

## CAROLYN MAUREEN CLANCY, MD: a conversation with the editor

Carolyn Maureen Clancy, MD (*Figure*), was appointed director of the Agency for Healthcare Research and Quality (AHRQ) on February 5, 2003. Prior to her appointment, she had served as AHRQ's acting director since March 2002 and previously was director of the agency's Center for Outcomes and Effectiveness Research. Dr. Clancy, who is a general internist and health services researcher, is a graduate of Boston College and the University of Massachusetts Medical School. Following clinical training in internal medicine, Dr. Clancy was a Henry J. Kaiser Family Foundation Fellow at the University of Pennsylvania. She was also an assistant professor in the Department of Internal Medicine at the Medical College of Virginia in Richmond before joining AHRQ in 1990. Dr. Clancy is a clinical associate professor (Department of Medicine) at the George Washington University School of Medicine and serves as a senior associate editor of *Health Services Research*. She has published widely in peer-reviewed journals and has edited or contributed to 7 books. She is a member of the Institute of Medicine and was elected a master of the American College of Physicians in 2004. Her major research interests include various dimensions of health care quality and primary care, access to care services, and the impact of financial incentives on physicians' decisions. Dr. Clancy lives in the Maryland suburbs of Washington, DC, with her husband, Bill. She enjoys jogging, watching movies, and spending time with her extended family.



Figure. Carolyn M. Clancy, MD.

**William Clifford Roberts, MD (hereafter, WCR):** *Dr. Clancy, thank you for coming to Baylor University Medical Center (BUMC) and for speaking with me so that the readers of BUMC Proceedings will have a better idea about your background and your goals as director of AHRQ. To start, could you briefly describe your upbringing and your family?*

**Carolyn Maureen Clancy, MD (hereafter, CMC):** I was born in Philadelphia while my dad was finishing graduate studies, and I grew up just outside of Boston. Both of my parents are from Boston originally. I am the oldest of 7, with 4 sisters and 2

brothers. I attended college and medical school in Boston. I am not sure what led me to want to be a physician, but I decided on that path when I was about 9 years old and then gathered information to support that decision. The more I learned later about medical decision making, the more I became fascinated with how decisions are made.

**WCR:** *Are there any physicians in your family?*

**CMC:** No. Why I had this desire intuitively, I'm not sure.

**WCR:** *What did your father do?*

**CMC:** My father was a businessman, an accountant by training with a master's degree in finance from Wharton. He worked on a lot of mergers and acquisitions, i.e., turning around bankrupt companies. My mother was a mathematician.

**WCR:** *You were a math major also?*

**CMC:** Yes.

**WCR:** *Did you live at home when you went to Boston College?*

**CMC:** I lived at home for one semester. The college was crowded and did not have dorm space. I moved in the second semester of my freshman year and thereafter lived on campus.

**WCR:** *Was it easy to make the choice to go to the University of Massachusetts Medical School?*

**CMC:** Being a student in Boston is an amazing experience. Students receive discounted admission to cultural events. At the time, I felt that being a student in Boston made me a valued member of the community. Worcester, where the University of Massachusetts Medical School is located, appeared less exciting, but during my interview there I was completely inspired by a professor, a pioneer in geriatrics, who interviewed me. The concept that medicine and science could be reshaped and rethought to anticipate the changing needs of the population had a very strong appeal to me.

**WCR:** *Was it difficult deciding on internal medicine?*

**CMC:** It was difficult because I was very attracted to several primary care fields and also to surgery. I ultimately decided that

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an internal medicine internship would be the best foundation for any clinical area. I ended up loving internal medicine. I did my internship and residency in Worcester and after that completed a fellowship at the University of Pennsylvania that was sponsored by the Kaiser Family Foundation. The foundation invested in this program for 5 or 6 years given its belief in the need for academic general internists who would research education and issues affecting health care delivery. The program was comparable to the Robert Wood Johnson Clinical Scholars Program.

