

SUPPLEMENTAL MATERIAL

Data S1. Supplemental Methods

Based upon ICD-10 codes, patients were classified as having PAD if they had previously documented PAD and/or graft procedures; CKD for estimated glomerular filtration rates of <90 mL per minute per 1.73 m² or those with albuminuria; falls if documented on an inpatient or outpatient visit; excess alcohol if diagnosed with alcohol withdrawal, alcohol-related end-organ damage, or rehabilitation for excess alcohol use; major bleeding if a major hemorrhage event and/or a blood transfusion in combination with a clinically-relevant nonmajor bleeding code were documented on an inpatient or outpatient visit.

Table S1. ICD-10-CA diagnosis and CCI procedure codes

| Clinical Diagnosis | ICD-10-CA Codes | CCI Procedure Codes |
|------------------------|---|---|
| Valvular disease | I05 I06 I34 I35 I08.0 I08.1 I08.2 I08.3 | 1.HS.80 1.HS.90 1.HT.80 1.HT.89 1.HT.90 1.HU.80 1.HU.90 1.HV.80 1.HV.90 |
| Heart Failure | I25.5 I42.0 I42.6 I42.7 I42.8 I42.9 I43 I50 | |
| Hypertension | I10-I13 I15 | |
| Diabetes | E10-E14 | |
| Stroke/TIA | I63 I64 H34.1 I61 G45 | |
| PAD | I70 I71 I73.1 I73.8 I73.9 I77.1 I79.0 I79.2 K55.1 K55.8 K55.9 Z95.8 Z95.9 | |
| CAD | I25.0 I25.1 I25.2 I25.5 I25.8 I25.9 | |
| MI | I21 I22 | |
| Chronic Kidney Disease | N18 | |
| Anemia | D50-D89 D60-D64 | |
| Thrombocytopenia | D69 | |
| Falls | W00- W19 | |
| Excess Alcohol | E52 F10 G62.1 I42.6 K29.2 K70.0 K70.3 K70.9 T51 Z50.2 Z71.4 Z72.1 | |
| Major Bleeding | H35.6 H43.1 H45.0 I60 I61 I62 M25.0 J94.2 I31.2 or Transfusion with CRNMB | |
| Transfusion | T80.3 T80.4 Y65.0 Z51.3 | 1.LZ.19 |
| CRNMB | I85.01 I85.11 I85.21 I85.31 I85.41 I85.51 I85.61 I85.71 I85.81 I85.91 K22.11 K22.6 K25.0 K25.2 K25.4 K25.6 K26.0 K26.2 K26.4 K26.6 K27.0 K27.2 K27.4 K27.6 K28.0 K28.2 K28.4 K28.6 K29.01 K29.11 K29.21 K29.31 K29.41 K29.51 K29.61 K29.71 K29.81 K29.91 K31.80 K55.21 K62.5 K66.1 K92.0 K92.1 K92.2 N02 S06.4 S06.5 S06.6 R04 R31 R58 | |

CAD, coronary artery disease; CCI, Canadian Classification of Health Interventions; CRNMB, clinically relevant nonmajor bleeding; CVD, cerebrovascular disease, ICD, International Classification of Disease; PAD, peripheral artery disease; TIA, transient ischemic attack.

