SUPPLEMENTAL MATERIALS

Supplemental Methods	**1.** Description of data sources and research ethics approval from each country/jurisdiction **2.** List of codes used by each country to identify STEMI, NSTEMI, PCI, diagnostic catheterization (cardiac catheterization without intervention), and CABG **3.** Jurisdiction-specific approach to identifying comorbidities and risk-adjustment **4.** Statistical analysis protocol **5.** 30-day mortality models and odds ratios for each country
Figure S1.	Cohort generation by country, numbers constitute person years (thousands)
Figure S2.	Ratio ST and non-ST elevation myocardial infarctions in men as compared to women in 2011-2018 in 6 high-income countries
Figure S3.	Age-standardized rates of cardiac catheterization, percutaneous coronary intervention (PCI), and coronary artery bypass graft surgery (CABG) during initial admission for ST elevation myocardial infarction
Figure S4.	Age-standardized rates of cardiac catheterization, percutaneous coronary intervention (PCI), and coronary artery bypass graft surgery (CABG) during initial admission for non ST elevation myocardial infarction
Figure S5.	Age and comorbidity adjusted 1-year mortality rates for ST elevation and non-ST elevation myocardial infarction for men and women
Figure S6.	Age-standardized mean length of stay and age and comorbidity-adjusted 30-day readmission rate, 2018
Table S1.	Total sample size and mean age by country and AMI type, 2011-2018

SUPPLEMENTAL METHODS

Methods 1: Description of data sources and research ethics approval from each country/jurisdiction.

United States

All hospitalizations for AMI in adults age > 66 years at the time of hospitalization during calendar years 2011-2017 were identified using 100% Medicare fee-for-service (FFS) data.[1] Data from 2010 was used as a "look-back" and data from 2018 were used to ascertain post-AMI outcomes.
During our study period approximately between 75% (2011) and 67% (2017) of the US Medicare population were enrolled in FFS Medicare during this period and thus included in our study population with the remainder enrolled in Medicare managed care plans.[2]

AMI Identification and Outcomes	
Data sources*	Use
100% Medicare Part A Data (2010-2018)	a. Identification of patients hospitalized with a primary diagnosis of AMI[3-5] b. Creation of comorbidities c. In-hospital and post-hospital utilization and outcomes
100% Medicare Beneficiary Summary File	a. Date of death
100% Medicare FFS Inpatient Data	PCI on the admission day (Note that procedure date is available in Inpatient data but not in Medpar)
Population Count and Demographics (Used for Calculation of AMI Hospitalization Rates and Standardization)	
Medicare Beneficiary Summary File	Number of Medicare FFS enrollees by year Age/race/sex/ethnicity/area of residence information

* For more information on US Medicare Part A Data please visit: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareFeeforSvcPartsAB/MEDPAR

Analyses were conducted at Harvard Medical School. This study was approved by the Institutional Review Board (IRB) of the Harvard Faculty of Medicine.

Ontario (Canada)

All hospitalizations for AMI in adults age > 66 years at the time of hospitalization during calendar years 2011-2017 were identified using 100% Ontario Discharge Abstract Database (DAD). Data from 2010 was used as a "look-back" and data from 2018 were used to ascertain post-AMI outcomes.
The DAD includes all admissions to all acute care hospitals in the province of Ontario and thus is inclusive of the entire Ontario population.
Analyses were conducted at ICES which is approved to store and analyze data from the Ontario provincial insurance program (Ontario Health Insurance Plan), which covers all health care for all residents of the province.[6]

AMI Identification and Outcomes	
Data source*	Use
Ontario Discharge Abstract Database (2010-2018)	a. Identification of patients hospitalized with a primary diagnosis of AMI [7 8] b. Creation of comorbidities c. In-hospital outcomes
OHIP Billing Data (2011-2018)	a. Post-AMI treatments and procedures
Registered Persons Data Base files	a. Determination of death date, birth date, and insurance coverage start and end date
Population Count and Demographics (Used for Calculation of AMI Hospitalization Rates and Standardization)	
Registered Persons Data Base files	Age/sex/ethnicity/area of residence information

The use of the data in this project is authorized under section 45 of Ontario's Personal Health Information Protection Act (PHIPA) and does not require review by a Research Ethics Board.

* For more information on Ontario Discharge Abstract Data please visit https://data.ontario.ca/dataset/discharge-abstract-database-dad-ontario-hospitals

Manitoba (Canada)

All hospitalizations for AMI in adults age > 66 years at the time of hospitalization during calendar years 2011-2017 were identified using 100% Manitoba Discharge Abstract Database (DAD). Data from 2010 was used as a "look-back" and data from 2018 were used to ascertain post-AMI outcomes.
The Manitoba DAD includes all admissions to all acute care hospitals in the province of Manitoba and thus is inclusive of the entire Manitoba population eligible to receive health services.
Analyses were conducted using the Population Research Data Repository housed at the Manitoba Centre for Health Policy and utilized the administrative data from the Manitoba ministry of health (I.e., Manitoba Health and Seniors Care). The administrative data captures all publicly-insured health services for all residents of the province who are eligible to receive health services.

AMI Identification and Outcomes	
Data source*	Use
Manitoba Discharge Abstract Database (2010-2018)	a. Identification of patients hospitalized with a primary diagnosis of AMI[8] b. Creation of comorbidities c. In-hospital outcomes
Physician Billing Data (2011-2018)	a. Post-AMI treatments and procedures
Manitoba Health Insurance Registry	Determination of death date, birth date, and insurance coverage start and end dates.
Population Count and Demographics (Used for Calculation of AMI Hospitalization Rates and Standardization)	
Manitoba Health Population Database	Counts of population by sex, age group, and year

The authors acknowledge the Manitoba Centre for Health Policy for use of data contained in the Manitoba Population Health Research Data Repository (Health Information Privacy Committee project # 2019/2020-38). The results and conclusions are those of the authors and no official endorsement by the Manitoba Centre for Health Policy, Manitoba Health and Seniors Care, or other data providers is intended or should be inferred.

* For more information on Manitoba data please visit: https://umanitoba.ca/manitoba-centre-for-health-policy/data-repository

England

All hospitalizations for AMI in adults age > 66 years at the time of hospitalization during calendar years 2011-2017 were identified using the Clinical Practice Research Datalink. Data from 2010 was used as a "look-back" and data from 2018 were used to ascertain post-AMI outcomes. CPRD has been shown to be representative of the English population by age, sex and ethnicity, and validated for research.[9-11] Analyses were conducted at the Institute of Health Informatics, University College London using linked electronic health records from primary care (CPRD), hospitalisation (HES) and the national death registry (ONS).[10]

AMI Identification and Outcomes	
Data source	Use
Clinical Practice Research Datalink (GOLD and Aurum)	a. Patient identification[9] b. Demographics c. Creation of comorbidities
Hospital Episode Statistics (HES)	a. Identification of patients hospitalized with a primary diagnosis of AMI[9 12] b. Creation of comorbidities c. In-hospital outcomes d. Inpatient procedures
Office of National Statistics	Cause-specific mortality
Population Count and Demographics (Used for Calculation of AMI Hospitalization Rates and Standardization)	
	Counts of population by sex, age group, and year

The study was approved by the MHRA (UK) Independent Scientific Advisory Committee 20_021, under Section 251 (NHS Social Care Act 2006). This study is based in part on data from the Clinical Practice Research Datalink obtained under licence from the UK Medicines and Healthcare products Regulatory Agency. The data is provided by patients and collected by the NHS as part of their care and support. The interpretation and conclusions contained in this study are those of the author/s alone.

Netherlands

All hospitalizations for AMI in Dutch adults age > 66 years at the time of hospitalization during calendar years 2013-2017 were identified using data from the national register for hospital care.[13] Data from 2012 was used as a "look-back" and data from 2018 were used to ascertain post-AMI outcomes.
These data include all inpatient hospitalizations for the Netherlands. Primary and secondary diagnosis are recorded as well as the main procedure performed during the admission. Demographic information and, if applicable, date of death, were extracted from municipality registers[*].

AMI Identification and Outcomes	
Data sources[†]	Use
National register for hospital care, Landelijke Basisregistratie Ziekenhuiszorg (LBZ – 2013-2017) and Landelijke Medische Registratie (LMR – 2012)	a. Identification of patients hospitalized with a primary diagnosis of AMI b. Creation of comorbidities c. In-hospital and post-hospital procedure utilization[‡] and outcomes
Municipality Register (GBAPERSOONTAB, GBAOVERLIJDENTAB)	Determination of age and sex, date of death
Population Count and Demographics (Used for Calculation of AMI Hospitalization Rates and Standardization)	
Municipality Register (GBA)	Counts of population by sex, age group, and year

This study was approved by the Internal Review Board (IRB) of the Erasmus School of Health Policy and Management on October 5, 2019.

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[*] An example of another paper using the same data is García-Gómez, P., van Kippersluis, H., O'Donnell, O., & van Doorslaer, E. (2013). Long Term and Spillover Effects of Health Shocks on Employment and Income. *The Journal of human resources*, *48*(4), 873–909. https://doi.org/10.1353/jhr.2013.0031

[†] Statistics Netherlands (2022) provides detailed information on the variables and observations in these data sources, their representativity, and the procedure to get data access.

[‡] The procedures were classified using the CBV, CVV and ZA classifications. Procedure codes occurring in the cohort were translated with the "verrichtingenthesaurus" (https://trex.dhd.nl/). Based on the translation these three classifications were assigned. Similar approach was followed by Rabbe et al. (in press).

Israel

Analyses were conducted at the Clinical Research Center in Soroka University Medical Center and included national data of Clalit Health Services insured patients.
All hospitalizations for AMI in adults age > 66 years at the time of hospitalization during calendar years 2011-2017 were identified using Clalit Health Services (CHS) Data sharing platform powered by MDClone © (https://www.mdclone.com).[16] Data from 2010 was used as a "look-back" and data from 2018 were used to ascertain post-AMI outcomes. The data is broadly representative of the Israel population with respect to age, sex, and geography. Clalit Health Services is Israel's largest insurance company and health care provider, providing most of Israel's health care services and providing health insurance to 54% of the country's population.[14] Services include primary, secondary, and tertiary care (including a third of Israel's acute care beds), as well as pharmacies and paramedical services. CHS maintains a comprehensive database, continuously updated with information about a subject's demographics, community and outpatient visits, laboratory tests, hospitalizations, medication prescriptions, and purchases.

AMI Identification and Outcomes	
Data sources*	Use
CHS Data warehouse using accessed by MDClone©	a. Identification of patients hospitalized with a primary diagnosis of AMI b. Demographic information (Age, sex, SES) c. Creation of comorbidities
CHS Data warehouse using accessed by MDClone©	d. procedures related to the diagnosis of AMI e. In-hospital and post-hospital utilization and outcomes
Population Count and Demographics (Used for Calculation of AMI Hospitalization Rates and Standardization)	
CHS Data warehouse using accessed by MDClone©	Population denominator includes all Clalit members that were > 66 years in the period of 2011-2017 and were members in Clalit one year before and after this period.

