



**OECD Study on cross-national differences
of ageing-related diseases**

Concluding workshop, June 20-21, 2002, Paris



**ARD PERSPECTIVE
UNDERSTANDING THE PERFORMANCE OF
HEALTH CARE SYSTEMS**

Stephane Jacobzone, OECD



INTRODUCTION

- ◆ Foster a dialogue between the stakeholders, patients, clinicians and policy makers
- ◆ Joint analysis of outcomes and “investments”
- ◆ The epidemiological transition and chronic disease: quality of life at older ages



TECHNOLOGY, AGEING AND ECONOMIC INCENTIVES

- ◆ Technology entry and diffusion
- ◆ Decreasing marginal returns ?
- ◆ Interference with ageing population ?
- ◆ Cost-effective targeted treatments or age bias ?



QUANTITIES AND PRICES

- ◆ Input prices
- ◆ Technical and allocative efficiency in producing health care
- ◆ Level of wages of health professionals

The analysis

- ◆ Drivers of health expenditure
- ◆ Unit health expenditure



DEMAND AND SUPPLY LED ECONOMIC INCENTIVES

- ◆ “Integrated public” model
- ◆ Insurance system



A limited role for demand side incentives

- ◆ Demand constraints play a small role except US non-emergency care
- ◆ But
- ◆ universal coverage does not necessarily ensure equal access
- ◆ Not without some form of restriction

Insurance countries and integrated public model countries relatively similar



A stronger role for supply side incentives and organisation of care



- ◆ Economic incentives payment mechanisms
- ◆ Direct constraints on quantity of care

Impact on:



- ◆ The quantity of care provided
- ◆ The type and mix of interventions

The impact of supply-side incentives and the organisation of care



- ◆ BC: Regulation and availability of machines, but link to screening rates? Impact on older patients. Role of organised screening. Payment and radiotherapy
- ◆ IHD: Availability of technology and number of procedures, additional impact of payment incentives
- ◆ Stroke: variation difficult to interpret. Impact on availability of technology (MRI). Organisation of stroke care and co-ordination across various settings

Understanding qualitative trends and the mix of invasive/less invasive treatment

- ◆ BC: Strong role for guidelines, for diffusion of BCS, but high level of mastectomy in some countries. Lack of radiation therapy 
- ◆ IHD: Medical knowledge: diffusion of PTCA, stents. Role of clinical trials for pharmaceutical utilisation. High rate of CABG in certain countries, CABG/PTCA also depends on payment 
- ◆ Stroke: Diffusion of endarterectomy. Transfers to rehabilitation higher in countries with more LTC

