

Meet Dr. Dallas Seitz, Leader of the Hotchkiss Real-World Evidence Initiative



The Cumming School of Medicine and the Hotchkiss Brain Institute bring together a talented and multidisciplinary group of academic clinicians who all contribute uniquely to the innovative health research that takes place at the University of Calgary's Foothills campus. One such individual, and recently appointed lead of the Hotchkiss Real-World Evidence Initiative (RWE) Dr. Dallas Seitz, is enthusiastic about utilizing unique data sources and wielding artificial intelligence technology to answer difficult health research questions.

Hailing from a small town in Saskatchewan, Dallas remained in the province to complete his medical training at the University of Saskatchewan but moved to Ontario for residency training in psychiatry at Queen's University in Kingston. Dallas later built upon his education in psychiatry by completing a research and clinical fellowship in geriatric psychiatry at the University of Toronto, and a Ph.D. in Health Services Research and Clinical Epidemiology at the Institute of Health Policy, Management, and Evaluation. His PhD work focused on the relationships between dementia and hip fractures using provincial healthcare data, which connected Dr. Seitz's two research focuses, dementia and administrative health data.

After completing graduate training and clinical fellowship, Dallas joined the faculty of Queen's University in 2010 where he remained until taking another academic position at the University of Calgary in 2019. In his clinical role, Dallas works at the Cognitive Neuroscience Program (Foothills Medical Centre), the Complex Dementia Care program (Bethany), and rural mental health research teams in Strathmore and Airdrie. In his research role, Dallas's research focuses on understanding dementia in Alberta, although he also utilizes provincial data to investigate the relationship between addictions and mental health conditions. In his role as the research and clinical lead of the Hotchkiss RWE initiative at the Hotchkiss Brain Institute, Dallas is working to enhance population-based health services research for brain and mental health disorders.

In this interview Dallas reflected on his academic and professional journey that led to his current role and research areas, and his future within the field of psychiatry and health services research: "I think that both psychiatry and health services research are very broad fields that allow you to explore different aspects of work. I'm increasingly working in areas related to addictions and mental health conditions in younger populations, which has been a great opportunity to learn more about some fields of research outside of dementia. Working with Alberta Health Services (AHS) as a Scientific Director has also been an unexpected but interesting aspect of my work that helps to bridge some of the academic research to more policy-oriented activities. I try to keep an

open mind to different types of work and projects as opportunities arise when you don't

anticipate them, and sometimes you find your interests evolve over time." With such a solid foundation in geriatric psychiatry, Dallas decided to expand his work and expertise to younger populations in the field of addictions and mental health to both broaden his scope of practice and learn more about potential fields of research interests beyond dementia. Consequently, the Provincial Addiction and Mental Health Program at AHS recently appointed Dallas as their Scientific Director.

Dallas offers a unique perspective on where the field of health research is going, stating, "While much of my research has involved using routinely collected health data such as information from physician visits or hospitalizations, there is great interest and promise in linking other datasets to health data to deepen our understanding of brain and mental health conditions. The implementation of a province-wide electronic health record in Alberta, ConnectCare, is a great example of how the unique sources of data that we have in Alberta can allow researchers to answer research questions that may be difficult to answer in other provinces." He also notes that applying artificial intelligence (AI) methods to health research using administrative data creates opportunities to analyze larger and more complex datasets than was possible in the past.

When asked what people outside of health research should be more aware of, Dallas shared, "With health services research, sometimes there can be the impression that health system data is easy to obtain and use for research, which is often far from the case! In comparison to some other fields of research, there are some advantages to using administrative data, such as it has already been collected, which is a plus. One of the big challenges is that the data was not collected for research, so a lot of work goes into preparing data to answer research questions. Also, trying to make comparisons between different treatments or services using this data takes a lot of planning and methodological expertise. Altogether I enjoy working with this type of data, although it isn't as easy to work with as some people might think!"

Something Dallas found interesting and surprising about working with health services research is no shortage of research questions about ways to improve the health system, noting that he always has more questions than available time to answer them. For these reasons—and the fact that Dallas is both a prolific health services researcher and a highly skilled collaborator—we are fortunate to have him at the helm to advise on and lead health services research in areas of brain and mental health conditions.