This study was conducted according to the guidelines of the Declaration of Helsinki was approved by the Institutional Review Board of Soroka University Medical Center (Ref. 0467-18)

Taiwan:

* For more information on the Israel data from Clalit please see: http://clalitresearch.org/about-us/our-data/ Accessed February 22, 2022

All hospitalizations for AMI in adults age > 66 years at the time of hospitalization during calendar years 2011-2017 were identified using Taiwan's Inpatient Expenditures data. Data from 2010 was used as a "look-back" and data from 2018 were used to ascertain post-AMI outcomes.
Key data files included the National Health Insurance (NHI) Inpatient Expenditures by Admission file, which contains all admissions to all acute care hospitals in Taiwan and thus is inclusive of Taiwan population. The NHI Registry for Beneficiaries file includes demographic and socioeconomic status information of all NHI beneficiaries. Because all legal residents in Taiwan are eligible to enroll in the NHI program and the enrollment rate has exceeded 99% since 2000, these data are population representative. The Cause of Death Data provides information on cause and date of all reported deaths in Taiwan. Analyses were conducted at the Yang-Ming branch of the Health and Welfare Data Science Center, Taiwan Ministry of Health and Welfare. The main data sources were the National Health Insurance Research Database and Cause of Death Data.[15]

AMI Identification and Outcomes	
Data sources*	Use
Inpatient Expenditures by Admissions (2010-2018)	a. Identification of patients hospitalized with a primary diagnosis of AMI[16 17] b. Creation of comorbidities c. In-hospital and post-hospital utilization and outcomes
Cause of Death Data	Determination of death date
Population Count and Demographics (Used for Calculation of AMI Hospitalization Rates and Standardization)	
Registry for Beneficiaries	a. Counts of population by sex, age group, and year b. Determination of birth date and sex

This study was approved by the Institutional Review Board of National Yang Ming Chiao Tung University (IRB number: YM110134E).

* For more information on US Medicare Part A DataTaiwan's NHI Data and Cause of Death Data please visit: https://dep.mohw.gov.tw/dos/cp-5119-59201-113.html (in Chinese)

References

1. Rosenkrantz AB, Hughes DR, Duszak R, Jr. Medicare Claims Data Resources: A Primer for Policy-Focused Radiology Health Services Researchers. *J Am Coll Radiol* 2017;14(12):1538-44. doi: 10.1016/j.jacr.2017.04.005 [published Online First: 2017/06/02]
2. Neuman P, Jacobson GA. Medicare Advantage Checkup. *New England Journal of Medicine* 2018;379(22):2163-72. doi: 10.1056/NEJMhpr1804089
3. Likosky DS, Zhou W, Malenka DJ, et al. Growth in medicare expenditures for patients with acute myocardial infarction: a comparison of 1998 through 1999 and 2008. *JAMA Intern Med* 2013;173(22):2055-61. doi: 10.1001/jamainternmed.2013.10789 [published Online First: 2013/09/26]
4. Popescu I, Nallamothu BK, Vaughan-Sarrazin MS, et al. Racial differences in admissions to high-quality hospitals for coronary heart disease. *Arch Intern Med* 2010;170(14):1209-15. doi: 10.1001/archinternmed.2010.227 [published Online First: 2010/07/28]
5. Levy AE, Hammes A, Anoff DL, et al. Acute Myocardial Infarction Cohorts Defined by International Classification of Diseases, Tenth Revision Versus Diagnosis-Related Groups: Analysis of Diagnostic Agreement and Quality Measures in an Integrated Health System. *Circ Cardiovasc Qual Outcomes* 2021;14(3):e006570. doi: 10.1161/circoutcomes.120.006570 [published Online First: 2021/03/04]
6. Ghali WA, Rothwell DM, Quan H, et al. A Canadian comparison of data sources for coronary artery bypass surgery outcome "report cards". *Am Heart J* 2000;140(3):402-8. doi: 10.1067/mhj.2000.109222 [published Online First: 2000/08/31]
7. Ko DT, Khera R, Lau G, et al. Readmission and Mortality After Hospitalization for Myocardial Infarction and Heart Failure. *J Am Coll Cardiol* 2020;75(7):736-46. doi: 10.1016/j.jacc.2019.12.026 [published Online First: 2020/02/23]
8. Ko DT, Ahmed T, Austin PC, et al. Development of Acute Myocardial Infarction Mortality and Readmission Models for Public Reporting on Hospital Performance in Canada. *CJC Open* 2021;3(8):1051-59. doi: 10.1016/j.cjco.2021.04.012 [published Online First: 2021/09/11]
9. Herrett E, Shah AD, Boggon R, et al. Completeness and diagnostic validity of recording acute myocardial infarction events in primary care, hospital care, disease registry, and national mortality records: cohort study. *Bmj* 2013;346:f2350. doi: 10.1136/bmj.f2350 [published Online First: 2013/05/23]
10. Herrett E, Gallagher AM, Bhaskaran K, et al. Data Resource Profile: Clinical Practice Research Datalink (CPRD). *Int J Epidemiol* 2015;44(3):827-36. doi: 10.1093/ije/dyv098 [published Online First: 2015/06/08]
11. Herrett E, Gallagher AM, Bhaskaran K, et al. Data Resource Profile: Clinical Practice Research Datalink (CPRD). *International Journal of Epidemiology* 2015;44(3):827-36. doi: 10.1093/ije/dyv098
12. Nedkoff L, Lopez D, Goldacre M, et al. Identification of myocardial infarction type from electronic hospital data in England and Australia: a comparative data linkage study. *BMJ Open* 2017;7(11):e019217. doi: 10.1136/bmjopen-2017-019217
13. World Health Organization. Regional Office for E, European Observatory on Health S, Policies, et al. Netherlands: health system review. Copenhagen: World Health Organization. Regional Office for Europe 2016:240 p.

14. Benis A, Harel N, Barak Barkan R, et al. Patterns of Patients' Interactions With a Health Care Organization and Their Impacts on Health Quality Measurements: Protocol for a Retrospective Cohort Study. *JMIR Res Protoc* 2018;7(11):e10734. doi: 10.2196/10734 [published Online First: 2018/11/09]
15. Hsieh CY, Su CC, Shao SC, et al. Taiwan's National Health Insurance Research Database: past and future. *Clin Epidemiol* 2019;11:349-58. doi: 10.2147/clep.S196293 [published Online First: 2019/05/24]
16. Lee CH, Fang CC, Tsai LM, et al. Patterns of Acute Myocardial Infarction in Taiwan from 2009 to 2015. *Am J Cardiol* 2018;122(12):1996-2004. doi: 10.1016/j.amjcard.2018.08.047 [published Online First: 2018/10/12]
17. Saw SM, Hong CY, Lee J, et al. Awareness and health beliefs of women towards osteoporosis. *Osteoporos Int* 2003;14(7):595-601.

Methods 2: List of codes used by each country to identify STEMI, NSTEMI, PCI, diagnostic catheterization (cardiac catheterization without intervention), and CABG[1]

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	United States	Canada	England	Netherlands	Israel	Taiwan
STEMI	Icd-9: 41000 41001 41010 41011 41020 41021 41030 41031 41040 41041 41050 41051 41060 41061 41080 41081 41090 41091 Icd-10: I2101 I2102 I2109 I2111 I2119 I2121 I2129 I213	ICD-10: Main diagnosis I21, I22 and with secondary R9430	ICD-10: I210, I211, I212, I213	Icd-9: 410 4100 4102 4103 4104 4105 4106 Icd-10: I21 I210 I211 I212 I213	ICD-9: 41000 41001 41010 41020 41021 41030 41031 41040 41041 41050 41051 41060 41061	ICD-9: 41000 41001 41010 41011 41020 41021 41030 41031 41040 41041 41050 41051 41060 41061 41080 41081 41090 41091 ICD-10: I2101 I2102 I2109 I2111 I2119 I2121 I2129 I213 I219
NSTEMI	Icd-9: 41070 41071 Icd-10: I214 I219 I21A1 I21A9	ICD-10: Main diagnosis I21, I22 with exclude secondary R9430	ICD-10: I214, I219, I220, I221, I228, I229	Icd-9: 4107 4108 4109 Icd-10 I214 I2140 I2141	ICD9: 41002 41012 41022 41032 41042 41052 41062 4107	ICD-9: 41070 41071 Icd-10: I214 I220 I221 I228

				I2142 I2149 I220 I221 I228 I229 I219	41070 41071 41072 41080 41081 41082 41090 41091 41092	I229
PCI	Icd-9: 0.66, 36.06, 36.07, 36.09 ICD-10: 027x3	CCI: 1IJ50, 1IJ54, 1IJ57GQ	OPCS-4: K47.1, K49, K49.1, K49.2, K49.3, K49.4, K49.8, K49.9, K50, K50.1, K50.4, K50.8, K50.9, K75, K75.1, K75.2, K75.3, K75.4, K75.8, K75.9	ZA codes: 033232 033231 033238 080827 033233 033234 033235 CVV codes: 88370 88374 88371 88372 88375 88376 88377 88378 88379 8839 8837 CBV codes: 333107D 333108A 333108C 333108K 333109S 333109T 333208 333234I 333299C 333107A 333107B 333107C	Z3606 Z36060 Z3607 Z36070	Icd-9: 36.06, 36.07 ICD-10: 027x3

				333107G 333108B 333108I 333109A 333109B 333109I 333109K 333109O 333109Q 333297 333297B 333297C 333297D 333297E 333297I 333602T 380029B 381029B 381729W 381729Z 333108G 333109U 333109V 333109W 333109X 333108J 333108H 333043B		
Diagnostic catheterization	Icd-9:,37.21, 37.22, 37.23, Icd-10:4A02	CCI: 3IP10 (with accompanying billing code Z442, G297)	OPCS-4: K65, K631, K632, K633, K634, K635, K636	ZA codes: 033229 033219 CVV codes: 12750 12751 12758 12759 1273 1274 1275 1276 12760 12761 1277	Z3721 Z37211 Z3722 Z3723	Icd-9: 37.21, 37.22, 37.23, Icd-10: 4A02

				1278 CBV codes: 333203A 333204 333205 333206 333207C 333207D 333207E 333207F 333207G 333207J 333222 333207B 333201B 333212 333291B 333291 333291 333201A 333200 333209 333210S 339845E		
CABG	Icd-9: 36.1x, Icd-10: 021x	CCI: 1IJ76	OPCS-4: K40, K40.1, K40.2, K40.3, K40.4, K40.8, K40.9, K41, K41.1, K41.2, K41.3, K41.4, K41.8, K41.9, K42, K42.1, K42.2, K42.3, K42.4, K42.8, K42.9, K43, K43.1, K43.2, K43.3, K43.4, K43.8, K43.9, K44, K44.1, K44.8, K44.9, K45, K45.1, K45.2, K45.3, K45.4, K45.5, K45.8, K45.9, K46, K46.1, K46.2, K46.3, K46.4, K46.8, K46.9, K44.2, K45.6, K46.5	ZA codes: 033105 033100 033101 033102 033103 033104 033106 033107 CVV codes: 5361 53610 53611 53619 53618 53612 536120 536121	Z3610 Z3613 Z3614 Z3615 Z3616 Z3619	Icd-9: 36.1x Icd-10: 021x

				536122 CBV codes: 333102 333100 333105A 333103 333102A 333184A 333184H 333553 333104A 333105H 333105C 333102 333102L 333103L 333105D 333104B 333102A 333104 333105B 333105E 333105F 333105G 333090L		

Methods 3: Jurisdiction-specific approach to identifying comorbidities and risk-adjustment

