

Nathan McClure



Biography

I graduated with an MPH in Applied Biostatistics at the University of Alberta, where I developed a strong interest in patient-reported outcome measures and the EQ-5D health-related quality of life measure. I came into public health with a background in basic sciences having previously completed a BSc in Biology at the University of British Columbia and an MSc in Mathematical Biology at Queen's University. During my studies, I have interned for the Global Malaria Programme, World Health Organization, and have also completed a practicum for the Canadian Public Health Service working for the Department of Health and Social Services, Government of the Northwest Territories. Most recently, I worked as an analyst for Emergency Medical Services at Alberta Health Services. My interest in

patient-oriented research stems from a desire to capture how changes in health have positive or negative impacts on a patient's quality of life. In turn, I want to study applications that combine the patient's perspective with societal values to inform care and decision-making. Over the past year, I have worked with the Alberta PROMs and EQ5D Research and Support Unit to help end-users in the interpretation of health-related quality of life scores. This motivated me to pursue a PhD with the objective of generating evidence and advice for minimally important difference on the EQ5D health utility score and patient-reported outcome measures. Outside of school, I enjoy skiing, hiking and camping in the Rockies!

Project Summary

Generating Evidence and Advice for Minimally Important Differences on EQ5D and Patient-Reported Outcome Measures

Self-reported measures of health-related quality of life (HRQL), often referred to as patient-reported outcome measures (PROMs), are emerging as important tools to achieve triple aims of better care (quality), better health (outcomes), and lower costs (or cost containment). However, in most health systems, the application of PROMs is nascent, and there are many unanswered questions. The

minimally important difference (MID) represents the smallest change or difference in a PROM score that is considered meaningful to the patient. In this regard, the MID differs from statistical significance, where the latter attempts to quantify the role that chance plays in the observed change, it is not necessarily reflective of the value that the patient places on that change. While statistical significance has played a major role in the advancement of medical research and the quality of care we benefit from, looking forward it is important to consider other criteria that seek to empower the patient's and general public's perspective to support informed decision-making in advancing care and policy development. The EQ5D is the most commonly used measure of HRQL in the world, providing a health utility score that is calculated from a health questionnaire with self-reported responses to five dimensions of health: mobility, self-care, usual activities, pain/discomfort and anxiety/depression. The health utility score essentially represents the Canadian population's preference for the reported health state. Presently, the Alberta-wide adoption of the EQ5D in patient reported outcome measurement and its roll-out in primary care makes studying the MID of the EQ5D a relevant and timely objective.