
OECD Study of Cross-National Differences in the
Treatment, Costs and Outcomes of Ischaemic Heart
Disease

Annex 1: Tables and Charts

Pierre Moise, Stéphane Jacobzone
and the ARD-IHD Experts Group

3

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**OECD STUDY OF CROSS-NATIONAL DIFFERENCES IN THE TREATMENT, COSTS AND
OUTCOMES OF ISCHAEMIC HEART DISEASE
ANNEX 1: TABLES & CHARTS**

Pierre Moise, Stéphane Jacobzone and the ARD-IHD Experts Group

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Table 2. Coverage of Public Health Insurance and Availability and Use of Private Health Insurance

	Public Health Insurance		Private Health Insurance		
	Universal	Services excluded from coverage related to IHD*	Availability	Use	% of population covered
Australia	Yes	None (some limitations regarding aids and equipment)	Yes	Choice of doctor in public hospital and choice of private hospital; not available for ambulatory or outpatient physician services; covers co-payments, including drugs, within certain levels of cover.	45.8% of Australian population were covered by private health insurance hospital cover as of 09/00.
Belgium	Yes	None	Yes	Hospital costs and statutory co-payments Mutualites also offer some <i>voluntary</i> insurance to members	about 30%
Canada	Yes	Pharmaceuticals outside the hospital ⁽¹⁾	Yes	Covers excluded services such as pharmaceuticals outside the hospital.	About 70% of Canadian population
Denmark	Yes	None	Yes	Covers the co-payment for pharmaceuticals; also used to avoid waiting lists	30% (8% fully covered; 22% partly covered)
Finland	Yes	None	Yes	No impact on IHD; mainly used for children and services of a private doctor in addition to regular sickness insurance	12%
Germany	Yes ⁽²⁾	None	Yes	Choice of treatment by senior physician consultant	9%
Greece	Yes	None, if using public facilities	Yes	Provide access to private providers	More than 10% <i>approx.</i> ?
Hungary	Yes	None	Not significant	For a very limited segment of the population, foreign-based.	N.r.
Italy	Yes	None	Yes	Access to doctors outside the national system	?
Japan	Yes	None	Yes	Private insurance traditionally provides an insured person with an indemnity benefit to compensate for lost income due to hospitalization. As of 2000, private insurance also provides compensation for co-payments	?
Korea	Yes	echocardiogram	No	N.r.	N.r.
Norway	Yes	None	At an early stage	Private health insurance has been virtually non-existent up until recently. They are now establishing, but they play at this time a negligible role in funding of health care services.	Negligible
Spain	Yes	None	Yes	Mainly as supplementary insurance; sole form of insurance for most self-employed professionals	10 - 20%
Sweden	Yes	None	Yes	Limited; used by employers to jump queues for key personnel	?
Switzerland	No ⁽³⁾	None (within limits of a quite extensive, pre-defined "health care basket")	Yes	(a) the content defined by the law on social health insurance (b) additional health care, considered as "comfort care" for supplementary services such as private room, dental care, complementary medicines etc.	(a) 100% (b) 2/3 of the population have some form of additional insurance

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	Public Health Insurance		Private Health Insurance		
	Universal	Services excluded from coverage related to IHD*	Availability	Use	% of population covered
UK	Yes	None	Yes	Jump the waiting lists	11% (1996)
US	No (only those over 65 and the poor)	For those over 65, pharmaceuticals outside the hospital	Yes	Covers all services related to IHD; Covers excluded services for public health insurance such as pharmaceuticals outside the hospital and cost sharing.	55% of Medicare population has private supplemental insurance; 2/3 of adults under 65

Source: OECD Questionnaire "Core Set of Indicators" for ischaemic heart disease.

N.r. : not relevant. * This does not necessarily mean that all these services are free of charge. (See table on cost-sharing).

(1) Means-tested provincial social assistance schemes cover the poor, those on social assistance and the elderly (Four provinces have universal public coverage; Ontario does not)

(2) Public health insurance is mandatory for individuals whose annual gross income does not exceed a certain level.

(3) Universal coverage through a mandatory contract with a private health insurance since January 1, 1996 ("social health insurance")

Table 3. Out-of-Pocket Payments as a Percent of Total Health Care Expenditures: 1990-1997

Country	1990	1997
Australia	16.4	16.2
Canada	14.2	17.1
Denmark	16.1	16.2
Finland	15.5	19.9
Germany	11.1	11.9
Italy	15.8	23.5
Japan	..	13.7
Korea	53.0	46.5
Switzerland	29.1	28.8
United Kingdom	9.0	11.0
United States	20.7	17.7

Note: The figures for Finland in 1990 do not take into account the effect of tax deductions for medical expenses, which were discontinued after 1992. If tax deductions were included then out-of-pocket payments in 1990 would have been 12.6% of total health expenditure. In 1999, official figures from the Ministry of Health in Denmark show the figure to be 18.8%.

Source: OECD Health Data 2000; Published data from the Ministry of Health and Welfare (Japan).

Table 4. Cost Sharing Policies for Non-Drug Related Care of Ischaemic Heart Disease

	Inpatient Care	Ambulatory Care			Co-payment		Detailed descriptions
		Specialist care	Diagnostic Procedures	Rehabilitation	Exemptions	Reinsurance	
Australia	Yes	Yes	Yes	Yes	Yes	Yes	<p><i>Public, modest cost-sharing; private, significant cost-sharing:</i> For ambulatory physician services, public patient's out of pocket expenses is the difference between the Medicare reimbursement (85% of the Medicare Benefits Schedule fee) and the doctor's fee (actual fee charged tends to be close to the schedule fee). Co-payments are higher for specialists if patient was not referred. There are no co-payments for pathology and diagnostic imaging services if patients have been referred. Depending on the place of service provided, public health insurance will pay 75-85 per cent of the scheduled fee and private health insurance may cover the gap. For outpatient specialist care, public outpatients have no charge.</p> <p><i>Exemptions from co-payment:</i> Medicare has a safety net scheme to protect patients whose accumulated out-of-pocket payments in any one calendar year exceed a specified amount. Eligible individuals and families are entitled to receive up to 100% of the schedule fee for the remainder of the calendar year.</p>
Belgium	Yes Modest	Yes	Yes Modest	?	Yes	None (?)	<p>Patients pay moderate co-payment for ambulatory services.</p> <p>Exemptions for long standing illness, widows, orphans, retired, disabled and minimum wage who pay a lower rate</p>
Canada	None	None	None	None, if referred	N.r.	Nr.	
Denmark	None	None	None	None	Nr.	Nr.	
Finland	Yes	Yes, modest	Yes modest	Yes, modest	No but ceiling on expenses	None	<p>Yearly maximum of 3500 FIM (550 USD) for charges in public (municipally provided) health care. For physicians and diagnostic imaging out-of-pocket charges are 120 FIM (20 USD) per year and 60 FIM (10 USD) per visit, with a maximum 180 FIM (30 USD) per year. Short-term inpatient care is charged at FIM 135 per day and a "basic charge" FIM 150 is levied if the length of stay is longer than three days.</p>

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	Inpatient Care	Ambulatory Care			Co-payment		Detailed descriptions
		Specialist care	Diagnostic Procedures	Rehabilitation	Exemptions	Reinsurance	
Germany	Yes	Yes, modest	Yes, modest	Yes, Modest	Yes	None	Co-payment of 17 DEM per diem for first 14 days of hospital stay. People with very low incomes and those receiving social assistance are exempted from cost-sharing (except for hospital treatment).
Greece	None	Yes	Yes	Yes	Yes	Yes	Co-payments for outpatient care depend on whether it is a contracted (no co - payment) or no contracted ambulatory care unit. Private insurance companies can cover the co-payments. In practice, both in public and private health care sector the co-payments are rather significant, but in public sector these payments are informal.
Hungary	None	None, if referred	None, if referred	None	Yes (?)	Yes (non-profit insurance companies)	Since January 1998, co-payments are required if patients normally requiring referral consult directly a specialist or if they deal with a specialist other than the one to which they were referred. Patients receiving services from physicians outside of the national health insurance system do pay some out-of-pocket payments. Patients may pay under-the-table "gratitude money" to influence treatment choice and can be considered a form of out-of-pocket payment where patients pay providers operating within the national health insurance system.
Italy	None	Yes, modest	Yes modest	Yes Modest	Yes	None	Payment of a limited out-of-pocket contribution for remaining services, mainly ambulatory and outpatient care services. A system of exemption from cost sharing exists, particularly for low-income populations. For individuals with IHD there is an exemption from co payment for some diagnostic and pathology services.
Japan	Yes (with ceiling)	Yes (with ceiling)	Yes (with ceiling)	Yes (with ceiling)	Yes (with ceiling)	Yes	Co-payments of 20 - 30% of medical fees, with exemption for the poor, for inpatient and outpatient services. Limited to 63,600 JPY. For persons aged 70 or greater, or 65 with a disability, co-payment of 1,000 JPY per day (limited to 30 days) for inpatient and 500 JPY per day for outpatient services. As of 2000 private insurance is available to cover co-pay.
Korea	Yes significant	Yes, significant	Yes, significant	Yes, significant	Yes	None	Co-payments are uniform for the entire population except for the elderly aged 70 years or more (65 or greater as of July 2000) for whom the co-payments may be less. Co-payments for drugs differ by type of medical facility.

	Inpatient Care	Ambulatory Care			Co-payment		Detailed descriptions
		Specialist care	Diagnostic Procedures	Rehabilitation	Exemptions	Reinsurance	
Norway	None	Yes, modest	Yes modest	Yes, Modest	Yes	None	There is a co-payment of 110 NOK (13 USD) for specialist services with an annual upper limit 1320 NOK (150 USD). Elderly are entitled to a reduction on co-payment on all services. For rehabilitation, copayments are for ambulatory care.
Spain	None	None	None	None	N.r.	N.r.	Out-of-pocket payments are mainly for pharmaceutical and orthotic-prosthetic products, dental health services and direct private payments.
Sweden	Yes modest	Yes, modest	Yes modest	Yes modest	None	None	Current co-payment is very small; for outpatient treatment co-pay is SEK 100 - 150 and for inpatient treatment is SEK 50 - 100 per day, both depending on county councils. There is an annual maximum for all outpatient care (SEK 900). Substantial payments can be faced for rehabilitation outside hospital
Switzerland	Yes	Yes	Yes	Yes	No	No	Each calendar year, the first CHF 230.- of health care costs are paid by the patient (higher "franchises" can be elected by patients in order to reduce their health insurance premiums). In addition, there is a co-payment of 10% for all health care expenditures, irrespective of the type of care and place of delivery, up to a maximum of CHF 600.- (adults) per year. Inpatients also contribute to hospital non-medical expenditure (CHF 10.- per day) if they are living alone.
United Kingdom	None	None	None	None	N.r.	None	There are virtually no copayments for publicly provided specialised care. In addition, patients who opt to insure themselves privately, or who are recruited to a private health insurance scheme by virtue of their employment, may choose to be treated in a private health care facility and costs may be partly or fully reimbursed, depending on the insurance arrangement.

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	Inpatient Care	Ambulatory Care			Co-payment		Detailed descriptions
		Specialist care	Diagnostic Procedures	Rehabilitation	Exemptions	Reinsurance	
United States (Medicare and Medicaid)	Yes	Yes	Yes	Yes	None	Yes (Medigap)	<p><i>Cost-sharing arrangements are highly dependent upon the type of insurance.</i></p> <ul style="list-style-type: none"> • Medicare covers everyone over age 65. Medicare Part B, which covers 80% of non-inpatient services, has a monthly premium for medical insurance. Medicare Part A, which covers inpatient services, has a deductible for each hospital admission of USD 776 (as of 2000) and additional co-payments for lengthy stays. Those in Medicare HMO plans may have more complete coverage and less out of pocket payments (20 percent of Medicare enrollees are in HMOs). • For individuals 35-64, 14 percent are without health insurance, additional 9 percent is covered by public programs, and the remaining 77% have private health insurance (with about 73% of these Americans enrolled in some type of managed care plan). For private insurance and Medicaid, cost-sharing (though limited in managed care plans) varies widely depending on the specific health plan.

Source: OECD Questionnaire "Core Set of Indicators" for ischaemic heart disease.

N.r. : not relevant.

Note: Unless otherwise indicated, this applies to public health insurance schemes. Most private insurance schemes involve some cost-sharing. For the purposes of this table we have included co-insurance (a proportion of the cost of a service) as part of co-payment (a fixed amount of the cost of a service).

Table 5. Cost-Sharing Policies for Drugs used in the treatment of ischaemic heart disease

	Differentiation	Method	Exemptions from co-payments	Reinsurance of second-tier copayment allowed?	Does reinsurance offset co-payment?
Australia	By type of beneficiary	Fixed amount depending on beneficiary type Max \$ 21.90 for general population and \$ 3.50 for concessional patients per prescription (as at 1 January 2001)	Waiver for concessional cardholders, low income, chronically sick.	Private insurance but only for hospital care.	Not usually
Belgium	By type of drug and of beneficiary	Percentages depending on the category of the active person and of his dependants. (100/80/60/50 0%)	Long standing illness, widows, orphans, retired, disabled and minimum wage pay a lower rate	Only for-profit insurance companies	N/A
Canada	By type of drug and beneficiary	Most provinces use a combination of co-payments and deductibles as part of cost sharing with beneficiaries. Overall 88% of Canadian have coverage, 62 % private plans, 19 % provincial plans, 7% under both. Universal coverage in Alberta, British Columbia, Quebec and Saskatchewan (partnership between public and private). Drugs administered in hospital are free of charge.		Yes	NR
Denmark	By type of drug and partly by beneficiary	Prior to March 1, 2000 50.2% for drugs with definite and valuable therapeutic effects, 25.3% for drugs used for the treatment of well-defined and often life-threatening diseases (<i>most drugs used to treat IHD belong to this category</i>). As of March 1, 2000, reimbursement is dependent on the amount of drug which the patient uses in a given year. Persons with a chronic illness face a maximum accumulated co-payment of 3600 dkk per year. The previous exemptions in place no longer apply except in cases involving chronic illness.	According to the social legislation, pensioners, low income families and disabled persons are eligible for a reimbursement of co-payment.	Yes	In some cases (7% have full coverage and 22% are covered for 50% of co-payment - 1999)
Finland	By type of drug and beneficiary	A fixed deductible different for each of the three categories of reimbursement. Co-payment 50% in excess of 8\$. Level of co-payment also influenced by the categories.	For certain chronic conditions the co-pay is reduced 0 - 25% in excess of FIM 50 (for CHD co-pay is reduced 25%).	Yes	Yes
Germany	By size of the prescription and beneficiary	By law in 1992. Since July 1997 copayment of 9/11/13 DM (5 to 7\$) in relation to package-volume (DM 8/9/10 since January 1999);. (For drugs under the reference pricing scheme, patients also pay the difference between the reference and the actual price). Yearly cost-sharing is limited to 2% of yearly gross income, lower if single earner family (1% for chronically ill).	People with very low incomes and those receiving social assistance are exempted from cost-sharing.	No	NR
Greece	Very partial	Fixed contribution of 25% of the total drug value, but only 10% for pregnant women, 0% for chronic diseases		Yes	No
Hungary	By type of drug and beneficiary	A percentage of the price of the drug from 0% to 100% depending on the type of drugs.		Yes, for non-profit insurance company	N/A

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	Differentiation	Method	Exemptions from co-payments	Reinsurance of second-tier copayment allowed?	Does reinsurance offset co-payment?
Italy	By type of drug and beneficiary	Prescription charge of 3000 ITL (\$1.50) plus percentage of the price. Three main drug categories (0, 50, 100 %). Moving towards more prescription charge and reduction of the share of drugs with patient charge (more or nothing) NHS patients are required to pay part of the nationally set fee of the services they demand, up to a preset expense limit per prescription (currently 70,000 lire; every prescription can contain up to 8 specialist tests/services/procedures.	Exemption according to income, age and health status From 01/01/2001 all drugs classified A and B (incl. ACE inhib., calc. chann. block., diur., antiplat., β-block.) are free of charge, including the basic prescription charge.	NA	NA
Japan	By type of beneficiary	Since 1983, health and medical care for people who are 70 or more, or 65 or more with a disability, has been financed by the Health Services Law for the Aged. This law provided services for 13 million beneficiaries, or 10% of the total population in 1997. In 1997, patients were responsible for a fixed co-payment of 1,000 JPY per day for inpatient services and 500 JPY per visit for outpatient services..	Special rules for certain diseases. Waivers for low income.	Yes	N/R
Korea	Not by type of beneficiary or size.	Differentiated percentage of co-payment by type of medical facility: in-patient - 20%; outpatient pharmacies - 40% (as of July 2000, patients get prescription from clinic or hospital and must buy at pharmacy); Local clinic - 30%; Hospital - 40%; General Hosp. - 55%.	Co-payments may be less for the elderly aged 70 years or more	Yes	Yes
Norway	By type of beneficiary	50% co-payment. Maximum 43 \$ per prescription. When cost of pharmacies and use of medical serviced exceeds 150\$, all costs are covered	Waiver for children below 7 years and elderly.	Yes	N/A
Spain	By type of drug and beneficiary	Based on the price of drug. Generally 40% of the price, 30% for civil servants mutual companies. There are no co-payments for inpatients.	Retired, handicapped and chronically ill.	No	Yes
Sweden	By prescription size and beneficiary	Patients pay 100% of the costs up to SEK 900 per 12 month period, 50 % of the costs between SEK 900 and 1700, 25 % of the costs between SEK 1700 and 3300, 10 % of the costs between SEK 3300 and 4300, after which the high cost protection celing cuts in and reduces out of pocket payment to 0. This construction limits the total amount that a patient would have to pay for prescription drugs per 12 month period to SEK 1800. Note, however, that all drugs consumed during episodes of inpatient care are free of charges for patients.		Yes	Yes
Switzerland	None	Each calendar year, the first CHF 230.- of health care costs, including drugs, are paid by the patient (higher "franchises" can be elected by patients in order to reduce their health insurance premiums). In addition, there is a co-payment of 10% for all health care expenditures, irrespective of the type of care and place of delivery, up to a maximum of CHF 600.- (adults) per year. There is no separate billing for drugs delivered during a hospital stay.	None	No	No
United Kingdom	By type of beneficiary	Fixed amount charge, currently £ 5.5 per prescription.	Many waivers ⁽¹⁾	Unknown	N/A

	Differentiation	Method	Exemptions from co-payments	Reinsurance of second-tier copayment allowed?	Does reinsurance offset co-payment?
United States (Medicare and Medicaid)	NR	Drugs not included in Medicare but may be covered if HMO. Most private insurance plans have co-payment requirements. 60% of retail sales paid by third parties to some exempt. Fixed prescription charges in HMOs, against co-payments plus a deductible in Fee For Service Planes, Medicaid Covers Some Drugs.	Yes	N/A	

Source: Jacobzone (2000) (OECD questionnaire on pharmaceutical management and regulation supplemented and updated by the OECD Questionnaire “Core Set of Indicators” for ischaemic heart disease. N.r. : not relevant. Unless otherwise indicated, this applies to public health insurance schemes. Most private insurance schemes involve some cost-sharing. For the purposes of this table we have included co-insurance (a proportion of the cost of a service) as part of co-payment (a fixed amount of the cost of a service). (1) In 1995, 16% of the total number of the prescriptions carried a prescription charge, and 22% of the value of total prescriptions carried a charge N/A: not available, NR: not relevant.

Table 6. Non-financial Barriers - Gate-keeping

Country	Access specialist without referral	Influence on access to services
Australia	No	Elective Surgery Waiting Times system: patients triaged, mostly at the hospital level. Medicare benefit payable for certain specialist services is dependent upon evidence of referral, usually from a GP.
Belgium	Yes	
Canada (Ont.)	No	No formal system. However, most patients cannot see cardiologist without referral.
Denmark	No	GPs act as gatekeepers.
Finland	No	For public specialised (non-emergency) hospital care, the patient is expected to have a referral from a health centre physician. However these physicians are not considered as gate-keepers since a considerable proportion of referrals originate from the private sector
Germany	Yes	To receive reimbursement for services received in a given quarter, sickness fund members must select a family practitioner in accordance with the Social Code Book and cannot change physicians during that period.
Greece	No	
Hungary	Mixed	Decrees issued in 1997 place some limitations on the specialised services that an individual can access without referral but a wide range of services remains generally available.
Italy	No	Patients are registered with a GP, who acts as a gatekeeper to public specialist services. There are no barriers to private specialists.
Korea	Yes	
Japan	Yes	
Norway	No	Under most conditions patients cannot access specialists without referral.
Spain	No	
Sweden	Yes	Patients can make appointments with the hospitals’ outpatient departments without any referral from primary care or private physicians
Switzerland	Yes	Most patients are referred to hospital-based specialists, although some do offer polyclinics where patients can register themselves for outpatient services.
United Kingdom	No	GPs act as gatekeepers to specialists.
United States	No	Many managed-care plans require primary care referral for full coverage on non-emergency specialist services. Impact on the use of intensive services not clear.

Source: OECD Questionnaire “Core Set of Indicators” for ischaemic heart disease. N.r. : not relevant.

Table 8. Financing of Hospitals

Countries	Global Budgets	Mixed - Case-mix (DRG) and global budgets	Case-Mix (DRGs)	Fee for Service	Within budget constraint
Australia	Public hospitals in New South Wales	Public hospitals in Australian Capital Territory.	Public hospitals (Queensland Victoria, Western Australia, South Australia, Tasmania, and Northern Territory.	Private hospitals financed by fee charges to private insurers and/or out of pocket payments	No
Belgium		Since 1994, case-mix adjusted prospective budgets are used, related to average length of stay. Incentives to decrease length of stay.		<i>Fees related to hospital days, medication and prosthesis. (A macroeconomic cap is imposed).</i>	Yes (at national level)
Canada ⁽¹⁾	Yes		Have been developed so hospitals can monitor resource allocation		
Denmark	Yes (run by local counties)	As of Jan 2000, 3% of the budget will be based on DRGs			
Finland	Prior to 1993	Since 1993, budget rests with local authorities who buy medical services Yearly budget and contracts with municipalities and hospital districts.	Introduced in 1997 for two hospital districts	Some fee-for-service arrangements since 1993.	Yes (at local level)
Germany			Case fees and procedure fees introduced in 1996	Mostly fee for service financing	Some - 1993 national level
Greece	Public hospitals			Private hospitals - fee charges to private payers	No

Countries	Global Budgets	Mixed - Case-mix (DRG) and global budgets	Case-Mix (DRGs)	Fee for Service	Within budget constraint
Hungary⁽²⁾		DRG based using Homogeneous Diagnosis Groups. Monthly fixed payment for 15 % of expenditure for institutions providing outpatient specialist care, including hospitals – coupled with a relative tariff fee for service (Cf. German floating points system)		Outpatient services	
Italy		DRGs based tariff system with a yearly volume and expenditure limit		Private hospitals/ private patients outside the NHS	No
Japan			Trial at 8 national and 2 social insurance hospitals since November 1998	Mainly Fee for Service, calculated from nation-wide point-fee system. Applies to surgery and most settings of care.	No
Korea			Tentatively developed for some diseases but not heart disease	Mainly fee for service	No
Norway	Block grants from county governments until 1980-1997.	Since July 1 1997, combination of global budgets and activity based (DRGs); from 1999 on a 50/50 basis. Outpatient surgery is included in the DRG system from 1999.		Yes private sector (negligible)	No
Spain	Financing based on historical costs				
Sweden	Mainly global budgets; set by local authorities since 1993; as a rule, hospitals have usually been granted additional funding if applied for.	Since the 1993 reform, a few county councils reimburse part of the expenses using a DRG system.		Hospitals receiving patients referred from county councils which do not have hospitals that perform CABG or PTCA charge the patients' county council fee for service	No

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Countries	Global Budgets	Mixed - Case-mix (DRG) and global budgets	Case-Mix (DRGs)	Fee for Service	Within budget constraint
Switzerland	In some cantons, block grants for Canton's financing (50% of costs)			Fixed charges per day of hospitalisation paid by insurers (50% of costs). Price agreements at the canton level between hospitals & health insurance organisations	No
United Kingdom	Overall fixed budget for inpatient and outpatient activity. 69% of contracts are block contracts.	Some cost and volume contracts		Private sector outside the NHS pure fee for service system Since 1991, GP fund-holders pay fee for service (50% of GPs in 1997), price competition	No Yes
United States	Global budgets for Veterans hospitals.		Since 1983 used by Medicare for all hospitals.	Regulated fee for service system for Medicaid, and private insurers.	No

Source: OECD Questionnaire "Core Set of Indicators" for ischaemic heart disease. N.r.: not relevant.

(1) Hospitals that perform invasive cardiac procedures receive supplemental funding in Ontario.

(2) Special fees for technologies, including CABG

Table 9. Remuneration systems for specialists

Country	Ambulatory care specialists		Hospital-based specialists		Comment
	Mode of Remuneration	Mixed hospital and ambulatory practice	Mode of Remuneration	Salaried/public physicians allowed private practice within public hospitals	
Australia	FFS	Yes	Mixed	Yes	In ambulatory care settings, physicians are paid with no limit on the use of services and annual expenditures. Physician treating public patients in public hospitals, fees paid by the hospital. Medicare Benefit Schedule defines approved fees, but doctors not bound to charge schedule fee. For physicians treating private patient in public hospital or private hospital, public sector benefits will cover the physician fee partially along with private sector (either private health insurance or out of pocket payment from patient).
Belgium	FFS	None	Fee for service	<i>Not relevant</i>	Since 1995, hospitals receive global budgets but physicians remain paid on a FFS basis.
Canada	FFS	Yes	Salaried and FFS	Not relevant	Physicians remunerated fee for service operate within a global budget constraint for all physicians within each province.
Denmark	NR	NR	Salaried	No	FFS exists in the very small private sector. Most specialists are hospital based
Finland	Salaried - public FFS - private	Yes	Salaried - public FFS - private	Yes ('pay bed patients')	FFS exists in the very small private sector. A substantial portion of private outpatient services is provided by hospital specialists with a full time contracts in public hospitals. In addition, senior specialists in public hospitals are permitted to attend private patients. These 'pay bed patients' can choose their doctor and their waiting times tend to be shorter.
Germany	FFS, floating point	Segmented	Salaried	Yes, for chief physicians	Strict separation between ambulatory care and hospital physicians. Incentives to refer to hospitals. Few outpatient services available in hospitals.
Greece	FFS	Segmented	Public: - Salaried Private: Mixed	See comment	In private hospitals, physicians receive a mix of salary and FFS. Unofficial informal private payments may exist in public hospitals
Hungary	FFS		Salaried	Unofficial gratitude payments	Majority of doctor-patient contacts in hospital outpatient centres under the care of specialists. Specialists are mainly hospital-based. Highly hospital-centric and specialist oriented system.

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Country	Ambulatory care specialists		Hospital-based specialists		Comment
	Mode of Remuneration	Mixed hospital and ambulatory practice	Mode of Remuneration	Salaried/public physicians allowed private practice within public hospitals	
Italy	FFS	Yes	Public: Salaried. Private : some FFS	Yes; allowed quota of revenue.	Adjustments in the salary scale for seniority, qualification, experience and special co-ordination powers.
Japan	Salaried for hospital physicians. Fee-for-service for independent clinics.	Yes	Salaried	No	
Korea	FFS	Yes	Fee for service	Not relevant	
Norway	Salaried - public FFS - private		Salaried	No	Most specialists are hospital based. No specific adjustment linked with treatment choices.
Spain	Salaried		Salaried (public); FFS private	Yes	There are two different salary levels, one for primary care physicians and one for specialists. Differences in salary levels for specialists are related to seniority, hierarchical level and organizational responsibilities. There are no differences across specialties.
Sweden	Salaried		Salaried	Not relevant	
Switzerland	FFS (?)	Yes	Fee for service		
United Kingdom	None	Not relevant	Salaried - public FFS - private	Yes, with some controls	Annual capitation fees based on number of registered patients (plus allowances, health promotion payments); some fee for service for selected services. Very small private sector. Most specialists are hospital-based consultants, plans to expand consultant posts by 30 percent by 2004. They also can earn up to 10 percent of gross income from private practice based on fee for service. In addition, the contract between consultants and the NHS is expected to change with increased financial rewards for consultants tied to the NHS.
United States	Mixed	Yes	Mixed, salaried/FFS	Not relevant	Payments (either capitation, FFS, and salaried) vary according to hospital and health insurance rules, and also to hospital's status.

