Value for Money: The Nursing Health Services Research – McMaster Unit

The Nursing Health Services Research Unit (NHSRU), funded by the Ontario Ministry of Health and Long-Term Care, consists of Co-Principal Investigators Dr. Linda O'Brien-Pallas at the Toronto site (see profile in CJNL Volume 21 Number 1) and Dr. Andrea Baumann at the McMaster site. The NHSRU has a multidisciplinary team of 46 co-investigators and more than 50 researchers representing nursing, business, labour studies, sociology, economics, healthcare policy, engineering and anthropology. The NHSRU has been recognized internationally, nationally and provincially for its comprehensive team approach to problem identification and resolution.

Dr. Andrea Baumann

In this issue, Editor-in-Chief Dorothy Pringle talks with Andrea Baumann, RN, MScN, PhD, who leads the McMaster unit of the NHSRU. Dr. Baumann is also the associate vice-president International Health, Faculty of Health Sciences, at McMaster University and a co-investigator in a CIHR Team Grant in Community Care and Health Human Resources. She has been grant reviewer on three multidisciplinary councils and a member of various journal editorial boards.

Her recent publications have focused on the supply and production of healthcare workers and rural policy implications. In addition to her research, Dr. Baumann has directed several international projects in relation to capacity building and higher education for women.

Q: I'm going to start by asking you what led to the development of the Nursing Health Services Research Unit, with particular emphasis on the McMaster site.

A: Actually, these two units – McMaster and University of Toronto – grew up together, because one important factor that led to their development was a concern in the 1990s about recruitment issues and the shortage of nurses. Actually, it still seems to be the same today. Second, there was some concern about nursing research capacity in Ontario. I think those two things, like many ideas, end up being synergistic, that a lot of people have the same idea at the same time. There was a request for proposals at that time from the Ministry [of Health].

In response, Linda O'Brien-Pallas [at the University of Toronto] and I met and pulled together many researchers in the province. At that time, there weren't very many of what we would call "nurse researchers" in this area. We pulled in a variety of social sciences, business and engineering types. People like John Eyles and Vivian Walters, sociologists. And there was a business professor from the University of Toronto, Martin Evans. I remember those three people as being very helpful.

In conceptualizing what a unit would look like, there's the vision and then there's the administration of that vision. That part, too, was new territory; there weren't many existing units like this, although now there are a lot – centres of excellence and that kind of thing. … At the time, there was a shortage of nursing research capacity and a certain angst that we didn't know much about nursing services – who was in it, where were they, what were they doing? All that [inquiry] accumulated the interest in starting [the NHSRU, but the], most important [factor was] the government's support.

Q: What was the focus of the research when you started? Has that changed or evolved over the years?

A: The [two] units started together in the '90s collecting data and writing common reports. There were a few researchers in the province, but remember, the PhD programs were just starting. We had to gather what I call "basic data" – we sat down and did a common visioning around the major objectives, but we kept a very large umbrella, including human resources and health systems. Organizations were not [yet] used to either collecting or sharing data; for example, regulatory bodies had never [seen themselves] as data repositories for human resources, or interpreting issues in the nursing workforce.

As we grew, the area of human resources got bigger. Perhaps we were ahead of our time, by the late '90s, the world had become very interested in human resources, partly because of recessionary economics. By then, we had our "basement" data, that is, we had enough to begin to understand.

[As a matter of] natural evolution, people took on different projects. It was never at that time conscious, but the two units are mutually complementary. The University of Toronto unit looked at outcomes and forecasting, and McMaster looked at rural workforce issues, workforce profiling and so forth.
We do some similar things, but address them in a different fashion – an excellent approach, because in nursing, one of the problems is that we don't have many studies on similar topics compared to, say, sociology or psychology. [Initially, we had] a core of maybe 10, 12 people. This has expanded to approximately, I'd say, 30 people, and core people – maybe 20 – now work in different areas in health human resources and in the health system.

Q: How do your "core people" get involved? Do you actively recruit them, or do they come to you?
A: It's a combination. We established a process early on that has worked well [for us, though it's not the only possible approach] – the [concept of funding] co-investigators. We have a small amount of seed money at each site. At McMaster, [where] we have perhaps 20 people, not everybody gets seed money every year, but we might try to pinpoint, for example, newly graduated PhDs. As I say, this is [only] one way [of doing it], but the [collaborative approach] has been a good one for us.

Q: That raises the question about leadership in this kind of endeavour. How would you describe your leadership style at the research unit?
A: We are seeking to build capacity and work with new researchers and students, and I tend to run the unit in a collaborative fashion.

Q: Given that you've had the opportunity of a number of different leadership roles – being the director of the school, as well as being the director of the research units – would you say you have to use different styles or different tactics in those two leadership roles?
A: One advantage I have is that I've been able to get to know everybody in the school. I did the annual career reviews. I got to know what people wanted and needed because they'd tell me – in my other "hat" – "This is what I need." That helped, because [then] I could say, "If this is your area of interest, there's some support here for you."

Q: What difference has having infrastructure funding made?
A: Certainly, having it throughout these years has allowed us to build a program

of researchers. And it has allowed us also to build nursing research capacity. [In return, the NHSRU] has given Ontario value for its money, in terms of understanding the nursing workforce better than any other province. We have given the Ministry some very valuable information, briefed the deputy ministers and nursing secretariats in a variety of subjects. [The funding has] also built some capacity in what I call the research staff area.