Table S2. Oral anticoagulation ATC codes using the PIN profile

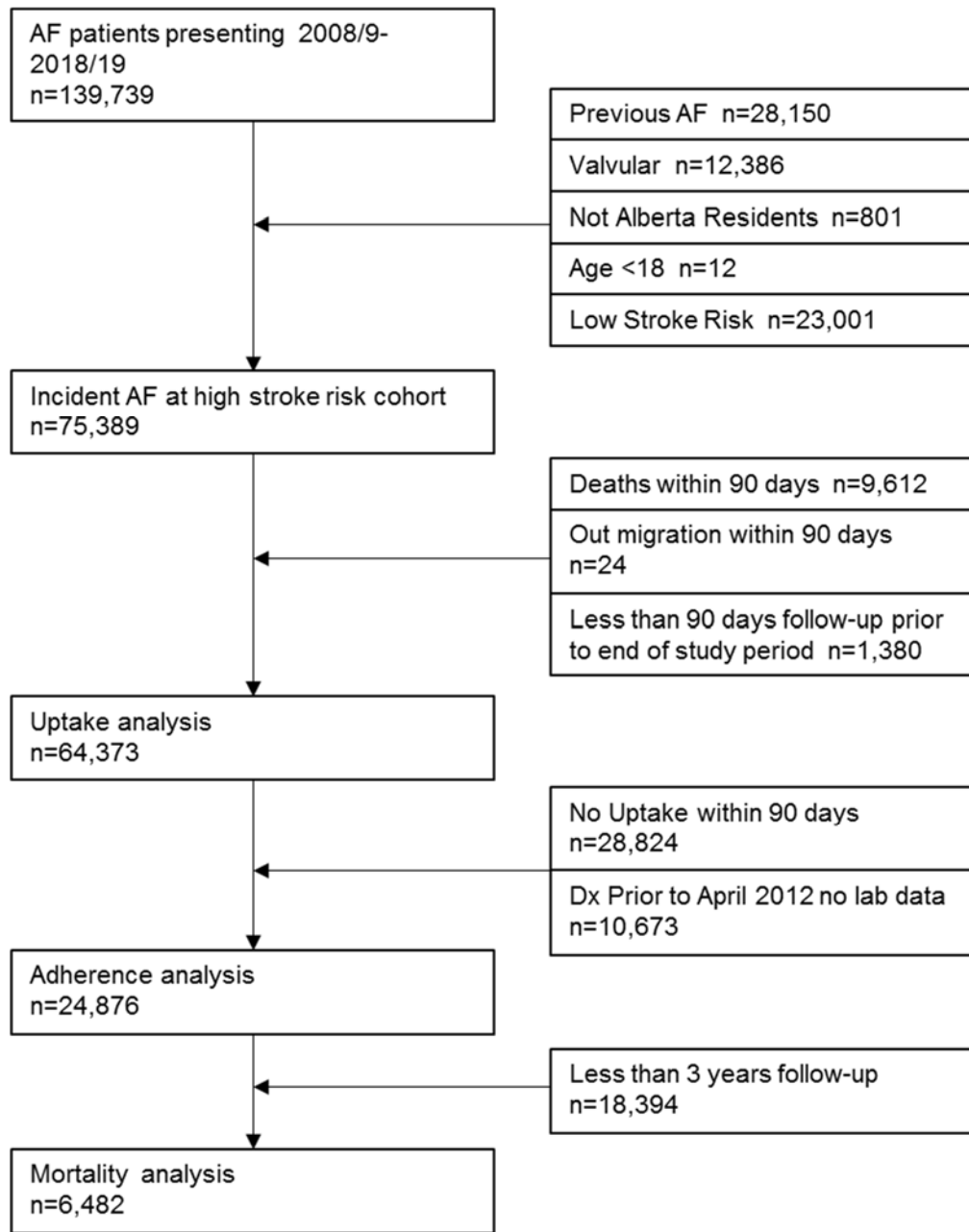
| Drug Name (generic) | ATC Code |
|----------------------------|------------------|
| Warfarin | B01AA03 |
| Rivaroxaban | B01AF01, B01AX06 |
| Apixaban | B01AF02 |
| Dabigatran | B01AE07 |
| Edoxaban | B01AF03 |

ATC, Anatomical Therapeutic Chemical classification system; PIN, Pharmaceutical Information Network.

