Supplemental Online Content

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This supplemental material has been provided by the authors to give readers additional information about their work.
### eTable 1. Medication Reconciliation: Ontario Drug Benefit (ODB) Claims for Selected Drug Information Numbers

| DIN           | Description                                                |
|---------------|------------------------------------------------------------|
| 93899979      | MEDSCHECK                                                  |
| 93899981      | HOSPITAL DISCHARGE MEDSCHECK FOLLOW UP                     |
| 93899982      | PHARMACISTS DOCUMENTED DECISION MEDSCHECK FOLLOW UP        |
| 93899983      | PHYSICIAN/RN EC REFERRAL MEDSCHECK FOLLOW UP               |
| 93899984      | PLANNED HOSPITAL ADMISSION MEDSCHECK FOLLOW UP             |
| 93899985      | MEDICATION REVIEW                                          |
| 93899986      | MEDICATION REVIEW LONG TERM CARE QUARTERLY                 |
| 93899987      | MEDICATION REVIEW HOME                                     |
| 93899988      | MEDICATION REVIEW FOR DIABETES                             |
| 93899989      | MEDICATION REVIEW FOR DIABETES- FOLLOW-UP                  |
eTable 2. Canadian Classification of Interventions (CCI) Procedure Codes for Cardiac Conditions

| Coronary artery bypass graft surgery (CABG)                        | 1IJ76 | BYPASS, CORONARY ARTERIES |
|---------------------------------------------------------------|-------|---------------------------|
| CCI Description                                              | 1IJ80 | REPAIR, CORONARY ARTERIES |
| Percutaneous coronary intervention (PCI)                      | 1IJ26 | BRACHYTHERAPY, CORONARY ARTERIES |
| CCI Description                                              | 1IJ50 | DILATION, CORONARY ARTERIES |
|                                                            | 1IJ55 | REMOVAL OF DEVICE, CORONARY ARTERIES |
|                                                            | 1IJ57 | EXTRACTION, CORONARY ARTERIES |
| Cardiac catheterization (CATH)                                | 3IS10 | Xray, vena cava (superior and/or inferior) |
| CCI Description                                              | 3IP10 | Xray, heart with coronary arteries |
|                                                            | 2HZ28 | Pressure measurement, heart |
| Implantable cardiac defibrillator (ICD)                       | 1HZ53GRFS | Implantation of internal device, heart NEC percutaneous transluminal approach [transvenous] or approach NOS cardioverter/defibrillator [AICD, CRT-D, BiV-ICD] |
| CCI Description                                              | 1HZ53LAFS | Implantation of internal device, heart NEC open approach (thoracotomy) cardioverter/defibrillator [AICD, CRT-D, BiV-ICD] |
| Permanent pacemaker (PPM)                                     | 1HZ53GRNM | Implantation of internal device, heart NEC percutaneous transluminal approach [transvenous] or approach NOS Single chamber, programmable, rate responsive pacemaker (VVD, VVI, AAI, VVIR, AAIR modes) |
| CCI Description                                              | 1HZ53LANM | Implantation of internal device, heart NEC open approach (thoracotomy) single chamber programmable rate responsive pacemaker (VVD, VVI, AAI, VVIR, AAIR modes) |
|                                                            | 1HZ53GRNK | Implantation of internal device, heart NEC percutaneous transluminal approach [transvenous] or approach NOS dual chamber programmable rate responsive pacemaker (DVI, DDD, DDDR modes) |
|                                                            | 1HZ53LANK | Implantation of internal device, heart NEC open approach [thoracotomy] Dual chamber programmable, rate responsive pacemaker (DVI, DDD, DDDR modes) |
|                                                            | 1HZ53GRNL | Implantation of internal device, heart NEC percutaneous transluminal approach [transvenous] or approach NOS fixed rate pacemaker (VOO mode) |
|                                                            | 1HZ53LANL | Implantation of internal device, heart NEC open approach [thoracotomy] Fixed rate pacemaker (VOO mode) |
|                                                            | 1HZ53GRFR | Implantation of internal device, heart NEC percutaneous transluminal (transvenous) approach or approach NOS cardiac resynchronization therapy pacemaker [CRT-P] |
|                                                            | 1HZ53LAFR | Implantation of internal device, heart NEC open (thoracotomy) approach cardiac resynchronization pacemaker [CRT-P] |
**eTable 3.** Congestive Heart Failure and Chronic Obstructive Pulmonary Disease Comorbidities at Index Admission

| ICD-10-CA Codes | Condition                                      |
|-----------------|-----------------------------------------------|
| I20-I25         | Ischemic heart disease                        |
| R57             | Shock                                         |
| I70-I74, I77-I82, R02 | Peripheral vascular disease PVD              |
| I44-I49         | Arrhythmia                                    |
| I60-I69         | Cerebrovascular disease CVD                   |
| I10-I13, I15    | Hypertensive disease                          |
| F00-F03         | Dementia                                      |
|                 | Other cardiovascular disease (any of the following): |
| I30-I33, I40-I43, I51.4 | Myo-/peri-/endo-cardial disease              |
| I26-I28         | Pulmonary vascular disease                    |
| I00-I02, I05-I09| Rheumatic heart disease                       |
| R55, R96.0      | Syncope, Sudden death                         |
| I34-I39         | Valvular heart disease                        |
| I51, I52, I95, I97 | Other cardiac                                |
**eTable 4. Additional Congestive Heart Failure Comorbidities at Index Admission**

| ICD-10-CA Codes | Condition                     |
|-----------------|-------------------------------|
| J20, J40-J45    | COPD                          |
| N17, N19, R34   | Acute renal failure           |
| I12, I13, T824, Z992 | Chronic renal failure     |
| E10, E11, E13, E14 | Diabetes                    |
| C0, C1, C20, C21, C22, C23, C24, C25, C26, C30, C31, C32, C33, C34, C37, C38, C39, C40, C41, C43, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C6, C70, C71, C72, C73, C74, C75, C76, C81, C82, C83, C84, C85, C88, C90, C91, C92, C93, C94, C95, C96, C97 | Non-metastatic cancer |
| C77, C78, C79, C80 | Metastatic cancer             |
| I850, K704, K729, K766, K767, K778, I859, I982 | Moderate/severe liver disease |
### eTable 5. Additional Chronic Obstructive Pulmonary Disease Comorbidities at Index Admission

| ICD-10-CA Codes | Condition | Condition |
|-----------------|-----------|-----------|
| I500, I501, or I509 | CHF | Other chronic respiratory condition (any of the following): |
| E84 | Cystic fibrosis | |
| J47 | Bronchiectasis | |
| J60 | Coalworker’s pneumoconiosis | |
| J61 | Pneumoconiosis due to asbestos and other mineral fibres | |
| J620 | Pneumoconiosis due to talc dust | |
| J628 | Pneumoconiosis due to other dust containing silica | |
| J630 | Aluminosis (of lung) | |
| J631 | Bauxite fibrosis (of lung) | |
| J632 | Berylliosis | |
| J633 | Graphite fibrosis (of lung) | |
| J634 | Siderosis | |
| J635 | Stannosis | |
| J638 | Pneumoconiosis due to other specified inorganic dusts | |
| J64 | Unspecified pneumoconiosis | |
| J65 | Pneumoconiosis associated with tuberculosis | |
| J660 | Byssinosis | |
| J661 | Flax-dresser’s disease | |
| J662 | Cannabinosis | |
| J668 | Airway disease due to other specific organic dusts | |
| J670 | Farmer’s lung | |
| J671 | Bagassosis | |
| J672 | Bird fancier’s lung | |
| J673 | Suberosis | |
| J674 | Maltworker’s lung | |
| J675 | Mushroom-worker’s lung | |
| J676 | Maple-bark-stripper’s lung | |
| J677 | Air-conditioner and humidifier lung | |
| J678 | Hypersensitivity pneumonitis due to other organic dusts | |
| J6790 | Allergic bronchopulmonary aspergillosis | |
| J6799 | Hypersensitivity pneumonitis due to unspecified organic dust | |
| J680 | Bronchitis and pneumonitis due to chemicals, gases, fumes & vapours | |
| J701 | Chronic and other pulmonary manifestations due to radiation | |
| J703 | Chronic drug-induced interstitial lung disorders | |
| J704 | Drug-induced interstitial lung disorders, unspecified | |
| J708 | Respiratory conditions due to other specified external agents | |
| J709 | Respiratory conditions due to unspecified external agent | |
| J840 | Alveolar and parietoalveolar conditions | |
| J841 | Other interstitial pulmonary diseases with fibrosis | |
| J848 | Other specified interstitial pulmonary diseases | |
| J849 | Interstitial pulmonary disease, unspecified | |
| J850 | Gangrene and necrosis of lung | |
| J851 | Abscess of lung with pneumonia | |
| J852 | Abscess of lung without pneumonia | |
| J860 | Pyothorax with fistula | |
| J869 | Pyothorax without fistula | |
| J90 | Pleural effusion, not elsewhere classified | |
| J91 | Pleural effusion in conditions classified elsewhere | |

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| OHIP Codes | Description                      |
|------------|----------------------------------|
| J920       | Pleural plaque with presence of asbestos |
| 277        | Cystic fibrosis                  |
| 494        | Bronchiectasis                   |
| 501        | Asbestosis                       |
| 502        | Silicosis                        |
| 511        | Pleurisy with or without effusion |
| 515        | Pulmonary fibrosis               |
eTable 6. Postdischarge Physician Visits by Fiscal Years (FYs) 2005-2012 and 2013-2018

| Physician visits                  | AMI FY 2005-2012 | AMI FY 2013-2018 | CHF FY 2005-2012 | CHF FY 2013-2018 | COPD FY 2005-2012 | COPD FY 2013-2018 |
|-----------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| N=107,100                         | N=91,754         | N=68,389         | N=64,669         | N=67,627         | N=51,207         |
| Visit with PCP or relevant specialist within 7 days | 45.93% | 45.76% | 42.42% | 42.50% | 34.04% | 33.46% |
| Visit with PCP or relevant specialist within 14 days | 69.71% | 71.48% | 64.65% | 67.01% | 57.36% | 58.44% |
| Visit with PCP or relevant specialist within 30 days | 85.82% | 86.48% | 81.92% | 83.60% | 76.16% | 76.65% |
| Collaborative care (visit with PCP and relevant specialist) within 30 days | 23.00% | 24.48% | 23.00% | 28.65% | 11.06% | 12.86% |
| Visit with relevant specialist within 30 days | 29.13% | 30.10% | 31.10% | 38.77% | 15.75% | 18.20% |

PCP: primary care provider
### eTable 7. Adverse Outcome Rates Overall and by Sex, Length of Stay, and Subgroup at Increased Risk

| Cohort Adverse Outcomes | Overall | Age ≥75 years | Female | Male | LOS 2 days | LOS 3-7 days | LOS > 7 days | Comorbidity | Low SES | Rural |
|--------------------------|---------|---------------|--------|------|------------|--------------|-------------|-------------|---------|-------|
| **Acute Myocardial Infarction (AMI)** |         |               |        |      |            |              |             |             |         |       |
| Unplanned readmission within 30 days of discharge, % | 6.74    | 10.41         | 8.49   | 5.92 | 3.87       | 5.98         | 10.43       | 7.40        | 7.12    | 6.89  |
| Major cardiac event within 30 days of discharge, % | 2.44    | 4.26          | 3.19   | 2.08 | 1.26       | 2.27         | 3.58        | 2.74        | 2.58    | 2.65  |
| Death within 30 days of discharge, % | 0.71    | 1.55          | 0.84   | 0.64 | 0.30       | 0.53         | 1.38        | 0.81        | 0.74    | 0.71  |
| Unplanned readmission within 90 days of discharge, % | 13.67   | 21.62         | 17.02  | 12.09| 7.82       | 12.40        | 20.44       | 15.04       | 14.35   | 14.06 |
| Major cardiac event within 90 days of discharge, % | 5.18    | 9.26          | 6.62   | 4.50 | 2.66       | 4.77         | 7.75        | 5.83        | 5.50    | 5.56  |
| Death within 90 days of discharge, % | 2.20    | 5.04          | 2.70   | 1.96 | 0.85       | 1.67         | 4.34        | 2.55        | 2.32    | 2.25  |

| **Congestive Heart Failure (CHF)** |         |               |        |      |            |              |             |             |         |       |
| Unplanned readmission within 30 days of discharge, % | 13.52   | 14.24         | 13.57  | 13.48| 11.68      | 12.66        | 15.40       | 13.69       | 13.68   | 13.55 |
| Major cardiac event within 30 days of discharge, % | 5.98    | 6.41          | 5.97   | 5.98 | 5.52       | 5.72         | 6.50        | 6.05        | 6.10    | 5.79  |
| Death within 30 days of discharge, % | 2.23    | 2.77          | 2.08   | 2.37 | 1.34       | 1.79         | 3.18        | 2.25        | 2.24    | 2.37  |
| Unplanned readmission within 90 days of discharge, % | 29.12   | 30.98         | 29.35  | 28.92| 25.88      | 27.68        | 32.30       | 29.53       | 29.55   | 29.40 |
| Major cardiac event within 90 days of discharge, % | 13.40   | 14.49         | 13.43  | 13.39| 12.15      | 13.03        | 14.35       | 13.63       | 13.70   | 13.27 |
| Death within 90 days of discharge, % | 7.66    | 9.43          | 7.24   | 8.01 | 5.39       | 6.46         | 10.17       | 7.74        | 7.60    | 8.02  |

| **Chronic Obstructive Pulmonary Disease (COPD)** |         |               |        |      |            |              |             |             |         |       |
| Unplanned readmission within 30 days of discharge, % | 10.37   | 11.54         | 9.45   | 11.24| 8.45       | 9.78         | 12.59       | 10.72       | 10.45   | 9.97  |
| Major cardiac event within 30 days of discharge, % | 4.42    | 4.59          | 3.97   | 4.84 | 4.19       | 4.27         | 4.84        | 4.48        | 4.52    | 4.10  |
| Death within 30 days of discharge, % | 1.71    | 2.19          | 1.36   | 2.06 | 0.98       | 1.38         | 2.80        | 1.78        | 1.71    | 1.68  |
| Unplanned readmission within 90 days of discharge, % | 22.47 | 25.13 | 20.74 | 24.12 | 18.88 | 21.34 | 26.71 | 23.20 | 22.67 | 21.68 |
|---------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Major cardiac event within 90 days of discharge, % | 10.38 | 10.86 | 9.50  | 11.23 | 9.40  | 10.16 | 11.37 | 10.55 | 10.58 | 9.77  |
| Death within 90 days of discharge, %               | 5.43  | 7.05  | 4.37  | 6.43  | 3.40  | 4.58  | 8.24  | 5.68  | 5.41  | 5.31  |
### eTable 7. Cox proportional hazards model for death within 30 days among those with AMI.

