wright Regional CCTS: to advance health equity through translational science that actively engages diverse communities, trains a diverse research workforce and supports the rapid implementation of innovative clinical and translational science within the Wright Regional CCTS and throughout the national program," said F. Gerard Moeller, M.D., director of the Wright Center and associate vice president of the division of clinical research.

The Wright Center was established in 2007 and was awarded its first CTSA grant of \$20 million in 2010. VCU was the first academic health center in Virginia to receive a CTSA, joining a national consortium of more than 50 biomedical research hubs funded by the National Center for Advancing Translational Sciences. Participating institutions work to accelerate the transformation of laboratory discoveries into treatments for patients, engage communities in clinical research and train a new generation of clinical and translational researchers. In 2018, that grant was renewed for \$21.5 million.

NEXT is published by the MCV Foundation to share the latest breakthroughs occurring at VCU Health and the positive impact these exciting innovations have on our patients.

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