A background for national quality policies in health systems

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ABSTRACT

The improvement of quality is, for most countries, central to the reform of health systems and service delivery. All countries face challenges to ensure access, equity, safety and participation of patients, and to develop skills, technology and evidence-based medicine within available resources.

The first part of this document outlines some of the values, forms and concepts which affect national approaches, together with the international influences of the Council of Europe, European Union and the WHO Regional Office.

The second part offers a framework and principles for a national quality strategy. This gives examples of policy, organization, methods and resources which have been applied to the institutionalisation of quality by Member States.

The appendices include a summary of recommendations from expert advisers on behalf of the Council of Europe and of WHO Europe. There is also a self-assessment tool to help identify existing mechanisms and future opportunities for quality improvements, as well as references to relevant publications and websites.

Keywords

QUALITY OF HEALTH CARE
DELIVERY OF HEALTH CARE – standards
OUTCOME ASSESSMENT (HEALTH CARE)
QUALITY CONTROL
NATIONAL HEALTH PROGRAMS
POLICY MAKING
EUROPE
CONTENTS

Acknowledgements ........................................................................................................................................i

Part 1: The context of quality ........................................................................................................................1
  Purpose ......................................................................................................................................................1
  Better Systems; better care ........................................................................................................................1

Part 2: Background for quality policy ...........................................................................................................9
  National values and priorities for quality ..................................................................................................9
  National organization and institutionalization of quality ........................................................................12
  Methods, techniques and tools for development of quality ....................................................................19
  Resources for quality improvement ........................................................................................................29
  Starting out and moving forward ............................................................................................................31

Annex 1 Classification of quality concepts and tools ................................................................................34
Annex 2 Self-assessment questionnaire .....................................................................................................36
Annex 3 Recommendations of the Council of Europe ..............................................................................40
Annex 4 WHO references on quality .........................................................................................................43
Annex 5 References ....................................................................................................................................45

Index ............................................................................................................................................................51

Table 1. Examples of national policies for quality in Europe .......................................................................9
Table 2. Examples of current policy initiatives, Ireland ..............................................................................10
Table 3. Examples of legislation for quality in health care, general ...........................................................11
Table 4. Examples of national quality policy groups/councils ....................................................................14
Table 5. Examples of national executive agencies ......................................................................................15
Table 6. Integrating quality agencies in Scotland and England, 2002 ........................................................16
Table 7. Examples of reference centres for clinical guidelines and HTA ...................................................17
Table 8. Appraisal of Guidelines Research and Evaluation (AGREE) project ...........................................18
Table 9. Journals of national societies for quality in Europe .....................................................................18
Table 10. Definitions of accreditation, licensure and certification ..............................................................20
Table 11. National accreditation programmes launched since 1995 in Europe ..........................................22
Table 12. Features of collegial and regulatory systems ..............................................................................22
Table 13. Some national standards projects ...............................................................................................24
Table 14. Some national measurement projects .........................................................................................25
Table 15. Some national improvement projects .........................................................................................27
Table 16. National initiatives for patients’ rights ........................................................................................28
Table 17. Some government guides to quality ............................................................................................28
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Part 1: The context of quality

Purpose

The first part of this document aims to provide Ministers of Health, and other policymakers in WHO Member States, with background information on common definitions and issues surrounding quality of health systems and health care.

The second part presents a background for a national programme for improving quality, based on research evidence and on experience from other countries in and beyond Europe.

The definition and assessment of quality used to be left to technology, professionals and economists; now, in the context of health systems, it is increasingly the domain of patients, of a well informed public and electorate, and of a competitive market which compares performance with other countries. The growth of technology and information, the demands for transparency and public accountability, and the limits of financial and human resources oblige every Member State to describe and reform its health system according to internationally recognized standards of structures, process, performance and results.

Better Systems; better care

Priorities for quality

Much of the research and development of quality in health care came from the developed countries, especially the United States, and focused on hospitals, high technology and voluntary self-regulation. But the first priorities in many countries are to develop basic health care, community services and public health. Here, quality programmes tend to be driven by government and statutory control.

However, public, political and professional dissatisfaction with health services shows a global consensus. Concerns relate particularly to access and continuity of care, clinical effectiveness, patient safety, value for money, consumer responsiveness and public accountability. Thus the developed world has begun to shift attention towards preventive medicine, primary care, consumer involvement and more explicit regulation by government and funding agencies through managed care and health networks.

The main reasons given by EU member and accession states to implement quality assurance strategies are (1):

- Unsafe health systems;
- Unacceptable levels of variations in performance, practice and outcome;
- Ineffective or inefficient (overuse, misuse or underuse) healthcare technologies and/or delivery;
- Unaffordable waste from poor quality;
- User dissatisfaction;
- Unequal access to healthcare services;
- Waiting lists;
Unaffordable costs to society:
Waste from poor quality.

The language of quality

No consensus exists on the definition of quality or how it should be measured, either in overall health systems or in population or individual health care. Different cultures have different values and priorities; for some, “goodness” means the provision of staff and facilities, for some it means equity and compassion, for others it means optimum clinical outcomes. The challenge for every country is to recognize these various legitimate expectations and to reconcile them in a responsive and balanced health system. However, according to a framework proposed by a group of authors in WHO/HQ in 2001, the quality of health systems is defined as the level of attainment of health systems’ intrinsic goals for health improvement and responsiveness to legitimate expectations of the population (2).

Values

The quality of health care is often debated by users, providers and purchasers, but the overall health of the population depends more on the quality of the health system including the country’s social, economic, educational and cultural environment. But the quality of health care provided to the population is also largely determined by models of financing, legislation and other regulatory mechanisms.

There is general agreement that “quality” should be assessed from the viewpoints of major stakeholders (such as users, care providers, payers, politicians, and health administrators) and against explicit criteria which reflect the underlying values of a given society. The most commonly quoted elements of a “good” health system relate to Donabedian’s adaptation of the concept of input-process-output in industrial manufacturing.

Structure – availability of human, financial, technical resources (investment):

• How they are allocated in terms of time, place and responsiveness to the needs of populations (access);
• Fairness in sharing costs and benefits (equity).

Process – how the resources are applied (stewardship):

• Use of time and resources (efficiency);
• Avoidance of waste (economy);
• Reduction of risk (safety);
• Evidence-based practice (appropriateness);
• Patient-focused care (continuity);
• Public information (choice, transparency, accountability).

Outcome – what results are achieved (performance):

• Population health (health improvement);
• Clinical outcome (effectiveness);
• Meeting expectations of public and workforce (satisfaction);
• Value for money (cost-benefit).
It is not realistic to expect to concentrate on all of these values at the same time. Each country should define the strategic totality of values in quality (preferably in terms which could survive a change of government), and then define the operational priorities.

**Concepts of improvement**

A mechanical approach to “quality control” and inspection of inputs and processes is appropriate to machines and can produce static compliance with minimum standards. But it has been proven that it does not stimulate human behaviour towards a conscious dynamic improvement and often leads to blame and punishment, which do not motivate staff and managers in professionally led services.

In the past twenty years, the concept of improvement of health systems has moved away from top-down control, compliance and punishment towards bottom-up development, self-regulation and incentives; quality measurement has shifted from resource inputs to performance outputs. Emphasis has moved from “quality control and assessment” to the definition of agreed and valid standards, systematic and reliable measurement of performance, implementing action for change, repeated measurement and continuous improvement in a cycle or upward-moving spiral.

**Figure 1. The cycle of quality improvement**

Quality cannot be “inspected into” healthcare systems; improvement requires a quality culture to be shared by managers and staff, particularly the clinical professions which are most resistant to external control and regulation. Currently there is little evidence that regulatory systems have adopted the principles of continuous quality improvement (3), but there is also evidence that internal mechanisms of organizational and personal development on their own have repeatedly failed to ensure safety, efficiency, best practice and public accountability. Ideally, national quality improvement programmes would be subject to the same scientific evaluation as clinical technologies but in reality they rarely are – even though the methods exist for more robust examination (4).
Several analyses of national health policy on quality development (5–8) have recognized a need for a collaborative balance between voluntary, independent peer review by health professionals (such as by clinical audit, governance and accreditation) and statutory, governmental control (such as by licensing, registration and inspection). The general conclusions were that statutory and voluntary quality systems should be coordinated with national or local government in order to ensure valid standards, reliable assessments, transparency and public accountability. For their part, the medical associations of Europe have committed themselves to encouraging the responsibility of health care providers in the process of continuous quality improvement (9).

But so far there is little evidence that mechanisms designed for external regulation are effective routes to quality improvement, or that professional self-regulation ensures public accountability, or that the two goals can be achieved better by a single structure. Therefore it is clear that governments must work with independent bodies of users, health professionals, insurers and health politicians to improve the quality of health systems.

A key aim of any national strategy for quality is therefore to identify and develop the common interests and partnerships between governmental and nongovernmental contributors.

**The environment of quality**

**International environment**

In Europe, key intergovernmental contributors to policy on quality in health care are the Council of Europe, the European Commission and WHO Regional Office for Europe. Other influences are funding agencies, such as the World Bank and national development agencies, and cross-border market forces resulting from freedom of travel, insurance, trade and professional practice.

Less formal networks also promote the generation and exchange of evidence and methods of quality improvement through international societies (such as for technology assessment (10), quality (11), and primary care (12) and the European Society for Quality in Healthcare (13)) and collaborations of professional and technical interests (such as the European Organization for Quality (14), the European Foundation for Quality Management (15), and the Cochrane collaboration (16)).

**Council of Europe**

The Council of Europe established a committee of experts on quality in 1995. This committee drafted a series of recommendations to health ministers (adopted in 1997) that the governments of Member States should establish a quality improvement system (17), meaning: “To create policies and structures, where appropriate, that support the development and implementation of ‘quality improvement systems’, i.e. systems for continuously assuring and improving the quality of health care at all levels”.

The resolution was based on the notion that receiving health care of good quality is a fundamental right of every individual and each community, that it is implicit in Article 11 of the European Social Charter on the right to the protection of health, and because Article 3 of the Convention on Human Rights and Biomedicine requires that Contracting Parties provide “equitable access to health care of appropriate quality”. The appendix to this resolution outlined 17 practical guidelines for a national quality improvement system (see Annex 3).
**European Union**

The mission of the Directorate General for Health and Consumer Protection is to “ensure a high level of protection of consumers’ health, safety and economic interests as well as of public health at the level of the European Union” (18). Although the delivery of health services is clearly the responsibility of individual states, the common agenda of transparency and consumer protection increasingly brings social, if not legal pressure upon them for European standardization in order to ensure free and safe movement of goods, personnel and consumers (19). Health ministers agreed in 1998 to collaborate on quality in health care; the Austrian Federal Ministry published a summary of quality policies in EU Member States in 1998 (20), and in accession states in 2001 (21).

Successive funded programmes have encouraged collaboration throughout Europe in biomedical and health service research (such as on health care outcomes, hospital utilization (22), and external assessment programmes (23)). The COMAC project (24) compared approaches to quality assurance in 262 hospitals across the EU and has been credited with stimulating formal programmes in Israel (25) and in Poland (26).

In May 2000 the Commission adopted a new public health strategy (27) to take account of recent legal and political developments and of the 1998 review of the existing policy in the EC (28). That review had recommended three priorities:

- Improving information for the development of public health;
- Reacting rapidly to threats to health;
- Tackling health determinants through health promotion and disease prevention.

Paragraph 48 of the 2000 strategy paper introduced the concept of actively spreading best practice in health care (and thus quality improvement) among Member States of the Union – and among those seeking to join –:

> A major emphasis … would be placed on best practice in health care, i.e. the current best evidence as regards the safety, efficacy, effectiveness and cost-effectiveness of different approaches to health promotion, prevention, diagnosis and treatment … The work would aim to promote and bring together activities in the Member States in the fields of evidence-based medicine, quality assurance and improvement, appropriateness of interventions, and health technology assessment. Coordination of work in these fields would be supported and set on a formal footing in order to pool the expertise of the centres in the Member States, to gather and exchange information, stimulate international studies, and improve the dissemination of findings.

**World Health Organization**

In 1977, the World Health Assembly of WHO (29) launched the global targets of Health for All by the year 2000 by adopting the declaration of the international conference on primary health care, held in Alma-Ata, USSR (now Almaty, Kazakhstan) in 1978. In the same resolution, Member States of WHO were invited to act individually in formulating national policies, strategies and plans of action for attaining this goal, and collectively in formulating regional and global strategies. In 1998, the Fifty-first Assembly reaffirmed these principles for the 21st Century and committed support for relevant regional and national policies and strategies.