Jurisdiction	Approach
USA	Elixhauser comorbidities
England	Elixhauser comorbidities
Netherlands	Elixhauser comorbidities as well as medication usage (categorized by ATC class) in the prior year; use of long-term care, elderly homes, nursing homes; annual expenditure on pharmaceuticals and standard deviation; annual hospital costs and standard deviation; annual mental health care costs and standard deviation
Israel	Elixhauser diagnosis codes obtained from hospitalization over the prior year that were supplemented with additional codes from ambulatory care for CHF, hypertension, and hypothyroidism.
Manitoba	Elixhauser comorbidities
Ontario	Elixhauser comorbidities
Taiwan	Elixhauser comorbidities

Methods 4: Statistical analysis protocol

IHSRC Sex-Stratified Analysis Protocol

September 30, 2022

This document describes the analysis protocol for the comparison of AMI among men and women.
We use comorbidities to characterize and compare the health of the study populations in each jurisdiction. We measure comorbidities using a modified Elixhauser[1] and include both a) diagnosis codes present on claims in the 1-year prior to the index admission and b) diagnoses recorded during the index admission, **excluding** cardiac codes (ELX_GRP_1 through ELX_GRP_4, that is: CHF, cardiac arrhythmia, vascular disease, and pulmonary circulatory disorders).
We compute the proportion of men and women in each year and AMI cohort (STEMI and NSTEMI) who have each comorbidity

Age adjustment of AMI rates

We first compute weights based on the US AMI denominator population in 2018, $w_a = \frac{n_a}{N}$, where N is the denominator population (i.e., all enrollees age 66+ with no more than 1 month of HMO and residing in the US in the index year) and n_a is the number of people in the denominator population who are in age group a.
Then for each jurisdiction and year, we compute age-standardized STEMI and NSTEMI admission rates. Let y_{as} denote the count of hospitalizations and n_{as} the count of denominator population in age group a and sex group $s \in \{men, women\}$. We directly standardize the admission rate using the age distribution in the 2018 US denominator population,

$$r_s = \sum_a w_a \frac{y_{as}}{n_{as}}$$

To form confidence intervals around these rates, we use the Gamma approximation of Fay & Feuer 1997, using the notation of Tiwari et al. 2006

1. Estimate the variance of the age-adjusted rate using:

$$v_s = \sum_a w_a^2 \frac{y_{as}}{n_{as}^2}$$

2. Compute the lower bound of the 95% confidence interval:

$$LB_s = \frac{v_s}{2\, r_s}\left(\chi^2_{2r_s^2/v_s}\right)^{-1}(.025)$$

where $\left(\chi^2_{df}\right)^{-1}(\alpha)$ is the 100α %ile of a Chi-square distribution with df degrees of freedom

3. Compute the upper bound of the 95% confidence interval:

$$UB_q = \frac{v_s + w_M^2}{2(r_s + w_M)}\left(\chi^2_{2(r_s+w_M)^2 / v_s+w_M^2}\right)^{-1}(.975)$$

where $w_M = \max\{w_a/N_{as}\}$ and the max is taken over the age groups in sex group s

4. Take a difference between the rates in men and women

$$\Delta = r_{men} - r_{women}$$

Form a 95% confidence bound for this difference using a Normal approximation:

$$\Delta \pm z_{.975}\sqrt{v_{men} + v_{women}}$$

where $z_{.975}$ is the .975 quantile of a standard normal distribution (≈ 1.96).

Age adjustment of binary outcomes

We first compute weights based on the US AMI cohort in 2018, $w_a = \frac{n_a}{N}$, where N is the number of people hospitalized with AMI (STEMI or NSTEMI) in the US in 2018 and n_a is the number of people in that cohort who are in age group a.

Then for each jurisdiction and year of interest, we compute age-standardized outcomes. Separately for STEMI and NSTEMI, in age group a and sex group $s \in \{men, women\}$, let y_{as} denote the count of people who have the outcome (e.g., PCI, CABG, mortality) and n_{as} denote the count of people hospitalized with AMI. We directly standardize the outcome rates using the age distribution in the corresponding 2018 US AMI cohort,

$$r_s = \sum_a w_a \frac{y_{as}}{n_{as}}$$

where $w_a = \frac{n_a}{N}$

To form confidence intervals around these rates, follow the same procedure above.

Age and comorbidity adjustment of binary outcomes

For STEMI and NSTEMI separately in each jurisdiction, we adjust 30-day mortality, one-year mortality, and 30-day readmissions for age and comorbidities using the following procedure:

1. Compute the **crude overall** outcome rate for each outcome, $R = \frac{n}{N}$, where n is the count with the outcome and N is the total AMI cohort sample.

2. For each person $i = 1, \ldots, N$, let $\boldsymbol{x}_i = (x_{i1}, x_{i2}, \ldots, x_{i30}, age_i, year_{it})'$ be a vector of binary indicators for the 30 individual comorbidity flags plus categorical age and year and y_i be a binary indicator of their outcome. Fit a logistic regression model:

$$logit\big(Pr(y_i = 1)\big) = \boldsymbol{\beta x}_i$$

3. Using the results of the model,
    a. Compute the **expected** outcome rate in each sex group $s \in \{men, women\}$

    $$E_s = \frac{1}{n_s} \sum_{i:s_i=s} logit^{-1}\left(\boldsymbol{\beta x}_i\right)$$

    where n_s is the number of people in the AMI cohort in sex group s
    b. Compute the **observed** outcome rate in each sex group

    $$O_s = \frac{1}{n_s} \sum_{i:s_i=s} y_i$$

    c. Compute the **adjusted** outcome rate

    $$r_s = \frac{R_s}{E_s} O_s$$

To form confidence intervals around these adjusted rates, we use a simple parametric method that ignores the variance contribution of the estimated coefficients from the casemix adjustment model. Hosmer and Lemeshow (1995) conclude that this is fine so long as the sample sizes used to fit the model are reasonably large, as they are in our case. The method is due to Fay and Feuer (1997).

1. Estimate the variance of the rate using:

$$v_s = w_s^2 \, O_s \Big/ n_s^2$$

where $w_s = \frac{\overline{R}}{E_s}$

2. Compute the lower bound of a 95% confidence interval:

$$LB_s = \frac{v_s}{2r_s}\left(\chi^2_{2r_s^2/v_s}\right)^{-1}(.025)$$

where $\left(\chi^2_{df}\right)^{-1}(\alpha)$ is the 100α %ile of a Chi-square distribution with df degrees of freedom

3. Compute the upper bound of a 95% confidence interval:

$$UB_s = \frac{v_s + w_s^2}{2(r_s + w_s)}\left(\chi^2_{2(r_s+w_M)^2 \Big/ v_s+w_M^2}\right)^{-1}(.975)$$

4. Take a difference between the rates in men and women

$$\hat{\Delta} = r_{men} - r_{women}$$

5. Form a 95% confidence bound for this difference using a Normal approximation:

$$\hat{\Delta} \pm z_{.975}\sqrt{v_{men} + v_{women}}$$

where $z_{.975}$ is the .975 quantile of a standard normal distribution (≈ 1.96).

References

Hosmer DW, Lemeshow S. Confidence interval estimates of an index of quality performance based on logistic regression models. *Statist Med*. 1995;14(19):2161-2172.

Tiwari RC, Clegg LX, Zou Z. Efficient interval estimation for age-adjusted cancer rates. *Stat Methods Med Res*. 2006;15(6):547-569.

Fay MP, Feuer EJ. Confidence Intervals for Directly Standardized Rates: A Method Based on the Gamma Distribution. *Statistics in Medicine*. 1997;16(7):791-801.

Methods 5: Jurisdiction-specific odds ratios for 30-day mortality logit models

US Sex Stratified AMI Study - Logistic Regressions on 30-Day Mortality Odds Ratio Estimates							
Probability modeled is mort30d=1 (Two separate models for STEMI and NSTEMI)							
STEMI					NSTEMI		
	Point	95%	Wald		Point	95%	Wald
Effect	Estimate	Confidence Limits			Estimate	Confidence Limits	
66-70 vs 86+	0.224	0.216	0.232		0.268	0.261	0.275
71-75 vs 86+	0.275	0.267	0.284		0.327	0.319	0.334
76-80 vs 86+	0.363	0.352	0.375		0.426	0.418	0.435
81-85 vs 86+	0.53	0.514	0.545		0.572	0.562	0.583
ELX_GRP_1	1.372	1.316	1.43		1.113	1.091	1.137
ELX_GRP_2	1.044	1.006	1.084		0.925	0.907	0.943
ELX_GRP_3	1.132	1.074	1.192		1.111	1.084	1.138
ELX_GRP_4	1.096	1.026	1.171		1.093	1.06	1.127
ELX_GRP_5	1.257	1.222	1.292		1.133	1.115	1.152
ELX_GRP_6	0.668	0.65	0.686		0.603	0.59	0.616
ELX_GRP_7	0.644	0.619	0.669		0.691	0.674	0.709
ELX_GRP_8	1.337	1.244	1.437		1.471	1.408	1.537
ELX_GRP_9	3.103	3.019	3.188		1.951	1.917	1.985
ELX_GRP_10	1.111	1.084	1.138		1.203	1.186	1.22
ELX_GRP_11	1.2	1.17	1.23		1.063	1.046	1.081
ELX_GRP_12	1.151	1.111	1.193		1.018	0.998	1.038
ELX_GRP_13	0.891	0.867	0.916		0.911	0.897	0.926
ELX_GRP_14	1.285	1.238	1.334		1.31	1.282	1.339
ELX_GRP_15	3.258	3.125	3.398		2.615	2.54	2.693
ELX_GRP_16	0.838	0.763	0.919		0.842	0.799	0.888
ELX_GRP_17	1.234	0.709	2.146		0.865	0.625	1.197
ELX_GRP_18	1.054	0.938	1.183		1.163	1.095	1.235
ELX_GRP_19	2.268	2.093	2.457		2.468	2.36	2.582
ELX_GRP_20	1.25	1.183	1.321		1.337	1.295	1.38
ELX_GRP_21	0.927	0.879	0.978		0.966	0.936	0.997
ELX_GRP_22	1.098	1.059	1.138		1.171	1.147	1.196
ELX_GRP_23	0.866	0.836	0.896		0.8	0.783	0.818
ELX_GRP_24	1.247	1.2	1.297		1.612	1.579	1.645
ELX_GRP_25	2.265	2.216	2.315		1.853	1.827	1.879
ELX_GRP_26	0.785	0.723	0.852		0.898	0.859	0.938
ELX_GRP_27	0.793	0.754	0.835		0.846	0.825	0.868
ELX_GRP_28	0.83	0.764	0.902		0.875	0.831	0.921
ELX_GRP_29	0.671	0.595	0.757		0.738	0.688	0.792
ELX_GRP_30	1.098	1.012	1.192		1.074	1.024	1.126
ELX_GRP_31	0.953	0.921	0.985		0.952	0.934	0.971

