Pioneers and pit crews

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Alone we can do so little. Together we can do so much.
Helen Keller

The word *pioneer* conjures many images, especially that of the first to discover something. It implies aloneness, if not loneliness. In research—especially family medicine research—nothing could be further from the truth. Although all of the College of Family Physicians of Canada's Top 20 Pioneers in Family Medicine Research[1] were among the first to discover and achieve things in their areas, none of them got there alone. As with clinical practice itself, successful research requires pit crews, not cowboys.[2]

The model of the "cowboy" researcher has its roots in the world of basic biomedical bench research, where individual scientists in their laboratories aggressively compete for grants and publication in the most prestigious journals. Arguably, the template for the cowboy researcher was established both in modern scientific culture and in the public mind with the publication of James Watson's book *The Double Helix*.[3] While basic biomedical scientists in reality work more like pit crews than cowboys, in the world of family medicine research, and especially health system research, teamwork and the sharing of ideas is essential.

Teamwork is a theme in the work of all 20 pioneers, but in some cases this theme is more explicit. The earliest pioneers of practice-based research like James Mackenzie, William Pickles, and John Fry in the United Kingdom, Frans Huygen in the Netherlands, and Curtis Hames in the United States did work largely alone, but the work of almost all of the 20 named pioneers would have been impossible without important and close collaboration with others.

For example, Dr Walter Rosser was recognized for his work with the Ambulatory Sentinel Practice Network (ASPN), formed in 1981 with initial funding from the Rockefeller Foundation.[4] The ASPN was created to address a fundamental problem in family medicine at the time—the lack of knowledge and understanding of "the common and often ill-defined concerns people bring only to their family doctors, even though they represent such a large portion of human suffering."[5] Between 1983 and 1990, ASPN grew from 38 to 75 practices with fewer than 150 000 to more than 345 000 patients in rural and urban areas in Canada and the United States.[4] The goal of ASPN was to create a living laboratory for the study of people under the care of family physicians and for the surveillance of primary care problems and services, a goal that it achieved, maturing as a research organization in the 1990s and morphing into the American Academy of Family Physicians in 1999.

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Similarly, Dr Rick Birtwhistle was recognized for leadership in establishing and driving the Canadian Primary Care Sentinel Surveillance Network, a repository of patient data from electronic medical records from 11 primary care practice-based research networks in 7 provinces and the Northwest Territories. Anonymized data are collected from almost 1000 providers at 130 clinics for almost 1 million patients,[6] giving family medicine researchers unprecedented power to understand the type and complexity of health problems seen in primary care and the capacity to improve care and outcomes for patients and communities.

Interestingly, a team and all its members were recognized among the pioneers—the Thames Valley Family Practice Research Unit. Drs Martin Bass, Judith Belle Brown, Ian McWhinney, Carol McWilliam, and Moira Stewart were recognized precisely for their early adoption of a team-based, interdisciplinary approach to family medicine research.

Although it might not always be as evident as in these examples, there is no doubt that the work of other recognized pioneers such as Drs Rick Glazier,[7] Gail Webber,[8] and Janet Smylie[9] is highly dependent on teamwork.

Why teamwork? As Atul Gawande writes:

> The problems of making health care work are large. The complexities are overwhelming governments, economies, and societies around the world. We have every indication, however, that where people in medicine combine their talents and efforts to design organized service to patients and local communities, extraordinary change can result.[2]

This applies as much to the research enterprise as to clinical care, as family medicine and primary care grapple with delivering cost-effective, high-quality care in an era of chronic disease and an aging population.

References

1. College of Family Physicians of Canada [website]. *CFPC celebrates Top 20 Pioneers of Family Medicine Research in Canada.* Mississauga, ON: College of Family Physicians of Canada; 2015. Available from: **www.cfpc.ca/ProjectAssets/Templates/NewsItem.aspx?id=8072**. Accessed 2015 Sep 21.
2. Gawande A. Cowboys and pit crews. *The New Yorker* 2011 May 26. Available from: **www.newyorker.com/news/news-desk/cowboys-and-pit-crews**. Accessed 2015 Sep 21.
3. Watson JD. *The double helix. A personal account of the discovery of the structure of DNA*. New York, NY: Atheneum; 1968.
4. Green LA, Hickner J. A short history of primary care practice-based research networks: from concept to essential research laboratories. *J Am Board Fam Pract* 2006;19:1-10.
5. Rosser WW, Green L. Update from the Ambulatory Sentinel Practice Network of North America. *Can Fam Physician* 1989;35:843-6.
6. *CPCSSN marks major achievements as part of transition*. Kingston, ON: Canadian Primary Care Sentinel Surveillance Network; 2015.
7. Glazier RH, Creatore MI, Weyman JT, Fazli G, Matheson FI, Gozdyra P, et al. Density, destinations or both? A comparison of measures of walkability in relation to transportation behaviors, obesity and diabetes in Toronto, Canada. *PLoS One* 2014;9:e85295.
8. Webber G, Chirangi B. Women's health in women's hands: a pilot study assessing the feasibility of providing women with medications to reduce post-partum hemorrhage and sepsis in rural Tanzania. *Health Care Women Int* 2014;35:758-70.
9. Smylie J, Crengle C, Freemantle J, Taualii M. Indigenous birth outcomes in Australia, Canada, New Zealand and the United States. *Open Women Health J* 2010;4:7-17.