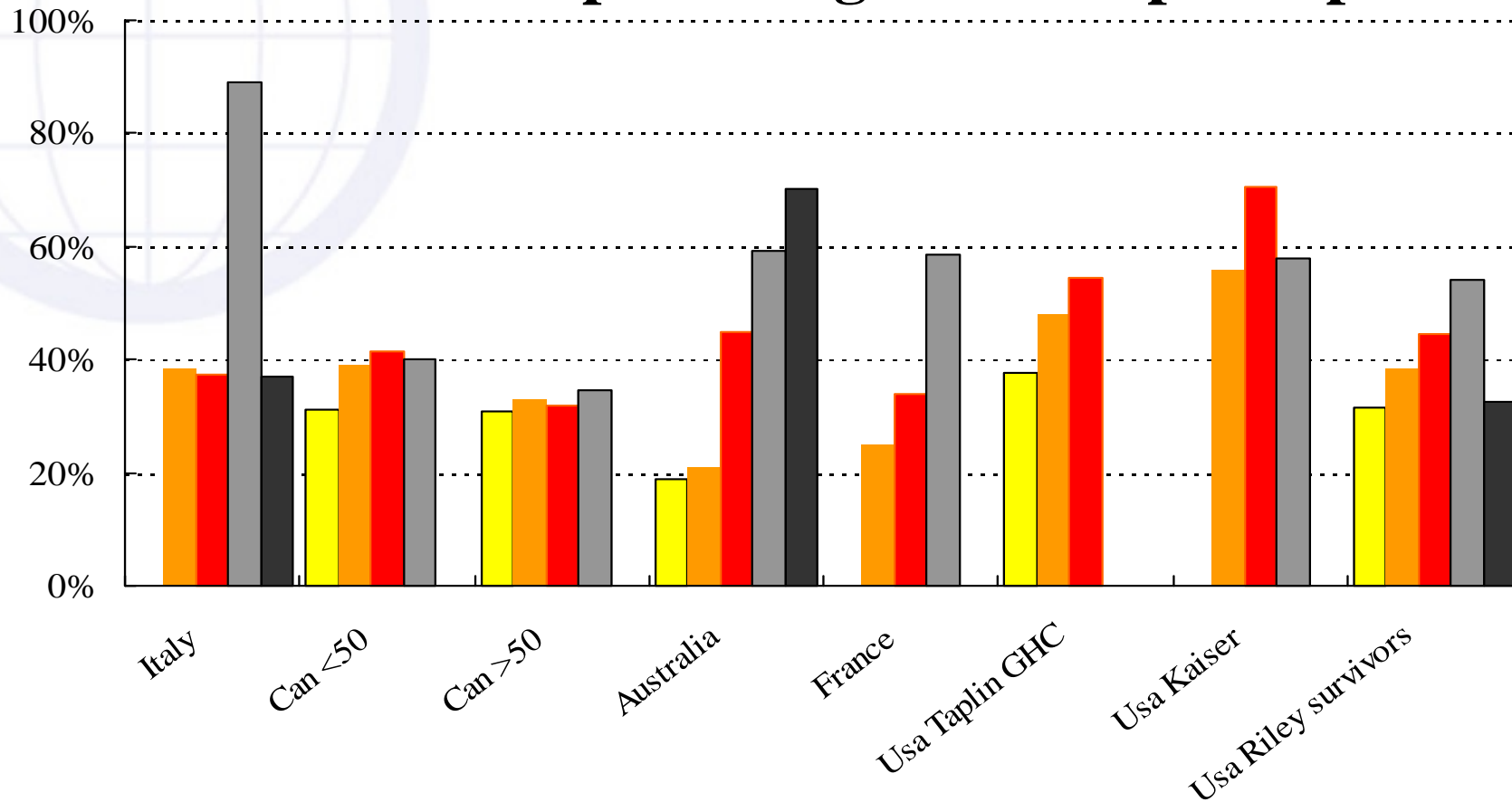


Understanding the use of resources



- ◆ Length of stay
- ◆ Relative use of resources:
variance high for IHD, less for stroke
- ◆ Cost of breast cancer: variation by severity and type of treatment

Variation in costs by stage, first 6 months of treatment as a percentage of GDP per capita





DO WE GET VALUE FOR MONEY ?



◆ Outcomes

- ◆ Population level: mortality trends
- ◆ Case fatality for treated patients
- ◆ Role of medical and non-medical factors

UNDERSTANDING TRENDS IN HEALTH OUTCOMES IN RELATION TO RESOURCE UTILISATION



- ◆ Qualitative analysis of IHD stroke mortality trends :
 - ◆ Limited analytical power
 - ◆ Role of risk factors but difficult to ascertain (lags, role of secondary prevention ...)
 - ◆ Phases in the epidemiological transition

MULTIVARIATE ANALYSIS

Preliminary results

- ◆ Mortality related indicators
 - PYLLS and standardised mortality
- ◆ In relation to
 - ◆ Economic determinants (GDP, type of occupation)
 - ◆ Risk factors : tobacco, alcohol, pollution
 - ◆ Medical care: physicians, + procedures



Key initial findings

- ◆ Consistent with previous results (Or)
- ◆ GDP (-)
- ◆ Physicians (-)
- ◆ Share of white collars (+)

Plus

- ◆ Additional reduction from utilisation of medical care (PTCA, BYPASS, Total)
- ◆ Both for PYLLS, and mortality



QUESTIONS

- ◆ Stability and consistency of results

- ◆ Is medical care worth it?