**WCR:** *How did you end up in Richmond, Virginia?*

**CMC:** As I finished my fellowship in 1984, I met a faculty member from Virginia Commonwealth University (VCU) who shared my interest in medical decision making. One of the first studies I did as a fellow was to evaluate whether decision analysis could be used to help physicians decide whether to receive the hepatitis B vaccine, which was then new on the market. Before the university bought and distributed the vaccine for all the physicians, we did a randomized trial to compare decision analysis to background information and to doing nothing. The decision analysis made a significant difference. In particular, those physicians at higher risk of being infected by hepatitis B were more likely to get the vaccine when decision analysis was implemented. I was bitten by the bug to figure out how people make decisions because it struck me that medicine was becoming increasingly complex and understanding more about the decision-making process was critical to improving care. It was a terrific experience.

**WCR:** *Did you enjoy Richmond?*

**CMC:** Richmond is a beautiful city, especially for someone like me who loves old buildings and historic areas. One of the major roads contained numerous statues of Confederate war heroes, which suggested that those who grew up in the South probably learned about the Civil War from a different perspective than those who grew up in Massachusetts.

**WCR:** *At VCU, you were the head of the outpatient clinic. How did that work out?*

**CMC:** Within a year or so of arriving I was asked to be the medical director for the primary care clinic. That was a terrific opportunity because it gave me an important role in designing educational programs for residents. I also began thinking about how to assess the quality of both the clinical care and the education we provided. While we had aspirations of having electronic medical records, we learned quickly the importance of systems and reminders, even with paper-based records. For example, reminders about clinical preventive services—in the form of sticky notes pasted to the front of patient charts—resulted in dramatic increases in the delivery of evidence-based care. In addition, we evaluated the quality of diabetic teaching. We did a survey to find out what patients had learned or heard—which prompted us to rethink how to provide information on self-management far more effectively. On a more humbling note, our efforts to engage the primary care residents in providing peer review and feedback to their colleagues were far less successful.

**WCR:** *It sounds like your investigative efforts at VCU led you directly into what you are now doing. How did you get involved with AHRQ?*

**CMC:** One of the first projects I did when I got to Richmond was to evaluate the faculty practice at the university, which had become part of a new kind of health maintenance organization (HMO), an independent practice association. Each physician had some patients who were HMO members and some patients with conventional insurance. Reimbursement for HMO members was through capitation while reimbursement for other patients was traditional fee-for-service. At that time it was clear that studies of HMO physicians were confounded by substantial physician practice variation, even within closed-staff model plans like the (then) Harvard Community Health Plan. What I saw was an opportunity to evaluate the impact of financial incentives where each physician effectively served as his or her own control.

We examined two categories of services. First, we looked at what we called *discretionary tests*, where we couldn't determine any reason for doing the test. A chest x-ray for a healthy 40-year-old man who doesn't smoke would be an example of a discretionary test. Second, we examined the delivery of evidence-based preventive services as a measure of quality. We found that patients in the HMO were much less likely to have received discretionary tests. In terms of quality, there was no difference between patients in regular insurance plans and those in the HMO. This study triggered my interest in policy.

The other part of the policy bug was that VCU was one of the original sites for a very large foundation-supported effort to integrate the medical residents into programs for private patients as well as into the programs for public patients. This endeavor made me think a lot about how to provide care to uninsured patients who are socioeconomically disadvantaged. Along the way, I interviewed a young potential medical intern who had worked with Jack Wennberg. Wennberg had done original groundbreaking work in variations in practice. It was his work that really launched AHRQ. His work provided the critical foundation that members of Congress used to create a new agency.

**WCR:** *You are the fourth director of AHRQ?*

**CMC:** Yes.

**WCR:** *How did it come about that you moved to Washington and joined this agency?*

**CMC:** Along the way I had some personal reasons to be relocating; I met my future husband. The agency at the time had started a new group on primary care. The idea of understanding more about the basis of primary care practices was appealing. While most research is conducted at tertiary academic medical centers, the vast majority of people receive care in community-based practices, and our understanding of why people seek care and the quality of that care remains limited. I thought I would spend a couple of years at AHRQ and then return to academic medicine. But I have been with AHRQ now for 15 years!