| Parameter                                                                 | Hazard Ratio | 95% Hazard Ratio Confidence Limits |
|---------------------------------------------------------------------------|--------------|-----------------------------------|
| Office visit (PC or relevant specialist) within 7 days after discharge    | 0.931        | 0.834 to 1.038                    |
| Females: 46 - 64 (ref=females 20 - 45)                                   | 2.622        | 0.635 to 10.825                   |
| Females: 65 - 74                                                         | 4.797        | 1.178 to 19.542                   |
| Females: 75 - 84                                                         | 4.909        | 1.211 to 19.895                   |
| Females: 85+                                                             | 10.242       | 2.535 to 41.374                   |
| Males: 20 - 45                                                           | 0.727        | 0.139 to 3.806                    |
| Males: 46 - 64                                                           | 2.772        | 0.684 to 11.235                   |
| Males: 65 - 74                                                           | 5.26         | 1.302 to 21.26                    |
| Males 75 - 84                                                            | 7.369        | 1.825 to 29.751                   |
| Males: 85+                                                               | 11.118       | 2.749 to 44.964                   |
| Income quintile: 1 (ref=income quintile 5)                               | 1.075        | 0.904 to 1.277                    |
| Income quintile: 2                                                       | 0.998        | 0.837 to 1.19                     |
| Income quintile: 3                                                       | 0.902        | 0.751 to 1.084                    |
| Income quintile: 4                                                       | 0.94         | 0.78 to 1.132                     |
| Urban (RIO < 10) (ref=rural)                                             | 1.041        | 0.915 to 1.186                    |
| RIO (missing)                                                            | 0.935        | 0.564 to 1.55                     |
| Ambulatory visit to a comprehensive PC physician in the past year        | 1.063        | 0.885 to 1.276                    |
| Usual provider of care: FHT (ref=no usual provider of care)              | 0.061        | 0.048 to 0.078                    |
| Usual provider of care: non-FHT (ref=no usual provider of care)          | 0.073        | 0.058 to 0.091                    |
| Specialty of discharging physician: Cardiologist (ref=GP/FP)             | 0.746        | 0.636 to 0.872                    |
| Specialty of discharging physician: GIM                                  | 0.817        | 0.701 to 0.953                    |
| Specialty of discharging physician: Other                                | 0.827        | 0.651 to 1.052                    |
| AMI severity conditions: Shock                                           | 2.334        | 1.479 to 3.682                    |
| AMI severity conditions: CHF                                              | 1.912        | 1.672 to 2.187                    |
| AMI severity conditions: Cancer                                          | 4.421        | 3.614 to 5.409                    |
| AMI severity conditions: CVD                                              | 1.845        | 1.312 to 2.596                    |
| AMI severity conditions: Diabetes with complications                      | 1.108        | 0.949 to 1.293                    |
| AMI severity conditions: Cardiac dysrhythmias                           | 1.245        | 1.083 to 1.432                    |
| AMI severity conditions: Acute renal failure                            | 1.363        | 1.128 to 1.648                    |
| AMI severity conditions: Chronic renal failure                           | 1.414        | 1.18 to 1.694                     |
| AMI severity conditions: Pulmonary edema                                 | 1.324        | 0.686 to 2.557                    |
| History of AMI in previous 1 - 5 years                                   | 1.281        | 0.925 to 1.775                    |
| History of CHF or angina in previous 1 - 5 years                         | 1.04         | 0.817 to 1.324                    |
| Cardiac revascularization (CABH/PCI) during index admission              | 0.318        | 0.273 to 0.369                    |
| History of PCI or CABG in previous 1 - 5 years                           | 0.763        | 0.585 to 0.995                    |
| Charlson comorbidity in previous 5 years: Myocardial infarction          | 0.864        | 0.636 to 1.174                    |
| Charlson comorbidity in previous 5 years: CHF                           | 1.478        | 1.139 to 1.917                    |
| Charlson comorbidity in previous 5 years: Peripheral vascular disease    | 1.238        | 0.996 to 1.54                     |
| Charlson comorbidity in previous 5 years: Cerebrovascular disease        | 1.1          | 0.867 to 1.394                    |
| Charlson comorbidity in previous 5 years: Dementia                       | 1.704        | 1.274 to 2.28                     |
| Charlson comorbidity in previous 5 years: COPD                           | 1.158        | 0.967 to 1.385                    |
| Charlson comorbidity in previous 5 years: Connective tissue/rheumatic disease | 0.707     | 0.377 to 1.326                    |
| Charlson comorbidity in previous 5 years: Peptic ulcer disease           | 1.182        | 0.857 to 1.631                    |
| Charlson comorbidity in previous 5 years: Mild liver disease             | 1.774        | 1.073 to 2.933                    |
| Charlson comorbidity in previous 5 years: Diabetes without complications  | 1.107        | 0.889 to 1.379                    |
| Charlson comorbidity in previous 5 years: Diabetes with complications    | 1.015        | 0.833 to 1.236                    |
| Charlson comorbidity in previous 5 years: Hemiplegia or paraplegia       | 1.126        | 0.622 to 2.037                    |
| Charlson comorbidity in previous 5 years: Renal disease                  | 1.25         | 1.032 to 1.514                    |
| Charlson comorbidity in previous 5 years: Primary cancer                 | 0.975        | 0.788 to 1.207                    |
| Charlson comorbidity in previous 5 years: Moderate or severe liver disease | 2.068     | 1.057 to 4.048                    |
| Charlson comorbidity in previous 5 years: Metastatic cancer              | 1.938        | 1.437 to 2.612                    |
| Charlson comorbidity in previous 5 years: HIV/AIDS                       | 14.727       | 4.487 to 48.338                   |
| Year of discharge: 2006 (ref=2005)                                       | 0.881        | 0.668 to 1.161                    |
| Year of discharge: 2007                                                  | 0.972        | 0.739 to 1.279                    |
| Year of discharge: 2008                                                  | 1.119        | 0.909 to 1.384                    |
| Year of discharge: 2009                                                  | 1.031        | 0.775 to 1.372                    |
| Year of discharge: 2010                                                  | 1.341        | 1.025 to 1.755                    |
| Year of discharge: 2011                                                  | 0.943        | 0.703 to 1.265                    |
| Year of discharge: 2012                                                  | 1.099        | 0.816 to 1.48                     |
| Year of discharge: 2013                                                  | 1.09         | 0.809 to 1.469                    |
| Year of discharge: 2014                                                  | 0.399        | 0.306 to 0.519                    |
| Year of discharge: 2015                                                  | 1.244        | 0.93 to 1.664                     |
| Year of discharge: 2016                                                  | 1.394        | 1.052 to 1.847                    |
| Year of discharge: 2017                                                  | 1.444        | 1.084 to 1.924                    |
| Year of discharge: 2018                                                  | 1.018        | 0.746 to 1.389                    |
| Year of discharge: 2019                                                  | 1.183        | 0.854 to 1.64                     |
| Parameter                                                                 | Hazard Ratio | 95% Hazard Ratio Confidence Limits |
|--------------------------------------------------------------------------|--------------|----------------------------------|
| Office visit (PC or relevant specialist) within 7 days after discharge    | 0.986        | 0.952 - 1.021                    |
| Females: 46 - 64 (ref= females 20 - 45)                                  | 0.918        | 0.764 - 1.084                    |
| Females: 65 - 74                                                         | 1.14         | 0.949 - 1.37                     |
| Females: 75 - 84                                                         | 1.25         | 1.042 - 1.499                    |
| Females: 85+                                                             | 1.59         | 1.322 - 1.913                    |
| Males: 20 - 45                                                           | 0.728        | 0.594 - 0.892                    |
| Males: 46 - 64                                                           | 0.756        | 0.632 - 0.904                    |
| Males: 65 - 74                                                           | 0.936        | 0.781 - 1.121                    |
| Males: 75 - 84                                                           | 1.178        | 0.984 - 1.412                    |
| Males: 85+                                                               | 1.348        | 1.117 - 1.626                    |
| Income quintile: 1 (ref=income quintile 5)                               | 0.919        | 0.764 - 1.084                    |
| Income quintile: 2                                                        | 1.13         | 1.067 - 1.197                    |
| Income quintile: 3                                                        | 1.088        | 1.026 - 1.154                    |
| Income quintile: 4                                                        | 1.017        | 0.957 - 1.08                     |
| Income quintile: Missing                                                 | 1.133        | 0.866 - 1.482                    |
| Urban (RIO < 10) (ref=rural)                                             | 0.979        | 0.941 - 1.019                    |
| RIO (missing)                                                            | 1.204        | 1.057 - 1.381                    |
| AMI severity conditions: Shock                                           | 1.512        | 1.287 - 1.771                    |
| AMI severity conditions: CHF                                              | 1.489        | 1.147 - 1.951                    |
| AMI severity conditions: Cancer                                          | 1.712        | 1.555 - 1.891                    |
| AMI severity conditions: Diabetes with complications                     | 1.194        | 0.933 - 1.428                    |
| AMI severity conditions: Diabetes without complications                  | 1.119        | 1.065 - 1.176                    |
| AMI severity conditions: Cardiac dysrhythmias                            | 1.185        | 1.126 - 1.247                    |
| AMI severity conditions: Acute renal failure                             | 1.223        | 1.131 - 1.321                    |
| AMI severity conditions: Chronic renal failure                           | 1.245        | 1.153 - 1.345                    |
| AMI severity conditions: Pulmonary edema                                 | 1.556        | 1.241 - 1.951                    |
| History of AMI in previous 1 - 5 years                                   | 1.121        | 1 - 1.257                       |
| History of CHF or angina in previous 1 - 5 years                         | 1.198        | 1.105 - 1.298                    |
| Cardiac revascularization (CABG/PCI) during index admission              | 0.747        | 0.717 - 0.779                    |
| History of PCI or CABG in previous 1 - 5 years                           | 0.941        | 0.868 - 1.019                    |
| Charlson comorbidity in previous 5 years: Myocardial infarction          | 0.967        | 0.869 - 1.075                    |
| Charlson comorbidity in previous 5 years: CHF                            | 1.06         | 0.97 - 1.159                     |
| Charlson comorbidity in previous 5 years: Peripheral vascular disease    | 1.16         | 1.071 - 1.256                    |
| Charlson comorbidity in previous 5 years: Cerebrovascular disease        | 1.077        | 0.987 - 1.174                    |
| Charlson comorbidity in previous 5 years: Dementia                       | 1.06         | 0.909 - 1.236                    |
| Charlson comorbidity in previous 5 years: COPD                           | 1.335        | 1.251 - 1.425                    |
| Charlson comorbidity in previous 5 years: Connective tissue/rheumatic disease | 1.269   | 1.069 - 1.507                  |
| Charlson comorbidity in previous 5 years: Peptic ulcer disease           | 1.141        | 1.008 - 1.291                    |
| Charlson comorbidity in previous 5 years: Mild liver disease             | 1.245        | 1 - 1.552                       |
| Charlson comorbidity in previous 5 years: Diabetes without complications | 1.155        | 1.074 - 1.243                    |
| Charlson comorbidity in previous 5 years: Diabetes with complications    | 1.316        | 1.233 - 1.404                    |
| Charlson comorbidity in previous 5 years: Hemiplegia or paraplegia      | 1.249        | 1.004 - 1.555                    |
| Charlson comorbidity in previous 5 years: Renal disease                 | 1.17         | 1.08 - 1.266                     |
| Charlson comorbidity in previous 5 years: Primary cancer                 | 1.051        | 0.971 - 1.137                    |
| Charlson comorbidity in previous 5 years: Moderate or severe liver disease | 1.196   | 0.898 - 1.592                  |
| Charlson comorbidity in previous 5 years: Metastatic cancer              | 1.283        | 1.104 - 1.492                    |
| Charlson comorbidity in previous 5 years: HIV/AIDS                       | 1.731        | 0.799 - 3.748                    |
| Year of discharge: 2005 (ref=2005)                                       | 0.861        | 0.79 - 0.938                     |
| Year of discharge: 2007                                                  | 0.888        | 0.815 - 0.967                    |
| Year of discharge: 2008                                                  | 0.849        | 0.778 - 0.927                    |
| Year of discharge: 2009                                                  | 0.805        | 0.736 - 0.88                    |
| Year of discharge: 2010                                                  | 0.836        | 0.765 - 0.915                    |
| Year of discharge: 2011                                                  | 0.835        | 0.762 - 0.915                    |
| Year of discharge: 2012                                                  | 0.849        | 0.774 - 0.93                    |
| Year of discharge: 2013                                                  | 0.812        | 0.741 - 0.89                    |
| Year of discharge: 2014                                                  | 0.756        | 0.689 - 0.83                    |
| Year of discharge: 2015                                                  | 0.817        | 0.744 - 0.896                    |
| Year of discharge: 2016                                                  | 0.745        | 0.678 - 0.818                    |
| Year of discharge: 2017                                                  | 0.776        | 0.706 - 0.854                    |
| Year of discharge: 2018                                                  | 0.753        | 0.684 - 0.828                    |
| Year of discharge: 2019                                                  | 0.752        | 0.677 - 0.836                    |
### Table 10. Cox Proportional Hazards Model for Major Cardiac Event (Death as Competing Risk) Within 30 d Among Individuals With Acute Myocardial Infarction

