

Clinical Research at MCHP Over the Next 20 Years

La recherche clinique au Centre des politiques de santé du Manitoba pour les 20 prochaines années

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THE POPULATION HEALTH DATA REPOSITORY (“THE REPOSITORY”) HOUSED AT THE Manitoba Centre for Health Policy (MCHP) has been used for many different types of research. Despite the fact that both investigator-driven research and deliverables conducted by MCHP research scientists as part of the centre’s contract with Manitoba Health have included clinical research, this area has not been MCHP’s strength. Over the past 20 years, some clinicians have used the Repository to study a variety of topics; however, this work has constituted only a small percentage of the research done at the Centre, and relatively few clinicians have seen the Repository’s potential to answer their research questions. The purpose

of this session was to share the experiences of two clinicians actively engaged in research using the Repository and to explore barriers and facilitators to clinician engagement in research using the Repository's data.

The first speaker, Dr. Allan Garland, shared his experience in being given the opportunity to lead a deliverable at the Centre soon after joining the University of Manitoba's Faculty of Medicine. Dr. Garland is an intensive care specialist and a researcher with extensive experience in database research. The potential of working with the Repository was one of the factors that drew him to Winnipeg. In addition to his skills and interest, there was the untapped potential of linking an extensive and detailed intensive care unit clinical database covering all ICU admissions in Winnipeg to the population-based Repository data in order to understand what happened to patients before and after their ICU admission.

Dr. Garland first identified many challenges in using the Repository data, and then shared some preliminary results from his ICU study. Challenges facing clinicians seeking to use the Repository include lack of understanding of the potential uses of administrative data, the power and limitations of such data, lack of knowledge about the data housed in the Repository and the need to rely on MCHP staff to address these challenges. If researchers wish to link their clinical database to the Repository data, there is a process to follow to comply with the privacy and confidentiality requirements mandated by Manitoba Health. In addition, the study needs to be approved by both the local university research ethics board and the Health Information Privacy Committee at Manitoba Health before the research can begin. The data can be analyzed only using SAS, and data analysis can currently be performed only within MCHP's secure environment. Preparation of data and use of analysts' time are billed to the researcher at an hourly rate based on cost recovery.

The second speaker, Dr. Bill Leslie, described the development of his research program on bone health. He has gained international recognition based on his use of a bone mineral density (BMD) measurement database he developed and subsequently linked to the Repository. His research has addressed many of the cutting-edge questions about BMD testing, the impact on clinicians' prescribing practices of osteoporosis medications and the appropriate treatment for osteoporosis, all using the linked data.

The third speaker, Dr. Mike Moffat, presented an overview of clinical research involving the Repository. He reviewed the list of publications from MCHP from 1989 through 2009 and tagged the research according to a number of criteria: research that was directed at one of four areas of clinical knowledge (diagnosis, etiology, prognosis and treatment or prevention) (Figure 1); research that was applied to individuals; and finally, research that was not exclusively about the effect of poverty or socio-economic status. Studies about the healthcare system, costs, efficiencies and resources were also excluded from his review. He concluded that although clinical research using the MCHP Repository is accelerating exponentially, the research covers limited clinical areas. Dr. Moffat highlighted similar challenges to those raised by Dr. Garland.

This session presented several suggestions to support the growth of future clinical research at MCHP. There are needs for better training for clinician-researchers in general and for academic support for time to undertake clinical research, possibly with an alternative

funding plan for academic physicians. There is always a need for increased research funds, but a special competition for clinical research using the Repository was specifically suggested. MCHP needs to work at making data more easily accessible, and a short training course for clinicians to learn how to use the Repository would be helpful. Facilitating partnerships between clinicians and MCHP research scientists as well as outreach to clinical departments were also thought to be potentially useful future directions. Regular rounds for clinicians presenting research using the Repository were proposed as a way to further engage clinicians.

FIGURE 1. Clinical research at MCHP, 1989–2009

