

## Supplementary Material

### Variation in cardiovascular disease care: An Australian cohort study on sex differences in receipt of coronary procedures

**Table S1:** Rates of coronary procedures within 30 days of admission with AMI by sex and associated hazard ratios (n=4,580)

|                    | <b>Procedures/<br/>pys</b> | <b>Crude rate per py<br/>(95%CI)</b> | <b>Model 1<br/>HR (95%CI)</b> | <b>Model 2<br/>HR (95%CI)</b> | <b>Model 3<br/>HR (95%CI)</b> |
|--------------------|----------------------------|--------------------------------------|-------------------------------|-------------------------------|-------------------------------|
| <b>Angiography</b> |                            |                                      |                               |                               |                               |
| Men                | 2049/73.7                  | 27.8 (26.6-29.0)                     | 1.08 (1.00-1.16)              | 1.02 (0.95-1.10)              | 0.99 (0.92-1.07)              |
| Women              | 1060/48.9                  | 21.7 (20.4-23.0)                     | 1.00                          | 1.00                          | 1.00                          |
| <b>PCI/CABG</b>    |                            |                                      |                               |                               |                               |
| Men                | 1624/108.9                 | 14.9 (14.2-15.7)                     | 1.60(1.46-1.76)*              | 1.54(1.40-1.69)*              | 1.49(1.36-1.65)*              |
| Women              | 600/83.8                   | 7.15 (6.60-7.75)                     | 1.00                          | 1.00                          | 1.00                          |

Notes: The proportion of AMI patients who survived the 30 day follow-up period was 93.3% (94.4% men vs 91.4% women). py: person-year. Model 1 is adjusted for age at admission (in 5-year age categories). Model 2 is adjusted for age and sociodemographic variables (country of birth, region of residence, highest qualification, health insurance, marital status) Model 3 is adjusted for age, sociodemographic variables and health-related variables (obesity, physical functioning and psychological distress). \* indicates that the proportional hazard assumption is violated.

**Table S2:** Rates of coronary procedures within 30 days of admission with angina by sex and associated hazard ratios (n=4,457)

|                    | <b>Procedures<br/>/pys</b> | <b>Crude rate per py<br/>(95%CI)</b> | <b>Model 1<br/>HR (95%CI)</b> | <b>Model 2<br/>HR (95%CI)</b> | <b>Model 3<br/>HR (95%CI)</b> |
|--------------------|----------------------------|--------------------------------------|-------------------------------|-------------------------------|-------------------------------|
| <b>Angiography</b> |                            |                                      |                               |                               |                               |
| Men                | 1624/74.3                  | 21.9 (20.8-23.0)                     | 1.30 (1.20-1.40)              | 1.25 (1.15-1.35)              | 1.23 (1.13-1.33)              |
| Women              | 1026/79.0                  | 13.3 (12.5-14.1)                     | 1.00                          | 1.00                          | 1.00                          |
| <b>PCI/CABG</b>    |                            |                                      |                               |                               |                               |
| Men                | 1023/125.9                 | 8.13 (7.64-8.64)                     | 2.51(2.22-2.84)*              | 2.42(2.14-2.74)*              | 2.36(2.08-2.68)*              |
| Women              | 347/131.3                  | 2.64 (2.38-2.94)                     | 1.00                          | 1.00                          | 1.00                          |

Notes: The proportion of angina patients who survived the 30 day follow-up period was 99.6% (99.5% men vs 99.6% women). py: person-year. Model 1 is adjusted for age at admission (in 5-year age categories). Model 2 is adjusted for age and sociodemographic variables (country of birth, region of residence, highest qualification, health insurance, marital status) Model 3 is adjusted for age, sociodemographic variables and health-related variables (obesity, physical functioning and psychological distress). \* indicates that the proportional hazard assumption is violated.

**Table S3:** Associated hazard ratios for coronary procedures within one year of admission with AMI by sex using self-rated health only as a health-related variable (n=4,580)

|                    | <b>Model 1<br/>HR (95% CI)</b> | <b>Model 2<br/>HR (95%CI)</b> | <b>Model 3<br/>HR (95%CI)</b> |
|--------------------|--------------------------------|-------------------------------|-------------------------------|
| <b>Angiography</b> |                                |                               |                               |
| Men                | 1.08 (1.01-1.17)               | 1.02 (0.95-1.10)              | 1.02 (0.94-1.10)              |
| Women              | 1.00                           | 1.00                          | 1.00                          |
| <b>PCI/CABG</b>    |                                |                               |                               |
| Men                | 1.62 (1.48-1.78)               | 1.56 (1.42-1.71)              | 1.55 (1.41-1.71)              |
| Women              | 1.00                           | 1.00                          | 1.00                          |

Notes: Model 1 is adjusted for age at admission (in 5-year age categories). Model 2 is adjusted for age and socio-variables (country of birth, region of residence, highest qualification, health insurance, marital status). Model 3 is adjusted for age, sociodemographic variables and health-related variables (self-rated health only).