| Parameter | Hazard Ratio | 95% Hazard Ratio Confidence Limits |
|-----------|--------------|----------------------------------|
| Office visit (PC or relevant specialist) within 7 days after discharge | 1.021 | 0.963 - 1.082 |
| Females: 46 - 64 (ref= females 20 - 45) | 1.2 | 0.833 - 1.73 |
| Females: 65 - 74 | 1.485 | 1.032 - 2.136 |
| Females: 75 - 84 | 1.912 | 1.336 - 2.735 |
| Females: 85+ | 2.702 | 1.884 - 3.876 |
| Males: 20 - 45 | 0.812 | 0.541 - 1.22 |
| Males: 46 - 64 | 1.058 | 0.742 - 1.511 |
| Males: 65 - 74 | 1.381 | 0.966 - 1.974 |
| Males: 75 - 84 | 1.745 | 1.221 - 2.494 |
| Males: 85+ | 2.282 | 1.585 - 3.285 |
| Income quintile: 1 (ref=income quintile 5) | 1.142 | 1.041 - 1.254 |
| Income quintile: 2 | 1.078 | 0.981 - 1.185 |
| Income quintile: 3 | 1.007 | 0.913 - 1.11 |
| Income quintile: 4 | 0.928 | 0.839 - 1.027 |
| Income quintile: Missing | 1.193 | 0.774 - 1.838 |
| Urban (RIO < 10) (ref=rural) | 0.854 | 0.8 - 0.911 |
| RIO (missing) | 1.093 | 0.866 - 1.378 |
| Ambulatory visit to a comprehensive PC physician in the past year | 1.173 | 1.064 - 1.292 |
| Usual provider of care: FHT (ref=no usual provider of care) | 0.467 | 0.351 - 0.621 |
| Usual provider of care: non-FHT (ref=no usual provider of care) | 0.448 | 0.338 - 0.594 |
| Specialty of discharging physician: Cardiologist (ref=GP/FP) | 1.075 | 0.982 - 1.176 |
| Specialty of discharging physician: GIM | 1.031 | 0.943 - 1.127 |
| Specialty of discharging physician: Other | 0.929 | 0.815 - 1.058 |
| AMI severity conditions: Shock | 1.505 | 1.145 - 1.979 |
| AMI severity conditions: CHF | 1.787 | 1.354 - 2.391 |
| AMI severity conditions: Cancer | 1.231 | 1.017 - 1.489 |
| AMI severity conditions: Diabetes with complications | 1.177 | 0.923 - 1.501 |
| AMI severity conditions: Diabetes without complications | 1.003 | 0.921 - 1.093 |
| AMI severity conditions: Acute renal failure | 1.142 | 1.011 - 1.291 |
| AMI severity conditions: Chronic renal failure | 1.197 | 1.063 - 1.349 |
| AMI severity conditions: Pulmonary edema | 1.932 | 1.436 - 2.673 |
| History of AMI in previous 1 - 5 years | 1.079 | 0.913 - 1.277 |
| History of CHF or angina in previous 1 - 5 years | 1.364 | 1.206 - 1.542 |
| Cardiac revascularization (CABH/PCI) during index admission | 0.567 | 0.528 - 0.609 |
| History of PCI or CABG in previous 1 - 5 years | 1.028 | 0.911 - 1.16 |
| Charlson comorbidity in previous 5 years: Myocardial infarction | 1.09 | 0.93 - 1.278 |
| Charlson comorbidity in previous 5 years: CHF | 1.064 | 0.932 - 1.215 |
| Charlson comorbidity in previous 5 years: Peripheral vascular disease | 1.206 | 1.09 - 1.361 |
| Charlson comorbidity in previous 5 years: Cerebrovascular disease | 1.026 | 0.898 - 1.174 |
| Charlson comorbidity in previous 5 years: Dementia | 0.999 | 0.789 - 1.266 |
| Charlson comorbidity in previous 5 years: COPD | 1.039 | 0.934 - 1.157 |
| Charlson comorbidity in previous 5 years: Connective tissue/rheumatic disease | 1.103 | 0.824 - 1.477 |
| Charlson comorbidity in previous 5 years: Peptic ulcer disease | 1.038 | 0.846 - 1.274 |
| Charlson comorbidity in previous 5 years: Mild liver disease | 0.93 | 0.615 - 1.408 |
| Charlson comorbidity in previous 5 years: Diabetes without complications | 1.227 | 1.093 - 1.378 |
| Charlson comorbidity in previous 5 years: Diabetes with complications | 1.394 | 1.257 - 1.546 |
| Charlson comorbidity in previous 5 years: Hemiplegia or paraplegia | 1.145 | 0.809 - 1.62 |
| Charlson comorbidity in previous 5 years: Renal disease | 1.183 | 1.049 - 1.325 |
| Charlson comorbidity in previous 5 years: Primary cancer | 0.841 | 0.733 - 0.965 |
| Charlson comorbidity in previous 5 years: Moderate or severe liver disease | 0.587 | 0.308 - 1.118 |
| Charlson comorbidity in previous 5 years: Metastatic cancer | 0.824 | 0.604 - 1.124 |
| Charlson comorbidity in previous 5 years: HIV/AIDS | 2.753 | 0.871 - 8.7 |
| Year of discharge: 2006 (ref=2005) | 0.771 | 0.678 - 0.877 |
| Year of discharge: 2007 | 0.769 | 0.674 - 0.876 |
| Year of discharge: 2008 | 0.733 | 0.64 - 0.839 |
| Year of discharge: 2009 | 0.621 | 0.537 - 0.717 |
| Year of discharge: 2010 | 0.688 | 0.597 - 0.792 |
| Year of discharge: 2011 | 0.669 | 0.578 - 0.775 |
| Year of discharge: 2012 | 0.711 | 0.614 - 0.822 |
| Year of discharge: 2013 | 0.595 | 0.51 - 0.693 |
| Year of discharge: 2014 | 0.58 | 0.498 - 0.677 |
| Year of discharge: 2015 | 0.624 | 0.536 - 0.727 |
| Year of discharge: 2016 | 0.59 | 0.507 - 0.688 |
| Year of discharge: 2017 | 0.533 | 0.471 - 0.659 |
| Year of discharge: 2018 | 0.487 | 0.412 - 0.575 |
| Year of discharge: 2019 | 0.506 | 0.419 - 0.61 |
| Parameter                                                                 | Hazard Ratio | 95% Hazard Ratio Confidence Limits |
|---------------------------------------------------------------------------|--------------|----------------------------------|
| Office visit (PC or relevant specialist) within 7 days after discharge    | 0.945        | 0.888 1.007                      |
| Females: 46 - 64 (ref= females 20 - 45)                                   | 1.807        | 0.92 3.549                       |
| Females: 65 - 74                                                          | 3.063        | 1.571 5.975                      |
| Females: 75 - 84                                                          | 4.188        | 2.159 8.126                      |
| Females: 85+                                                              | 7.331        | 3.783 14.207                     |
| Males: 20 - 45                                                            | 0.632        | 0.286 1.4                         |
| Males: 46 - 64                                                            | 1.552        | 0.798 3.017                      |
| Males: 65 - 74                                                            | 5.419        | 2.797 10.499                     |
| Males: 85+                                                                | 8.502        | 4.383 16.492                     |
| Income quintile: 1 (ref=income quintile 5)                                | 1.123        | 1.015 1.242                      |
| Income quintile: 2                                                        | 1.036        | 0.935 1.149                      |
| Income quintile: 3                                                        | 0.993        | 0.894 1.104                      |
| Income quintile: 4                                                        | 0.993        | 0.892 1.105                      |
| Income quintile: Missing                                                  | 1.084        | 0.637 1.843                      |
| Urban (RIO < 10) (ref=rural)                                              | 1.027        | 0.955 1.105                      |
| RIO (missing)                                                             | 1.068        | 0.822 1.388                      |
| Ambulatory visit to a comprehensive PC physician in the past year         | 1.106        | 0.99 1.235                       |
| Usual provider of care: FHT (ref=no usual provider of care)               | 0.061        | 0.052 0.073                      |
| Usual provider of care: non-FHT (ref=no usual provider of care)           | 0.066        | 0.056 0.078                      |
| Specialty of discharging physician: Cardiologist (ref=GP/FP)              | 0.754        | 0.688 0.826                      |
| Specialty of discharging physician: GIM                                   | 0.826        | 0.757 0.902                      |
| Specialty of discharging physician: Other                                 | 0.815        | 0.709 0.937                      |
| AMI severity conditions: Shock                                            | 2.073        | 1.564 2.748                      |
| AMI severity conditions: CHF                                              | 1.872        | 1.735 2.02                       |
| AMI severity conditions: Cancer                                           | 4.02         | 3.558 4.542                      |
| AMI severity conditions: CVD                                              | 1.444        | 1.158 1.803                      |
| AMI severity conditions: Diabetes with complications                      | 1.243        | 1.136 1.361                      |
| AMI severity conditions: Cardiac dysrhythmias                             | 1.199        | 1.106 1.301                      |
| AMI severity conditions: Acute renal failure                              | 1.421        | 1.273 1.587                      |
| AMI severity conditions: Chronic renal failure                            | 1.378        | 1.235 1.539                      |
| AMI severity conditions: Pulmonary edema                                  | 1.64         | 1.135 2.368                      |
| History of AMI in previous 1 - 5 years                                    | 1.173        | 0.987 1.395                      |
| History of CHF or angina in previous 1 - 5 years                          | 1.064        | 0.929 1.219                      |
| Cardiac revascularization (CABG/PCI) during index admission               | 0.353        | 0.124 0.385                      |
| History of PCI or CABG in previous 1 - 5 years                            | 0.744        | 0.639 0.866                      |
| Charlson comorbidity in previous 5 years: Myocardial infarction           | 0.982        | 0.835 1.155                      |
| Charlson comorbidity in previous 5 years: CHF                             | 1.136        | 1.178 1.571                      |
| Charlson comorbidity in previous 5 years: Peripheral vascular disease     | 1.367        | 1.209 1.544                      |
| Charlson comorbidity in previous 5 years: Cerebrovascular disease         | 1.162        | 1.017 1.326                      |
| Charlson comorbidity in previous 5 years: Dementia                       | 1.487        | 1.241 1.781                      |
| Charlson comorbidity in previous 5 years: COPD                            | 1.368        | 1.239 1.511                      |
| Charlson comorbidity in previous 5 years: Connective tissue/rheumatic disease | 1.254      | 0.944 1.668                      |
| Charlson comorbidity in previous 5 years: Peptic ulcer disease            | 1.047        | 0.862 1.272                      |
| Charlson comorbidity in previous 5 years: Mild liver disease              | 1.502        | 1.066 2.116                      |
| Charlson comorbidity in previous 5 years: Diabetes without complications  | 1.053        | 0.928 1.184                      |
| Charlson comorbidity in previous 5 years: Diabetes with complications     | 1.108        | 0.991 1.239                      |
| Charlson comorbidity in previous 5 years: Hemiplegia or paraplegia        | 1.011        | 0.706 1.45                       |
| Charlson comorbidity in previous 5 years: Renal disease                   | 1.238        | 1.104 1.389                      |
| Charlson comorbidity in previous 5 years: Primary cancer                  | 1.029        | 0.911 1.163                      |
| Charlson comorbidity in previous 5 years: Moderate or severe liver disease| 2.06         | 1.383 3.069                      |
| Charlson comorbidity in previous 5 years: Metastatic cancer               | 2.271        | 1.899 2.716                      |
| Charlson comorbidity in previous 5 years: HIV/AIDS                        | 8.74         | 3.348 22.812                     |
| Year of discharge: 2006 (ref=2005)                                        | 0.969        | 0.832 1.128                      |
| Year of discharge: 2007                                                   | 0.957        | 0.82 1.116                       |
| Year of discharge: 2008                                                   | 1.043        | 0.893 1.218                      |
| Year of discharge: 2009                                                   | 1.053        | 0.899 1.233                      |
| Year of discharge: 2010                                                   | 1.064        | 0.907 1.249                      |
| Year of discharge: 2011                                                   | 0.997        | 0.846 1.174                      |
| Year of discharge: 2012                                                   | 1.006        | 0.85 1.191                       |
| Year of discharge: 2013                                                   | 0.995        | 0.842 1.176                      |
| Year of discharge: 2014                                                   | 0.43         | 0.364 0.508                      |
| Year of discharge: 2015                                                   | 1.145        | 0.971 1.349                      |
| Year of discharge: 2016                                                   | 1.136        | 0.964 1.34                       |
| Year of discharge: 2017                                                   | 1.165        | 0.986 1.377                      |
| Year of discharge: 2018                                                   | 0.908        | 0.751 1.085                      |
| Year of discharge: 2019                                                   | 0.925        | 0.757 1.129                      |
| Parameter                                                                 | Hazard Ratio | 95% Hazard Ratio Confidence Limits |
|---------------------------------------------------------------------------|--------------|----------------------------------|
| Office visit (PC or relevant specialist) within 7 days after discharge    | 0.994        | 0.969 - 1.018                    |
| Females: 46 - 64 (ref= females 20 - 45)                                  | 0.939        | 0.823 - 1.071                    |
| Females: 65 - 74                                                         | 1.122        | 0.984 - 1.28                     |
| Females: 75 - 84                                                         | 1.34         | 1.177 - 1.525                    |
| Females: 85+                                                             | 1.687        | 1.478 - 1.925                    |
| Males: 20 - 45                                                           | 0.744        | 0.643 - 0.861                    |
| Males: 46 - 64                                                           | 0.758        | 0.667 - 0.862                    |
| Males: 65 - 74                                                           | 1.0          | 0.870 - 1.138                    |
| Males: 75 - 84                                                           | 1.268        | 1.115 - 1.443                    |
| Males: 85+                                                               | 1.54         | 1.347 - 1.76                     |
| Income quintile: 1 (ref=income quintile 5)                               | 1.153        | 1.108 - 1.2                      |
| Income quintile: 2                                                       | 1.107        | 1.064 - 1.153                    |
| Income quintile: 3                                                       | 1.068        | 1.025 - 1.113                    |
| Income quintile: 4                                                       | 1.029        | 0.986 - 1.073                    |
| Income quintile: Missing                                                 | 1.088        | 0.899 - 1.317                    |
| Urban (BIO < 10) (ref=rural)                                             | 0.975        | 0.948 - 1.003                    |
| BD (missing)                                                            | 1.234        | 1.121 - 1.358                    |
| Ambulatory visit to a comprehensive PC physician in the past year        | 1.141        | 1.097 - 1.187                    |
| Usual provider of care: FHT (ref=no usual provider of care)              | 0.47         | 0.413 - 0.534                    |
| Usual provider of care: non-FHT (ref=no usual provider of care)          | 0.466        | 0.41 - 0.529                     |
| Specialty of discharging physician: Cardiologist (ref=GP/FP)             | 0.878        | 0.846 - 0.912                    |
| Specialty of discharging physician: GIM                                   | 0.891        | 0.858 - 0.926                    |
| Specialty of discharging physician: Other                                | 1            | 0.95 - 1.052                     |
| AMI severity conditions: Shock                                           | 1.143        | 1.180 - 1.619                    |
| AMI severity conditions: CHF                                              | 1.472        | 1.421 - 1.525                    |
| AMI severity conditions: Cancer                                          | 1.732        | 1.613 - 1.86                     |
| AMI severity conditions: CVD                                              | 1.082        | 0.967 - 1.212                    |
| AMI severity conditions: Diabetes with complications                     | 1.139        | 1.1 - 1.138                      |
| AMI severity conditions: Cardiac dysrhythmias                            | 1.162        | 1.121 - 1.205                    |
| AMI severity conditions: Acute renal failure                             | 1.231        | 1.165 - 1.299                    |
| AMI severity conditions: Chronic renal failure                           | 1.193        | 1.129 - 1.26                     |
| AMI severity conditions: Pulmonary edema                                 | 1.429        | 1.205 - 1.693                    |
| History of AMI in previous 1 - 5 years                                   | 1.052        | 0.974 - 1.129                    |
| History of CHF or angina in previous 1 - 5 years                         | 1.217        | 1.151 - 1.286                    |
| Cardiac revascularization (CABH/PCI) during index admission              | 0.713        | 0.694 - 0.734                    |
| History of PCI or CABG in previous 1 - 5 years                           | 0.943        | 0.893 - 0.997                    |
| Charlson comorbidity in previous 5 years: Myocardial infarction          | 1.033        | 0.961 - 1.111                    |
| Charlson comorbidity in previous 5 years: CHF                            | 1.112        | 1.046 - 1.182                    |
| Charlson comorbidity in previous 5 years: Peripheral vascular disease    | 1.193        | 1.129 - 1.261                    |
| Charlson comorbidity in previous 5 years: Cerebrovascular disease        | 1.101        | 1.037 - 1.169                    |
| Charlson comorbidity in previous 5 years: Dementia                       | 1.118        | 1.028 - 1.259                    |
| Charlson comorbidity in previous 5 years: COPD                           | 1.359        | 1.298 - 1.422                    |
| Charlson comorbidity in previous 5 years: Connective tissue/rheumatic disease | 1.344         | 1.195 - 1.511                    |
| Charlson comorbidity in previous 5 years: Peptic ulcer disease           | 1.227        | 1.128 - 1.334                    |
| Charlson comorbidity in previous 5 years: Mild liver disease             | 1.363        | 1.172 - 1.584                    |
| Charlson comorbidity in previous 5 years: Diabetes without complications | 1.181        | 1.122 - 1.243                    |
| Charlson comorbidity in previous 5 years: Diabetes with complications    | 1.38         | 1.319 - 1.445                    |
| Charlson comorbidity in previous 5 years: Hemiplegia or paraplegia       | 1.189        | 1.022 - 1.384                    |
| Charlson comorbidity in previous 5 years: Renal disease                  | 1.304        | 1.235 - 1.377                    |
| Charlson comorbidity in previous 5 years: Primary cancer                 | 1.056        | 0.999 - 1.115                    |
| Charlson comorbidity in previous 5 years: Moderate or severe liver disease | 1.354         | 1.12 - 1.637                     |
| Charlson comorbidity in previous 5 years: Metastatic cancer               | 1.358        | 1.221 - 1.51                     |
| Charlson comorbidity in previous 5 years: HIV/AIDS                       | 2.078        | 1.248 - 3.462                    |
| Year of discharge: 2006 (ref=2005)                                      | 0.932        | 0.877 - 0.99                     |
| Year of discharge: 2007                                                  | 0.908        | 0.854 - 0.966                    |
| Year of discharge: 2008                                                  | 0.88         | 0.827 - 0.917                    |
| Year of discharge: 2009                                                  | 0.857        | 0.804 - 0.914                    |
| Year of discharge: 2010                                                  | 0.892        | 0.837 - 0.95                     |
| Year of discharge: 2011                                                  | 0.889        | 0.833 - 0.949                    |
| Year of discharge: 2012                                                  | 0.888        | 0.832 - 0.948                    |
| Year of discharge: 2013                                                  | 0.894        | 0.839 - 0.954                    |
| Year of discharge: 2014                                                  | 0.795        | 0.744 - 0.849                    |
| Year of discharge: 2015                                                  | 0.872        | 0.816 - 0.93                     |
| Year of discharge: 2016                                                  | 0.808        | 0.756 - 0.863                    |
| Year of discharge: 2017                                                  | 0.808        | 0.751 - 0.864                    |
| Year of discharge: 2018                                                  | 0.761        | 0.713 - 0.816                    |
| Year of discharge: 2019                                                  | 0.797        | 0.74 - 0.859                     |
### Myocardial Infarction

| Parameter                                                                 | Hazard Ratio | 95% Hazard Ratio Confidence Limits |
|---------------------------------------------------------------------------|--------------|-----------------------------------|
| Office visit (PC or relevant specialist) within 7 days after discharge    | 1.018        | 0.978 1.059                       |
| Females: 46 - 64 (ref= females 20 - 45)                                   | 1.151        | 0.891 1.487                       |
| Females: 65 - 74                                                         | 1.478        | 1.146 1.907                       |
| Females: 75 - 84                                                         | 1.896        | 1.474 2.438                       |
| Females: 85+                                                             | 2.641        | 2.05 3.401                        |
| Males: 20 - 45                                                           | 0.825        | 0.621 1.097                       |
| Males: 46 - 64                                                           | 1.01         | 0.786 1.296                       |
| Males: 65 - 74                                                           | 1.405        | 1.094 1.806                       |
| Males: 75 - 84                                                           | 1.86         | 1.448 2.385                       |
| Males: 85+                                                               | 2.52         | 1.953 3.251                       |
| Income quintile: 1 (ref=income quintile 5)                               | 1.185        | 1.111 1.265                       |
| Income quintile: 2                                                       | 1.145        | 1.071 1.223                       |
| Income quintile: 3                                                       | 1.06         | 0.99 1.135                        |
| Income quintile: 4                                                       | 1.018        | 0.95 1.091                        |
| Income quintile: Missing                                                 | 1.351        | 1.002 1.822                       |
| Urban (RIO < 10) (ref=rural)                                             | 0.88         | 0.841 0.921                       |
| Ambulatory visit to a comprehensive PC physician in the past year        | 1.109        | 1.038 1.184                       |
| Usual provider of care: FHT (ref=no usual provider of care)              | 0.447        | 0.364 0.549                       |
| Usual provider of care: non-FHT (ref=no usual provider of care)          | 0.433        | 0.353 0.53                        |
| Specialty of discharging physician: Cardiologist (ref=GP/FP)             | 1.01         | 0.95 1.074                        |
| Specialty of discharging physician: GIM                                  | 0.986        | 0.928 1.048                       |
| Specialty of discharging physician: Other                                | 0.86         | 0.785 0.941                       |
| AMI severity conditions: Shock                                           | 1.581        | 1.316 1.999                       |
| AMI severity conditions: CHF                                              | 1.878        | 1.782 1.979                       |
| AMI severity conditions: Cancer                                          | 1.313        | 1.155 1.493                       |
| AMI severity conditions: CVD                                              | 1.128        | 0.953 1.336                       |
| AMI severity conditions: Diabetes with complications                     | 1.255        | 1.185 1.33                        |
| AMI severity conditions: Cardiac dysrhythmias                            | 1.063        | 1.004 1.126                       |
| AMI severity conditions: Acute renal failure                             | 1.188        | 1.094 1.29                        |
| AMI severity conditions: Chronic renal failure                           | 1.117        | 1.046 1.235                       |
| AMI severity conditions: Pulmonary edema                                 | 1.87         | 1.469 2.382                       |
| History of AMI in previous 1 - 5 years                                   | 1.112        | 0.994 1.244                       |
| History of CHF or angina in previous 1 - 5 years                         | 1.494        | 1.374 1.625                       |
| Cardiac revascularization (CABH/PCI) during index admission              | 0.584        | 0.556 0.614                       |
| History of PCI or CABG in previous 1 - 5 years                           | 1.011        | 0.931 1.097                       |
| Charlson comorbidity in previous 5 years: Myocardial infarction          | 1.095        | 0.985 1.218                       |
| Charlson comorbidity in previous 5 years: CHF                            | 1.103        | 1.008 1.206                       |
| Charlson comorbidity in previous 5 years: Peripheral vascular disease    | 1.199        | 1.104 1.303                       |
| Charlson comorbidity in previous 5 years: Cerebrovasculaer disease       | 1.073        | 0.979 1.173                       |
| Charlson comorbidity in previous 5 years: Dementia                       | 1.067        | 0.913 1.248                       |
| Charlson comorbidity in previous 5 years: COPD                           | 1.087        | 1.012 1.168                       |
| Charlson comorbidity in previous 5 years: Connective tissue/rheumatic disease | 1.01   | 0.821 1.242                       |
| Charlson comorbidity in previous 5 years: Peptic ulcer disease           | 1.038        | 0.904 1.192                       |
| Charlson comorbidity in previous 5 years: Mild liver disease             | 1.035        | 0.792 1.351                       |
| Charlson comorbidity in previous 5 years: Diabetes without complications | 1.156        | 1.065 1.254                       |
| Charlson comorbidity in previous 5 years: Diabetes with complications    | 1.397        | 1.3 1.501                         |
| Charlson comorbidity in previous 5 years: Hemiplegia or paraplegia       | 1.103        | 0.871 1.357                       |
| Charlson comorbidity in previous 5 years: Renal disease                  | 1.189        | 1.095 1.291                       |
| Charlson comorbidity in previous 5 years: Primary cancer                 | 0.851        | 0.775 0.934                       |
| Charlson comorbidity in previous 5 years: Moderate or severe liver disease | 0.932   | 0.66 1.316                        |
| Charlson comorbidity in previous 5 years: Metastatic cancer              | 0.87         | 0.707 1.07                        |
| Charlson comorbidity in previous 5 years: HIV/AIDS                       | 2.645        | 1.999 3.636                       |
| Year of discharge: 2006 (ref=2005)                                       | 0.845        | 0.772 0.926                       |
| Year of discharge: 2007                                                   | 0.845        | 0.77 0.927                        |
| Year of discharge: 2008                                                   | 0.792        | 0.719 0.872                       |
| Year of discharge: 2009                                                   | 0.758        | 0.687 0.836                       |
| Year of discharge: 2010                                                   | 0.763        | 0.69 0.843                       |
| Year of discharge: 2011                                                   | 0.756        | 0.683 0.838                       |
| Year of discharge: 2012                                                   | 0.754        | 0.68 0.835                       |
| Year of discharge: 2013                                                   | 0.717        | 0.647 0.795                       |
| Year of discharge: 2014                                                   | 0.628        | 0.564 0.7                        |
| Year of discharge: 2015                                                   | 0.701        | 0.631 0.78                        |
| Year of discharge: 2016                                                   | 0.639        | 0.574 0.712                       |
| Year of discharge: 2017                                                   | 0.623        | 0.558 0.696                       |
| Year of discharge: 2018                                                   | 0.541        | 0.482 0.607                       |
| Year of discharge: 2019                                                   | 0.538        | 0.472 0.613                       |