For twenty years, the Regional Office has actively promoted quality in health care through expert groups, training and publications; this focused on the management and clinical delivery of care. In September 1998, the Regional Committee, which comprises ministerial delegations from the
Member States, adopted *Health 21 – health for all into the 21st century* (30) and 21 targets as benchmarks against which to measure progress in protecting and improving health. Target 16, “Managing for quality of care”, focuses on outcomes as the ultimate measure of quality:

By the year 2010, Member States should ensure that the clinical management of the health sector, from population-based health programmes to individual patient care at the clinical level, is oriented towards health outcomes.

16.1 the effectiveness of major public health strategies should be assessed in terms of health outcomes, and decisions regarding alternative strategies for dealing with individual health problems should increasingly be taken by comparing health outcomes and their cost-effectiveness;

16.2 all countries should have a nationwide mechanism for continuous monitoring and development of the quality of care for at least ten major health conditions, including measurement of health impact, cost-effectiveness and patient satisfaction;

16.3 health outcomes in at least five of the above health conditions should show a significant improvement, and surveys should show an increase in patients’ satisfaction with the quality of services received and heightened respect for their rights.

Since 2000 the Regional Office has broadened the scope of the quality programme, shifting from quality of care to quality of health systems, from single diseases to the components of health systems such as organization, financing and performance management (31).

The World Health Report 2000 (32) proposed a framework for evaluating and improving performance of health systems in four key functions of delivering services (provision), creating resources (investment and training), financing (collecting, pooling and purchasing), and stewardship (oversight) and used five indicators to measure three major objectives: health, responsiveness (to people’s nonmedical expectations), and fair (financial) contribution. Thus 191 states were ranked in terms of:

- Overall level of population health;
- Health inequalities (or disparities) within the population;
- Overall level of health system responsiveness (a combination of patient satisfaction and how well the system acts);
- Distribution of responsiveness within the population (how well people of varying economic status find that they are served by the health system);
- Distribution of the health system's financial burden within the population (who pays the costs).

The WHO Director-General summarized some conclusions of the report:

- Responsible management of the wellbeing of the population and of the entire health system (stewardship) is the essence of good government;
- Many countries have more preventable deaths, especially amongst the poor, than would be expected from their level of health expenditure;
- Low income countries should protect people against the financial costs of illness by expanding pre-payment systems and spreading financial risk;
• Health ministries should not focus exclusively on the public sector, but aim to harness the energies of the independent sector to improve system performance.

**National environment**
The root causes of poor performance (and therefore also the opportunities for improvement) vary between and within countries, both in health care and in the wider health system. Each country has its own challenges, but there are many lessons which can be exchanged between countries in the definition, measurement and improvement of performance.

One common experience is that improving quality depends less on having more staff, equipment or money than on reorganizing the use of resources we already have, and changing the way we work. It is about behaviour more than technology; and that is why tools of quality which work in one country may not be successfully injected into or exported to another.

Openness, confidence, motivation and commitment are the foundations of a quality culture. But often, traditional practices and attitudes towards authority, mutual support and individual responsibility actively resist improvement. These create a culture of low expectations (from public and professions), vertical command structures, restricted information and a negative view of accountability and responsibility. Symptoms include:

Management is by command rather than by leadership; it is focused on the administration of individual departments and services rather than on the links between them and the performance of a corporate organization.

• Staff and public assume that there can be no change without legislation or compulsion.
• Professions are not authorized, not organized or not willing to take responsibility for improving clinical performance based on self-regulation.
• Quality improvement is seen to refer primarily to structure, equipment, buildings and staff rather than to operational processes and results. In the absence of performance data and adequate monitoring, the service with the most resources is assumed to be “the best”.
• Errors are covered up or blamed on individuals, rather than used as an opportunity to improve the system and reduce harm; quality management is seen as a way of inspection, controlling rather than encouraging improvement of the system.
• Professionals and users have very limited knowledge or understanding of the existing organization of health services with regard to their rights and roles as partners.
• The health system is seen as an isolated world rather than interconnecting with the quality of other systems.

The seeds of quality improvement need a fertile soil which may take years to prepare. The European Organization for Quality is focusing on management as one of the key social dimensions of quality improvement in health care (33). Many professionals, particularly older doctors, are uncomfortable with patient empowerment, peer review and team working, and with sharing information and power. A key stage in developing a national strategy is an assessment of the prevailing culture and the long-term implications for reassurance, training and information for the major stakeholders: users, health professionals, politicians and payers.

There is no universal template for a national policy on quality, but there are common elements of intention, organization and activity which national governments show to be important, either by
formal publication or by the evidence of action. These are presented in Part 2 under the headings of:

- National values and priorities for quality;
- National organization and structures for quality;
- Methods, techniques and tools for quality development;
- Resources for quality improvement.
Part 2: Background for quality policy

National values and priorities for quality

Principle: The government’s values, vision and strategies for quality improvement are comprehensive, consistent and based on evidence and consultation with stakeholders.

- They are explicitly stated and disseminated to the public, providers and purchasers.
- The policy is comprehensive, accessible and consistent with other policies and legislation. It identifies key roles and incentives for quality improvement.

Some governments express quality values, such as access, equity, and effectiveness in general statements of policy; some publish explicit standards such as patients’ charters, health improvement targets and service frameworks; some sponsor specific initiatives for performance measurement such as clinical indicators; some set up national centres for quality methodology and licensing of institutions; but few have published comprehensive policies for quality improvement in health systems or health care. In many cases this is because the policy is implicit, or it is packaged with strategic reform or with other operational initiatives. Quality needs to be a clear priority on every management agenda, starting from the Ministry.

Many initiatives to improve quality, especially in developing countries, form part of packages of reform in public health and primary care; some flow from isolated projects (mostly financed by international agencies), or efforts to maintain and improve standards of care while controlling costs and encouraging competition; and some are to establish public accountability and restore public confidence in the face of emerging evidence of health system failures. The dominant motive is shaped by the public/private division of the funding and delivery of services, by the balance of central or local control, and by public and professional attitudes to regulation as opposed to self-management. There are several countries in Europe that have designed national policies for quality development.

Table 1. Examples of national policies for quality in Europe

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Title</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>1995</td>
<td>DCQ des soins: proposition de politique nationale</td>
<td>Ministry of public health and environment</td>
</tr>
<tr>
<td>Bosnia-Herzegovina</td>
<td>2001</td>
<td>Policy on Health Care Quality and Safety</td>
<td>MoH, Federation of BiH</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>2000</td>
<td>National policy programme for quality</td>
<td>Decree 458/2000 requires performance measurement, casemix management, practice guidelines, accreditation of facilities</td>
</tr>
<tr>
<td>Estonia</td>
<td>1998</td>
<td>Quality Policy for Estonian Health Care</td>
<td>Quality policy working group: Ministry of Social Affairs, Central Sick Fund, medical and nursing associations; clinical guidelines, (re) licensing of professionals and institutions, certification of specialists, accreditation of hospitals and polyclinics, patient and public satisfaction studies</td>
</tr>
<tr>
<td>Country</td>
<td>Year</td>
<td>Description</td>
<td>Details</td>
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<tr>
<td>Finland</td>
<td>1995</td>
<td>National recommendations on quality management in health and social care</td>
<td>STAKES: Quality to be part of everyday work, client-orientated, and mediated through information</td>
</tr>
<tr>
<td>Germany</td>
<td>1998</td>
<td>National recommendations on quality management in health care</td>
<td>Quality policy working group: national and regional ministries of health</td>
</tr>
<tr>
<td>Ireland</td>
<td>2001</td>
<td>National health strategy</td>
<td>Explicit goals for high performance include quality systems and health service research into quality improvement</td>
</tr>
<tr>
<td>Italy</td>
<td>2000</td>
<td>National Health Plan</td>
<td>Seven priorities for public health improvement; national targets</td>
</tr>
<tr>
<td>Norway</td>
<td>1996</td>
<td>National strategy for quality improvement in health care</td>
<td>Definitions of legal accountability through local government and professional self-regulation; all providers of health services to have effective quality systems by 2000</td>
</tr>
<tr>
<td>Portugal</td>
<td>1998</td>
<td>National health strategy: quality policy</td>
<td>Develop and implement CQI nationally using EFQM</td>
</tr>
<tr>
<td>Slovenia</td>
<td>1996</td>
<td>QHC: a proposed national policy</td>
<td>MoH, Republic of Slovenia, Committee for QHC</td>
</tr>
<tr>
<td>Sweden</td>
<td>1993</td>
<td>National strategy for quality improvement</td>
<td>Defined responsibilities for QA; technology assessment</td>
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<tbody>
<tr>
<td>63</td>
<td>Quality systems will be integrated and expanded throughout the health system</td>
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<tr>
<td>64</td>
<td>A review of medicines legislation will be undertaken</td>
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<tr>
<td>65</td>
<td>Licensing of alternative medicines will be examined</td>
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<tr>
<td>66</td>
<td>The highest international standards of safety in transfusion medicine will be set and adhered to</td>
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<tr>
<td>67</td>
<td>Legislation on assisted human reproduction will be prepared</td>
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<tr>
<td>68</td>
<td>Decisions across the health system will be based on best available evidence</td>
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<tr>
<td>70</td>
<td>Accountability will be strengthened through further development of the service planning process</td>
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<tr>
<td>71</td>
<td>Each health board will develop implementation plans</td>
<td></td>
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<tr>
<td>72</td>
<td>Service agreements between the health boards and the voluntary sector will be extended to all service providers and associated performance indicators will be introduced</td>
<td></td>
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</tr>
<tr>
<td>73</td>
<td>Health research will continue to be developed to support information and quality initiatives</td>
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</table>

**Legislation**

Although most national strategies for quality are based on a mixture of statutory and voluntary activities, their ability to reach every part of every organization depends largely on the
willingness of individuals to participate. One approach is to require by national law that specified quality structures or activities are maintained (Table 3). Because many countries organize and regulate health services and personnel at subnational level, federal legislation is often implemented at the level of state, province, region, county, Lande, or canton. In almost all countries, the government has laid down the principles and left it to local purchasers, providers and insurers to implement them.

In the case of Austria where 99% of the population are covered by compulsory health insurance, the 1993 legislation was introduced in response to public demand, increasing competition, limited funding and the reform of hospital financing. Similar legislation in The Netherlands in 1996 extends also to primary care and emphasizes internal quality systems and self-regulation with external accountability to the Inspectorate of Health and to patient organizations. As in Austria, the Dutch law was prompted by a shift to market and service thinking and a concern that negotiations between providers, purchasers and consumers should include quality as well as volume and price. The 2000 health reforms in Germany were aimed to improve the supply of services and to control the cost of health insurance.

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Requirements</th>
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<tbody>
<tr>
<td>Austria</td>
<td>1993</td>
<td>Krankenanstaltengesetz (KAG, Hospital and Clinics Act) specifies hospital patients’ rights, comparative external evaluation, internal quality systems, QA committees</td>
</tr>
<tr>
<td>Belgium</td>
<td>1987</td>
<td>Hospital quality committees</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1999</td>
<td>Law on Health Care Facilities requires mandatory accreditation of hospitals and some out-patient services as a requirement for health insurance funding contracts from 2001</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>2000</td>
<td>Resolution N458/2000 defines a national quality programme consistent with policies of EU and WHO Health 21</td>
</tr>
<tr>
<td>France</td>
<td>1984</td>
<td>Law requires hospital medical committees to issue annual report on quality evaluation</td>
</tr>
<tr>
<td>France</td>
<td>1991</td>
<td>Law requires hospitals to define and demonstrate internal quality systems</td>
</tr>
<tr>
<td>France</td>
<td>1996</td>
<td>Ordonnance du 24 avril on reform of public and private hospitals requires mandatory quality improvement, patient surveys and hospital accreditation (later extending to health networks)</td>
</tr>
<tr>
<td>Georgia</td>
<td>1995</td>
<td>Law on Health Care limits right to practice to doctors and institutions which are licensed and accredited by 2001</td>
</tr>
<tr>
<td>Germany</td>
<td>1989</td>
<td>Health Reform Act requires QA for hospital and out-patient care; physicians to ensure that care meets standards (§70) and to be held responsible for imperfect and unauthorized treatment (§75); mandatory benchmarking of hospital process and outcome (§137); sick funds responsible for quality assurance (38)</td>
</tr>
<tr>
<td>Germany</td>
<td>2000</td>
<td>Health reform requires patient choice, cost-effective clinical practice</td>
</tr>
<tr>
<td>Germany</td>
<td>2001</td>
<td>Hospitals and rehabilitation units must have a quality management system Hospitals must write a quality report every two years (for the first time about the year 2004) (SGB V §137) Ten national evidence based guidelines must be developed per year</td>
</tr>
<tr>
<td>Hungary</td>
<td>1997</td>
<td>Act CLIV of 1997 on Health requires each health institution to operate an internal quality management system, funded by 0.1% of the total budget</td>
</tr>
</tbody>
</table>

Table 3. Examples of legislation for quality in health care, general
Some specific issues of quality are covered by legislation, and compliance is subject to statutory inspection in most countries. These include issues of public health and safety which generally override national, professional and personal freedoms, such as radiation, infection, hygiene, transfusion, medical devices, drug manufacture, complaints and licensing of facilities. They also include registration and, in some countries, re-registration of clinical personnel.