Table 10. Macro-regulation of coronary care facilities

Country	Capacity constraints		Comment
	Explicit	Targeted funding	
Australia	No	No	There is no formal planning for the distribution of coronary angioplasty and cardiac surgery units, however, they are distributed evenly between public and private and only located in urban areas
Belgium	No	No	
Canada (Ont.)	Yes	Yes	Ministry of Health sets overall limits on the number of invasive cardiac procedures and the availability of revascularisation centres. These centres also receive supplemental funding for invasive cardiac procedures but any additional procedures beyond their allotted quota must be paid for out of their own budgets.
Denmark	Yes	Yes	Public intensive services are concentrated in 5 major hospitals (heart centres), 6 satellites perform catheterizations. 1 private hospital perform invasive cardiac procedures.
Finland	Yes (district level)	Yes (in some hospitals)	Explicit constraints are set at the hospital district level. Public intensive services are concentrated in 6 major hospitals. 2 private hospitals perform invasive cardiac procedures
Germany	No	No	There does exist some inequality in the distribution of facilities, especially between East and West
Greece	No	No	There is no formal planning for the distribution of open heart centers and cardiac catheterisation laboratories, which are located only in urban areas.
Hungary ⁽¹⁾	No	No	
Italy	No	Yes, partially	Mandatory accreditation programme for hospitals & outpatient clinics (regional responsibility). Up to now only a few regions have followed the accreditation program
Japan	No	No	
Korea	No	No	
Norway	Yes	No	Only one private centre. It is located in the largest health region
Spain	Yes	No	
Sweden	No	Yes	Decisions regarding large investments on new capital (increasing capacity) rest with the county councils. No formal regulation at the national level. Funding for county councils regulated at the national level.
Switzerland	No	No	Every resident has access to cardiac surgery facilities and/or catheterisation laboratories within a 100km radius of his residence
United Kingdom ⁽²⁾	Yes	Yes	Funds are transferred from purchasers (District Health Authorities and GP fundholders) to hospitals and other providers under contracts that specify what services are to be provided and the terms on which they are to be supplied.
United States	No	No	Distribution of facilities is driven by market forces. One exception is New York state which has a Certificate of Need (CON) process for catheterisation and bypass facilities. Other states also have CON, but unlike New York, these have had little influence in practice.

Table 11. Non-Financial Barriers - Waiting Lists

Country	Waiting Lists	Intensity of Wait	Queue Jumping	Formal Queue Management	Comment
Australia	Yes	1	Yes	Yes	Priority in public hospitals determined by a formal triage system. Within Australia variability exists in waiting times, for instance between hospitals. The waiting times for private patients in private hospitals are generally much shorter than for public patients in public hospitals, dependent upon physician caseloads and hospital bed availability.
Belgium	No	NR	NR	NR	
Canada (Ont.)	Yes	1	No	Yes	Cardiac CareNetwork of Ontario manages waiting lists for coronary angiography, PTCA and CABG through a formal triage system. (CATH and PTCA since 1999/00).
Denmark	Yes	2	Yes	Yes	This has been a serious issue. Several public plans to reduce waiting lists. The official goal was reached by 1998.
Finland	Yes	1	Yes	Yes	Regional variations in waiting times for surgical procedures.
Germany	No	NR	NR	NR	There is some wait according to patient preference and perceived quality of provider, so it is not an issue of capacity.
Greece	Yes	1	Yes	No	Out of pocket money may affect waiting time for cardio-surgical procedures. Waiting times for cardiac procedures exist only for public health care sector (15 - 20 days for CABG and 6 months for invasive cardiology procedures.
Hungary	Yes	1	Yes	Yes	Ability to pay physicians "gratitude money" (out-of-pocket direct under the table payments) may affect waiting time for surgical procedures. Supervised waiting lists have been set up for services that cannot be provided within two months, including CABG & PTCA.
Italy	Yes	2	Possible	Yes	Ministry of Health has begun monitoring on a national level. Information is limited to some procedures and a few regions. The data refer mainly to ambulatory care and account for a high variability among Regions.
Korea	No	NR	NR	NR	
Japan	No	NR	NR	NR	
Norway	Yes	2	Yes	Yes	Waiting times particularly significant between 1985 and 1995. During latter half of 1980s, Norwegian Heart and Lung Association sponsored heart surgery in the UK for Norwegians. Two hospitals (one public, one private) with heart surgery capacity opened in 1989 to increase overall capacity. In 2000, waiting times for IHD are normally around 2-3 months and have been shortened even more since.
Spain	Yes	1	Yes	Yes	The National Health System explicitly uses waiting times as a means of controlling access to high technology diagnostic and therapeutic procedures. When waits exceed a predetermined period of time, the NHS arranges for operations to be performed in private hospitals.
Sweden	Yes	1	Yes	Yes	Late 1980s patients waiting for coronary treatments sometimes waited over 6 months. In 1991, government issued "care guarantee" ensuring patients treated within 3 months for 12 diagnoses and associated treatments, including PTCA, CABG and catheterisation. Lasted until 1996. A limited number of key personnel in private companies can go to private hospitals to jump public queues.
Switzerland	No	NR	NR	NR	There is some wait according to patient preference and perceived quality of provider, so it is not an issue of capacity.
United Kingdom ⁽³⁾	Yes	2	Yes	Yes	Waiting lists are an important issue in the UK. In 1997 the government made a commitment to reduce waiting lists. However, the number of people on waiting lists increased and continued to do so until March 1998. Since then the number of people on waiting lists has fallen. The desired goal is to achieve a position where no one is waiting for more than 12 months, but there are now more people waiting between 12 and 18 months than when the government came to office.
United States	No	NR	NR	NR	

Source: OECD Questionnaire "Core Set of Indicators" for ischaemic heart disease. N.r. : not relevant. *Note:* Intensity of wait scale (refers to elective CABG and CATH): 1 = some wait (average wait between 2 to 6 months), 2 = significant waiting times may exist (average wait greater than 6 months)

Table 12. A brief qualitative link between intensity of waiting times and general health system features

Systems characteristics	Average intensity of wait:		
	Six months or more is common	Usually between 2 to 6 months	Virtually no queues
Fixed financing and macro-regulation	Norway, UK	Canada, Denmark, Finland, Italy, Spain, Sweden	
Fixed financing and no macro-regulation		Australia (public patients), Greece, Hungary	
Open ended financing and no macro-regulation			Belgium, Germany, Korea, Japan, Switzerland, US

Note: This is a general qualitative assessment. Macro-regulation refers to the geopolitical level, in some cases national in others health district, at which constraints, if any, are made. Waiting times refer to elective cardiovascular care services.

Table 13. Incidence of Ischaemic Heart Disease and Acute Myocardial Infarction in Denmark, 1996

(Rate per 100,000 population)

	Age 35-64 years		Age 65-74 years		Age 75 or older	
	IHD	AMI	IHD	AMI	IHD	AMI
Both genders	507	179	2,046	866	3,701	1,530
Males	742	274	2,946	1,263	4,739	2,046
Females	269	83	1,291	535	3,107	1,234

Source: DIKE Health and Morbidity Statistics 1999. *Note:* Incidence calculated as number of persons with admissions or deaths from ischaemic heart disease (ICD10 I20-I25) and acute myocardial infarction (ICD10 I20-I22) in 1996.

Table 14. Gender gap in mortality, 1980 to 1994

	1980	1985	1990	1994	% change (80-94)
Australia	185.7	157.0	115.7	98.1	-47.2
Canada	173.2	147.6	110.6	96.0	-44.6
United States	171.7	140.3	111.6	96.7	-43.4
Belgium	114.2	96.3	73.8	65.7	-42.5
Finland	262.8	256.0	201.3	157.7	-40.0
Sweden	211.0	195.8	149.7	126.8	-40.0
Denmark	195.1	179.0	145.1	118.2	-39.4
United Kingdom	218.3	199.5	160.7	139.4	-36.1
Switzerland	110.4	103.7	91.9	76.9	-30.3
Italy	89.3	80.8	71.9	65.3	-26.7
Norway	168.2	184.5	162.2	125.2	-25.6
Germany	142.1	137.0	111.9	110.4	-22.3
Japan	29.6	25.7	22.0	23.1	-22.0
Spain	64.0	64.6	58.2	56.5	-11.7
Greece	76.6	77.1	75.3	67.8	-11.5
Hungary	156.0	166.0	161.4	164.3	5.3
Korea	n.a.	6.1	10.8	16.8	175.4

Source: OECD Health Database 2000

Note: n.a. not available; Data for Germany prior to 1991 did not include the Federal Republic of Germany. Rate of change for Korea is between 1985 and 1994. These data reflect mortality for all age groups since these were the only data available for all countries. The data have been age-standardised to the European population.

Table 15. A comparison of trends in mortality from IHD for Males and Females: 1970-80 and 1980-95

	From the country reports ⁽¹⁾						From the health database (persons aged 40 and over)									
	Men			Women			Men					Women				
	Mortality	Slopes		Mortality	Slopes		Mortality		Slopes			Mortality		Slopes		
	1980	1995	[80-95]	1980	1995	[80-95]	1970	1980	1995	[70-80] ⁽⁵⁾	[80-95]	1970	1980	1995	[70-80] ⁽⁵⁾	[80-95]
Australia	811	460	-4.0%	386	238	-3.2%	1138	825	447	-3.1%	-4.4%	555	392	241	-3.3%	-3.5%
Belgium ⁽²⁾							551	443	285	-1.7%	-3.8%	247	185	135	-1.9%	-3.2%
Canada	750	416	-4.2%	362	201	-4.1%	983	774	421	-2.4%	-4.3%	506	381	217	-2.9%	-3.9%
Denmark							895	890	513	1.0%	-3.6%	463	422	266	-0.2%	-3.0%
Finland							1092	970	690	-1.0%	-2.5%	439	386	325	-1.2%	-1.2%
Germany ⁽³⁾							433	442	505	1.2%	-0.6%/-0.7%	189	189	252	2.2%	0.2%/0.2%
Greece	274	299	0.8%	104	137	1.9%	223	272	299	2.3%	0.7%	105	103	136	0.5%	1.9%
Hungary							715	693	785	0.5%	0.5%	451	359	427	-0.9%	0.9%
Italy	414	281	-2.6%	208	129	-3.1%	418	413	288	0.6%	-2.7%	247	207	138	-0.8%	-3.0%
Japan	169	138	-1.6%	95	73	-2.0%	175	155	143	-1.3%	-1.9%	104	92	78	-1.1%	-2.6%
Korea ⁽⁴⁾		72			35			22	77		13.3%		10	38		13.7%
Norway	720	489	-2.8%	295	204	-2.3%	791	738	502	-0.8%	-2.8%	353	296	217	-2.1%	-1.9%
Spain							172	267	236	5.4%	-1.0%	85	122	107	5.8%	-1.1%
Sweden							880	947	528	0.3%	-4.1%	483	438	239	-1.5%	-4.0%
Switzerland ⁽²⁾							374	411	332	1.6%	-1.4%	162	162	159	0.3%	-0.2%
United Kingdom							908	873	585	-0.5%	-2.8%	405	380	287	-0.7%	-1.8%
United States							1133	804	463	-2.6%	-3.9%	589	402	262	-3.0%	-3.0%

Source: Under the column "From the country reports" - Responses to OECD questionnaire "Core set of indicators for ischaemic heart disease" and ARD country reports (Australia, Canada, Finland and Norway). Under the column "From the health database" - WHO Cause of Death Statistics. *Note:* (1) The age groups vary: Australia and Greece are for persons 40 - 90; remaining countries persons aged 40+; (2) 1994 data for Belgium and Switzerland; (3) For Germany, the slopes have been computed over two different time periods to avoid the time series disruption with reunification: 80-90, 90-95; (4) Data are available only for the period 1985-1995 for Korea from the database. The trend from the country report has been computed over 1995-1998 (5) The period is 70-78 to avoid time series disruption for Belgium, Germany, Hungary, Spain, Switzerland and the United States and 70-76 for Denmark. The data have been age-standardised to the European population aged 40 and over.

Table 17. Contribution of deaths and non-fatal separations to total identified incidence, Denmark

1996	Males	Females
Out-of-Hospital Deaths	25.3%	25.5%
In-hospital Deaths	9.7%	18.8%
Survivors	65.0%	55.7%

Source (DIKE 1999).

Table 18. Monica Data

Country	Population	Abbreviation	Data collection					
			Registration Period	Number of years	Coronary-event monitoring (a)		Acute-coronary-care monitoring	
					First period	Second period	First period	Second period
Australia	Newcastle	AUS-NEW	1985-1993	9	85-87	91-93	85	91-93
	Perth	AUS-PER	1984-1993	10	84-86	91-93	84-86	91-93
Belgium	Charleroi	BEL-CHA	1983-1992	10	07/85-06/88	90-92	(b)	(b)
	Ghent	BEL-GHE	1983-1992	10	07/85-06/88	90-92	(b)	(b)
	Chent/Charleroi	BEL-GCH	1983-1992	10	(b)	(b)	09/86-07/87	05/91-03/92
Canada	Halifax County	CAN-HAL	1984-1993	10	84-86	91-93	84-86	91-93
Denmark	Glostrup	DNK-GLO	1982-1991	10	86-88	89-91	87-88	89-91
Finland	Kuopio Province	FIN-KUO	1983-1992	10	04/85-03/88	90-92	(b)	(b)
	North Karelia	FIN-NKA	1983-1992	10	04/85-03/88	90-92	(b)	(b)
	Turku/Loimaa	FIN-TUL	1983-1992	10	04/85-03/88	90-92	(b)	(b)
	Kuopio Province/North Karelia/Turku	FIN-FIN	1983-1992	10	(b)	(b)	09/86-12/86	09/92-12/92
Germany	Augsburg	DEU-AUG	1985-1994	10	85-87	92-94	85-87	92-94
	Bremen	DEU-BRE	1985-1992	8	85-87	90-92	85-87	90-92
	East Germany	DEU-EGE	1985-1993	9	88-90	91-93	89-90	91-93
Italy	Area Brianza	ITA-BRI	1985-1994	10	85-88	92-94	86-87	92-94
	Friuli	ITA-FRI	1984-1993	10	84-86	91-93	84-86	91-93
Spain	Catalonia	ESP-CAT	1985-1994	10	85-88	92-94	04/86-12/87	92-94
Sweden	Göteborg	SWE-GOT	1984-1994	11	85-88	90-93	04/86-06/87	01/91-06/92
	Northern Sweden	SWE-NSW	1985-1995	11	85-88	93-95	11/86-06/87	93-95
Switzerland	Ticino	CHE-TIC	1985-1993	9	85-87	91-93	(b)	(b)
	Vaud/Fribourg	CHE-VAF	1985-1993	9	85-87	91-93	(b)	(b)
	Ticino/Vaud/Fribourg	CHE-CHE	1985-1993	9	(b)	(b)	86	07/92-12/93
United Kingdom	Belfast	GBR-BEL	1983-1993	11	84-86	91-93	85	91-93
	Glasgow	GBR-GLA	1985-1994	10	85-87	92-94	85-87	92-94
United States	Stanford	USA-STA	1984-1995	13	80-83	90-92	81-82	11/90-12/92

The centres displayed are from countries participating in the current OECD study.

(a) These data were collected as part of the continuous registration of coronary events during the MONICA project observation period.

(b) These are amalgamations of previous populations, which for technical reasons data were collected by the larger unit.

Table 20. Data Sources: Based on country reports

	Name of dataset	Dates	DRG	Longitudinal	Codes (Diag/Proc)	Comments
Australia National	National Hospital Morbidity Database (NHMD)	1989-	Yes	No	ICD9 CM D/P	Federal coverage, all individuals residing in Australia. AN DRG, adapted from US DRG.
Perth	Western Australia (Hospital Morbidity Data system)	1970-	Yes	Yes	ICD9 CM D/P	All inpatient episodes in Western Australia. Also involved in MONICA. Data were also provided through TECH.
Belgium Federal	Résumé Clinique Minimum/ Résumé Financier Minimum		Yes	No	ICD9 CM D/P	
CIEC Database	Id.	1988-1997	Yes	No	ICD9 CM D/P	Covers 15-75 hospitals per year, teaching and general, public and private. Multiple stays followed only with same hospital. AP DRG Version 10 (TECH)
Canada National	Discharge Abstract Database CIHI/Statistics Canada	1979-	Yes	No		All hospitalisation in Canada. Case Mix Group. (CMG)
Ontario				Yes		Data provided for the AMI cohort provided through TECH.
Denmark	National Patient Register	1978	Yes	Yes	Dk classif, P ICD8-93, ICD10-94	All inpatients discharged from Danish public hospitals. Nordic countries version of DRG (since 1987) (TECH)
Finland	Hospital Discharge Register	1987	Yes	Yes	Finclassif. (83-96) NOMESCO 96-	All inpatients discharged from all Finnish public hospitals. Nordic countries version of DRG (since 1997). ICD9 86-95, ICD10 since then. Data also provided through TECH.
Germany	National discharge (Federal Bureau of Statistics)		No (?)	No		
Italy	Scheda di Dimissione Ospedaliera (National discharge abstract data)	1998-	Yes	No	ICD9CM D/P	All inpatient admissions in Italy. Includes false AMIs.
Italy MONICA	MONICA Area Friuli (P.I. DR. Vanuzzo)	See table 18	No	Yes		These data were used to analyse outcomes.
Japan	Voluntary Hospitals of	?		No		Discharged cases from 15 tertiary care private teaching hospitals

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	Name of dataset	Dates	DRG	Longitudinal	Codes (Diag/Proc)	Comments
	Japan (VHJ) Quality Indicator Project					in Japan, over 500 beds, play the core role in health care in their region, and scattered nationwide. As of May 2000, 200 000 cases were collected.
Korea	Yonsei University Hospital	?	?	No		
Norway	Norwegian Patient Register (NPR)	1990-	Yes	Yes	ICD9-10 National code Proc	Inpatients from public and private hospitals. From 2000 also includes outpatients. Nordic countries version of DRG started in 1997. ICD-9 1990-1998. ICD10 from 1999. National code for Procedures. Data also provided through TECH.
Spain Federal	Conjunto Minimo Basico de Datos al Alta Hospitalaria (Discharge abstracts)	?	?	No		All admissions in public hospitals in Spain
2 Regions	Discharge abstracts from Catalunya and Pais Vasco	?	?	Yes		Admissions in 30 hospitals equipped with Catheterisation laboratories.
Sweden	PTCA: Swedish Coronary Angiography and Angioplasty Registry (SCAAR) Hospital Discharge Registry (HDR)	1991-1997 ICD10 & a national code for procedures	Yes	Yes		SCAAR: data come from a subset of 5 hospitals that were in the registry from the beginning, since not all Swedish hospitals were initially included. This subset covers 70 % of all PTCAs in 1997. Data also provided through TECH HDR: includes all patients discharged from public hospitals. Private facilities not included. Nordic countries version of DRG.
Switzerland	Hospital of Fribourg - (MONICA Center)	See table 18		No	ICD9CM since 1998	All admissions in the hospital. (TECH) Vaud Canton. Excludes transfers from acute hospitals. Follow up 28 day from admission.
GBR-Oxford	Oxford Record Linkage Study	1968-	No	Yes		All population in Oxford area. Data also provided through TECH.
United States	TECH Medicare Claims data MEDPAR HISKEW	1984-	Yes	Yes		All beneficiaries aged 65 and over (1984-1995). 1984-1997: 20 % of Medicare sample. Medicare data was supplemented with Californian data for the treatment sections for the 40-65 age groups. (TECH investigators).
United States	NHDS	?	Yes	No		Specific dataset to obtain data for all admissions above age 65. Simplified cohort instructions

Source: Country reports and TECH internal records. See also Moise (2001) for more detail.

Table 21. Readmissions one year following initial admission for AMI, by sex (TECH)**Both Genders**

	Acute myocardial infraction			Ischaemic heart disease			Congestive heart failure			All causes		
	1990	1993	1996	1990	1993	1996	1990	1993	1996	1990	1993	1996
Canada (Ontario)		5	5		18	16		6	5		37	34
Denmark	8	7	6	18	21	26	3	4	4	33	37	42
Finland	7	7	6	22	25	27	1	0	3	32	34	37
Sweden	8	7	7	15	19	20				29	34	34
United Kingdom (Oxford) *	4	3	4	9	12	20	0	0	7	25	32	36
United States	6	6	6	12	11	11	9	9	8	39	39	38

Men

	Acute myocardial infraction			Ischaemic heart disease			Congestive heart failure			All causes		
	1990	1993	1996	1990	1993	1996	1990	1993	1996	1990	1993	1996
Canada (Ontario)		5	4		23	20		4	3		38	34
Denmark	8	7	6	19	22	28	3	4	4	34	37	43
Finland	6	6	6	22	27	27	1	0	3	33	36	36
Sweden	8	7	7	16	21	22				30	35	35
United Kingdom (Oxford) *	5	4	5	10	14	22	0	0	6	26	31	38
United States	6	6	5	12	11	11	8	8	8	38	38	37

Women

	Acute myocardial infraction			Ischaemic heart disease			Congestive heart failure			All causes		
	1990	1993	1996	1990	1993	1996	1990	1993	1996	1990	1993	1996
Canada (Ontario)		6	6		17	17		7	5		38	36
Denmark	7	7	6	16	19	22	4	5	5	32	36	40
Finland	7	7	6	23	23	27	1	1	4	32	33	38
Sweden	8	8	8	13	16	17				29	33	33
United Kingdom (Oxford) *	4	3	3	9	11	17	0	0	9	24	33	33
United States	6	6	6	12	12	11	10	10	10	39	40	41

Note: In some countries the representativeness of the data may be limited to some hospitals and/or certain geographical areas. Data on Ischaemic Heart Disease refer to ICD-9 codes 411 (Other acute and subacute forms of ischemic heart disease), 413 (Angina) and 414 (Other forms of chronic IHD), except 414.1x.

Source: The data were provided by the TECH Research Network. See Table 20 and ANNEX Data sources.

Table 22. Health Care Expenditure(Direct Costs) Associated with IHD

Direct costs as a percentage of total health expenditure			
	IHD		CVD (Cardiovascular disease)
Australia	2.7		11.3
Canada	2.9		10.2
United Kingdom	3.1		7.1
United States	5.1		10.0
Direct costs by category as a proportion of total health care expenditure on IHD			
	Hospitals	Physician Services	Drugs
Australia	74.8	11.5	13.7
Canada	75.8	12.7	11.5
United Kingdom	61.0	3.9	35.1
United States	74.9	17.3	7.8

Sources: "Health system costs of cardiovascular diseases and diabetes in Australia 1993-94" (Australia); "Economic Burden of Illness in Canada, 1993" (Canada); "Coronary heart disease statistics: Economics Supplement", British Heart Foundation Health (UK-IHD); OECD Health Data Base 2000 (UK-CVD); "2001 Heart and Stroke Statistical Update" American Heart Association (US).

Note: The studies for Australia, Canada and the US use a similar methodology which is different from that used for the UK study for IHD.

The figure for IHD-UK are based on 1996 data and the figure for CVD-UK are based on 1995 data.

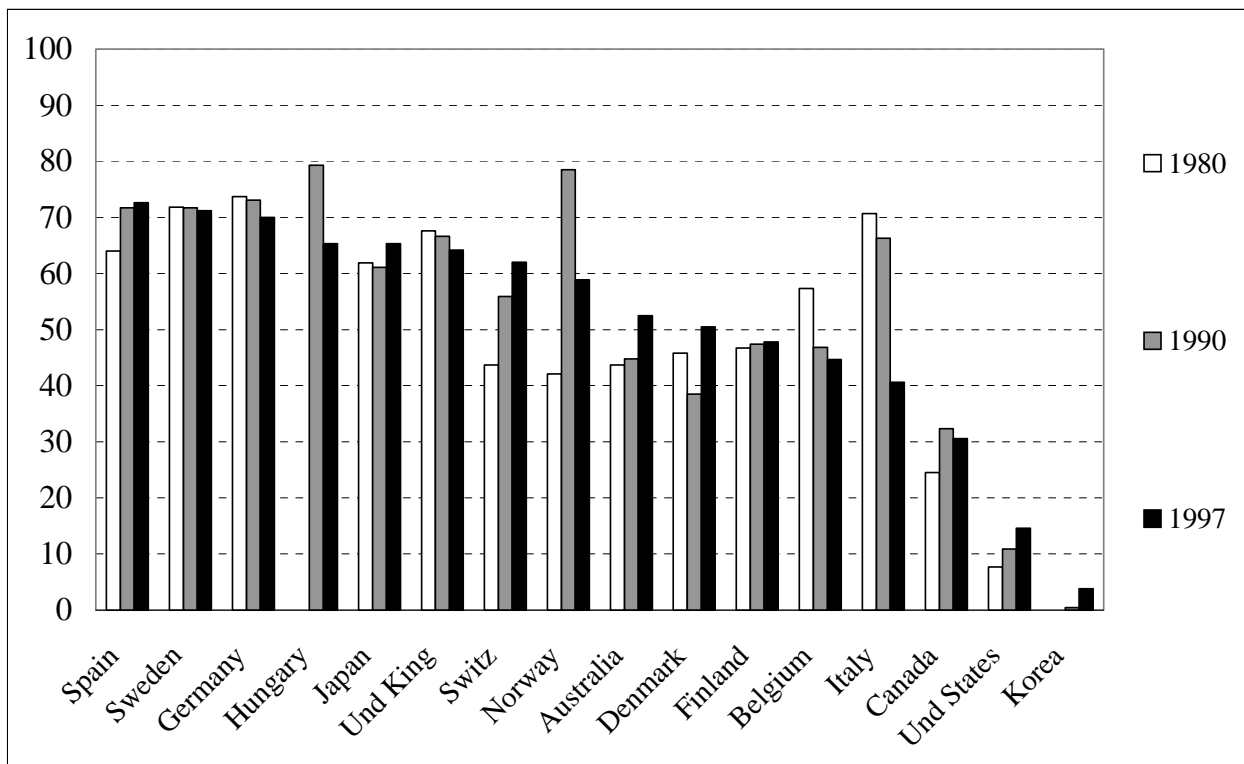
The category of hospital costs includes prescription drugs in hospital with the exception of Canada and drugs prescribed for inpatients by office-based physicians in the US. For these two countries, these figures are included in the drugs category.

The figures for the drug category in Australia include non-prescription drugs.