- ◆ Technical question:

Can we account for the endogeneity of medical care (procedures) in the estimates:

- ◆ Yes

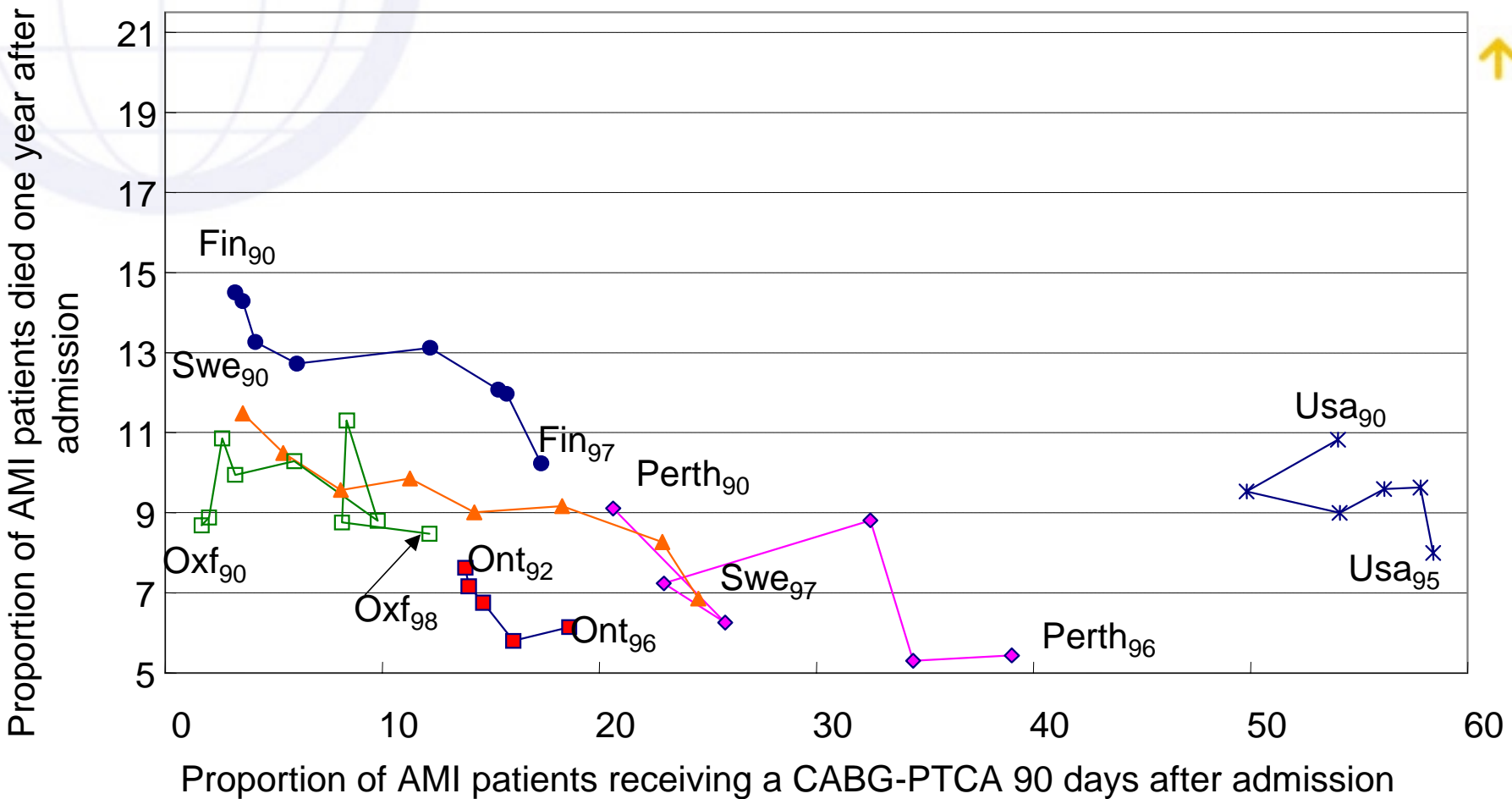
- ◆ 3 stage least square estimates

- ◆ Weaker results, but still significant when both types of procedures are combined