Table S3. Changes in oral anticoagulation adherence categories over a 3-year period following initiation of therapy

| | | NOAC Uptake Transition | | Warfarin Uptake Transition | |
|--------------------|------------------|---------------------------|---------------|-------------------------------|---------------|
| | | Year 1 → 2 | Year 2 → 3 | Year 1 → 2 | Year 2 → 3 |
| | | n (%) | n (%) | n (%) | n (%) |
| Starting Adherence | Ending Adherence | | | | |
| High | High | 2,250 (86.7%) | 2,163 (87.7%) | 1,348 (76.7%) | 1,472 (74.5%) |
| | Moderate | 259 (10.0%) | 226 (9.2%) | | |
| | Low | 87 (3.4%) | 77 (3.1%) | 409 (23.3%) | 504 (25.5%) |
| Moderate | High | 203 (43.2%) | 213 (49.3%) | | |
| | Moderate | 141 (30.0%) | 121 (28.0%) | | |
| | Low | 126 (26.8%) | 98 (22.7%) | | |
| Low | High | 13 (3.8%) | 20 (3.9%) | 628 (47.8%) | 450 (41.1%) |
| | Moderate | 32 (9.2%) | 21 (4.1%) | | |
| | Low | 301 (87.0%) | 473 (92.0%) | 685 (52.2%) | 644 (58.9%) |
| Total | | 3,412 | | 3,070 | |

Figure S1. CONSORT diagram



AF, atrial fibrillation; Dx, diagnosis.

