

The Interface Between Routine Health Information, Rapid Assessment and Survey-based Information

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Why has investment in routine health information systems been neglected in developing countries?

- It is often incomplete, with there being little scope for attain full coverage
- The data tends to be poorly recorded
- It is difficult for users to access, sometimes deliberately so
- Service-based data do not usually represent the experience of entire populations
- If used for managerial purposes there can be incentives to 'cook the figures' thus reducing its credibility

Why has there been so much investment in survey-based health information in developing countries?

- It is generally more carefully gathered
- It can be designed to be representative of entire populations
- It is less vulnerable to manipulation
- It is more widely available in both summarised and raw formats
- It is generally produced to meet specific management and evaluation purposes, particularly those of donors

Reasons why routine health information systems might merit more investment

- Their marginal cost is relatively low and therefore they are more sustainable for developing countries than periodic large surveys
- They can provide a synergistic complement to survey-based data, and identify issues requiring further investigation through, for example, *ad hoc* enquiries
- Their potential to influence policy and improve service management has been demonstrated in developed countries
- Technological advances have made it possible to provide access to these sources, and therefore use of them, to a much wider population.

Why invest more in routinely collected health information systems?

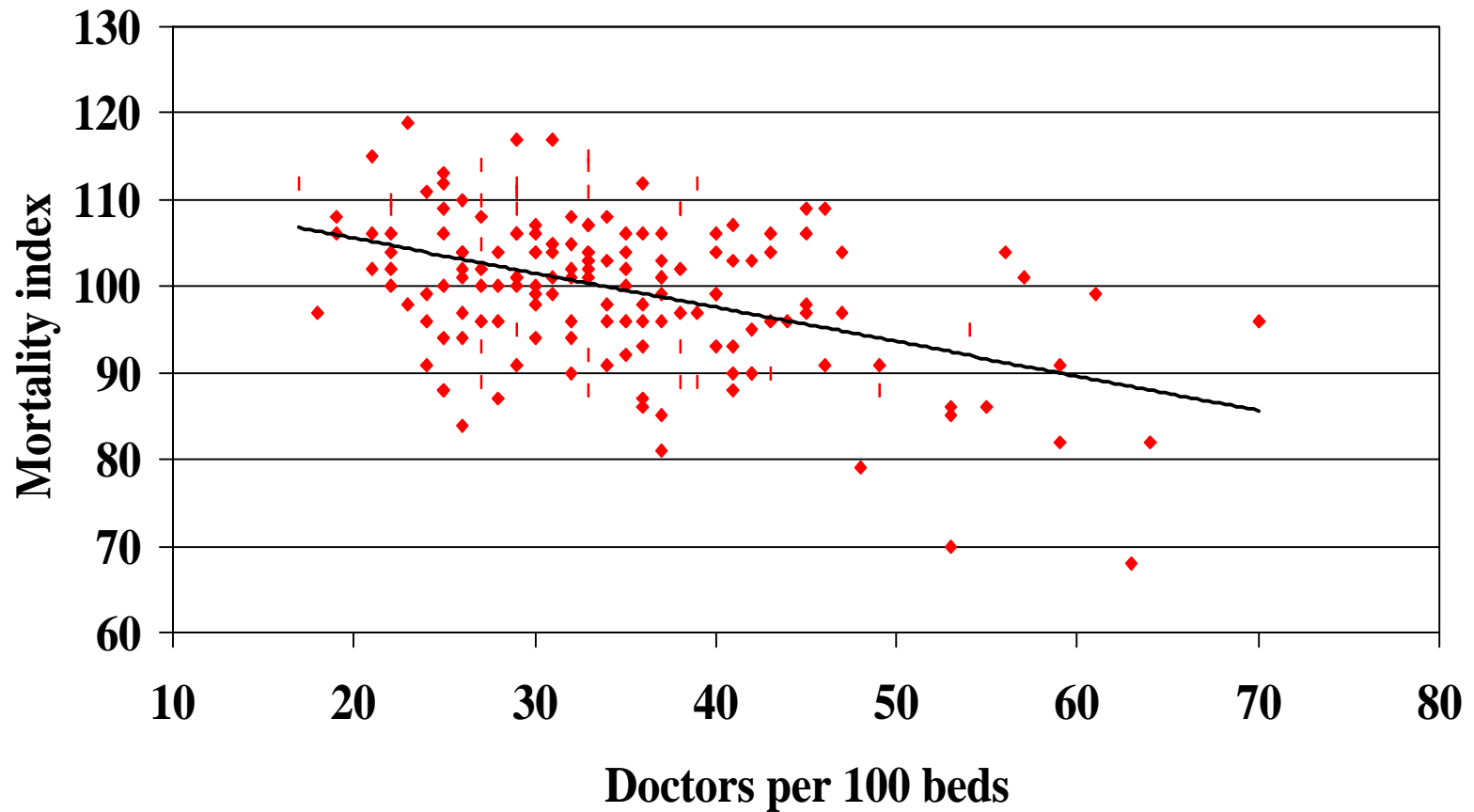
‘Good’ reasons

- To assist policy formulation
- To monitor service and system performance
- For health surveillance
- To empower citizens
- To create incentives for better performance
- To meet international reporting obligations

‘Bad’ reasons

- To keep up with advances in other countries
- To make use of the opportunities provided by technological advances
- Because existing systems are weak

Hospital mortality vs doctors in England



Information system developments: the present and the future

‘Modern’ Information System Developments

- Conducting regular health and demographic population surveys
- Redesigning forms
- Establishing minimum datasets
- Computerising data storage
- Improving data analysis and reporting
- Web-site publication of results
- Orientation to (and ownership by) public sector providers
- Focussing on service production and productivity

‘Post-modern’ Information System Developments

- Tailoring to the needs of reformed health systems
- Redefining ownership and responsibilities
- Orienting to needs of patients, purchasers and regulators
- Concern with monitoring multiple dimensions of overall system performance
- Integrating routine information with surveys & *ad hoc* studies

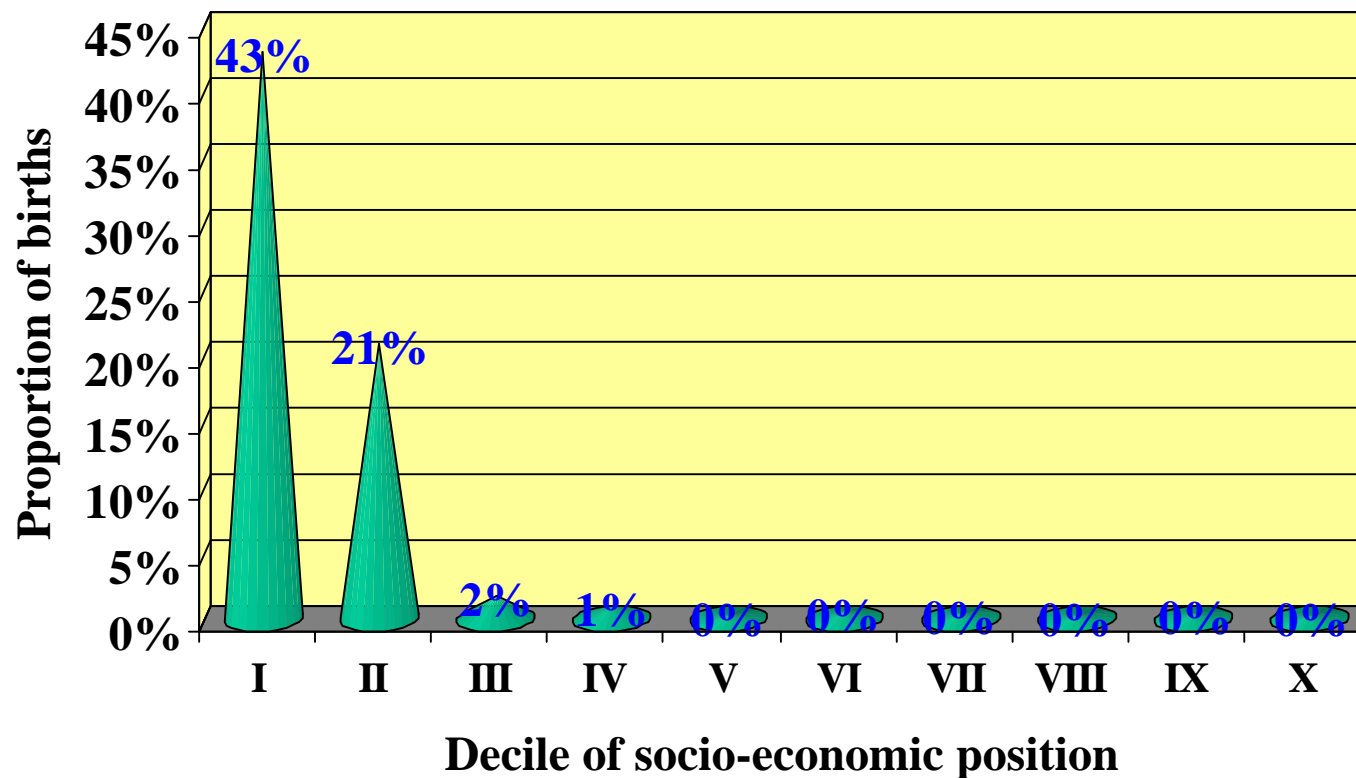
Health Sector Reform and Information System Development

