

# “Measuring Up”

Improving Health Systems Performance in OECD Countries



Le suivi de la performance,  
l'amélioration de la santé :  
accroître l'effet des services de santé  
sur la santé de la population

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Health  
Canada

Santé  
Canada

Canada

# The Canadian experience, an international perspective

- A substantial health system reform, in a short period of time
- An extensive monitoring and evaluation program, with multidisciplinary teams at work
- Closed links with decision makers

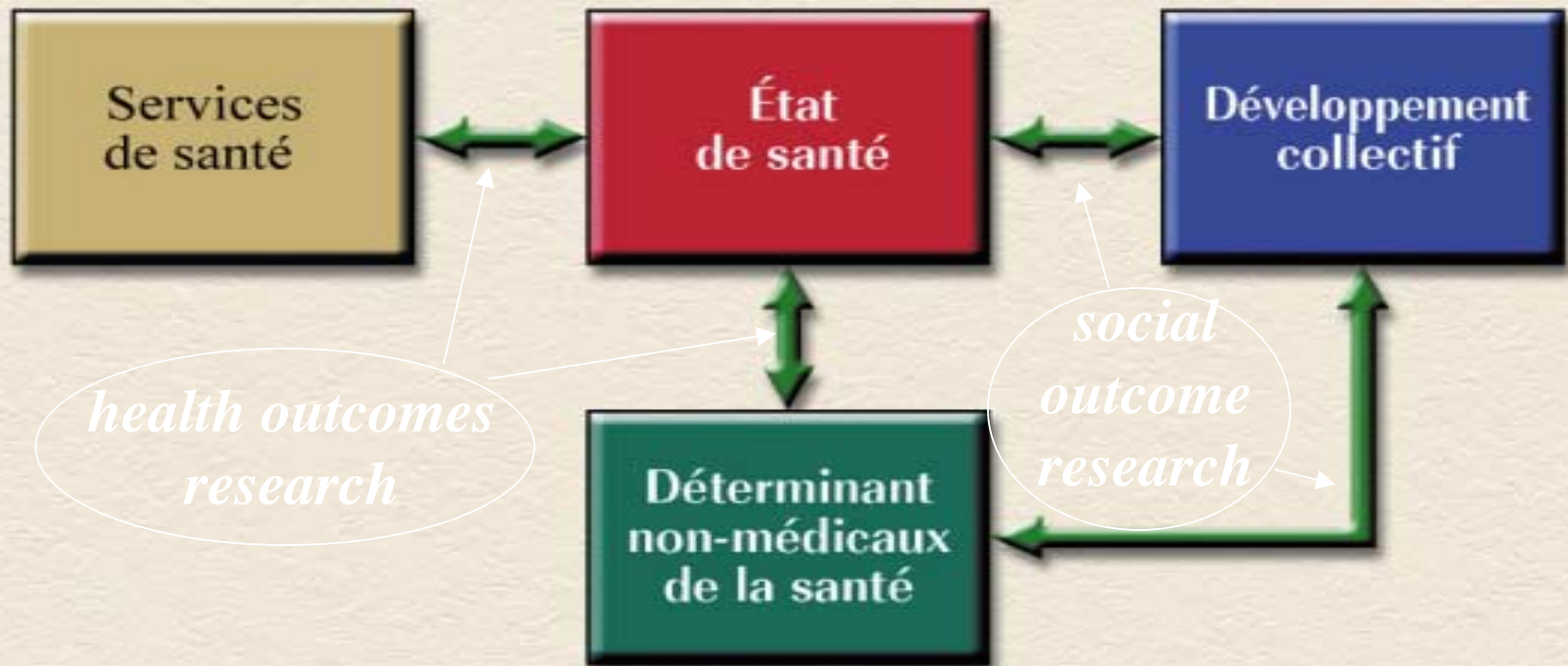
## Are there comparable experiences ?

