The National Indicator Project

Country: Denmark
Partner Institute: University of Southern Denmark, Odense
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Health Policy Issues: Quality Improvement
Current Process Stages

Featured in half-yearly report: Health Policy Developments 12

1. Abstract

The Danish National Indicator project aims to document and improve the quality of care at the national level. From 2000-2008 disease specific clinical indicators, standards and prognostic factors were developed for eight diseases. The project has been implemented in all clinical departments. All results are published in order to inform the public and to give patients and relatives the opportunity to make informed choices. The experiences indicate that the quality of care improved over time.

2. Purpose of health policy or idea

The aim of the Danish National Indicator Project is to document and develop the quality of care for the benefit of the patient. The project also aims at making comparisons (benchmarking), making judgements, determining priorities, support accountability and to provide transparency in health care.

The project focuses on documentation, monitoring and improvement of the quality in health care. The elements used in this process are:

- priority setting (which diseases should be included?),
- development of evidence based indicators and standards,
- data collection,
- data analysis, evaluation and interpretation,
- feedback to providers and managers,
- clinical audit,
- implementation of quality improvement, and
- public release of all data.

From 2000 to 2008 evidence-based disease specific quality indicators have been developed by multi-professional
groups of clinicians appointed by the respective scientific societies for the following eight diseases:

- stroke,
- diabetes,
- hip fracture,
- schizophrenia,
- acute intestinal surgery,
- heart failure,
- chronic obstructive lung disease (COLD), and
- lung cancer.

For each of these diseases six to ten specific quality indicators have been developed reflecting the medical technical aspects of care in terms of prevention, diagnostics, treatment, care and rehabilitation.

When the data have been collected, analysis, interpretation and evaluation of the results take place nationally, regionally and locally in each region at hospitals and in clinical units.

Clinicians and managers receive continuous feedback of results. The hospital units can see whether they are below or above standards, and whether their care is improving or worsening.

A structured clinical audit process is initiated in order to explain the results. The purpose is to provide professional interpretations and to evaluate the results in relation to critical incidents in order to implement and to monitor improvements. The audit process is organised nationally, regionally and locally.

After the professional process of analysis, interpretation and evaluation described above, the data are released publicly - in a specific edition to the professional environment and by a special edition to the public.

The project aims to assess the health care system as an organisation and does not focus on individuals. It is not the aim of the project to find scapegoats, but to highlight the best possible basis for improvement of quality and development of quality in the health care system. At the same time, a qualified basis will be created for a dialogue between the health care providers, managers, the political system, and patients.

Main objectives
The main objectives of the project are:

- Improving the quality of prevention, diagnostics, treatment and rehabilitation
- Providing documentation for making priorities
- Information of the quality in health care for patients and consumers

Type of incentives
non-financial

Groups affected
Health professionals, management at all levels in the Danish healthcare sector, the patients, the public
3. Characteristics of this policy

<table>
<thead>
<tr>
<th>Degree of Innovation</th>
<th>traditional</th>
<th>innovative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of Controversy</td>
<td>consensual</td>
<td>highly controversial</td>
</tr>
<tr>
<td>Structural or Systemic Impact</td>
<td>marginal</td>
<td>fundamental</td>
</tr>
<tr>
<td>Public Visibility</td>
<td>very low</td>
<td>very high</td>
</tr>
<tr>
<td>Transferability</td>
<td>strongly system-dependent</td>
<td>system-neutral</td>
</tr>
</tbody>
</table>

4. Political and economic background

5. Purpose and process analysis

Origins of health policy idea

Few countries are able to document the quality of their health care system. Few countries have a mandatory system to track the quality of care delivered to their citizens. Thus in most countries there is an urgent need for systematic approaches to performance and outcome measurement.

This implies, that our knowledge about the quality of care for common major diseases at national level is very limited and in some countries not even existing, and existing data may be of poor validity.

Assessing the quality of care has become increasingly important to providers, regulators, purchasers and patients. Providers wish to know how well they are performing and to have effective means of assessing and improving the quality of care they provide. But this will require measurements that are meaningful, interpretable, and of demonstrable value in the assessments. Regulators and purchasers have thus begun to focus on the transparency, accountability and the cost-effectiveness of health care in producing health outcomes. Patients need information about quality of care in order to be able to perform choices. As a consequence the Danish National Indicator Project was developed in the Danish Health Care System.