**National organization and institutionalization of quality**

**Principle:** There are effective mechanisms to integrate and implement the national policy within national and local government, and between all stakeholders and sectors of health care provision.

- Coordination of quality improvement is clearly defined within the ministry of health; there are effective communications with other agencies e.g. health insurance, public health, finance, information and international.
- Accountability and mechanisms for implementing quality improvement are defined throughout the health system.
- Support structures, such as agencies, boards, committees and networks (including nongovernmental organizations, patients’ complaints, training and research institutions, professional groups) are established, publicised and accessible nationally.

Quality improvement systems should be set up at all levels of care provision: individual care providers, practices, hospitals, other institutions, and at the interfaces between them. The same
requirements for health care quality assurance should be established in all public and private health institutions. Throughout the health care system, management processes need to include:

- Designated leadership, accountability, supervision, monitoring and communication of quality at subdistrict, district, regional and national levels;
- Public accountability through reporting of quality improvement systems through objective external assessment by independent bodies;
- Dissemination of quality information to civic groups with an interest in health, such as women's groups, health educators, legislators and mass media;
- Coordination of multidisciplinary quality assurance projects using common protocols on such topics as peri-operative, maternal and perinatal deaths and iatrogenic drug reactions;
- Regular, systematic feedback of data on important process and outcome measures to individuals, organizational units and organizations.

Countries with well established quality programmes tend to support policy, executive and information functions at national level. Governmental strategies need to identify and support the contributions of users, professional, academic and other independent organizations towards the national programme. These organizations may be involved in separate centres or committees, inside or outside government, such as:

- Policy: a formal mechanism by which users, purchasers, providers, professions and government contribute to developing and sustaining a comprehensive, integrated and long-term policy on quality;
- Executive: technical unit for development of national standards, measurements, audits, and training; support structures, such as agencies, boards, committees, networks and national regulatory bodies, e.g. for technology and safety;
- Information: collection and dissemination of national and international experience, techniques, data and references; national resource centre for the collation and dissemination of comprehensive comparative information on performance (quality, quantity, cost and value for money); may include representatives from other sectors, nongovernmental organizations, teaching and research institutions and professional groups.

**National policy groups (vision)**

Several governments have established quality units within the Ministry of Health, or have convened multi-agency think tanks to develop visions and concepts of quality according to national priorities and possibilities (Table 4). Many of the latter were set up specifically to carry out a pre-defined government objective of reform but others have a remit both to develop and to oversee the implementation of comprehensive and consistent national policy. User, purchaser and provider representatives are often included.

Professional representation, such as from medical and nursing associations, is variable but some national professional bodies have played a leading role in promoting quality in health care. For example in Germany, the medical chamber, the nursing society and the health insurance funds began a consortium, later including the society of all hospitals, to develop healthcare accreditation.
Table 4. Examples of national quality policy groups/councils

<table>
<thead>
<tr>
<th>Country</th>
<th>Founded</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>1995</td>
<td>Care Quality Department, MoH</td>
</tr>
<tr>
<td>Bosnia-Herzegovina</td>
<td>2001</td>
<td>Working group on quality and accreditation</td>
</tr>
<tr>
<td>Finland</td>
<td>1994</td>
<td>National committee for research in QHC: allocates government budget</td>
</tr>
<tr>
<td></td>
<td></td>
<td>under health insurance law</td>
</tr>
<tr>
<td>Israel</td>
<td>1995</td>
<td>National committee for research in QHC: allocates government budget</td>
</tr>
<tr>
<td></td>
<td></td>
<td>under health insurance law</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1994</td>
<td>Harmonization of Health Certification (HKZ) (39): council to harmonize</td>
</tr>
<tr>
<td></td>
<td></td>
<td>certification, accreditation, ISO, EFQM</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1990</td>
<td>National “quality conferences” each five years to define policy,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Leidschendam (40)</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>1999</td>
<td>Federal Methodological Center for Quality Management within Central</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Public Health Research Institute to develop and disseminate quality</td>
</tr>
<tr>
<td></td>
<td></td>
<td>methodology in Russia; supported by QAP/URC; website in English and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Russian (41)</td>
</tr>
<tr>
<td>Spain</td>
<td>1998</td>
<td>Health care accreditation working group: national programme of regional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and central governments</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2000</td>
<td>Quality Taskforce established by minister of health, comprising front</td>
</tr>
<tr>
<td></td>
<td></td>
<td>line NHS staff and consumer representatives</td>
</tr>
</tbody>
</table>

National executive agencies (implementation)

In some countries, executive agencies separate from the Ministry have been set up to coordinate or directly manage part or all of the programme for quality improvement. Some are independent; some are arms of government. Their common functions, often shared by more than one agency, include:

- To advise on federal priorities for quality improvement in order to focus available resources on those areas which are most likely to yield highest benefits to patients;
- To define general principles for quality improvement methods which have been shown to be appropriate, effective and affordable;
- To research and develop collaborations, individuals, pilot projects and training programmes to enable systematic quality improvement to be institutionalized at regional and local level;
- To research and develop systems for safety surveillance and reduction of risk to staff and patients;
- To coordinate at federal level the gathering, development and adoption of optimal organizational standards as guidelines for improving services, and as a basis for their external assessment and accreditation;
- To oversee the definition, validation and dissemination of evidence-based guidelines for effective and efficient clinical practice in collaboration with professional, managerial and consumer organizations;
- To develop data which are routinely available from primary and hospital care for use as numerical measures of clinical and organizational performance at local and national level;
To make information on the theory and practice of standards, measurements and improvement accessible to all health personnel by cataloguing and signposting local, national and international quality resources, reference centres and publications.

Table 5. Examples of national executive agencies

<table>
<thead>
<tr>
<th>Country</th>
<th>Title</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>Centre for medical technology assessment</td>
<td>Evaluate new technologies and disseminate results to purchasers, providers and the public</td>
</tr>
<tr>
<td>Finland</td>
<td>Quality Council for Health Care STAKES <a href="http://www.stakes.fi">www.stakes.fi</a></td>
<td>Responsibility delegated by MoH for national care registers, quality indicators, patient satisfaction databases, technology assessment</td>
</tr>
<tr>
<td>France</td>
<td>Agence Nationale d’Accréditation et d’Évaluation en Santé ANAES (statutory) <a href="http://www.anaes.fr">www.anaes.fr</a></td>
<td>Accreditation of health facilities, evaluation of clinical practice and guidelines, and definition of interventions which are reimbursable under health insurance</td>
</tr>
<tr>
<td>Italy</td>
<td>Agenzia per i Servizi Sanitari Regionali</td>
<td>Under authority of the Ministry of Health collaborates with the Regions to support and survey health activity including CQ1, accreditation, indicators, guidelines etc.</td>
</tr>
<tr>
<td>Lithuania</td>
<td>State Health Care Accreditation Service</td>
<td>Under authority of Ministry of Health, the Service licenses institutions and specialists, and approves medical devices</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Dutch Institute for Healthcare Improvement CBO <a href="http://www.cbo.nl/">www.cbo.nl/</a></td>
<td>Guideline development, visitation systems, indicator development and a national registry of quality indicators, methods and training</td>
</tr>
<tr>
<td>Portugal</td>
<td>Instituto de Qualidade em Saude (IQS) <a href="http://www.iqs.pt">www.iqs.pt</a></td>
<td>Clinical practice guidelines; “MoniQuOr” assessment and monitoring of organizational quality in health centres; development of hospital accreditation programme</td>
</tr>
<tr>
<td>Romania</td>
<td>National Commission for Hospital Accreditation</td>
<td>Board represents MoH, doctors, insurers and hospital association; replaced sanitary authorization by MoH</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>National Patient Safety Agency <a href="http://www.npsa.org.uk">www.npsa.org.uk</a></td>
<td>Special health authority to coordinate United Kingdom efforts to report, and to learn from, adverse events occurring in the NHS (only). For general issues see Australian experience (43)</td>
</tr>
</tbody>
</table>

Some countries have divided these functions among numerous agencies. There is a danger that fragmentation leads to duplication, omissions and confusion of standards and assessments. One remedy (suggested by the public inquiry into paediatric cardiac surgery in Bristol in the west of England (44)) is to introduce an extra national body to coordinate all the other agencies. This was rejected by the Department of Health (45) but in 2002 proposals from Scotland and then from England supported an integration of functions in the public and private sector (Table 6).
Table 6. Integrating quality agencies in Scotland and England, 2002

<table>
<thead>
<tr>
<th>New agency</th>
<th>Main elements</th>
<th>Main functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>England: “Delivering the NHS Plan” (46) proposes Commission for Healthcare Audit and Inspection</td>
<td>Commission for Health Improvement</td>
<td>Local reviews of clinical governance, implementation of service frameworks, troubleshooting of NHS health care (including Wales) <a href="http://www.chi.nhs.uk">www.chi.nhs.uk</a></td>
</tr>
<tr>
<td></td>
<td>National Care Standards Commission</td>
<td>Inspection of private and voluntary health care <a href="http://www.doh.gov.uk/ncsc/">www.doh.gov.uk/ncsc/</a></td>
</tr>
<tr>
<td></td>
<td>Audit Commission</td>
<td>Value for money and financial audit of public services <a href="http://www.audit-commission.gov.uk/ltc/acuteportfolio.shtml">www.audit-commission.gov.uk/ltc/acuteportfolio.shtml</a></td>
</tr>
<tr>
<td></td>
<td>Health Technology Board</td>
<td>Evidence-based advice on innovations in healthcare <a href="http://www.htbs.co.uk">www.htbs.co.uk</a></td>
</tr>
<tr>
<td></td>
<td>Scottish Health Advisory Service</td>
<td>Quality for mental illness, disability, frail elderly <a href="http://www.show.scot.nhs.uk/shas/">www.show.scot.nhs.uk/shas/</a></td>
</tr>
</tbody>
</table>

**National resource centres (sharing experience)**

Central elements in a national structure for quality often include a technical resource centre which collects and distributes national and international experience, or a clearing house linking other sources (Table 7). These may be units within the health ministry, part of an executive agency, separate government agencies, research centres or self-financing independent bodies. They are commonly set up with public money and, despite income generation from products such as training and publications, need continued central support. For example:

*Agency for Health Technology Assessment and Research, Catalonia, Spain*

The Catalan Agency for Health Technology Assessment and Research (CAHTA) was created in 1994, as a successor of the former Catalan Office for Health Technology Assessment (COHTA) which was created in 1991. As a non-profit public agency affiliated to the Catalan Health Service, it assumed responsibility in 1999 for designing and implementing a new health research strategy for Catalonia. It is also a WHO collaborating centre for HTA.

*Centre for quality and accreditation in health care, Slovakia*

Established by the Slovak Government with one full-time member of staff to develop a system for comprehensive assessment of the quality of care provided by the health service.

*Scottish Intercollegiate Guidelines Network SIGN*

The Scottish Intercollegiate Guidelines Network (SIGN) was formed in 1993 to improve clinical care by developing, publishing and disseminating guidelines for good clinical practice. SIGN selects guideline topics on the basis of the burden of disease, evidence of variation in practice and the potential to improve outcome.