Table 23. Data sources for costs of selected IHD treatments

	Source	Costs/charges/ expenditures	Physician charges	Comment
Australia	AIHW - administrative data	Expenditures	Included	Data adjusted for disease severity and comorbidities
Belgium	CIES	Costs	No	
Canada	CIHI	Charges	Not included	
Denmark	Sundhedsministeriet	DRG costs	Yes	DRG underestimates actual cost by about 10%
Finland	Standard cost list of health services, Stakes	Real costs	Yes	Based on DRG cost weight from two hospital districts
Greece	ARD country report	Expenditures	Yes	LOS appears to be low for some treatments
Italy	ARD country report	Real costs	Yes	Based on a sample of hospitals; calculated for LOS >1 and less than trim point (function of 25 th & 75 th percentiles)
Japan	VHJ project	Charges	No	July 2001
United Kingdom	Sculpher 1994	Costs	No	Based on one London hospital
United States	Stone 1997 (AMI with and without PTCA)	Costs	Yes	Uses t-PA for thrombolytics Based on Massachusetts hospitals
	Hlatky 1999 (Elective PTCA)	Costs (converted from charges)	Yes	
	Ghali 1999 (CABG)	Costs (converted from charges)		Used costs for CABG including CATH category

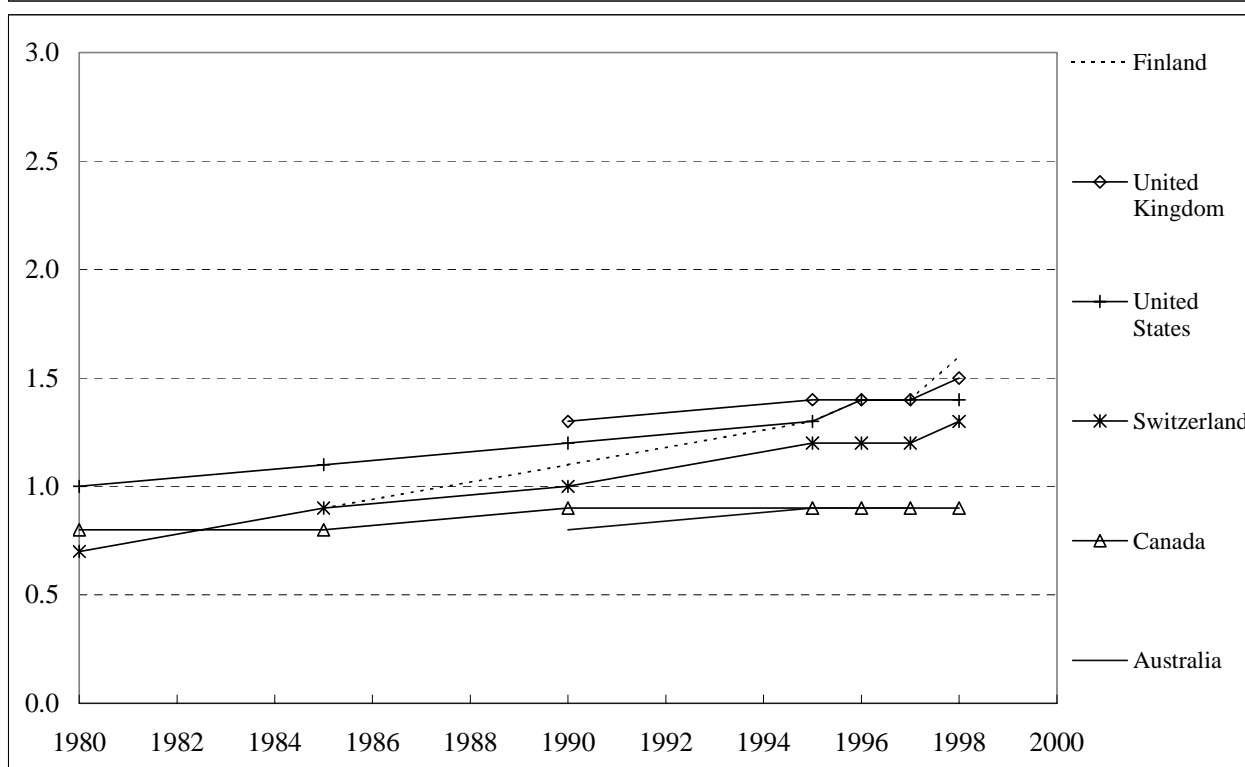
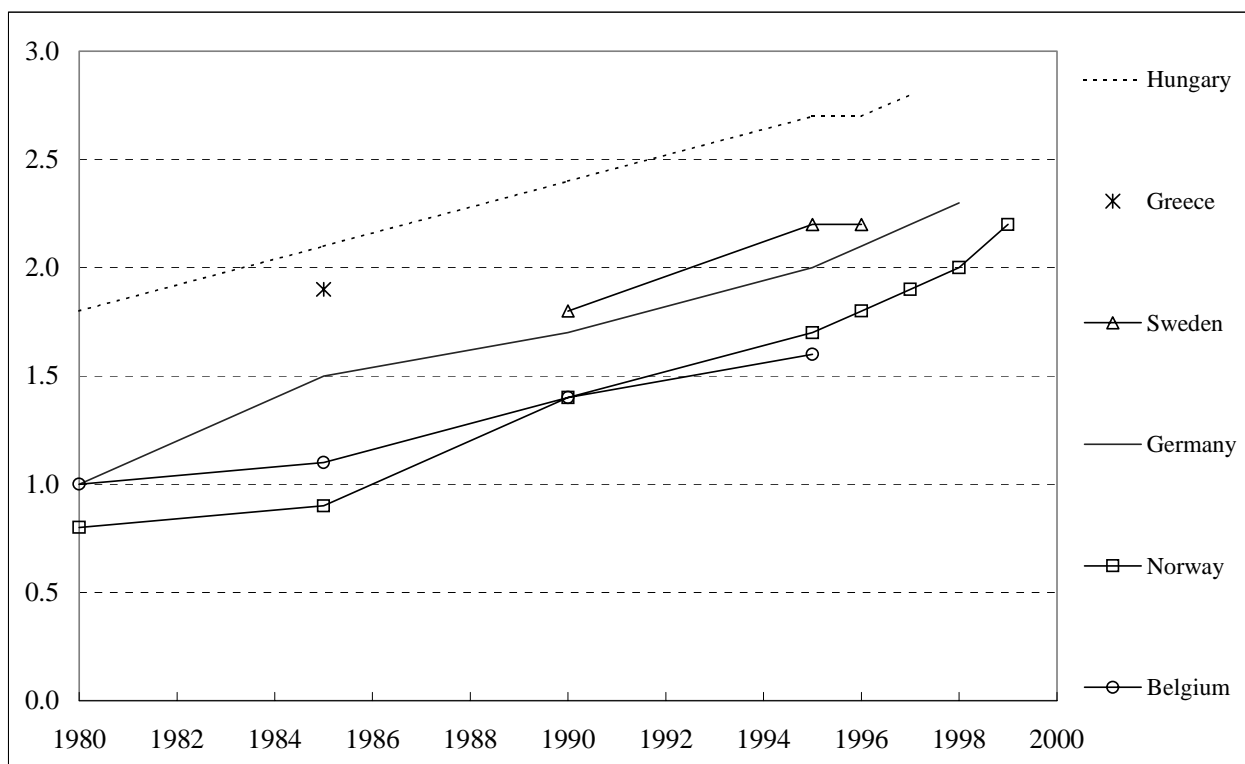
Chart 1. Public pharmaceutical expenditure as a percentage of total pharmaceutical expenditure



Note: 1991 and 1996 data for Hungary; 1984 data for Japan; 1996 data for Norway. Figures for Korea do not include social insurance expenditure for drugs.

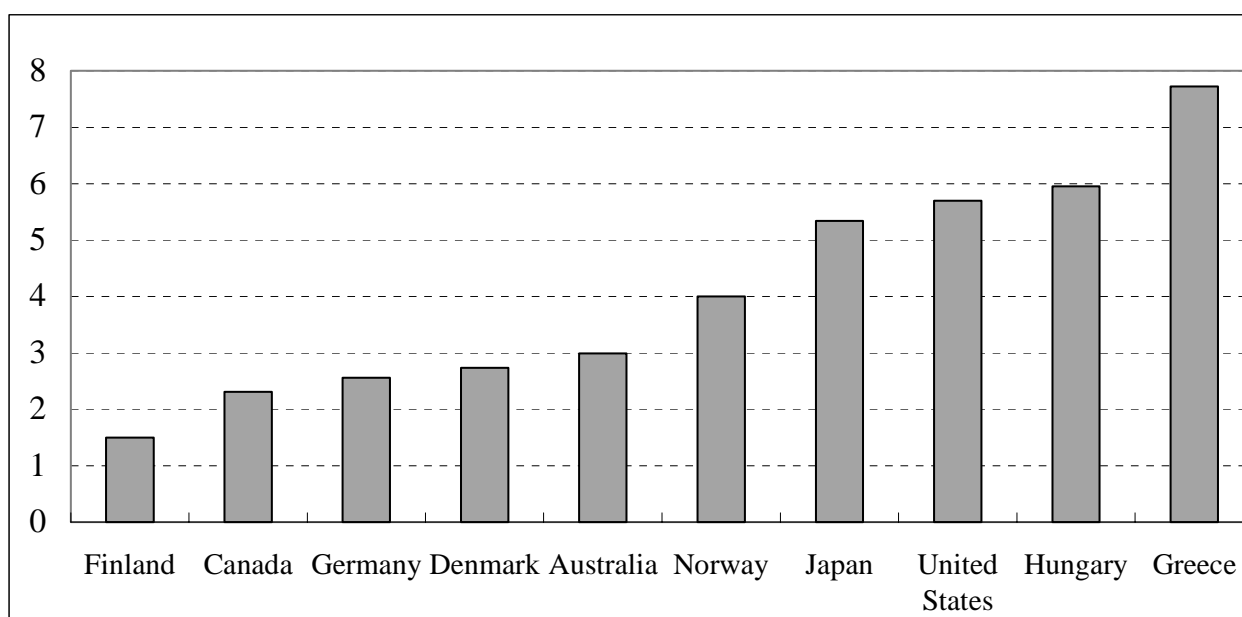
Source: OECD Health Data 2000.

Chart 2a. Number of Specialists per 100 000 inhabitants



Source: OECD Health Data 2000.

Chart 2b. Number of cardiologists per 100 000 inhabitants



Notes:

Australia: 1997 data. Clinicians only (excludes administrators, researchers, teachers, etc.) classified to main practice.

Canada: 1997 data. Only includes physicians currently registered with the Royal College of Physicians and Surgeons of Canada. After 1979 cardiology was a subspecialty. Numbers do not include physicians certified by the Royal College of Physicians and Surgeons of Canada who are practising in the US.

Denmark: 1995 data.

Finland: 1997 data. Persons of working age.

Germany: 1998 data. Includes angiologists.

Greece: 1997 data. Refers to hospital physicians only.

Hungary: 1999 data. Data were reported as FTEs;

Italy: According to data from the *National Federation of Doctors and Surgeons*, there were 20.2 cardiologists per 100,000 inhabitants in 1997. This figure is much higher than the other countries and may include physicians not included in the figures from the other countries such as: physicians not practicing full-time or GPs who have a second specialty in cardiology.

Japan: 1996 Data.

Norway: 1995 Data. Refers to practicing specialists less than 70 years old.

Sweden: According to data from the *National Board of Health and Welfare*, there were 15.8 certified specialists in cardiology in 1998. As with Italy, these figures are much higher than the other countries and may reflect a different definition or measure of what constitutes a cardiologist.

United States: 1993 Data. Clinically active physicians (those working more than 20 hours per week)

Source: Responses to OECD questionnaire "Core set of indicators for ischaemic heart disease" and ARD country reports (Denmark, Finland, Norway and Hungary);

Australia: *AIHW Medical Labour Force Surveys, 1995–1998*;

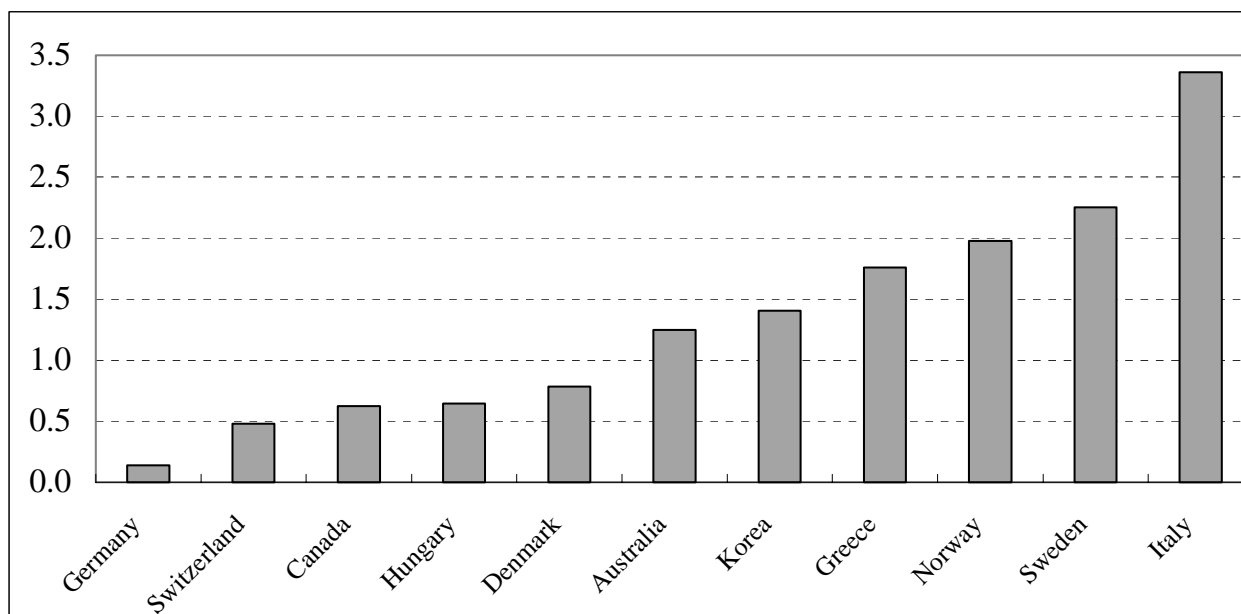
Canada: *Royal College of Physicians and Surgeons of Canada*;

Germany: *Ärztstatistik 1998*;

Greece: *Social Welfare and Health Statistics, National Statistical Service of Greece*;

Japan: *Ministry of Health and Welfare. Survey of Physicians, Dentists and Pharmacists, 1998. Tokyo: Kosei Tokei Kyokai, 2000.*

United States: *1998 Dartmouth Atlas*.

Chart 2c. Number of cardiovascular surgeons per 100 000 inhabitants**Notes:**

Australia: 1997 data. Includes cardio-thoracic and vascular surgeons. Clinicians only (excludes administrators, researchers, teachers, etc.) classified to main practice.

Canada: 1997 data. Includes cardiac, cardiothoracic and cardiovascular and thoracic surgeons. Only includes physicians currently registered with the Royal College of Physicians and Surgeons of Canada. Numbers do not include physicians certified by the Royal College of Physicians and Surgeons of Canada who are practising in the US.

Denmark: 1995 data.

Germany: 1998 data. Includes thoracic and cardiovascular surgeons.

Greece: 1997 data. Refers to thoracic surgeons. Cardiovascular surgery as a specialty does not exist in Greece. Surgeons specialising in cardiovascular care are recorded as either surgeons or thoracic surgeons. Refers to hospital physicians only.

Hungary: 1999 data. Refers to cardiac surgeons.

Italy: 1997 data.

Korea: 1997 data. Refers to chest surgeons which include cardiovascular surgeons.

Norway: 1995 data. Refers to practicing specialists less than 70 years old.

Sweden: 1998 data. Refers to thoracic surgeons.

Switzerland: 1998 data. Refers to active cardiovascular surgeons.

Source: Responses to OECD questionnaire "Core set of indicators for ischaemic heart disease" and ARD country reports (Hungary, Denmark and Norway);

Australia: *AIHW Medical Labour Force Surveys, 1995–1998*;

Canada: *Royal College of Physicians and Surgeons of Canada*;

Germany: *Ärztstatistik 1998*;

Greece: *Social Welfare and Health Statistics, National Statistical Service of Greece*;

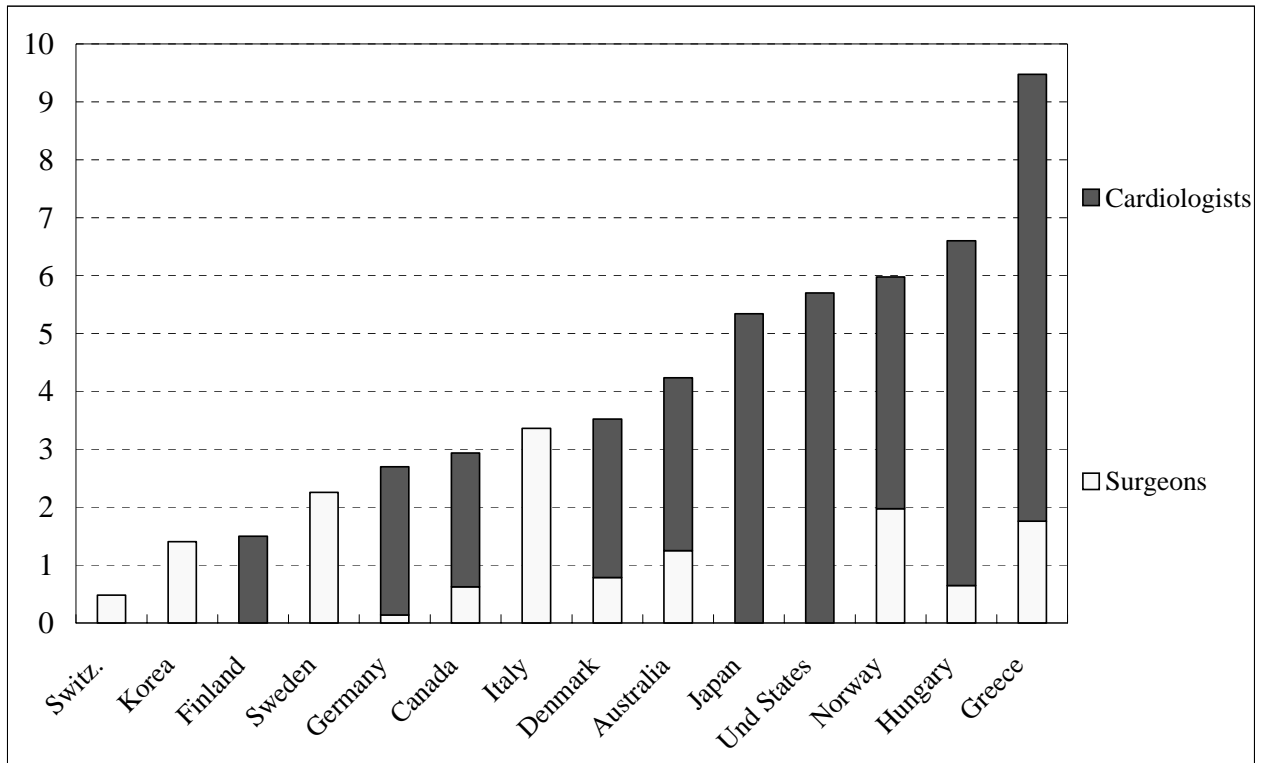
Italy: *National Federation of Doctors and Surgeons*

Korea: *Ministry of Health and Welfare*

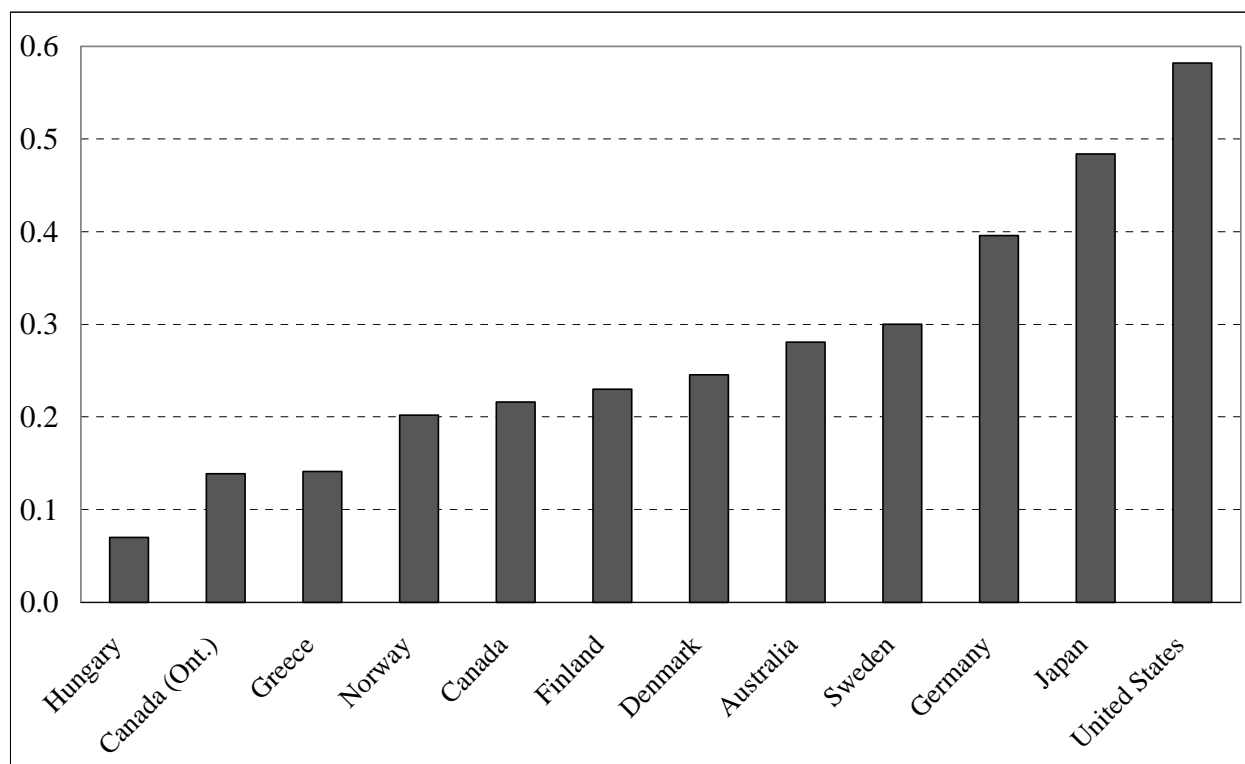
Sweden: *National Board of Health and Welfare*

Switzerland: *Swiss Medical Association*

Chart 2d. Number of cardiologists and cardiovascular surgeons per 100 000 inhabitants



Notes: See previous Charts 2b and 2c for details. It was felt that data on the number of cardiologists in Italy and Sweden were too large to be within normal parameters. Therefore only surgeons are presented here. Switzerland and Korea only provided data on surgeons.

Chart 3. Number of catheterisation laboratories per 100 000 inhabitants

Note: These data refer to the number of facilities that have at least one catheterisation lab. In many cases, CATH facilities will have several labs in place

Australia: 2000 data. Interventional Cardiology Laboratories.

Canada: 1995 data. (Ontario - 3 centres offering revascularization are currently being built or are in the advanced planning stages. 2000 data)

Denmark: 2000 data.

Finland: 2000 data.

Germany: 1996 data.

Greece: 2000 data.

Hungary: 2000 data.

Japan: 1996 data.

Norway: 2000 data.

Sweden: 1995 data.

United States: 1996 data.

Source: Responses to OECD questionnaire "Core set of indicators for ischaemic heart disease" and ARD country reports (Canada (Ontario), Denmark, Finland, Greece, Hungary and Norway);

Australia: *AIHW/NHF National Cardiac Surgery and Coronary Angioplasty Registers.*

Canada: *Gelfand ET., Knudston ML, Galbraith BN. Chapter 7: Revascularization in Canada: Manpower and resource issues. Can J Cardiol 1997; 13(Suppl D): 58D-63D.*

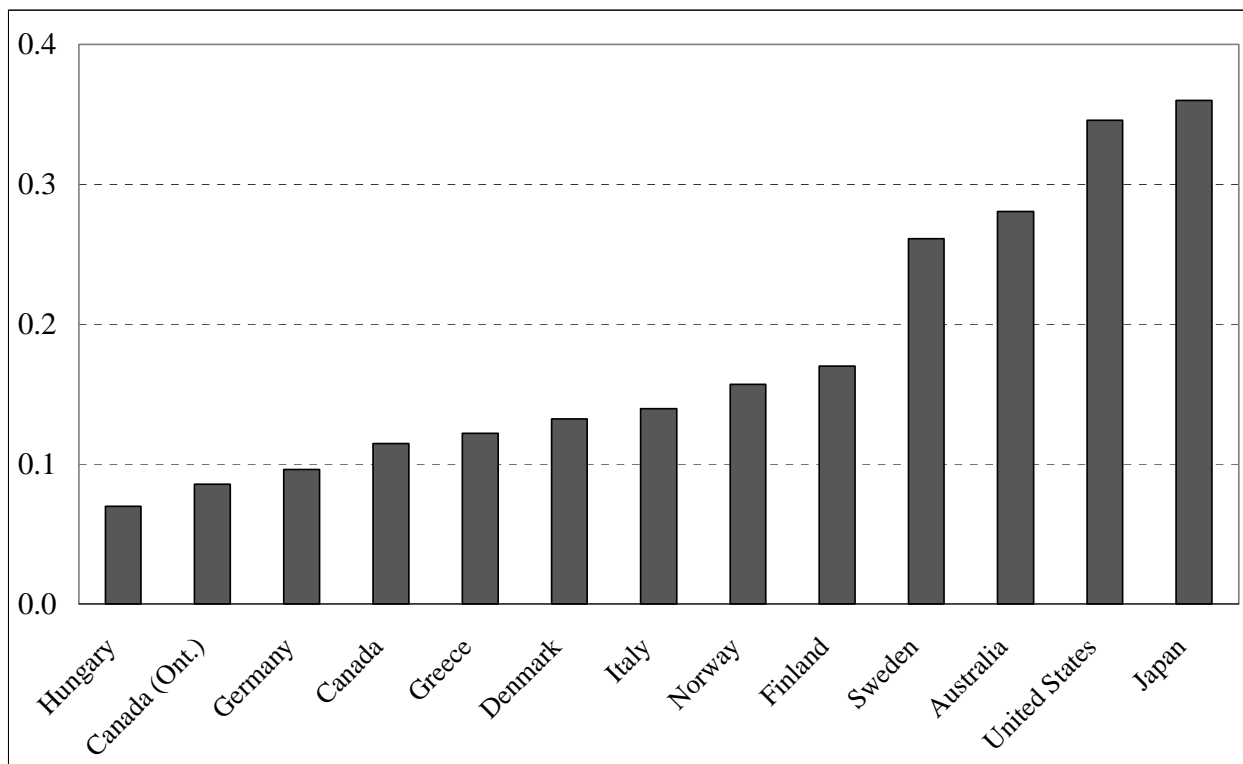
Germany: *Perleth et. al. 1999.*

Japan: *Ministry of Health and Welfare. Survey of Medical Care Institutions, 1996. Tokyo: Kosei Tokei Kyokai, 1998.*

Sweden: *National Board of Health and Welfare.*

United States: *Communication with Dr. Richard Miller, Center for Naval Analyses. Data from the American Hospital Association County Hospital File 1996.*

Chart 4. Number of cardiac surgery facilities per 100 000 inhabitants



Note: These data refer to the number of facilities that have at least one operating theatre equipped to perform open heart surgery. In many cases, these facilities will have several such theatres in place.

Australia: 2000 data. Information is only available on the number of hospitals where cardiac surgery was performed.

Canada: 1995 data. (Ontario - 3 centres offering revascularization are currently being built or are in the advanced planning stages. 2000 data.)

Denmark: 2000 data.

Finland: 2000 data.

Germany: 1998 data. Includes six hospitals which are not part of hospital planning.

Greece: 2000 data.

Hungary: 1999 data.

Italy: 2000 data. Includes both public and private contracted hospitals.

Japan: 1996 data.

Norway: 2000 data.

Sweden: 1995 data.

United States: 1996 data.