Initiators of idea/main actors

- Government
- Providers
- Scientific Community

Approach of idea

The approach of the idea is described as: new:
Actors and positions
Description of actors and their positions

**Government**
- Government, The National Board of Health
- The Danish Regions

**Providers**
- Professional organisations

**Scientific Community**
- The scientific medical societies

**Actors and influence**
Description of actors and their influence

**Government**
- Government, The National Board of Health
- The Danish Regions

**Providers**
- Professional organisations

**Scientific Community**
- The scientific medical societies

**Positions and Influences at a glance**

**Adoption and implementation**
Concerted action between different stakeholders

The Danish National Indicator Project (NIP) has been established as a concerted action between the Ministry of Health, the National Board of Health, the Centre for Evaluation and Assessment of Medical Technology, the Association of Danish Regions, the five regions, the Danish Medical Association, the Scientific Societies, the Danish Nursing Association, the Danish Physiotherapists Association and the Occupational Therapists Association.

The Coordinating Secretariat, which is run by the Danish regions, coordinates all activities of the Danish National Indicator Project. The secretariat communicates information about the project to all participants. It determines time schedules and coordinates other concrete activities in relation to the work in the indicator groups. It searches for documentation and scientific literature for each indicator group. The Coordinating Secretariat is responsible for the development of indicators and standards, data collection, implementation, auditing and public release of the data.

**Indicators jointly developed by different professional groups**

Each indicator group is established across clinical professions in coordination with the scientific societies (the Danish Medical Association, the Danish Nursing Association etc.). Indicator groups reflect all relevant health professions in relation to a given disease, including physicians, nurses, physiotherapists, occupational therapists and others. The composition of the indicator groups is designed to secure a high and multidisciplinary scientific standard and to promote a good working process in the group. The members of the group must reflect the disease area both clinically and scientifically as well as at a community hospital and university level. A multi-disciplinary indicator group
includes 8-15 members. Meeting attendance is compulsory in the indicator groups. Each member of the indicator groups is attached to the project with a contract that secures financial compensation for participation in the meetings.

Each indicator group is assisted by a staff consisting of the project manager, project coordinator, clinical epidemiologist and a documentarist. The documentarist searches for literature relating to indicators and standards.

Two basic principles are followed:

1. Providers determine evidence based indicators, standards and prognostic factors in relation to the clinical condition of the disease in focus, and

2. Providers interpret the results before they are released publicly.

Clinical epidemiologists are responsible for advising on issues in clinical epidemiology, planning for clinical epidemiological tasks, developing registration/recording forms for data collection, analysis and most important the interpretation of data related to the work of each indicator group.

**Implementation of the project in all hospitals treating patients with the defined diseases**

Quality indicators, standards and prognostic factors have been implemented in all participating clinical units and departments. There is a mandatory participation for all hospitals and relevant clinical departments and units treating patients with the eight diseases. The data elements for the quality indicators and prognostic factors are collected specifically as part of the project continuously for all patients with the eight diseases in the Danish healthcare system. At all participating clinical units and departments, data are collected electronically and transmitted securely via the Internet to the project's national database. In Denmark, it is possible to assign unique patient identifiers.

**Monthly feedback to providers**

Each clinical unit and department receive their own results every month so that they can follow on a continuous basis how they perform. The monthly report represents registrations with regard to the patients hospitalised in the previous months. This secures the availability of timely data for clinicians' continuous assessment and improvement on the
quality of care.

Yearly audit and public release of data

Once a year, a structured audit process is initiated by audit groups of clinicians at national, regional and local levels in order to explain the risk adjusted results and to prepare implementation of improvements for each disease. After the audit process is completed, the data for each department are released publicly. The release consists of case mix adjusted data for each participating department, together with a short summary of audit comments.

Monitoring and evaluation

The results from the National Indicator Project show that the proportion of recommended care provided to patients as well as the proportion of patients receiving all recommended interventions has increased significantly nationwide.

Review mechanisms

Mid-term review or evaluation, Final evaluation (internal)

Dimensions of evaluation

Structure, Process, Outcome

6. Expected outcome

The National Indicator Project has been implemented since 2003. Since the first results of the Danish national indicator project was provided in 2003-2008, it can be documented that the proportion of recommended care provided to patients has increased significantly nationwide. Measuring the proportion of patients receiving all recommended interventions according to the national practice guidelines, there has also been a significant increase between 2003 and 2008.

National Indicator Project will become permanent part of Danish system

Danish Regions has decided to implement the project as a permanent part of the Danish healthcare system. It has also been decided to expand the project for three diseases or clinical conditions in 2009: Birth, depression and inflammatory bowel diseases (Colitis Ulcerosa and Chron’s disease).

<table>
<thead>
<tr>
<th>Quality of Health Care Services</th>
<th>marginal</th>
<th>fundamental</th>
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<tbody>
<tr>
<td>Level of Equity</td>
<td>system less equitable</td>
<td>system more equitable</td>
</tr>
<tr>
<td>Cost Efficiency</td>
<td>very low</td>
<td>very high</td>
</tr>
</tbody>
</table>

7. References

Sources of Information

- Mainz J. Bartels PD. Nationwide quality improvement - how are we doing and what can we do? Int J Qual Health Care 2006; 18:79-80


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