**WCR:** *Who offered you the position at AHRQ?*

**CMC:** The person who was running primary care.

**WCR:** *After you had been there for 2 or 3 months, did you feel that you made the right decision?*

**CMC:** Scientifically, I was much more productive working at the agency than I had been in academia. I had the oppor-

tunity to work with people with different types of scientific backgrounds. I examined patterns of care for large populations, something I hadn't been able to do in Richmond. This opportunity was a very important complement to all of the questions I was asking when I ran the primary care clinic.

**WCR:** *You mentioned in your superb presentation (medical grand rounds, BUMC, November 8, 2005) that your agency has a budget of \$300 million and consists of 300 people. In the federal government, that is a relatively small budget. What was it in 1990 when you went there?*

**CMC:** I believe it was just under \$100 million. It got up to about \$150 million by 1995. Early on in the agency's development, we supported the development of clinical practice guidelines. There was some controversy about one of the guidelines, and AHRQ's congressional oversight committee leadership changed in 1995. At that point, the House Budget Committee decided the agency should be eliminated. That did not happen, but our budget was cut by 20%. Since that time, we have received continued increases in our budget, particularly a large increase related to patient safety and even more of an increase related to evaluating the impact of health information technology on the quality, safety, and efficiency of care. Most recently, Congress has provided an additional \$15 million for the Effective Health Care Program—to examine the comparative effectiveness of different treatment options for conditions most important to the beneficiaries of the Medicare, Medicaid, and State Child Health Insurance Programs. The first report, on gastroesophageal reflux disease, was published in mid-December 2005, and several more were released in January 2006.

**WCR:** *When did you become the director of this agency?*

**CMC:** I became the acting director in 2002. The person who was director before me was a giant in our field, John Eisenberg, who died young.

**WCR:** *Whom do you report to?*

**CMC:** The Secretary of Health and Human Services.

**WCR:** *How do you spend most of your time?*

**CMC:** We have 5 research centers: the Center for Primary Care, Prevention, and Clinical Partnerships; the Center for Outcomes and Evidence; the Center for Quality Improvement and Patient Safety; the Center for Delivery, Organization, and Markets; and the Center for Financing, Access, and Cost Trends. We also have several offices that support research management and administrative functions, including peer review and training and what we call communication and knowledge transfer. I have a number of direct reports, including the people who direct those units. Together, as the senior leadership team, we set the vision for our work by developing and implementing new initiatives to identify what works to improve health care—and working with physicians, health care leaders, and patients themselves to use the results. We see our overarching mission—to improve the quality, safety, effectiveness, and efficiency of health care for all Americans—as one that consists of both the production and use of evidence-based information to improve care.

I spend a fair amount of time trying to communicate the importance of what we are doing to policy makers and the public. People understand the problems confronting health care

delivery but have more difficulty understanding how developing better evidence-based strategies for day-to-day practice is a critical part of solving many problems.

**WCR:** *How many physicians are in your agency?*

**CMC:** Between 25 and 30, many of whom still see patients on a regular basis.

**WCR:** *Do you speak to Congress?*

**CMC:** Yes. This past year I testified 4 or 5 times on various issues related to health care. The best hearing was one on patient safety, where a bill that had been around for several years passed in July 2005 and 5 weeks later was signed into law by the president. The day of the hearing I would not have predicted this result.

**WCR:** *It sounds like you are selling Congress on the idea of improving health care quality and the importance of safety and of evidence-based medicine. Who got President Bush to include the electronic medical record piece in his State of the Union speech about a year ago? Was that you?*

**CMC:** That was a very exciting moment. Numerous policy makers, including some very senior people in his Council of Economic Advisors and the Department of Health and Human Services, pushed it. Secretary Thompson was a strong proponent. At least as important is leadership on this issue from the private sector. In many other industries, the power of information technology has been clearly demonstrated. Residents and students today have grown up with the use of computers; they don't use clipboards or index cards but personal digital assistants. When President Bush made that statement about computerized records and reducing medical mistakes, I could almost hear the applause all over Washington, DC. My e-mail started lighting up instantly because people were very excited about that.