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### eTable 13. Cox proportional hazards model for death within 30 days among those with CHF.

| Parameter                                                                 | Hazard Ratio | 95% Hazard Ratio Confidence Limits |
|---------------------------------------------------------------------------|--------------|-----------------------------------|
| Office visit (PC or relevant specialist) within 7 days after discharge     | 0.976        | 0.905 - 1.052                     |
| Females: 46 - 64 (ref = females 20 - 45)                                  | 0.856        | 0.646 - 1.158                     |
| Females: 65 - 74                                                          | 1.067        | 0.589 - 1.932                     |
| Females: 75 - 84                                                          | 1.461        | 0.816 - 2.618                     |
| Females: 85+                                                              | 2.345        | 1.311 - 4.192                     |
| Males: 20 - 45                                                            | 0.298        | 0.118 - 0.752                     |
| Males: 46 - 64                                                            | 0.979        | 0.4 - 2.298                       |
| Males: 65 - 74                                                            | 1.382        | 0.77 - 2.482                      |
| Males 75 - 84                                                             | 1.832        | 1.025 - 3.274                     |
| Males: 85+                                                                | 2.799        | 1.564 - 5.008                     |
| Income quintile: 1 (ref = income quintile 5)                              | 1.048        | 0.928 - 1.184                     |
| Income quintile: 2                                                         | 1.035        | 0.916 - 1.17                      |
| Income quintile: 3                                                         | 1.017        | 0.897 - 1.153                     |
| Income quintile: 4                                                         | 0.956        | 0.839 - 1.089                     |
| Income quintile: Missing                                                  | 0.681        | 0.314 - 1.475                     |
| Urban (RIO < 10) (ref = rural)                                            | 0.938        | 0.854 - 1.029                     |
| RIO (missing)                                                             | 0.872        | 0.612 - 1.242                     |
| Ambulatory visit to a comprehensive PC physician in the past year         | 0.986        | 0.851 - 1.143                     |
| Usual provider of care: FHT (ref = no usual provider of care)             | 0.084        | 0.071 - 0.098                     |
| Usual provider of care: non-FHT (ref = no usual provider of care)         | 0.08         | 0.069 - 0.093                     |
| Specialty of discharging physician: Cardiologist (ref = GP/FP)            | 0.795        | 0.704 - 0.897                     |
| Specialty of discharging physician: GIM                                   | 0.945        | 0.857 - 1.042                     |
| Specialty of discharging physician: Other                                 | 0.943        | 0.811 - 1.098                     |
| CHF severity conditions: Ischemic heart disease                           | 1.036        | 0.945 - 1.135                     |
| CHF severity conditions: Other cardiovascular disease                     | 1.401        | 1.281 - 1.533                     |
| CHF severity conditions: Shock                                           | 1.172        | 0.619 - 2.22                      |
| CHF severity conditions: Peripheral vascular disease                      | 1.407        | 1.148 - 1.725                     |
| CHF severity conditions: Atrial fibrillation                              | 0.946        | 0.871 - 1.027                     |
| CHF severity conditions: Cerebrovascular disease                          | 1.085        | 0.765 - 1.538                     |
| CHF severity conditions: Hypertension                                     | 0.767        | 0.702 - 0.838                     |
| CHF severity conditions: COPD                                             | 1.116        | 1.001 - 1.244                     |
| CHF severity conditions: Dementia                                        | 1.596        | 1.297 - 1.963                     |
| CHF severity conditions: Acute renal failure                              | 1.537        | 1.388 - 1.702                     |
| CHF severity conditions: Chronic renal failure                            | 1.22         | 0.979 - 1.519                     |
| CHF severity conditions: Diabetes                                        | 1.059        | 0.946 - 1.185                     |
| CHF severity conditions: Non-metastatic cancer                            | 2.105        | 1.784 - 2.484                     |
| CHF severity conditions: Metastatic cancer                                | 2.446        | 1.855 - 3.226                     |
| CHF severity conditions: Moderate/severe liver disease                    | 2.247        | 1.359 - 3.716                     |
| History of AMI in previous 5 years                                       | 1.184        | 0.981 - 1.43                      |
| History of CHF or angina in previous 5 years                              | 0.972        | 0.833 - 1.134                     |
| History of implantable cardiac defibrillator in previous 3 years          | 1.057        | 0.903 - 1.216                     |
| History of permanent pacemaker in previous 3 years                        | 1.062        | 0.334 - 3.381                     |
| Charlson comorbidity in previous 5 years: Myocardial infarction           | 1.034        | 0.862 - 1.241                     |
| Charlson comorbidity in previous 5 years: CHF                            | 1.413        | 1.272 - 1.667                     |
| Charlson comorbidity in previous 5 years: Peripheral vascular disease     | 1.235        | 1.081 - 1.413                     |
| Charlson comorbidity in previous 5 years: Cerebrovascular disease        | 0.999        | 0.862 - 1.159                     |
| Charlson comorbidity in previous 5 years: Dementia                       | 1.372        | 1.124 - 1.676                     |
| Charlson comorbidity in previous 5 years: COPD                           | 1.196        | 1.077 - 1.329                     |
| Charlson comorbidity in previous 5 years: Connective tissue/rheumatic disease | 1.617  | 1.244 - 2.102                     |
| Charlson comorbidity in previous 5 years: Peptic ulcer disease           | 0.64         | 0.576 - 1.043                     |
| Charlson comorbidity in previous 5 years: Mild liver disease             | 1.302        | 1.11 - 2.032                      |
| Charlson comorbidity in previous 5 years: Diabetes without complications  | 0.891        | 0.754 - 1.053                     |
| Charlson comorbidity in previous 5 years: Diabetes with complications     | 0.932        | 0.823 - 1.056                     |
| Charlson comorbidity in previous 5 years: Hemiplegia or paraplegia        | 1.361        | 0.974 - 1.902                     |
| Charlson comorbidity in previous 5 years: Renal disease                  | 1.084        | 0.968 - 1.213                     |
| Charlson comorbidity in previous 5 years: Primary cancer                  | 1.211        | 1.062 - 1.382                     |
| Charlson comorbidity in previous 5 years: Moderate or severe liver disease | 1.71       | 1.198 - 2.442                     |
| Charlson comorbidity in previous 5 years: Metastatic cancer               | 1.835        | 1.413 - 2.349                     |
| Charlson comorbidity in previous 5 years: HIV/AIDS                       | 0           | 0 - 0                             |
| Year of discharge: 2006 (ref = 2005)                                      | 1.091        | 0.9 - 1.324                       |
| Year of discharge: 2007                                                   | 1.039        | 0.846 - 1.275                     |
| Year of discharge: 2008                                                   | 1.158        | 0.949 - 1.413                     |
| Year of discharge: 2009                                                   | 1.253        | 1.026 - 1.531                     |
| Year of discharge: 2010                                                   | 1.016        | 0.825 - 1.251                     |
| Year of discharge: 2011                                                   | 1.021        | 0.826 - 1.262                     |
| Year of discharge: 2012                                                   | 1.001        | 0.812 - 1.234                     |
| Year of discharge: 2013                                                   | 1.01         | 0.823 - 1.239                     |
| Year of discharge: 2014                                                   | 0.346        | 0.286 - 0.417                     |
| Year of discharge: 2015                                                   | 0.055        | 0.78 - 1.17                       |
| Year of discharge: 2016                                                   | 0.971        | 0.795 - 1.186                     |
| Year of discharge: 2017                                                   | 1.067        | 0.878 - 1.296                     |
| Year of discharge: 2018                                                   | 1.021        | 0.838 - 1.243                     |
| Year of discharge: 2019                                                   | 0.899        | 0.725 - 1.135                     |
| Parameter                                                                 | Hazard Ratio | 95% Hazard Ratio Confidence Limits |
|---------------------------------------------------------------------------|--------------|----------------------------------|
| Office visit (PC or relevant specialist) within 7 days after discharge     |              |                                  |
| Females: 20 - 45                                                         | 0.934        | 0.764 - 1.141                    |
| Females: 46 - 64 (ref= females 20 - 45)                                   | 0.972        | 0.899 - 1.048                    |
| Females: 75 - 84                                                         | 0.906        | 0.849 - 0.968                    |
| Females: 85+                                                             | 0.992        | 0.906 - 1.091                    |
| Males: 20 - 45                                                           | 0.871        | 0.706 - 1.105                    |
| Males: 46 - 64 (ref= males 20 - 45)                                       | 0.969        | 0.875 - 1.067                    |
| Males: 75 - 84                                                           | 1.054        | 0.981 - 1.131                    |
| Males: 85+                                                               | 1.119        | 0.921 - 1.367                    |
| Income quintile: 1 (ref=income quintile 5)                               | 0.934        | 0.764 - 1.141                    |
| Income quintile: 2                                                        | 0.972        | 0.899 - 1.048                    |
| Income quintile: 3                                                        | 0.912        | 0.855 - 0.974                    |
| Income quintile: Missing                                                 | 0.966        | 0.831 - 1.168                    |
| Urban (RIO < 10) (ref=rural)                                             | 0.975        | 0.822 - 1.149                    |
| RIO (missing)                                                            | 1.025        | 0.894 - 1.174                    |
| Ambulatory visit to a comprehensive PC physician in the past year         | 1.027        | 0.989 - 1.066                    |
| Usual provider of care: FHT (ref=no usual provider of care)               | 0.975        | 0.917 - 1.037                    |
| Usual provider of care: non-FHT (ref=no usual provider of care)           | 0.975        | 0.917 - 1.037                    |
| Specialty of discharging physician: Cardiologist (ref=GP/FP)              | 0.952        | 0.812 - 1.104                    |
| Specialty of discharging physician: GIM                                   | 0.974        | 0.936 - 1.013                    |
| Specialty of discharging physician: Other                                | 0.975        | 0.917 - 1.037                    |
| CHF severity conditions: Arrhythmia                                      | 1.014        | 0.976 - 1.053                    |
| CHF severity conditions: Hypertension                                    | 1.112        | 1.078 - 1.164                    |
| CHF severity conditions: Shock                                           | 0.87         | 0.648 - 1.168                    |
| CHF severity conditions: Ischemic heart disease                          | 1.051        | 0.956 - 1.155                    |
| CHF severity conditions: Other cardiovascular disease                     | 1.08         | 1.078 - 1.164                    |
| History of AMI in previous 5 years                                       | 1.091        | 1.009 - 1.18                     |
| History of CHF or angina in previous 5 years                             | 1.155        | 1.089 - 1.225                    |
| History of implantable cardiac defibrillator in previous 3 years         | 1.044        | 0.979 - 1.112                    |
| History of permanent pacemaker in previous 5 years                       | 1.35         | 0.903 - 2.019                    |
| Charlson comorbidity in previous 5 years: Myocardial infarction          | 1.005        | 0.932 - 1.083                    |
| Charlson comorbidity in previous 5 years: CHF                           | 1.179        | 1.112 - 1.249                    |
| Charlson comorbidity in previous 5 years: Peripheral vascular disease    | 1.082        | 1.023 - 1.145                    |
| Charlson comorbidity in previous 5 years: Cerebrovascular disease        | 1.089        | 1.027 - 1.154                    |
| Charlson comorbidity in previous 5 years: Dementia                       | 1.077        | 0.981 - 1.183                    |
| Charlson comorbidity in previous 5 years: COPD                           | 1.238        | 1.187 - 1.291                    |
| Charlson comorbidity in previous 5 years: Connective tissue/rheumatic disease | 1.247       | 1.112 - 1.399                    |
| Charlson comorbidity in previous 5 years: Peptic ulcer disease           | 0.998        | 0.92 - 1.084                     |
| Charlson comorbidity in previous 5 years: Mild liver disease             | 1.136        | 1.112 - 1.154                    |
| Charlson comorbidity in previous 5 years: Diabetes without complications | 1.019        | 0.955 - 1.088                    |
| Charlson comorbidity in previous 5 years: Diabetes with complications    | 1.126        | 1.069 - 1.185                    |
| Charlson comorbidity in previous 5 years: Hemiplegia or paraplegia       | 1.058        | 0.915 - 1.223                    |
| Charlson comorbidity in previous 5 years: Renal disease                  | 1.255        | 1.18 - 1.331                     |
| Charlson comorbidity in previous 5 years: Primary cancer                 | 1.097        | 1.035 - 1.163                    |
| Charlson comorbidity in previous 5 years: Moderate or severe liver disease | 1.602       | 1.387 - 1.851                    |
| Charlson comorbidity in previous 5 years: Metastatic cancer              | 1.136        | 1.002 - 1.287                    |
| Year of discharge: 2006 (ref=2005)                                       | 0.968        | 0.856 - 1.045                    |
| Year of discharge: 2007                                                  | 0.923        | 0.852 - 1.001                    |
| Year of discharge: 2008                                                  | 0.926        | 0.855 - 1.004                    |
| Year of discharge: 2009                                                  | 1.017        | 0.938 - 1.102                    |
| Year of discharge: 2010                                                  | 0.994        | 0.917 - 1.077                    |
| Year of discharge: 2011                                                  | 1.002        | 0.924 - 1.088                    |
| Year of discharge: 2012                                                  | 0.997        | 0.919 - 1.082                    |
| Year of discharge: 2013                                                  | 1.013        | 0.936 - 1.097                    |
| Year of discharge: 2014                                                  | 0.833        | 0.766 - 0.905                    |
| Year of discharge: 2015                                                  | 0.948        | 0.876 - 1.026                    |
| Year of discharge: 2016                                                  | 0.948        | 0.876 - 1.025                    |
| Year of discharge: 2017                                                  | 0.933        | 0.863 - 1.009                    |
| Year of discharge: 2018                                                  | 0.916        | 0.847 - 0.991                    |
| Year of discharge: 2019                                                  | 0.924        | 0.848 - 1.006                    |
Hazard Ratio
Office visit (PC or relevant specialist) within 7 days after discharge
1.021 0.975 1.068
Females: 46 - 64 (ref= females 20 - 45)
1.064 0.762 1.486
Females: 65 - 74
1.143 0.824 1.585
Females: 75 - 84
1.315 0.982 1.87
Females: 85+
1.568 1.136 2.164
Males: 20 - 45
1.085 0.73 1.614
Males: 46 - 64
1.027 0.741 1.423
Males: 65 - 74
1.268 0.931 1.777
Males: 75 - 84
1.326 0.961 1.829
Males: 85+
1.505 1.088 2.082
Income quintile: 1 (ref=income quintile 5)
1.125 1.044 1.213
Income quintile: 2
1.055 0.977 1.139
Income quintile: 3
1.056 0.977 1.142
Income quintile: 4
1.03 0.95 1.117
Income quintile: Missing
1.051 0.72 1.534
Urban (RIO < 10) (ref=rural)
1.049 0.991 1.111
RIO (missing)
1.08 0.881 1.323
Ambulatory visit to a comprehensive PC physician in the past year
1.067 0.975 1.168
Usual provider of care: FHT (ref=no usual provider of care)
0.505 0.419 0.609
Usual provider of care: non-FHT (ref=no usual provider of care)
0.504 0.419 0.605
Specialty of discharging physician: Cardiologist (ref=GP/FP)
0.881 0.82 0.946
Specialty of discharging physician: GIM
1 0.942 1.061
Specialty of discharging physician: Other
0.866 0.785 0.956
CHF severity conditions: Ischemic heart disease
1.106 1.046 1.169
CHF severity conditions: Other cardiovascular disease
1.204 1.138 1.275
CHF severity conditions: Shock
1.031 0.686 1.548
CHF severity conditions: Peripheral vascular disease
0.984 0.851 1.137
CHF severity conditions: Arrhythmia
0.999 0.951 1.05
CHF severity conditions: Cerebrovascular disease
0.999 0.951 1.05
CHF severity conditions: Hypertension
0.92 0.874 0.969
CHF severity conditions: COPD
0.984 0.917 1.055
CHF severity conditions: Dementia
0.933 0.793 1.098
CHF severity conditions: Acute renal failure
1.378 1.291 1.47
CHF severity conditions: Chronic renal failure
1.164 1.026 1.32
CHF severity conditions: Diabetes
1.067 1.015 1.167
CHF severity conditions: Non-metastatic cancer
1.142 0.998 1.308
CHF severity conditions: Metastatic cancer
1.065 0.803 1.414
CHF severity conditions: Moderate/severe liver disease
0.633 0.355 1.128
History of AMI in previous 5 years
1.236 1.102 1.386
History of CHF or angina in previous 5 years
1.153 1.056 1.259
History of implantable cardiac defibrillator in previous 3 years
1.055 0.961 1.157
History of permanent pacemaker in previous 3 years
1.399 0.802 2.442
Charlson comorbidity in previous 5 years: Myocardial infarction
0.996 0.891 1.113
Charlson comorbidity in previous 5 years: CHF
1.35 1.239 1.472
Charlson comorbidity in previous 5 years: Peripheral vascular disease
1.114 1.024 1.212
Charlson comorbidity in previous 5 years: Cerebrovascular disease
1.119 1.065 1.262
Charlson comorbidity in previous 5 years: Dementia
0.956 0.826 1.105
Charlson comorbidity in previous 5 years: COPD
1.104 1.025 1.186
Charlson comorbidity in previous 5 years: Connective tissue/rheumatic disease
1.09 0.835 1.221
Charlson comorbidity in previous 5 years: Peptic ulcer disease
0.98 0.865 1.109
Charlson comorbidity in previous 5 years: MLD liver disease
1.185 0.98 1.492
Charlson comorbidity in previous 5 years: Diabetes without complications
1.042 0.945 1.149
Charlson comorbidity in previous 5 years: Diabetes with complications
1.116 1.033 1.206
Charlson comorbidity in previous 5 years: Hemiplegia or paraplegia
1.044 0.843 1.292
Charlson comorbidity in previous 5 years: Renal disease
1.133 1.058 1.213
Charlson comorbidity in previous 5 years: Primary cancer
0.991 0.904 1.086
Charlson comorbidity in previous 5 years: Moderate or severe liver disease
1.021 0.781 1.336
Charlson comorbidity in previous 5 years: Metastatic cancer
0.964 0.781 1.19
Charlson comorbidity in previous 5 years: HIV/AIDS
2.944 1.464 5.918
Year of discharge: 2006 (ref=2005)
0.912 0.815 1.021
Year of discharge: 2007
0.9 0.801 1.011
Year of discharge: 2008
0.866 0.782 0.957
Year of discharge: 2009
0.958 0.851 1.078
Year of discharge: 2010
0.981 0.872 1.103
Year of discharge: 2011
0.883 0.781 0.998
Year of discharge: 2012
0.904 0.802 1.02
Year of discharge: 2013
0.958 0.835 1.054
Year of discharge: 2014
0.735 0.647 0.834
Year of discharge: 2015
0.827 0.735 0.931
Year of discharge: 2016
0.859 0.764 0.965
Year of discharge: 2017
0.816 0.726 0.917
Year of discharge: 2018
0.789 0.7 0.898
Year of discharge: 2019
0.813 0.715 0.924
### eTable 16. Cox proportional hazards model for death within 90 days among those with CHF.