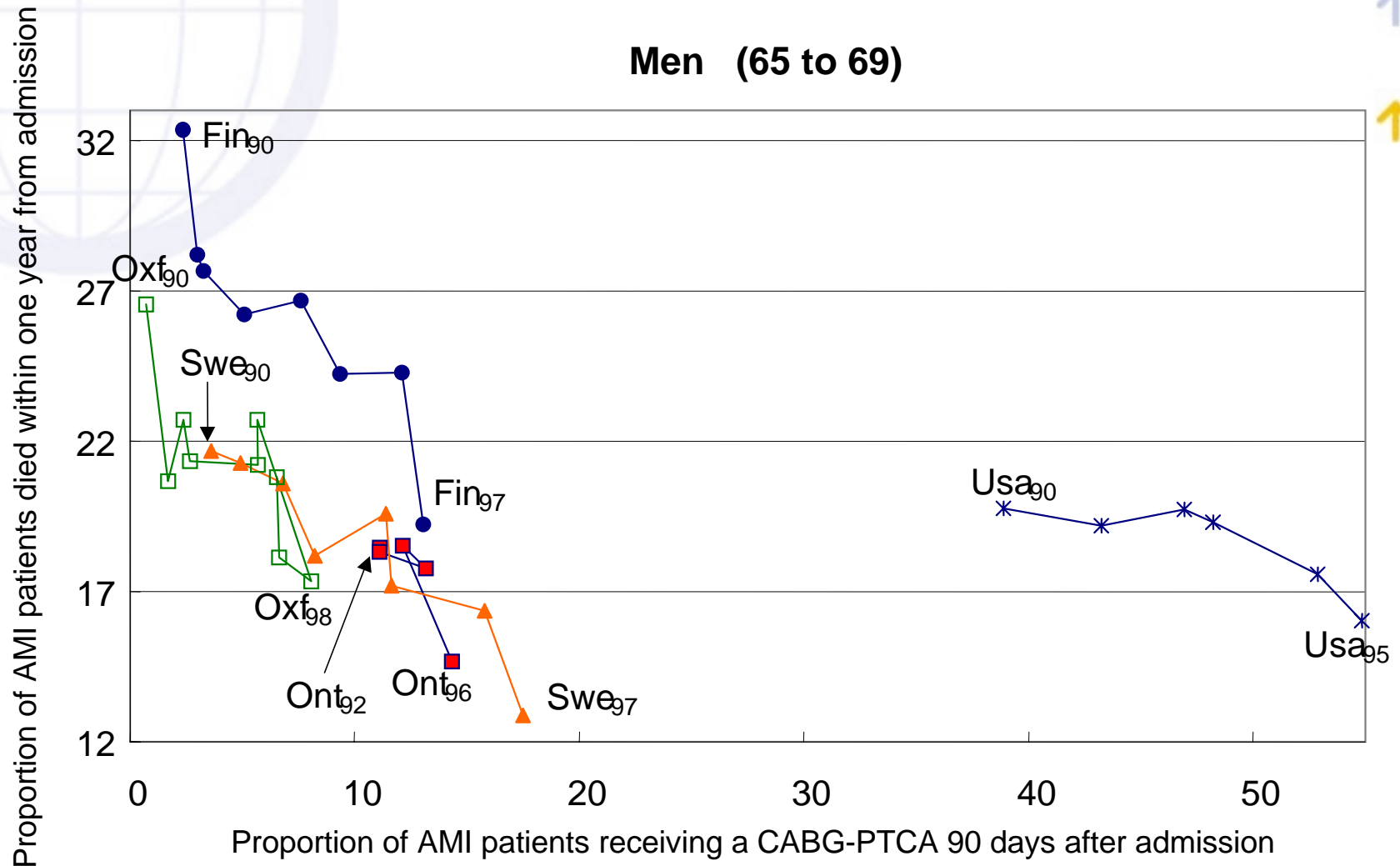


From macro to micro level: Case fatality in relation to technology utilisation

Men (40 to 64)