Figure S2. Change in OAC class prescription within 1 year

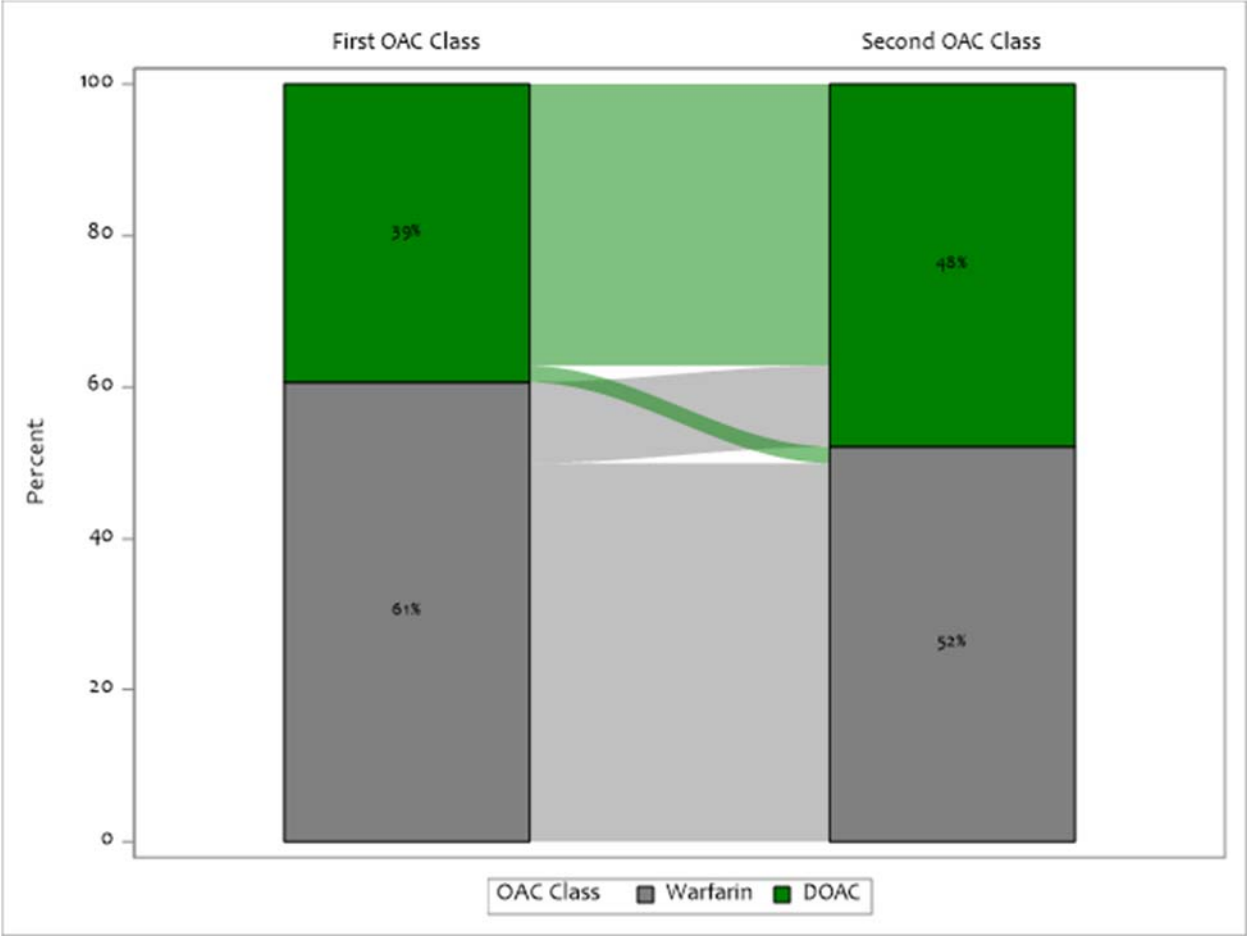
