Changing Perspectives: From Transplant Surgery to Diabetes Primary Care

Claresa Levetan, MD

Editor's note: In the “Practice Profiles” department of Clinical Diabetes, we spotlight clinicians who have chosen to dedicate a significant portion of their time to the care of patients with diabetes. Suggestions for clinicians to interview in the future are welcome and can be e-mailed to levetan@juno.com.

When did you first become interested in entering the medical profession? From as early an age as I can remember, I wanted to go into medicine. In fact, I can’t tell you just what started it, but by the time I moved literally into the shadow of the Mayo Clinic in Rochester, Minn., at the age of 10, I was already certain that medicine had an appeal that I couldn’t find in any other profession.

Where did you grow up? I was born in the rural town of Harmony, Minn., population less than 500, in the upstairs of an old house. My father, a Methodist minister, then moved us to an underserved area of North Minneapolis for about 6 years and then to Rochester, where I attended high school.

Where did you go to medical school and do your training? I earned my bachelor of arts degree at Carleton College in Northfield, Minn., and then attended the then-very-new Mayo Medical School.

Who were your role models in medicine? Several of Mayo’s great doctors had been role models for me at a younger age, and I had a great deal of respect for many of the physicians who worked there. It fulfilled a real ambition of mine to be able to return to Rochester to learn from them.

You did some of your training overseas. How did that come about? When I was in medical school at Mayo, I met Alison, an English premedical student doing a research clerkship there. We fell in love and got engaged as I completed my Halsted (surgery) residency at Johns Hopkins Hospital in Baltimore, Md. We got married a year later and moved to Sheffield, England, so Alison could finish medical school.

What did you do in England with your medical training? I initially got a job doing transplant research in the surgery department at Leeds University, where I worked with an outstanding and well-known English surgeon, Prof. Geoffrey Giles. I spent 4 years at Leeds and finished the surgical residency. I received my surgical degree and the fellowship in the Royal College of Surgeons.

What did you think about the health care system in England? Working in the National Health Service changed my American medical-based perspectives and gave me a new understanding of both the advantages and the problems of a nationalized health care service.

How did your transformation from transplant surgeon to family physician evolve? One day, I was working on the surgical ward in England and got a call from a hospital in Chicago. They asked if I would be interested in coming back and working with their team. I moved back to Chicago, leaving Alison alone in England for a year while she did her internship. She later joined me and began a biochemistry research position at Northwestern University.

At the end of another year, we moved back to Minnesota so Alison could begin her family practice training at the University of Minnesota. We moved to the small town of Northfield just outside of Minneapolis, and I began working with a group of five family practitioners in town.

How did you like practicing in a small town? Of course, a small-town practice was much different from what I had been doing. Although I was comfortable with the surgical and trauma cases, I remember thinking that the family practitioners really had some all-around skills that I envied.

I remember one night in the emergency room seeing a man who had been crushed by a horse and later that day seeing a 5-week-old baby with a fever. The middle-aged man had a severe crush injury to his chest, so I placed the appropriate tubes, stabilized him, and called in a helicopter to take him to a nearby trauma unit for further care. But caring for
the baby terrified me. I had to call in extra help for what turned out to be a pretty simple problem.

It was about then that I decided it would be really useful to have the all-around skills of the dedicated family practice doctors I was working with. So I applied to the University of Minnesota Department of Family Practice for a resident position, and they were happy to take me on.

**When did you begin doing diabetes work?**

During my training, I worked with Roger Mazze, research director of the International Diabetes Center, and Victor Corbett, an experienced endocrinologist. The two of them got me started doing research in diabetes.

After the residency, I stayed at the University of Minnesota for 2 years doing a research fellowship in the Department of Family Practice and earning a master’s degree in epidemiology from the School of Public Health. By then, I had quite a bit of work proceeding in a few different areas of diabetes, and it seemed natural to stay when the department asked me to join the faculty.

**How has your unique background helped you become a champion of patients with diabetes?**

As a physician, I just listened as people told me over and over how problems with the health care system insidiously conspired to prevent them from receiving the best medical care. By simply listening and trying to do what my patients needed, I found myself championing changes in the health care system.

**What is the greatest thing you think a family practice resident should learn about the disease of diabetes?**

I would like family practice residents to know that people with diabetes, with their doctor’s help, good support, current medicines, modern instruments, and meaningful education, can now control their disease in a way that has never before been possible. People with diabetes can control their blood glucose, blood pressure, and cholesterol levels to the point where the complications of diabetes need never appear.

