Dataset: sh026544.project4_hrr_end15

Variables to use

Name	Description	Level
Age_at_end_ref_yr	Age continuous	Patient
Agecat	Age categorical: 65-69,70-74,75-79,80-84,85-89	Patient
Male	1=male; 0=female	Patient
Race	1=white; 2=black; 3=Hisp; 4=Asian; 5=other	Patient
Acutemi	Comorbidity (0/1), recent	Patient
Afib	Comorbidity (0/1), recent	Patient
Breast_past	Comorbidity (0/1), history of breast ca	Patient
Chf	Comorbidity (0/1), ever	Patient
Ckd	Comorbidity (0/1), recent	Patient
Colorectal_past	Comorbidity (0/1), history of colorectal ca	Patient
Copd	Comorbidity (0/1), ever	Patient
Dementia	Comorbidity (0/1), ever	Patient
Depress	Comorbidity (0/1), recent	Patient
Diab	Comorbidity (0/1), recent	Patient
Endometrial_past	Comorbidity (0/1), history of endometrial cancer	Patient
Hememalignancy	Comorbidity (0/1), ever	Patient
Hiv	Comorbidity (0/1), ever	Patient
Ihd	Comorbidity (0/1), ever	Patient
Liver	Comorbidity (0/1), ever	Patient
Lung_past	Comorbidity (0/1), history of lung cancer	Patient
Prostate_past	Comorbidity (0/1), history of prostate cancer	Patient
Pvd	Comorbidity (0/1), ever	Patient
Stroke	Comorbidity (0/1), ever	Patient
Ulcers	Comorbidity (0/1), current	Patient
Koa_visits	Number of knee OA visits per year	Patient
Koa	Categorical 1=any Knee OA visit; 0=no Knee OA visits	Patient
Kneesymptom_visits	Number of knee symptom visits per year	Patient
Kneesymptoms	Categorical 1=any knee symptom visit; 0=no knee symptom visits	Patient
Allkneevisits	Sum of koa_visits + kneesymptom_visits	Patient
Knee_patient	Categorical 1=(koa=1 or kneesymptoms=1); 0=neither	Patient
Op_visits	Number of outpatient visits, all cause	Patient
bene_id.		
Dead	Categorical 1=dead in year; 0=not dead	Patient
Personyrs	Length of followup in year (range 0-1.0 yrs)	Patient
Bene_enrollmt_ref_yr	Year (2011,2012,2013,2014,2015)	Patient
Tka	OUTCOME. Number of tka in year (0, 1, or 2)	Patient

Hrr	Health referral region; categorical geographic variable n=306. This is the variable whose variation in tka we want to explain	HRR
Obese_wtperc	% obesity in HRR	HRR
Physjob_t_wtperc	% with physical occupation in HRR	HRR
Smoking_wtperc	% smoking in HRR	HRR
Mcare_adv_wtperc	% with Medicare Advantage in HRR	HRR
Ortho_per_100000	Density of orthopedic surgeons in HRR	HRR
Poor	Categorical (0/1) if poor *Also Medicaid.*	Patient
Zscore	Continuous area-level measure of SES	Zipcode
Rural	Categorical (0/1)	Zipcode

Model building

1	Age, sex, race
2	Model 1 + kneepatient + obese_wtperc + physjob_t_wtperc + smoking_wtperc Or Model 1 + koa + kneesymptoms + obese_wtperc + physjob_t_wtperc + smoking_wtperc
3	Model 2 + 20 comorbidities
4	Model 3 + poor + zscore + rural + op_visits + mcare_adv_wtperc + ortho_per_100000