- Health outcomes typically not the focus of evaluation of reforms
- Policy relevant research is still rare in health services research

# Opportunities for further policy-relevant research

- Increasing need for population-based evaluation of performance
- Regional level analysis as an efficient approach
  - better understanding of the relationship between exposure and outcome
  - optimize comparability between units of observation
- Information systems need to be developed, with both theoretical and empirical efforts

## Services de santé, santé et développement



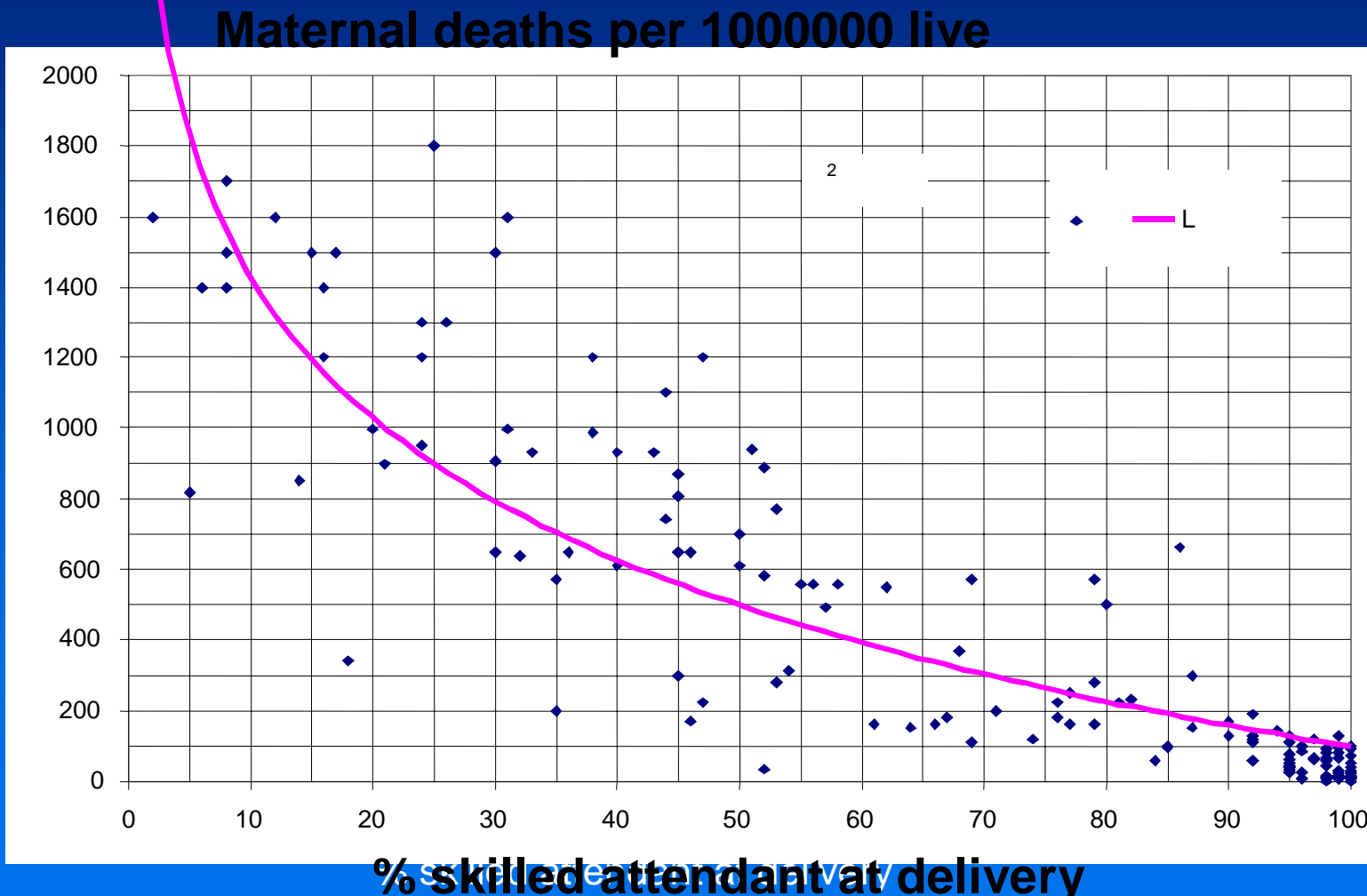
# R&D in information systems : health outcomes research