Netherlands Sex Stratified AMI Study - Logistic Regressions on 30-Day Mortality Odds Ratio Estimates							
Probability modeled is mort30d=1 (Two separate models for STEMI and NSTEMI)							
STEMI					NSTEMI		
Coefficients: (3 not defined because of singularities)					Coefficients: (1 not defined because of singularities)		
	Estimate	**Odds ratio**	**Std. Error**		**Estimate**	**Odds ratio**	**Std. Error**
(Intercept)	-3.07E+03		6.16E+01		-3.72E+03		7.20E+01
ELX_GRP_1	-8.94E+02	0.00E+00	7.98E+02		3.38E+02	8.35E+146	2.89E+02
ELX_GRP_2	2.56E+01	1.27E+11	1.47E+02		9.13E+01	4.66E+39	9.70E+01
ELX_GRP_3	3.81E+02	1.77E+165	1.98E+02		3.42E+02	4.56E+148	1.17E+02
ELX_GRP_4	-9.69E+02	0.00E+00	1.02E+03		-1.77E+02	2.22E-77	4.68E+02
ELX_GRP_5	5.17E+02	2.51E+224	1.34E+02		5.54E+02	2.94E+240	8.69E+01
ELX_GRP_6	-2.62E+02	1.81E-114	8.85E+01		-2.57E+02	1.80E-112	7.09E+01
ELX_GRP_7	-4.18E+02	3.94E-182	5.78E+02		-5.00E+02	9.62E-218	3.70E+02
ELX_GRP_8	7.55E+02	#NUM!	5.55E+02		2.60E+02	1.23E+113	3.89E+02
ELX_GRP_9	1.25E+03	#NUM!	2.08E+02		3.87E+02	1.59E+168	2.35E+02
ELX_GRP_10	3.85E+02	1.77E+167	1.16E+02		3.84E+02	7.93E+166	8.57E+01
ELX_GRP_11	3.40E+01	6.07E+14	1.01E+02		-1.58E+02	3.59E-69	8.02E+01
ELX_GRP_12	-5.58E+01	5.90E-25	2.75E+02		2.09E+02	6.47E+90	1.43E+02
ELX_GRP_13	-3.84E+01	2.08E-17	4.16E+02		-4.73E+01	2.76E-21	3.51E+02
ELX_GRP_14	4.96E+02	1.72E+215	1.25E+02		5.34E+02	6.07E+231	8.02E+01
ELX_GRP_15	8.08E+02	#NUM!	3.78E+02		6.09E+02	3.38E+264	2.96E+02
ELX_GRP_16	-1.43E+04	0.00E+00	4.60E+05		3.51E+02	2.74E+152	1.08E+03
ELX_GRP_17	NA	#VALUE!	NA		-1.23E+04	0	6.05E+05
ELX_GRP_18	5.97E+02	1.70E+259	4.26E+02		-3.54E+02	2.22E-154	3.37E+02
ELX_GRP_19	7.44E+02	#NUM!	2.07E+02		9.39E+02	#NUM!	1.57E+02
ELX_GRP_20	2.02E+02	3.96E+87	1.78E+02		3.58E+02	4.05E+155	1.38E+02
ELX_GRP_21	-2.01E+02	4.61E-88	2.88E+02		2.57E+02	4.54E+111	2.03E+02
ELX_GRP_22	-1.24E+03	0.00E+00	7.95E+02		8.64E+02	#NUM!	3.41E+02
ELX_GRP_23	-3.49E+02	2.44E-152	4.20E+02		-2.64E+02	2.71E-115	2.67E+02
ELX_GRP_24	-1.31E+04	0.00E+00	2.97E+05		-2.12E+02	8.50E-93	1.14E+03
ELX_GRP_25	4.84E+02	1.58E+210	1.66E+02		8.35E+02	#NUM!	1.25E+02
ELX_GRP_26	5.50E+02	9.82E+238	8.32E+02		-4.50E+02	3.02E-196	4.58E+02
ELX_GRP_27	1.83E+02	2.22E+79	2.99E+02		-8.42E+01	2.73E-37	2.17E+02
ELX_GRP_28	1.17E+03	#NUM!	4.97E+02		4.52E+02	1.21E+196	3.78E+02
ELX_GRP_29	-1.31E+04	0.00E+00	6.07E+05		-1.24E+04	0	5.71E+05
ELX_GRP_30	1.59E+04	#NUM!	4.69E+05		-1.32E+04	0	2.95E+05
ELX_GRP_31	1.56E+03	#NUM!	1.34E+03		-1.19E+02	1.54E-52	1.11E+03
agegrp5	1.74E+03	#NUM!	7.37E+01		1.66E+03	#NUM!	7.44E+01
agegrp4	1.06E+03	#NUM!	7.25E+01		1.08E+03	#NUM!	7.44E+01
agegrp3	6.82E+02	1.04E+296	7.23E+01		6.70E+02	1.42E+291	7.62E+01
agegrp2	3.00E+02	2.37E+130	7.45E+01		2.91E+02	2.40E+126	8.12E+01
agegrp1	NA	#VALUE!	NA		NA	#VALUE!	NA

pharmaceutic	3.99E-02	1.04E+00	1.73E-02		1.52E-02	1.01533641	8.90E-03
hospital costs	4.90E-03	1.00E+00	3.00E-03		-2.95E-03	0.99705136	2.13E-03
mental health	-9.70E-05	1.00E+00	9.82E-03		-1.43E-02	0.98577219	1.38E-02
A07	-2.68E+01	2.25E-12	1.35E+02		-1.46E+02	5.29E-64	1.09E+02
A10	3.05E+02	2.88E+132	6.01E+01		2.67E+02	5.49E+115	4.97E+01
C07	1.61E+02	1.02E+70	5.00E+01		-8.28E+00	0.00025354	4.45E+01
D11	3.04E+02	1.06E+132	1.88E+02		-1.65E+02	1.63E-72	1.80E+02
N07	-2.06E+02	5.12E-90	1.39E+02		-9.37E+01	1.99E-41	1.10E+02
R03	1.30E+02	1.74E+56	6.11E+01		-2.14E+01	4.93E-10	5.23E+01
S01	1.08E+01	4.81E+04	5.05E+01		-7.04E+01	2.66E-31	4.41E+01
A02	-1.59E+02	5.94E-70	5.07E+01		-1.30E+02	4.25E-57	4.58E+01
B01	2.47E+02	2.28E+107	5.48E+01		2.04E+02	3.95E+88	5.43E+01
C01	-1.25E+02	4.67E-55	6.46E+01		-2.34E+01	6.61E-11	4.66E+01
C08	-1.01E+01	4.11E-05	5.18E+01		-4.43E+01	5.65E-20	4.32E+01
C09	7.56E+01	6.60E+32	4.79E+01		-1.52E+01	2.41E-07	4.24E+01
C10	-1.45E+02	1.44E-63	5.32E+01		-1.98E+02	1.13E-86	4.55E+01
A05	1.15E+02	7.19E+49	4.74E+02		-5.46E+02	1.12E-237	5.27E+02
D02	2.15E+01	2.09E+09	6.95E+01		3.75E+01	1.88E+16	5.65E+01
D07	4.71E+01	2.82E+20	5.57E+01		-6.43E+01	1.18E-28	4.92E+01
J01	-3.29E+01	5.31E-15	4.88E+01		-2.59E+00	0.07524544	4.27E+01
J05	-3.03E+02	2.56E-132	2.37E+02		-9.48E+01	7.02E-42	1.97E+02
J07	2.92E+02	8.80E+126	1.74E+02		1.11E+02	1.61E+48	1.56E+02
M01	-2.29E+02	3.89E-100	6.20E+01		-2.04E+02	4.18E-89	5.88E+01
N05	9.18E+01	7.53E+39	8.38E+01		2.21E+02	1.42E+96	6.73E+01
R01	-2.00E+02	1.87E-87	8.69E+01		-1.56E+02	1.46E-68	7.35E+01
R05	-2.37E+02	8.75E-104	9.57E+01		-1.66E+02	6.61E-73	7.90E+01
D06	-8.14E+01	4.59E-36	8.84E+01		-1.21E+02	3.81E-53	7.44E+01
A12	-2.03E+02	5.64E-89	7.48E+01		1.53E+02	4.18E+66	5.80E+01
C03	1.96E+02	1.97E+85	4.95E+01		2.95E+02	7.94E+127	4.24E+01
N06	2.12E+02	7.88E+91	6.96E+01		1.25E+02	1.75E+54	6.09E+01
M04	1.13E+02	1.61E+49	1.00E+02		2.30E+02	1.04E+100	6.99E+01
S02	-1.48E+02	7.16E-65	1.13E+02		4.37E+01	9.15E+18	9.17E+01
A03	5.21E+01	4.07E+22	1.06E+02		-2.56E+02	5.42E-112	9.20E+01
B03	1.90E+02	4.89E+82	7.51E+01		1.62E+02	1.38E+70	5.59E+01
H03	1.79E+01	6.00E+07	8.53E+01		-1.55E+01	1.87E-07	7.20E+01
G04	-1.40E+02	2.13E-61	6.88E+01		-1.89E+02	6.14E-83	5.74E+01
M05	3.08E+02	6.40E+133	8.79E+01		-2.97E+00	0.05130331	7.71E+01
H02	1.28E+01	3.45E+05	6.63E+01		9.73E+01	1.77E+42	5.44E+01
J02	1.93E+02	4.88E+83	2.18E+02		2.81E+02	7.30E+121	1.91E+02
A06	-1.22E+02	1.71E-53	5.96E+01		8.65E+01	3.61E+37	4.76E+01
P01	4.73E+01	3.45E+20	2.12E+02		2.21E+02	8.62E+95	1.69E+02
C02	1.98E+02	1.46E+86	1.58E+02		-9.91E+01	9.06E-44	1.18E+02
N02	1.13E+01	8.16E+04	6.21E+01		-1.57E+02	5.92E-69	5.15E+01

N04	-5.63E+01	3.69E-25	1.65E+02		-1.22E+02	1.04E-53	1.42E+02
D04	-6.65E+02	1.16E-289	7.53E+02		-7.29E+01	2.23E-32	5.43E+02
N03	1.54E+02	1.03E+67	9.97E+01		-4.80E+01	1.47E-21	8.55E+01
L02	5.60E+00	2.70E+02	1.72E+02		1.96E+02	9.80E+84	1.24E+02
R06	-9.68E+01	9.50E-43	9.50E+01		-7.33E+01	1.50E-32	8.13E+01
H04	7.44E+02	#NUM!	2.97E+02		-2.87E+01	3.30E-13	2.51E+02
A11	1.22E+02	9.64E+52	6.56E+01		1.27E+02	9.59E+54	5.21E+01
Y	2.91E+02	3.58E+126	1.22E+02		4.06E+02	2.33E+176	8.82E+01
G03	-5.97E+01	1.16E-26	1.60E+02		-4.02E+02	2.59E-175	1.55E+02
L04	-3.08E+02	2.33E-134	1.81E+02		-9.77E+01	3.64E-43	1.51E+02
L01	-2.52E+02	4.41E-110	1.86E+02		-8.80E+01	5.82E-39	1.59E+02
B02	3.21E+02	1.72E+139	2.52E+02		8.08E-01	2.24319233	1.72E+02
B05	-5.16E+02	7.25E-225	3.42E+02		-1.35E+02	1.92E-59	2.32E+02
D05	-6.75E+01	4.99E-30	2.27E+02		1.07E+02	4.40E+46	1.80E+02
N01	-2.84E+02	4.14E-124	1.59E+02		-2.73E+01	1.35E-12	1.17E+02
C05	-1.73E+02	8.99E-76	2.55E+02		7.30E+01	4.95E+31	1.86E+02
G01	-2.95E+02	5.12E-129	3.01E+02		-1.82E+02	1.23E-79	2.53E+02
A01	-1.26E+02	2.57E-55	3.21E+02		-5.90E+01	2.29E-26	2.56E+02
V03	1.25E+02	2.36E+54	2.49E+02		4.94E+02	3.48E+214	1.53E+02
D08	7.85E+00	2.57E+03	8.28E+02		-1.38E+03	0	1.02E+03
D10	-8.04E+02	0.00E+00	4.68E+02		-7.12E+02	0	4.62E+02
A16	-1.25E+04	0.00E+00	4.03E+05		-1.12E+04	0	2.93E+05
H05	4.56E+02	9.88E+197	3.47E+02		5.51E+02	1.98E+239	2.44E+02
A04	5.14E+00	1.70E+02	3.19E+02		5.24E+02	5.02E+227	2.53E+02
L03	-1.47E+02	1.30E-64	8.10E+02		5.34E+02	4.97E+231	5.49E+02
P03	-1.22E+04	0.00E+00	2.44E+05		4.75E+02	1.31E+206	9.68E+02
D09	8.93E+01	6.31E+38	6.77E+02		4.85E+02	2.88E+210	5.03E+02
C04	5.76E+02	8.64E+249	8.15E+02		5.30E+02	1.23E+230	5.51E+02
A09	-3.01E+02	1.55E-131	4.45E+02		1.40E+02	4.24E+60	3.42E+02
V07	-2.60E+02	8.12E-114	7.20E+02		7.84E+02	#NUM!	4.13E+02
M03	1.10E+02	3.97E+47	4.50E+02		-3.68E+02	1.12E-160	4.67E+02
G02	1.10E+03	#NUM!	1.13E+03		1.26E+02	7.85E+54	1.10E+03
J04	-1.25E+03	0.00E+00	1.08E+03		-1.46E+02	6.46E-64	6.29E+02
M02	-1.26E+04	0.00E+00	4.58E+05		-1.14E+04	0	3.76E+05
D03	2.91E+03	#NUM!	9.39E+02		-1.21E+02	4.65E-53	6.18E+02
V01	6.68E+02	9.52E+289	1.10E+03		-1.10E+04	0	2.82E+05
J06	-1.30E+04	0.00E+00	2.88E+05		-1.24E+04	0	2.18E+05
P02	NA	#VALUE!	NA		-1.13E+04	0	4.32E+05
V04	-1.17E+04	0.00E+00	8.80E+05		-1.20E+04	0	6.15E+05
A14	-1.27E+04	0.00E+00	5.94E+05		-1.11E+04	0	8.67E+05
---		1.00E+00					

