Supplementary Table 1 Previous cross-referencing studies of myocardial infarction (MI) recording in hospital discharge databases, death registry and other sources

-				Sources compared						
Author and reference	Year	Country	N sources	Primary care	MI registry	Hospital data	Death registry	N MI patients	What was compared?	Findings
Hammar ⁶⁰	1975- 1981	Sweden	3	No	Local	Yes	Yes	5832	MI recorded in hospital discharge or mortality data <i>versus</i> MI community register.	81% of 5832 cases in the community register were found in hospital discharge and mortality data. 83% of 6582 cases in hospital discharge and mortality were found in the community register.
Pietila ⁶¹	1980- 1990	Finland	3	No	No	Yes	Yes	214	MI recorded in hospital discharge and coronary death recorded in the cause of death registers versus the Helsinki Heart Study.	In 1980-86, 94% of hospital/fatal cases were confirmed and in 1987-90, 92% of hospital/fatal cases were confirmed.
Madsen ³⁹	1982- 1991	Denmark	3	No	Local	Yes	Yes	6157	MI recorded in the National Heart Registry <i>versus</i> MI recorded in MONICA Denmark.	96% of 6157 cases in the National Heart Registry were found in MONICA within 28 days.
Merlo ⁶²	1982- 1994	Sweden	3	No	No	Yes	Yes	128	MI recorded in the National Patient Register <i>versus</i> MI recorded in the County Patient Register <i>versus</i> MI in the National Mortality Register.	128 cases identified: 77% in the National Patient Register, 73% in the County Patient Register, 49% in the Mortality Register.
Rapola ¹⁹	1985- 1993	Finland	3	No	No	Yes	Yes	408	MI and fatal coronary disease in National Hospital Discharge Register and the Register of Causes of Death <i>versus</i> medical record review against WHO MONICA criteria.	94% of 408 hospital/mortality register cases categorised as definite or possible MI according to WHO criteria.
Boyle ³⁸	1986- 1991	Australia	3	No	Local	Yes	Yes	7117	MI recorded in hospital and in death certificates <i>versus</i> MI recorded in MONICA Newcastle.	78.9% of hospital cases were confirmed by MONICA Newcastle. 96.0% of death certificate MIs were confirmed by MONICA Newcastle.
Hammar ²⁰	1987, 1995	Sweden	3	No	No	Yes	Yes	713	MI recorded in hospital <i>versus</i> medical record review against strict diagnostic criteria.	86% of 713 MI cases were classified as definite MI.

			Sources compared						
Year	Country	N sources	Primary care	MI registry	Hospital data	Death registry	N MI patients	What was compared?	Findings
1987- 1997	Netherlands	5 5	Yes	No	Yes	Yes	413	MI recorded in hospital discharge versus Cardiology Information System gold standard.	97% of 413 hospitalised cases were found in the Cardiology Information System.
1988- 2002	Finland	3	No	Local	Yes	Yes	37 062	MI recorded in hospital discharge and coronary death recorded in the cause of death registers <i>versus</i> MI recorded in the MONICA study.	90% of cases from hospital discharge and cause of death were identified in the MONICA study. Hospital discharge and cause of death registries identified 83% of MONICA MIs.
1989- 1991	Scotland	2	No	No	Yes	Yes	1109	Hospitalised MI identified in active follow-up in WOSCOPS trial (pravastatin for primary prevention) versus in the Scottish Record Linkage System.	94% of 1109 hospitalisations with myocardial infarction identified in active follow-up were identified in the Record Linkage System.
									78% of 1330 hospitalisations with MI in the Record Linkage System were identified in active follow-up.
1997- 2005	England	3	Yes	No	Yes	Yes	130	Hospital discharge MI diagnosis versus general practitioner questionnaire.	89.2% of 130 hospital discharge MIs had a diagnosis of MI in general practice.
2003	Italy	3	No	No	Yes	Yes	372	Hospital discharge MI diagnosis versus medical record review.	86.0% of 372 cases had definite MI according to American Heart Association criteria, and 52.7% according to MONICA criteria.
2001- 2009	England	4	Yes	National	Yes	Yes	21 489	Hospital discharge MI versus primary care MI versus acute coronary syndrome registry MI versus death registry MI.	30% of non-fatal cases were captured by three sources.
	1987- 1997 1988- 2002 1989- 1991 1997- 2005	1987- 1997 Netherlands 1988- 2002 Finland 1989- 1991 Scotland 1997- 2005 England 2001- England	Year Country sources 1987-1997 Netherlands 5 1988-2002 Finland 3 1989-1991 Scotland 2 1997-2005 England 3 2003 Italy 3	Year Country sources care 1987- 1997 Netherlands 5 Yes 1988- 2002 Finland 3 No 1989- 1991 Scotland 2 No 1997- 2005 England 3 Yes 2003 Italy 3 No	YearCountryNoncarePrimary careMI registry1987-1997Netherlands5YesNo1988-2002Finland3NoLocal1989-1991Scotland2NoNo1997-2005England3YesNo2003Italy3NoNo	YearCountryNo sourcesPrimary careMI registryHospital data1987-1997Netherlands5YesNoYes1988-2002Finland3NoLocalYes1989-1991Scotland2NoNoYes1997-2005England3YesNoYes2003Italy3NoNoYes	Year Country sources No registry care MI registry registry Hospital data Death registry 1987-1997 Netherlands 5 Yes No Yes Yes 1988-2002 Finland 3 No Local Yes Yes 1989-1991 Scotland 2 No No Yes Yes 1997-2005 England 3 Yes No Yes Yes 2003 Italy 3 No No Yes Yes	Year Country Notational 1987- Sources Primary care MI registry Hospital data Death data N MI registry 1987- 1997 Netherlands 5 Yes No Yes Yes 413 1988- 2002 Finland 3 No Local Yes Yes 37 062 1989- 1991 Scotland 2 No No Yes Yes 1109 1997- 2005 England 3 Yes No Yes Yes 130 2003 Italy 3 No No Yes Yes 372	Year Country No sources Primary care registry MI registry Death data N MI recorded in hospital discharge versus Cardiology Information System gold standard. 1987- 1997 Netherlands 5 Yes No Yes Yes 413 MI recorded in hospital discharge versus Cardiology Information System gold standard. 1988- 2002 Finland 3 No Local Yes Yes 37 062 MI recorded in hospital discharge and coronary death recorded in the cause of death registers versus MI recorded in the MONICA study. 1989- 1991 Scotland 2 No No Yes Yes 1109 Hospitalised MI identified in active follow-up in WOSCOPS trial (pravastatin for primary (pravastatin for primary (pravastatin for primary (pravastatin for primary primary care) (pravastatin for primary primary care) 1997- 2005 England 3 Yes No Yes Yes 130 Hospital discharge MI diagnosis versus general practitioner questionnaire. 2001- 2003 Italy 3 No No Yes Yes 372 Hospital discharge MI versus primary care MI versus acute coronary syndrome registry MI

Abbreviations: MI, myocardial infarction; MONICA, Multinational MONItoring of trends and determinants in CArdiovascular disease; WHO, World Health Organisation; WOSCOPS, West of Scotland Coronary Prevention Study

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