- Health services and the way they are organized are increasingly potent determinants of health
- Urgent need to refine our indicators, in order to adapt them to new challenges (chronic diseases, small effects, evidence-based medicine, etc.)
- *Examples :*
  - *Maternal and perinatal care*
  - *Ischemic heart disease*

# Perinatal and maternal mortality rates in Indiana, 1975-1982

	<i>Faith Assembly</i>	<i>Indiana</i>	<i>Relative risk</i>
<i>Maternal mortality (x 10<sup>-5</sup>)</i>	<b>872</b>	<b>9</b>	<b>92</b>
<i>Perinatal mortality (x 10<sup>-3</sup>)</i>	<b>48</b>	<b>18</b>	<b>2.7</b>

The higher the proportion of deliveries attended by skilled attendant in a country, the lower the country's maternal mortality ratio

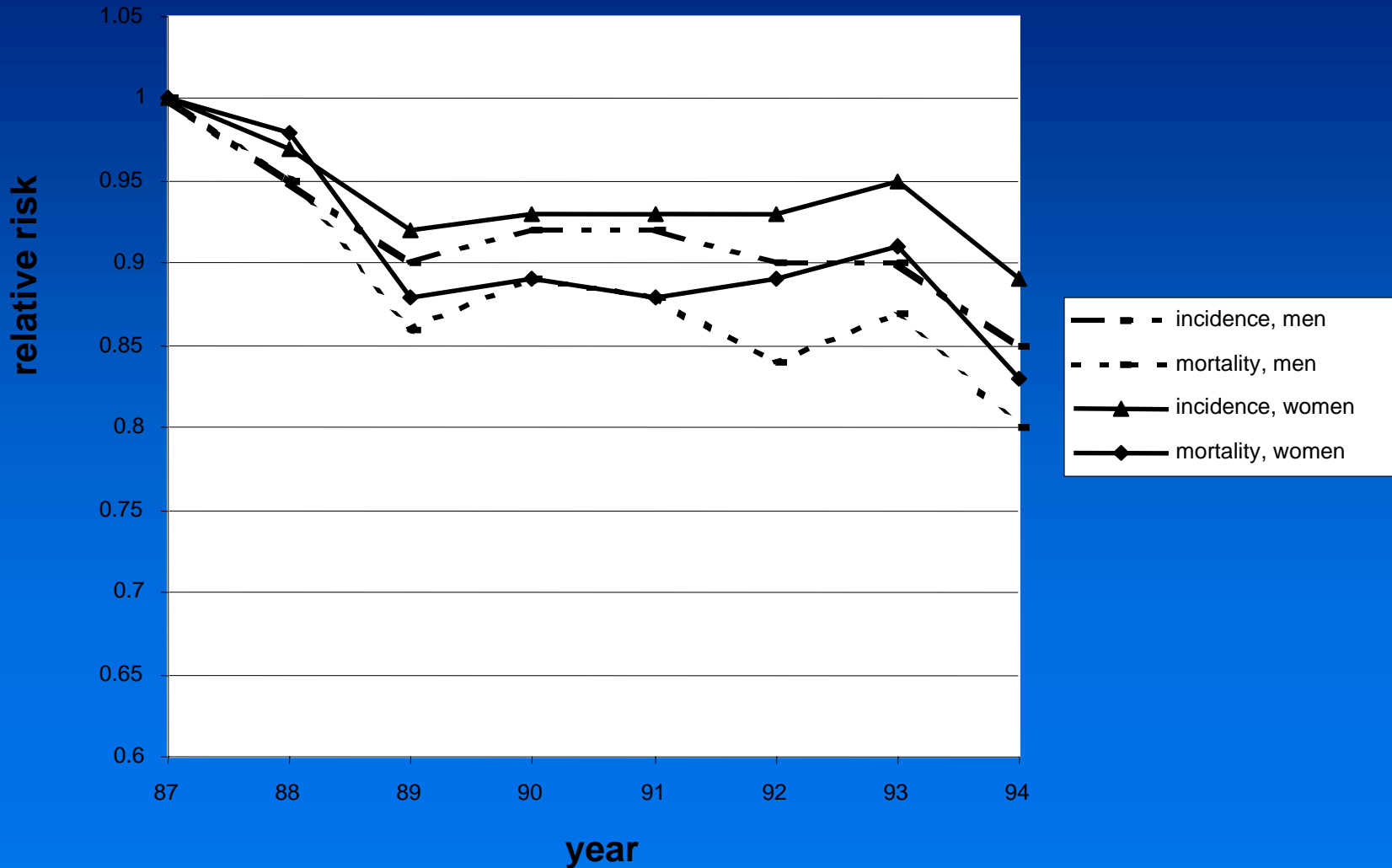


# Perinatal mortality rates (0/100) according to hour of birth Switzerland, 1979-1981 (n=220540 births)

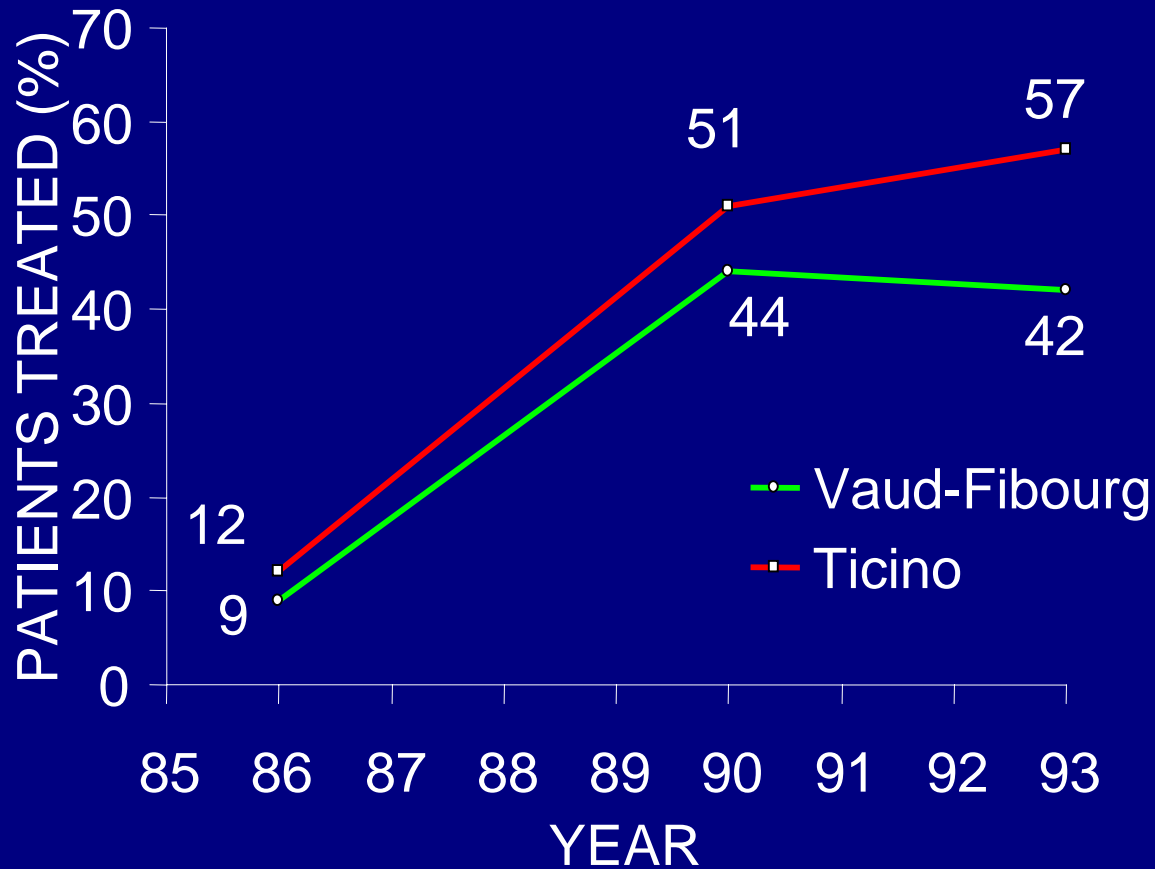
	<i>Low staff</i> (4 pm – 1 am)	<i>High staff</i> (2 am- 3 pm)	<i>Relative risk</i>
<i>All weights</i>	<b>12.0</b>	<b>8.4</b>	<b>1.44</b>
<i>&gt; 2500 g</i>	<b>4.1</b>	<b>3.1</b>	<b>1.33</b>
<i>&lt; 2500 g</i>	<b>131.4</b>	<b>99.8</b>	<b>1.32</b>