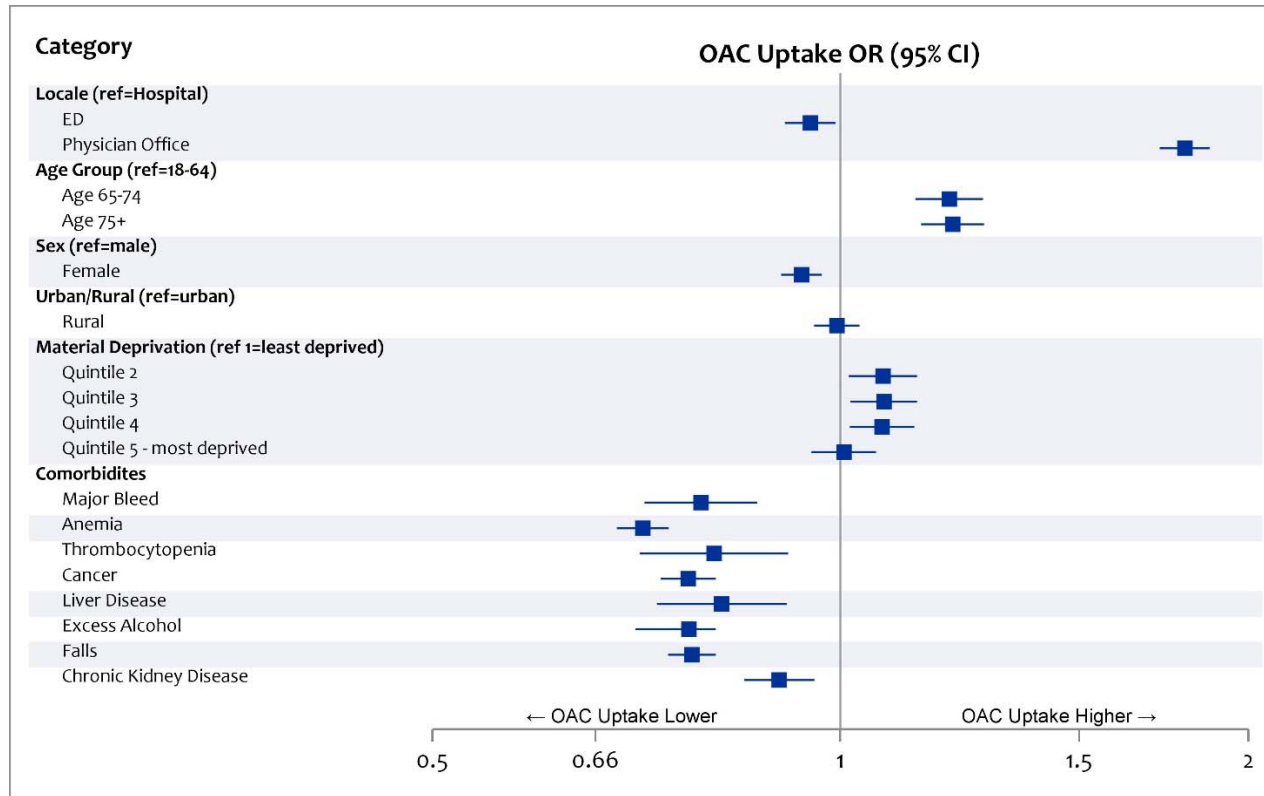
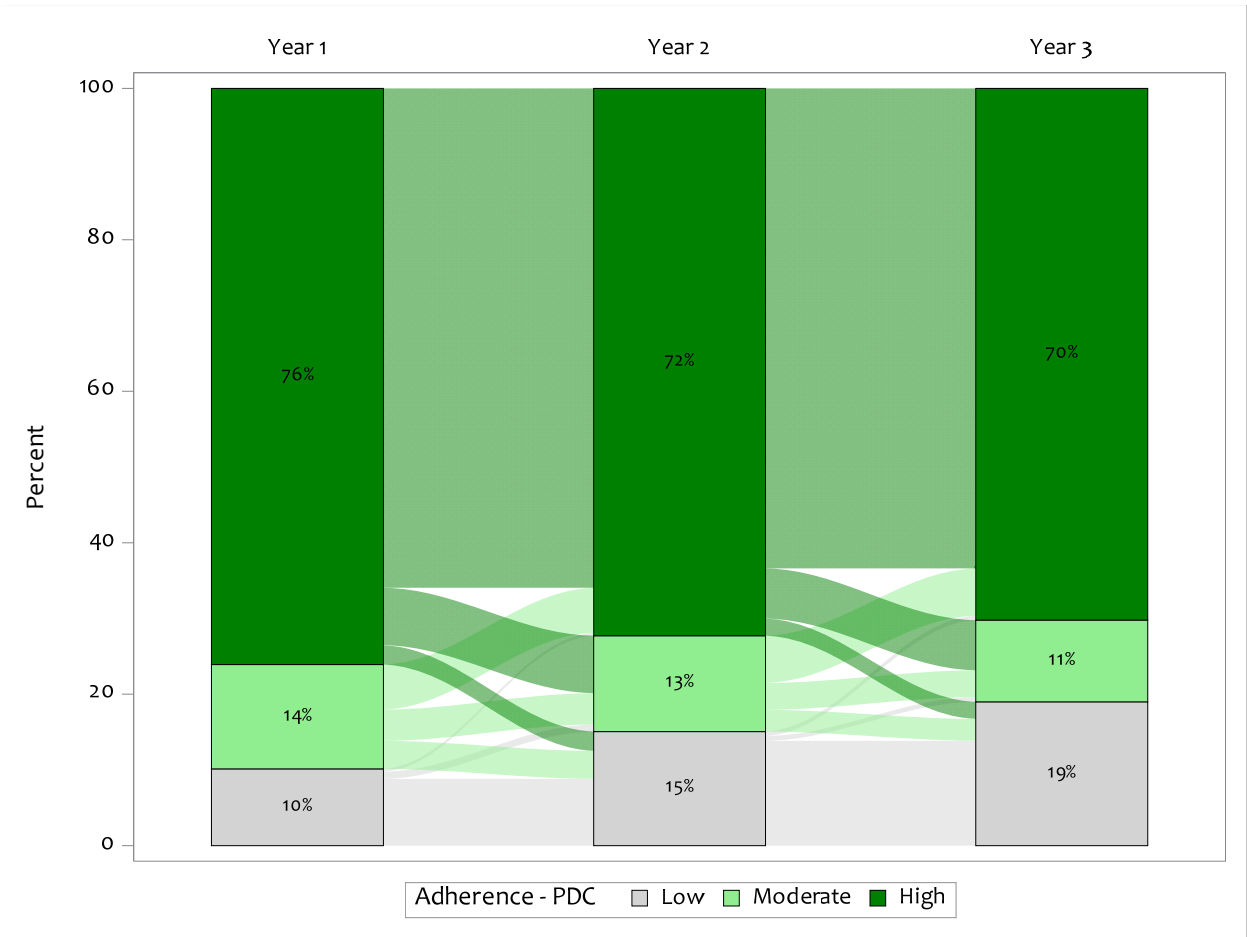


