

Folder of code files ([click here](#))

Results ([click here](#))

Description of code files

(orange = spending; green = risk; blue = net value)

File name	Description	Status	Output object
4a Medications cost	Sum up each patient's medication costs per year	Finished	4a medcost.rds
4b HA Visit cost	Sum up each patient's visit costs per year	Finished	4b visitcost.rds
4c Total costs	Sum up each patient's total costs used per year (adjusted for late enrolment into cohort, but not for death)	Finished	4c total adjusted spending.rds
5 comorbidity	Extract each patient's comorbidity status (for GLM model for spending)	Finished	5 comorbidity.rds 5 combined.rds
6 participant status code	Divide participants into "survivors", "incidents" and "decedents"	Finished	6 participant status.Rdata
7a GLM	Use GLM regression to predict spending by year	Finished	7 predicted spending
8a imputation for risk	Use imputation to predict patients' missing clinical data	Finished	8a MI_clinicalvalues_0711.Rdata
8b Method 1 - value of risk, imputed	Use the imputed data to predict 5-year mortality risk, using the HKU-SG model	Finished	8b predicted_mortality.Rdata
9 net value analysis	Method 1 of the Net Value Analysis Protocol	Finished	9 method 1 results.rds
10 Age and sex standardisation	Standardise net value results to WHO population and HKDM reference pop.	Finished	
11 Method 2	Method 2 of the Net Value Analysis Protocol	Finished	
12 Method 3	Method 3 of the Net Value Analysis Protocol	Finished	

Output objects

Object name	Description	Variables
4a medcost.rds	Each patient's sum of drug costs by year	"serial_no" "yr" "medcost"
4b visitcost.rds	Each patient's sum of visit costs by year	"serial_no" "yr" "visitcost"
4c total adjusted spending.rds	Each patient's sum of spending by year, adjusted for late enrolment	"serial_no" "yr"

		"spend.adj"
5 comorbidity.rds	For all participants, whether they were diagnosed of that comorbidity (T/F) by year 2006 to 2014	"serial_no" "yr" → repeat 2006 to 2014 for each participant all comorbidities → TRUE/FALSE by that year
5 combined.rds	Comorbidity status combined with adjusted spending	"serial_no" "yr" → repeat 2006 to 2014 "spend.adj" → from 4 all comorbidities "age_at_diagnosis" → for calculating duration of diabetes "dob" → for calculating age "duration" "age"
6 participant status.Rdata	3 objects listing serial no. of participants with status "decendent", "incident" or "survivor"	
7 predicted spending.rds	Participants' predicted spending by GLM, separated into predicted modifiable (holding age and duration constant) and predicted (age and duration vary with year)	"serial_no" "predicted_modifiable.2006" "predicted_year.2006" ... "predicted_modifiable.2014" "predicted_year.2014" → predicted modifiable spending and predicted spending by year "bl.spend.mod" → yr 2007-08 "fn.spend.mod" → yr 2013-14 "diff.spend.mod" → fn - bl "bl.spend.yr" "fn.spend.yr" "diff.spend.yr"
8a MI_clinicalvalues_0711.Rdata	Imputed results for patients' missing clinical values	imp_bl → large areglImpute imp_fn → large areglImput baseline_imputed → 2007-08 final_imputed → 2013-14
8b predicted_mortality.Rdata	All participant's predicted mortality at baseline, final and difference between baseline & final	"serial_no" "female" "duration" "age" "le" → life expectancy at that age "baseline" → mortality risk "final" "diff"