*National Quality Registries, Sweden*

Since the early 1990s, some 40 registries have been developed by local enthusiasts, but coordinated nationally, to aggregate data on the process and outcome of managing clinical conditions (48).
Table 7. Examples of reference centres for clinical guidelines and HTA

<table>
<thead>
<tr>
<th>Country</th>
<th>Title</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>ITA (HTA Unit of the Institute of Technology Assessment – Austrian Academy of Science)</td>
<td><a href="http://www.oeaw.ac.at/einheiten/ita">www.oeaw.ac.at/einheiten/ita</a></td>
</tr>
<tr>
<td>Denmark</td>
<td>DIHTA (Danish Institute for Health Technology Assessment)</td>
<td><a href="http://www.dsi.dk/">www.dsi.dk/</a></td>
</tr>
<tr>
<td>Finland</td>
<td>FINOHTA (Finnish Office for Health Care Technology Assessment)</td>
<td><a href="http://www.stakes.fi/finoaht">www.stakes.fi/finoaht</a></td>
</tr>
<tr>
<td>Germany</td>
<td>German Scientific Working Group of Technology Assessment in Health Care</td>
<td><a href="http://www.epi.mh-hannover.de/">www.epi.mh-hannover.de/</a></td>
</tr>
<tr>
<td>Germany</td>
<td>Ärztliche Zentralstelle Qualitätssicherung ÂZQ</td>
<td><a href="http://www.azq.de">www.azq.de</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="http://www.leitlinien.de">www.leitlinien.de</a></td>
</tr>
<tr>
<td>Italy</td>
<td>Agenzia per i Servizi Sanitari Regionali</td>
<td><a href="http://www.assr.it">www.assr.it</a></td>
</tr>
<tr>
<td>Netherlands</td>
<td>TNO Prevention and Health</td>
<td><a href="http://www.tno.nl/instit/pg/index.html">www.tno.nl/instit/pg/index.html</a></td>
</tr>
<tr>
<td>Norway</td>
<td>SMM (The Norwegian Centre for Health Technology Assessment)</td>
<td><a href="http://www.sintef.no/smm">www.sintef.no/smm</a></td>
</tr>
<tr>
<td>Portugal</td>
<td>National Institute for Quality in Health, Portugal</td>
<td><a href="http://www.iqs.pt">www.iqs.pt</a></td>
</tr>
<tr>
<td>Russian Federation</td>
<td>Public Health Research Institute</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>National HTA centre established 1994 by MoH; also regional centres for Catalonia, Basque Country, Andalucia</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>SBU (Swedish Council on Technology Assessment in Health Care)</td>
<td><a href="http://www.sbu.se/sbu-site/index">www.sbu.se/sbu-site/index</a></td>
</tr>
<tr>
<td>Switzerland</td>
<td>Swiss Science Council/Technology Assessment</td>
<td><a href="http://www.ta-swiss.ch">www.ta-swiss.ch</a></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Cochrane Centre: on-line publication “Bandolier”</td>
<td><a href="http://www.jr2.ox.ac.uk/bandolier">www.jr2.ox.ac.uk/bandolier</a></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>National Coordinating Centre for Health Technology Assessment</td>
<td><a href="http://www.hta.nhsweb.nhs.uk">www.hta.nhsweb.nhs.uk</a>.</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>NICE (National Institute for Clinical Excellence) 1998 (49)</td>
<td><a href="http://www.nice.org.uk">www.nice.org.uk</a></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>SIGN (Scottish Intercollegiate Guidelines Network)</td>
<td><a href="http://www.sign.ac.uk">www.sign.ac.uk</a></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>NHS Centre for Reviews and Dissemination</td>
<td><a href="http://www.york.ac.uk/inst/crd">www.york.ac.uk/inst/crd</a></td>
</tr>
</tbody>
</table>

If clinical practice is to be based on research evidence, guidelines must become increasingly consistent internationally, allowing for local variations in epidemiology, demography, culture and economy. There is increasing collaboration internationally between centres which develop and evaluate clinical guidelines, such as the Cochrane Collaboration and the AGREE project (Table 8).
Table 8. Appraisal of Guidelines Research and Evaluation (AGREE) project (50)

<table>
<thead>
<tr>
<th>What is AGREE?</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGREE is an international collaboration of researchers and policy makers who seek to improve the quality and effectiveness of clinical practice guidelines by establishing a shared framework for their development, reporting and assessment.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Who are the participants?</th>
</tr>
</thead>
<tbody>
<tr>
<td>The collaboration has the participation of a core of European countries: Denmark, Finland, France, Germany, Italy, the Netherlands, Spain, Switzerland and the United Kingdom as well as Canada, New Zealand and the United States.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What is contained in the research programme?</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGREE is an integrated research programme currently funded by the BIOMED-2 Programme of the European Union. <strong>Project: PL96-3669</strong></td>
</tr>
<tr>
<td>It comprises several research projects, including:</td>
</tr>
<tr>
<td>1. The creation of an appraisal instrument (AGREE) to assess the quality of clinical guidelines</td>
</tr>
<tr>
<td>2. The development of standard recommendations for guideline developers</td>
</tr>
<tr>
<td>3. A comparison of guideline development programmes</td>
</tr>
<tr>
<td>4. A content analysis of guidelines on asthma, diabetes and breast cancer</td>
</tr>
<tr>
<td>5. An appraisal of individual recommendations</td>
</tr>
</tbody>
</table>

**National quality societies**

Membership societies have formed from enthusiasts in many countries, often with a large proportion of clinicians driven by a common interest. Some are sponsored, at least initially, by government, but others struggle to pool the personal resources of their members and have little impact on or support from official initiatives. Few actively recruit consumer members but they offer a valuable forum for informal exchange of experience and training through meetings, publications, newsletters, journals and websites. Some publish a journal devoted to quality in health care (Table 9).

Table 9. Journals of national societies for quality in Europe

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Title</th>
<th>Society</th>
</tr>
</thead>
<tbody>
<tr>
<td>German speaking countries</td>
<td>1996</td>
<td>Gesundheitsoekonomie &amp; Qualitätsmanagement (was Qualität in der Gesundheitsversorgung)</td>
<td>GMQG</td>
</tr>
<tr>
<td>Italy</td>
<td>1986</td>
<td>QA</td>
<td>Italian Society for Quality in Healthcare (SIQuAS-VRQ)</td>
</tr>
<tr>
<td>Portugal</td>
<td>2000</td>
<td>Qualidade em Saúde</td>
<td>Instituto de Qualidade em Saúde</td>
</tr>
<tr>
<td>Spain</td>
<td>1986</td>
<td>Revista de Calidad Asistencial (was Revista de Control de Calidad Asistencial until 1994)</td>
<td>Sociedad Española de Calidad Asistencial</td>
</tr>
</tbody>
</table>

The European Society for Quality in Healthcare (ESQH) (51) comprises representatives of each national society: Denmark, Finland, Germany (52), Hungary, Ireland (53), Italy, Lithuania, Netherlands, Norway, Poland, Spain, Sweden, Switzerland, United Kingdom, Yugoslavia. There are also representatives from Belgium and Luxembourg.
ESQH aims to be a network of networks and in the next few years will focus on member national societies, on dedicated institutes in the field of quality of health care (a European Institute for Quality in Healthcare) and on universities (European Universities for Quality In Healthcare). Another focus will be on the networking with dedicated quality networks like EFQM (15), EQ (14) and ISQua, and on networking with European organizations in health care like hospitals (HOPE), managers (EHMA), medical associations (EFMA), nurses (EuroQuan), primary care (WONCA) and public health (EUPHA).

Methods, techniques and tools for development of quality

**Principle:** Effective methods for quality improvement are systematically promoted at national and local levels, consistent with experience and scientific evidence. Adoption of demonstrated quality methods is recognized and rewarded in organizations and individuals.

- Statutory mechanisms to ensure the safety of public, patients and staff are established and evaluated. Their regulations, standards, assessment processes and results are accessible to the public.
- Voluntary external quality assessment and improvement programmes are recognized by and consistent with statutory investigation and inspection. Their standards, assessment processes and operations comply with international criteria.
- There are formal mechanisms to define and protect the rights of patients and their families to health services.
- Local quality programmes are systematically planned and coordinated to meet national priorities and the needs of local stakeholders. They use standards, measures and improvement techniques which are explicit and known to be effective in that setting.

**External quality assessment mechanisms**

Many countries have a collection of voluntary and statutory mechanisms for periodic external assessment of organizations against defined standards. Some of these have been systematically compared (54). They are all intended to assure or improve some elements of quality but they are usually run by a variety of disparate organizations without national coordination to make them consistent, mutually supportive, economical and effective. Broadly, these mechanisms include variants on five approaches:

- **ISO:** the International Organization for Standardization (55) provides standards against which organizations or functions may be certificated by accredited auditors. Although originally designed for the manufacturing industry (e.g. medicines, medical devices), these have been applied to health care, specifically to radiology and laboratory systems, and more generally to quality systems in clinical departments (56).
- **European Foundation for Quality Management model** (57): the Baldrige criteria for management systems (58) have evolved from the United States into assessment programmes in Europe (59). Peer review: collegial, usually single-discipline programmes assess and give formal accreditation to training programmes but are also extended to clinical services (60).
- **Accreditation:** independent, voluntary programmes developed from a focus on training into multidisciplinary assessments of health care functions, organizations and networks. Mandatory programmes have recently been adopted in France (61), Italy (62) and Scotland (63).
• Registration and licensing: statutory programmes ensure that professional staff or provider organizations achieve minimum standards of competence (e.g. training, registration, certification and revalidation); there are also function-specific inspectorates for public health and safety (e.g. fire, radiation and infection) in many countries.

• Peer review (Dutch *visitatie*: collegial, usually single-discipline programmes assess and give formal accreditation to training programmes but are also extended to clinical services (64).

**Health service accreditation (recognition of institutional competence)**
Care is needed to differentiate health service accreditation from certification, and from licensing. The United States-based Quality Assurance Program and Joint Commission Resources have proposed a table of definitions (Table 10) (65); this is based on wide international experience but there are variations around the world. For example, in many European countries, doctors are individually “accredited” on completion of designated specialty training, and accreditation of institutions is increasingly compulsory. The full proceedings are available from QAP (66) of a conference held in Washington in October 2000 on regulation, licensure, accreditation and certification.

<table>
<thead>
<tr>
<th>Process</th>
<th>Issuing Organization</th>
<th>Object of Evaluation</th>
<th>Components/Requirements</th>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accreditation (voluntary)</td>
<td>Recognized tools, usually an NGO</td>
<td>Organization</td>
<td>Compliance with published standards, on-site evaluation, compliance not required by law and/or regulations</td>
<td>Set at a maximum achievable level to stimulate improvement over time</td>
</tr>
<tr>
<td>Licensure (mandatory)</td>
<td>Governmental authority</td>
<td>Individual</td>
<td>Regulations to ensure minimum standards, exam, or proof of education/competence</td>
<td>Set at a minimum level to ensure an environment with minimum risk to health and safety</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Organization</td>
<td>Regulations to ensure minimum standards, on-site inspection</td>
<td></td>
</tr>
<tr>
<td>Certification (voluntary)</td>
<td>Authorized body, either government or NGO</td>
<td>Individual</td>
<td>Evaluation of predetermined requirements, additional education/training, demonstrated competence in speciality area</td>
<td>Set by national professional or speciality boards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Organization or component</td>
<td>Demonstration that the organization has additional services, technology, or capacity</td>
<td>Industry standards (e.g. ISO 9000 standards) evaluate conformance to design specifications</td>
</tr>
</tbody>
</table>

“Accreditation” has acquired three different meanings; each is correct in its own context but users need to be aware of the differences:

• Recognition of specialty training, by professional bodies since the 19th century;
• Recognition of service delivery, Consortia of clinicians and managers since 1917;
• Recognition of agency competent to certificate health care providers, by International Organization for Standardization (ISO) since 1946.

In 2001, more than half of the world’s 36 national accreditation programmes had been set up since 1990 in Europe where 14 programmes operate in twelve countries. Over half of the programmes are (partially) funded or managed directly by government (upper segment of bar chart in Figure 2) but the longer-established programmes (e.g. Spain and United Kingdom) are independent. This suggests that governments increasingly use accreditation as a means of regulation and public accountability, in contrast to its traditional role in independent and voluntary self-development.

Where no national programme of accreditation exists, some individual institutions (especially private hospitals) seek external recognition from a foreign programme. Domestic national programmes, whether governmental or independent, are usually inspired by and developed with one or more foreign programmes (67). The main contributors in Europe have been the Canadian Council (68), the Australian Council, the Health Quality Service (United Kingdom) (69) and the Joint Commission International (United States) (70). Guidelines for the standards and operations of accreditation programmes have been established by the ALPHA Council of the International Society for Quality in Health Care (71) and have been used in specifications of government contracts with outside technical assistance. Guidance is also being developed by ALPHA on the local factors (e.g. national culture, policy and structures) which are necessary for the successful establishment of an accreditation programme.