- Recognition and encouragement of plurality in health service provision
 - 🕒 need to integrate public, private and social security data, particularly for disease surveillance and system-wide performance monitoring
- Strengthening the ‘stewardship’ role of ministries of health 🕒
developing their capacity to assess performance of the health system as a whole
- Separation of functions of purchasing and provision for health services
 - 🕒 need for independence of the institution responsible for generating performance indicators

Poverty Reduction and Information System Development

- Incorporating measures of socio-economic status in data collection forms to generate indicators of equity
- Monitoring socio-economic inequalities in access to services, utilization, and health outcomes
- Developing capacity to assess system performance in terms of how well they protect families against catastrophic health care costs

Proportion of children born outside hospitals or health centres by decile of socio-economic status



Source: National birth register, 1996

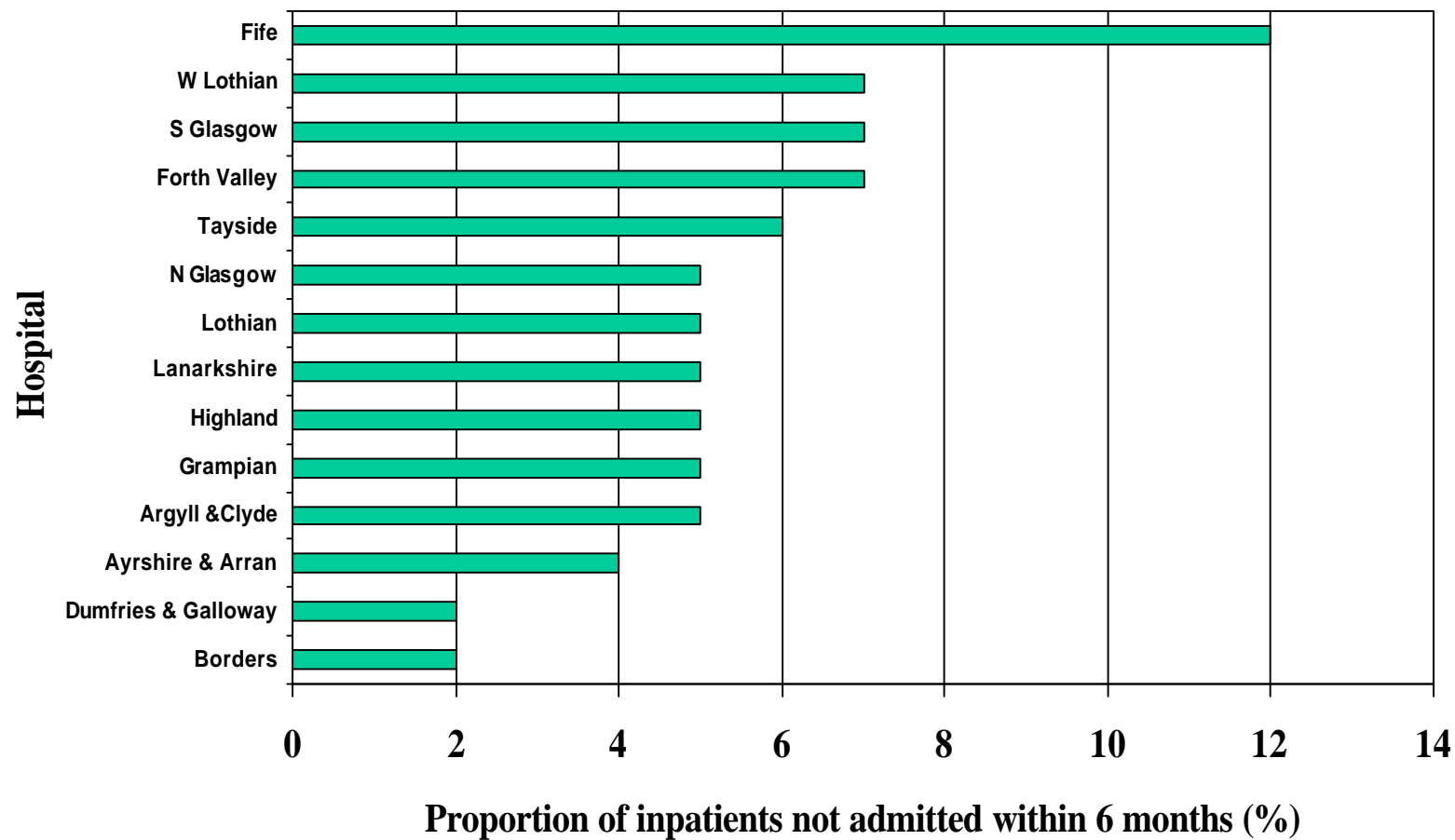
Improving Health System Performance through Information System Development