*Lancet 1988;i:340*

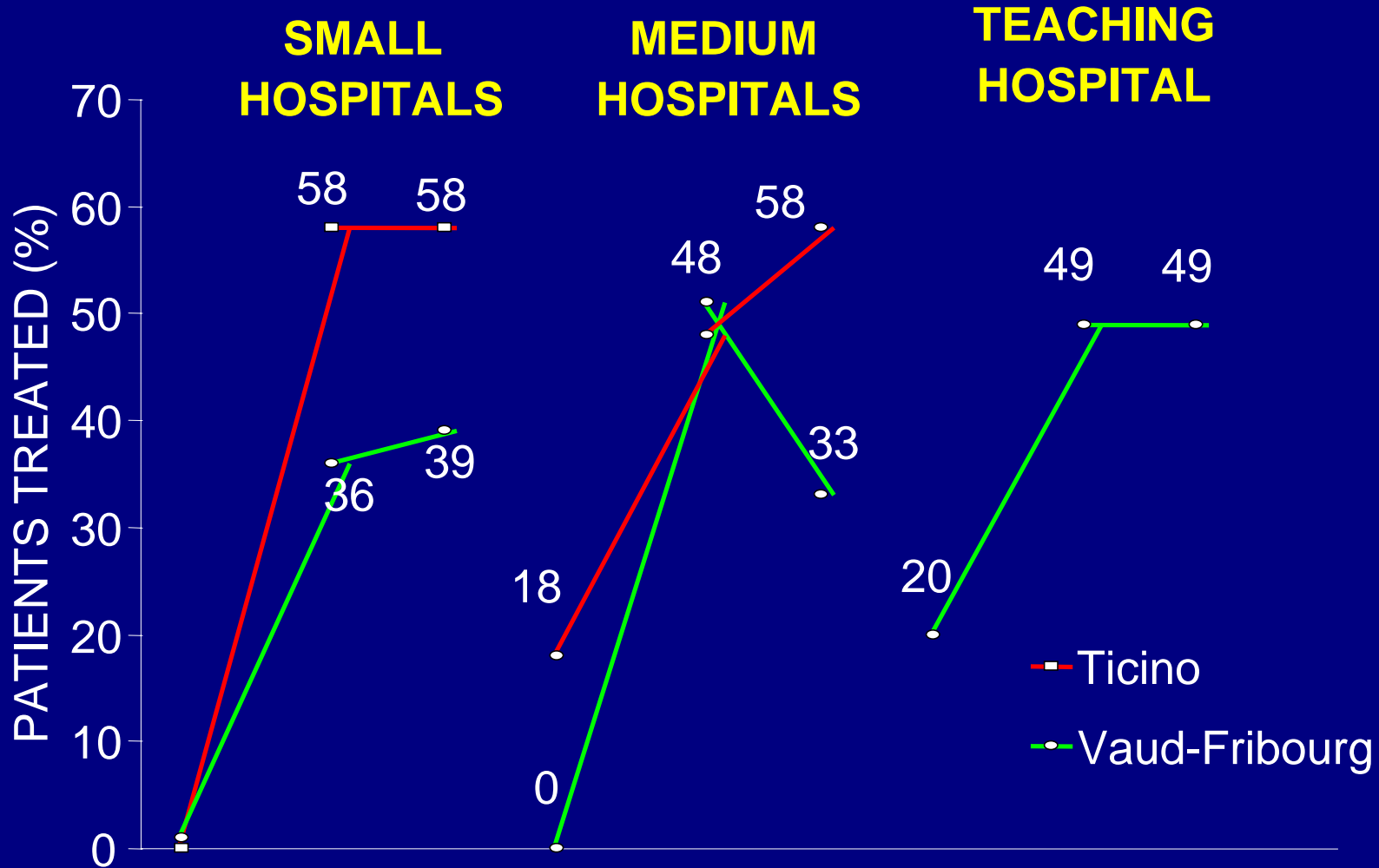
# AMI : Relative risk compared to 1987, both sexes, age 30-89 (age-adjusted to 1970)