Figure S3. Predictors associated with OAC uptake



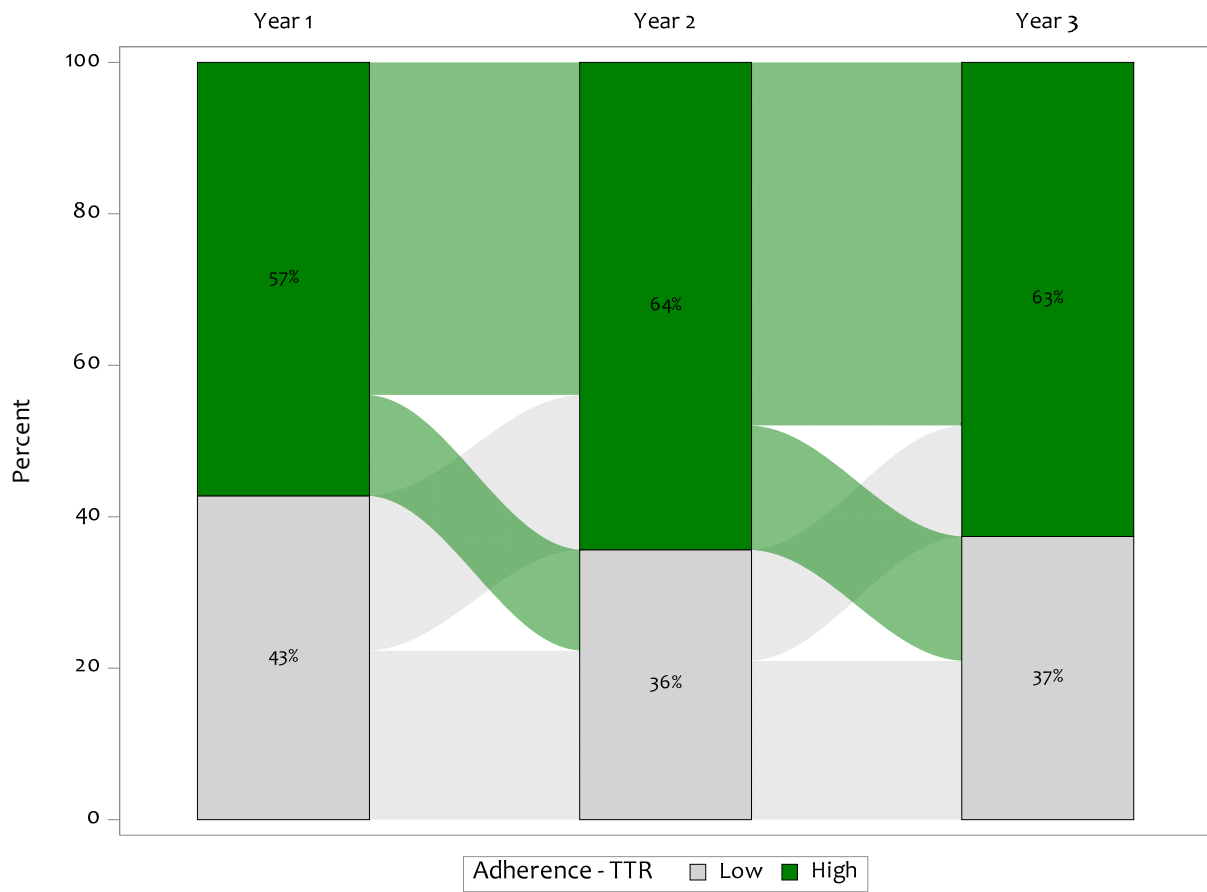
Odds ratios (OR) and 95% confidence intervals (CI) for factors affecting OAC uptake