| Parameter | Hazard Ratio | 95% Hazard Ratio Confidence Limits |
|-----------|--------------|-----------------------------------|
| Office visit (PC or relevant specialist) within 7 days after discharge | 0.934 (0.897, 0.973) |  |
| Females: 46 - 64 (ref= females 20 - 45) | 0.896 (0.846, 1.243) |  |
| Females: 65 - 74 | 1.109 (0.808, 1.524) |  |
| Females: 75 - 84 | 1.545 (1.131, 2.11) |  |
| Females: 85+ | 2.422 (1.924, 3.06) |  |
| Males: 20 - 45 | 0.58 (0.376, 0.896) |  |
| Males: 46 - 64 | 0.833 (0.655, 1.147) |  |
| Males: 65 - 74 | 1.339 (0.979, 1.833) |  |
| Males 75 - 84 | 1.865 (1.367, 2.545) |  |
| Males: 85+ | 2.81 (2.058, 3.837) |  |
| Income quintile: 1 (ref=income quintile 5) | 1.074 (1.006, 1.147) |  |
| Income quintile: 2 | 1.032 (0.965, 1.121) |  |
| Income quintile: 3 | 0.896 (0.646, 1.24) |  |
| Income quintile: 4 | 0.833 (0.655, 1.147) |  |
| Income quintile: Missing | 0.991 (0.693, 1.417) |  |
| Urban (RIO < 10) (ref=rural) | 0.947 (0.901, 0.996) |  |
| RIO (missing) | 0.873 (0.718, 1.061) |  |
| Ambulatory visit to a comprehensive PC physician in the past year | 1.035 (0.955, 1.121) |  |
| Usual provider of care: FHT (ref=no usual provider of care) | 0.09 (0.081, 0.101) |  |
| Usual provider of care: non-FHT (ref=no usual provider of care) | 0.085 (0.077, 0.094) |  |
| Specialty of discharging physician: Cardiologist (ref=GP/FP) | 0.823 (0.771, 0.879) |  |
| Specialty of discharging physician: GIM | 0.993 (0.942, 1.046) |  |
| Specialty of discharging physician: Other | 0.929 (0.855, 1.01) |  |
| CHF severity conditions: Ischemic heart disease | 1.009 (0.959, 1.061) |  |
| CHF severity conditions: Other cardiovascular disease | 1.332 (1.267, 1.4) |  |
| CHF severity conditions: Shock | 1.414 (1.314, 1.671) |  |
| CHF severity conditions: Peripheral vascular disease | 1.271 (1.13, 1.429) |  |
| CHF severity conditions: Atrial fibrillation | 0.922 (0.852, 0.964) |  |
| CHF severity conditions: Cerebrovascular disease | 0.987 (0.81, 1.201) |  |
| CHF severity conditions: Hypertension | 0.777 (0.741, 0.814) |  |
| CHF severity conditions: COPD | 1.138 (1.073, 1.208) |  |
| CHF severity conditions: Dementia | 1.482 (1.314, 1.671) |  |
| CHF severity conditions: Acute renal failure | 1.485 (1.403, 1.572) |  |
| CHF severity conditions: Chronic renal failure | 1.138 (1.101, 1.192) |  |
| CHF severity conditions: Diabetes | 0.998 (0.938, 1.061) |  |
| CHF severity conditions: Non-metastatic cancer | 1.936 (1.745, 2.105) |  |
| CHF severity conditions: Metastatic cancer | 2.684 (2.291, 3.145) |  |
| CHF severity conditions: Moderate/severe liver disease | 2.085 (1.534, 2.833) |  |
| History of AMI in previous 5 years | 1.134 (1.021, 1.26) |  |
| History of CHF or angina in previous 5 years | 1.044 (0.962, 1.135) |  |
| History of AMI in previous 3 years | 1.134 (1.021, 1.26) |  |
| History of CHF or angina in previous 5 years | 1.044 (0.962, 1.135) |  |
| History of implantable cardiac defibrillator in previous 3 years | 0.982 (0.9, 1.071) |  |
| History of permanent pacemaker in previous 3 years | 1.629 (1.034, 2.567) |  |
| Charlson comorbidity in previous 5 years: Myocardial infarction | 0.96 (0.868, 1.061) |  |
| Charlson comorbidity in previous 5 years: CHF | 1.167 (1.251, 1.471) |  |
| Charlson comorbidity in previous 5 years: Peripheral vascular disease | 1.138 (1.101, 1.192) |  |
| Charlson comorbidity in previous 5 years: Cerebrovascular disease | 1.04 (0.962, 1.125) |  |
| Charlson comorbidity in previous 5 years: Dementia | 1.23 (1.096, 1.381) |  |
| Charlson comorbidity in previous 5 years: COPD | 1.141 (1.077, 1.208) |  |
| Charlson comorbidity in previous 5 years: Connective tissue/rheumatic disease | 1.315 (1.126, 1.536) |  |
| Charlson comorbidity in previous 5 years: Peptic ulcer disease | 0.904 (0.836, 1.013) |  |
| Charlson comorbidity in previous 5 years: Mild liver disease | 1.254 (1.10, 1.498) |  |
| Charlson comorbidity in previous 5 years: Diabetes without complications | 0.908 (0.829, 0.995) |  |
| Charlson comorbidity in previous 5 years: Diabetes with complications | 1.029 (0.96, 1.102) |  |
| Charlson comorbidity in previous 5 years: Hemiplegia or paraplegia | 1.195 (0.99, 1.443) |  |
| Charlson comorbidity in previous 5 years: Renal disease | 1.163 (1.095, 1.235) |  |
| Charlson comorbidity in previous 5 years: Primary cancer | 1.166 (1.128, 1.36) |  |
| Charlson comorbidity in previous 5 years: Moderate or severe liver disease | 1.712 (1.413, 2.075) |  |
| Charlson comorbidity in previous 5 years: Metastatic cancer | 1.584 (1.372, 1.828) |  |
| Charlson comorbidity in previous 5 years: HIV/AIDS | 1.863 (1.609, 2.148) |  |
| Year of discharge: 2006 (ref=2005) | 1.107 (0.938, 1.228) |  |
| Year of discharge: 2007 | 1.074 (0.964, 1.196) |  |
| Year of discharge: 2008 | 1.006 (0.9, 1.123) |  |
| Year of discharge: 2009 | 1.016 (0.907, 1.137) |  |
| Year of discharge: 2010 | 1.028 (0.92, 1.149) |  |
| Year of discharge: 2011 | 1.023 (0.914, 1.145) |  |
| Year of discharge: 2012 | 0.96 (0.864, 1.085) |  |
| Year of discharge: 2013 | 1.04 (0.935, 1.163) |  |
| Year of discharge: 2014 | 0.42 (0.376, 0.469) |  |
| Year of discharge: 2015 | 1.014 (0.911, 1.129) |  |
| Year of discharge: 2016 | 0.974 (0.875, 1.085) |  |
| Year of discharge: 2017 | 1.089 (0.982, 1.208) |  |
| Year of discharge: 2018 | 0.977 (0.878, 1.087) |  |
| Year of discharge: 2019 | 0.885 (0.769, 0.973) |  |
### Table 18. Cox Proportional Hazards Model for All-Cause Readmissions (Death as Competing Risk) Within 90 d Among Individuals With Congestive Heart Failure

| Parameter                                                                 | Hazard Ratio | 95% Hazard Ratio Confidence Limits |
|---------------------------------------------------------------------------|--------------|-----------------------------------|
| Office visit (PC or relevant specialist) within 7 days after discharge     | 0.975        | 0.951 - 0.994                     |
| Females: 46 - 64 (ref= females 20 - 45)                                    | 0.949        | 0.825 - 1.091                     |
| Females: 65 - 74                                                          | 1.022        | 0.892 - 1.172                     |
| Females: 75 - 84                                                          | 1.128        | 0.986 - 1.283                     |
| Females: 85+                                                              | 1.269        | 1.109 - 1.452                     |
| Males: 20 - 45                                                            | 0.797        | 0.671 - 0.948                     |
| Males: 46 - 64                                                            | 0.903        | 0.788 - 1.035                     |
| Males: 65 - 74                                                            | 1.009        | 0.881 - 1.155                     |
| Males 75 - 84                                                             | 1.129        | 0.987 - 1.291                     |
| Males: 85+                                                                | 1.269        | 1.108 - 1.454                     |
| Income quintile: 1 (ref=income quintile 5)                                 | 1.095        | 1.058 - 1.132                     |
| Income quintile: 2                                                         | 1.039        | 1.004 - 1.075                     |
| Income quintile: 3                                                         | 1.021        | 0.986 - 1.058                     |
| Income quintile: 4                                                         | 1.067        | 0.971 - 1.164                     |
| Income quintile: Missing                                                  | 1.042        | 0.876 - 1.24                       |
| Urban (RIO < 10) (ref=rural)                                              | 1.008        | 0.982 - 1.034                     |
| RIO (missing)                                                             | 1.058        | 0.965 - 1.161                     |
| Ambulatory visit to a comprehensive PC physician in the past year          | 1.081        | 1.037 - 1.126                     |
| Usual provider of care: FHT (ref=no usual provider of care)               | 0.913        | 0.788 - 1.044                     |
| Usual provider of care: non-FHT (ref=no usual provider of care)           | 0.879        | 0.727 - 1.058                     |
| Specialty of discharging physician: Cardiologist (ref=GP/FP)              | 0.848        | 0.821 - 0.876                     |
| Specialty of discharging physician: CMH                                   | 0.976        | 0.95 - 1.003                      |
| Specialty of discharging physician: Other                                 | 0.989        | 0.926 - 1.007                     |
| CHF severity conditions: Ischemic heart disease                            | 1.008        | 0.982 - 1.034                     |
| CHF severity conditions: Other cardiovascular disease                     | 1.037        | 1.068 - 1.155                     |
| CHF severity conditions: Shock                                            | 0.929        | 0.759 - 1.118                     |
| CHF severity conditions: Peripheral vascular disease                      | 1.129        | 1.061 - 1.203                     |
| CHF severity conditions: Arrhythmia                                       | 0.989        | 0.967 - 1.012                     |
| CHF severity conditions: Cerebrovascular disease                          | 1.035        | 0.937 - 1.143                     |
| CHF severity conditions: Hypertension                                     | 0.937        | 0.857 - 1.026                     |
| CHF severity conditions: Dementia                                         | 1.033        | 0.96 - 1.111                      |
| CHF severity conditions: Acute renal failure                              | 1.246        | 1.208 - 1.286                     |
| CHF severity conditions: Chronic renal failure                            | 1.169        | 1.101 - 1.241                     |
| CHF severity conditions: Diabetic                                         | 1.017        | 0.96 - 1.075                      |
| CHF severity conditions: Non-metastatic cancer                            | 1.109        | 1.126 - 1.187                     |
| CHF severity conditions: Metastatic cancer                                | 1.376        | 1.226 - 1.545                     |
| CHF severity conditions: Moderate/severe liver disease                    | 1.402        | 1.372 - 1.576                     |
| History of AMI in previous 5 years                                       | 1.023        | 0.971 - 1.079                     |
| History of CHF or angina in previous 5 years                              | 1.141        | 1.096 - 1.188                     |
| History of implantable cardio defribulator in previous 5 years            | 1.038        | 0.965 - 1.054                     |
| History of permanent pacemaker in previous 3 years                        | 1.128        | 0.83 - 1.534                      |
| Charlson comorbidity in previous 5 years: Myocardial infarction           | 1.063        | 1.011 - 1.118                     |
| Charlson comorbidity in previous 5 years: CHF                            | 1.197        | 1.15 - 1.246                      |
| Charlson comorbidity in previous 5 years: Peripheral vascular disease     | 1.123        | 1.081 - 1.167                     |
| Charlson comorbidity in previous 5 years: Cerebrovascular disease         | 1.082        | 1.04 - 1.127                      |
| Charlson comorbidity in previous 5 years: Dementia                        | 1.096        | 1.028 - 1.169                     |
| Charlson comorbidity in previous 5 years: COPD                            | 1.256        | 1.22 - 1.293                      |
| Charlson comorbidity in previous 5 years: Connective tissue/rheumatic disease | 1.249    | 1.154 - 1.352                     |
| Charlson comorbidity in previous 5 years: Peptic ulcer disease            | 1.076        | 1.019 - 1.136                     |
| Charlson comorbidity in previous 5 years: Marrow liver disease            | 1.327        | 1.227 - 1.444                     |
| Charlson comorbidity in previous 5 years: Diabetes without complications   | 1.057        | 1.012 - 1.105                     |
| Charlson comorbidity in previous 5 years: Diabetes with complications     | 1.162        | 1.122 - 1.203                     |
| Charlson comorbidity in previous 5 years: Hemiplegia or paraplegia        | 1.047        | 0.947 - 1.159                     |
| Charlson comorbidity in previous 5 years: Renal disease                   | 1.223        | 1.185 - 1.262                     |
| Charlson comorbidity in previous 5 years: Primary cancer                  | 1.082        | 1.039 - 1.136                     |
| Charlson comorbidity in previous 5 years: Moderate or severe liver disease | 1.148        | 1.139 - 1.178                     |
| Charlson comorbidity in previous 5 years: Metastatic cancer               | 1.179        | 1.108 - 1.287                     |
| Charlson comorbidity in previous 5 years: HIV/AIDS                        | 1.717        | 1.096 - 2.689                     |
| Year of discharge: 2006 (ref=2005)                                        | 0.981        | 0.93 - 1.034                      |
| Year of discharge: 2007                                                    | 0.973        | 0.921 - 1.027                     |
| Year of discharge: 2008                                                    | 0.941        | 0.89 - 0.994                      |
| Year of discharge: 2009                                                    | 1.013        | 0.958 - 1.071                     |
| Year of discharge: 2010                                                    | 1.01          | 0.951 - 1.067                     |
| Year of discharge: 2011                                                    | 1.008        | 0.953 - 1.066                     |
| Year of discharge: 2012                                                    | 1.013        | 0.958 - 1.072                     |
| Year of discharge: 2013                                                    | 1.024        | 0.969 - 1.081                     |
| Year of discharge: 2014                                                    | 0.848        | 0.801 - 0.898                     |
| Year of discharge: 2015                                                    | 0.952        | 0.84 - 1.047                      |
| Year of discharge: 2016                                                    | 0.964        | 0.913 - 1.017                     |
| Year of discharge: 2017                                                    | 0.97          | 0.92 - 1.023                      |
| Year of discharge: 2018                                                    | 0.941        | 0.891 - 0.992                     |
| Year of discharge: 2019                                                    | 0.934        | 0.881 - 0.99                     |
### Congestive Heart Failure