Figure 2. Government sponsorship of accreditation programmes

Independent national programmes began in the United Kingdom; government supported programmes (upper segment of chart) began in 1995 in the Czech Republic. The first regional programme in Europe was established in the autonomous province of Catalonia in Spain in the 1980s.
Table 11. National accreditation programmes launched since 1995 in Europe

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>France (72)</td>
<td>1999</td>
<td>Agence Nationale d’Accréditation et d’Évaluation en Santé (ANAES) established under national law; government agency has a mandate to accredit all health services in France, public and private. Initial technical assistance from Canada and United Kingdom</td>
</tr>
<tr>
<td>Germany (73)</td>
<td>2001</td>
<td>Collaboration of federal medical chamber, insurers, nurses and hospital societies (KTQ); independent voluntary accreditation of hospitals supported by government</td>
</tr>
<tr>
<td>Ireland (74)</td>
<td>2001</td>
<td>Irish Health System Accreditation Scheme; Government-funded major academic teaching hospitals (MATH) pilot project. Initial technical assistance from Canada</td>
</tr>
<tr>
<td>Italy</td>
<td>2001</td>
<td>National health care reform law 1992 and specific law 1997 mandatory accreditation by Regional governments to obtain financial payments from the NHS</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>1997</td>
<td>Combined state licensing and accreditation programme for health care facilities; functions separated between MoH and independent accreditation commission 2001</td>
</tr>
<tr>
<td>Lithuania</td>
<td>1998</td>
<td>State Health Care Accreditation Service for licensing of institutions and specialists, approval of medical devices</td>
</tr>
<tr>
<td>Netherlands (75)</td>
<td>1998</td>
<td>Institute for Accreditation of Hospitals (Nederlands Instituut voor Accreditatie van Ziekenhuizen, NIAZ) supported by government</td>
</tr>
<tr>
<td>Poland (76)</td>
<td>1998</td>
<td>Program Akredytacji Szpitali Hospital Accreditation programme: developed with support from MoH. Initial technical assistance from the United States</td>
</tr>
<tr>
<td>Portugal (77)</td>
<td>2000</td>
<td>Instituto da Qualidade em Saúde Pilot programme by government-assisted institute for quality with technical assistance from United Kingdom</td>
</tr>
<tr>
<td>Switzerland (78, 79)</td>
<td>1998</td>
<td>Two independent programmes: Agence pour la Promotion et l’Evaluation de la Qualité (APEQ) and Vereinigung für Qualitätsförderung im Gesundheitswesen (VQG), promulgate joint standards</td>
</tr>
</tbody>
</table>

The aims and processes of accreditation are sometimes confused with licensing. In general, licensing is obligatory, by inspectors, against minimal standards of structure and inputs; until recently, accreditation was voluntary, by peers, against optimal standards of process and outcome. In short, one aims for static conformity, the other for dynamic development. For example radiation inspection is a process of mechanical calibration; accreditation would examine how it is used and how well the service performs. The two systems developed separately but are now beginning to converge in some countries to bridge the gap between external public accountability and internal quality improvement. The difference between external review programmes driven by professions (collegial), and by government (regulatory) are summarized in Table 12.

Table 12. Features of collegial and regulatory systems

<table>
<thead>
<tr>
<th>Collegial</th>
<th>Regulatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus on education, self-development, improved performance and reducing risk</td>
<td>Timely response to complaints and adverse events</td>
</tr>
<tr>
<td>General review of internal systems</td>
<td>In-depth probe of conditions and activities</td>
</tr>
<tr>
<td>Based on optimum standards, professional accountability and cooperative relationships</td>
<td>Based on minimum standards, investigation, enforcement and public accountability</td>
</tr>
</tbody>
</table>
Developing a national accreditation programme presents many questions which have to be answered throughout the health system and in consultation with stakeholders, for example:

- **Regulation:**
  - Is legislation necessary
  - Will participation be mandatory
  - How independent will the programme be from government

- **Involvement:**
  - How will users and the public be involved in defining and assessing standards
  - How will professional associations, chambers and institutes be involved

- **Incentives:**
  - What incentives will be offered to achieve accreditation
  - What will be the consequence for organizations that fail accreditation

- **Transparency:**
  - Will standards, assessment criteria and results of surveys be made public

- **Priorities:**
  - What sector will be accredited first – hospitals or primary care
  - Will the same programme include public and private facilities

- **Organization:**
  - How is accountability for health care defined within and between local government, professions, and health care organizations
  - How will accreditation relate to other regulatory agencies and professional institutes

- **Methods:**
  - Will accreditation be based on outcomes or on compliance with standards
  - Will accreditation standards and assessments be compatible with existing methods of ISO certification, statutory inspection, professional licensing

- **Resources:**
  - How will the programme be funded
  - What will be the cost of complying with standards, for whom
  - Is accreditation cost-effective
  - What external technical assistance will be needed

**Internal quality mechanisms**

The external assessment of health service performance, both statutory and voluntary, is essential to stewardship of the system. But it needs to link and reciprocate with internal and local mechanisms of self-assessment and quality improvement at the level of primary and hospital care. A key element of a national programme is to support such local initiatives by providing valid standards for organization and clinical practice, reliable tools for measuring performance and effective means of implementing change.
Table 13. Some national standards projects

<table>
<thead>
<tr>
<th>Country</th>
<th>Project Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>Clinical guidelines Development delegated to Bulgarian Medical Association (compulsory membership), supported by national Health Insurance Fund who audit application</td>
</tr>
<tr>
<td>France</td>
<td>L'Évaluation en Santé (80) Technology assessments and practice guidelines from ANAES (previously ANDEM)</td>
</tr>
<tr>
<td>Italy</td>
<td>Legislation National health care reform law 1992 and specific law 1997 mandatory accreditation by Regional governments to obtain financial payments from the NHS</td>
</tr>
<tr>
<td>Sweden</td>
<td>State of the art documents Define national clinical guidelines for local use</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>National service frameworks (81) Define the provision and organization and performance of key services e.g. diabetes, coronary heart disease, mental health, cancer, paediatric intensive care</td>
</tr>
</tbody>
</table>

**Measurement systems for quality**

Many countries have sought to define aggregated indicators of routine activity and outcome data as objective measures of quality and performance (Table 14). The aims of indicator development vary between internal self-assessment and governance, and external evaluation, accreditation and control. Indicators for external comparison and benchmarking between institutions or countries demand much greater consistency and case-mix adjustment than measures which are used only internally. They are therefore more feasible and common in countries with well-equipped and established national data systems and are often a by-product of funding systems which reimburse health care providers according to case-mix. Linking payment to patient-based data greatly increases the attention given to it, and improves its quality.

Common problems with data systems and their users include:

At national level:
- Design and primary use for financial management;
- Focus on hospitals and resources rather than populations and performance;
- Lack of agreed minimum data sets and definitions;
- Absence, inaccuracy or misinterpretation of aggregated data for indicators;
- Failure to integrate population and patient-based data;
- Slow data reporting to centre;
- Lack of incentives or disincentives for accurate data;
- Legal and ethical conflict between freedom of information and data protection.

At local level:
- Lack of reliable, networked computer access;
- Lack of realistic strategy for information management;
- Lack of internal validation of records e.g. of diagnosis, by doctors;
- Clinical data capture and coding incomplete or inaccurate;
- Data not made available to relevant local staff before reported upwards;
- Lack of training in quantitative methods (clinicians and managers);
- Failure to share data with colleagues, patients and other departments.

### Table 14. Some national measurement projects

<table>
<thead>
<tr>
<th>Country</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>Quality registers</td>
<td>National Board of Health funds commission to develop databases for clinical quality, 1995</td>
</tr>
<tr>
<td>Estonia</td>
<td>Case-mix measurement</td>
<td>Incorporation of acute hospital workload, based on DRGs, into Health Insurance Fund payments from 2003</td>
</tr>
<tr>
<td>Finland</td>
<td>Care registers</td>
<td>National data from STAKES (82)</td>
</tr>
<tr>
<td>Germany</td>
<td>Statistical benchmarking</td>
<td>Comparisons of process and outcomes of hospital care (mostly operative procedures) made mandatory since 1989 by Fifth Social Act (para 137)</td>
</tr>
<tr>
<td>Germany</td>
<td>Case-mix measurement</td>
<td>Lump sum payments for 250 procedures (about 25% of all hospital cases) introduced 1996</td>
</tr>
<tr>
<td>Hungary</td>
<td>Case-mix measurement</td>
<td>Incorporation of hospital workload, based on DRGs, into Health Insurance Fund payments from 1993</td>
</tr>
<tr>
<td>Ireland</td>
<td>Case-mix measurement</td>
<td>Incorporation of hospital workload, based on DRGs, into budgets from 1993</td>
</tr>
<tr>
<td>Italy</td>
<td>Minimum healthcare levels</td>
<td>Ministry of Health (2001) has defined 65 indicators to implement and to monitor hospital and primary health care</td>
</tr>
<tr>
<td>Sweden</td>
<td>Quality registers</td>
<td>40 national specialty databases (e.g. hip fracture, stroke, diabetes, vascular surgery) to provide benchmarking and comparison between providers (hospital and primary care) and across the nation; funded by national government allocation (about €2 million per year) to county councils since 1990 (83)</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>National framework for performance assessment</td>
<td>Defines measures to compare NHS providers in 6 areas: health improvement, fair access to service, effective delivery of care, efficiency, patient and carer experience, health outcomes of NHS care</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Clinical indicators</td>
<td>National Health Service (NHS): Public health (84) and clinical outcome indicators (85)</td>
</tr>
</tbody>
</table>

### Implementing change

Many quality initiatives succeed in measuring performance against valid standards but fail to “close the loop” by taking effective action for improvement. Every quality assessment should lead to a plan of action, implementation and systematic follow up but too often there is no sustained and effective response at national or local level to the findings of clinical research, internal audits, or even public inquiries.

Much of the evidence for successful change management at local level surrounds the adoption of evidence-based medicine by clinicians, particularly doctors (86–89). Reports from North America, Europe and Australia suggest that problems and solutions in change management centre on the behaviour of people and organizations more than on technical issues.

Reported change mechanisms fall into four general approaches: information, support, incentives and systems.
Information
Feedback reinforces and sustains improvement against pre-defined standards or peer-group benchmarks. Benchmarking can encourage debate between clinicians and managers, collaboration between participating hospitals and practices, and improvement in data quality. Both can effect and maintain change in clinical practice.

Support
Change can be sustained by peer group pressure, such as in discussion meetings, or by statistical feedback on comparative performance. In the Russian Federation it was noted that on-site assistance by international medical consultants was needed for several years to hasten the process of change and that the introduction of evidence based medicine was difficult for practitioners due to lack of access to knowledge bases in an appropriate language (90).

Closer supervision of trainees and assistants, and educational programmes to resolve identified weaknesses are common responses to quality problems, although many single instances of failure of individuals to take appropriate action are shown to be due to the immediate circumstances (such as pressure, tiredness, staff shortage) rather than to a lack of knowledge.

Responsive training may thus be aimed at improving clinical skills and knowledge but is more often to develop the capacity of managers and clinicians for individual or organizational improvement. A recent WHO publication is addressed to health care personnel and managers seeking to improve the quality of the health care system by fostering change in the process of care and in the performance of practitioners (91).

Incentives
The Institute of Medicine report, “Crossing the Quality Chasm” emphasises the need to align payment policies with quality improvement (92). Financial barriers in payment methods can create significant barriers and may need fundamental reform.

Beyond the satisfaction, common to most health care staff, that comes from doing the job better, more tangible incentives have been used such as high-profile quality awards, certificates of approval and money. A review of literature on the association between physician payment and the costs, process or outcomes of care concluded that financial incentives can reduce the use of resources, improve compliance with practice guidelines or achieve a general health care target (93).

Hospitals also respond to financial incentives, such as to reduce waiting lists or improve access to emergency care (94) but there have been allegations of “gaming” (adjusting reported data in order to achieve required targets) in many settings and countries.

Systems
Business process re-engineering is an industrial concept. Applied to health services it has had dramatic impact, for example, on re-focusing outpatient care by reducing multiple separate visits to clinics, diagnostic and treatment services and replacing them by a “one-stop shop”. A more common and simpler application is the response of hospitals to delay analysis of door-to-needle time in acute myocardial infarction which usually shows that traditional inefficient practices may deprive patients of the benefits of timely thrombolytic therapy.

Reconfiguration of referral patterns and clinical specialties is another option for improvement, based on evidence that some technical procedures produce better results in the hands of frequent
users (the *volume-outcome link*). The literature on links between volume of clinical activity and clinical outcomes suggests that for some procedures or specialties there may be some quality gains as hospital or physician volume increases. In other areas the research suggests an absence of significant volume gains (95).

Some governmental projects aim to provide general incentives for change; many have set out to effect improvement in specific areas through national collaborations and external audit (Table 15).