Source: Responses to OECD questionnaire "Core set of indicators for ischaemic heart disease" and ARD country reports (Canada (Ontario), Denmark, Finland, Greece, Hungary, Italy and Norway);

Australia: *AIHW/NHF National Cardiac Surgery and Coronary Angioplasty Registers.*

Canada: *Gelfand ET., Knudston ML, Galbraith BN. Chapter 7: Revascularization in Canada: Manpower and resource issues. Can J Cardiol 1997; 13(Suppl D): 58D-63D.*

Germany: *Bruckenberg 1999.*

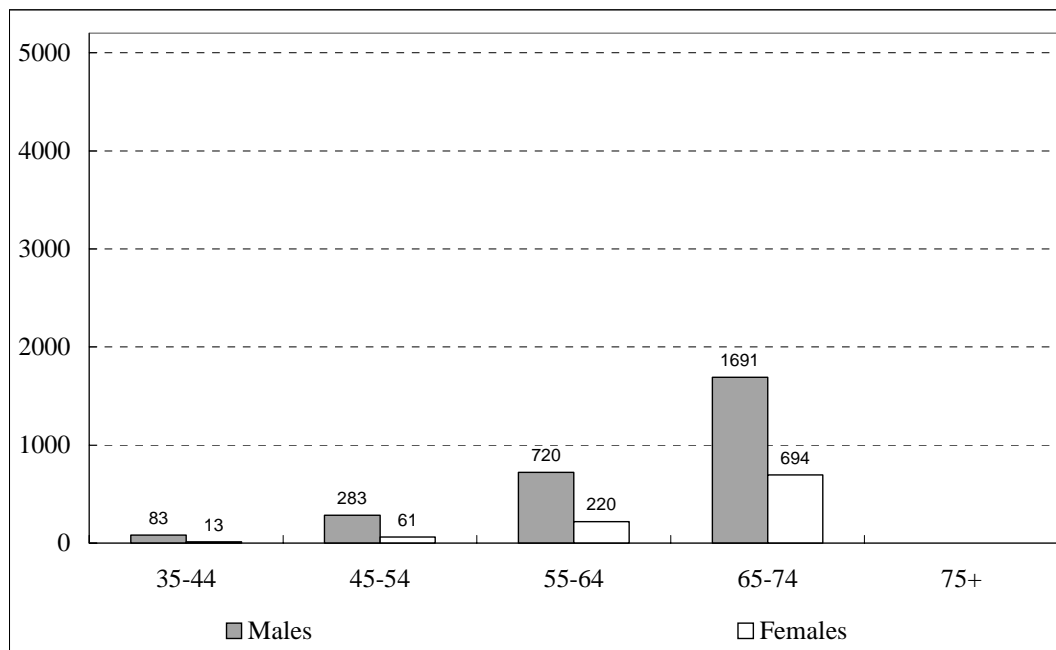
Japan: *Ministry of Health and Welfare. Survey of Medical Care Institutions, 1996. Tokyo: Kosei Tokei Kyokai, 1998.*

Sweden: *National Board of Health and Welfare.*

US: *Communication with Dr. Richard Miller, Center for Naval Analyses. Data from the American Hospital Association County Hospital File 1996.*

Chart 5. Incidence of AMI in (West) Germany, by age and gender, 1991

Number of persons with AMI per 100,000 inhabitants

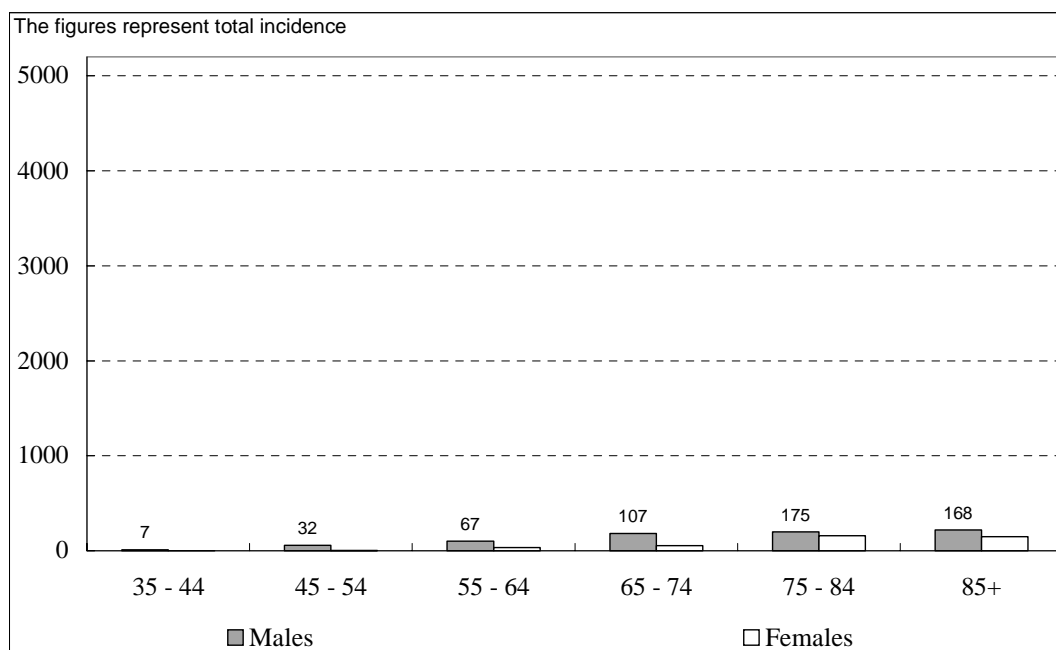


Note: Data were not available for persons aged 75 or older.

Source: Gesundheitsberichterstattung des Bundes, German National Health and Examination Survey, www.gbe-bund.de.

Chart 6. Incidence of AMI in Japan (Okinawa), by age and gender, 1988 - 1991

Number of persons with AMI per 100,000 inhabitants



Source: Fukiyama (1999)

Chart 7. Incidence of AMI (per 100 000 population) in Sweden, by age and gender, 1987 - 1997

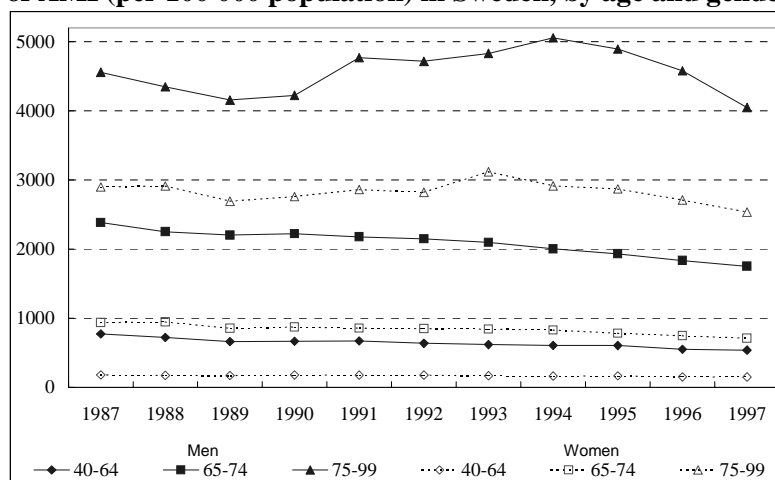


Chart 8. Incidence of AMI in Australia, by age and gender, 1993/4 - 1997/98 (fiscal years)

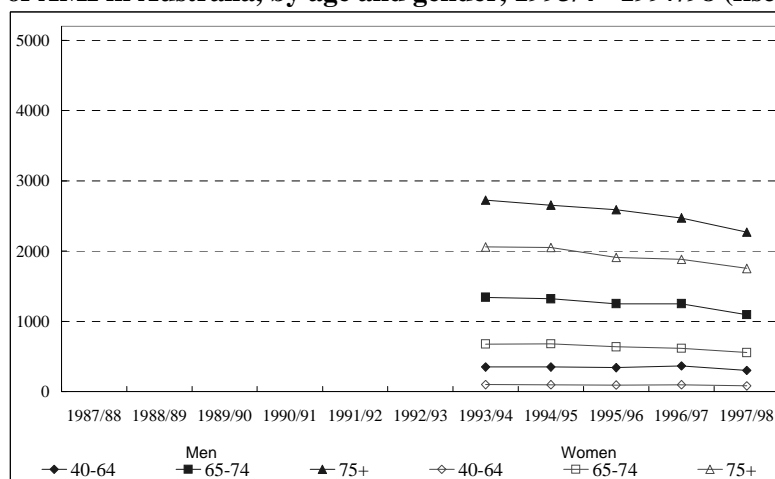
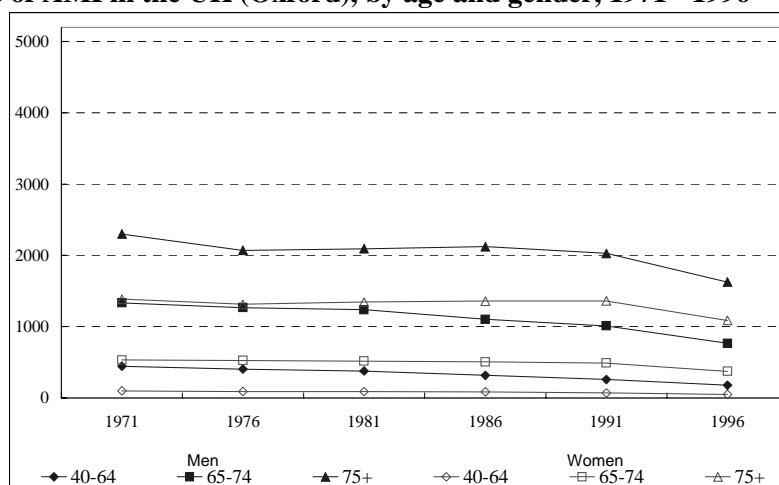


Chart 9. Incidence of AMI in the UK (Oxford), by age and gender, 1971 - 1996



Sources: Sweden - National Board of Health and Welfare; Australia - AIHW National Hospital Morbidity Database; AIHW National Mortality Database; AIHW. Monitoring the incidence of cardiovascular disease in Australia; UK - Oxford Record Linkage Study.

Chart 10. Incidence of AMI, by age, gender and country, 1991

Number of persons with AMI per 100,000 inhabitants

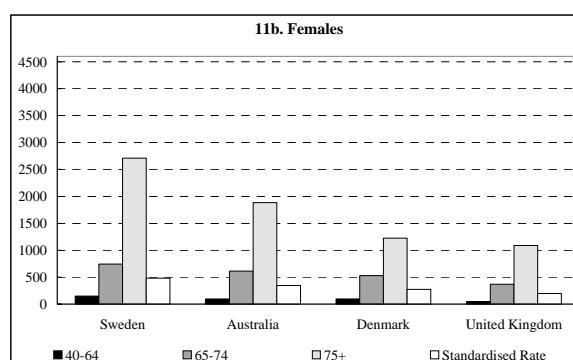
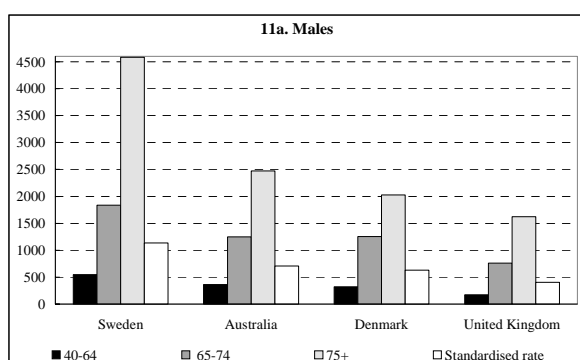


Note: See Charts 5 and 6.

Sources: See Charts 5, 6 and 9.

Chart 11. Incidence of AMI, by age, gender and country, 1996

Number of persons with AMI per 100,000 inhabitants

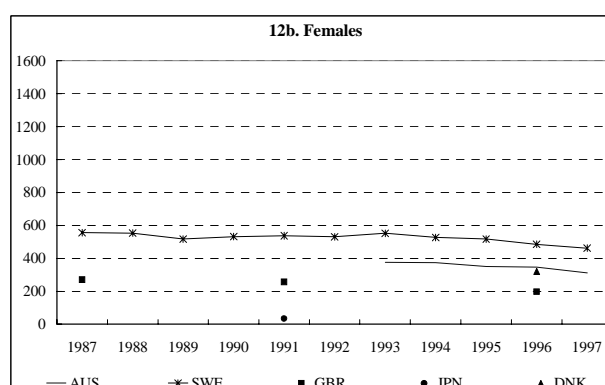
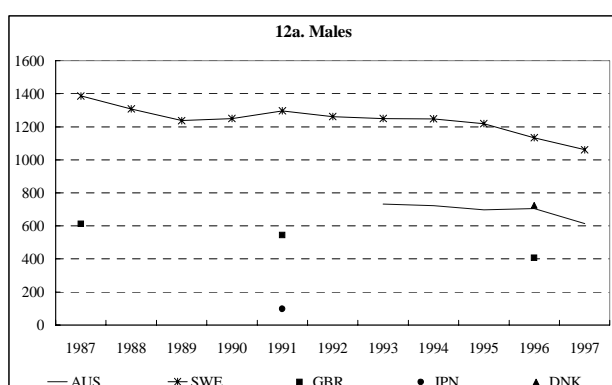


Note: Standardised rates are standardised to the European population aged 40 and over. Australia refers to 1996/97.

Sources: See Charts 7, 8 and 9; Denmark - 1999 Heart Statistics, Jorgen Videbaek, Mette Madsen.

Chart 12. Age-standardised incidence of AMI, by gender and country 1987 - 1997

Number of persons with AMI per 100,000 inhabitants

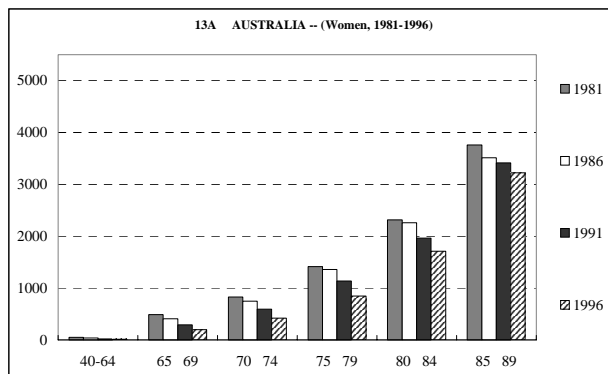
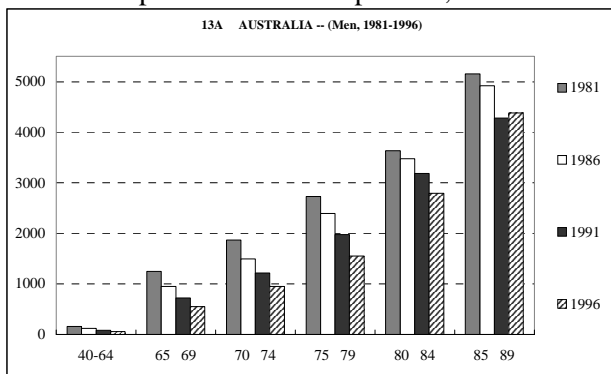


Note: Age-standardized to the European population aged 40 and over.

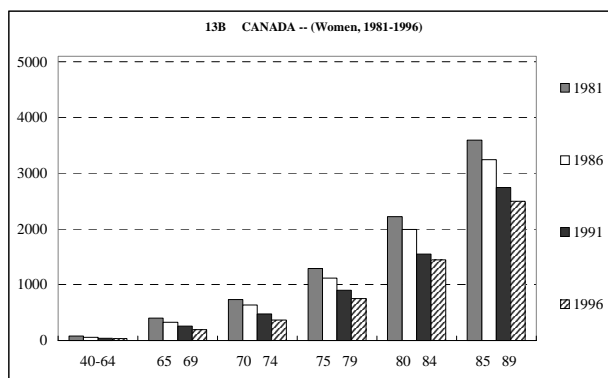
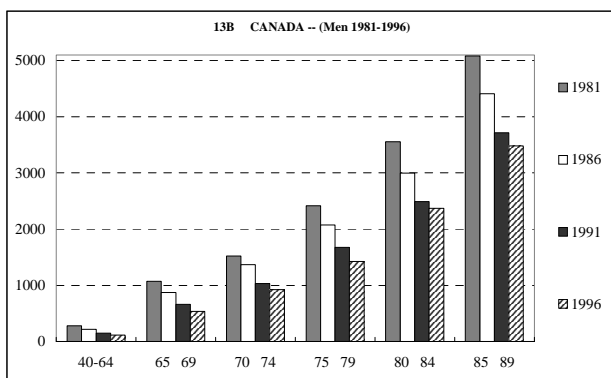
Sources: See Charts 6, 7, 8 and 9; Denmark - (DIKE 1999)

Chart 13. IHD mortality rates by age and gender, 1981 - 1996

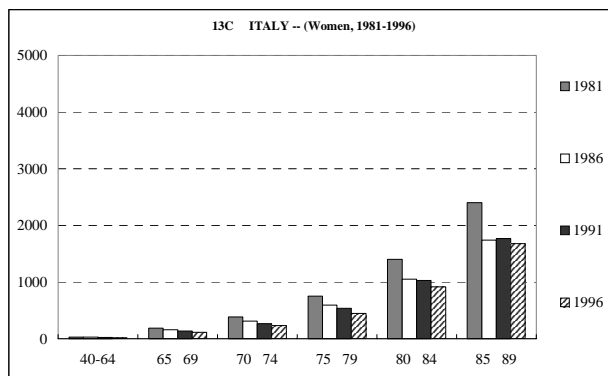
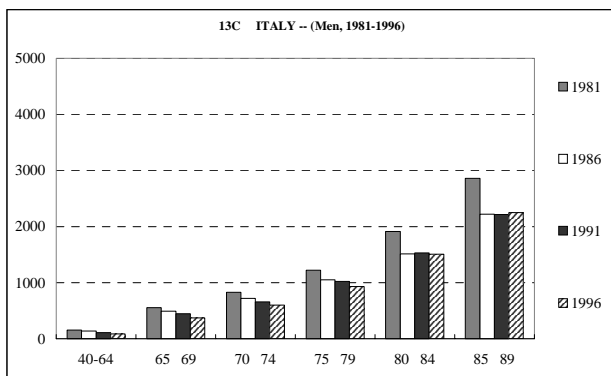
Number of persons with IHD per 100,000 inhabitants



Source: AIHW National Mortality Database.



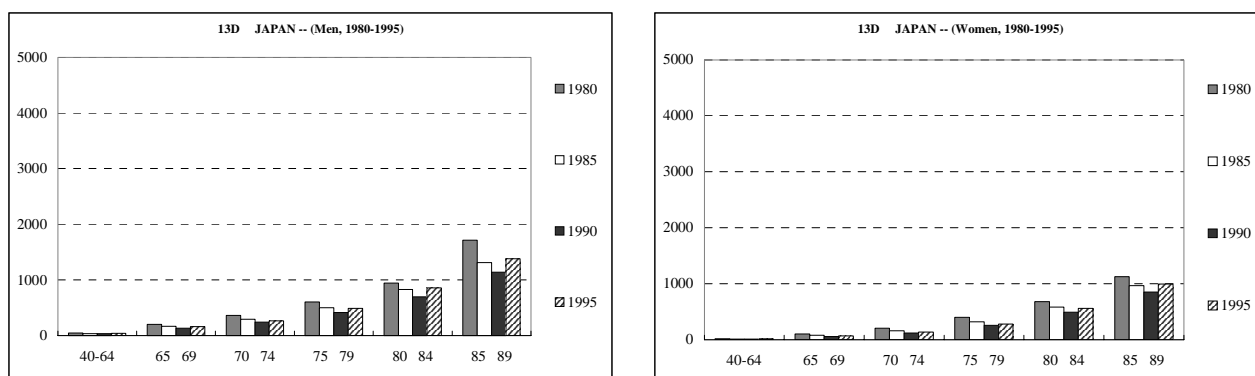
Source: Responses to OECD questionnaire “Core set of indicators for ischaemic heart disease” and ARD country reports.



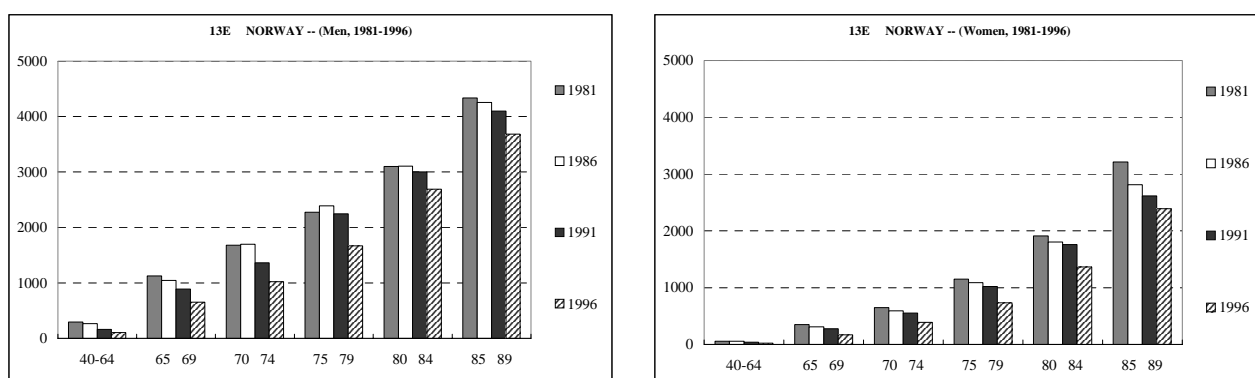
Source: Responses to OECD questionnaire “Core set of indicators for ischaemic heart disease” and ARD country reports.

Chart 13. (continued) IHD mortality rates by age and gender, 1981 - 1996

Number of persons with IHD per 100,000 inhabitants



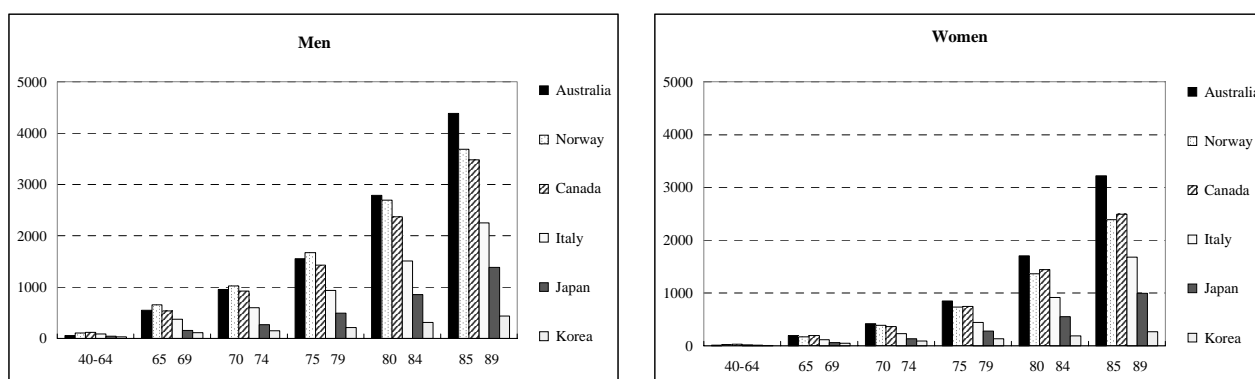
Source: Ministry of Health and Welfare, Vital Statistics of Japan 1998. Tokyo: Kosei Toeki Kyokai, 2000.



Source: Responses to OECD questionnaire “Core set of indicators for ischaemic heart disease” and ARD country reports.

Chart 14. IHD Mortality rates by age groups, 1996

Number of persons with IHD per 100,000 inhabitants

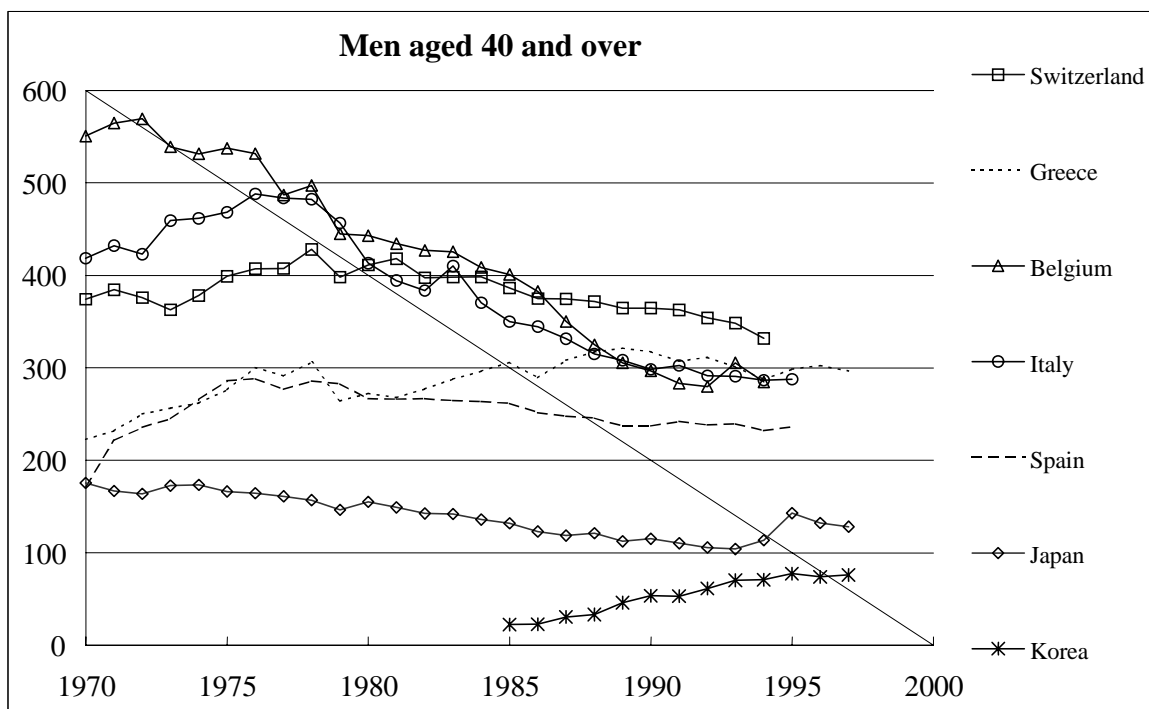
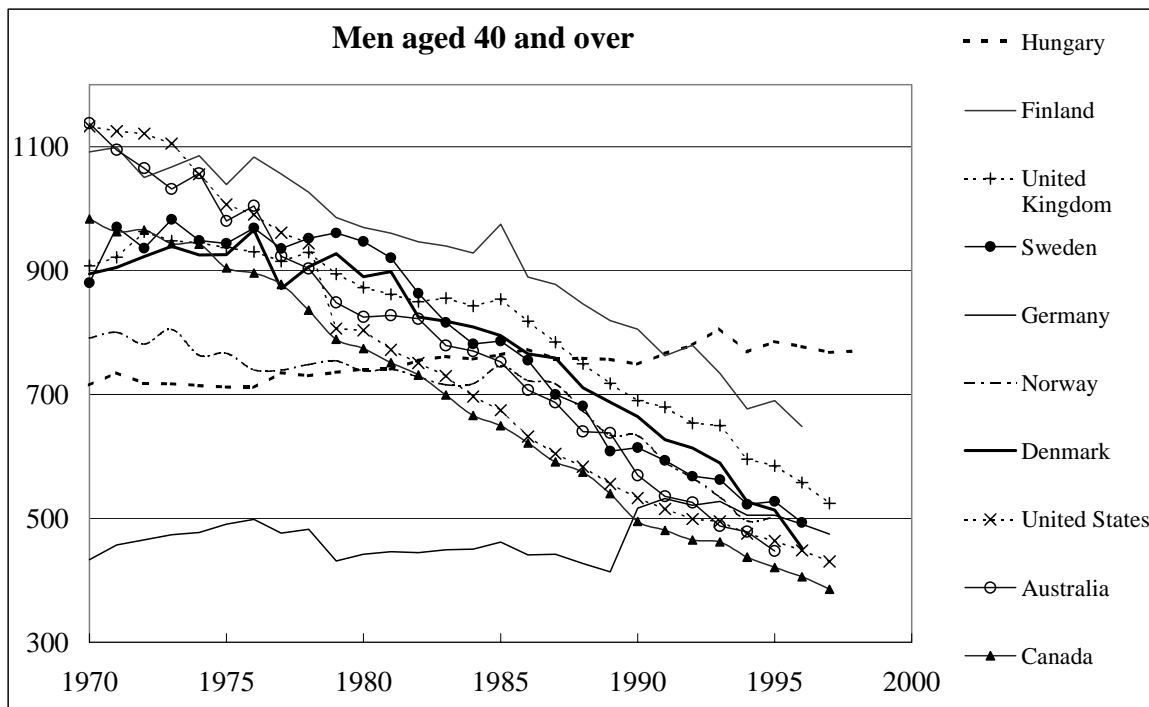


Note: 1995 data for Japan and Korea.

Source: Responses to OECD questionnaire “Core set of indicators for ischaemic heart disease” and ARD country reports (Korea). See Chart 13 (Australia, Canada, Italy, Japan and Norway).