| Parameter                                                                 | Hazard Ratio | 95% Hazard Ratio Confidence Limits |
|---------------------------------------------------------------------------|--------------|-----------------------------------|
| Office visit (PC or relevant specialist) within 7 days after discharge    | 1            | 0.97 - 1.03                       |
| Females: 46 - 64 (ref= females 20 - 45)                                   | 1.236        | 0.969 - 1.575                     |
| Females: 65 - 74                                                          | 1.406        | 1.109 - 1.784                     |
| Females: 75 - 84                                                          | 1.62         | 1.381 - 1.949                     |
| Females: 85+                                                              | 1.951        | 1.543 - 2.469                     |
| Males: 20 - 45                                                            | 1.078        | 0.808 - 1.439                     |
| Males: 46 - 64                                                            | 1.213        | 0.956 - 1.538                     |
| Males: 65 - 74                                                            | 1.406        | 1.182 - 1.894                     |
| Males: 75 - 84                                                            | 1.611        | 1.374 - 2.038                     |
| Males: 85+                                                                | 1.925        | 1.52 - 2.438                      |
| Income quintile: 1 (ref=income quintile 5)                                | 1.119        | 1.065 - 1.176                     |
| Income quintile: 2                                                        | 1.062        | 1.01 - 1.117                      |
| Income quintile: 3                                                        | 1.033        | 0.981 - 1.089                     |
| Income quintile: 4                                                        | 1            | 0.947 - 1.055                     |
| Income quintile: Missing                                                  | 1.078        | 0.835 - 1.302                     |
| Urban (RIO < 10) (ref=rural)                                              | 1.016        | 0.978 - 1.055                     |
| RIO (missing)                                                             | 1.042        | 0.906 - 1.199                     |
| Ambulatory visit to a comprehensive PC physician in the past year         | 1.105        | 1.039 - 1.175                     |
| Usual provider of care: FHT (ref=no usual provider of care)               | 0.45         | 0.398 - 0.511                     |
| Usual provider of care: non-FHT (ref=no usual provider of care)           | 0.452        | 0.4 - 0.511                       |
| Specialty of discharging physician: Cardiologist (ref=GP/FP)              | 0.878        | 0.837 - 0.92                       |
| Specialty of discharging physician: Other                                | 0.841        | 0.787 - 0.898                     |
| CHF severity conditions: Ischemic heart disease                           | 1.117        | 1.077 - 1.159                     |
| CHF severity conditions: Other cardiovascular disease                     | 1.141        | 1.098 - 1.186                     |
| CHF severity conditions: Shock                                            | 1.211        | 1.03 - 1.45                       |
| CHF severity conditions: Peripheral vascular disease                      | 1.052        | 0.957 - 1.155                     |
| CHF severity conditions: Arrhythmia                                       | 0.982        | 0.95 - 1.016                      |
| CHF severity conditions: Cerebrovascular disease                          | 0.953        | 0.822 - 1.105                     |
| CHF severity conditions: Hypertension                                     | 0.928        | 0.897 - 0.961                     |
| CHF severity conditions: COPD                                             | 0.945        | 0.902 - 0.991                     |
| CHF severity conditions: Dementia                                         | 0.926        | 0.828 - 1.036                     |
| CHF severity conditions: Acute renal failure                              | 1.282        | 1.226 - 1.341                     |
| CHF severity conditions: Chronic renal failure                            | 1.128        | 1.034 - 1.23                      |
| CHF severity conditions: Diabetes                                        | 1.091        | 1.041 - 1.142                     |
| CHF severity conditions: Non-metastatic cancer                            | 1.079        | 0.983 - 1.186                     |
| CHF severity conditions: Metastatic cancer                                | 1.145        | 0.937 - 1.398                     |
| CHF severity conditions: Moderate/severe liver disease                    | 0.79         | 0.553 - 1.129                     |
| History of AMI in previous 5 years                                       | 1.138        | 1.055 - 1.227                     |
| History of CHF or angina in previous 5 years                              | 1.159        | 1.092 - 1.23                      |
| History of implantable cardiac defibrillator in previous 3 years          | 1.026        | 0.964 - 1.092                     |
| History of permanent pacemaker in previous 3 years                        | 1.167        | 0.77 - 1.77                       |
| Charlson comorbidity in previous 5 years: Myocardial infarction           | 1.092        | 1.016 - 1.175                     |
| Charlson comorbidity in previous 5 years: CHF                            | 1.329        | 1.254 - 1.409                     |
| Charlson comorbidity in previous 5 years: Peripheral vascular disease     | 1.142        | 1.081 - 1.207                     |
| Charlson comorbidity in previous 5 years: Cerebrovascular disease         | 1.11         | 1.048 - 1.176                     |
| Charlson comorbidity in previous 5 years: Dementia                        | 0.943        | 0.854 - 1.041                     |
| Charlson comorbidity in previous 5 years: COPD                            | 1.113        | 1.066 - 1.163                     |
| Charlson comorbidity in previous 5 years: Connective tissue/rheumatic disease | 0.95 | 0.835 - 1.082 |
| Charlson comorbidity in previous 5 years: Peptic ulcer disease           | 1.006        | 0.927 - 1.092                     |
| Charlson comorbidity in previous 5 years: Mld liver disease               | 1.211        | 1.065 - 1.377                     |
| Charlson comorbidity in previous 5 years: Diabetes without complications  | 1.061        | 0.995 - 1.123                     |
| Charlson comorbidity in previous 5 years: Diabetes with complications     | 1.139        | 1.082 - 1.199                     |
| Charlson comorbidity in previous 5 years: Hemiplegia or paraplegia        | 0.949        | 0.815 - 1.104                     |
| Charlson comorbidity in previous 5 years: Renal disease                   | 1.121        | 1.071 - 1.173                     |
| Charlson comorbidity in previous 5 years: Primary cancer                  | 0.97         | 0.912 - 1.022                     |
| Charlson comorbidity in previous 5 years: Moderate or severe liver disease| 1.088        | 0.912 - 1.298                     |
| Charlson comorbidity in previous 5 years: Metastatic cancer               | 0.924        | 0.797 - 1.071                     |
| Charlson comorbidity in previous 5 years: HIV/AIDS                        | 2            | 1.068 - 3.746                     |
| Year of discharge: 2006 (ref=2005)                                        | 0.922        | 0.855 - 0.994                     |
| Year of discharge: 2007                                                   | 0.91         | 0.842 - 0.984                     |
| Year of discharge: 2008                                                   | 0.879        | 0.812 - 0.951                     |
| Year of discharge: 2009                                                   | 0.924        | 0.852 - 1.001                     |
| Year of discharge: 2010                                                   | 0.937        | 0.865 - 1.016                     |
| Year of discharge: 2011                                                   | 0.91         | 0.839 - 0.987                     |
| Year of discharge: 2012                                                   | 0.939        | 0.838 - 0.986                     |
| Year of discharge: 2013                                                   | 0.972        | 0.899 - 1.051                     |
| Year of discharge: 2014                                                   | 0.757        | 0.697 - 0.823                     |
| Year of discharge: 2015                                                   | 0.869        | 0.804 - 0.940                     |
| Year of discharge: 2016                                                   | 0.87         | 0.804 - 0.940                     |
| Year of discharge: 2017                                                   | 0.859        | 0.795 - 0.929                     |
| Year of discharge: 2018                                                   | 0.941        | 0.777 - 0.909                     |
| Year of discharge: 2019                                                   | 0.815        | 0.748 - 0.889                     |

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## eTable 19. Cox proportional hazards model for death within 30 days among those with COPD.

| Parameter                                                                 | Hazard Ratio | 95% Hazard Ratio Confidence Limits |
|---------------------------------------------------------------------------|--------------|----------------------------------|
| Office visit (PC or relevant specialist) within 7 days after discharge    | 1.044        | 0.95 - 1.147                     |
| Females: 46 - 64 (ref= females 20 - 45)                                   | 1.544        | 0.624 - 3.817                    |
| Females: 65 - 74                                                          | 2.007        | 1.068 - 3.637                    |
| Females: 75 - 84                                                          | 3.311        | 1.359 - 8.067                    |
| Females: 85+                                                              | 4.374        | 1.783 - 10.734                   |
| Males: 20 - 45                                                            | 1.196        | 0.322 - 4.522                    |
| Males: 46 - 64                                                            | 2.723        | 1.113 - 6.662                    |
| Males: 65 - 74                                                            | 3.649        | 1.5 - 8.878                      |
| Males 75 - 84                                                             | 3.996        | 1.644 - 9.712                    |
| Males: 85+                                                                | 5.884        | 2.411 - 14.36                    |
| Income quintile: 1 (ref=income quintile 5)                                | 1.116        | 0.951 - 1.31                      |
| Income quintile: 2                                                         | 1.134        | 0.963 - 1.335                    |
| Income quintile: 3                                                         | 1.089        | 0.92 - 1.29                      |
| Income quintile: 4                                                         | 1.087        | 0.913 - 1.294                    |
| Income quintile: Missing                                                  | 1.283        | 0.594 - 2.77                     |
| Urban (RIO < 10) (ref=rural)                                              | 0.964        | 0.858 - 1.082                    |
| RIO (missing)                                                             | 1.075        | 0.743 - 1.553                    |
| Ambulatory visit to a comprehensive PC physician in the past year          | 0.99         | 0.821 - 1.195                    |
| Usual provider of care: FHT (ref=no usual provider of care)               | 0.055        | 0.045 - 0.067                    |
| Usual provider of care: non-FHT (ref=no usual provider of care)           | 0.057        | 0.047 - 0.069                    |
| Specialty of discharging physician: GIM                                    | 0.963        | 0.853 - 1.088                    |
| Specialty of discharging physician: Other                                  | 1.008        | 0.837 - 1.214                    |
| Specialty of discharging physician: Respirologist                         | 1.075        | 0.896 - 1.29                     |
| COPD severity conditions: Ischemic heart disease                          | 0.919        | 0.78 - 1.083                     |
| COPD severity conditions: Other cardiovascular disease                    | 1.353        | 1.127 - 1.625                    |
| COPD severity conditions: Shock                                           | 0.711        | 0.231 - 2.186                    |
| COPD severity conditions: Peripheral vascular disease                     | 1.33         | 0.988 - 1.79                     |
| COPD severity conditions: Arrhythmia                                      | 1.058        | 0.921 - 1.216                    |
| COPD severity conditions: Cerebrovascular disease                         | 1.611        | 1.055 - 2.461                    |
| COPD severity conditions: Hypertension                                    | 0.803        | 0.712 - 0.906                    |
| COPD severity conditions: Dementia                                        | 1.327        | 0.996 - 1.768                    |
| COPD severity conditions: CHF                                             | 1.338        | 1.171 - 1.528                    |
| History of COPD in previous 5 years                                       | 1.049        | 0.79 - 1.393                     |
| Other chronic respiratory disease                                         | 2.201        | 1.864 - 2.6                      |
| Charlson comorbidity in previous 5 years: Myocardial infarction           | 1.222        | 1.048 - 1.425                    |
| Charlson comorbidity in previous 5 years: CHF                            | 1.168        | 1.016 - 1.343                    |
| Charlson comorbidity in previous 5 years: Peripheral vascular disease     | 0.999        | 0.826 - 1.21                     |
| Charlson comorbidity in previous 5 years: Cerebrovascular disease         | 0.956        | 0.777 - 1.177                    |
| Charlson comorbidity in previous 5 years: Dementia                        | 1.625        | 1.242 - 2.127                    |
| Charlson comorbidity in previous 5 years: COPD                            | 1.22         | 0.921 - 1.615                    |
| Charlson comorbidity in previous 5 years: Connective tissue/thematic disease | 0.623 | 0.386 - 1.007                |
| Charlson comorbidity in previous 5 years: Peptic ulcer disease           | 0.776        | 0.57 - 1.057                     |
| Charlson comorbidity in previous 5 years: Mild liver disease             | 1.089        | 0.709 - 1.673                    |
| Charlson comorbidity in previous 5 years: Diabetes without complications  | 0.788        | 0.648 - 0.959                    |
| Charlson comorbidity in previous 5 years: Diabetes with complications     | 0.921        | 0.796 - 1.066                    |
| Charlson comorbidity in previous 5 years: Hemiplegia or paraplegia       | 1.096        | 0.669 - 1.797                    |
| Charlson comorbidity in previous 5 years: Renal disease                  | 1.267        | 1.062 - 1.51                     |
| Charlson comorbidity in previous 5 years: Primary cancer                 | 1.914        | 1.67 - 2.193                     |
| Charlson comorbidity in previous 5 years: Moderate or severe liver disease | 1.235      | 0.745 - 2.045                    |
| Charlson comorbidity in previous 5 years: Metastatic cancer              | 3.793        | 4.896 - 6.856                    |
| Charlson comorbidity in previous 5 years: HIV/ADIS                        | 1.346        | 0.888 - 2.058                    |
| Year of discharge: 2006 (ref=2005)                                       | 0.85         | 0.676 - 1.099                    |
| Year of discharge: 2007                                                   | 1.015        | 0.797 - 1.293                    |
| Year of discharge: 2008                                                   | 1.011        | 0.793 - 1.289                    |
| Year of discharge: 2009                                                   | 1.157        | 0.908 - 1.475                    |
| Year of discharge: 2010                                                   | 1.101        | 0.865 - 1.401                    |
| Year of discharge: 2011                                                   | 0.981        | 0.762 - 1.264                    |
| Year of discharge: 2012                                                   | 1.167        | 0.916 - 1.488                    |
| Year of discharge: 2013                                                   | 0.964        | 0.745 - 1.248                    |
| Year of discharge: 2014                                                   | 0.409        | 0.327 - 0.512                    |
| Year of discharge: 2015                                                   | 1.298        | 1.028 - 1.64                     |
| Year of discharge: 2016                                                   | 1.191        | 0.942 - 1.505                    |
| Year of discharge: 2017                                                   | 1.139        | 0.898 - 1.445                    |
| Year of discharge: 2018                                                   | 1.164        | 0.913 - 1.483                    |
| Year of discharge: 2019                                                   | 1.034        | 0.774 - 1.381                    |
| Parameter                                                                 | Hazard Ratio | 95% Hazard Ratio Confidence Limits |
|---------------------------------------------------------------------------|--------------|----------------------------------|
| Office visit (PC or relevant specialist) within 7 days after discharge    | 0.965        | 0.929 - 1.003                    |
| Females: 46 - 64 (ref = females 20 - 45)                                  | 0.969        | 0.758 - 1.293                    |
| Females: 65 - 74                                                          | 1.156        | 0.906 - 1.476                    |
| Females: 75 - 84                                                          | 1.21         | 0.949 - 1.544                    |
| Females: 85+                                                              | 1.231        | 0.959 - 1.58                     |
| Males: 20 - 45                                                            | 0.99         | 0.695 - 1.409                    |
| Males: 46 - 64                                                            | 1.168        | 0.914 - 1.492                    |
| Males: 65 - 74                                                            | 1.279        | 1.003 - 1.631                    |
| Males 75 - 84                                                             | 1.355        | 1.063 - 1.727                    |
| Males: 85+                                                                | 1.355        | 1.057 - 1.737                    |
| Income quintile: 1 (ref = income quintile 5)                              | 1.098        | 1.029 - 1.17                     |
| income quintile: 2                                                        | 1.034        | 0.968 - 1.106                    |
| income quintile: 3                                                        | 1.103        | 0.961 - 1.103                    |
| income quintile: 4                                                        | 1.023        | 0.953 - 1.099                    |
| income quintile: Missing                                                  | 1.037        | 0.755 - 1.423                    |
| Urban (RIO < 10) (ref = rural)                                             | 1.006        | 0.961 - 1.053                    |
| RIO (missing)                                                             | 1.096        | 0.938 - 1.28                     |
| Ambulatory visit to a comprehensive PC physician in the past year         | 1.04         | 0.964 - 1.123                    |
| Usual provider of care: FHT (ref = no usual provider of care)             | 0.314        | 0.269 - 0.367                    |
| Usual provider of care: non-FHT (ref = no usual provider of care)         | 0.314        | 0.269 - 0.366                    |
| Specialty of discharging physician: GIM                                    | 1.048        | 1.017 - 1.072                    |
| Specialty of discharging physician: Other                                 | 0.994        | 0.921 - 1.072                    |
| Specialty of discharging physician: Respirologist                        | 1.088        | 1.013 - 1.169                    |
| COPD severity conditions: Ischemic heart disease                         | 1.10         | 1.005 - 1.139                    |
| COPD severity conditions: Other cardiovascular disease                    | 1.134        | 1.047 - 1.227                    |
| COPD severity conditions: Shock                                          | 1.043        | 0.653 - 1.667                    |
| COPD severity conditions: Peripheral vascular disease                     | 1.161        | 1.02 - 1.321                     |
| COPD severity conditions: Arrhythmia                                     | 1.157        | 1.093 - 1.224                    |
| COPD severity conditions: Cerebrovascular disease                        | 0.997        | 0.816 - 1.219                    |
| COPD severity conditions: Hypertension                                   | 0.918        | 0.876 - 0.962                    |
| COPD severity conditions: Dementia                                       | 0.995        | 0.862 - 1.149                    |
| COPD severity conditions: CHF                                            | 1.13         | 1.164 - 1.3                   |
| History of COPD in previous 5 years                                      | 1.229        | 1.093 - 1.383                    |
| Other chronic respiratory disease                                        | 1.4          | 1.29 - 1.52                     |
| Charlson comorbidity in previous 5 years: Myocardial infarction           | 1.117        | 1.05 - 1.188                    |
| Charlson comorbidity in previous 5 years: CHF                            | 1.289        | 1.22 - 1.361                    |
| Charlson comorbidity in previous 5 years: Peripheral vascular disease    | 1.064        | 0.986 - 1.147                   |
| Charlson comorbidity in previous 5 years: Cerebrovascular disease        | 1.104        | 1.016 - 1.199                   |
| Charlson comorbidity in previous 5 years: Dementia                       | 1.24         | 1.095 - 1.404                   |
| Charlson comorbidity in previous 5 years: COPD                           | 1.15         | 1.023 - 1.293                   |
| Charlson comorbidity in previous 5 years: Connective tissue/rheumatic disease | 1.188     | 1.033 - 1.367                   |
| Charlson comorbidity in previous 5 years: Peptic ulcer disease           | 1.031        | 0.926 - 1.157                   |
| Charlson comorbidity in previous 5 years: Mild liver disease             | 1.289        | 1.109 - 1.498                   |
| Charlson comorbidity in previous 5 years: Diabetes without complications  | 1.034        | 0.964 - 1.109                   |
| Charlson comorbidity in previous 5 years: Diabetes with complications     | 1.109        | 1.047 - 1.175                   |
| Charlson comorbidity in previous 5 years: Hemiplegia or paraplegia       | 1.181        | 0.979 - 1.424                   |
| Charlson comorbidity in previous 5 years: Renal disease                  | 1.315        | 1.225 - 1.412                   |
| Charlson comorbidity in previous 5 years: Primary cancer                 | 1.188        | 1.115 - 1.265                   |
| Charlson comorbidity in previous 5 years: Moderate or severe liver disease | 1.382   | 1.131 - 1.688                   |
| Charlson comorbidity in previous 5 years: Metastatic cancer              | 1.89         | 1.702 - 2.099                   |
| Charlson comorbidity in previous 5 years: HIV/AIDS                       | 1.557        | 0.861 - 2.817                   |
| Year of discharge: 2006 (ref = 2005)                                      | 0.905        | 0.83 - 0.987                    |
| Year of discharge: 2007                                                   | 0.936        | 0.852 - 1.026                   |
| Year of discharge: 2008                                                   | 0.923        | 0.841 - 1.014                   |
| Year of discharge: 2009                                                   | 0.893        | 0.81 - 0.985                    |
| Year of discharge: 2010                                                   | 0.992        | 0.902 - 1.09                    |
| Year of discharge: 2011                                                   | 0.891        | 0.806 - 0.984                   |
| Year of discharge: 2012                                                   | 1.021        | 0.929 - 1.122                   |
| Year of discharge: 2013                                                   | 0.943        | 0.855 - 1.04                     |
| Year of discharge: 2014                                                   | 0.8          | 0.723 - 0.885                   |
| Year of discharge: 2015                                                   | 0.977        | 0.888 - 1.075                   |
| Year of discharge: 2016                                                   | 0.921        | 0.837 - 1.014                   |
| Year of discharge: 2017                                                   | 0.897        | 0.815 - 0.987                   |
| Year of discharge: 2018                                                   | 0.965        | 0.876 - 1.063                   |
| Year of discharge: 2019                                                   | 1.029        | 0.92 - 1.149                    |
| Parameter                                                                 | Hazard Ratio | 95% Hazard Ratio Confidence Limits |
|---------------------------------------------------------------------------|--------------|-----------------------------------|
| Office visit (PC or relevant specialist) within 7 days after discharge    | 0.943        | 0.89 - 1.01                       |
| Females: 46 - 64 (ref= females 20 - 45)                                   | 0.982        | 0.88 - 1.11                       |
| Females: 65 - 74                                                          | 1.16         | 1.02 - 1.33                       |
| Females: 75 - 84                                                          | 1.124        | 0.785 - 1.61                      |
| Females: 85+                                                              | 1.028        | 0.709 - 1.49                      |
| Males: 20 - 45                                                            | 1.062        | 0.646 - 1.74                      |
| Males: 46 - 64                                                            | 1.235        | 0.861 - 1.77                      |
| Males: 65 - 74                                                            | 1.384        | 0.967 - 1.98                      |
| Males: 75 - 84                                                            | 1.364        | 0.954 - 1.951                     |
| Males: 85+                                                                | 1.276        | 0.883 - 1.843                     |
| Income quintile: 1 (ref=income quintile 5)                                | 1.132        | 1.024 - 1.25                      |
| Income quintile: 2                                                        | 1.109        | 0.99 - 1.23                       |
| Income quintile: 3                                                        | 1.035        | 0.926 - 1.15                      |
| Income quintile: Missing                                                  | 1.695        | 1.149 - 2.501                     |
| Urban (RIO < 10) (ref=rural)                                              | 1.075        | 1.003 - 1.152                     |
| RIO (missing)                                                             | 1.036        | 0.821 - 1.307                     |
| Ambulatory visit to a comprehensive PC physician in the past year         | 1.067        | 0.949 - 1.19                      |
| Usual provider of care: FHT (ref=no usual provider of care)               | 0.401        | 0.312 - 0.517                     |
| Usual provider of care: non-FHT (ref=no usual provider of care)           | 0.391        | 0.304 - 0.501                     |
| Specialty of discharging physician: GIM                                   | 1.076        | 1.001 - 1.145                     |
| Specialty of discharging physician: Other                                 | 0.857        | 0.757 - 0.971                     |
| Specialty of discharging physician: Respiriologist                        | 1.208        | 1.09 - 1.33                       |
| COPD severity conditions: Ischemic heart disease                         | 0.936        | 0.845 - 1.037                     |
| COPD severity conditions: Other cardiovascular disease                    | 0.939        | 0.821 - 1.074                     |
| COPD severity conditions: Shock                                          | 1.02         | 0.461 - 2.259                     |
| COPD severity conditions: Peripheral vascular disease                     | 0.935        | 0.747 - 1.17                      |
| COPD severity conditions: Arrhythmia                                      | 1.029        | 0.937 - 1.129                     |
| COPD severity conditions: Cerebrovascular disease                        | 0.973        | 0.706 - 1.34                      |
| COPD severity conditions: Hypertension                                    | 0.932        | 0.868 - 1.002                     |
| COPD severity conditions: Dementia                                       | 0.953        | 0.752 - 1.208                     |
| COPD severity conditions: CHF                                             | 0.961        | 0.876 - 1.051                     |
| History of COPD in previous 5 years                                       | 1.3          | 1.083 - 1.561                     |
| Other chronic respiratory disease                                         | 1.098        | 0.957 - 1.261                     |
| Charlson comorbidity in previous 5 years Myocardial infarction            | 0.988        | 0.895 - 1.092                     |
| Charlson comorbidity in previous 5 years CHF                             | 1.183        | 1.086 - 1.287                     |
| Charlson comorbidity in previous 5 years Peripheral vascular disease      | 0.969        | 0.857 - 1.096                     |
| Charlson comorbidity in previous 5 years Cerebrovascular disease          | 1.012        | 0.884 - 1.158                     |
| Charlson comorbidity in previous 5 years Dementia                        | 1.035        | 0.835 - 1.283                     |
| Charlson comorbidity in previous 5 years COPD                            | 1.472        | 1.227 - 1.766                     |
| Charlson comorbidity in previous 5 years Connective tissue/rheumatic disease | 1.286 | 1.039 - 1.592                     |
| Charlson comorbidity in previous 5 years Peptic ulcer disease             | 0.925        | 0.775 - 1.104                     |
| Charlson comorbidity in previous 5 years Mild liver disease               | 1.149        | 0.913 - 1.446                     |
| Charlson comorbidity in previous 5 years Diabetes without complications   | 0.996        | 0.896 - 1.108                     |
| Charlson comorbidity in previous 5 years Diabetes with complications      | 0.94         | 0.855 - 1.034                     |
| Charlson comorbidity in previous 5 years Hemiplegia or paraplegia         | 1.207        | 0.896 - 1.627                     |
| Charlson comorbidity in previous 5 years Renal disease                    | 1.101        | 0.977 - 1.242                     |
| Charlson comorbidity in previous 5 years Primary cancer                   | 1.023        | 0.925 - 1.132                     |
| Charlson comorbidity in previous 5 years Moderate or severe liver disease | 0.72         | 0.473 - 1.096                     |
| Charlson comorbidity in previous 5 years Metastatic cancer                | 1.182        | 0.981 - 1.424                     |
| Charlson comorbidity in previous 5 years HIV/AIDS                         | 1.184        | 0.472 - 2.971                     |
| Year of discharge: 2006 (ref=2005)                                        | 0.771        | 0.681 - 0.873                     |
| Year of discharge: 2007                                                   | 0.807        | 0.705 - 0.925                     |
| Year of discharge: 2008                                                   | 0.746        | 0.649 - 0.858                     |
| Year of discharge: 2009                                                   | 0.731        | 0.63 - 0.848                      |
| Year of discharge: 2010                                                   | 0.865        | 0.753 - 0.994                     |
| Year of discharge: 2011                                                   | 0.819        | 0.708 - 0.947                     |
| Year of discharge: 2012                                                   | 0.792        | 0.687 - 0.915                     |
| Year of discharge: 2013                                                   | 0.753        | 0.649 - 0.873                     |
| Year of discharge: 2014                                                   | 0.74         | 0.638 - 0.858                     |
| Year of discharge: 2015                                                   | 0.803        | 0.697 - 0.927                     |
| Year of discharge: 2016                                                   | 0.747        | 0.649 - 0.861                     |
| Year of discharge: 2017                                                   | 0.817        | 0.69 - 0.929                      |
| Year of discharge: 2018                                                   | 0.812        | 0.703 - 0.937                     |
| Year of discharge: 2019                                                   | 0.83         | 0.702 - 0.982                     |
### Cox Proportional Hazards Model for Death Within 90 Days Among Those with COPD