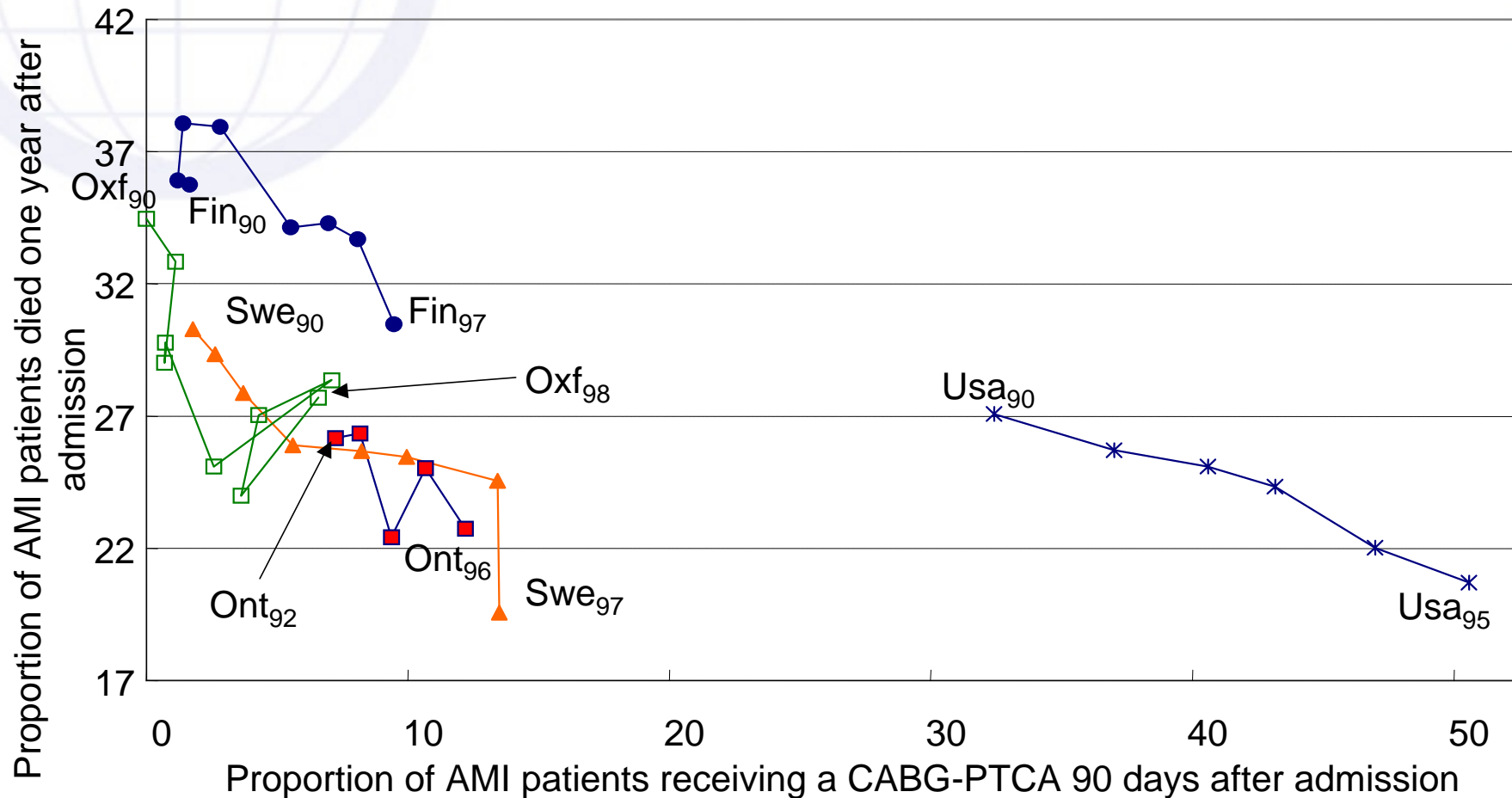


From macro to micro level: Case fatality in relation to technology utilisation



From macro to micro level: Case fatality in relation to technology utilisation

Men (70 to 74)





