Executive Summary

Mental health and substance use is a rising issue in British Columbia. The Ministry of Health has mandated 5 regional health authorities to collect and submit data through an information platform called Mental Health and Substance Use Minimum Reporting Requirements (MHA MRR). A health service delivery system is established to effectively and efficiently meet client and population health needs at the local, regional and provincial levels. In this report, we have conducted literature reviews on analyzing the Health of the Nation Outcome Scales (HoNOS), and tried to assess the internal consistency, reliability and validity of these instruments. Predictive models and machine learning methods have been proposed to perform cross sectional analysis and explore the relationship between mental illness and health determinants. Business intelligence tools are used to create interactive map-based dashboards and keep track of regional and temporal trends for health indicators. The Health Sector Information, Analysis and Reporting (HSIAR) division is adopting more advanced analytics, transitioning from traditional reporting to data science-based analytics. Through on-going health surveillance and analysis, we can better understand the health need of individual, and help program areas implement data driven decisions that better align services and resources to achieving improved mental health outcomes.