**Table S4:** Associated hazard ratios for coronary procedures within one year of admission with angina by sex using self-rated health only as a health-related variable (n=4,457)

|                    | <b>Model 1<br/>HR (95% CI)</b> | <b>Model 2<br/>HR (95%CI)</b> | <b>Model 3<br/>HR (95%CI)</b> |
|--------------------|--------------------------------|-------------------------------|-------------------------------|
| <b>Angiography</b> |                                |                               |                               |
| Men                | 1.31 (1.21-1.41)               | 1.26 (1.16-1.36)              | 1.25 (1.16-1.36)              |
| Women              | 1.00                           | 1.00                          | 1.00                          |
| <b>PCI/CABG</b>    |                                |                               |                               |
| Men                | 2.57 (2.28-2.88)               | 2.49 (2.21-2.80)              | 2.50 (2.22-2.81)              |
| Women              | 1.00                           | 1.00                          | 1.00                          |

Notes: Model 1 is adjusted for age at admission (in 5-year age categories). Model 2 is adjusted for age and sociodemographic variables (country of birth, region of residence, highest qualification, health insurance, marital status). Model 3 is adjusted for age, sociodemographic variables and health-related variables (self-rated health only).

**Table S5:** Associated hazard ratios for coronary procedures within one year of admission with AMI by sex using the Charlson index in addition to health-related variables used in the main analysis (n=4,580)

|                    | <b>Model 1<br/>HR (95%CI)</b> | <b>Model 2<br/>HR (95%CI)</b> | <b>Model 3<br/>HR (95%CI)</b> |
|--------------------|-------------------------------|-------------------------------|-------------------------------|
| <b>Angiography</b> |                               |                               |                               |
| Men                | 1.08 (1.01-1.17)              | 1.02 (0.95-1.10)              | 1.00 (0.93-1.08)              |
| Women              | 1.00                          | 1.00                          | 1.00                          |
| <b>PCI/CABG</b>    |                               |                               |                               |
| Men                | 1.62 (1.48-1.78)              | 1.56 (1.42-1.71)              | 1.53 (1.39-1.68)              |
| Women              | 1.00                          | 1.00                          | 1.00                          |

Notes: Model 1 is adjusted for age at admission (in 5-year age categories). Model 2 is adjusted for age and sociodemographic variables (country of birth, region of residence, highest qualification, health insurance, marital status). Model 3 is adjusted for age, sociodemographic variables and health-related variables (obesity, physical functioning, psychological distress and the Charlson index).

**Table S6:** Associated hazard ratios for coronary procedures within one year of admission with angina by sex using the Charlson index in addition to health-related variables used in the main analysis (n=4,457)

|                    | <b>Model 1<br/>HR (95%CI)</b> | <b>Model 2<br/>HR (95%CI)</b> | <b>Model 3<br/>HR (95%CI)</b> |
|--------------------|-------------------------------|-------------------------------|-------------------------------|
| <b>Angiography</b> |                               |                               |                               |
| Men                | 1.31 (1.21-1.41)              | 1.26 (1.16-1.36)              | 1.24 (1.14-1.34)              |
| Women              | 1.00                          | 1.00                          | 1.00                          |
| <b>PCI/CABG</b>    |                               |                               |                               |
| Men                | 2.57 (2.28-2.88)              | 2.49 (2.21-2.80)              | 2.46 (2.18-2.77)              |
| Women              | 1.00                          | 1.00                          | 1.00                          |

Notes: Model 1 is adjusted for age at admission (in 5-year age categories). Model 2 is adjusted for age and sociodemographic variables (country of birth, region of residence, highest qualification, health insurance, marital status). Model 3 is adjusted for age, sociodemographic variables and health-related variables (obesity, physical functioning, psychological distress and the Charlson index).

**Table S7:** Rates of coronary procedures within one year of admission with unstable angina only (I20.0) by sex, and associated hazard ratios (n=2,131)

|                    | <b>Procedures<br/>/pys</b> | <b>Crude rate per<br/>py (95%CI)</b> | <b>Model 1<br/>HR (95%CI)</b> | <b>Model 2<br/>HR (95%CI)</b> | <b>Model 3<br/>HR (95%CI)</b> |
|--------------------|----------------------------|--------------------------------------|-------------------------------|-------------------------------|-------------------------------|
| <b>Angiography</b> |                            |                                      |                               |                               |                               |
| Men                | 672/423.5                  | 1.59 (1.47-1.71)                     | 1.26 (1.12-1.42)              | 1.25 (1.11-1.41)              | 1.24 (1.10-1.40)              |
| Women              | 468/444.2                  | 1.05 (0.96-1.15)                     | 1.00                          | 1.00                          | 1.00                          |
| <b>PCI/CABG</b>    |                            |                                      |                               |                               |                               |
| Men                | 420/650.1                  | 0.64 (0.59-0.71)                     | 2.52 (2.09-3.04)              | 2.50 (2.07-3.03)              | 2.50 (2.06-3.02)              |
| Women              | 151/729.8                  | 0.21 (0.18-0.24)                     | 1.00                          | 1.00                          | 1.00                          |

Notes: py: person-year. Model 1 is adjusted for age at admission (in 5-year age categories). Model 2 is further adjusted for country of birth, region of residence, highest qualification, marital status and health insurance. Model 3 is further adjusted for obesity, physical functioning and psychological distress.