As young family practitioners, the most important thing they can do is to listen to and try to understand their patients. By understanding their patients’ needs, by being approachable, and by listening carefully to their patients’ wishes, they will over the course of years achieve a better understanding of all the patients they serve.

**What are your thoughts on the team approach to diabetes?**

A good team should include a primary care physician, a diabetes educator, a nutritionist, a pharmacist, an ophthalmologist or well-trained optometrist, a nurse practitioner, a podiatrist, perhaps a psychologist, and other health care professionals depending on the individual’s needs. It is important that these team members communicate with each other.

Each person on the health care team is important, and we need to use each team member according to his or her strengths. I would encourage all people with diabetes to identify each member of their health care team and call on them for help appropriately.

**Where do you see a role for endocrinologists in the care of patients with diabetes?**

An endocrinologist is an important part of the health care team. Endocrinologists are experts who can provide specific answers to problematic diabetes questions and help with unusual problems related to diabetes. All people with diabetes should have access to an endocrinologist on their team when they need that kind of expertise.

However, there are far fewer endocrinologists in this country than there are primary care physicians. Sometimes patients seek out more expertise when what they need is better accessibility, more individual support, more time, or a broader focus that includes other important health issues.

**What is the one thing about the American health care system you would most like to change?**

Too often, basic health care is linked to unreasonable personal expenses for individual patients. We have the best medical care in the world, but we don’t distribute it appropriately. Some people don’t go to the doctor because it can cost too much, and preventive care for many other people is placed on the back burner.

The cost of drugs and medical equipment is one of the greatest barriers to better care. People need better access to care and less fear that a sudden illness could leave themselves and their families broke.

**What aspects of diabetes care do you believe may be overlooked?**

We must remember that diabetes care should not overshadow other aspects of preventive care that all patients need, including flu shots, vaccinations, good cholesterol and blood pressure management, eye checks, and a variety of screenings for common cancers. We must also ensure that we provide answers to individuals’ questions and that we address their important needs.

**What do you do on a daily basis?**

I practice at a University-owned community family practice clinic in St. Paul, located in the Phalen Village area. About half of my time is spent teaching clinical medicine to medical students and residents. I have a small private practice two days a week. Most of the rest of my time is spent doing clinical research in diabetes.

Much of my research examines our health care delivery system and how we can improve our system to provide the very best diabetes care to our patients. I work with many physicians in other primary care clinics to improve diabetes care in St. Paul and the surrounding region.

**How can we begin to get Americans focused on preventing type 2 diabetes?**

A first important step is to recognize the
dangers of the current American lifestyle—too much of the wrong foods and too little exercise. We talk about it, but too often we don’t do much about it. We use cars for individual transportation when the rest of the world would walk to a nearby bus or train.

As a result of our population’s increasing weight and decreasing level of physical activity, we are seeing an epidemic of diabetes in the United States among age groups where diabetes used to be rare just 40 years ago.

There is no quick fix, but I think we need to struggle against forces that impede our fight to stay fit and trim.

Tell me about your involvement in professional organizations.

I am the director of the Minnesota Academy of Family Physicians Research Network and have served on a variety of research and educational committees. I have also served as a consultant on diabetes research being done by the American Academy of Family Physicians (AAFP).

I was asked by the AAFP to be its representative to the National Diabetes Education Program. This important program, sponsored by the Centers for Disease Control and Prevention and the National Institutes of Health, seeks to promote better diabetes care throughout the country.

If we turned the clock ahead 20 years, what is your fantasy about where we’d be in the treatment of diabetes?

I think type 1 diabetes will be managed by placement of a small implantable device that checks blood glucose and delivers insulin. That device will be just about as smart as a pancreas and should virtually eliminate development of subsequent problems. Type 2 diabetes may still require other medicines to reduce insulin resistance, but hopefully these will be available in a more effective form by then.

I hope that we will all have a better understanding of the value of a more balanced lifestyle in terms of exercise and nutrition and that we will all eat better and take a bit more time to enjoy ourselves and our families.

We’re still 20 years into the future. What do you see yourself doing personally and professionally?

I would like to tell my children that I was part of the generation that helped to eliminate diabetes as a serious disease. I may move back to England to be closer to my wife’s family and in some way continue in my lifelong ongoing education.

Clares Levetan, MD, is director of diabetes education at MedStar Research Institute in Washington, D.C. She is an associate editor of Clinical Diabetes.