Israel Sex Stratified AMI Study - Logistic Regressions on 30-Day Mortality Odds Ratio Estimates							
Probability modeled is mort30d=1 (Two separate models for STEMI and NSTEMI)							
STEMI					NSTEMI		
	Point	Confidence Limits			Point	Confidence Limits	
	Estimate	conf.low	conf.high		Estimate	conf.low	conf.high
71-75 vs 66-7(	1.6595	1.2066	2.2877		1.422	1.109	1.828
76-80 vs 66-7(	2.0534	1.4962	2.8274		2.165	1.725	2.732
81-85 vs 66-7(	2.8606	2.1054	3.9071		2.924	2.349	3.666
86+ vs 66-70	7.0646	5.3165	9.4761		5.785	4.711	7.165
Elix1	1.0538	0.7738	1.4175		1.354	1.177	1.555
Elix2	0.6796	0.3449	1.2254		1.037	0.815	1.306
Elix3	2.0955	1.2735	3.3586		0.989	0.796	1.222
Elix4	0.714	0.3906	1.2407		1.297	0.992	1.681
Elix5	0.9794	0.6388	1.4558		1.093	0.899	1.321
Elix6	0.8136	0.6749	0.9819		0.69	0.615	0.774
Elix7	1.3031	0.0661	8.6668		0.491	0.078	1.699
Elix8	0.5393	0.0273	3.3421		1.321	0.567	2.708
Elix9	3.4068	2.3972	4.7861		1.84	1.452	2.312
Elix10	1.4572	1.1351	1.8579		0.898	0.773	1.041
Elix11	1.3424	1.1059	1.6278		0.988	0.88	1.109
Elix12	1.3914	0.9276	2.0395		1.193	0.969	1.459
Elix13	0.8393	0.6017	1.1494		0.997	0.845	1.171
Elix14	1.4445	1.1328	1.8333		1.361	1.198	1.546
Elix15	2.3535	0.4575	9.6809		1.085	0.494	2.217
Elix16	0.3216	0.0355	1.9337		0.977	0.429	2.076
Elix17							
Elix18	0.7449	0.2041	2.088		1.506	0.817	2.596
Elix19	3.7079	1.3116	9.4624		3.061	1.698	5.283
Elix20	1.1623	0.9012	1.4896		1.192	1.035	1.37
Elix21	0.7005	0.3254	1.3505		0.768	0.514	1.108
Elix22	0.3993	0.1156	1.032		1.877	1.283	2.687
Elix23	0.8495	0.6452	1.1061		0.899	0.762	1.057
Elix24	0.9606	0.5819	1.52		1.452	1.125	1.855
Elix25	9.3614	4.841	18.3273		3.232	2.329	4.439
Elix26	0.4738	0.0254	2.585		1.186	0.578	2.22
Elix27	1.1847	0.8552	1.6173		0.929	0.783	1.097
Elix28	2.4113	0.6057	7.7094		0.84	0.246	2.165
Elix29							
Elix30	1.3055	0.6583	2.5134		1.604	1.065	2.396
Elix31	1.0143	0.5691	1.7372		0.697	0.474	1.006

Netherlands Sex Stratified AMI Study - Logistic Regressions on 30-Day Mortality Odds Ratio Estimates							
Probability modeled is mort30d=1 (Two separate models for STEMI and NSTEMI)							
STEMI					NSTEMI		
Coefficients: (3 not defined because of singularities)					Coefficients: (1 not defined because of singularities)		
	Estimate	**Odds ratio**	**Std. Error**		**Estimate**	**Odds ratio**	**Std. Error**
(Intercept)	-3.07E+03		6.16E+01		-3.72E+03		7.20E+01
ELX_GRP_1	-8.94E+02	0.00E+00	7.98E+02		3.38E+02	8.35E+146	2.89E+02
ELX_GRP_2	2.56E+01	1.27E+11	1.47E+02		9.13E+01	4.66E+39	9.70E+01
ELX_GRP_3	3.81E+02	1.77E+165	1.98E+02		3.42E+02	4.56E+148	1.17E+02
ELX_GRP_4	-9.69E+02	0.00E+00	1.02E+03		-1.77E+02	2.22E-77	4.68E+02
ELX_GRP_5	5.17E+02	2.51E+224	1.34E+02		5.54E+02	2.94E+240	8.69E+01
ELX_GRP_6	-2.62E+02	1.81E-114	8.85E+01		-2.57E+02	1.80E-112	7.09E+01
ELX_GRP_7	-4.18E+02	3.94E-182	5.78E+02		-5.00E+02	9.62E-218	3.70E+02
ELX_GRP_8	7.55E+02	#NUM!	5.55E+02		2.60E+02	1.23E+113	3.89E+02
ELX_GRP_9	1.25E+03	#NUM!	2.08E+02		3.87E+02	1.59E+168	2.35E+02
ELX_GRP_10	3.85E+02	1.77E+167	1.16E+02		3.84E+02	7.93E+166	8.57E+01
ELX_GRP_11	3.40E+01	6.07E+14	1.01E+02		-1.58E+02	3.59E-69	8.02E+01
ELX_GRP_12	-5.58E+01	5.90E-25	2.75E+02		2.09E+02	6.47E+90	1.43E+02
ELX_GRP_13	-3.84E+01	2.08E-17	4.16E+02		-4.73E+01	2.76E-21	3.51E+02
ELX_GRP_14	4.96E+02	1.72E+215	1.25E+02		5.34E+02	6.07E+231	8.02E+01
ELX_GRP_15	8.08E+02	#NUM!	3.78E+02		6.09E+02	3.38E+264	2.96E+02
ELX_GRP_16	-1.43E+04	0.00E+00	4.60E+05		3.51E+02	2.74E+152	1.08E+03
ELX_GRP_17	NA	#VALUE!	NA		-1.23E+04	0	6.05E+05

ELX_GRP_18	5.97E+02	1.70E+259	4.26E+02		-3.54E+02	2.22E-154	3.37E+02
ELX_GRP_19	7.44E+02	#NUM!	2.07E+02		9.39E+02	#NUM!	1.57E+02
ELX_GRP_20	2.02E+02	3.96E+87	1.78E+02		3.58E+02	4.05E+155	1.38E+02
ELX_GRP_21	-2.01E+02	4.61E-88	2.88E+02		2.57E+02	4.54E+111	2.03E+02
ELX_GRP_22	-1.24E+03	0.00E+00	7.95E+02		8.64E+02	#NUM!	3.41E+02
ELX_GRP_23	-3.49E+02	2.44E-152	4.20E+02		-2.64E+02	2.71E-115	2.67E+02
ELX_GRP_24	-1.31E+04	0.00E+00	2.97E+05		-2.12E+02	8.50E-93	1.14E+03
ELX_GRP_25	4.84E+02	1.58E+210	1.66E+02		8.35E+02	#NUM!	1.25E+02
ELX_GRP_26	5.50E+02	9.82E+238	8.32E+02		-4.50E+02	3.02E-196	4.58E+02
ELX_GRP_27	1.83E+02	2.22E+79	2.99E+02		-8.42E+01	2.73E-37	2.17E+02
ELX_GRP_28	1.17E+03	#NUM!	4.97E+02		4.52E+02	1.21E+196	3.78E+02
ELX_GRP_29	-1.31E+04	0.00E+00	6.07E+05		-1.24E+04	0	5.71E+05
ELX_GRP_30	1.59E+04	#NUM!	4.69E+05		-1.32E+04	0	2.95E+05
ELX_GRP_31	1.56E+03	#NUM!	1.34E+03		-1.19E+02	1.54E-52	1.11E+03
agegrp5	1.74E+03	#NUM!	7.37E+01		1.66E+03	#NUM!	7.44E+01
agegrp4	1.06E+03	#NUM!	7.25E+01		1.08E+03	#NUM!	7.44E+01
agegrp3	6.82E+02	1.04E+296	7.23E+01		6.70E+02	1.42E+291	7.62E+01
agegrp2	3.00E+02	2.37E+130	7.45E+01		2.91E+02	2.40E+126	8.12E+01
agegrp1	NA	#VALUE!	NA		NA	#VALUE!	NA
long-term care	9.62E+02	#NUM!	1.82E+02		6.90E+02	6.87E+299	1.51E+02
elderly home	-4.14E+02	2.15E-180	2.13E+02		-6.34E+01	3.04E-28	1.56E+02
nursing home	-7.09E+01	1.70E-31	1.98E+02		3.00E+02	1.30E+130	1.53E+02
pharmaceutical costs	3.99E-02	1.04E+00	1.73E-02		1.52E-02	1.01533641	8.90E-03
hospital costs	4.90E-03	1.00E+00	3.00E-03		-2.95E-03	0.99705136	2.13E-03
mental healthcare costs	-9.70E-05	1.00E+00	9.82E-03		-1.43E-02	0.98577219	1.38E-02
A07	-2.68E+01	2.25E-12	1.35E+02		-1.46E+02	5.29E-64	1.09E+02
A10	3.05E+02	2.88E+132	6.01E+01		2.67E+02	5.49E+115	4.97E+01
C07	1.61E+02	1.02E+70	5.00E+01		-8.28E+00	0.00025354	4.45E+01