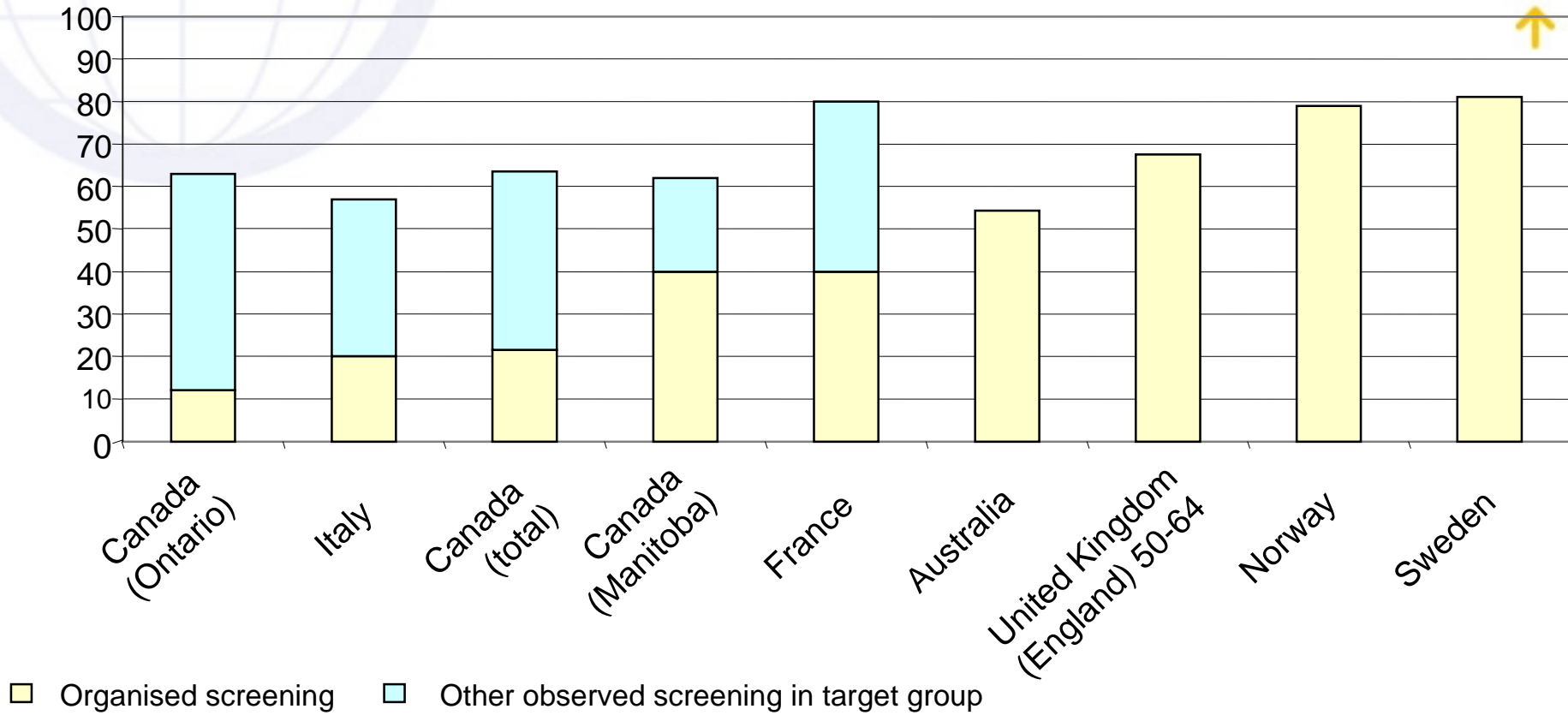
BREAST CANCER

- ◆ Assessing screening
- ◆ Survival or mortality
- ◆ Stage at diagnosis
- ◆ Incidence