- WHR 2000 and the focus on health system performance
- Acknowledgement that health systems have a range of social functions beyond mere health gain
- Need for information systems to be able to evaluate and monitor the various dimensions of overall health system performance including:
 - (1) Health gain
 - (2) Equity
 - (3) Social security against catastrophic costs
 - (4) Process utility (client-perceived service quality)
 - (5) Value for money

Empowering Citizens through Information System Development

- Increasingly citizens are being asked to assess and purchase health services, either through facility co-payments, selection of insurance plans, use of vouchers, or by choosing doctors
- Citizens need information to effectively purchase and choose service providers
- Patient perceptions of quality are now acknowledged to be important and valid indicators of performance (particularly for patients). Purchasers and users of services therefore need to routinely monitor these.
- Publication of service performance indicators can have a powerful influence on health policy and on service management.

Waiting times for admission in Scottish hospitals



Areas for Investment in Developing Country Routine Health Information (I)

- Developing surveillance systems in collaboration with private sector clinical and laboratory service providers
- Establishing systems and dissemination modalities that help citizens to choose quality health services (health insurance) at reasonable prices
- Separating roles of data analysis and publication from health service provision
- Creating and strengthening capacity to flag adverse health events (eg maternal deaths) and conduct *ad hoc* enquiries

Areas for Investment in Developing Country Routine Health Information (II)

- Introducing record linkage between survey, census and routine health information (whilst maintaining privacy)
- Introducing socio-economic indicators into routine information sources for monitoring health and health service equity
- Improving routine data on service costs to enable efficiency to be monitored and value for money to be determined
- Increasing the availability of electronic sources of routinely collected data to public health specialists, journalists and researchers

Potential Modalities of Investment

- Lobbying for organisational change in the ownership of information and in responsibilities for dissemination with a view to establishing new independent structures holding a remit to provide service performance information to purchasers of health services (including specifically the general public).
- Demonstration projects of collaboration with private sector service providers, particularly for improving reporting and management of notifiable diseases
- International comparison studies making use of existing routine information to compare health system performance (in equity, avoidable mortality etc).
- Redesign of existing systems to incorporate more cost and socio-economic information on users, and to extend scope for record linkage between data sources (whilst protecting privacy).
- Pilot projects in the use of routine mortality and morbidity data as triggers for adverse health event enquiries