**Table S8:** Rates of coronary procedures within one year of admission with AMI by sex and associated hazard ratios, excluding those aged 85 years and over (n=3691)

|                    | <b>Procedures/<br/>pys</b> | <b>Crude rate per<br/>py (95%CI)</b> | <b>Model 1<br/>HR (95%CI)</b> | <b>Model 2<br/>HR (95%CI)</b> | <b>Model 3<br/>HR (95%CI)</b> |
|--------------------|----------------------------|--------------------------------------|-------------------------------|-------------------------------|-------------------------------|
| <b>Angiography</b> |                            |                                      |                               |                               |                               |
| Men                | 1891/438.3                 | 4.31 (4.12-4.51)                     | 1.08 (0.99-1.16)              | 1.03 (0.95-1.12)              | 1.02 (0.94-1.1)               |
| Women              | 912/258.9                  | 3.52 (3.3-3.76)                      | 1.00                          | 1.00                          | 1.00                          |
| <b>PCI/CABG</b>    |                            |                                      |                               |                               |                               |
| Men                | 1543/767.2                 | 2.01 (1.91-2.11)                     | 1.69 (1.53-1.87)              | 1.65 (1.49-1.82)              | 1.61 (1.46-1.79)              |
| Women              | 517/608.8                  | 0.85 (0.78-0.93)                     | 1.00                          | 1.00                          | 1.00                          |

Notes: py: person-year. Model 1 is adjusted for age at first admission. Model 2 is adjusted for age and sociodemographic variables (country of birth, region of residence, highest qualification, health insurance, marital status). Model 3 is adjusted for age, sociodemographic variables and health-related variables (obesity, physical functioning, psychological distress).

**Table S9:** Rates of coronary procedures within one year of admission with angina by sex and associated hazard ratios, excluding those aged 85 years and over (n=4076)

|                    | <b>Procedures/<br/>pys</b> | <b>Crude rate per<br/>py (95%CI)</b> | <b>Model 1<br/>HR (95%CI)</b> | <b>Model 2<br/>HR (95%CI)</b> | <b>Model 3<br/>HR (95%CI)</b> |
|--------------------|----------------------------|--------------------------------------|-------------------------------|-------------------------------|-------------------------------|
| <b>Angiography</b> |                            |                                      |                               |                               |                               |
| Men                | 1603/629.1                 | 2.55 (2.43-2.68)                     | 1.29 (1.19-1.4)               | 1.25 (1.16-1.36)              | 1.24 (1.14-1.34)              |
| Women              | 1010/707.2                 | 1.43 (1.34-1.52)                     | 1.00                          | 1.00                          | 1.00                          |
| <b>PCI/CABG</b>    |                            |                                      |                               |                               |                               |
| Men                | 1066/1131.6                | 0.94 (0.89-1.00)                     | 2.65 (2.35-2.99)              | 2.57 (2.28-2.91)              | 2.53 (2.23-2.86)              |
| Women              | 347/1322.5                 | 0.26 (0.24-0.29)                     | 1.00                          | 1.00                          | 1.00                          |

Notes: py: person-year. Model 1 is adjusted for age at first admission. Model 2 is adjusted for age and sociodemographic variables (country of birth, region of residence, highest qualification, health insurance, marital status). Model 3 is adjusted for age, sociodemographic variables and health-related variables (obesity, physical functioning, psychological distress).

**Table S10:** Associated hazard ratios for coronary procedures within one year of admission with AMI (n=4,580) or angina (n=4,457) by sex, adjusted for age, sociodemographic variables and health-related variables including cardiovascular risk factors

|                    | <b>AMI<br/>HR (95%CI)</b> | <b>Angina<br/>HR (95%CI)</b> |
|--------------------|---------------------------|------------------------------|
| <b>Angiography</b> |                           |                              |
| Men                | 1.01 (0.93-1.09)          | 1.24 (1.14-1.34)             |
| Women              | 1.00                      | 1.00                         |
| <b>PCI/CABG</b>    |                           |                              |
| Men                | 1.52 (1.38-1.67)          | 2.45 (2.17-2.76)             |
| Women              | 1.00                      | 1.00                         |

Notes: Model 1 is adjusted for age at admission (in 5-year age categories). Model 2 is adjusted for age and socio-variables (country of birth, region of residence, highest qualification, health insurance, marital status). Model 3 is adjusted for age, sociodemographic variables health-related variables (obesity, physical functioning, psychological distress), and CVD risk factors (smoking, self-rated diabetes, treated for high blood pressure, treated for high cholesterol and family history of heart disease).