**Table 15. Some national improvement projects**

<table>
<thead>
<tr>
<th>Country</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>Hospital accreditation</td>
<td>Begun spring 2001</td>
</tr>
<tr>
<td>Estonia</td>
<td>Certification of medical specialists</td>
<td>Estonian Medical Association, supported by Ministry of Social Affairs, introduced programme in 2000.</td>
</tr>
<tr>
<td>France</td>
<td>National programme for quality assurance, hospital</td>
<td>Public hospitals offered funding for projects to increase patient safety 1995</td>
</tr>
<tr>
<td>Germany</td>
<td>Demonstration projects, hospital</td>
<td>680 (25% of all acute hospitals) applied for 42 demonstration projects for quality management 1998–2001</td>
</tr>
<tr>
<td>Germany</td>
<td>Audit projects, medical departments</td>
<td>1999–2002</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>Licensing and accreditation</td>
<td>Combined state programme for health care facilities 1997; functions separated between MoH and independent accreditation commission 2001</td>
</tr>
<tr>
<td>Latvia</td>
<td>Financial incentives, primary care</td>
<td>Since 1999, 15% of mixed capitation payments to doctors is based on quality</td>
</tr>
<tr>
<td>Portugal</td>
<td>MoniQuOr, health centres</td>
<td>Programme to monitor the quality of organization in health centres by internal and external assessment 1998</td>
</tr>
<tr>
<td>Sweden</td>
<td>National quality award</td>
<td>First awarded in 1997 by county councils for organizational performance assessed against criteria of quality, development and leadership, similar to EFQM</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Avoidable deaths</td>
<td>Independent initiatives adopted by government: National confidential enquiries into peri-operative (NCEPOD) (96) and perinatal (97) deaths, and suicide and homicide by people with mental illness (98). Also Scottish Audit of Surgical Mortality (SASM)</td>
</tr>
</tbody>
</table>

**Rights of patients and families**

One specific issue which is central to the aims of health and social reform concerns the rights of individual patients and their families, and of the population as a whole. Since one of the simpler definitions of quality is “meeting customer expectations”, responsiveness of the system is often measured in terms of the satisfaction or of the experience of patients. One of the fundamental rights of patients is to have access to adequate information, to be educated and empowered in self-management of their health, diseases and conditions. Recent surveys of access to primary care (99) and of in-hospital experience (100) have shown that valid comparisons can be made within and between countries in Europe.
Table 16. National initiatives for patients’ rights

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>Hospital strategy 1998</td>
<td>Defines rights to consent, dignity, mediation</td>
</tr>
<tr>
<td>Croatia</td>
<td>National survey</td>
<td>One-off survey by MoH of patients discharged from hospital over 90 days (23% response rate) (101)</td>
</tr>
<tr>
<td>Ireland</td>
<td>Patients’ Charter 1992</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>Framework document 1995</td>
<td>The NHS law (1992) defined the rights of the citizens</td>
</tr>
<tr>
<td>Latvia</td>
<td>Law on Medicine 1997</td>
<td>Defines rights to high quality, responsive and respectful care</td>
</tr>
<tr>
<td>Lithuania</td>
<td>Law on patients’ rights 1996</td>
<td>Defines rights to access, information, choice, consent, dignity, confidentiality, access to records</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Medical Treatment Contracts Act</td>
<td>Defines rights to information, consent, confidentiality, access to records</td>
</tr>
<tr>
<td>Spain</td>
<td>Health barometer</td>
<td>Periodic survey of public satisfaction by MoH</td>
</tr>
<tr>
<td>Spain</td>
<td>Regulation of health care benefits 1995</td>
<td>Defines rights to access, information, choice, and quality in publicly funded service</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Patients’ Charter 1992</td>
<td>Rights to access, privacy, information; national benchmarking</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>National public surveys 1999</td>
<td>Rolling programme of published large-scale stratified surveys of public patient experience: general practice (102), cardiac disease (103), cancer treatment</td>
</tr>
</tbody>
</table>

The implementation of national policy is in many countries the function of local providers, purchasers and regulators, and not of central government. But some have helped to translate policy into practice by producing practical guidance on quality improvement methods either through management directives or formal publications (Table 17).

Table 17. Some government guides to quality

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>1994</td>
<td>Federal MoH Textbook of QA in hospitals (104)</td>
</tr>
<tr>
<td>Finland</td>
<td>1998</td>
<td>Quality management of health services related to ISO standards. Provided and purchased by municipalities. Vocabulary, based on ISO 8402 (105)</td>
</tr>
<tr>
<td>Germany</td>
<td>1998</td>
<td>Textbook on principles of quality management (106)</td>
</tr>
<tr>
<td>Spain and Portugal</td>
<td>1990</td>
<td>Evaluation of the quality of primary care (107)</td>
</tr>
</tbody>
</table>

The tools and methods commonly used around the world are outlined in Annex 1 but the priorities and resources of individual countries determine which are appropriate locally. The principles of most of these (such as patient surveys, indicators and guidelines adapted from the Internet) can be effectively applied with minimal cost and technology. The scope of a comprehensive local quality improvement programme includes (see Annex 1: classification of quality concepts and tools):

- Population access and system responsiveness to community needs;
- Consumers’, users’ and clients’ expectations and experience;
- Staff welfare, morale, development;
- Staff competence, knowledge, attitudes, skills, accountability;
- Clinical practice, guidelines, care pathways;
- Service delivery, coordination, continuity, management;
- Risk, health and safety;
- Resource management, efficiency, cost-benefit, rationing;
- Communications, records, information, and their use.

**Resources for quality improvement**

The national programme identifies responsibility for funding and providing the basic knowledge, skills and information required for quality improvement as:

- Personnel are trained to evaluate and improve the performance of their own work and of their health care organization;
- Personnel have protected time to participate in formal, systematic quality improvement programmes;
- Health facilities provide staff with accurate, complete and timely data by which clinical and organizational performance can be measured;
- Authoritative information on the theory and practice of standards, measurements and improvement is accessible to all health personnel;
- The direct financial costs of the quality programme are realistically identified in advance and allocated to agreed budgets, especially for training, research and information.

**Training**

Successful quality programmes depend more on behavioural science than on technical solutions. Culture, attitude, training and management of human resources are essential. National plans often mention these without identifying or funding whoever is to be responsible for providing them.

**Universal basic training for healthcare improvement**

*Undergraduate and specialty training*

Students of medicine, dentistry, nursing, pharmacy and other clinical professions must understand the definition, measurement and improvement of standards of health care and be able to apply them to clinical practice. The competences which are taught and assessed among graduates in specialty training must include the ability to apply a basic understanding of the principles of performance measurement, quality improvement and risk management to the types of patient, technology and situation which they are likely to meet in specialist practice.

*Continuing professional development*

The training needs of individual clinicians for quality management depend on many factors including specialty, experience, job responsibilities, access to continuing education and personal commitment to life-long learning. In general, competent clinicians have not in the past been trained in the systematic identification, measurement and improvement of their own or their
colleagues’ clinical practice – unless they have significant experience in research or in epidemiology.

**Advanced training for quality specialists**

A small minority of personnel, including some non-clinical staff (such as information and records specialists, and administrators) need more tailored training either in wider scope (e.g. local coordinators, leaders, teachers) or in greater depth (e.g. surveyors and inspectors). When these key personnel are identified, trained and installed at local level, training can be cascaded throughout the health care system.

**Time**

In its strategy for Health Nutrition and Population (HNP), the World Bank notes, with respect to enhancing the performance of health care systems, that the life cycle of individual projects is 5–8 years, of individual staff assignments is 3–5 years and the term of the health minister in office is 1–4 years. A survey of national accreditation programmes in 2001 indicated that most of them took at least three years to undertake their first income-generating surveys, and much longer to become financially independent (66).

Time spent by clinicians in classrooms, records departments and discussion of standards, measurements, and action plans is time not spent in clinics, operating theatres and wards. One estimate, adopted for the implementation of medical audit in the United Kingdom, put this at 5% of a full-time clinician’s programme to take part in regular systematic quality improvement. This activity replaced some of the time spent on more traditional and anecdotal clinical meetings but it also generated more work for clerical staff in retrieving and re-filing large numbers of case records for analysis.

**Data**

For quality to work, people need data about their own practice, clinic or hospital, about best practices and about how to adopt them. Even the poorest facilities usually keep registers of outpatients, emergencies, admissions, prescriptions, diagnostic tests, operations and nursing and medical care which can yield valuable data. At local level, routine data are often rejected as being inaccurate, incomplete or too late for quality improvement; the more they are rejected, the worse they become.

**Information**

Clinicians and managers need access to standards, measurements and practical guidance on tested methods of improvement and examples of results. Local libraries can provide some of this, such as in journals, but the wealth of information on websites commends investment in Internet access. Many countries have established a development centre to collect and exchange the national body of experience and to relate it to knowledge abroad.

**Funding**

The commonest message of quality improvement projects is to make better use of existing resources rather than to spend more. Improvement does not have to be expensive but experience suggests that when health care contracts are specified in terms of cost, volume and quality, it is usually quality which is compromised first, perhaps because it is the more difficult to measure. For the same reason, the cost-benefits of quality improvement programmes are often hard to evaluate.
Some quality projects do not improve quality or save resources, but they do waste time, antagonize staff and undermine any faith that improvement is possible. The common causes of ineffectual projects are inadequate planning, organization, methods or failure to implement appropriate action.

Countries contemplating a national quality improvement programme must give commitment of the financial resources necessary for personnel and data systems to conduct effective activities. Direct costs include:

**National level**
- Establishment and operation of policy groups, executive agencies, resource centres;
- Development and operation of national indicator, audit and accreditation programmes; most small scale national accreditation programmes in Europe in 1999 were costing €300 000 per year to maintain;
- Active, systematic integration of staff training for quality improvement into undergraduate and continuing education; there is also a cost involved in educating politicians, payers and the general public towards a realistic understanding of a quality culture;
- Enabling medical colleges and other health and research institutions to support district hospitals and health centres in upgrading the skills and knowledge of their staff in quality improvement;
- Identification and funding of priority research related to quality improvement.

**Local level**
- Use of libraries and the Internet between individuals and countries, as well as through bulletin boards specifically designed for such exchange;
- Adequate medical records systems to provide a uniform minimum data set as a basis for clinical audit, quality indicators, and measurement of process and outcome;
- Trained quality facilitators who are or become the local repositories of expertise to support and train the general staff within a hospital or district.

**Starting out and moving forward**

There is no standard pathway to a national quality system, but health ministers in many countries have taken some or all of the following steps:

- **Set up a quality task force**, at national or regional level, including users, clinicians, academics, managers and payers;
  - Spain, 1998: working group to establish a national programme of accreditation integrated between central government and regional autonomous governments
  - Bulgaria, 2000: task force to establish a quality policy with the National Health Insurance Fund
  - Estonia, 1998: quality policy working group (including Ministry of Social Affairs, Central Sick Fund, medical and nursing associations) to develop a consultative document
- Bosnia Herzegovina, 2001: working group on quality improvement and accreditation to develop a consultative document and form an interim national advisory group

- **Analyse current situation** of existing policies, structures, skills and resources for quality improvement: identify issues and opportunities; look at other public and commercial service industries;
  - See profile for self-assessment (Annex 2)

- **Find technical assistance and expertise** (national or abroad): attend workshops, conferences, visits; use libraries, Internet for reference;

- **Seek development funding** (internally or overseas) to get a sustainable programme established: budget for transition to operational funding in 3–4 years;

- **Draft statement of values and strategic plan**: balance the public, professional and political agenda for quality; make clear that government is committed to transparency, accountability and empowerment of consumers, to leading by example and to keeping quality improvement high on the political agenda; build professional and financial incentives for quality and performance improvement into the health system;
  - See technical advice above
  - See recommendations of Council of Europe (Annex 3)

- **Inform and consult with the public, professions and paying agencies**: enlist public support for the national strategy, and involvement in defining and assessing standards of service; do not assume that everyone understands what you mean by “quality”; expect managers to have different views from clinicians;

- **Identify need for (changes in) legislation**: examine legal opportunities and threats to a quality programme; is new legislation desirable or necessary?
  - Several countries e.g. Finland and Latvia have chosen against a quality mandate
  - Quality improvement activity was compared between the Netherlands (where it is required by law and healthcare is managed centrally) with Finland (where it is not required by law and healthcare is managed by municipalities); legislation was associated with more “quality” activity, but perceived benefits were associated with using effective methods, not with legislation (108)

- **Define and publicize incentives** for performance improvement to reward individuals and institutions throughout the health system;

- **Be realistic**: set achievable and sustainable goals consistent with the time and resources available; choose and prioritize quality values (e.g. safety, equity, appropriateness), include the cost of time and effort into the basic financing of health care; do not expect quality initiatives to be money-saving in the short term; a quality culture may take years to grow;