| Parameter                                                                 | Hazard Ratio | 95% Hazard Ratio Confidence Limits |
|----------------------------------------------------------------------------|--------------|----------------------------------|
| **Office visit (PC or relevant specialist) within 7 days after discharge** | 0.956        | 0.906 - 1.008                    |
| **Females: 46 - 64 (ref= females 20 - 45)**                              | 2.249        | 1.234 - 4.099                    |
| **Females: 65 - 74**                                                     | 3.414        | 1.882 - 6.193                    |
| **Females: 75 - 84**                                                     | 4.721        | 2.611 - 8.571                    |
| **Females: 85+**                                                         | 5.750        | 3.161 - 10.457                   |
| **Males: 20 - 45**                                                       | 1.473        | 0.659 - 3.294                    |
| **Males: 46 - 64**                                                       | 3.454        | 1.899 - 6.267                    |
| **Males: 65 - 74**                                                       | 4.834        | 2.669 - 8.755                    |
| **Males 75 - 84**                                                        | 5.666        | 3.13 - 10.255                    |
| **Males: 85+**                                                           | 7.580        | 4.178 - 13.753                   |
| **Income quintile: 1 (ref=income quintile 5)**                           | 1.101        | 1.008 - 1.203                    |
| **Income quintile: 2**                                                   | 1.026        | 0.934 - 1.126                    |
| **Income quintile: 3**                                                   | 1.02        | 0.926 - 1.125                    |
| **Income quintile: Missing**                                             | 0.902        | 0.565 - 1.441                    |
| **Urban (RIO < 10) (ref=rural)**                                         | 0.981        | 0.92 - 1.046                     |
| **RIO (missing)**                                                       | 1.026        | 0.816 - 1.291                    |
| **Ambulatory visit to a comprehensive PC physician in the past year**    | 1.008        | 0.906 - 1.121                    |
| **Usual provider of care: FHT (ref=no usual provider of care)**           | 0.056        | 0.049 - 0.065                    |
| **Usual provider of care: non-FHT (ref=no usual provider of care)**       | 0.058        | 0.051 - 0.067                    |
| **Specialty of discharging physician: GIM**                               | 0.969        | 0.906 - 1.037                    |
| **Specialty of discharging physician: Other**                            | 1.109        | 1.004 - 1.224                    |
| **Specialty of discharging physician: Respirologist**                     | 0.996        | 0.898 - 1.105                    |
| **COPD severity conditions: Ischemic heart disease**                     | 0.939        | 0.859 - 1.026                    |
| **COPD severity conditions: Other cardiovascular disease**               | 1.404        | 1.267 - 1.557                    |
| **COPD severity conditions: Shock**                                      | 0.662        | 0.318 - 1.378                    |
| **COPD severity conditions: Peripheral vascular disease**                | 1.336        | 1.121 - 1.592                    |
| **COPD severity conditions: Arhythmia**                                  | 1.042        | 0.962 - 1.128                    |
| **COPD severity conditions: Cerebrovascular disease**                    | 1.232        | 0.943 - 1.611                    |
| **COPD severity conditions: Hypertension**                               | 0.788        | 0.736 - 0.843                    |
| **COPD severity conditions: Dementia**                                   | 1.475        | 1.257 - 1.731                    |
| **COPD severity conditions: CHF**                                        | 1.333        | 1.238 - 1.437                    |
| **History of COPD in previous 5 years**                                  | 1.067        | 0.91 - 1.252                     |
| **Other chronic respiratory disease**                                     | 1.844        | 1.665 - 2.042                    |
| **Charlson comorbidity in previous 5 years: Myocardial infarction**      | 1.132        | 1.039 - 1.232                    |
| **Charlson comorbidity in previous 5 years: CHF**                        | 1.276        | 1.183 - 1.377                    |
| **Charlson comorbidity in previous 5 years: Peripheral vascular disease**| 1.021        | 0.918 - 1.136                    |
| **Charlson comorbidity in previous 5 years: Cerebrovascular disease**    | 0.994        | 0.885 - 1.116                    |
| **Charlson comorbidity in previous 5 years: Dementia**                   | 1.391        | 1.198 - 1.623                    |
| **Charlson comorbidity in previous 5 years: COPD**                       | 1.174        | 1.002 - 1.376                    |
| **Charlson comorbidity in previous 5 years: Connective tissue/thrombosis disease**| 0.798 | 0.629 - 1.012 | |
| **Charlson comorbidity in previous 5 years: Peptic ulcer disease**       | 1.005        | 0.859 - 1.176                    |
| **Charlson comorbidity in previous 5 years: Mild liver disease**         | 1.268        | 1.016 - 1.583                    |
| **Charlson comorbidity in previous 5 years: Diabetes without complications**| 0.922        | 0.83 - 1.024                     |
| **Charlson comorbidity in previous 5 years: Diabetes with complications**| 0.994        | 0.916 - 1.077                    |
| **Charlson comorbidity in previous 5 years: Hemiplegia or paraplegia**   | 1.204        | 0.928 - 1.562                    |
| **Charlson comorbidity in previous 5 years: Renal disease**              | 1.294        | 1.175 - 1.424                    |
| **Charlson comorbidity in previous 5 years: Primary cancer**             | 2.018        | 1.871 - 2.178                    |
| **Charlson comorbidity in previous 5 years: Moderate or severe liver disease**| 1.63 | 1.245 - 2.134 | |
| **Charlson comorbidity in previous 5 years: Metastatic cancer**          | 5.654        | 5.121 - 6.242                    |
| **Charlson comorbidity in previous 5 years: HIV/AIDS**                   | 0.564        | 0.115 - 2.756                    |
| **Year of discharge: 2006 (ref=2005)**                                   | 0.909        | 0.802 - 1.03                     |
| **Year of discharge: 2007**                                              | 1.01         | 0.884 - 1.153                    |
| **Year of discharge: 2008**                                              | 0.972        | 0.849 - 1.112                    |
| **Year of discharge: 2009**                                              | 1.028        | 0.896 - 1.178                    |
| **Year of discharge: 2010**                                              | 1.108        | 0.971 - 1.265                    |
| **Year of discharge: 2011**                                              | 1.038        | 0.903 - 1.193                    |
| **Year of discharge: 2012**                                              | 1.131        | 0.988 - 1.293                    |
| **Year of discharge: 2013**                                              | 1.038        | 0.903 - 1.194                    |
| **Year of discharge: 2014**                                              | 0.413        | 0.359 - 0.476                    |
| **Year of discharge: 2015**                                              | 1.194        | 1.048 - 1.362                    |
| **Year of discharge: 2016**                                              | 1.093        | 0.957 - 1.248                    |
| **Year of discharge: 2017**                                              | 1.077        | 0.944 - 1.23                     |
| **Year of discharge: 2018**                                              | 0.948        | 0.821 - 1.094                    |
| **Year of discharge: 2019**                                              | 0.947        | 0.803 - 1.115                    |
| Parameter                                                                 | Hazard Ratio | 95% Hazard Ratio Confidence Limits |
|---------------------------------------------------------------------------|--------------|-----------------------------------|
| Office visit (PC or relevant specialist) within 7 days after discharge     | 0.951        | 0.917 0.976                       |
| Females: 46 - 64 (ref= females 20 - 45)                                   | 1.002        | 0.989 1.022                       |
| Females: 65 - 74                                                          | 1.152        | 0.979 1.358                       |
| Females: 75 - 84                                                          | 1.259        | 1.069 1.483                       |
| Females: 85+                                                              | 1.31         | 1.107 1.55                        |
| Males: 20 - 45                                                            | 1.045        | 0.826 1.322                       |
| Males: 46 - 64                                                            | 1.18         | 1 1.391                           |
| Males: 65 - 74                                                            | 1.296        | 1.1 1.527                         |
| Males 75 - 84                                                             | 1.37         | 1.164 1.613                       |
| Males: 85+                                                                | 1.478        | 1.251 1.746                       |
| Income quintile: 1 (ref=income quintile 5)                                | 1.093        | 1.047 1.142                       |
| Income quintile: 2                                                        | 1.042        | 0.996 1.089                       |
| Income quintile: 3                                                        | 1.015        | 0.969 1.063                       |
| Income quintile: 4                                                        | 1.01         | 0.962 1.059                       |
| Income quintile: Missing                                                  | 1.045        | 0.851 1.284                       |
| Urban (RIO < 10) (ref=rural)                                              | 1.02         | 0.989 1.052                       |
| RIO (missing)                                                             | 1.154        | 1.04 1.28                          |
| Ambulatory visit to a comprehensive PC physician in the past year         | 1.084        | 1.029 1.142                       |
| Usual provider of care: FHT (ref=no usual provider of care)               | 0.325        | 0.29 0.364                       |
| Usual provider of care: non-FHT (ref=no usual provider of care)           | 0.325        | 0.291 0.364                       |
| Specialty of discharging physician: GIM                                   | 1.018        | 0.986 1.051                       |
| Specialty of discharging physician: Other                                 | 0.977        | 0.928 1.029                       |
| Specialty of discharging physician: Respirologist                        | 1.03         | 0.981 1.082                       |
| COPD severity conditions: Ischemic heart disease                         | 1.028        | 0.984 1.074                       |
| COPD severity conditions: Other cardiovascular disease                    | 1.122        | 1.061 1.186                       |
| COPD severity conditions: Shock                                          | 1.015        | 0.732 1.408                       |
| COPD severity conditions: Peripheral vascular disease                     | 1.134        | 1.035 1.243                       |
| COPD severity conditions: Arrhythmia                                      | 1.131        | 1.088 1.176                       |
| COPD severity conditions: Cerebrovascular disease                        | 1.03         | 0.897 1.182                       |
| COPD severity conditions: Hypertension                                    | 0.915        | 0.886 0.944                       |
| COPD severity conditions: Dementia                                       | 1.09         | 0.991 1.198                       |
| COPD severity conditions: CHF                                             | 1.214        | 1.169 1.261                       |
| History of COPD in previous 5 years                                      | 1.226        | 1.131 1.33                        |
| Other chronic respiratory disease                                         | 1.337        | 1.262 1.417                       |
| Charlson comorbidity in previous 5 years: Myocardial infarction          | 1.103        | 1.057 1.151                       |
| Charlson comorbidity in previous 5 years: CHF                            | 1.308        | 1.26 1.357                        |
| Charlson comorbidity in previous 5 years: Peripheral vascular disease     | 1.095        | 1.041 1.153                       |
| Charlson comorbidity in previous 5 years: Cerebrovascular disease         | 1.119        | 1.057 1.183                       |
| Charlson comorbidity in previous 5 years: Dementia                       | 1.166        | 1.069 1.272                       |
| Charlson comorbidity in previous 5 years: COPD                           | 1.194        | 1.102 1.295                       |
| Charlson comorbidity in previous 5 years: Connective tissue/rheumatic disease | 1.164 | 1.056 1.282 |
| Charlson comorbidity in previous 5 years: Peptic ulcer disease           | 1.157        | 0.98 1.339                       |
| Charlson comorbidity in previous 5 years: Mild liver disease             | 1.264        | 1.139 1.402                       |
| Charlson comorbidity in previous 5 years: Diabetes without complications  | 1.053        | 1.004 1.104                       |
| Charlson comorbidity in previous 5 years: Diabetes with complications     | 1.165        | 1.12 1.211                       |
| Charlson comorbidity in previous 5 years: Hemiplegia or paraplegia       | 1.156        | 1.014 1.319                       |
| Charlson comorbidity in previous 5 years: Renal disease                  | 1.242        | 1.182 1.305                       |
| Charlson comorbidity in previous 5 years: Primary cancer                 | 1.265        | 1.212 1.32                        |
| Charlson comorbidity in previous 5 years: Moderate or severe liver disease | 1.432 | 1.245 1.648 |
| Charlson comorbidity in previous 5 years: Metastatic cancer              | 2.004        | 1.864 2.155                       |
| Charlson comorbidity in previous 5 years: HIV/AIDS                       | 1.561        | 1.051 2.188                       |
| Year of discharge: 2006 (ref=2005)                                        | 0.884        | 0.834 0.937                       |
| Year of discharge: 2007                                                   | 0.909        | 0.854 0.968                       |
| Year of discharge: 2008                                                   | 0.897        | 0.842 0.956                       |
| Year of discharge: 2009                                                   | 0.872        | 0.817 0.931                       |
| Year of discharge: 2010                                                   | 0.954        | 0.895 1.017                       |
| Year of discharge: 2011                                                   | 0.891        | 0.833 0.952                       |
| Year of discharge: 2012                                                   | 0.948        | 0.888 1.012                       |
| Year of discharge: 2013                                                   | 0.908        | 0.85 0.971                       |
| Year of discharge: 2014                                                   | 0.812        | 0.759 0.868                       |
| Year of discharge: 2015                                                   | 0.932        | 0.874 0.995                       |
| Year of discharge: 2016                                                   | 0.906        | 0.849 0.966                       |
| Year of discharge: 2017                                                   | 0.85         | 0.797 0.908                       |
| Year of discharge: 2018                                                   | 0.8           | 0.842 0.962                       |
| Year of discharge: 2019                                                   | 0.964        | 0.893 1.04                        |
### Table 25. Cox Proportional Hazards Model for Readmission for Chronic Obstructive Pulmonary Disease (COPD) or COPD-Related Conditions (Death as Competing Risk) Within 90 d Among Individuals With COPD