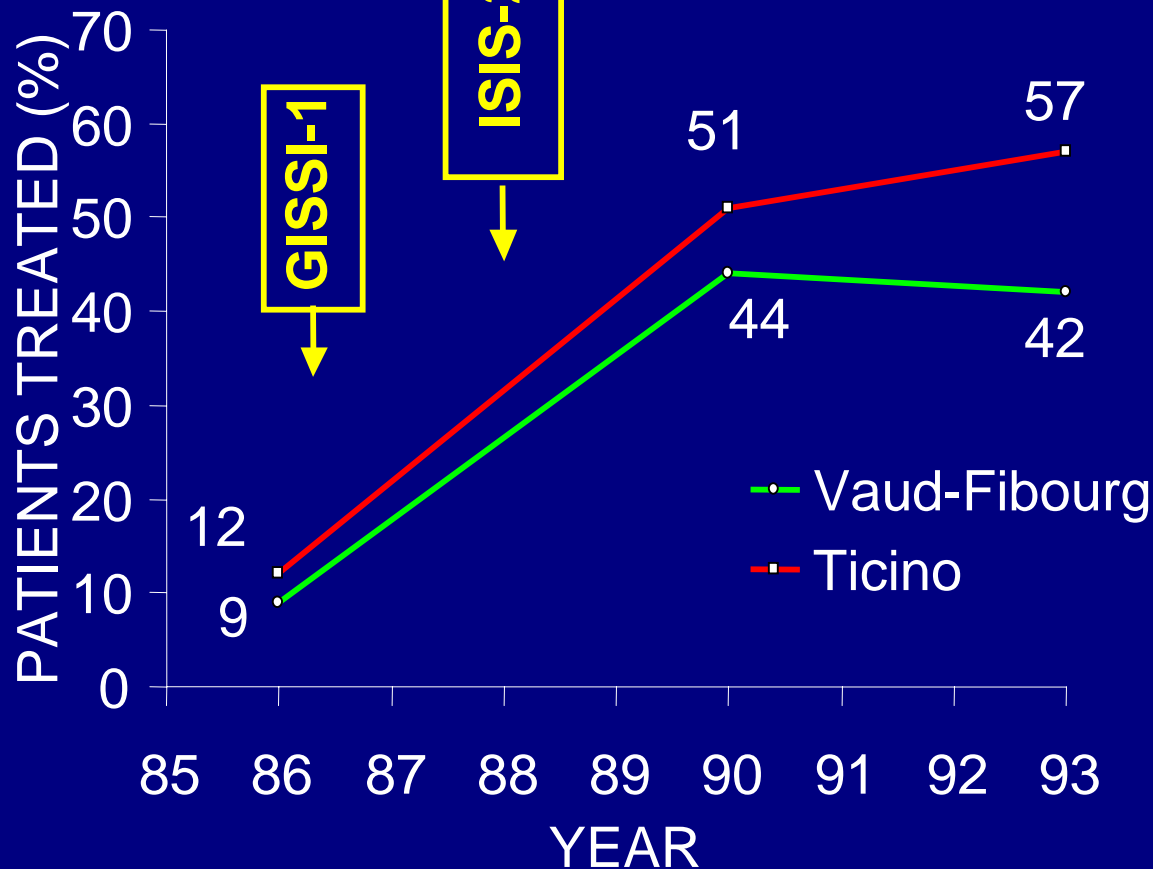
# THROMBOLYTIC DRUGS (men aged 35-64, hospitalized with definite AMI)