- **Identify structures, roles and accountability** for quality: clarify responsibilities and communications for collaboration between government and statutory activities e.g. health insurance funds, inspectorates, chambers; define and authorize a competent national agency to advise, coordinate and inform; clarify accountability for quality at all levels of the health system; balance top-down control with bottom-up self-governance; define complementary roles of external statutory inspection and voluntary accreditation of individuals and institutions;
• **Define and disseminate practical guidance** to clinicians and managers on evidence-based standards of performance and on effective methods for quality improvement. Explore existing international guidance:
  – **Clinical guidelines**: AGREE Group, which is evaluating existing clinical guidelines according to certain criteria which are recognized by the EU and supported by our programme; guidelines for guidelines in best practice are formulated by the Council of Europe in collaboration with WHO Europe
  – **External assessment**: ALPHA criteria for standards and for programme operation

• **Research and pilot quality projects**: do not expect all imported quality packages to “plug and play”;

• **Define a national minimum data set** and criteria for data quality: ensure that agencies share basic aggregated data (e.g. population-based and patient-based); do not allow non-standard data coding systems. Use comparison among peers, benchmarking and feedback for identification of best practice;

• **Develop knowledge, attitudes and skills**: systematically introduce quality into the curriculum and training at undergraduate, specialty and career level; most clinicians have no training in measuring performance; do not expect technology to solve behavioural problems;

• **Publish an annual account** of the quantified impact and costs of the quality programme.
# Annex 1

## Classification of Quality Concepts and Tools

### Conceptual approaches

<table>
<thead>
<tr>
<th>Focus</th>
<th>Concepts, values</th>
<th>A. Defining standards</th>
<th>B. Measurement tools and methods</th>
<th>C. Change management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Health policy, targets</td>
<td>Epidemiological monitoring</td>
<td>Information systems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Legislation, regulations</td>
<td>Population health data</td>
<td>Health policy, targets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Needs assessment</td>
<td>Health service data</td>
<td>League tables</td>
</tr>
</tbody>
</table>

### Public and consumers

#### 1. Public health

- **Health gain**
- **Equity**
- **Access**
- **Human rights**

- **Legislation, regulations**
- **Needs assessment**

- **Health policy**
- **Population health data**
- **Health service data**

- **Information systems**
- **Health policy, targets**
- **League tables**

#### 2. Consumers, users, clients

- **Responsiveness**
- **Rights**
- **Responsibilities**
- **Commercial forces**

- **Legislation**
- **Consumer, data protection**
- **Freedom of information**
- **Patients’ charters**

- **Complaints analysis**
- **Satisfaction/experience surveys**
- **Patient-assessed outcome tools**
- **Indicators: process, access**

- **Public information**
- **User groups**
- **User representation**
- **Ombudsman**

### Personnel and staff

#### 3. Staff welfare

- **Protecting investment**
- **Staff morale**

- **Employment legislation**
- **Personnel policy, procedures**

- **Health checks**
- **Indicators: absence, turnover**
- **Staff surveys, exit interviews**
- **External HR assessment**

- **Staff health service**
- **Staff counselling**
- **Human resource management**

#### 4. Staff competence

- **Knowledge, attitudes, skills**
- **Unethical behaviour**
- **Public accountability**

- **Training curricula**
- **(Re) licensing criteria**
- **Recruitment criteria**
- **Job specifications**
- **Staff by-laws**

- **Recruitment screening**
- **Individual performance review**
- **Credentialing, revalidation process**
- **Supervision**
- **Accreditation of training**
- **Inspection**
- **Consumer survey**

- **Training**
- **CPD/CME**
- **Skill mix adjustment**
- **Trainee supervision**
## Clinical practice

### 5. Clinical effectiveness

- Variations in practice
- Biomedical research
- Clinical effectiveness
- Technology assessment
- Clinical freedom
- Public demand

<table>
<thead>
<tr>
<th>Guidelines</th>
<th>Clinical audit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protocols</td>
<td>Clinical indicators, benchmarking</td>
</tr>
<tr>
<td>Critical care pathways</td>
<td>Adverse patient events</td>
</tr>
<tr>
<td>Recovery pathways</td>
<td>Delay analysis</td>
</tr>
<tr>
<td></td>
<td>Confidential enquiries</td>
</tr>
</tbody>
</table>

### Management

### 6. Service delivery

- Team working
- Service integration
- Patient-centred care
- Public accountability

<table>
<thead>
<tr>
<th>Training programmes</th>
<th>Self-assessment (indicators, EFQM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning guidelines</td>
<td>Occasional surveys</td>
</tr>
<tr>
<td>Internal policies</td>
<td>External certification, accreditation</td>
</tr>
<tr>
<td>Accreditation standards</td>
<td>External quality assurance (labs, X-ray)</td>
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<tr>
<td>Service frameworks</td>
<td>External performance indicators</td>
</tr>
<tr>
<td>Health care contracts</td>
<td>Peer review visiting</td>
</tr>
<tr>
<td>Industrial QA standards</td>
<td>Statutory inspection</td>
</tr>
</tbody>
</table>

### 7. Risk, health and safety

- Risk management
- Cost containment
- Public relations

<table>
<thead>
<tr>
<th>Internal risk procedures</th>
<th>Self-assessment, risk assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accreditation, ISO standards</td>
<td>Adverse event analysis see 5B</td>
</tr>
<tr>
<td>Guidance from insurers, inquiries, government</td>
<td>External review: ISO, insurance, accreditation</td>
</tr>
<tr>
<td>Statutory regulations</td>
<td>Statutory inspection, licensing, registration</td>
</tr>
<tr>
<td></td>
<td>Public inquiry</td>
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</table>

### 8. Resource management

- Efficiency
- Equity
- Rationing
- Opportunity costs
- Cost-benefit

<table>
<thead>
<tr>
<th>Resource allocation formula</th>
<th>Clinical costing</th>
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<tbody>
<tr>
<td>Planning guidelines</td>
<td>Utilization review</td>
</tr>
<tr>
<td>Staffing, equipment targets</td>
<td>Efficiency indicators</td>
</tr>
<tr>
<td>Clinical guidelines, HTA</td>
<td>Capital asset, supplies audit</td>
</tr>
<tr>
<td></td>
<td>National surveys</td>
</tr>
</tbody>
</table>

### 9. Communications

- Patient involvement
- Management control
- Clinical evaluation
- Cost recovery

<table>
<thead>
<tr>
<th>Record content standards</th>
<th>Communications audit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data quality standards</td>
<td>Audit of records, data accreditation</td>
</tr>
<tr>
<td>Patient information standards</td>
<td>Accreditation survey</td>
</tr>
<tr>
<td></td>
<td>Communications audit</td>
</tr>
</tbody>
</table>

### Management

- Pathology, radiology accreditation
- Quality strategy, leadership
- Organizational development
- Team working
- Award schemes

### Teams

- Training e.g. lifting, fire
- Financial incentives
- Preventive maintenance
- Whistle-blowing
- Litigation

### Resource management

- Waste reduction
- Resource re-allocation
- Insurance, payment incentives
- Clinical budgeting

### Communications

- IT strategy
- Records committee
- Casemix-based funding
- Training in clinical coding
Annex 2

SELF-ASSESSMENT QUESTIONNAIRE

If the answer to a numbered question is “no”, go directly to next numbered question.

1. **Policy:** The government’s values, vision and strategies for quality improvement are comprehensive, consistent and based on evidence and consultation. They are explicitly stated and disseminated to purchasers, providers and the public.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.1 The policy is explicit and accessible</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- is formally published</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- is systematically disseminated to providers, purchasers, public</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- is accessible free of charge</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1.2 The policy is consistent</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- with existing and proposed legislation and regulations which it identifies</td>
<td></td>
<td></td>
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<tr>
<td>- with public health policy and priorities</td>
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<td></td>
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<tr>
<td>- with WHO Health for All policy</td>
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<tr>
<td><strong>1.3 The policy is comprehensive</strong></td>
<td></td>
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<tr>
<td>- defines the scope of quality (e.g. technical, social, economic) and factors which affect it</td>
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<tr>
<td>- identifies and reflects the differing viewpoints of stakeholders</td>
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<tr>
<td>- actively involves consumers in defining and assessing quality</td>
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<tr>
<td>- relates to independent, voluntary and social care, as well as the public sector</td>
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<tr>
<td><strong>1.4 The policy identifies key roles in quality improvement</strong></td>
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</tr>
<tr>
<td>- commits government to lead quality improvement by example and to ensure that quality remains visible on every management agenda</td>
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<tr>
<td>- identifies the responsibilities and accountabilities of public, private and professional bodies (e.g. for training, monitoring)</td>
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</tr>
<tr>
<td><strong>1.5 The policy identifies incentives for quality</strong></td>
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<tr>
<td>- requires evidence of quality improvement systems as a condition for funding contracts with practitioners, hospitals and health care organizations</td>
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<tr>
<td>- identifies incentives to motivate staff to participate in quality improvement</td>
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</table>

2. **Organization:** There are effective mechanisms to integrate and implement the national policy within national and local government, and between all stakeholders and sectors of health care provision.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2.1 Coordination of quality improvement is clearly defined within the ministry of health</strong></td>
<td></td>
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<tr>
<td>- there is an identified quality unit and a named accountable officer</td>
<td></td>
<td></td>
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<tr>
<td>- an organizational chart identifies sections within the ministry which contribute to quality improvement, and shows relationships between them</td>
<td></td>
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<tr>
<td>- a published annual report identifies quality activities and quantified improvements in performance of the health care system</td>
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</tr>
<tr>
<td><strong>2.2 Accountability and mechanisms for implementing quality improvement are defined throughout the health care system</strong></td>
<td></td>
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</tr>
<tr>
<td>- quality improvement is explicitly incorporated into national health programmes</td>
<td></td>
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<tr>
<td>- implementation of national guidance (e.g. reports, enquiries and ministry/health department advice) is systematically followed up through performance management or independent review in primary, secondary and tertiary services</td>
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</tr>
</tbody>
</table>
- there is designated leadership, accountability, supervision, monitoring and communication of quality at sub district, district, regional and national levels
- quality management structures and mechanisms are integrated within each provider and commissioning organization (e.g. clinical governance, clinical, patient and public satisfaction, audit, performance measurement, risk management)
- accountability for the quality of clinical practice is clearly defined within each provider organization

2.3 Support structures, such as agencies, boards, committees and networks (including nongovernmental organizations, teaching and research institutions and professional groups) are established, publicised and accessible nationally
- there is a national quality policy group representing consumers, providers, insurers, and professions
- there is a national resource centre for technology assessment
- there is a resource centre for collecting and developing clinical practice guidelines
- the dissemination of clinical standards is coordinated nationally to avoid duplication and to ensure they are coherent, affordable and cost-effective
- there is a resource centre for the collation and dissemination of comprehensive comparative information on health system performance
- there is a national information and resource centre for quality improvement
- there are active quality improvement structures identified within each self-regulating clinical profession and specialty
- there is a national society for quality in health care

3. Methodology: Effective methods for quality improvement are systematically promoted at national and local level, consistent with experience and scientific evidence. Adoption of demonstrated quality methods is recognized and rewarded in organizations and individuals

3.1 Statutory mechanisms to ensure the safety of public, patients and staff are established and evaluated. Their regulations, standards, assessment processes and results are accessible to the public
- licensing of public health care facilities
- licensing of private health care facilities
- licensing of doctors, dentists, nurses and allied practitioners
- periodic re-licensing of facilities
- periodic re-licensing of practitioners
- certification of radiation safety
- certification of fire safety
- certification of environmental and occupational safety
- licensing of medical equipment and drugs

3.2 Voluntary external quality assessment and improvement programmes are recognized by and consistent with statutory investigation and inspection. Their standards, assessment processes and operations comply with international criteria
- there is a formal mechanism by which voluntary and statutory programmes collaborate towards convergence of standards, assessment, quality improvement and public accountability
- the uptake of ISO certification and EFQM assessment in health care, regulated by their formal national bodies, is actively monitored and supported
- accreditation programmes are supported in primary, secondary and tertiary care
- accreditation programmes meet international ALPHA standards
- there is a national external quality assurance system for clinical laboratories
- there are systematic, confidential national enquiries into the occurrence of adverse events and outcomes in health care

3.3 There are formal mechanisms to define and protect the rights of patients and their families to health services
- patients’ rights to high quality health care are explicitly stated, widely disseminated, and in the language of ethnic minorities
- the results of national sample surveys of patient experience and satisfaction with health care have been made public
- there is a well-publicized national programme for receiving and analysing complaints about health services

3.4 Local quality programmes are systematically planned and coordinated to meet national priorities and the needs of local stakeholders. They use standards, measures and improvement techniques which are explicit and known to be effective in that setting
- Population access and system responsiveness to community needs
- Consumers’, users’ and clients’ views and experience
- Staff welfare, morale, development
- Staff competence, knowledge, attitudes, skills, accountability
- Clinical practice, guidelines, care pathways
- Service delivery, coordination, continuity, management
- Risk, health and safety
- Resource management, efficiency, cost-benefit, rationing
- Communications, records, information

