The medical residency system as we know it today was first introduced 125 years ago—and a lot has changed in that time. Examining the origins of residency programs, and the historical roots of its challenges, can help determine what residents of today—and tomorrow—can expect.

At its beginning, residency was not the only option for all medical school graduates, Kenneth M. Ludmerer, MD, an internist, medical educator and historian of medicine, said during a recent presentation at the Accreditation Council of Graduate Medical Education (ACGME). Medical school graduates could take different pathways to become physicians, including apprenticeships or studying outside of the country.

At this time, those who did participate in residency programs had certain attitudes about the work they did, which informed how well the programs worked. One principle was that “residents should have sufficient time to pursue problems in depth,” Dr. Ludmerer said. “They’d reflect on the total patient.” Thoroughness, attention to detail and high professional authority gave programs a scholarly feel. Residents lived in the hospital – hence residency training – and therefore easily followed the patient from admittance to discharge.

“The values, education principles and moral principles were reinforced by the learning environment,” Dr. Ludmerer said. “There was sufficient time [to pursue problems]…. They weren’t any less busy, but they were busy because they were so careful and thorough.”

By the early 1940s, specialty boards began to crop up, cutting off the alternative pathways to becoming a physician. By the 1950s and 1960s, things began to change—sicker patients and more technology increased the consequences of error. Faculty had shifting priorities, meaning fewer faculty on the wards.

By the 1970s, when burnout was officially recognized, residency had changed.

“There was enormous unrest among residents,” Dr. Ludmerer said. “We need to know more about what causes burnout, but at the core was excessive workloads and a sense of being marginalized by

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New payment models, such as diagnosis-related groups, and duty-hour limits through the 1980s and into present day continued to change residency. What is really needed today, and for the future is a more holistic conception of residency, which may help lessen burnout and ensure professional satisfaction among trainees, said Dr. Ludmerer.

“We need to concentrate on the quality of the entire learning environment, including relationships with faculty, intellectual stimulation and reasonable patient loads,” he said. “For the past generation, residents have been crying out, ‘Let me heal,’ but their sense of fulfillment in work has diminished greatly. … If we truly want to make the residency better, it’s the conditions of work that matter, and not work hours alone.”

Dr. Ludmerer pointed to current efforts to improve residency, including the Institute of Medicine report on graduate medical education (GME) financing and other GME solutions. The AMA is working on these issues as well, as outlined by the AMA Council on Medical Education, by collaborating with the ACGME and other stakeholders in creating an ideal medical education continuum. In addition, the AMA’s updated policy on resident duty-hours supports research to explore a variety of issues in duty-hours, including innovative models for requirements.

Through its Accelerating Change in Medical Education initiative, the AMA is working to transform undergraduate medical education and now is focusing on collaborating with GME stakeholders to make innovative changes in these relationships as well.

**How would you improve residency?** Share your thoughts in a comment below at *AMA Wire®* or on the AMA Resident and Fellow Section Facebook page.