Organised screening participation rates

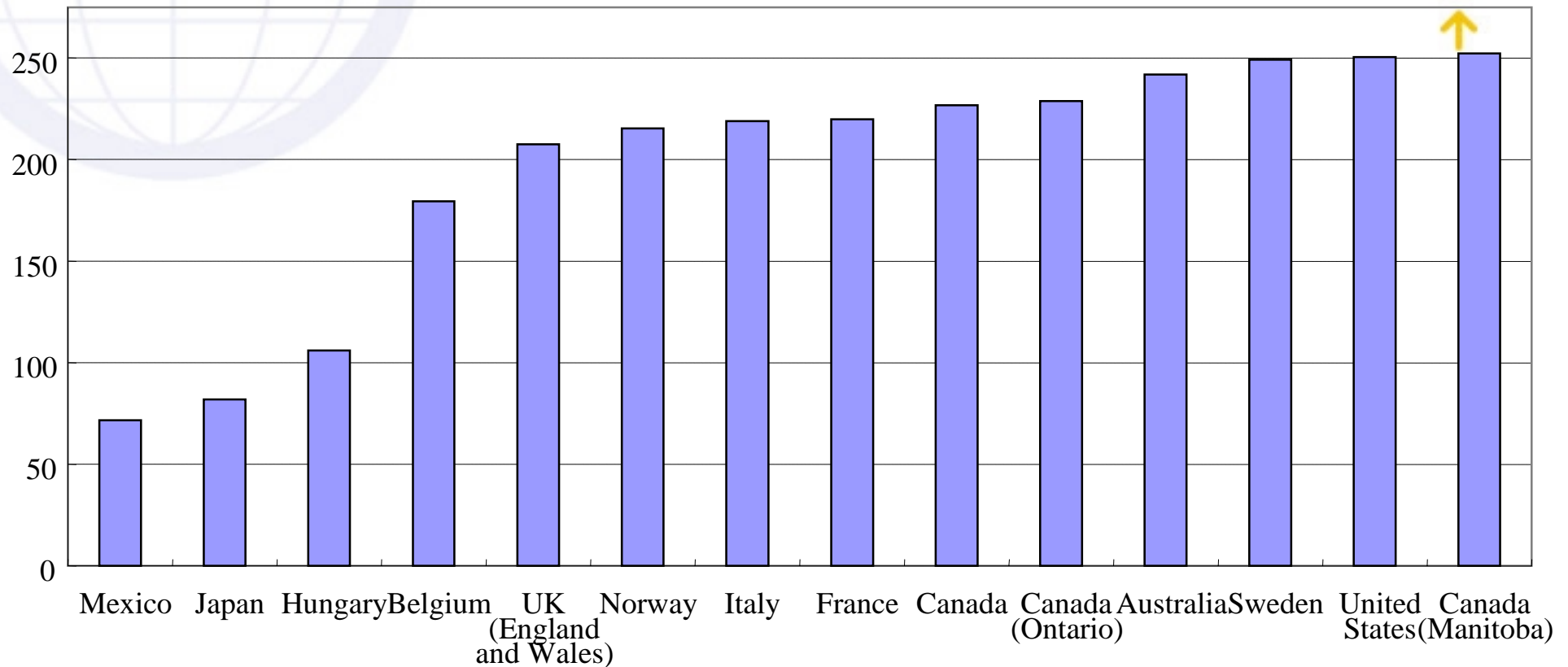
As a percentage of eligible women



Source: health interview surveys, experts reports, Health Canada 2001

Age-standardised incidence (1995)