Figure S4. Change in categories of adherence to DOAC over time



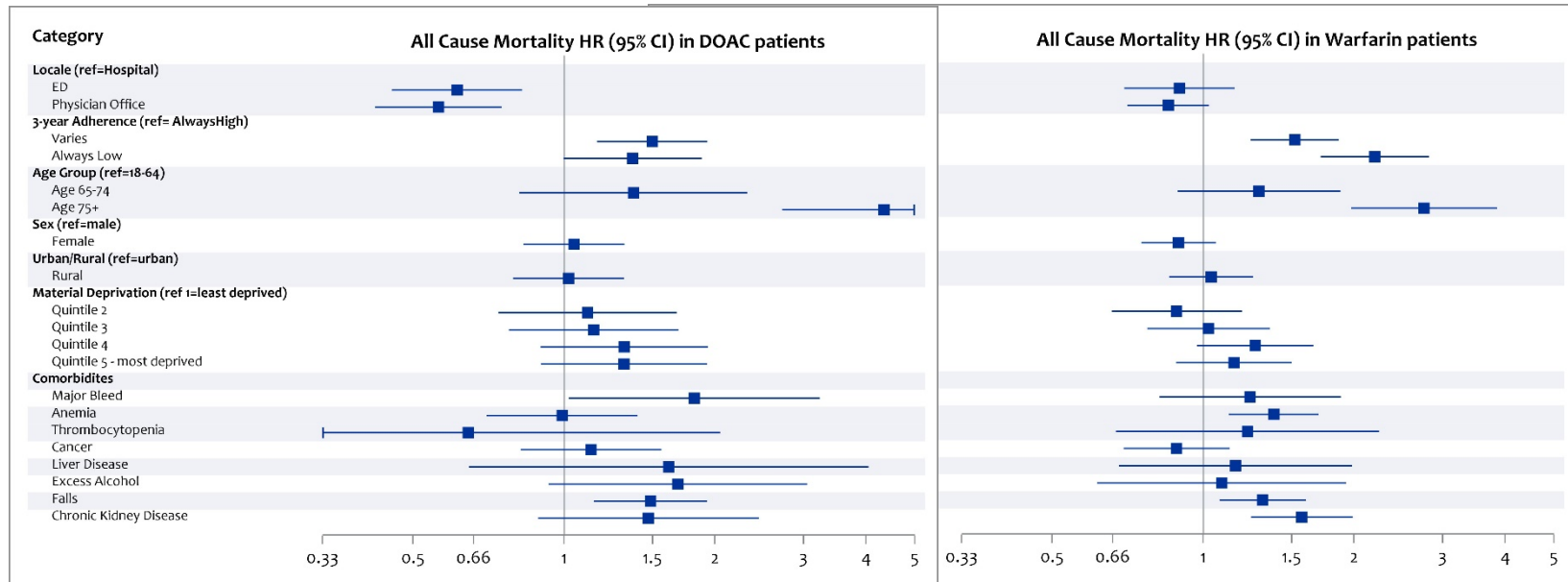
DOAC, direct oral anticoagulant; PDC, proportion of days covered.

Figure S5. Change in categories of adherence to warfarin over time



TTR, time in therapeutic range.

Figure S6. Predictors associated with all-cause mortality



Hazard ratios (OR) and 95% confidence intervals (CI) for factors affecting all cause mortality. Follow up for all cause mortality begins at 3 years after the first OAC dispense.