**WCR:** *It sounds like President Bush is a major supporter of endeavors that you are involved in.*

**CMC:** In addition to information technology, patient safety is a big priority for this administration. This development is very exciting.

**WCR:** *Do you envision that your budget and number of people will continue to grow?*

**CMC:** Yes. Many members of Congress and many business leaders who are seeing their costs continue to escalate are increasingly convinced about the need for better information to make the best possible health care decisions. There is a lot of excitement about the Effective Health Care Program as a way of bringing the best of scientific evidence to the practice and organization of health care. We are very appreciative of the support we have had so far. These are obviously tough times budget-wise. A big part of my daily work is trying to ensure that we collaborate as effectively as possible with the Medicare and Medicaid programs and private-sector partners.

**WCR:** *How did your coming to BUMC come about? What is your knowledge about BUMC's endeavors to improve patient safety and quality of care?*

**CMC:** AHRQ's mission is to improve the quality, safety, efficiency, and effectiveness of health care for all Americans. On our budget, we can't focus on both the production and use of evidence-based information to improve care unless we work in

close partnership with those who are providing care, paying for it, or regulating it. Baylor Health Care System (BHCS) has been a critical partner for some of our most important initiatives. Dr. David Ballard is leading a great clinical trial trying to improve quality of care in rural hospitals. "How do we improve?" is the question. Is giving information for benchmarking enough, or can an additional educational intervention (the ABC Baylor Program) be scaled down for smaller facilities and lead to greater improvements? We have critical partners at BUMC in part of our Effective Health Care Program and also work closely on an exciting patient safety project that focuses on reducing adverse drug events, reducing the occurrence and improving care for pressure ulcers, and dramatically reducing hospital-acquired infections. BHCS has a coherent and unusual relationship between its scientific research center and its entire clinical enterprise, and that makes it a terrific partner for us. BHCS is on the leading edge of the projects we support.

**WCR:** *How do you see medicine in the USA 5 years hence? What is going to be different?*

**CMC:** It is always hard to differentiate hope from prediction. I once heard a futurist say that everyone agrees on what is going to happen in the future, but what they disagree about is the time frame. I believe that health care is going to look a whole lot different 5 years hence. The next 5 years will be a time of incredibly exciting change. We will see more and more systems with electronic health records that don't just digitize what we have put on paper but actually help us work smarter. Working smarter is going to become a core part of medical education.

When I was a medical student and a resident, I appreciated and learned an enormous amount from nurses, but I had no understanding of how physicians, nurses, and others could

work most effectively as a team. The Institute of Medicine's first report on patient safety, *To Err Is Human*, emphasized the importance of systems in reducing errors; this is beginning to become an important part of clinical training and will only increase in importance. For example, even at VCU, where we had a computerized order entry system over 20 years ago, we didn't focus enough on teamwork. When I attended on the wards at VCU, I used to go to discharge rounds with the nurses who couldn't get the residents interested in the discharge procedures. A recent survey found that about 15% of adults report that they are back in the emergency room within a short period of time after hospitalization because they didn't receive or understand relevant information when discharged from the hospital. That is incredibly important stuff, but it was not a core part of my training. In 5 years we will be well along the way to using decision support systems in a way that we simply don't understand now. That means that part of medical education must include focus on policies of care and how we work together effectively in teams. It's going to be a huge change in the medical enterprise.

**WCR:** *It sounds like you have incredible responsibility in your position. Do you still have time to jog and go to a movie occasionally?*

**CMC:** Yes. My work is incredibly exciting. We are trying to make the care we deliver better and more efficient. In essence, the work we support is where the rubber meets the road. My work is incredibly engaging, but I do try to get some time for balance as well.

**WCR:** *It was a pleasure.*

**CMC:** Yes. Thank you.