D11	3.04E+02	1.06E+132	1.88E+02		-1.65E+02	1.63E-72	1.80E+02
N07	-2.06E+02	5.12E-90	1.39E+02		-9.37E+01	1.99E-41	1.10E+02
R03	1.30E+02	1.74E+56	6.11E+01		-2.14E+01	4.93E-10	5.23E+01
S01	1.08E+01	4.81E+04	5.05E+01		-7.04E+01	2.66E-31	4.41E+01
A02	-1.59E+02	5.94E-70	5.07E+01		-1.30E+02	4.25E-57	4.58E+01
B01	2.47E+02	2.28E+107	5.48E+01		2.04E+02	3.95E+88	5.43E+01
C01	-1.25E+02	4.67E-55	6.46E+01		-2.34E+01	6.61E-11	4.66E+01
C08	-1.01E+01	4.11E-05	5.18E+01		-4.43E+01	5.65E-20	4.32E+01
C09	7.56E+01	6.60E+32	4.79E+01		-1.52E+01	2.41E-07	4.24E+01
C10	-1.45E+02	1.44E-63	5.32E+01		-1.98E+02	1.13E-86	4.55E+01
A05	1.15E+02	7.19E+49	4.74E+02		-5.46E+02	1.12E-237	5.27E+02
D02	2.15E+01	2.09E+09	6.95E+01		3.75E+01	1.88E+16	5.65E+01
D07	4.71E+01	2.82E+20	5.57E+01		-6.43E+01	1.18E-28	4.92E+01
J01	-3.29E+01	5.31E-15	4.88E+01		-2.59E+00	0.07524544	4.27E+01
J05	-3.03E+02	2.56E-132	2.37E+02		-9.48E+01	7.02E-42	1.97E+02
J07	2.92E+02	8.80E+126	1.74E+02		1.11E+02	1.61E+48	1.56E+02
M01	-2.29E+02	3.89E-100	6.20E+01		-2.04E+02	4.18E-89	5.88E+01
N05	9.18E+01	7.53E+39	8.38E+01		2.21E+02	1.42E+96	6.73E+01
R01	-2.00E+02	1.87E-87	8.69E+01		-1.56E+02	1.46E-68	7.35E+01
R05	-2.37E+02	8.75E-104	9.57E+01		-1.66E+02	6.61E-73	7.90E+01
D06	-8.14E+01	4.59E-36	8.84E+01		-1.21E+02	3.81E-53	7.44E+01
A12	-2.03E+02	5.64E-89	7.48E+01		1.53E+02	4.18E+66	5.80E+01
C03	1.96E+02	1.97E+85	4.95E+01		2.95E+02	7.94E+127	4.24E+01
N06	2.12E+02	7.88E+91	6.96E+01		1.25E+02	1.75E+54	6.09E+01
M04	1.13E+02	1.61E+49	1.00E+02		2.30E+02	1.04E+100	6.99E+01
S02	-1.48E+02	7.16E-65	1.13E+02		4.37E+01	9.15E+18	9.17E+01
A03	5.21E+01	4.07E+22	1.06E+02		-2.56E+02	5.42E-112	9.20E+01
B03	1.90E+02	4.89E+82	7.51E+01		1.62E+02	1.38E+70	5.59E+01

H03	1.79E+01	6.00E+07	8.53E+01		-1.55E+01	1.87E-07	7.20E+01
G04	-1.40E+02	2.13E-61	6.88E+01		-1.89E+02	6.14E-83	5.74E+01
M05	3.08E+02	6.40E+133	8.79E+01		-2.97E+00	0.05130331	7.71E+01
H02	1.28E+01	3.45E+05	6.63E+01		9.73E+01	1.77E+42	5.44E+01
J02	1.93E+02	4.88E+83	2.18E+02		2.81E+02	7.30E+121	1.91E+02
A06	-1.22E+02	1.71E-53	5.96E+01		8.65E+01	3.61E+37	4.76E+01
P01	4.73E+01	3.45E+20	2.12E+02		2.21E+02	8.62E+95	1.69E+02
C02	1.98E+02	1.46E+86	1.58E+02		-9.91E+01	9.06E-44	1.18E+02
N02	1.13E+01	8.16E+04	6.21E+01		-1.57E+02	5.92E-69	5.15E+01
D01	-1.90E+01	5.89E-09	9.73E+01		6.76E+01	2.38E+29	7.78E+01
H01	3.29E+02	5.66E+142	4.72E+02		5.12E+01	1.64E+22	4.25E+02
N04	-5.63E+01	3.69E-25	1.65E+02		-1.22E+02	1.04E-53	1.42E+02
D04	-6.65E+02	1.16E-289	7.53E+02		-7.29E+01	2.23E-32	5.43E+02
N03	1.54E+02	1.03E+67	9.97E+01		-4.80E+01	1.47E-21	8.55E+01
L02	5.60E+00	2.70E+02	1.72E+02		1.96E+02	9.80E+84	1.24E+02
R06	-9.68E+01	9.50E-43	9.50E+01		-7.33E+01	1.50E-32	8.13E+01
H04	7.44E+02	#NUM!	2.97E+02		-2.87E+01	3.30E-13	2.51E+02
A11	1.22E+02	9.64E+52	6.56E+01		1.27E+02	9.59E+54	5.21E+01
Y	2.91E+02	3.58E+126	1.22E+02		4.06E+02	2.33E+176	8.82E+01
G03	-5.97E+01	1.16E-26	1.60E+02		-4.02E+02	2.59E-175	1.55E+02
L04	-3.08E+02	2.33E-134	1.81E+02		-9.77E+01	3.64E-43	1.51E+02
L01	-2.52E+02	4.41E-110	1.86E+02		-8.80E+01	5.82E-39	1.59E+02
B02	3.21E+02	1.72E+139	2.52E+02		8.08E-01	2.24319233	1.72E+02
B05	-5.16E+02	7.25E-225	3.42E+02		-1.35E+02	1.92E-59	2.32E+02
D05	-6.75E+01	4.99E-30	2.27E+02		1.07E+02	4.40E+46	1.80E+02
N01	-2.84E+02	4.14E-124	1.59E+02		-2.73E+01	1.35E-12	1.17E+02
C05	-1.73E+02	8.99E-76	2.55E+02		7.30E+01	4.95E+31	1.86E+02
G01	-2.95E+02	5.12E-129	3.01E+02		-1.82E+02	1.23E-79	2.53E+02

A01	-1.26E+02	2.57E-55	3.21E+02		-5.90E+01	2.29E-26	2.56E+02
V03	1.25E+02	2.36E+54	2.49E+02		4.94E+02	3.48E+214	1.53E+02
D08	7.85E+00	2.57E+03	8.28E+02		-1.38E+03	0	1.02E+03
D10	-8.04E+02	0.00E+00	4.68E+02		-7.12E+02	0	4.62E+02
A16	-1.25E+04	0.00E+00	4.03E+05		-1.12E+04	0	2.93E+05
H05	4.56E+02	9.88E+197	3.47E+02		5.51E+02	1.98E+239	2.44E+02
A04	5.14E+00	1.70E+02	3.19E+02		5.24E+02	5.02E+227	2.53E+02
L03	-1.47E+02	1.30E-64	8.10E+02		5.34E+02	4.97E+231	5.49E+02
P03	-1.22E+04	0.00E+00	2.44E+05		4.75E+02	1.31E+206	9.68E+02
D09	8.93E+01	6.31E+38	6.77E+02		4.85E+02	2.88E+210	5.03E+02
C04	5.76E+02	8.64E+249	8.15E+02		5.30E+02	1.23E+230	5.51E+02
A09	-3.01E+02	1.55E-131	4.45E+02		1.40E+02	4.24E+60	3.42E+02
V07	-2.60E+02	8.12E-114	7.20E+02		7.84E+02	#NUM!	4.13E+02
M03	1.10E+02	3.97E+47	4.50E+02		-3.68E+02	1.12E-160	4.67E+02
G02	1.10E+03	#NUM!	1.13E+03		1.26E+02	7.85E+54	1.10E+03
J04	-1.25E+03	0.00E+00	1.08E+03		-1.46E+02	6.46E-64	6.29E+02
M02	-1.26E+04	0.00E+00	4.58E+05		-1.14E+04	0	3.76E+05
D03	2.91E+03	#NUM!	9.39E+02		-1.21E+02	4.65E-53	6.18E+02
V01	6.68E+02	9.52E+289	1.10E+03		-1.10E+04	0	2.82E+05
J06	-1.30E+04	0.00E+00	2.88E+05		-1.24E+04	0	2.18E+05
P02	NA	#VALUE!	NA		-1.13E+04	0	4.32E+05
V04	-1.17E+04	0.00E+00	8.80E+05		-1.20E+04	0	6.15E+05
A14	-1.27E+04	0.00E+00	5.94E+05		-1.11E+04	0	8.67E+05
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England Sex Stratified AMI Study - Logistic Regressions on 30-Day Mortality Odds Ratio Estimates							
Probability modeled is mort30d=1 (Two separate models for STEMI and NSTEMI)							
	STEMI				NSTEMI		
	Point	95%	Wald		Point	95%	Wald
Effect	Estimate	Confidence Limits			Estimate	Confidence Limits	
intercept	0.04279688	0.03639334	0.05032715		0.03598081	0.03151788	0.0410757
71-75 vs 66-7	1.45397469	1.19028741	1.77607726		1.54271534	1.32202513	1.80024613
76-80 vs 66-7	1.90447357	1.56651989	2.31533579		1.89059468	1.6328376	2.18904087
81-85 vs 66-7	3.00219014	2.48545144	3.62636158		2.87568185	2.49915821	3.3089326
86+ vs 66-70	5.57267101	4.65960055	6.66466189		4.61271539	4.03331209	5.27535257
congestive_he	1.46158123	1.13105996	1.88868829		1.18391789	1.05631639	1.32693346
cardiac_arrhy	1.23162315	1.01991275	1.48727975		0.92765634	0.84297643	1.02084265
valvular_disea	1.17405478	0.87605197	1.57342792		1.24764669	1.09903283	1.41635648
pulmonary_ci	1.70911882	1.0044292	2.90820609		1.12382903	0.86532971	1.45954967
peripheral_va	1.32181591	1.10320915	1.58374076		1.26346368	1.14629587	1.3926077
hypertension_	0.74014209	0.6642315	0.82472799		0.74526977	0.6955294	0.79856729
hypertension_	1.06623925	0.71161031	1.59759649		1.01116156	0.8529969	1.19865347
paralysis	1.26996619	0.81918549	1.96880209		1.5661761	1.27091115	1.9300386
other_neuro	2.91312552	2.40513061	3.52841556		1.88354671	1.67575403	2.11710557
chronic_pulm	0.95462298	0.83336164	1.0935289		1.04896762	0.971079	1.13310356
diabetes_noc	1.32420147	1.16455202	1.5057374		1.0159772	0.94245314	1.09523713
diabetes_com	0.9968363	0.69520246	1.42934278		1.21841148	1.03843216	1.42958451
hypothyroidis	0.93514859	0.77804917	1.12396867		0.78012529	0.69579914	0.87467119
renal_failure	1.55450563	1.34265148	1.7997878		1.51751842	1.40281667	1.64159881
liver_disease	2.15092913	1.49168835	3.10151658		2.21396553	1.78745303	2.74225017
peptic_ulcer	0.69999899	0.38482106	1.27331542		0.99960327	0.76173038	1.31175903
lymphoma	1.84810511	1.03170405	3.31053513		1.60601041	1.16529829	2.21339845
metastatic_ca	4.06357958	2.81900664	5.85762332		2.95301761	2.35731376	3.69925853
non_metastat	1.106351	0.86698111	1.41180993		1.11939476	0.97516232	1.28496007
ra	1.11681949	0.89703414	1.39045519		0.95592338	0.8324529	1.09770716
coagulopathy	1.50655092	0.91597622	2.47789803		1.39295426	1.06861243	1.81573929
obesity	0.76122991	0.57897401	1.00085837		0.76943389	0.64448987	0.91860019
weight_loss	1.40688578	0.94664035	2.09089716		1.37844679	1.11392272	1.70578759
fluid_electrol	3.14217479	2.73613573	3.60846954		2.53161594	2.33842196	2.74077107
blood_loss_ar	0.37325991	0.09571278	1.45563589		0.45643121	0.21444882	0.97146466
deficiency_an	0.78960003	0.60207039	1.0355404		0.75675183	0.66229316	0.86468253
alcohol_abus	0.64877647	0.4230614	0.99491683		0.77620067	0.61400333	0.98124464
drug_abuse	1.26E-05	2.85E-108	5.54E+97		0.21229492	0.02848663	1.58211521
psychoses	0.94935747	0.44142804	2.04173616		1.21626584	0.81704305	1.81055648
depression	0.85536097	0.6569489	1.11369755		0.99116314	0.85765877	1.14544898