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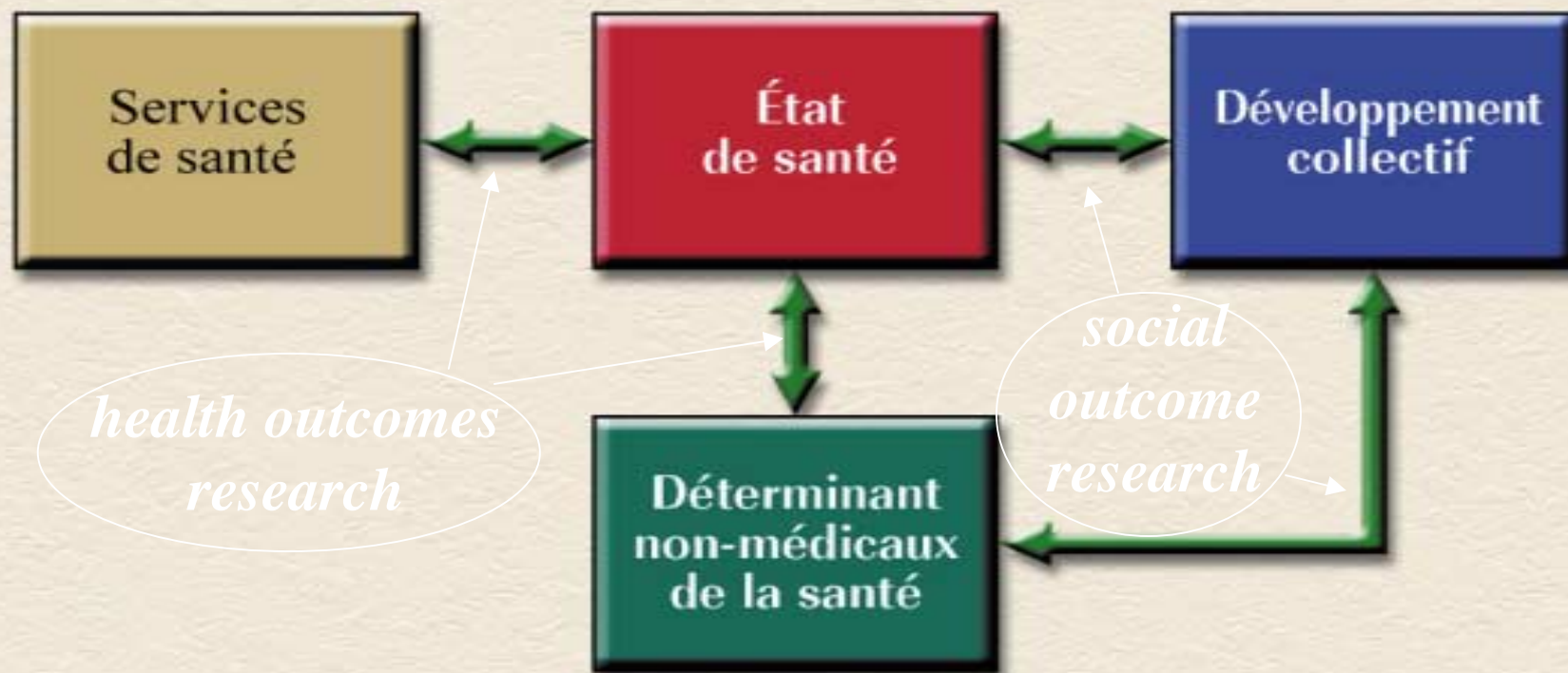
# THROMBOLYTIC DRUGS (men aged 35-64 hospitalized with definite AMI)