Chart 15. Age-standardised mortality rates for Ischaemic Heart Disease, Males, 1970 - 1996

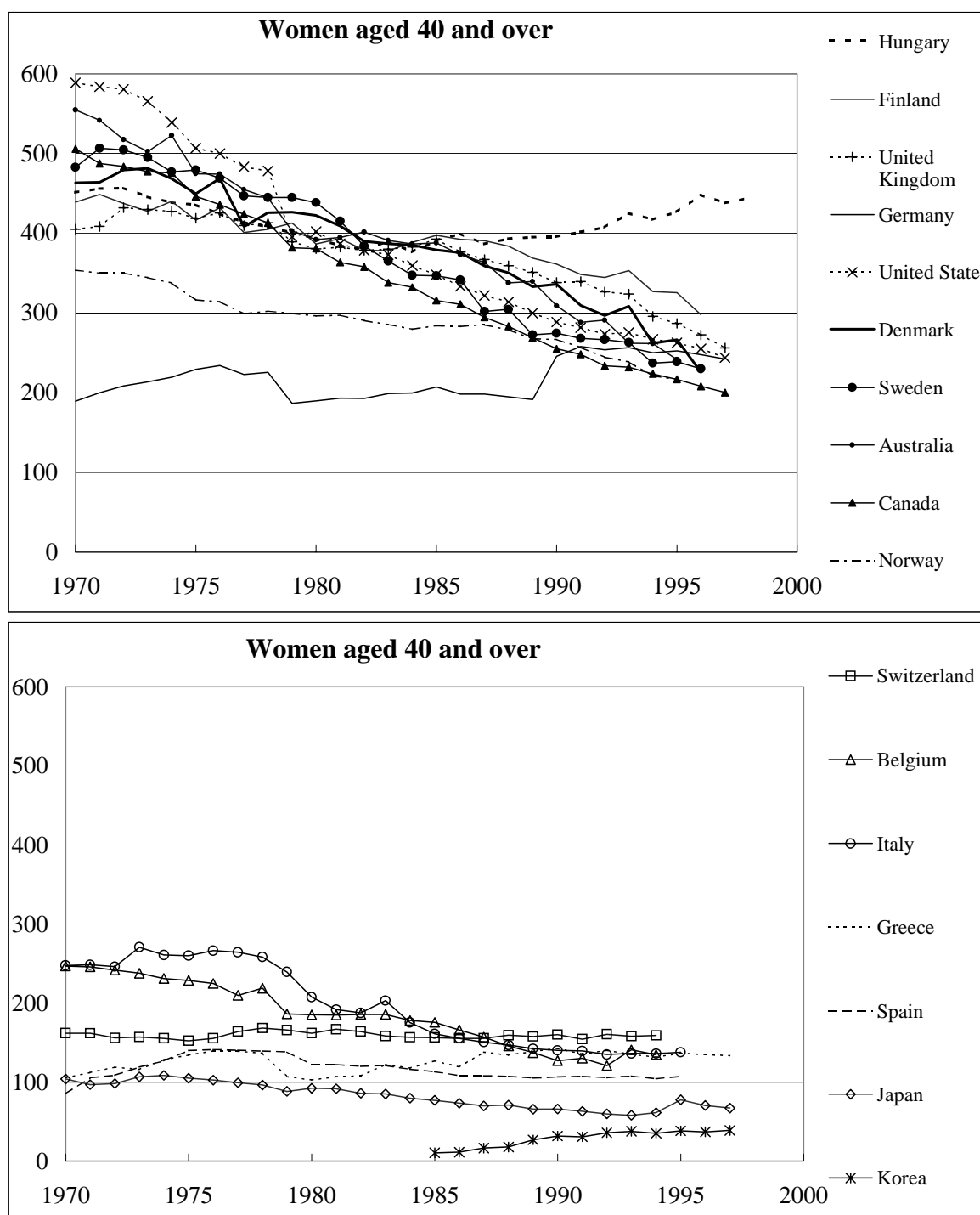
Number of persons with IHD per 100,000 inhabitants



Note: Age-standardized to the European population aged 40 and over. Calculations based on 5-year age groups. Prior to 1990 data for Germany were only available for West Germany. The sudden increase in the mortality rates from 1989 to 1990 are due to the inclusion of East Germany beginning in 1990. A linear trend was used to estimate data for Hungary for 1978 - 1980.

Source: Responses to OECD questionnaire "Core set of indicators for ischaemic heart disease" and ARD country reports (Australia, Canada, Finland and Norway). Remaining countries - WHO *Cause of Death Statistics*.

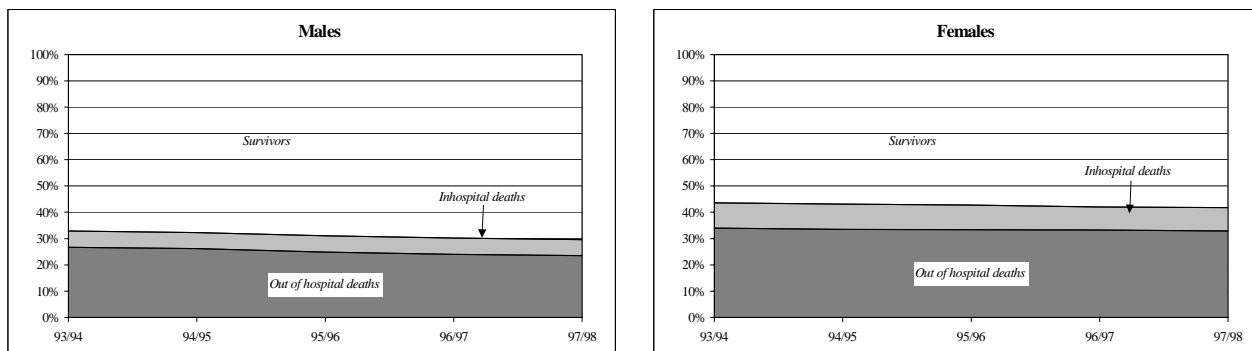
Chart 16. Age-standardised mortality rates for Ischaemic Heart Disease, Females, 1970 - 1996
 Number of persons with IHD per 100,000 inhabitants



Note: Age-standardized to the European population. Calculations based on 5-year age groups. Prior to 1990 data for Germany were only available for West Germany. The sudden increase in the mortality rates from 1989 to 1990 are due to the inclusion of East Germany beginning in 1990. A linear trend was used to estimate data for Hungary for 1978 - 1980.

Source: Responses to OECD questionnaire “Core set of indicators for ischaemic heart disease” and ARD country reports (Australia, Canada, Finland and Norway). Remaining countries - WHO *Cause of Death Statistics*.

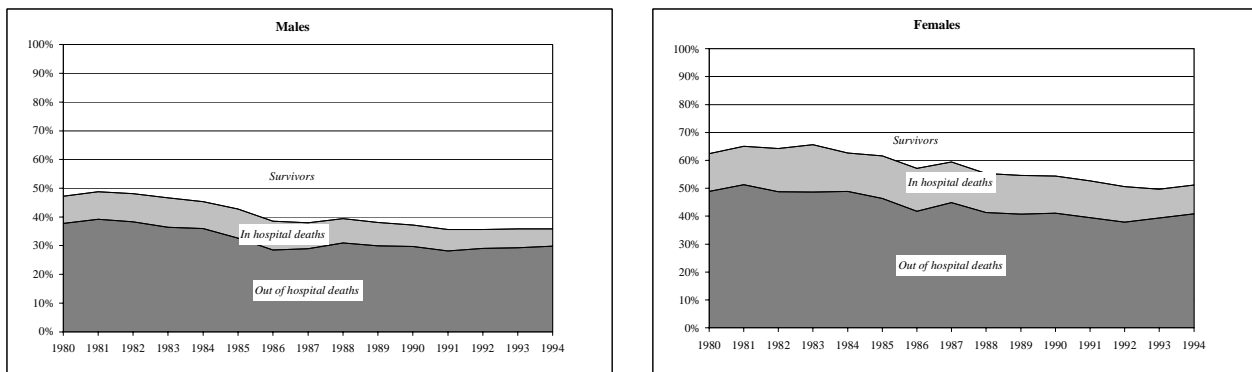
Chart 17. Contribution of deaths and non-fatal separations to total identified incidence, Australia



Note: These data represent the population aged 40 and over.

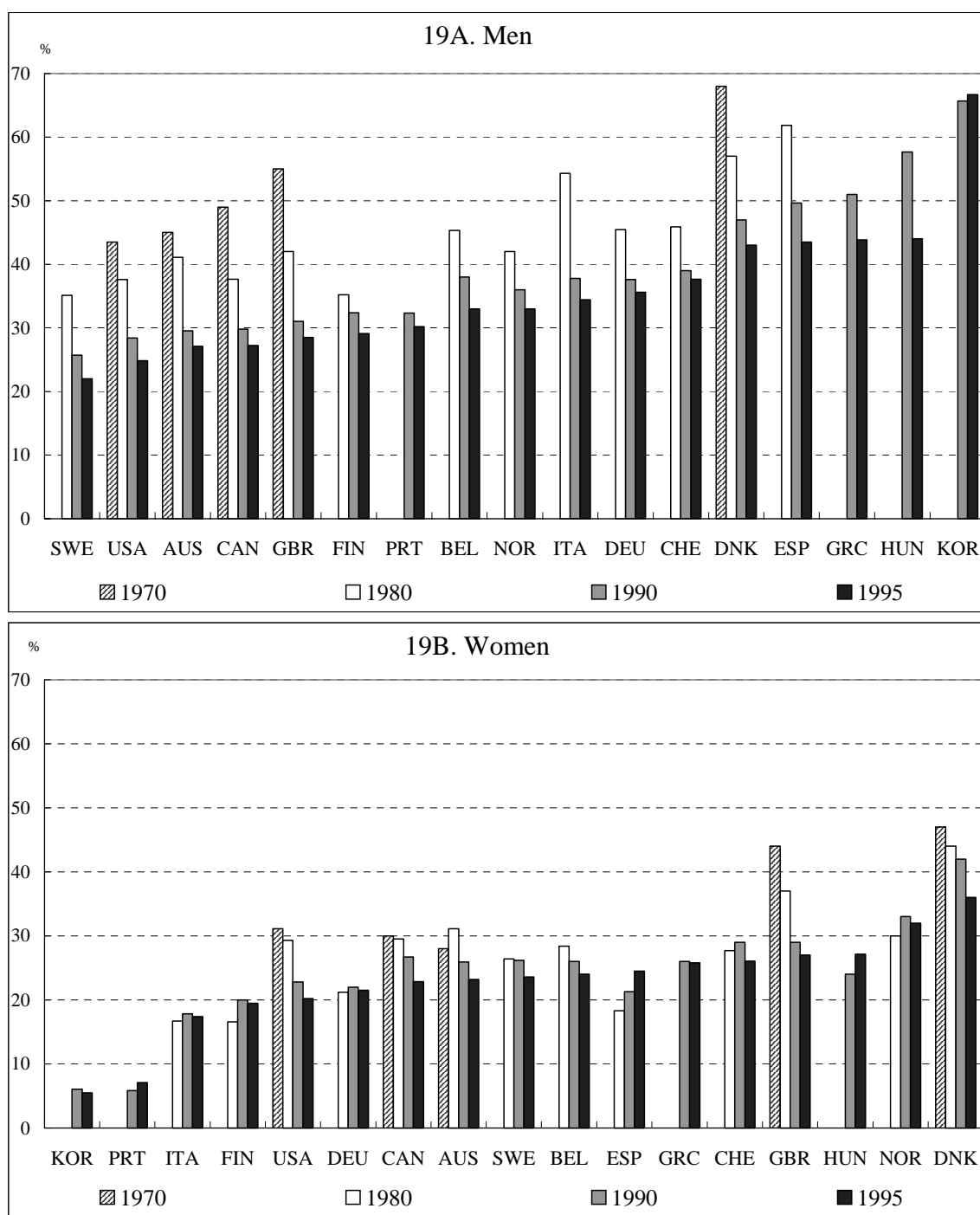
Source: AIHW National Hospital Morbidity Database. AIHW National Mortality Database.

Chart 18. Contribution of deaths and non-fatal separations to total identified incidence, Greece



Source: Vital Statistics, National Statistical Service of Greece. Social Welfare and Health Statistics, National Statistical Service of Greece.

Chart 19. Percentage of the population who are daily smokers



Note: Share of the (fe)male population aged 15 and above who are daily smokers.

Women: Australia (1969); Germany (1978); Belgium (1982); Switzerland (1981).

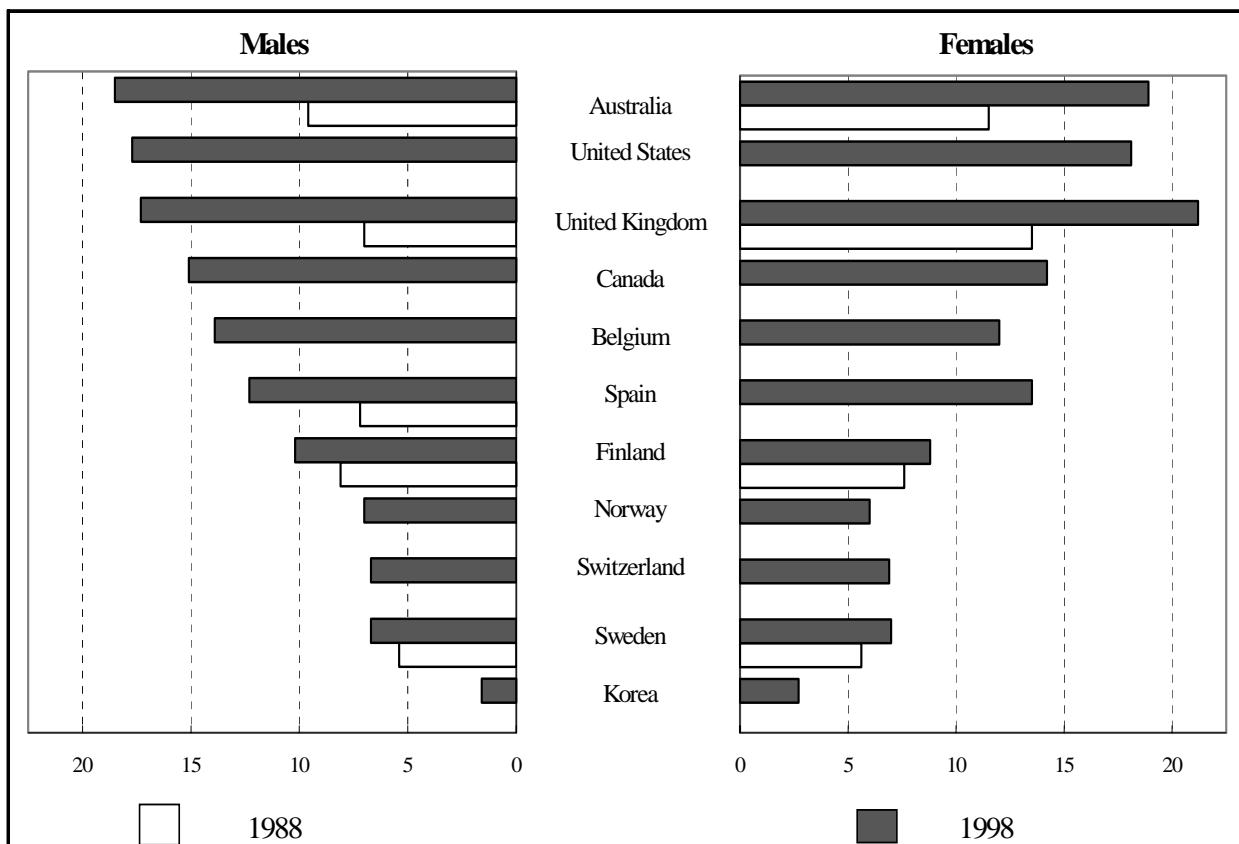
Secretariat's estimates given existing years: Canada, Spain (1980); Australia, Germany, Hungary, Korea, Portugal, Spain (1990); Canada, Greece, Hungary, Switzerland, United Kingdom, United States (1995).

Men: Australia (1969); Hungary (1994).

Secretariat's estimates given existing years: Belgium, Canada, Germany, Spain, Switzerland (1980); Australia, Germany, Hungary, Korea, Portugal, Spain (1990); Canada, Greece, Switzerland, United Kingdom, United States (1995).

Source: OECD Health Data (2000).

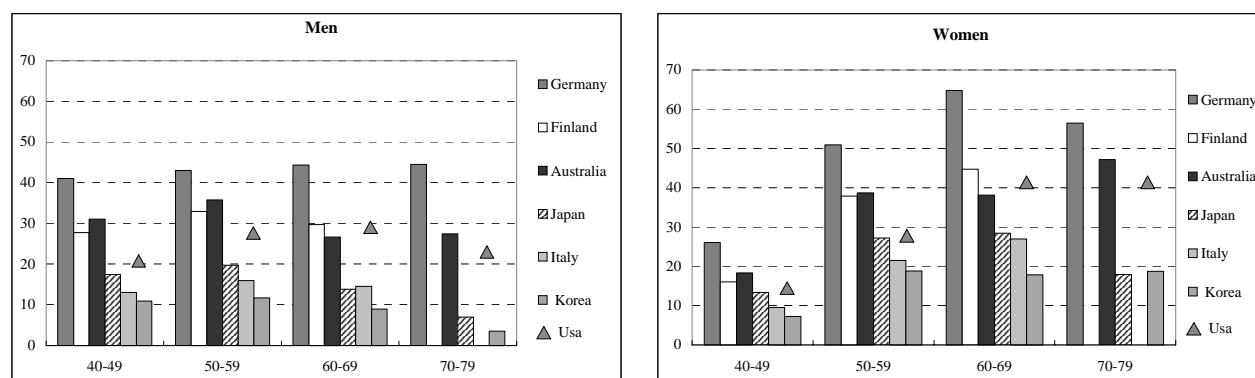
Chart 20. Percentage of the population with a Body Mass Index > 30 kg/m²



Note: These data represent the population aged 15 and over, except in Norway and the UK where the data represent the population aged 16 and over. Data in Australia on respondents' height and weight were measured by trained professionals. For all other countries height and weight were self-reported.
 Data for the following countries were not available for 1988 - Australia (1989), Spain (1987), Sweden (1989) and United Kingdom (1986).
 Data for the following countries were not available for 1998 - Australia (1995), Belgium, Spain, Sweden and Switzerland (1997).
 Data for the UK in 1986 do not include Northern Ireland and are for England only in 1998.

Source: OECD Health Data 2000 and Journal of American Medical Association, Oct. 2000- Vol. 284 no. 13.

Chart 21. Percentage of the population with high cholesterol level, by age and gender, 1998



Note: Data were available for Norway, but only for persons aged 40-42 years. The data were collected in a screening program from 11 (out of 19) counties. The threshold for high blood cholesterol is the same as Australia (see below). The levels recorded were as follows: Men 30.2%, Women 16.3%. Some countries reported levels using Standard International units (mmol/L) and some countries reported levels using mg/dl.

Australia: high blood cholesterol is defined by serum rate with cholesterol over 6.2mmol/L; data are for 1999.

Finland: Serum rate with cholesterol over 6.2mmol/L; data are for 1997. The last age group is 60-64.

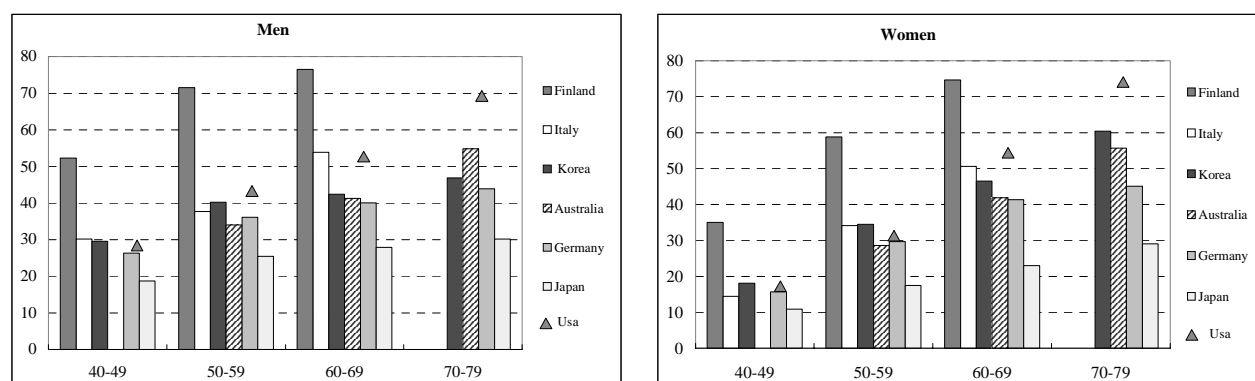
Germany: data refer to the population with a cholesterol level > 250 mg/dl.

Japan: the oldest age group corresponds to the population aged 70 and over. Refers to population with cholesterol level > 240mg/dL

US: the corresponding age groups are: 35-44, 45-54, 55-64, 65-74 and the studied period is 1988-94. Refers to population with cholesterol level > 240mg/dL

Source: AIHW analysis of the 1990-00 Australian Diabetes, Obesity and Lifestyle Study (Australia); Bundesministerium für Gesundheit, 1999 (Germany); ARD country report (Italy and Korea); ARD country report for stroke (Japan); Finrisk'97 population survey (Finland); National Center for Health Statistics, *Health United States (2000)*; National Health Screening Service, Oslo (Norway).

Chart 22. Percentage of the population with hypertension, by age and gender (1998)



Note: Hypertension is defined as systolic blood pressure ≥ 140 mmHg and diastolic blood pressure of < 90 mmHg. Data were available for Norway, but only for persons aged 40-42 years. The data were collected in a screening program from 11 (out of 19) counties. High blood pressure defined as systolic blood pressure ≥ 160 mmHg or diastolic pressure > 95 mmHg. The levels recorded were as follows: Men 4.6%, Women 2.1%.

Australia: missing observations were deleted from the analysis; data are for 1995.

Finland: people having high blood pressure or on medication; data are for 1997. The last age group is 60-64.

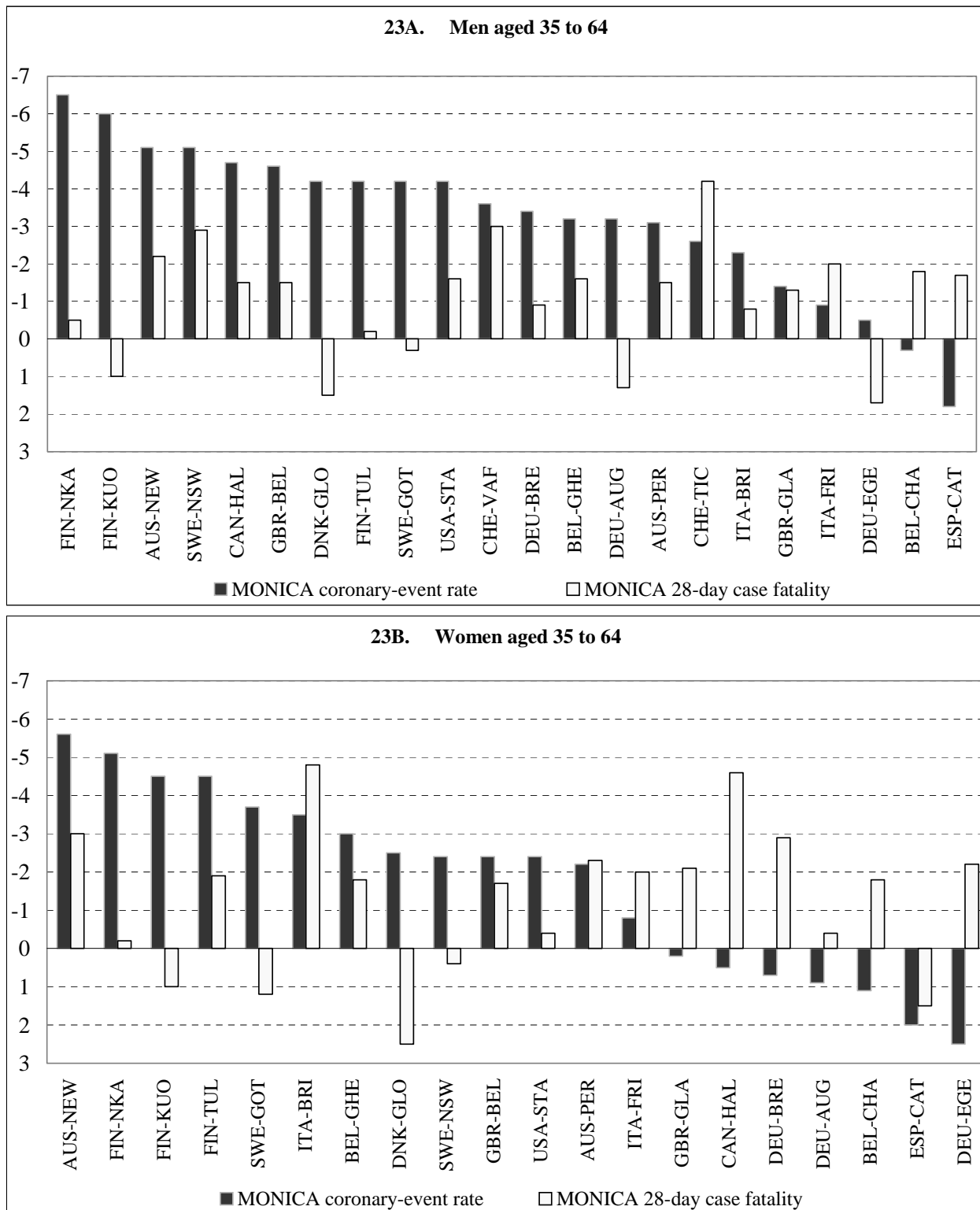
Germany: hypertension defined as systolic blood pressure of > 149 mmHg and / or diastolic pressure of > 94 mmHg.

Japan: the last age group corresponds to people aged 70 and over.

US: the corresponding age groups are: 35-44, 45-54, 55-64, 65-74 and the studied period is 1988-94.