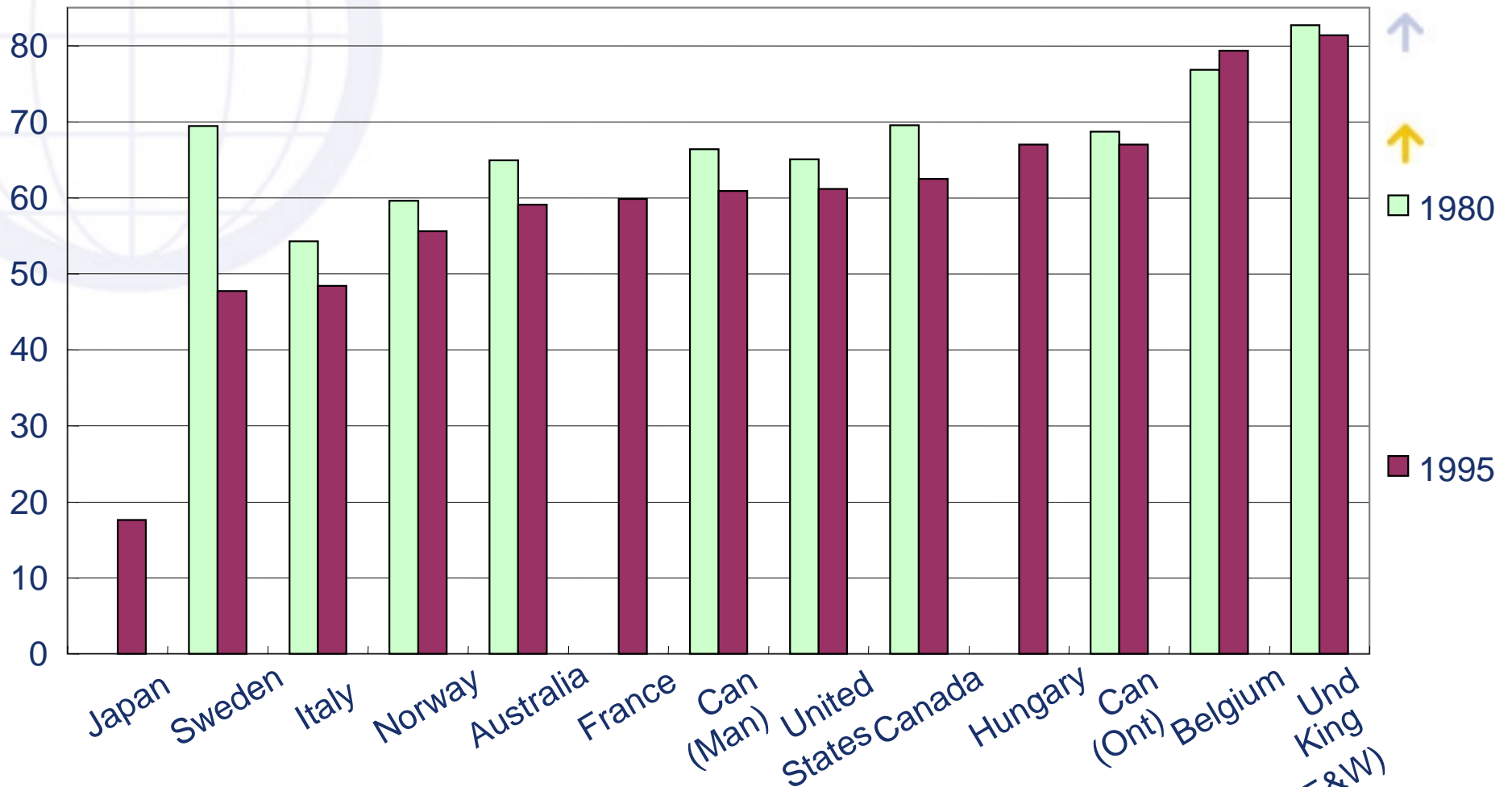
rate per 100 000 females aged 40 and over



Note: 1990 data for Hungary, Mexico and the United Kingdom

Age standardised mortality rates

per 100 000 women age 40 and over



for France, Hungary, Japan, Norway and the United Kingdom (E&W); 1983 and 1996 for Australia; 1996 for Italy.



IMPLICATIONS OF CANCER RESULTS

- ◆ Neither prevention nor cure alone
- ◆ Balance of the two approaches
- ◆ Certain features of health care systems tend to favour one approach





TRENDS IN “DISABILITY” AND QUALITY OF LIFE ↑



- ◆ BC: better quality of life with earlier diagnosis, but more “sickness”
- ◆ US/Canadian results: single vessel interventions *vs.* multiple vessels
- ◆ Stroke: role of stroke unit and availability of early rehabilitation

Policy implications for improving performance

- Implications of economic incentives and financing constraints
- Improving performance: a multidimensional strategy
 - Delivery of appropriate amount of care
 - Delivery of appropriate mix of treatment (+/-invasive)
 - Targeting the treatments to the right patients with the right indication and the highest ability to benefit
 - Improving efficiency in the production process
Improving value through minimising costs, (and providers' rents), while preserving quality
- Results strongly “suggestive” but not “conclusive”



A further step in assessing performance?

- Different perspectives

Payers and the “macro/public health” perspectives

Patients/physicians with the micro/medical view

- Where to locate the economic constraint ?
- Which parameters are to be optimised ?

These depend on countries various economic and political consensus about health and the role of health care systems

- Need to foster data development and common standards
Long-term investments to improve the performance of health care systems

