

Appendix 5 (part 1 of 2): Multivariable Cox model for readmission with myocardial infarction*		
Covariate	Hazard ratio (95% CI)	p value
Revascularization-to-medical therapy ratio		
Low	1.00 (ref)	
High	1.03 (0.84-1.26)	0.8
Medium	0.90 (0.72-1.13)	0.4
Treatment		
Medical therapy	1.00 (ref)	
PCI	0.57 (0.39-0.84)	0.004
CABG	2.04 (1.36-3.08)	0.001
Patient		
<i>Demographic</i>		
Age, yr (per additional yr)	1.01 (1.00-1.01)	0.002
Male sex (v. female)	0.93 (0.87-1.00)	0.04
Rural residence (v. urban)	0.97 (0.88-1.07)	0.5
Income quintile		
1 (lowest)	1.25 (1.12-1.40)	< 0.001
2	1.11 (1.03-1.19)	0.006
3	1.07 (0.98-1.17)	0.1
4	0.99 (0.88-1.11)	0.8
5 (highest)	1.00 (ref)	
<i>Medical comorbidities</i>		
Peripheral vascular disease (v. no disease)	1.35 (1.26-1.44)	< 0.001
Prior MI (v. no prior MI)	1.96 (1.79-2.14)	< 0.001
COPD (v. no COPD)	1.13 (1.04-1.23)	0.004
Charlson comorbidity score (per additional point)	1.20 (1.16-1.24)	< 0.001
<i>Cardiac risk factors</i>		
Diabetes (v. no diabetes)	0.99 (0.88-1.10)	0.8
Hypertension (v. no hypertension)	1.28 (1.09-1.49)	0.002
Hyperlipidemia (v. no hyperlipidemia)	0.94 (0.85-1.04)	0.3
History of smoking (v. never smoked)	1.00 (0.92-1.09)	0.9
<i>Cardiac status/testing</i>		
Native stenosis (v. nonsignificant stenosis)		
Left main coronary artery	1.09 (0.96-1.24)	0.2
Proximal left anterior descending coronary artery	1.04 (0.95-1.14)	0.4
Mid or distal left anterior descending coronary artery	1.11 (1.01-1.22)	0.04
Circumflex artery	1.15 (1.00-1.32)	0.04
Right coronary artery	1.15 (1.05-1.27)	0.003
Prior CABG (v. no prior CABG)	1.23 (1.15-1.32)	< 0.001
Vessel disease		
1 vessel	1.00 (ref)	
2 vessel	0.97 (0.85-1.10)	0.6
3 vessel	1.01 (0.82-1.24)	0.9

Appendix 5 (part 2 of 2): Multivariable Cox model for readmission with myocardial infarction*

Covariate	Hazard ratio (95% CI)	p value
Left ventricular function		
≥ 50%	1.00 (ref)	
≤ 34%	1.50 (1.35-1.68)	< 0.001
35%–49%	1.27 (1.17-1.37)	< 0.001
Not done	1.12 (1.02-1.23)	0.02
Exercise ECG risk		
Low risk	1.00 (ref)	
High risk	1.00 (0.82-1.22)	> 0.9
Uninterpretable	0.93 (0.78-1.10)	0.4
Not done	1.43 (1.28-1.60)	< 0.001
Functional imaging risk		
Low risk	1.00 (ref)	
High risk	0.97 (0.87-1.08)	0.6
Not done	1.03 (0.94-1.13)	0.5
CCS class		
0	1.00 (ref)	
1	0.94 (0.81-1.08)	0.3
2	1.02 (0.90-1.16)	0.8
3	1.07 (0.96-1.21)	0.2
4	1.18 (0.99-1.41)	0.07
Physician‡		
Age, yr (per additional yr)	1.01 (1.00-1.03)	0.1
Male (v. female)	1.10 (0.83-1.44)	0.5
Years since graduation (per additional yr)	0.99 (0.98-1.01)	0.3
Total consultations billed per year (per additional consultation)	1.00 (1.00-1.00)	0.2
Total visits billed per yr (per additional visit)	1.00 (1.00-1.00)	0.3
Hospital factors		
Annual catheterization volume (per additional procedure)	1.00 (1.00-1.00)	0.009
Hospital type		
CABG, PCI and catheterization	1.00 (ref)	
Catheterization only	0.91 (0.78-1.05)	0.2
PCI and catheterization only	1.05 (0.73-1.51)	0.8

Note: CABG = coronary artery bypass grafting, CCS = Canadian Cardiovascular Society, CI = confidence interval, COPD = chronic obstructive pulmonary disease, ECG = electrocardiogram, PCI = percutaneous coronary intervention, ref = reference group.
 *This model included a time-varying covariate for treatment. The cohort was allocated to the medical therapy category until time of revascularization (up to maximum of 90 d), at which point the revascularized patients were reallocated to the PCI or CABG category based on the first revascularization modality received.
 †Significant stenosis ≥ 70% (≥ 50% in left main coronary artery).
 ‡Procedural physician.