| Parameter                                                                 | Hazard Ratio | 95% Hazard Ratio Confidence Limits |
|---------------------------------------------------------------------------|--------------|-----------------------------------|
| Office visit (PC or relevant specialist) within 7 days after discharge    |              |                                   |
| Females: 46 - 64 (ref= females 20 - 45)                                   | 1.142        | 0.895 - 1.466                     |
| Females: 65 - 74                                                         | 1.33         | 1.044 - 1.693                     |
| Females: 75 - 84                                                         | 1.319        | 1.036 - 1.68                      |
| Females: 85+                                                             | 1.221        | 0.951 - 1.568                     |
| Males: 20 - 45                                                           | 1.102        | 0.786 - 1.546                     |
| Males: 46 - 64                                                           | 1.379        | 1.082 - 1.758                     |
| Males: 65 - 74                                                           | 1.574        | 1.236 - 2.003                     |
| Males: 75 - 84                                                           | 1.558        | 1.225 - 1.983                     |
| Males: 85+                                                               | 1.509        | 1.179 - 1.932                     |
| Income quintile: 1 (ref=income quintile 5)                               | 1.135        | 1.061 - 1.211                     |
| Income quintile: 2                                                       | 1.117        | 1.045 - 1.194                     |
| Income quintile: 3                                                       | 1.065        | 0.993 - 1.141                     |
| Income quintile: 4                                                       | 1.06         | 0.987 - 1.139                     |
| Income quintile: Missing                                                 | 1.546        | 1.185 - 2.017                     |
| Urban (RIO < 10) (ref=rural)                                             | 1.065        | 1.018 - 1.115                     |
| RIO (missing)                                                            | 1.028        | 0.882 - 1.198                     |
| Ambulatory visit to a comprehensive PC physician in the past year        | 1.09         | 1.01 - 1.177                      |
| Usual provider of care: FHT (ref=no usual provider of care)              | 0.393        | 0.33 - 0.468                      |
| Usual provider of care: non-FHT (ref=no usual provider of care)          | 0.396        | 0.331 - 0.471                     |
| Specialty of discharging physician: GIM                                   | 1.037        | 0.99 - 1.087                      |
| Specialty of discharging physician: Other                               | 0.853        | 0.787 - 0.925                     |
| Specialty of discharging physician: Respiriologist                      | 1.153        | 1.078 - 1.233                     |
| COPD severity conditions: Ischemic heart disease                         | 0.917        | 0.857 - 0.981                     |
| COPD severity conditions: Other cardiovascular disease                   | 0.981        | 0.899 - 1.071                     |
| COPD severity conditions: Shock                                         | 1.078        | 0.668 - 1.74                      |
| COPD severity conditions: Peripheral vascular disease                    | 0.936        | 0.809 - 1.083                     |
| COPD severity conditions: Arrhythmia                                     | 0.993        | 0.934 - 1.055                     |
| COPD severity conditions: Cerebrovascular disease                        | 0.991        | 0.802 - 1.223                     |
| COPD severity conditions: Hypertension                                   | 0.93         | 0.887 - 0.975                     |
| COPD severity conditions: Dementia                                       | 0.977        | 0.839 - 1.138                     |
| COPD severity conditions: CHF                                           | 0.99         | 0.993 - 1.051                     |
| History of COPD in previous 5 years                                     | 1.32         | 1.171 - 1.487                     |
| Other chronic respiratory disease                                        | 1.086        | 0.991 - 1.19                      |
| Charlson comorbidity in previous 5 years: Myocardial infarction          | 0.988        | 0.925 - 1.055                     |
| Charlson comorbidity in previous 5 years: CHF                           | 1.127        | 1.066 - 1.192                     |
| Charlson comorbidity in previous 5 years: Peripheral vascular disease    | 1.001        | 0.925 - 1.083                     |
| Charlson comorbidity in previous 5 years: Cerebrovascular disease        | 1.048        | 0.962 - 1.143                     |
| Charlson comorbidity in previous 5 years: Dementia                      | 1.034        | 0.899 - 1.189                     |
| Charlson comorbidity in previous 5 years: COPD                           | 1.489        | 1.322 - 1.676                     |
| Charlson comorbidity in previous 5 years: Connective tissue/rheumatic disease | 1.109   | 0.957 - 1.286                     |
| Charlson comorbidity in previous 5 years: Peptic ulcer disease          | 1.024        | 0.914 - 1.147                     |
| Charlson comorbidity in previous 5 years: Mild liver disease            | 1.057        | 0.902 - 1.238                     |
| Charlson comorbidity in previous 5 years: Diabetes without complications  | 0.992        | 0.926 - 1.062                     |
| Charlson comorbidity in previous 5 years: Diabetes with complications    | 0.96         | 0.902 - 1.021                     |
| Charlson comorbidity in previous 5 years: Hemiplegia or paraplegia       | 1.051        | 0.857 - 1.29                      |
| Charlson comorbidity in previous 5 years: Renal disease                  | 1.04         | 0.959 - 1.127                     |
| Charlson comorbidity in previous 5 years: Primary cancer                 | 1.066        | 0.998 - 1.138                     |
| Charlson comorbidity in previous 5 years: Moderate or severe liver disease | 0.755   | 0.578 - 0.985                     |
| Charlson comorbidity in previous 5 years: Metastatic cancer              | 1.298        | 1.149 - 1.466                     |
| Charlson comorbidity in previous 5 years: HIV/AIDS                       | 1.18         | 0.661 - 2.109                     |
| Year of discharge: 2006 (ref=2005)                                       | 0.793        | 0.731 - 0.86                      |
| Year of discharge: 2007                                                  | 0.807        | 0.739 - 0.882                     |
| Year of discharge: 2008                                                  | 0.778        | 0.71 - 0.852                      |
| Year of discharge: 2009                                                  | 0.751        | 0.683 - 0.826                     |
| Year of discharge: 2010                                                  | 0.862        | 0.788 - 0.945                     |
| Year of discharge: 2011                                                  | 0.82         | 0.746 - 0.902                     |
| Year of discharge: 2012                                                  | 0.798        | 0.726 - 0.876                     |
| Year of discharge: 2013                                                  | 0.782        | 0.71 - 0.862                      |
| Year of discharge: 2014                                                  | 0.74         | 0.673 - 0.815                     |
| Year of discharge: 2015                                                  | 0.778        | 0.708 - 0.855                     |
| Year of discharge: 2016                                                  | 0.788        | 0.718 - 0.865                     |
| Year of discharge: 2017                                                  | 0.713        | 0.649 - 0.784                     |
| Year of discharge: 2018                                                  | 0.815        | 0.742 - 0.895                     |
| Year of discharge: 2019                                                  | 0.824        | 0.738 - 0.92                      |
eTable 26. Adjusted Hazard Ratios With 95% CIs of Adverse Events for Patients Who Received vs Did Not Receive Early Physician Follow-up, Overall, by Sex, Length of Stay Group, and Subgroup at Increased Risk

| Cohort Adverse Outcomes | Adjusted hazard ratio (95% confidence interval) |
|-------------------------|-------------------------------------------------|
|                         | Original cohort | Age ≥ 75 years | Female | Male | LOS 2 days | LOS 3-7 days | LOS >7 days | Any comorbidity | Low SES | Rural residence |
| Acute Myocardial Infarction (AMI), N | | | | | | | | | | |
| Unplanned readmission within 30 days of discharge, % | 0.99 (0.96, 1.03) | 0.97 (0.92, 1.02) | 0.97 (0.92, 1.03) | 0.99 (0.95, 1.04) | 0.92 (0.82, 1.03) | 1.03 (0.99, 1.08) | 0.96 (0.90, 1.01) | 0.97 (0.94, 1.01) | 0.96 (0.92, 1.01) | 0.99 (0.94, 1.05) |
| Major cardiac event within 30 days of discharge, % | 0.92 (0.83, 1.03) | 1.04 (0.90, 1.19) | 1.02 (0.86, 1.22) | 0.88 (0.76, 1.01) | 0.99 (0.64, 1.53) | 0.87 (0.74, 1.02) | 1.02 (0.87, 1.20) | 0.93 (0.83, 1.04) | 0.89 (0.78, 1.02) | 0.91 (0.76, 1.09) |
| Death within 30 days of discharge, % | 0.92 (0.83, 1.03) | 1.00 (0.97, 1.04) | 0.97 (0.93, 1.01) | 1.01 (0.98, 1.04) | 0.96 (0.88, 1.04) | 1.03 (1.00, 1.07) | 0.96 (0.93, 1.00) | 0.99 (0.96, 1.01) | 0.98 (0.95, 1.01) | 0.98 (0.94, 1.02) |
| Unplanned readmission within 90 days of discharge, % | 0.99 (0.97, 1.02) | 1.00 (0.97, 1.04) | 0.97 (0.93, 1.01) | 1.01 (0.98, 1.04) | 0.96 (0.88, 1.04) | 1.03 (1.00, 1.07) | 0.96 (0.93, 1.00) | 0.99 (0.96, 1.01) | 0.98 (0.95, 1.01) | 0.98 (0.94, 1.02) |
| Major cardiac event within 90 days of discharge, % | 0.95 (0.89, 1.01) | 0.97 (0.90, 1.05) | 0.97 (0.88, 1.07) | 0.93 (0.86, 1.01) | 1.09 (0.84, 1.42) | 0.95 (0.87, 1.05) | 0.96 (0.88, 1.01) | 0.94 (0.89, 1.05) | 0.98 (0.90, 1.05) | 0.93 (0.84, 1.03) |
| Death within 90 days of discharge, % | 0.95 (0.89, 1.01) | 0.97 (0.90, 1.05) | 0.97 (0.88, 1.07) | 0.93 (0.86, 1.01) | 1.09 (0.84, 1.42) | 0.95 (0.87, 1.05) | 0.96 (0.88, 1.01) | 0.94 (0.89, 1.05) | 0.98 (0.90, 1.05) | 0.93 (0.84, 1.03) |
| Congestive Heart Failure (CHF) | | | | | | | | | | |
| Unplanned readmission within 30 days of discharge, % | 1.01 (0.98, 1.04) | 1.01 (0.97, 1.05) | 1.05 (1.01, 1.10) | 0.97 (0.93, 1.01) | 1.02 (0.92, 1.13) | 1.03 (0.98, 1.07) | 1.00 (0.95, 1.05) | 1.01 (0.97, 1.04) | 1.00 (0.97, 1.04) | 1.01 (0.96, 1.07) |
| Major cardiac event within 30 days of discharge, % | 1.02 (0.98, 1.07) | 1.02 (0.96, 1.08) | 1.05 (0.99, 1.13) | 0.99 (0.93, 1.06) | 1.10 (0.96, 1.27) | 1.05 (0.99, 1.12) | 0.97 (0.90, 1.05) | 1.02 (0.97, 1.07) | 1.00 (0.95, 1.06) | 1.06 (0.97, 1.15) |
| Death within 30 days of discharge, % | 0.97 (0.90, 1.05) | 1.00 (0.91, 1.09) | 1.02 (0.91, 1.14) | 0.94 (0.85, 1.04) | 0.98 (0.73, 1.31) | 0.95 (0.85, 1.07) | 1.04 (0.93, 1.15) | 0.97 (0.90, 1.09) | 1.00 (0.91, 1.09) | 0.96 (0.84, 1.09) |
| Unplanned readmission within 90 days of discharge, % | 0.98 (0.96, 0.99) | 0.97 (0.94, 0.99) | 0.99 (0.96, 1.02) | 0.96 (0.93, 0.99) | 0.97 (0.91, 1.04) | 1.01 (0.98, 1.04) | 0.95 (0.92, 0.98) | 0.98 (0.96, 0.99) | 0.97 (0.95, 0.996) | 0.99 (0.95, 1.03) |

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| Major cardiac event within 90 days of discharge, % | 1.00 (0.97, 1.03) | 0.98 (0.94, 1.02) | 1.01 (0.97, 1.06) | 0.99 (0.95, 1.03) | 1.06 (0.96, 1.16) | 1.04 (0.99, 1.08) | 0.95 (0.91, 1.00) | 1.00 (0.97, 1.03) | 0.99 (0.95, 1.02) | 1.02 (0.96, 1.07) |
|-----------------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Death within 90 days of discharge, %          | 0.93 (0.90, 0.97) | 0.94 (0.90, 0.98) | 0.96 (0.90, 1.02) | 0.91 (0.86, 0.96) | 1.04 (0.90, 1.21) | 0.96 (0.87, 0.98) | 0.93 (0.89, 0.97) | 0.93 (0.90, 0.998) | 0.95 (0.83, 0.95) | 0.89 (0.83, 0.95) |
| **Chronic Obstructive Pulmonary Disease (COPD)** |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
| Unplanned readmission within 30 days of discharge, % | 0.97 (0.93, 1.00) | 0.97 (0.92, 1.03) | 0.96 (0.91, 1.02) | 0.97 (0.92, 1.02) | 0.92 (0.82, 1.02) | 0.99 (0.94, 1.05) | 0.96 (0.90, 1.00) | 0.96 (0.90, 0.99) | 0.94 (0.90, 0.99) | 0.99 (0.94, 1.06) |
| Readmission for COPD or COPD-related condition within 30 days of discharge, % | 0.94 (0.89, 1.00) | 0.95 (0.87, 1.03) | 0.95 (0.87, 1.03) | 0.94 (0.87, 1.02) | 0.91 (0.77, 1.06) | 0.97 (0.89, 1.05) | 0.93 (0.83, 1.03) | 0.94 (0.88, 0.995) | 0.92 (0.86, 0.99) | 0.97 (0.88, 1.06) |
| Death within 30 days of discharge, %          | 1.05 (0.95, 1.15) | 1.05 (0.93, 1.18) | 1.11 (0.96, 1.30) | 1.01 (0.90, 1.14) | 1.05 (0.76, 1.45) | 1.02 (0.89, 1.17) | 1.12 (0.97, 1.28) | 1.05 (0.95, 1.16) | 1.06 (0.94, 1.18) | 1.06 (0.92, 1.23) |
| Unplanned readmission within 90 days of discharge, % | 0.95 (0.93, 0.98) | 0.96 (0.92, 0.99) | 0.97 (0.93, 1.01) | 0.94 (0.91, 0.97) | 0.94 (0.87, 1.01) | 0.97 (0.93, 1.00) | 0.95 (0.91, 0.995) | 0.95 (0.92, 0.98) | 0.94 (0.91, 0.97) | 0.96 (0.92, 1.001) |
| Readmission for COPD or COPD-related condition within 90 days of discharge, % | 0.93 (0.89, 0.96) | 0.94 (0.89, 0.99) | 0.95 (0.90, 1.01) | 0.91 (0.86, 0.96) | 0.88 (0.79, 0.98) | 0.95 (0.90, 1.00) | 0.92 (0.86, 0.99) | 0.92 (0.88, 0.96) | 0.92 (0.88, 0.997) | 0.94 (0.88, 0.997) |
| Death within 90 days of discharge, %          | 0.96 (0.91, 1.01) | 0.95 (0.89, 1.02) | 1.07 (0.98, 1.16) | 0.90 (0.84, 0.96) | 1.01 (0.85, 1.21) | 0.93 (0.86, 1.01) | 1.01 (0.93, 1.10) | 0.95 (0.90, 1.00) | 0.95 (0.89, 1.01) | 0.97 (0.89, 1.05) |