Penny Pekow

Celebrating 27 Years at Baystate

In late September DHDPS will celebrate the retirement of **Penny Pekow, PhD**, Supervisor of Biostatistics and Research Support. We been privileged to have her as a part of our department for almost thirty years, and she has been integral to our growth and development. We are grateful for the dedication, knowledge, and experience she has shared, and we wish her all the best for her retirement.

What led you to Baystate and what were the earliest projects you worked on?

I moved to Amherst in 1988 with 2 young children, and an unfinished dissertation. A former fellow student from Chapel Hill, then faculty at UMass-Amherst introduced me around the department – and I started a half-time research associate position in the Biostatistics department consulting on projects at UMass Medical School, and at Baystate Medical Center. My initial work at Baystate included a consulting contract for the OB/Gyn department, and another for the division of Cardiac Surgery. I worked to support faculty and staff on internally funded research. Over time my work expanded to include other departments at Baystate. I particularly enjoyed working with Susan DeJoy, director of the midwifery program. For a project designed to reduce use of episiotomy, we conducted a large (>1000) chart audit (in the days one still had to request and comb through physical charts) to compute episiotomy rates by provider type and individual provider. We then surveyed providers on appropriate use of the procedure and asked them to report their own use rate. We provided individual feedback to providers including their recent rate along with education on problems with overuse of episiotomy. The follow-up chart audit to look for impact on episiotomy use was my first use of electronic health records – still a lot of work, but infinitely less than pulling and combing through 1000 physical charts.

Another especially memorable project during this period was the first NIH-funded clinical trial I worked on: The Influence of CPB Temperature on CABG Morbidity, with Dick Engelman in cardiac surgery. Looking back, I think that was still part of the wild west days of clinical trials. We made major changes to the study protocol and updated inclusion criteria with much less oversight from the IRB or NIH than current protocols allow.

When I started working for Baystate in 1988, I would print out analytic results or save to a floppy disc and either mail (snail mail) them in, or else drive in for a meeting. Within the year we started using FAX machines, and several years later, email. Speed of communication wasn't the only changing factor: over this period both the speed of computing, and the volume of data available also started to blow-up.

In 1996 the division of Academic Affairs decided to open a research office – and I was invited to take the biostatistician position, as a Baystate employee, working with Dan Teres, MD. I continued halftime at UMass, teaching courses in data management and intro biostatistics. Dan Teres and I provided consulting support to faculty and residents much the way the current Epidemiology Group does. We also ran a summer intern program for students getting MS or MPH degrees in public health, matching students with faculty and helping support their work. This was how I started working with Peter Lindenauer – he sponsored a few student projects. As a follow-up to one of these projects (evaluating rates of perioperative beta-blocker use at Baystate) we requested data from Premier, to try and evaluate the same topic across many hospitals. This was our first foray into large multi-center database analysis, and it helped put us on the map with publications in JAMA and NEJM.

Please share your reflections on the growth of the CenteràInstituteàDepartment and the role of the Biostats group within it

When Peter moved into a leadership position in research, we formed the Center for Quality of Care Research (CQCR). Initially we continued to hire grad students and staff from UMass-Amherst to assist with data management and analysis, but then shifted to hiring full-time analytic and support staff for the center. As the center grew, adding faculty and staff, and gaining success in grant support, we transitioned to become an Institute (IHDPS) and finally Department (DHDPS).

The biostatistics group has been an integral part of the growth of the DHDPS. Much of the initial work we published, as well as grants received, was focused on analysis of large multi-hospital databases. In addition to the Premier database, we expanded our expertise to include use of HCUP's National Inpatient Sample (NIS) and KID data; Medicare data; the state All-payer claims data (APCD) and Cerner's multi-hospital electronic health record data. Building a strong team of analysts to support this work has been key to the success of these endeavors, and of the department. Aruna Priya and Meng-Shiou Shieh, among others, have been crucial to our success with their strong analytic skills and intellectual curiosity that keeps them growing.

What are some of the highlights of your time in the DHDPS?

The strong teamwork ethic of the department has been one of its key strengths, and for me one of the real pleasures of working here. When teaching data management, I've tried to drive home the idea that research is a team sport. I've had the opportunity to work with so many bright, talented and motivated investigators – serving as a statistical mentor, but also learning so much from them and with them along the way. The process has kept me on my toes – pushing me and my team to stay abreast of new analytic methods and making sure we could not only implement these new methods, but also explain them adequately. It's been a joy to watch new investigators grow, and while sad to see them move on, also exciting to see where they've landed, and the work they go on to direct. And it is not just the investigators – the department has also served as an educational steppingstone for the research support staff who have moved on into medical school, or other research opportunities. I'm proud to have been part of everyone's journey.

What do you like to do in your free time, and what are your plans for after you leave Baystate?

In my free time – I enjoy cooking (and eating); reading novels; walking in the woods near my home; watching Korean shows on Netflix (lately getting into Korean cooking …); spending time with family and friends doing all the aforementioned. I need a dog.

As for my plans for retirement: It's a mystery!