Taiwan Sex Stratified AMI Study - Logistic Regressions on 30-Day Mortality Odds Ratio Estimates							
Probability modeled is mort30d=1 (Two separate models for STEMI and NSTEMI)							
STEMI					NSTEMI		
	Point	95%	Wald		Point	95%	Wald
Effect	Estimate	Confidence Limits			Estimate	Confidence Limits	
66-70 vs 86+	0.232	0.21	0.255		0.252	0.227	0.279
71-75 vs 86+	0.322	0.294	0.353		0.331	0.301	0.363
76-80 vs 86+	0.439	0.402	0.48		0.439	0.403	0.477
81-85 vs 86+	0.633	0.581	0.69		0.587	0.542	0.636
ELX_GRP_1	1.405	1.261	1.565		1.421	1.309	1.542
ELX_GRP_2	1.377	1.202	1.577		1.127	1.008	1.259
ELX_GRP_3	1.214	1.012	1.455		1.277	1.113	1.467
ELX_GRP_4	1.323	0.868	2.017		1.102	0.763	1.592
ELX_GRP_5	1.361	1.114	1.662		1.491	1.261	1.764
ELX_GRP_6	0.541	0.505	0.579		0.533	0.495	0.573
ELX_GRP_7	0.691	0.636	0.752		0.642	0.594	0.693
ELX_GRP_8	1.642	1.225	2.202		1.002	0.704	1.427
ELX_GRP_9	2.566	2.219	2.966		1.507	1.283	1.771
ELX_GRP_10	0.922	0.834	1.019		0.818	0.743	0.902
ELX_GRP_11	0.995	0.929	1.064		0.936	0.875	1.001
ELX_GRP_12	1.108	0.989	1.24		0.953	0.869	1.046
ELX_GRP_13	0.924	0.576	1.484		0.883	0.605	1.288
ELX_GRP_14	1.652	1.502	1.817		1.523	1.405	1.652
ELX_GRP_15	1.266	1.081	1.483		1.264	1.085	1.473
ELX_GRP_16	1.178	1.014	1.368		0.837	0.726	0.966
ELX_GRP_17	1.723	0.908	3.268		1.976	0.208	18.793
ELX_GRP_18	2.117	1.61	2.783		0.759	0.355	1.624
ELX_GRP_19	1.225	1.042	1.441		2.125	1.646	2.742
ELX_GRP_20	1.122	0.827	1.52		1.18	1.015	1.372
ELX_GRP_21	1.58	1.147	2.176		1.141	0.858	1.516
ELX_GRP_22	1.179	0.246	5.655		1.427	1.071	1.901
ELX_GRP_23	1.578	1.048	2.376		0.688	0.087	5.416
ELX_GRP_24	1.631	1.48	1.799		1.621	1.096	2.398
ELX_GRP_25	1.318	1.055	1.645		1.264	1.158	1.38
ELX_GRP_26	0.846	0.613	1.167		0.79	0.66	0.947
ELX_GRP_27	0.889	0.431	1.83		0.665	0.5	0.884
ELX_GRP_28	2.414	0.243	24.001		1.16	0.592	2.274
ELX_GRP_29	1.681	0.853	3.312		1.051	0.219	5.044
ELX_GRP_30	0.774	0.486	1.231		2.316	1.28	4.189
ELX_GRP_31	0.953	0.921	0.985		1.41	0.972	2.047

Manitoba Sex Stratified AMI Study - Logistic Regressions on 30-Day Mortality Odds Ratio Estimates							
Probability modeled is mort30d=1 (Two separate models for STEMI and NSTEMI)							
STEMI					NSTEMI		
	Point	95%	Wald		Point	95%	Wald
Effect	Estimate	Confidence Limits			Estimate	Confidence Limits	
66-70 vs 86+	0.163	0.113	0.235		0.186	0.136	0.254
71-75 vs 86+	0.249	0.177	0.351		0.237	0.177	0.317
76-80 vs 86+	0.318	0.227	0.446		0.303	0.231	0.397
81-85 vs 86+	0.541	0.389	0.752		0.51	0.405	0.643
ELX_GRP_1	1.754	0.858	3.587		1.661	1.211	2.277
ELX_GRP_2	1.46	0.792	2.692		1.06	0.75	1.499
ELX_GRP_3	1.872	0.496	7.066		0.997	0.445	2.23
ELX_GRP_4	0	0	0		1.188	0.375	3.768
ELX_GRP_5	2.574	1.515	4.373		1.468	1.021	2.11
ELX_GRP_6	0.906	0.713	1.152		0.678	0.565	0.813
ELX_GRP_7	0.399	0.04	4.026		1.368	0.583	3.214
ELX_GRP_8	0.725	0.282	1.865		2.036	0.903	4.592
ELX_GRP_9	4.164	2.606	6.653		2.748	1.749	4.319
ELX_GRP_10	1.037	0.66	1.628		1.586	1.222	2.058
ELX_GRP_11	1.737	0.603	5.005		2.485	1.323	4.668
ELX_GRP_12	1.262	0.977	1.631		1.66	1.378	2
ELX_GRP_13	1.068	0.567	2.013		1.107	0.737	1.664
ELX_GRP_14	1.458	0.879	2.42		1.95	1.467	2.592
ELX_GRP_15	4.715	2.071	10.736		0.68	0.194	2.385
ELX_GRP_16	1.125	0.137	9.262		0.573	0.129	2.55
ELX_GRP_17	N/A	N/A	N/A		N/A	N/A	N/A
ELX_GRP_18	6.285	1.547	25.533		1.656	0.651	4.213
ELX_GRP_19	0.929	0.239	3.617		3.398	1.648	7.008
ELX_GRP_20	0.792	0.407	1.544		1.156	0.722	1.851
ELX_GRP_21	0.465	0.139	1.558		1.068	0.409	2.788
ELX_GRP_22	1.34	0.549	3.275		1.344	0.645	2.798
ELX_GRP_23	0.733	0.429	1.252		0.77	0.507	1.171
ELX_GRP_24	1.868	0.415	8.408		1.161	0.383	3.518
ELX_GRP_25	1.752	1.155	2.66		1.878	1.417	2.489
ELX_GRP_26	0.278	0.025	3.077		2.328	0.671	8.078
ELX_GRP_27	0.782	0.241	2.536		0.972	0.512	1.846
ELX_GRP_28	1.655	0.617	4.439		2.922	1.226	6.967
ELX_GRP_29	4.904	0.564	42.661		2.11	0.385	11.576
ELX_GRP_30	4.1	0.878	19.148		0.735	0.094	5.768
ELX_GRP_31	0.669	0.223	2.006		1.062	0.602	1.871

SUPPLEMENTAL FIGURE LEGENDS

Figure S1: Generation of cohorts by country with numbers constituting person-years (thousands)

Figure S2: 1-year mortality rates for ST elevation and non-ST elevation myocardial infarctions for males and females (age and comorbidity adjusted)

Figure S3: ST and non-ST elevation myocardial infarction ratio in men as compared to women in 2011-2018 in 6 high-income countries

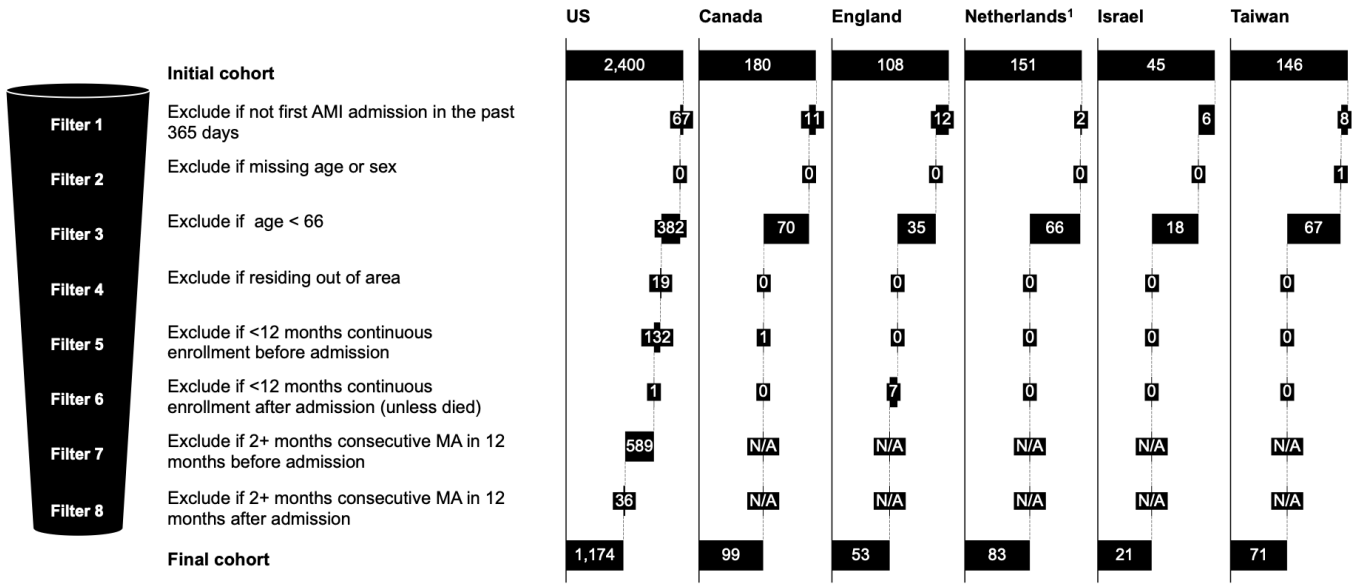
Figure S4: Rates of cardiac catheterization, percutaneous coronary intervention (PCI), and coronary artery bypass graft surgery (CABG) during initial admission for ST elevation myocardial infarction (age standardized)

Figure S5: Rates of cardiac catheterization, percutaneous coronary intervention (PCI), and coronary artery bypass graft surgery (CABG) during initial admission for non-ST elevation myocardial infarction (age standardized)

Figure S6: Mean length of stay (age standardized) and 30-day readmission rate, 2018 (age and comorbidity adjusted)