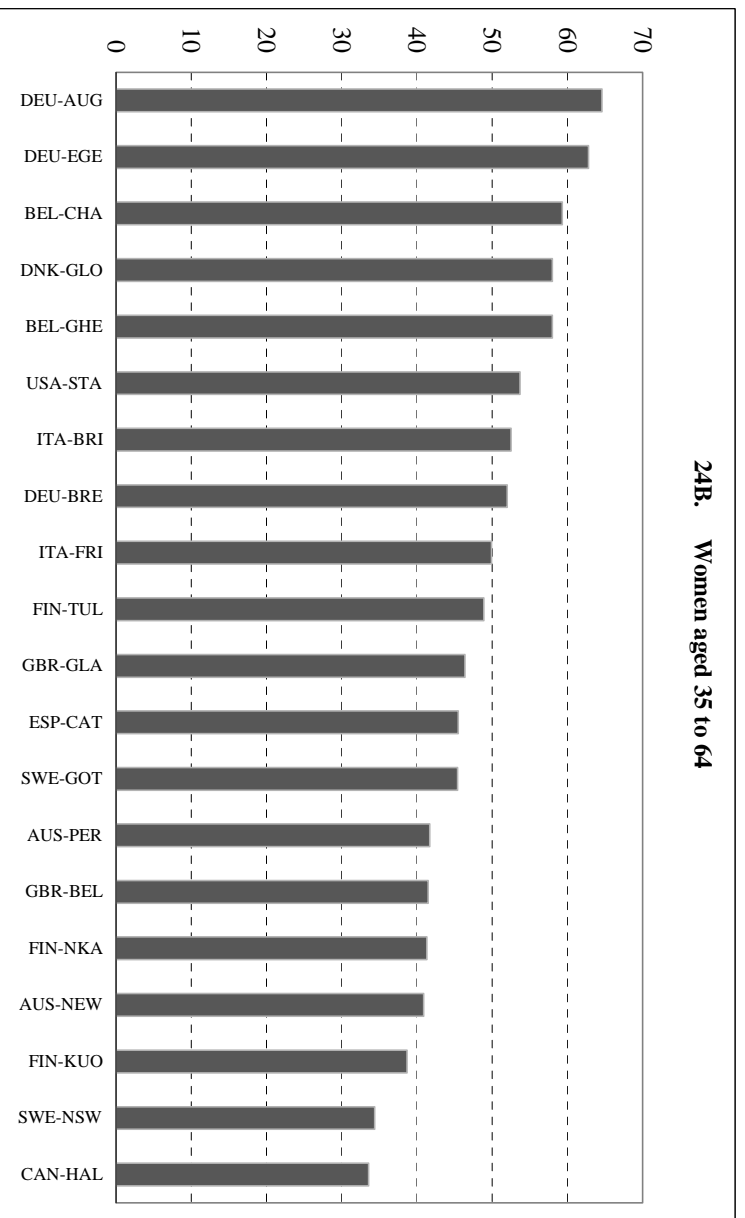
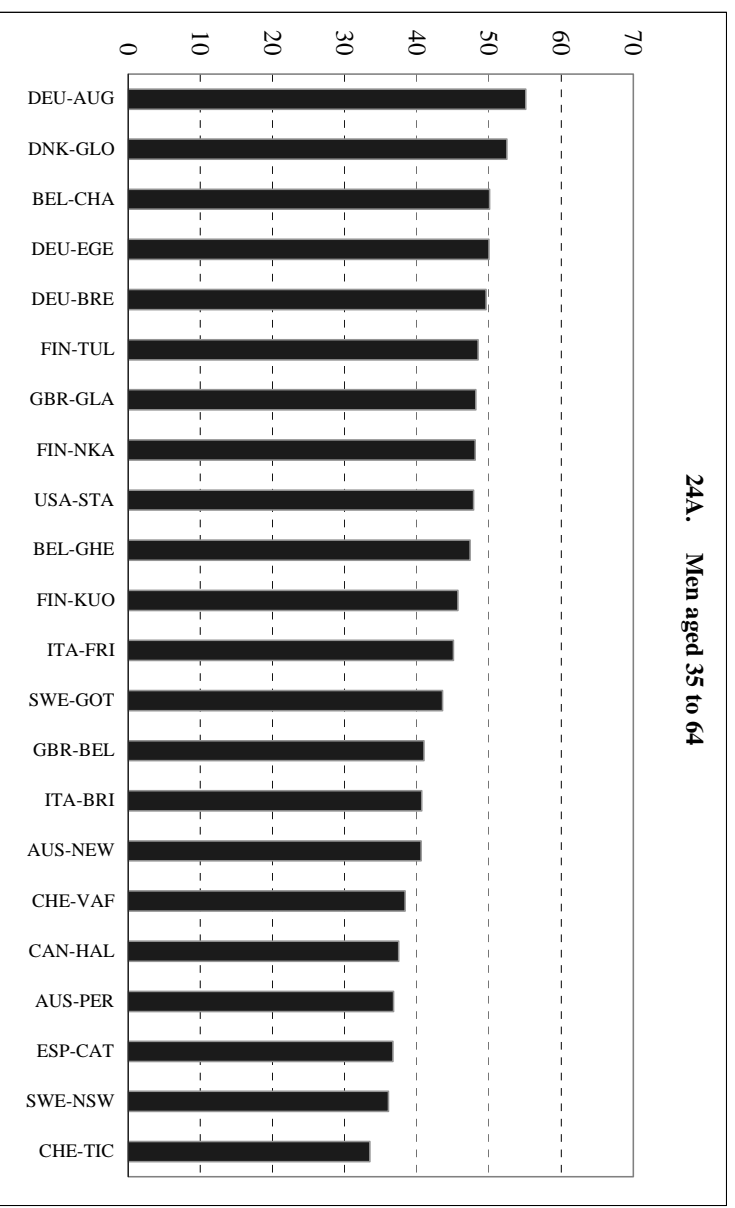
Sources: AIHW analysis of the ABS/DHAC 1995 National Nutrition Survey (Australia); Bundesministerium für Gesundheit, 1999 (Germany); ARD country report (Italy and Korea); ARD country report for stroke (Japan); Finrisk'97 population survey (Finland); National Center for Health Statistics, *Health United States (2000)*; National Health Screening Service, Oslo (Norway).

Chart 23. Trends in event rates and case fatalities, by gender (MONICA)



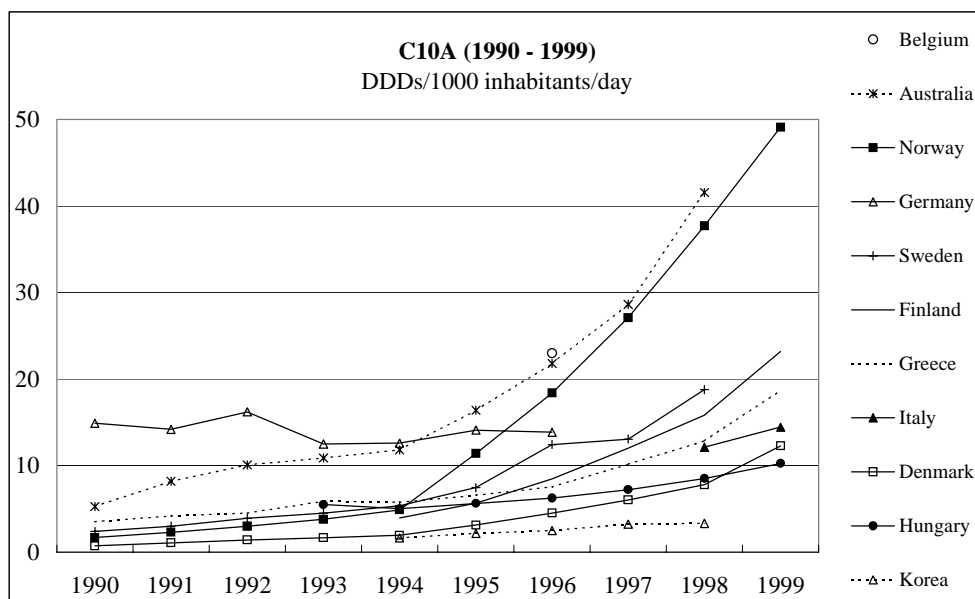
Source: Tunstall Pedoe (1999).

Chart 24. 28-day case fatality, by gender (MONICA)



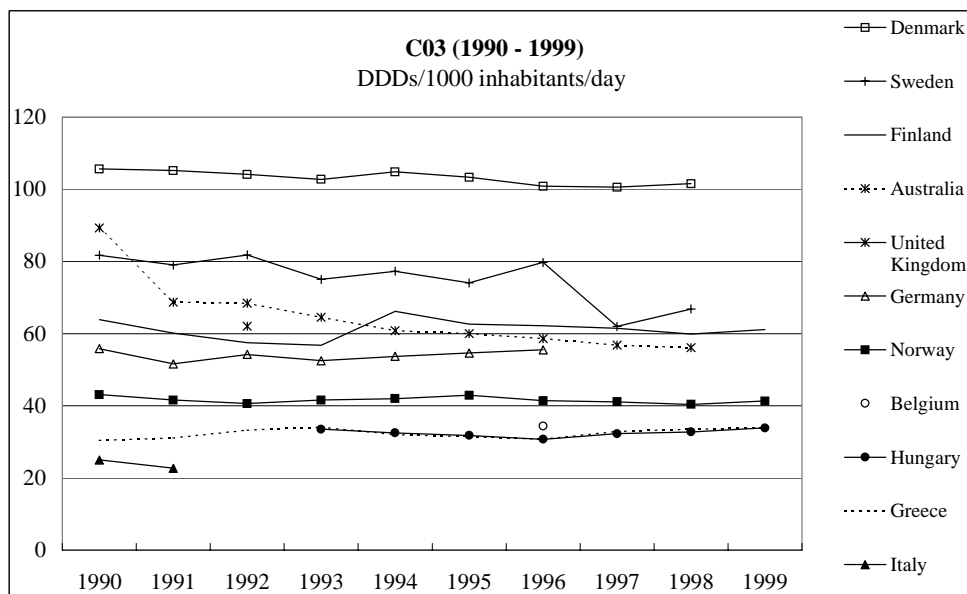
Source: Tunstall Pedoe (1999).

Chart 25a. Consumption of cholesterol and triglyceride reducers (ATC C10A)



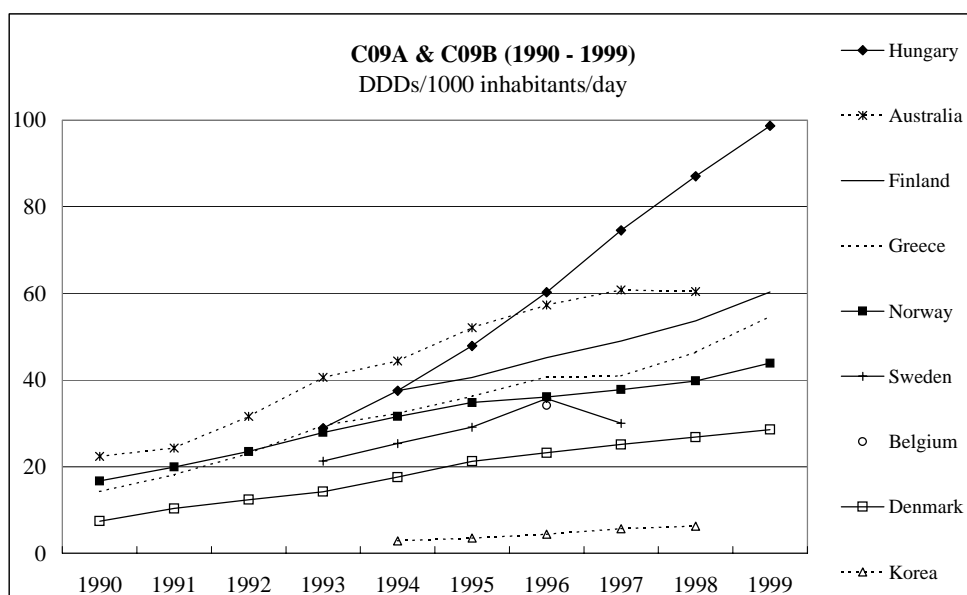
Source: Responses to OECD questionnaire “Core set of indicators for ischaemic heart disease” and ARD country reports; Responses to OECD questionnaire “Core set of indicators for stroke” and ARD country report (Hungary); Farmetrika S.A. (Greece); NMD (Norway); OECD Health Data Base 2000 (Germany).

Chart 25b. Consumption of diuretics (ATC C03)



Source: Responses to OECD questionnaire “Core set of indicators for ischaemic heart disease” and ARD country reports; Responses to OECD questionnaire “Core set of indicators for stroke” and ARD country report (Hungary); Farmetrika S.A. (Greece); NMD (Norway); OECD Health Data Base 2000 (Germany).

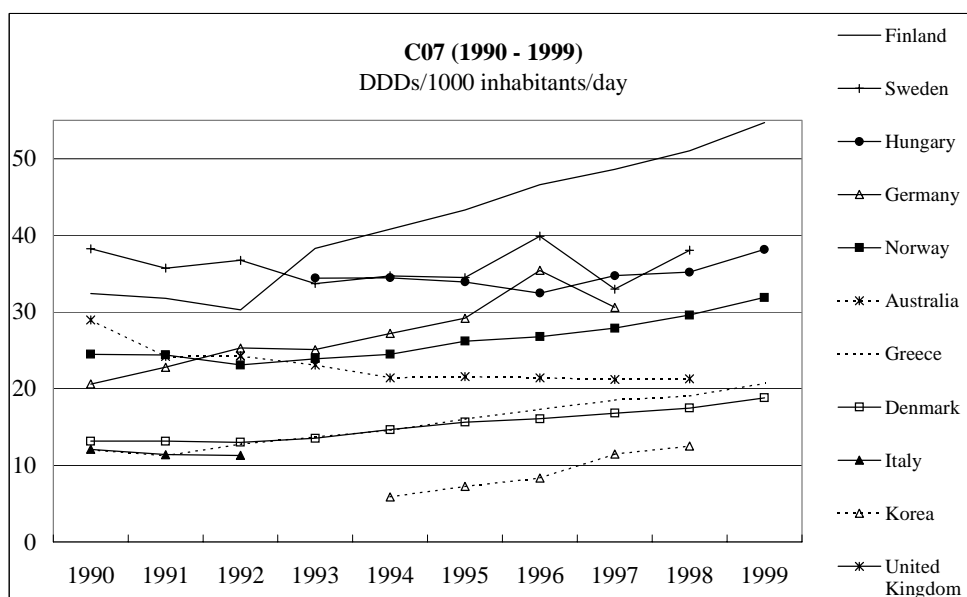
Chart 25c. Consumption of ACE inhibitors (ATC C09)



Note: Data for Italy were disaggregated into C09A and C09B. Hungary data were not available for C09B.

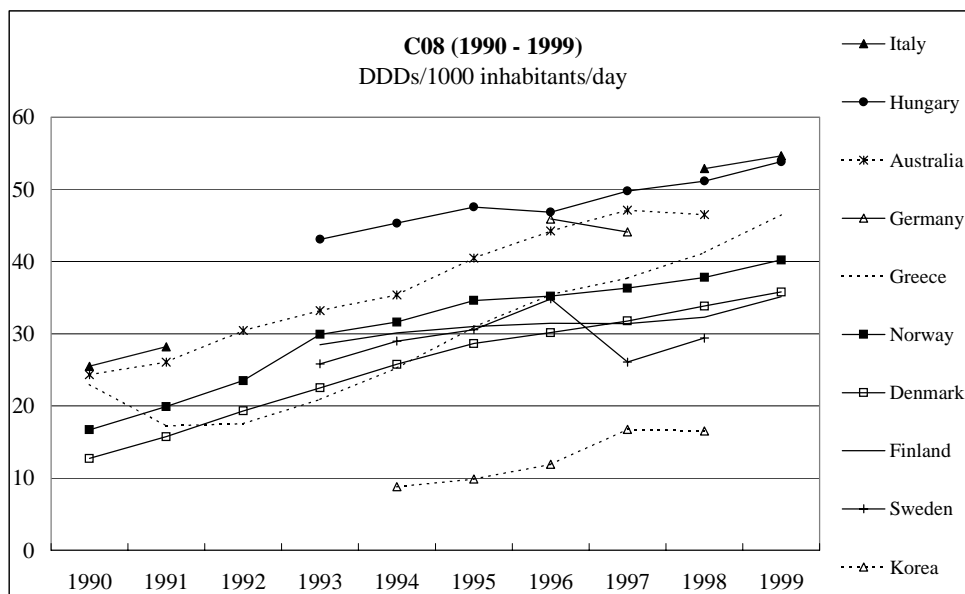
Source: Responses to OECD questionnaire “Core set of indicators for ischaemic heart disease” and ARD country reports; Responses to OECD questionnaire “Core set of indicators for stroke” and ARD country report (Hungary); Farmetrika S.A. (Greece); NMD (Norway).

Chart 25d. Consumption of beta blocking agents (ATC C07)



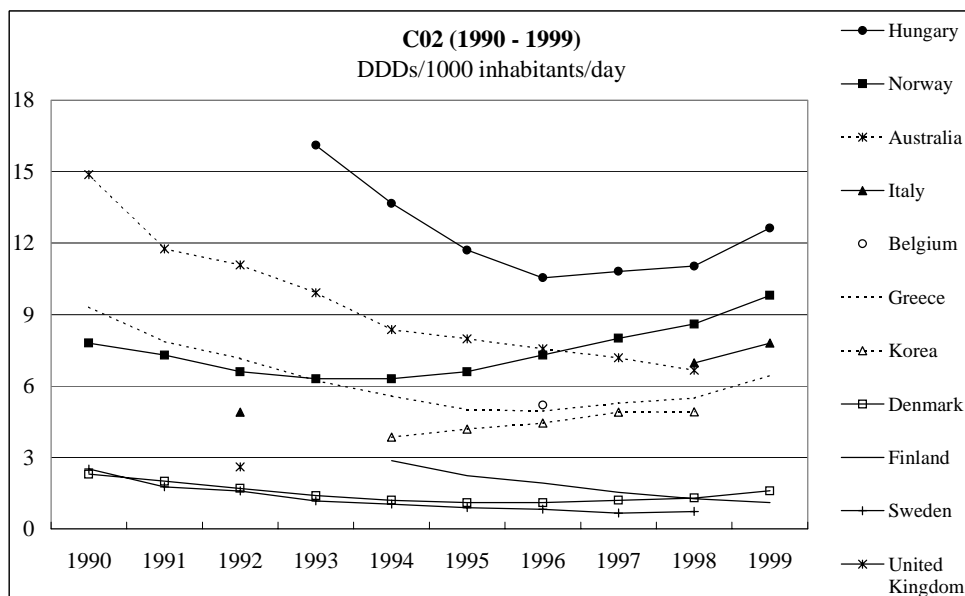
Source: Responses to OECD questionnaire “Core set of indicators for ischaemic heart disease” and ARD country reports; Responses to OECD questionnaire “Core set of indicators for stroke” and ARD country report (Hungary); Farmetrika S.A. (Greece); NMD (Norway); OECD Health Data Base 2000 (Germany).

Chart 25e. Consumption of calcium channel blockers (ATC C08)



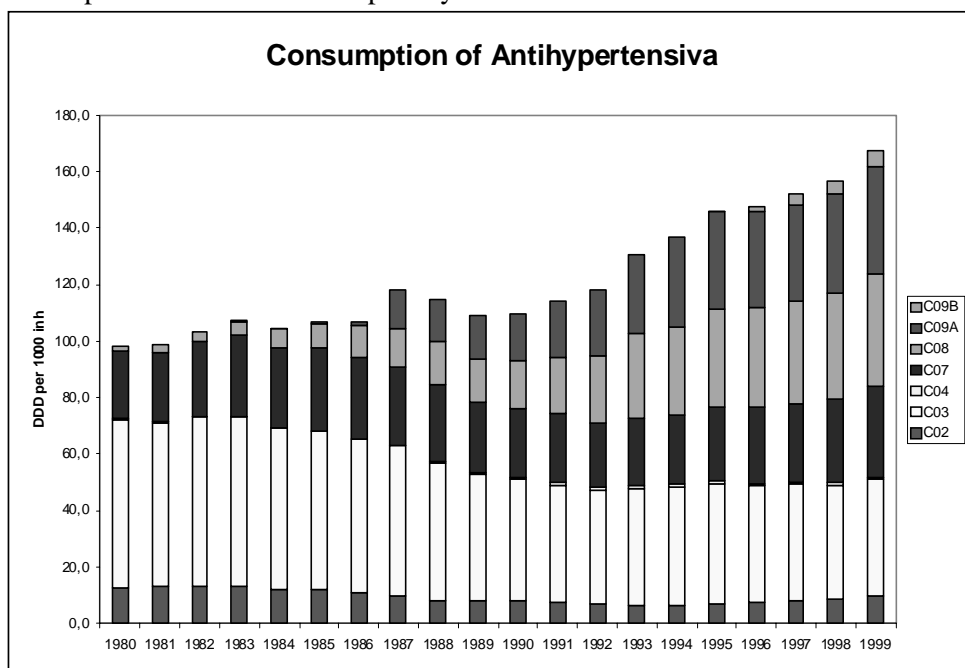
Source: Responses to OECD questionnaire “Core set of indicators for ischaemic heart disease” and ARD country reports; Responses to OECD questionnaire “Core set of indicators for stroke” and ARD country report (Hungary); Farmetrika S.A. (Greece); NMD (Norway); OECD Health Data Base 2000 (Germany).

Chart 25f. Consumption of antihypertensives (ATC C02)



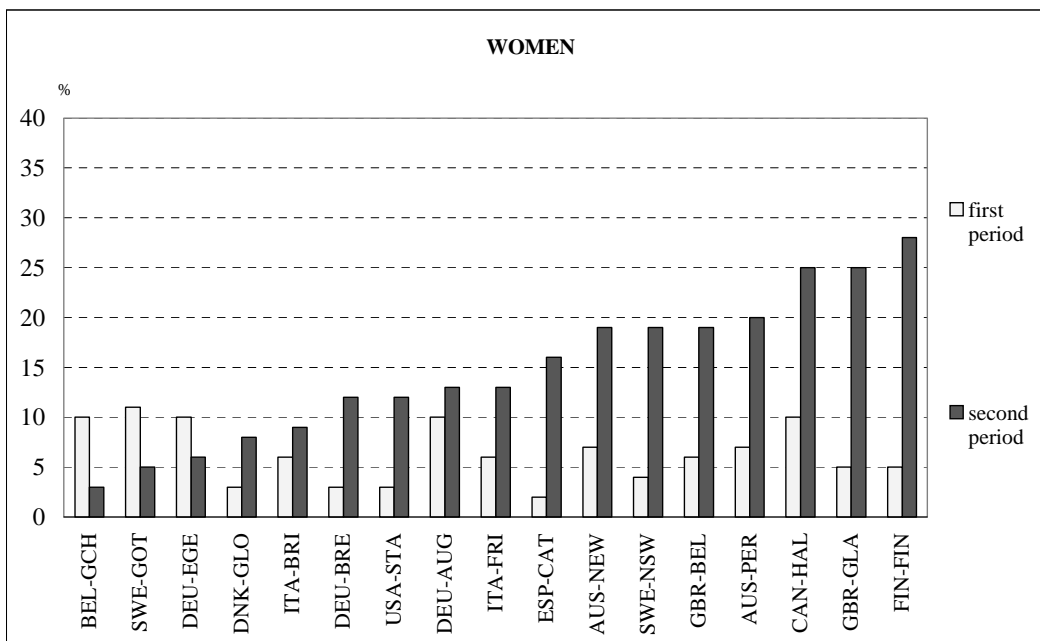
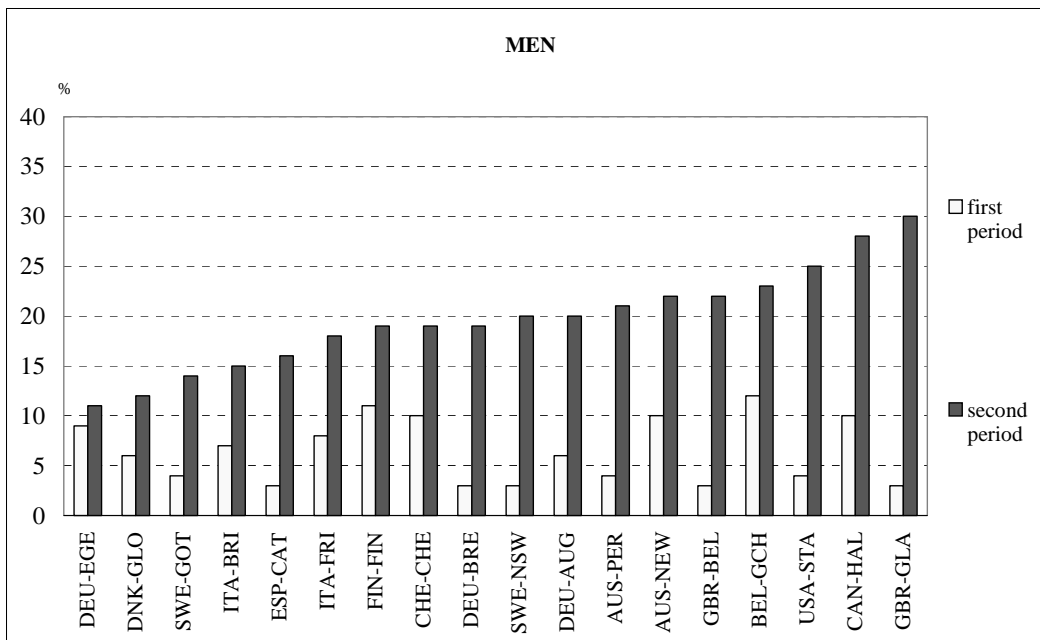
Source: Responses to OECD questionnaire “Core set of indicators for ischaemic heart disease” and ARD country reports; Responses to OECD questionnaire “Core set of indicators for stroke” and ARD country report (Hungary); Farmetrika S.A. (Greece); NMD (Norway).

Chart 26. Consumption of drugs used to treat hypertension in Norway
 DDDs per 100 000 inhabitants per day.



Source: Responses to OECD questionnaire “Core set of indicators for stroke” and ARD country report.

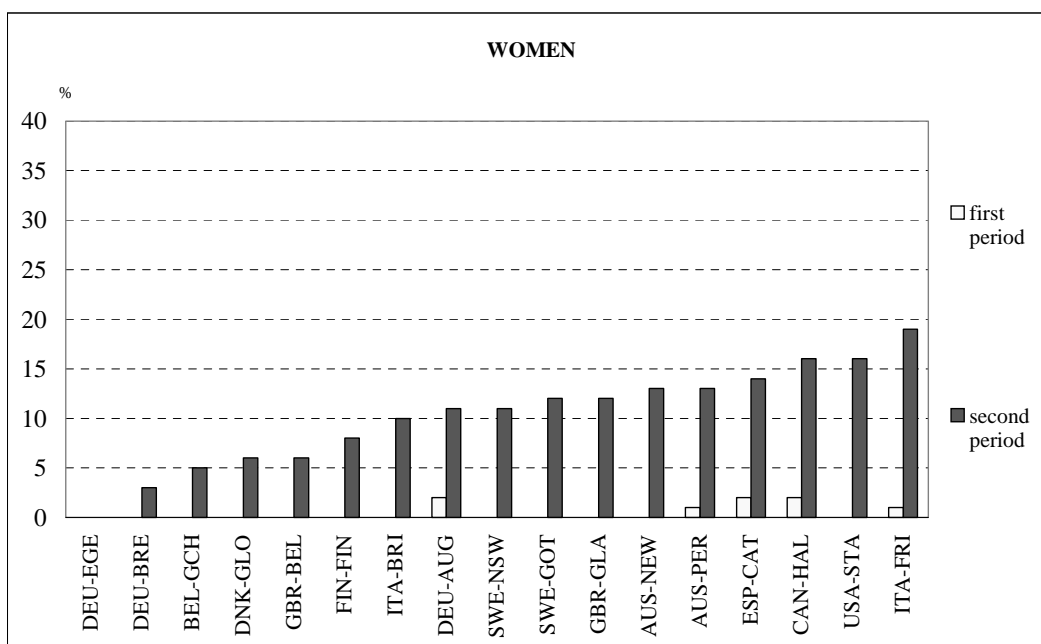
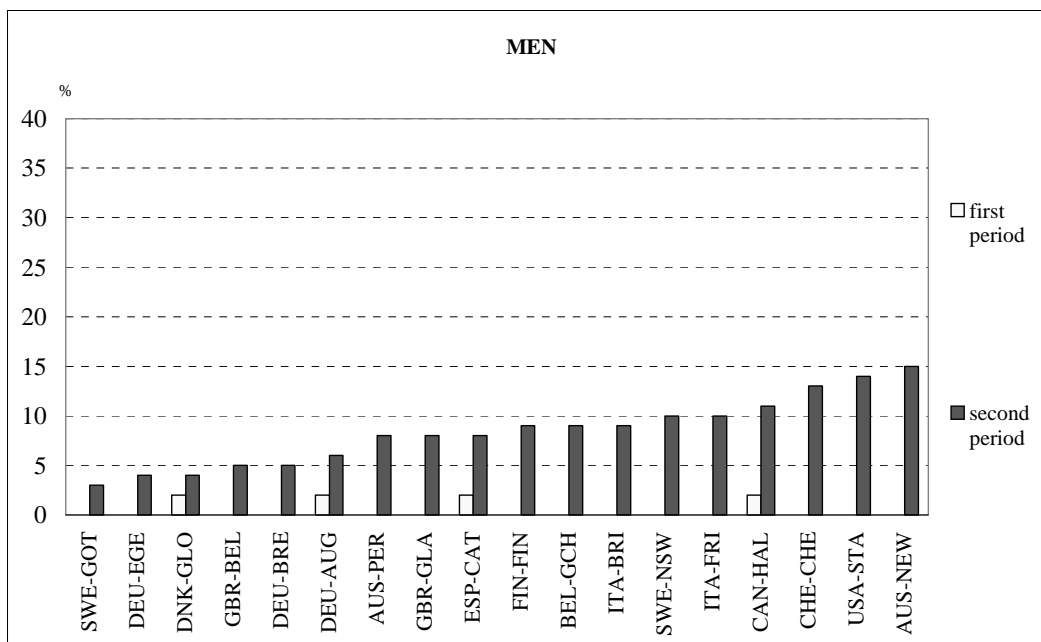
Chart 27a. Treatment prior to onset of coronary-event - antiplatelets (MONICA)
Proportion receiving antiplatelets



Note: The intervals of data registration during the first and second periods were not uniform across the MONICA centres. See Table 18 for a description of the registration periods.

Source: Tunstall-Pedoe (2000).