Q: What kind of staff do you have that are critical to running a unit like yours?
A: We have one Manager, the Administrative Coordinator, who is absolutely critical. I 'buy' a part-time Finance Officer. Then we have some Research Associate positions. I divide them into [full-time and] part-time [associates], because I sometimes share them with other researchers. That way, we get maximum value for the dollar.

One problem is that the budget is fixed; it has no inflationary components. [There's] a whole issue of how governments look upon research as being fixed. Yet salaries go up, so it's [the budget] a challenge. Sharing research associates allows us to partner with other researchers. And there's a certain amount of money again for graduate students, so we can support them and keep them going for two to three years.

Q: What role will the grad students play in the unit?
A: I take my own as well as some of the co-investigators', so I've been able to get some physical space for them. We bring them in so they're together. They have to be studying in the area of Health Services with a focus on human resources. That's a pretty broad area. They're either working in work environments or that kind of thing; they do fit under the larger umbrella. They play a large part, because they come to team meetings and are involved in many research activities of the unit. We just finished a small study and one of the master's students was involved – she's going to do the keynote [address].

We can offer them different forums to grow in different directions, because, as you know, doing the research [also means] making PowerPoint presentations and giving talks – things "my grandmother never told me"! – Learning to be a researcher [means learning to be a] public speaker, learning how to talk to government representatives. So the students have to learn to express their ideas clearly. We help them with that.

Q: What about non-nurse research members? Is recruiting and working with them different from working with the nurse research members?
A: At the beginning, we had a lot of non-nurse researchers such as Michael [Carter] from Engineering at U of T. Nursing has grown a lot and so has what I'd

call professional nursing expertise in the area of research so we have fewer now. We still use non-nurses in certain areas. I'm sure that Linda [O'Brien-Pallas] would say the same in her forecasting work.. I'll give you an example. In migration, Jennifer Blythe, who is an anthropologist, and Ivy Bourgeault, who is a sociologist, have different perspectives on that topic and we work with both of them. As well there are representatives from the Centre for Health Economics and Policy Analysis (CHEPA) and then the Institute for Clinical Evaluative Sciences (ICES) on our advisory board. Raisa Deber and her [health policy] group at U of T have been supportive of our research, working with both sites. We still use a lot of consultation with other fields, but I'd say that we're around the table now as an equal player which wasn't necessarily true earlier.

Q:What role does return on research investment play in the life of your unit? And on a related issue: What about knowledge translation, which has become much more prominent in the research environment in the last few years? How are you managing that whole basket?

A: We do a return-on-investment calculation every year, and it is substantial at both sites. We calculate how much money we receive from the government and some other sources for infrastructure which is usually a couple of million dollars which is considered the investment and that is leveraged into millions of dollars in actual research money. So it's a huge return on investment for such a small amount of money!

I don't think anyone yet has the answer to knowledge translation for researchers. We have knowledge translation officers and all sorts of different names for them and CHSRF (the Canadian Health Services Research Foundation) has provided a lot of leadership in this area, but sometimes despite these officers and the leadership, not everybody's clear about what knowledge translation means.

Up until just a very few years ago, the peer-reviewed published research was the only goal. But now the phenomenon of grey literature has become quite a challenge for academics. Peer-reviewed articles are seen only in certain circles. Researchers have got to continue to look at other products. This is only my opinion, but we're good as academics, but we are not marketers and, in fact, we feel uncomfortable with marketing-kinds of materials – even. We like numbers and that necessarily doesn't translate well into helping the day-to-day decision-making of clinicians and decision-makers. This is a huge struggle.

We still struggle, With what constitutes knowledge? And then, What's the evidence of uptake? And all of that certainly is a science unto itself. We have some good examples though: our work on retirement, certainly, and when we did the

research on new graduates working full-time and part-time, boy there was uptake at that. Again, that struck very responsive ears, because we had information people needed. And the other thing that struck really responsive ears was around SARS. So all of a sudden we heard, "Who is the public health nurse?" It became of immense importance to a lot of people. Sometimes, with our health human resources information, much of it been aligned with what I'd call almost a crisis, and then they do pay attention, you can directly see it. You're producing the information that's being used. Some of it, like the SARS research, capitalizes on that even though that sounds unkind. On the other hand, some of the other timing is serendipitous. You get it out at the same time that an issue arises and the two come together. And I don't know how you can play that. I think a lot of it is luck and some of it is a recycling. When an issue arises, three or four years after you've done something, you can bring it to the attention of stakeholders to say, "Hey, by the way, we know this about it."

Q: Is there something else that you think we should know that I haven't asked you about?

A: Let me say a few words of what I will call, destination. We are an Ontario-based unit but, some of our researchers have gone beyond Ontario and into Canada and internationally. And we've grown along with this stretch and benefited from it.

As well, we now have a lot more access to data. We had to struggle really hard for that at the beginning, but it's getting better. The partnership between researchers, regulatory bodies, federal agencies, hospitals, health facilities that hold data, is a much more positive one now. We've evolved now to being able to look at the quality of that data. It took us a long time and, now Linda O'Brien-Pallas even holds some repositories of data, but it's taken a long time for her to develop these types of partnerships. That's evolved in Ontario, but we had to force the issue in many cases, because we had to see what was there. So I think we led the way in that. So I've see a lot of growth in that area and we've been very fortunate.