Appendix 3:   Approach to data analyses

Outcome	Type of response variable	Method of analysis	List of potential covariates, (forward selection)
Incremental costs (total and by care category, province wide)	**Continuous**	Method of recycled predictions using generalized linear regression models with gamma distribution and the log link (incl. two-part models if needed)	**Socio -demographic factors:** Age (to be used for per LHIN analysis) Sex (to be used for per LHIN analysis) Income Urban/Rural residence Immigration status **Clinical status and care characteristics:** Number of EDCs and specific clinical clusters of interest such mental disease or dementia Access to a geriatrician Primary care group affiliation Number of physician visits (primary care and specialist) Number of home care visits
Costs per LHIN (total and by care category)		Multi-level generalized linear models with gamma distribution	
HCU rate per LHIN		Ordinary Least Squares regression model with aggregated values of covariates	
Incremental rates of healthcare use (e.g. all cause hospital admission, physician visits and home care visits, province wide)	**Count**	Method of recycled predictions using generalized linear regression model with negative binomial distribution and the log link (incl. two-part models if needed)	
Rates of healthcare use by LHIN level		Multi-level generalized linear models with negative binomial distribution	
All-cause mortality	**Categorical**	Logistic regression	