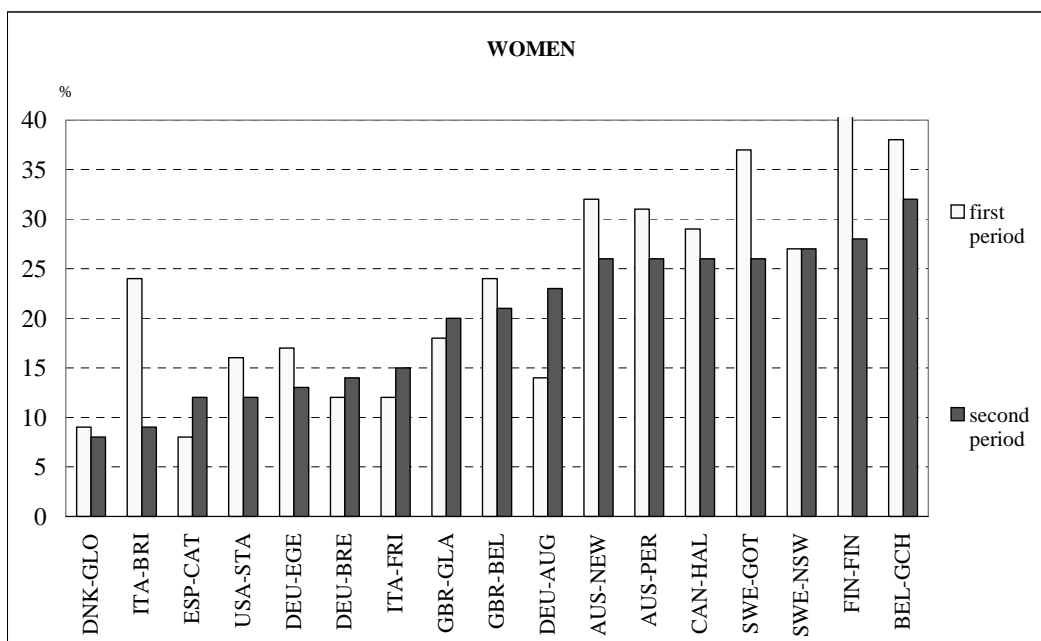
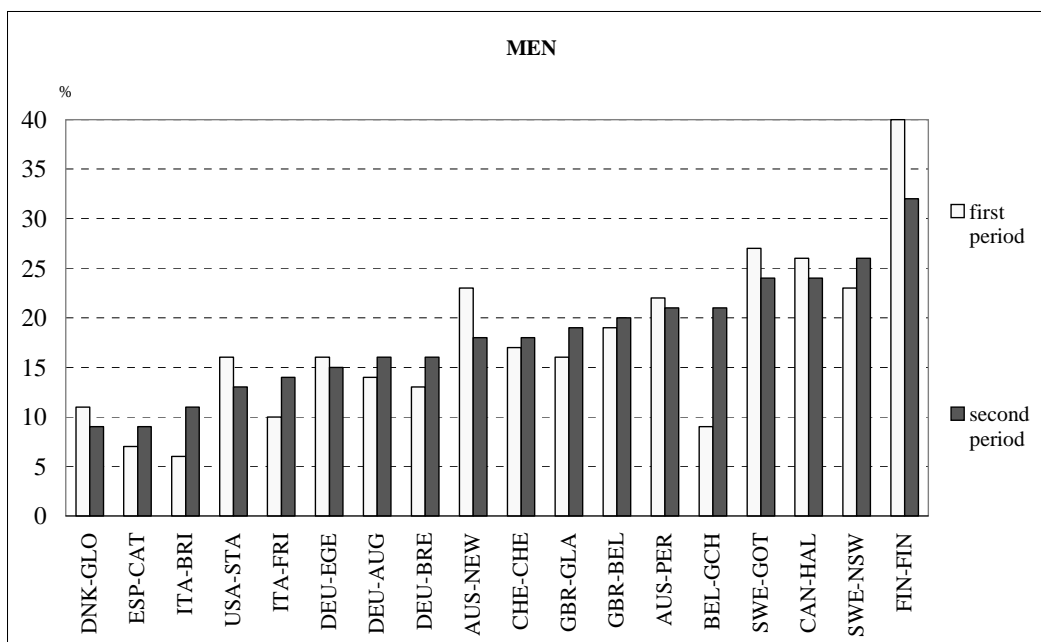
Chart 27b. Treatment prior to onset of coronary-event - ACE inhibitors(MONICA)
Proportion receiving ACE inhibitors



Note: The intervals of data registration during the first and second periods were not uniform across the MONICA centres. See Table 18 for a description of the registration periods.

Source: Tunstall-Pedoe (2000).

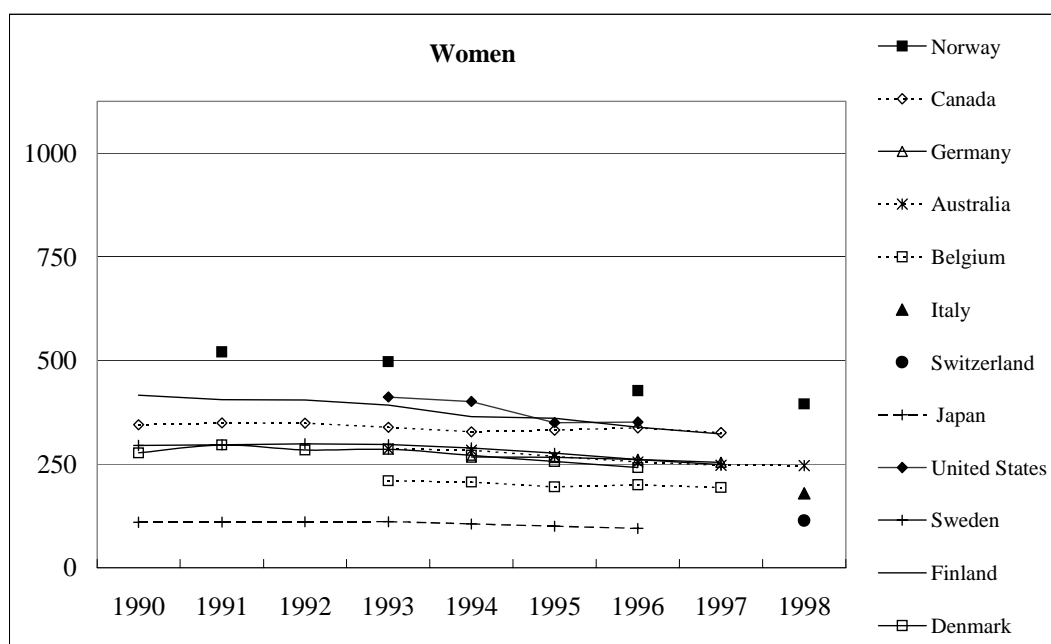
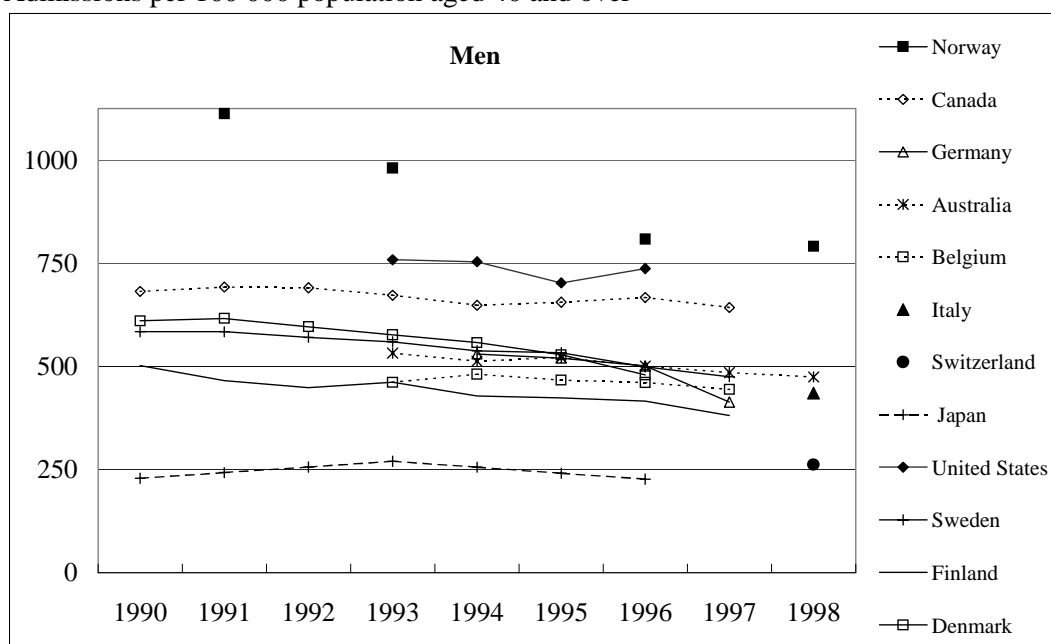
Chart 27c. Treatment prior to onset of coronary-event - betablockers (MONICA)
Proportion receiving betablockers



Note: The intervals of data registration during the first and second periods were not uniform across the MONICA centres. See Table 18 for a description of the registration periods.

Source: Tunstall-Pedoe (2000).

Chart 28a. Overall raw admission rates due for Acute Myocardial Infarction
Admissions per 100 000 population aged 40 and over

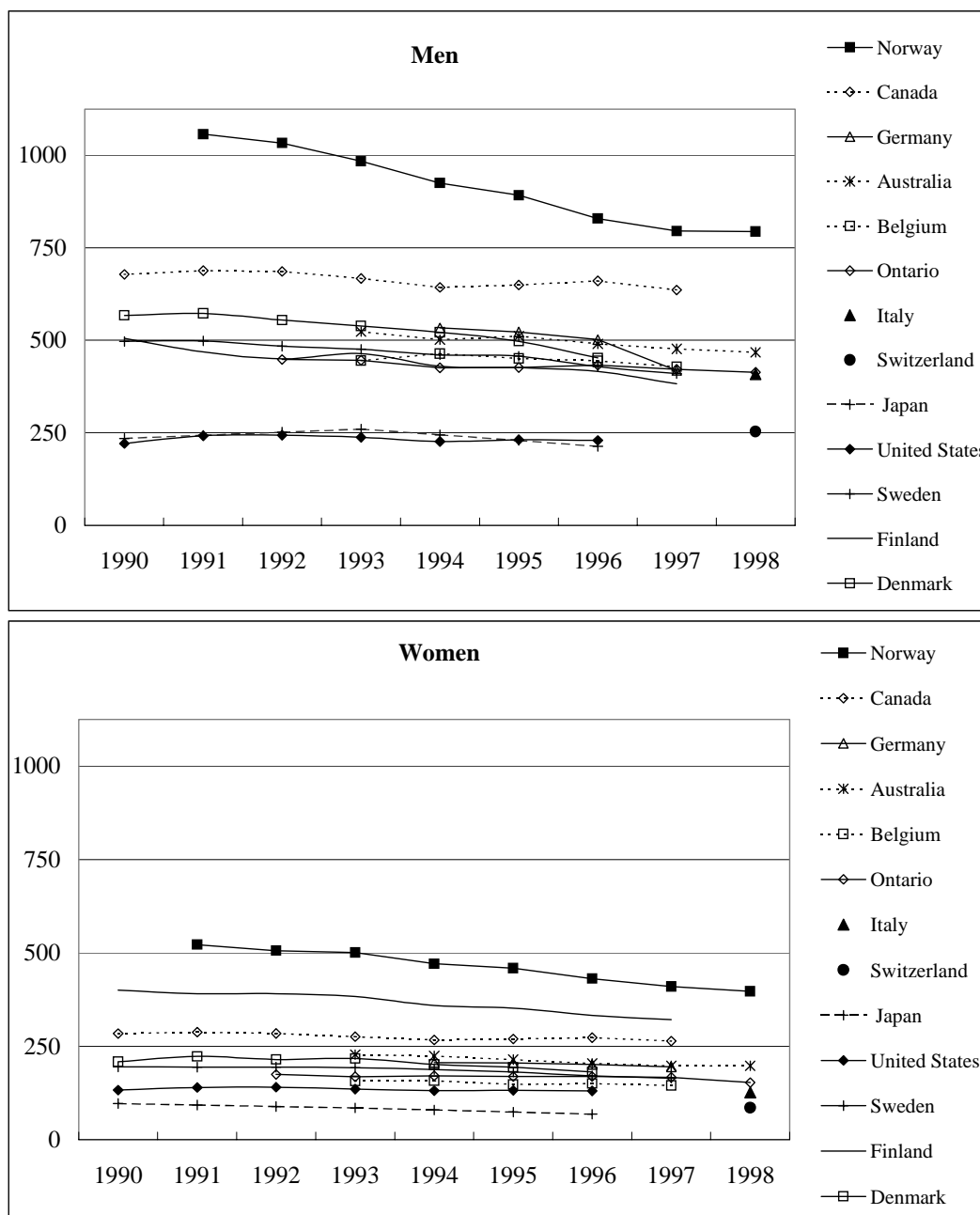


Note: These data have not been age-standardised. Population aged 45 and over for Germany, Japan and the United States.

Figures for Denmark, Finland and Sweden are based on patient-based data. Data for Australia are based on fiscal years 1993/94 to 1998/99.

Sources: Responses to OECD questionnaire “Core set of indicators for ischaemic heart disease” and ARD country reports (Australia, Belgium, Canada, Germany, Italy, Japan, Norway and Switzerland). Data for the US were derived from the National Hospital Discharge Survey (see Table 20 for details). The data for Denmark, Finland and Sweden were provided by the TECH Research Network.

Chart 28b. Overall age-standardised admission rates for Acute Myocardial Infarction
Admissions per 100 000 population aged 40 and over



Note: Population aged 45 and over for Germany, Japan and the United States. Figures for Denmark, Finland and Sweden are based on patient-based data. Age-standardised to the European population aged 40 and over.

Sources: Responses to OECD questionnaire "Core set of indicators for ischaemic heart disease" and ARD country reports (Australia, Belgium, Canada, Germany, Italy, Japan, Norway and Switzerland. Data for the US were derived from the National Hospital Discharge Survey (see Table 20 for details). The data for Denmark, Finland and Sweden were provided by the TECH Research Network.

Chart 29a. Admission rates for Acute Myocardial Infarction, by age and gender
 Admissions per 100 000 inhabitants (figures using event-based data)

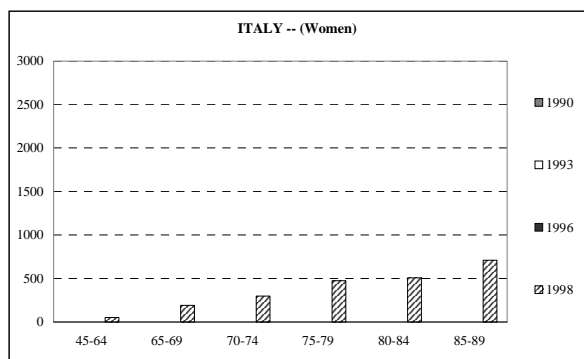
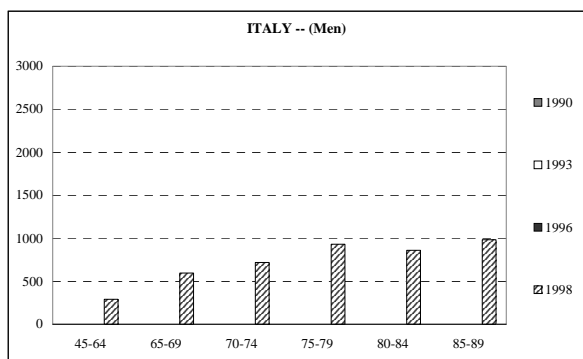
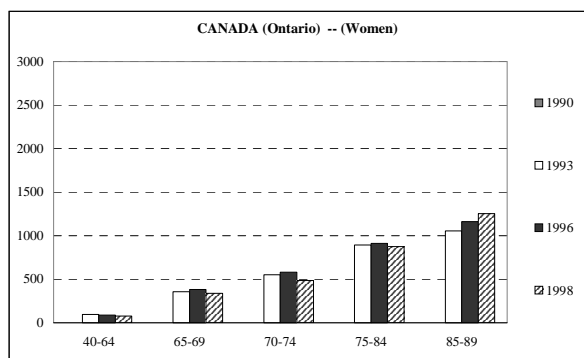
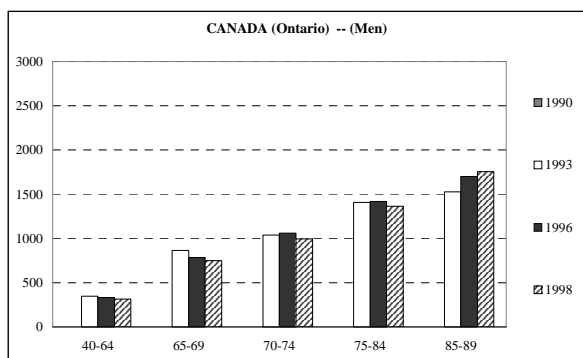
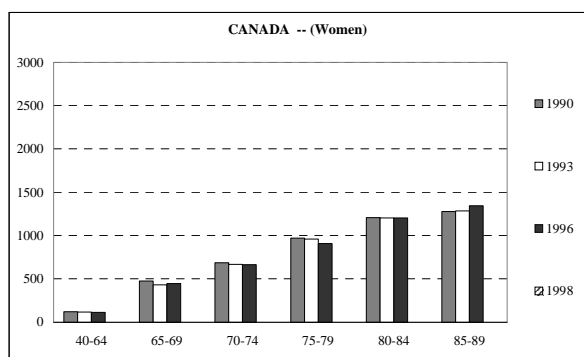
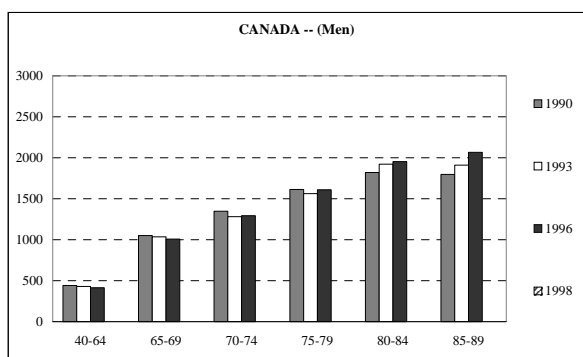
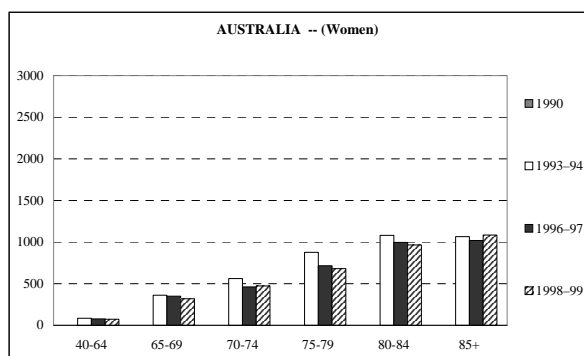
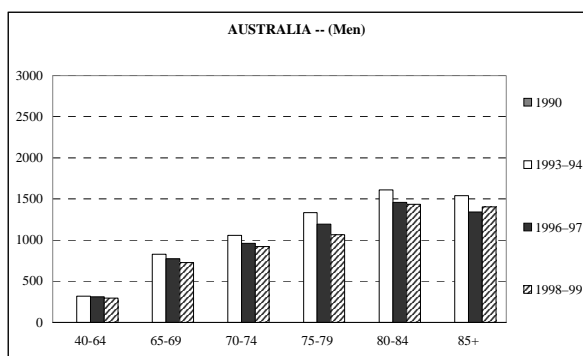
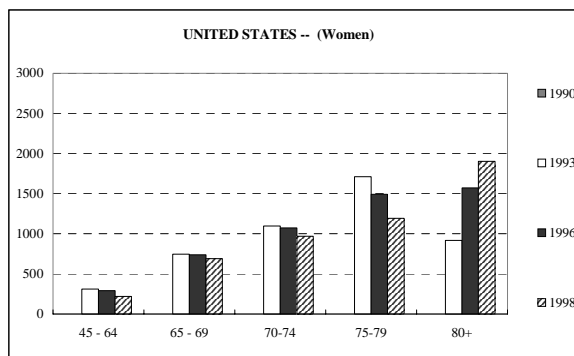
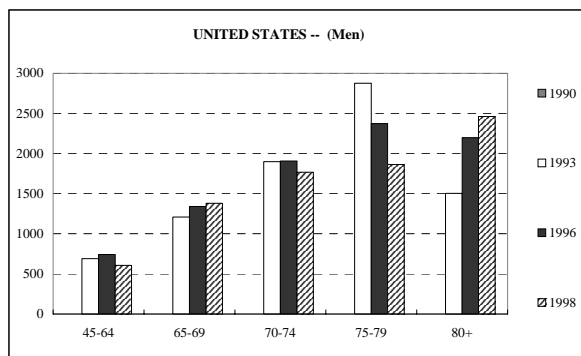
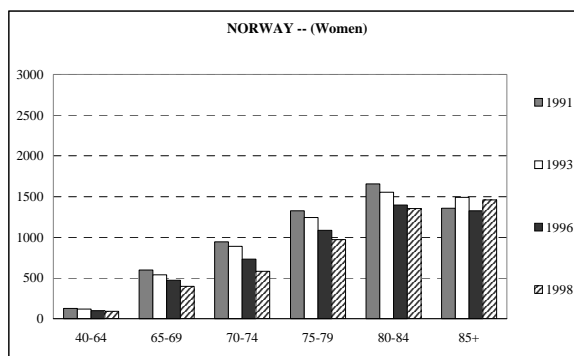
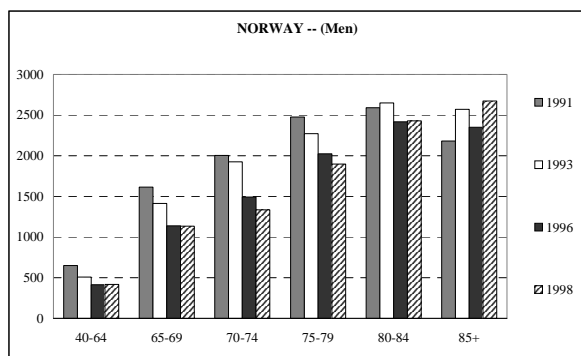
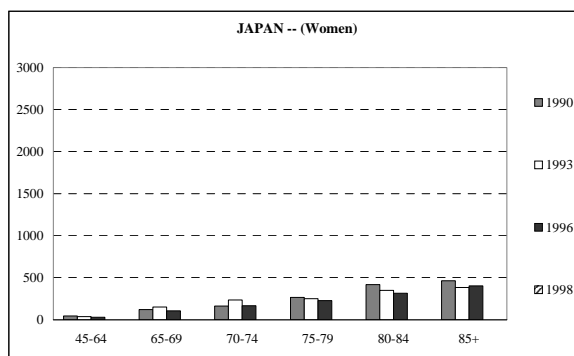
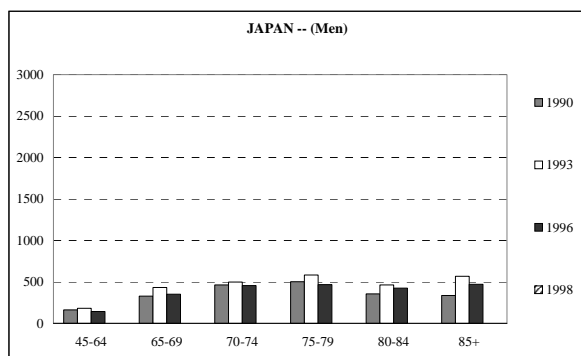


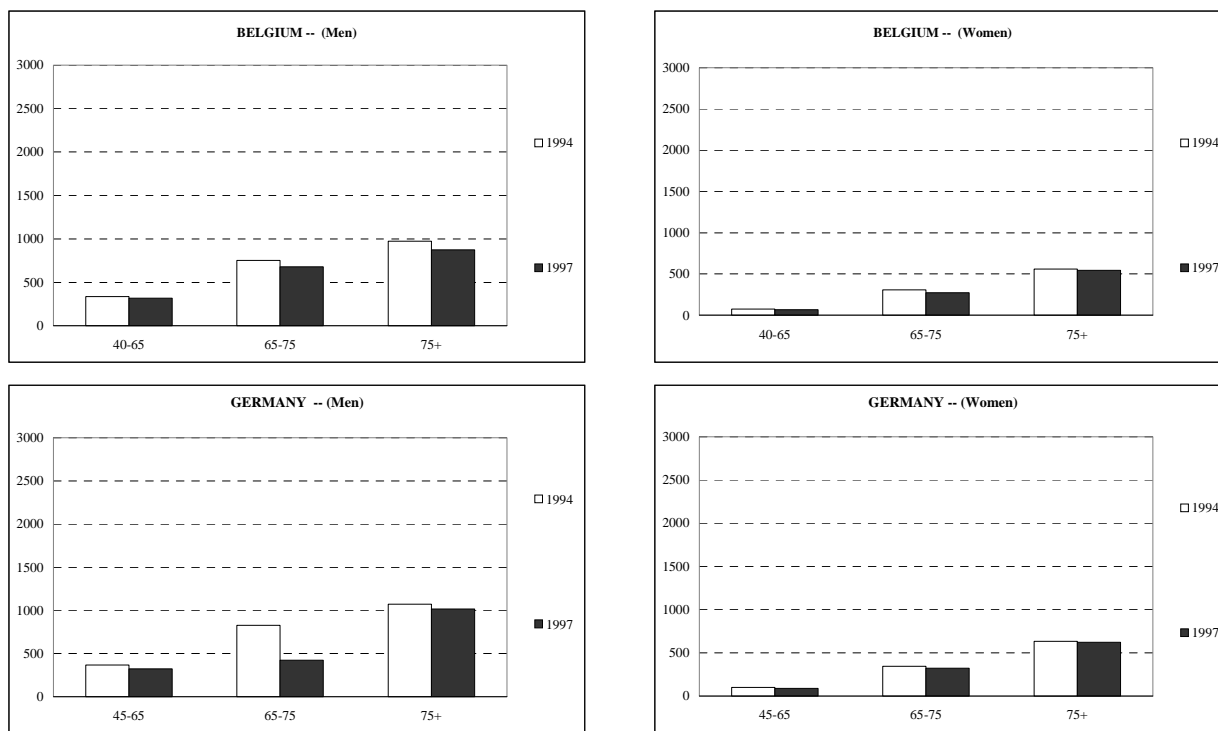
Chart 29a. (continued) Admission rates for Acute Myocardial Infarction, by age and gender
Admissions per 100 000 inhabitants (figures using event-based data)



Note: In some countries the representativeness of the data may be limited to some hospitals and/or certain geographical areas.

Source: Responses to OECD questionnaire “Core set of indicators for ischaemic heart disease” and ARD country reports (Australia, Canada, Canada (Ontario), Italy, Japan and Norway Data for the US were derived from the National Hospital Discharge Survey (see Table 20 for details).

Chart 29a. (continued) Admission rates for Acute Myocardial Infarction, by age and gender
 Admissions per 100 000 inhabitants (figures using event-based data)
 (3 broad age groups)



Sources: Responses to OECD questionnaire “Core set of indicators for ischaemic heart disease” and ARD country reports.