**Streptokinase alone  
reduce mortality  
at day 35 by 23%**

**GISSI-1 trial:  
Streptokinase  
reduce mortality  
at day 21 by 18%**

## Services de santé, santé et développement

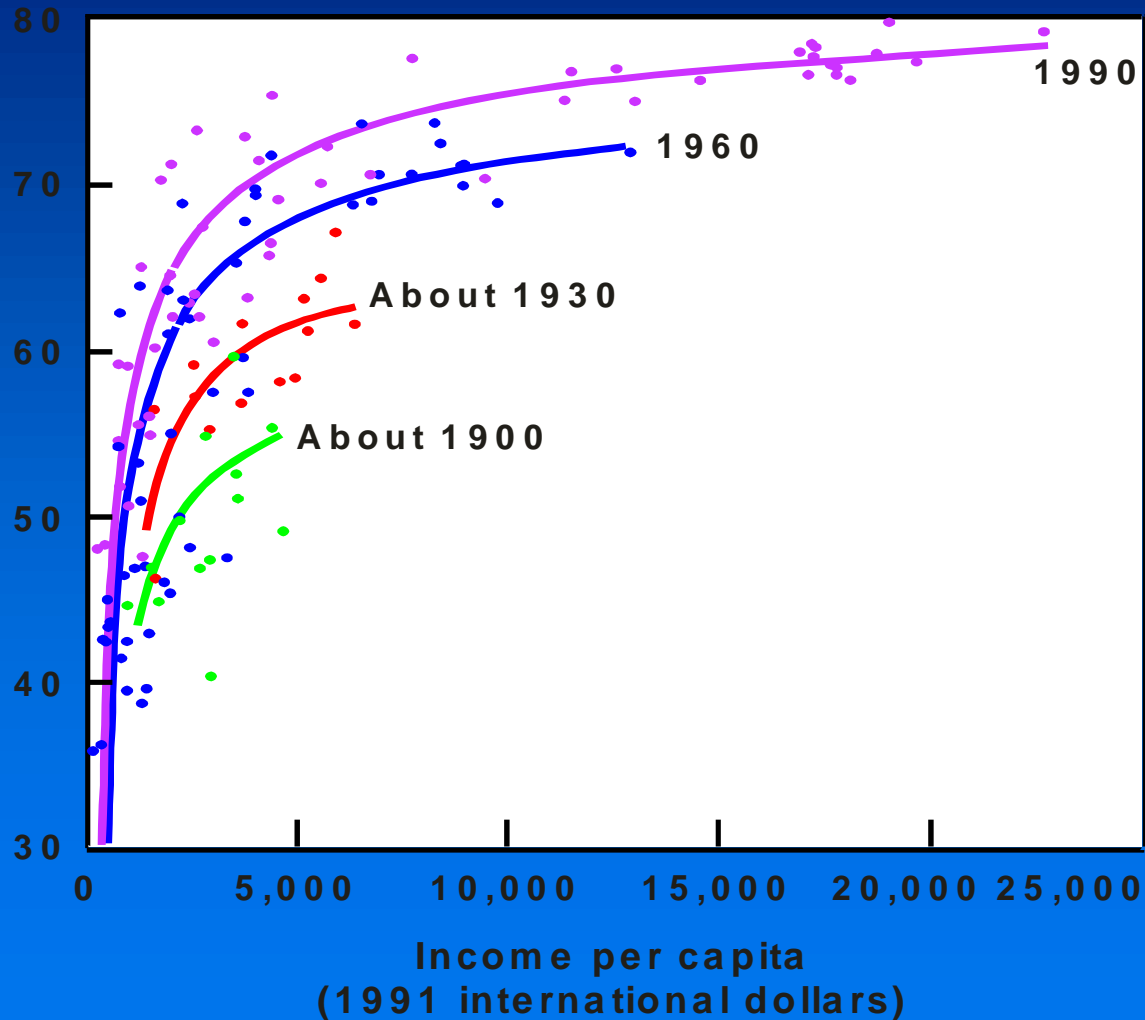


# R&D in information systems : social outcomes research

- Need to define better conceptual and empirical network quantifying the impact of health improvement on welfare
- If only the sum of individual welfare achieved is calculated, then maldistribution of consequences (benefits and burden) might be overlooked
- In the most developed countries, elderly population is a key area for R&D on social outcomes

# Impressive Gains in Health at Similar Income Levels

Life expectancy (years)



# Conclusion : Opportunities for international collaboration

- R&D addressed in the Montreal experience would benefit from new collaborations (eg, population-based performance, regional level analysis, information systems)
- Such an international collaboration would allow :
  - better understanding of the relationship between exposure (ie, policies) and outcome (ie, health status and welfare)
  - encourage standards & systems compatibility
  - minimize development costs
- Cost-effectiveness and sustainability of health systems, a shared concern