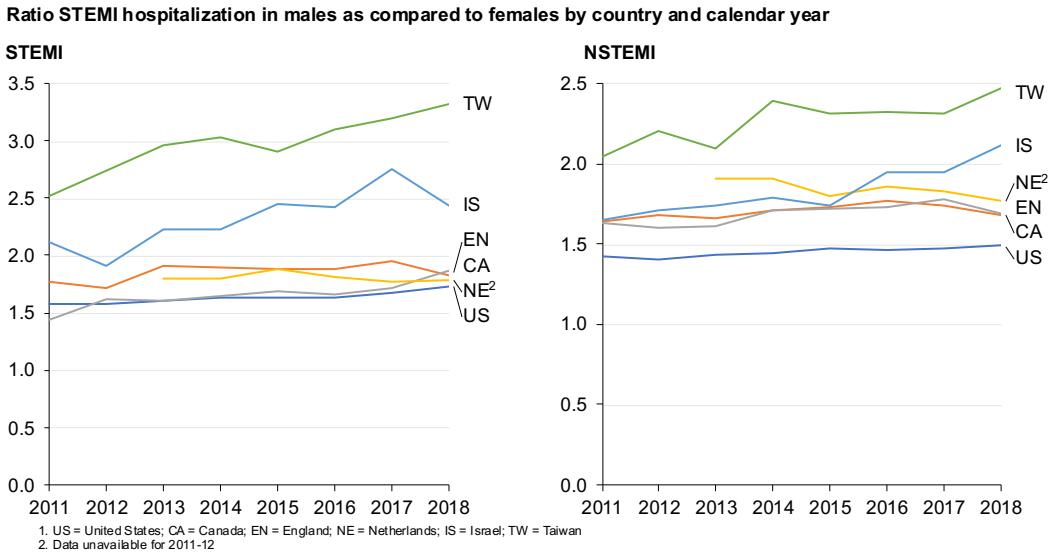
SUPPLEMENTAL FIGURES

Figure S1: Cohort generation, numbers constitute person-years (thousands)



1. Person-years are for population in 2013-2018 sample due to data unavailability

Figure S2: Ratio ST and non-ST elevation myocardial infarctions in men as compared to women in 2011 -2018 in 6 high-income countries [1]



1. US = United States; CA = Canada; EN = England; NE = Netherlands; IS = Israel; TW = Taiwan
2. Data unavailable for 2011-12

Figure S3: Age-standardized rates of cardiac catheterization, percutaneous coronary intervention (PCI), and coronary artery bypass graft surgery (CABG) during initial admission for ST elevation myocardial infarction

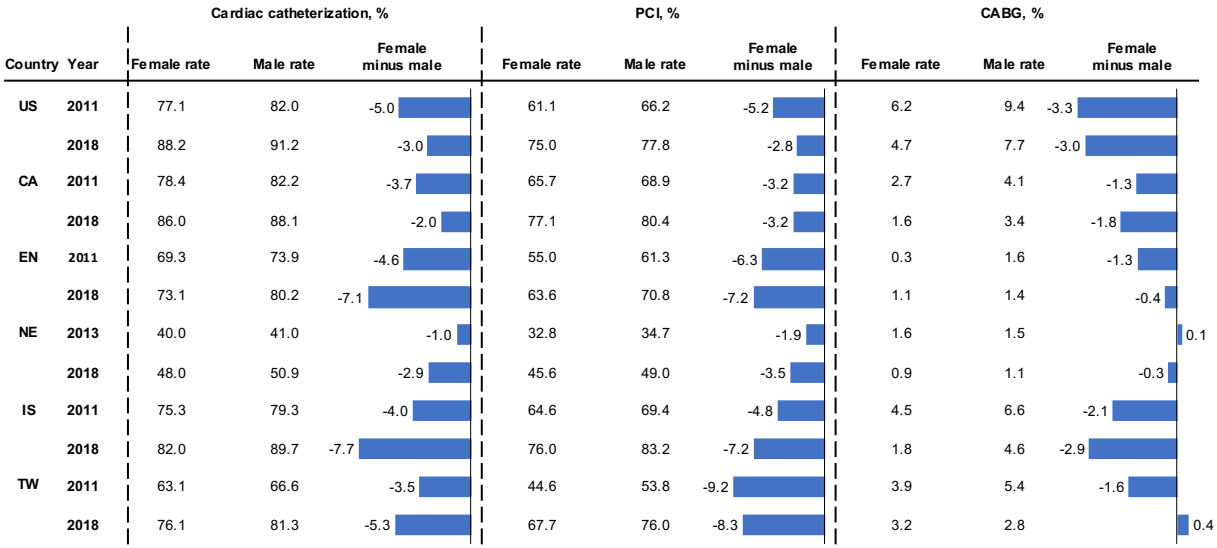


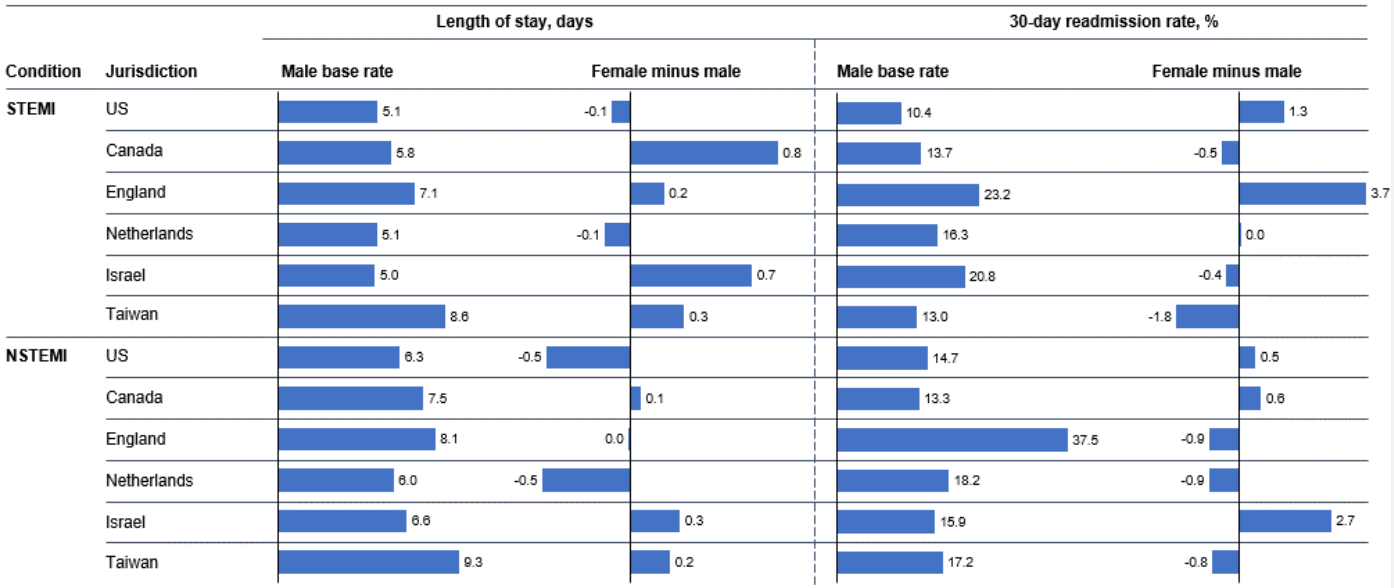
Figure S4: Age-standardized rates of cardiac catheterization, percutaneous coronary intervention (PCI), and coronary artery bypass graft surgery (CABG) during initial admission for non -ST elevation myocardial infarction

		Cardiac catheterization, %			PCI, %			CABG, %		
Country	Year	Female rate	Male rate	Female minus male	Female rate	Male rate	Female minus male	Female rate	Male rate	Female minus male
US	2011	56.8	61.6	-4.9	27.8	32.3	-4.6	7.6	11.9	-4.3
	2018	60.7	67.4	-6.7	30.4	35.7	-5.3	7.8	14.0	-6.2
CA	2011	52.8	56.4	-3.6	27.1	29.3	-2.3	5.9	9.3	-3.4
	2018	65.8	70.6	-4.8	36.2	41.6	-5.5	6.3	10.9	-4.6
EN	2011	48.6	42.8	-5.8	19.0	24.3	-5.3	0.8	2.1	-1.3
	2018	53.1	53.1	-4.3	26.5	31.8	-5.3	0.8	2.0	-1.2
NE	2013	28.6	30.9	-2.3	14.9	16.4	-1.5	1.3	2.1	-0.8
	2018	26.7	30.7	-3.9	22.6	26.1	-3.5	1.5	2.2	-0.7
IS	2011	45.8	51.7	-5.9	26.7	31.5	-4.8	6.8	9.1	-2.3
	2018	55.8	63.3	-7.5	38.0	44.7	-6.7	3.5	7.0	-3.5
TW	2011	55.3	59.4	-4.1	34.0	40.8	-6.7	3.6	5.3	-1.7
	2018	68.7	72.1	-3.4	49.0	55.5	-6.5	3.0	4.2	-1.3

Figure S5: age and comorbidity adjusted 1-year mortality rates for ST elevation and non ST elevation myocardial infarction for men and women

		STEMI, %			NSTEMI, %		
Country	Year	Female rate	Male rate	Female minus male	Female rate	Male rate	Female minus male
US	2011	35.0	33.1	1.9	32.3	34.3	-2.0
	2018	25.7	24.0	1.7	25.1	26.5	-1.3
CA	2011	22.9	22.7	0.2	28.8	31.9	-3.1
	2018	23.7	21.9	1.8	19.3	21.0	-1.7
EN	2011	15.7	17.0	-1.3	21.4	22.4	-1.0
	2018	20.5	22.4	-1.9	23.6	24.3	-0.7
NE	2013	20.7	21.2	-0.5	17.6	22.7	-5.2
	2018	11.8	9.8	2.0	7.5	8.0	-0.4
IS	2011	18.7	16.4	2.2	27.4	29.2	-1.8
	2018	20.1	15.6	4.6	27.1	23.9	3.2
TW	2011	41.8	36.6	5.2	33.6	33.8	-0.2
	2018	32.7	29.1	3.6	29.1	30.8	-1.7

Figure S6: Age-standardized mean length of stay and age and comorbidity-adjusted 30-day readmission rate, 2018



SUPPLEMENTAL TABLES

Table S1: Total sample size and mean age by country and AMI type, 2011-2018[1]

		Sample size		Mean age	
Condition	**Country[2]**	**Female**	**Male**	**Female**	**Male**
STEMI	US	128,715 (45.2%)	156,235 (54.8%)	80.36	76.57
	CA	10,622 (40.8%)	15,423 (59.2%)	79.31	75.29
	EN	6,595 (41.1%)	9,441 (58.9%)	80.20	76.23
	NE	11,561 (39.4%)	17,797 (60.6%)	78.68	75.18
	IS	2,086 (37.2%)	3,515 (62.8%)	79.67	75.50
	TW	9,780 (34.1%)	18,867 (65.9%)	79.26	76.30
NSTEMI	US	434,966 (48.9%)	454,572 (51.1%)	81.18	78.73
	CA	31,995 (44.1%)	40,609 (55.9%)	80.82	77.81
	EN	18,813 (43.5%)	24,434 (56.5%)	82.04	78.65
	NE	22,376 (40.5%)	32,931 (59.5%)	79.43	76.73
	IS	6,498 (43.6%)	8,411 (56.4%)	81.31	78.27
	TW	17,292 (41.2%)	24,671 (58.8%)	79.22	77.58

1. Netherlands data excludes 2011 and 2012
2. US = United States; CA = Canada; EN = England; NE = Netherlands; IS = Israel; TW = Taiwan