Chart 29b. Admission rates for Acute Myocardial Infarction, by age and gender (TECH)
 Admissions per 100 000 inhabitants (figures using patient-based data)

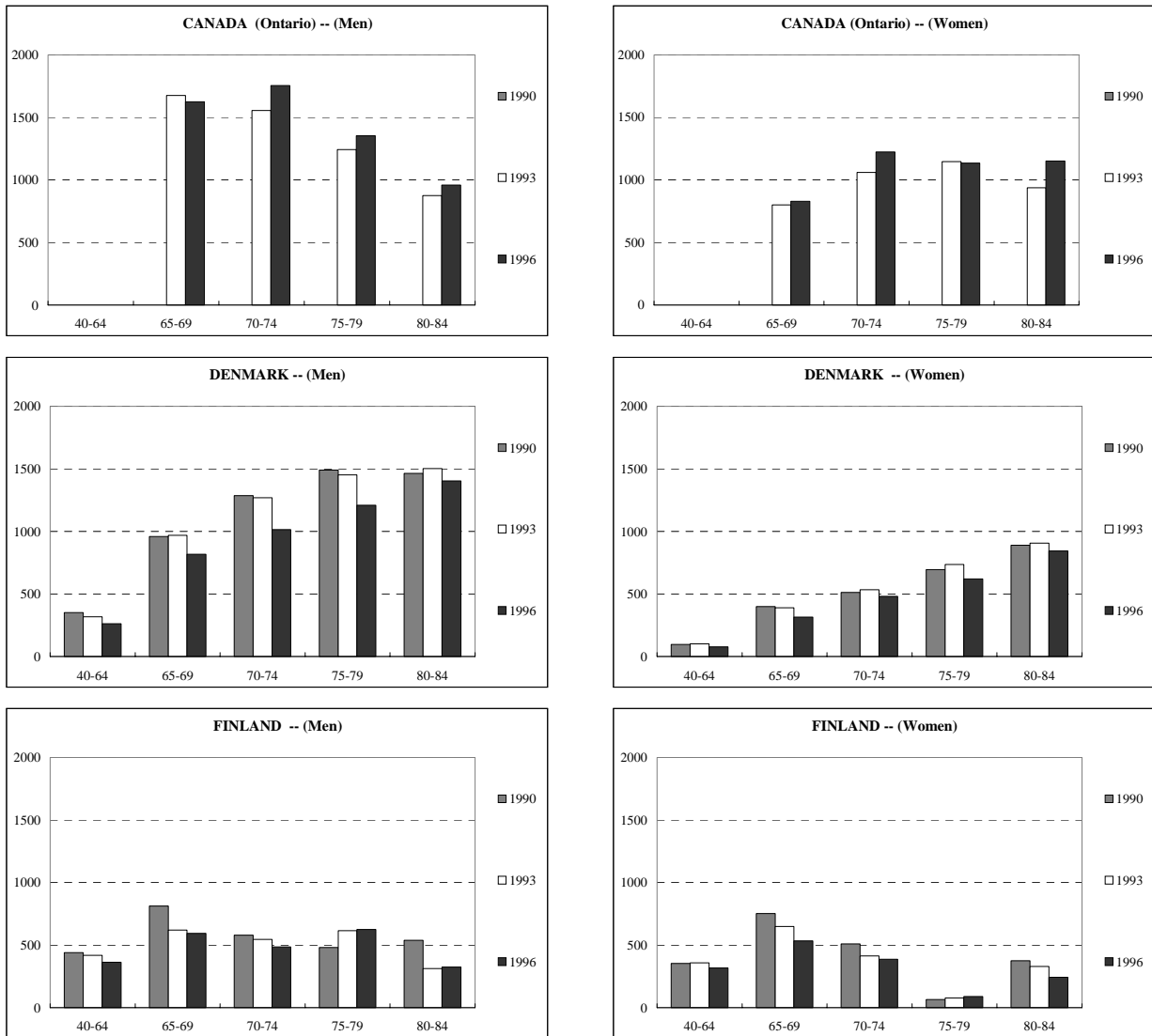
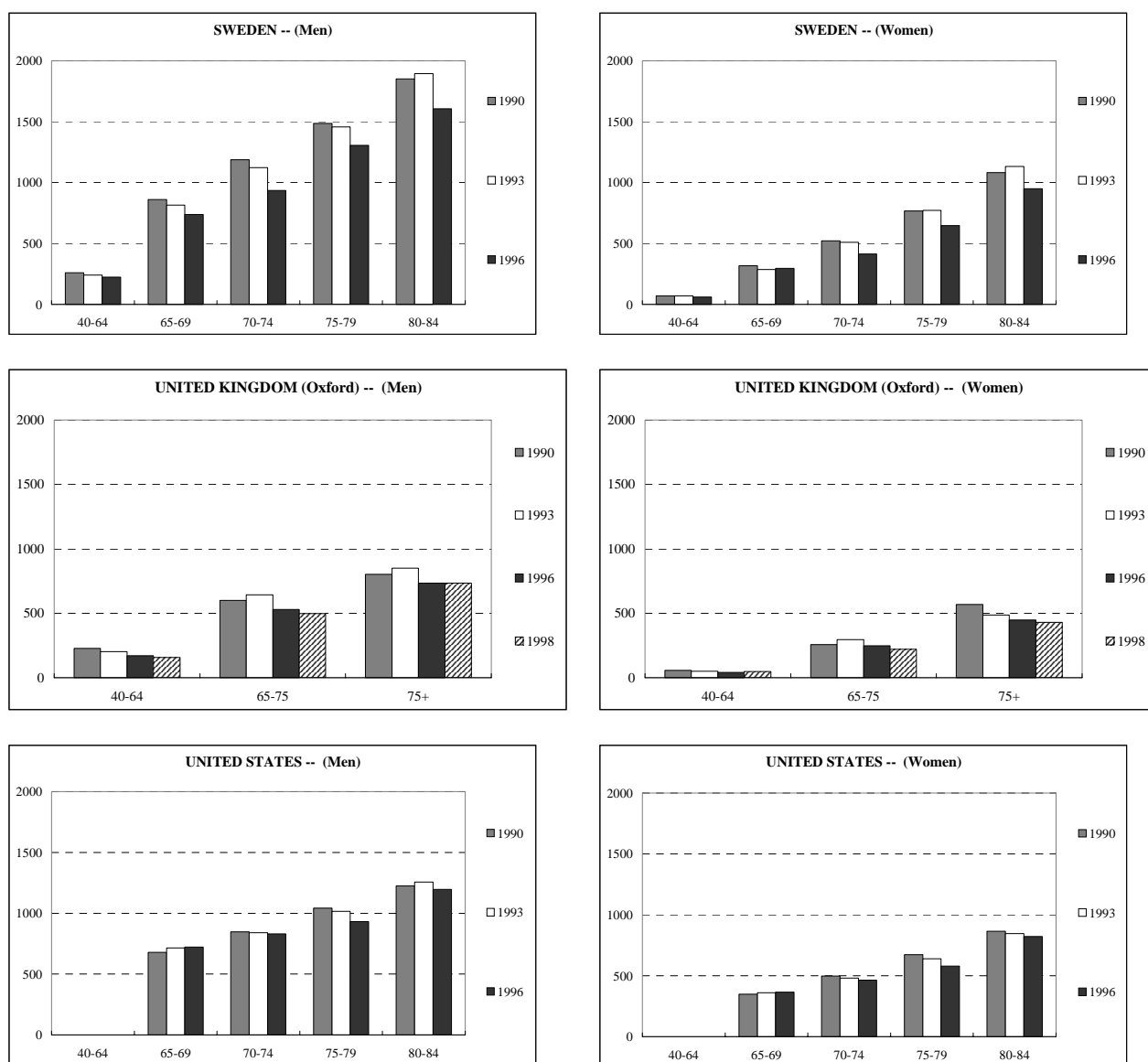


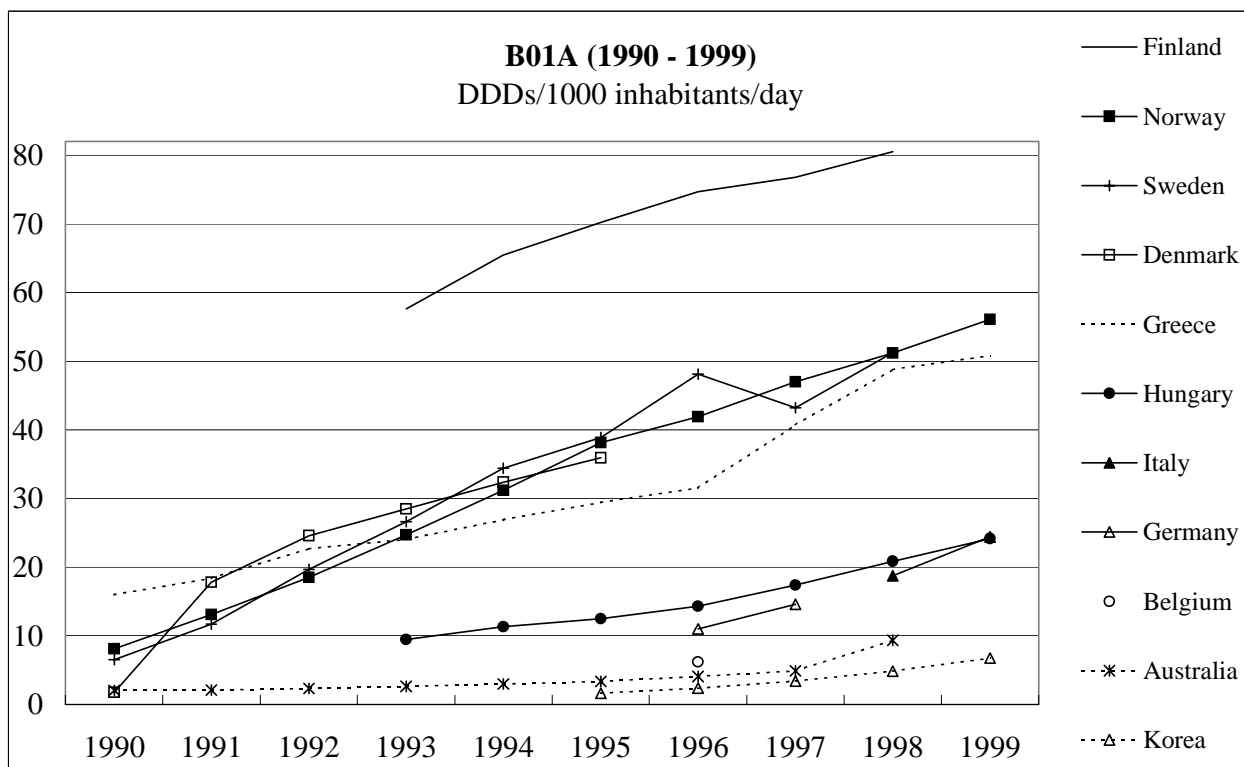
Chart 29b. (continued) Admission rates for Acute Myocardial Infarction, by age and gender (TECH)
Admissions per 100 000 inhabitants (figures using patient-based data)



Source: TECH research network except UK (Oxford). Data for Oxford obtained directly from ORLS. See Table 20 for more information.

Note: Data for the 40-64 year age group were not available for Canada (Ontario); data for the 40-64 year age group were available for the United States but only for the state of California, since these may not be representative of the US as a whole the figures have been omitted from this chart; data for persons aged 65 and older for the US were derived from the Medicare data base.
Data for the 75+ age group for the UK represent persons aged 75 - 99.

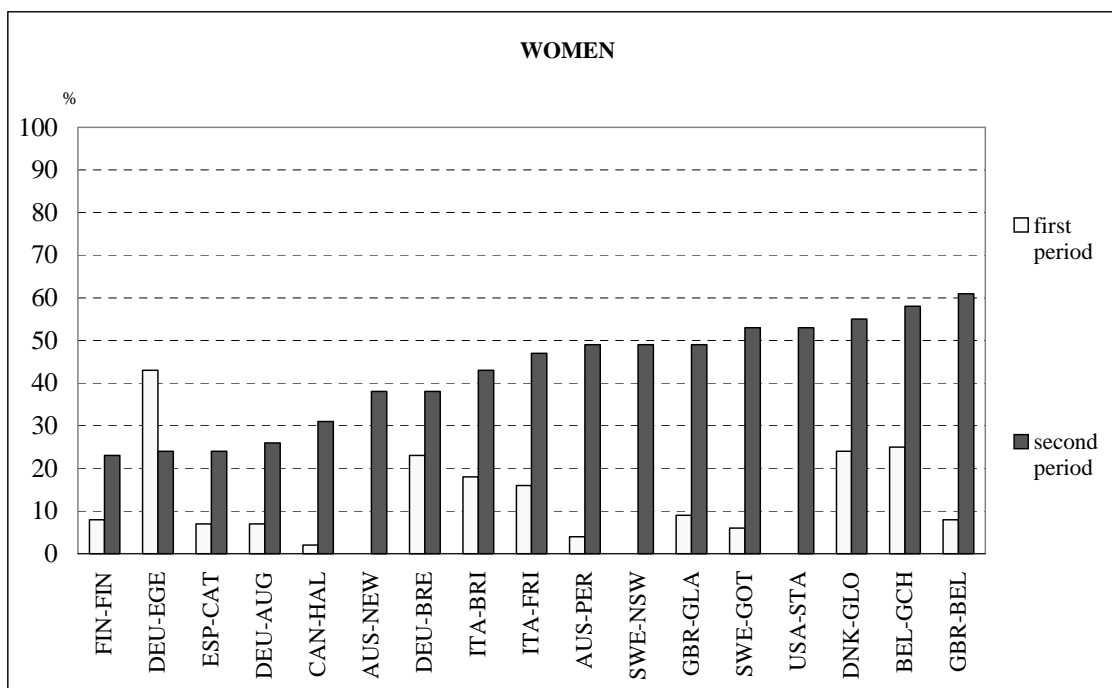
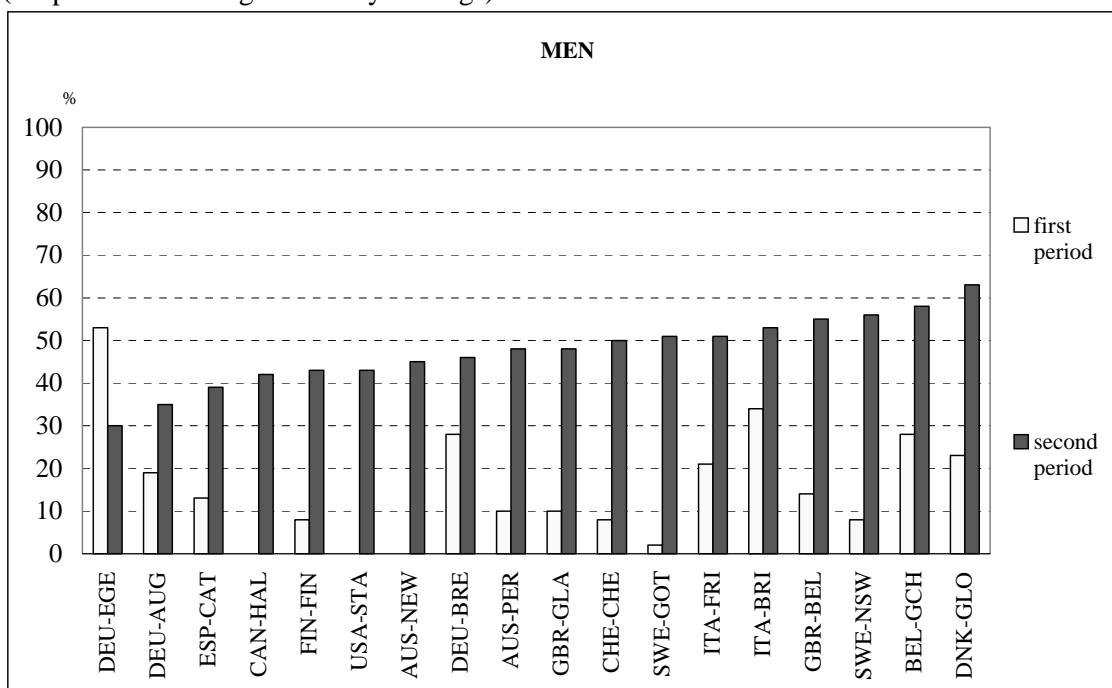
Chart 30. Consumption of antithrombotic agents (ATC B01A)



Note: Denmark - unable to separate B01A from B01. Hungary - data only available for the sub-group B01A A.

Source: Responses to OECD questionnaire “Core set of indicators for ischaemic heart disease” and ARD country reports; Farmetrika S.A. (Greece); NMD (Norway); OECD Health Data Base 2000 (Australia and Sweden).

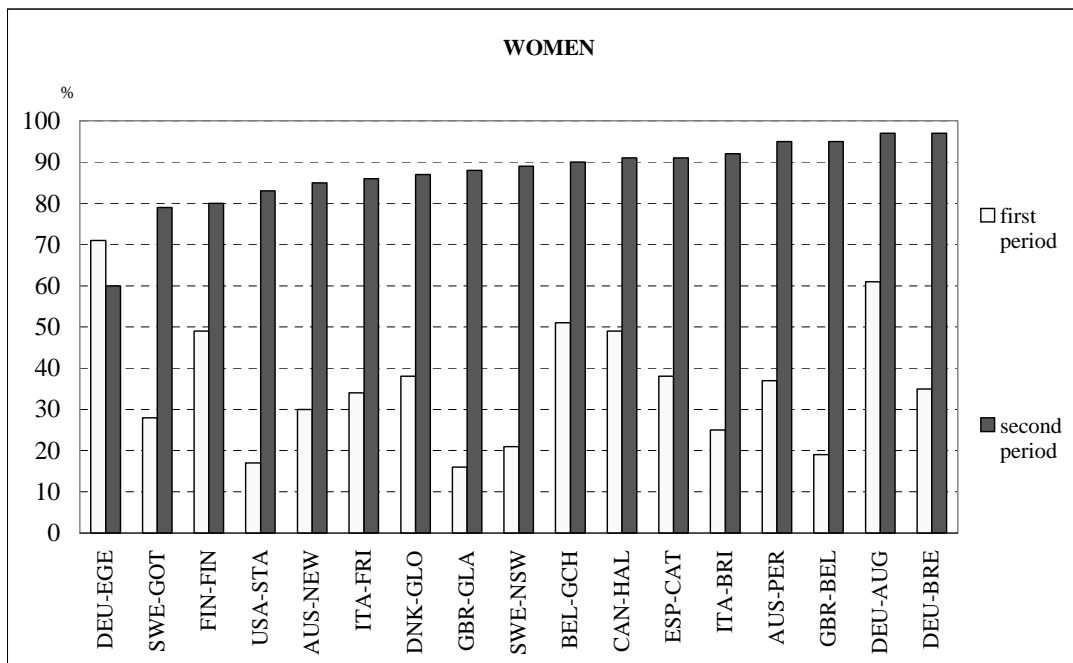
Chart 31a. Treatment during acute coronary-event - thrombolytics (MONICA)
 (Proportion receiving thrombolytic drugs)



Note: The intervals of data registration during the first and second periods were not uniform across the MONICA centres. See Table 18 for a description of the registration periods.

Source: Tunstall-Pedoe (2000).

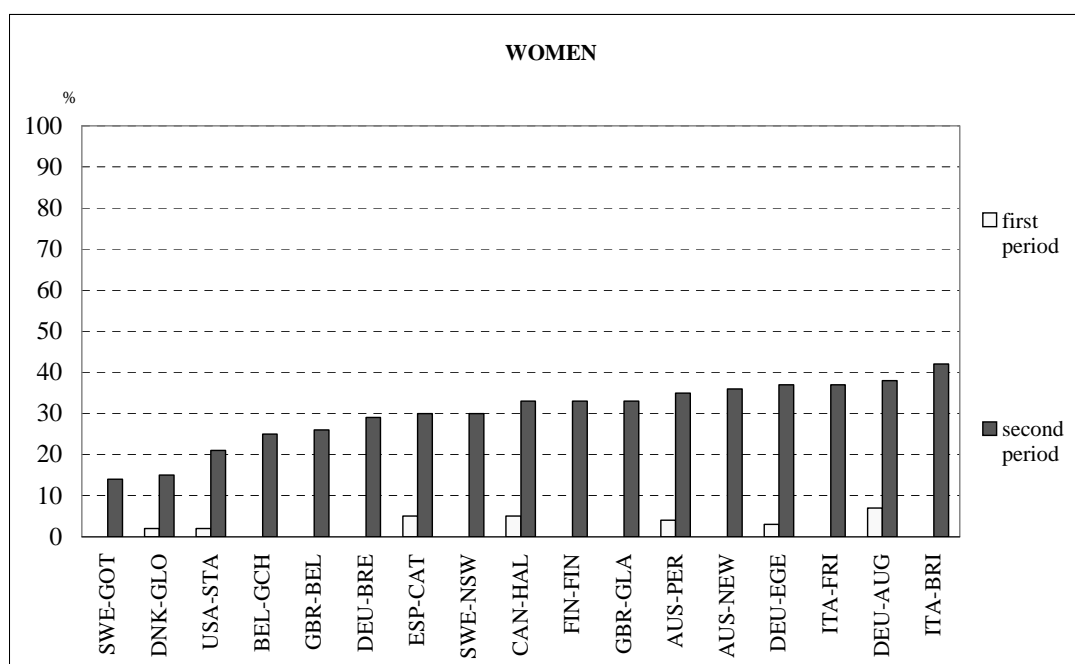
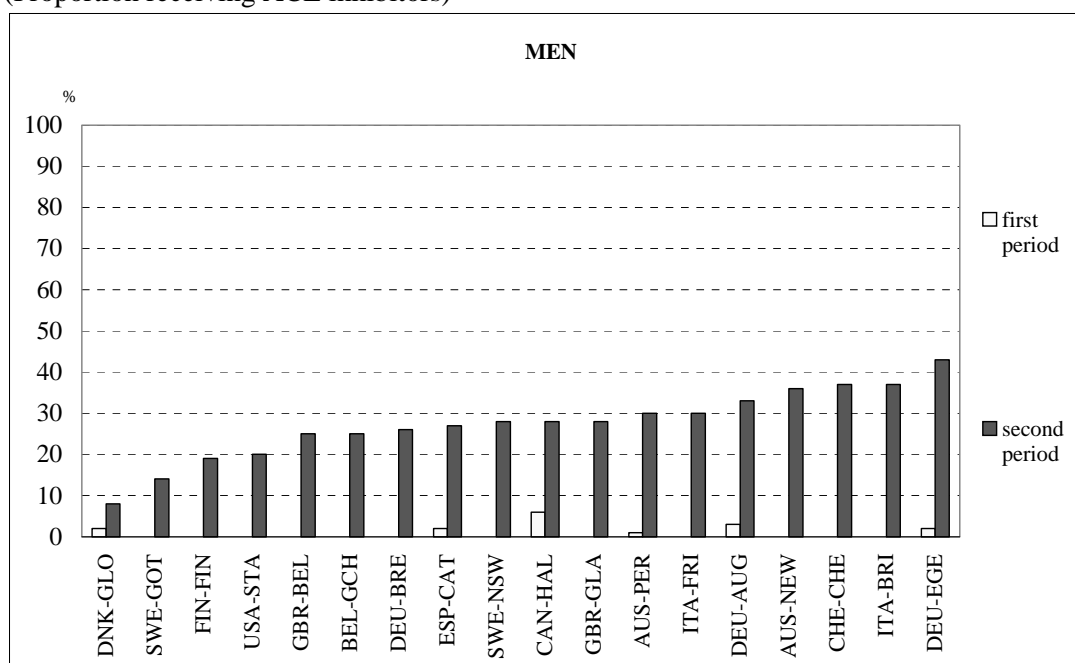
Chart 31b. Treatment during acute coronary-event - antiplatelets (MONICA)
 (Proportion receiving antiplatelet drugs)



Note: The intervals of data registration during the first and second periods were not uniform across the MONICA centres. See Table 18 for a description of the registration periods.

Source: Tunstall-Pedoe (2000).

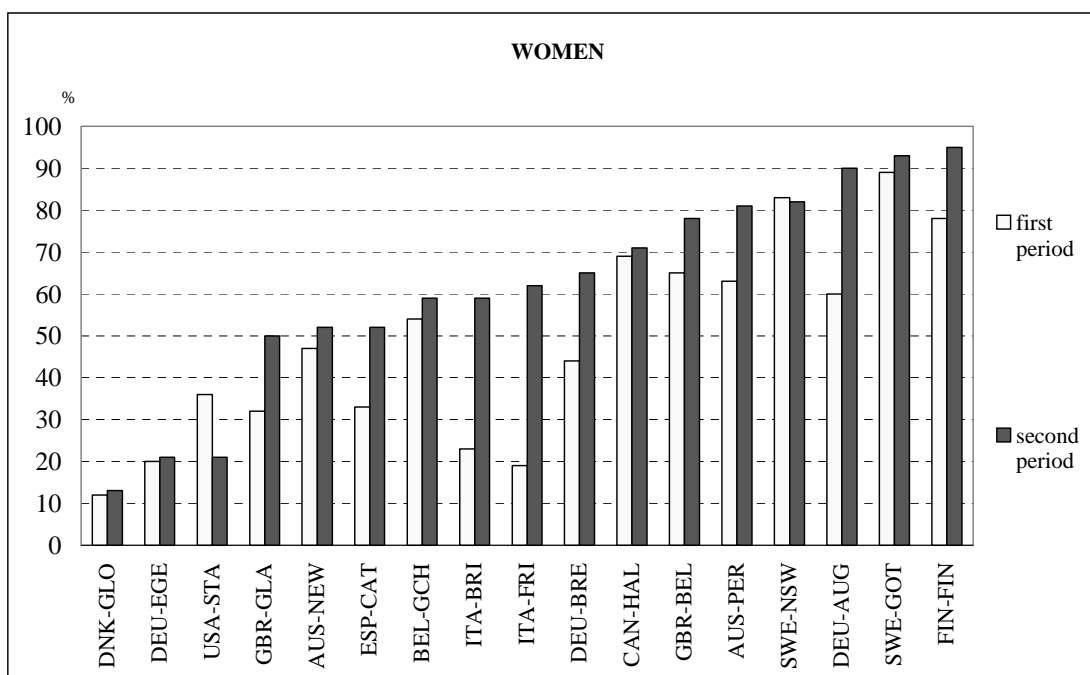
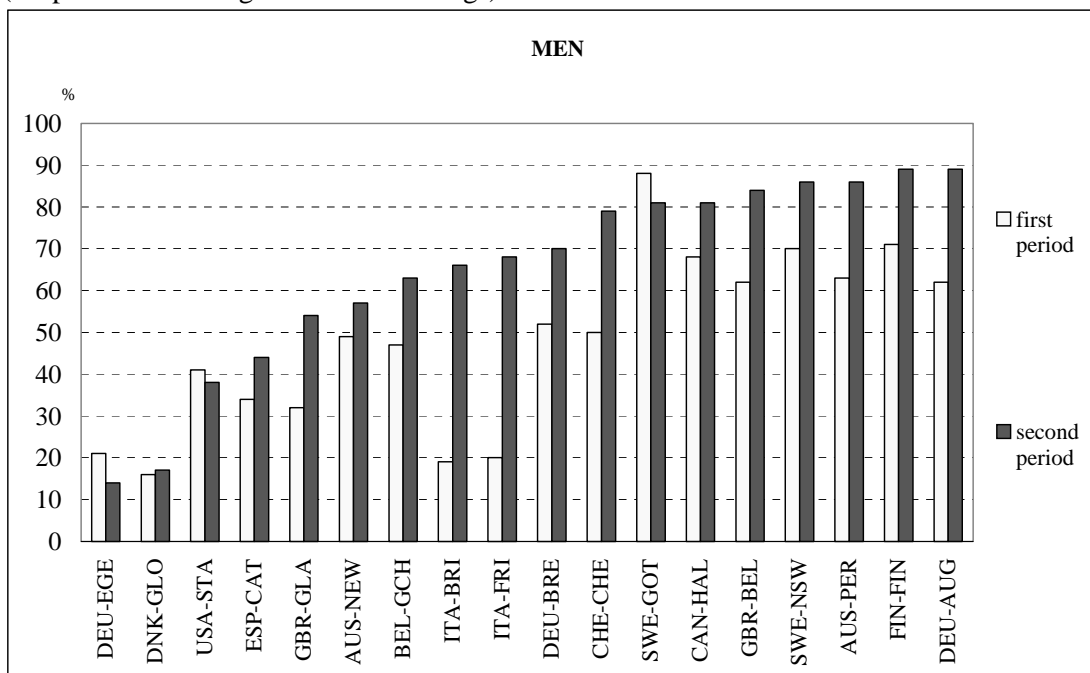
Chart 31c. Treatment during acute coronary-event -ACE inhibitors (MONICA)
 (Proportion receiving ACE inhibitors)



Note: The intervals of data registration during the first and second periods were not uniform across the MONICA centres. See Table 18 for a description of the registration periods.

Source: Tunstall-Pedoe (2000).

Chart 31d. Treatment during acute coronary-event - beta blockers (MONICA)
 (Proportion receiving beta blockers drugs)



Note: The intervals of data registration during the first and second periods were not uniform across the MONICA centres. See Table 18 for a description of the registration periods.

Source: Tunstall-Pedoe (2000).

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