

A Growing Body of Evidence: MAHEC Expands its Research Capacity



MAHEC's Research Division has expanded to 11 full-time scientists and staff who are dedicated to advancing community-engaged, evidence-based health research.

We recently sat down with Research Division Director, Kathy Foley, PhD, to discuss the expansion of MAHEC's research, library and knowledge services team. Since good research requires asking the right questions, we thought we'd start by posing a few of our own.

Over the past year, your research team has added eight scientists and assistants, and you've added a librarian. What has spurred this growth?

MAHEC has received state appropriations to develop an academic health sciences center that can more fully assess and address our region's rural healthcare needs. We need a robust research team to support our state mandate to improve the health and wellbeing of rural North Carolinians. That's no small mandate.

Every county in our region is a federally designated healthcare professional shortage area. We don't have enough healthcare providers in a variety of fields including primary care, general surgery, and mental health not to mention nurses and allied health professionals like physical therapists. Our research team is focused on identifying what kinds of providers are needed across our region so MAHEC can develop targeted programs to meet these needs.

Our academic health center will be home to a leading master of public health (MPH) program in partnership with UNC Gillings School of Global Public Health and UNC Asheville. Our scientists will help MPH faculty, students and community partners conduct research to guide the development of public health interventions to improve our region's health at the population level.

We also have increased needs for research support in our expanding medical programs including the Asheville Regional Campus of the UNC School of Medicine, our new surgery and psychiatry residency programs, and our

rural fellowships. All of this new research helps inform and guide the evidence-based medicine we teach and practice here at MAHEC.

Why do we need an academic health center in Western North Carolina?

There isn't anyone in North Carolina who has the in-depth knowledge about our region that we have. In some ways, our Appalachian mountain culture has more in common with West Virginia and Tennessee than it does with other parts of our state. Our research needs to be based here so we can understand our region's unique healthcare needs.

For example, we've been hit particularly hard with the opioid crisis. It's harder to combat here in Western North Carolina because we have higher rates of poverty and unemployment, fewer mental health care providers and treatment centers, and more painkillers prescribed on average per resident. To further complicate matters, what looks like "accessible care" on a map often isn't because there are mountains in the way and other transportation barriers.

In order to do good research and provide the best healthcare, we have to be culturally sensitive. We have to know where and how we can leverage interventions. This requires local research informed by local community members. That's the only way we are going to transform the health of our mountain communities. UNC Health Sciences at MAHEC will facilitate this kind of collaborative community-led change.

Our research needs to be based here so we can understand our region's unique healthcare needs.

What will be unique about our academic health center?



UNC Health Sciences at MAHEC will house the expanded Asheville Regional Campus of the UNC School of Medicine as well as a Joint Program of Public Health, both of which will be supported by MAHEC's interdisciplinary research center.

continued on next page...

MAHEC has deep ties and a long history of innovation in rural healthcare. We've established strong community partnerships throughout Western North Carolina. Because our research team will support all of the UNC Health Sciences at MAHEC, we're in a unique position to foster collaboration across disciplines like medicine, pharmacy, and public health and across community-based organizations and healthcare systems.

It sounds like research will be the backbone of UNC Health Sciences at MAHEC. Are there other benefits to having an academic health center in our backyard?

Definitely. As I mentioned, we have a critical shortage of healthcare providers across Western North Carolina. Research indicates the best way to grow our healthcare workforce is to recruit students from our region, educate them here at home, and provide opportunities for them to stay and practice here in the mountains. An academic health center supports every step of this pipeline process.

Research also shows that establishing an academic health center in a rural region encourages healthcare innovations and attracts other industry, creates jobs, and spurs new investment. That's a lot of potential benefit.

What research projects are on the boards right now?

One of our top priorities is getting an accurate understanding of the healthcare workforce needs in our rural region. Does Graham County need more family physicians or nurse

Establishing an academic health center in a rural region encourages healthcare innovations and attracts industry, creates jobs, and spurs new investment.

practitioners? Is there a shortage of dentists in Rutherford County? Once we get a good sense of what kinds of providers are needed and where, we can look at the best ways to recruit, train and retain them.

We're also looking at ways to build a more resilient workforce and provide ongoing professional development with place-based approaches like ECHO telehealth training.

We're doing a lot of research on our opioid and substance use disorder treatment programs at our family health and ob/gyn clinics. Our preliminary qualitative research indicates our patients trust our providers more than they do in other cities. We're trying to understand why. MAHEC seems to be combatting stigma, which is essential for getting patients to consider treatment.

We also provide ongoing research support to our faculty, fellows, and residents as well as the students and preceptors at our Asheville Regional Campus of the UNC School of Medicine. It's important that our providers and students learn how to use and conduct research to deliver the right treatment to the right patient at the right time. This is what it means to practice evidence-based medicine.



MAHEC's Research Division Director, Kathy Foley, PhD.

What were you looking for when you were building your team of research scientists?

I'd say, first and foremost, I was looking for researchers who are willing to let their priorities be driven by the needs of our community and our faculty not their own research agendas.

I also wanted to build a balanced team with scientists who could do both quantitative and qualitative research. It's important to look at data from different angles to see if we can discover something we haven't seen before. Research should be an iterative process that expands what we can know.

Everyone on our team is open minded and eager to work with faculty, residents, patients, and community partners. In other words, we are willing to relinquish some control and let the community shape our research.

You talk a lot about community. What role does community play in healthcare research?

Community-based participatory research or patient-engaged research is being driven by the Patient-Centered Outcomes Research Institute (PCORI) and the shared-decision making model emphasized in the Affordable Care Act, Medicaid and Medicare legislation, and advocacy groups like the National Patient Advocacy Foundation and Robert Wood Johnson Foundation.

Academic researchers can get stuck in their ivory towers and lose touch with the local community. When this happens, research becomes something we do *for* or *to* people, rather than something we do *with* the community. We're beginning to understand this is a flawed approach.

continued on next page...



Research associates Kara Franke, Anne Squires, and Lauren Payne review data on a current project.

The only way we can create interventions that truly meet our community's needs is to invite them to sit at the table with us from the very beginning, even when considering what our essential research question will be.

At MAHEC, we're looking at the science of patient engagement. What happens to a researcher and a clinician when they involve a patient in a research question? What happens to patients and community members when they are involved? Does this improve trust? Does this improve the quality of the questions you ask? These are the questions we're trying to answer.

Our clinicians recently developed a women's health screening tool with community input in a human-centered design process. We're about to begin using this tool in all well-woman visits at our family health clinics. Now we're going back to our community partners to learn how this process impacted them and what was meaningful for them.

In addition to engaging patients, why is research important to the practice of medicine?

Research helps us understand what works and what doesn't work. The best approaches are evidence-based, but there is still so much we don't know. We are still learning how to deliver the best care and how to communicate meaningfully with our patients.

Having researchers and librarians embedded in our clinics and residency programs creates a learning-rich environment and ongoing opportunities for innovation. Research also helps our residents and providers become more comfortable with the uncertainty that is inherent in medicine while striving to improve their patients' health.

If someone wants to incorporate research into their work, how would they get started? What's the process?

Start by reading the literature and finding out what's been done before. Is there a good evidence base already? You might have an idea for practice innovation that has already been tried and tested. What can you learn? Alternately, you might discover there isn't a good body of research, and you might be inspired to contribute to it.

Here at MAHEC, we have librarians embedded in every division. Our librarians are information research experts who can help with a thorough literature search. This is the best place to start.

And, of course, it helps to have a burning question.

What do you want to know? [M](#)