3. Resources: The national programme identifies responsibility for funding and providing the basic knowledge, skills and information required for quality improvement

4.1 Personnel are trained to evaluate and improve the performance of their own work and of their health care organization
- relevant techniques of quality improvement are incorporated in the curriculum, teaching and examination of all clinical undergraduates
- performance analysis and improvement are included in the continuing professional development programme provided by all health facilities
- professional colleges, academic centres and research institutions have an agreed and specified role in supporting the skills and knowledge of personnel in hospitals, clinics and health centres
- a national curriculum is defined for staff who specialize in the coordination of quality programmes
- responsibility is identified for national integration and provision of training in quality management in all health disciplines

4.2 Personnel have protected time to participate in formal, systematic quality improvement programmes
- time for quality improvement activity is specified in contracts with employees and with health care purchasers
- participation in clinical and organizational peer review is a condition of employment or staff privileges in all health facilities

4.3 Health facilities provide staff with accurate, complete and timely data by which clinical and organizational performance can be measured
- there is a nationally agreed minimum patient data set
- this includes in-patient, ambulatory, primary and preventive care
- national standards for data quality are defined and monitored
- patient administration systems in all facilities are designed to generate indicators, indices and data for clinical and administrative review
- data systems are accessible to clinicians and managers for routine or ad hoc analysis

4.4 Information on the theory and practice of standards, measurements and improvement is accessible to all health personnel
- staff have access to a database of quality experience in their own organization
- Staff have access through publications, library services or Internet to national and international resource centres

- National quality resources, reference centres and publications are actively catalogued, signposted and accessible to intended users across all borders of the nation

### 4.5 The direct financial costs of the quality programme are realistically identified in advance and allocated to agreed budgets, especially for training, research and information

- Direct costs of agreed quality programmes are identified in purchaser-provider contracts

- Service level agreements identify agreed quality targets as well as price and volume of clinical activity

- Local resource allocation mechanisms respond to deficits demonstrated by quality management programmes

- Central funding of quality initiatives is based on an agreed programme which is publicly accountable

- Priority is given to research and development to identify and implement incentives and mechanisms which are shown to effect behavioural change

**Sources:**
Recommendations from WHO regional working groups (see WHO/ISQua International and national structures and activities for improving health care, 2002)
Council of Europe. Recommendations of Committee of Ministers 1997 Appendix to R (97) 17
Annex 3

RECOMMENDATIONS OF THE COUNCIL OF EUROPE

Appendix to R (97) 17

I. DIMENSIONS OF QUALITY IMPROVEMENT SYSTEMS

A. Procedures and processes for quality improvement

1. The following essentials of quality improvement systems should be implemented:
   – identification of quality problems and successes;
   – systematic collection of data on care provision;
   – standards and evidence-based guidelines for high-quality cost-effective care;
   – implementing changes when needed by effective mechanisms and strategies;
   – measuring the impact of changes;
   – exploiting best practices.

B. Organization of quality improvement

2. Such systems should be set up at all levels of care provision: individual care providers, practices, hospitals, other institutions, and at the interfaces between them. The same requirements for health care quality assurance should be established in all public and private health institutions.

C. Responsibilities: the actors in quality improvement

3. All the different parties involved in health care (providers, patients, funders, managers, and authorities) need to participate in setting up and maintaining these quality improvement systems in a close and continuous cooperation.

4. Health care providers should themselves develop, set up, and maintain quality improvement systems adapted to their health care settings and make these systems transparent to others.

5. Funders should contribute to quality improvement by requiring the establishment of quality improvement systems in their contracts with practitioners, hospitals, and health care organizations.

6. Health policy makers should create the necessary framework for policies, laws, and regulations concerning quality, and appropriate evaluation and updating procedures.

7. Managers in health care should assume leadership in setting up such systems in their organizations.

II. KEY ISSUES IN QUALITY IMPROVEMENT SYSTEMS: GENERAL PRINCIPLES

A. Practice guidelines

8. Guidelines should be developed systematically, disseminated effectively to the professionals as well as the public, and their effects monitored.
B. Technology assessment and quality improvement
   9. Health care should be improved by applying methods of evidence-based medicine and using the results of technology assessment in decision-making, directing appropriate attention to laboratory quality assurance.

C. Quality indicators and information systems
   10. Health care information systems should be set up for using relevant quality of care and process indicators and allow for timely production, feedback, and reliable comparisons of health care data. Individual patient data must be kept confidential.

D. Patient's perspective
   11. Information on the needs, priorities, and experiences of patients at all levels of care provision should be gathered through appropriate methods ensuring active participation of patients.

E. Managing change
   12. Quality improvement systems should include effective mechanisms and strategies:
      - for achieving necessary changes in a planned and managed approach;
      - for involving all the actors in care and decision making, in particular, patients

III. CONDITIONS FOR IMPLEMENTATION OF QIS
   13. The necessary conditions should be created, according to each member state's legal and political system, to implement quality improvement systems namely:
      - support structures, such as agencies, boards, committees, and networks;
      - making full use of available resources, and provide resources and specific financing mechanisms for quality assessment, assurance, improvement and development;
      - pre- and postgraduate education for health care providers to gain knowledge of and skills in quality assessment and improvement systems;
      - appropriate incentives for participation in quality improvement.

IV. EVALUATION OF QUALITY IMPROVEMENT SYSTEMS
A. Public accountability
   14. Public accountability of quality improvement systems should be examined through objective external assessment by independent bodies and appropriate communication of the results.

B. Feedback
   15. The results of external assessment should be used to support continuous internal evaluation and improvement.

V. RESEARCH AND DEVELOPMENT
   National efforts
   16. All necessary measures should be taken to promote research and development of quality improvement.
European cooperation

17. Stimulating exchange and collaboration in quality improvement at the national as well as at the European level should be encouraged. Quality issues should be included into European cooperative initiatives (e.g. data handling and exchange).
Annex 4

WHO REFERENCES ON QUALITY

Publications
WHO has commissioned monographs on specific technical issues in quality, and published reports from consultative meetings. Many of these are available on the Internet. The emphasis has been on the integration of standards, measurement and improvement as a global, cyclical and continuing activity.

Publications on quality since 1990, WHO Geneva

<table>
<thead>
<tr>
<th>Title</th>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assurance of quality in primary care</td>
<td>1990</td>
<td>Report, Shanghai</td>
</tr>
<tr>
<td>National perspectives on quality assurance in mental health care</td>
<td>1991</td>
<td>WHO/MNH/91.2 (109)</td>
</tr>
<tr>
<td>CQI in health facilities</td>
<td>1992</td>
<td>1992.3</td>
</tr>
<tr>
<td>Assessing the standards of care in substance abuse treatment</td>
<td>1993</td>
<td>WHO/PSA/93.5 (110)</td>
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<tr>
<td>Guidelines for quality assurance programmes for blood transfusion services</td>
<td>1993</td>
<td>Monograph</td>
</tr>
<tr>
<td>Promoting the use of technology assessment to improve health care in developing countries</td>
<td>1994</td>
<td>TEC/94.2 (112) Report, Alexandria</td>
</tr>
<tr>
<td>Quality assurance in mental health care</td>
<td>1994</td>
<td>WHO/MNH/MND/94.17 (113)</td>
</tr>
<tr>
<td>Quality assurance in developing countries</td>
<td>1994</td>
<td>1994.5 Report</td>
</tr>
<tr>
<td>Quality assurance methods in developing countries</td>
<td>1996</td>
<td>WHO/SHS/DHS/96.2 (115) Report, St Johns</td>
</tr>
<tr>
<td>Developing a national policy and guidelines on the clinical use of blood</td>
<td>1998</td>
<td>WHO/BLS/98.2 (117)</td>
</tr>
<tr>
<td>A WHO framework for health system performance assessment</td>
<td>1999</td>
<td>GPE paper no. 6 (118) Monograph, Murray JL, Frenk J</td>
</tr>
<tr>
<td>Issues in health services: Improving provider skills delivery. Strategies for assisting health workers to modify and improve skills: Developing quality health care – a process of change</td>
<td>2000</td>
<td>WHO/EIP/OSD/00.1</td>
</tr>
</tbody>
</table>
European Region (EURO)
WHO Europe organized a series of seminars and workshops in the 1980s which brought together some of the early enthusiasts for quality in health care. WHO went on to develop models for national quality strategies, comparative condition-specific databases (including stroke, diabetes and renal disease), collaborative centres and training programmes in “quality of care development (QCD)”.

Publications on quality since 1990, WHO Europe

<table>
<thead>
<tr>
<th>Title</th>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>QA and development in health care</td>
<td>1991</td>
<td>QCT technical paper no 1 Monograph Wahba W</td>
</tr>
<tr>
<td>The role of WHO in QA</td>
<td>1991</td>
<td>Monograph Worning AM</td>
</tr>
<tr>
<td>Midwifery quality assurance</td>
<td>1991</td>
<td>EUR/ICP/HSR 342(2) (120) Report Brussels</td>
</tr>
<tr>
<td>Policy of medical associations regarding quality of care development</td>
<td>1993</td>
<td>ICP/HSC 021(C)/BD/01 Report Utrecht</td>
</tr>
<tr>
<td>Quality assurance indicators in mental health care</td>
<td>1993</td>
<td>EUR/ICP/CLR 062 (121) Report Stockholm</td>
</tr>
<tr>
<td>Multidisciplinary quality development in stroke care</td>
<td>1995</td>
<td>EUR/ICP/CIND 94 Report Reykjavik 07/MT03 (122)</td>
</tr>
<tr>
<td>Quality in health care: a proposed national policy, Belgium</td>
<td>1995</td>
<td>64 pages A5 Policy Belgium</td>
</tr>
<tr>
<td>Quality in health care: a proposed national policy, Slovenia</td>
<td>1996</td>
<td>15 pages A4 Policy Slovenia</td>
</tr>
<tr>
<td>Obstetrical quality development through the integrated use of telematics (OBSQID)</td>
<td>1996</td>
<td>Report Trieste (123)</td>
</tr>
<tr>
<td>Guidelines in health care practice</td>
<td>1997</td>
<td>EUR/ICP/POLC 02 02 04 Report Schloss Velen, Borken, Germany</td>
</tr>
<tr>
<td>Experiences with quality management in an international context</td>
<td>1998</td>
<td>EUR/ICP/QCPH 04 01 02 Report, Germany</td>
</tr>
<tr>
<td>Guidelines on quality management in multidisciplinary occupational health services</td>
<td>1999</td>
<td>EUR/ICP/EHBI 02 02 03</td>
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<tr>
<td>Appropriateness in health care services</td>
<td>2000</td>
<td>EUR/00/5022388 (125) Report Koblenz</td>
</tr>
<tr>
<td>Institutionalization of Health Technology Assessment</td>
<td>2000</td>
<td>EUR/01/5016750 Report on a WHO Meeting</td>
</tr>
<tr>
<td>Developing quality health care: a process of change</td>
<td>2000</td>
<td>WHO/EIP/OSD/00.1 WHO document (125)</td>
</tr>
</tbody>
</table>
Annex 5

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13. European Society for Quality in Healthcare (ESQH) www.esqh.net/


www.gesundheit.bmsg.gv.at


29. World Health Organization. www.who.int


43. Runciman WB. Lessons from the Australian Patient Safety Foundation: setting up a national patient safety surveillance system – is this the right model? Quality Safety Health Care 2002; 11: 246–51.


52. Gesellschaft für Qualitätsmanagement in der Gesundheitsversorgung (GQM) e.V. (Society for Quality Management in Health Care). http://www.gqmg.de/


58. Baldrige criteria for management systems. www.asq.org/abtquality/awards/baldrige.html


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INDEX

access, 1, 2, 4, 9, 12, 24–30, 34, 38, 39, 49
accountability, 1–4, 7, 9, 10, 11, 13, 21–23, 29, 32, 34, 35, 37, 38, 41
accreditation, 4, 9, 11–16, 19–24, 27, 30–32, 34, 35, 37, 46, 48
Adverse patient events, 35
Agence Nationale d’Accréditation et d’Évaluation en Santé, 15, 22
Agency for Health Technology Assessment and Research, 16
AGREE project, 17
ALPHA Council, 21
appropriateness, 2, 5, 12, 32, 46
Ärztliche Zentralstelle Qualitätssicherung, 17
Audit Commission, 16
Australian Council on Healthcare Standards, 21
Austria, 11, 17, 28
Baldrige, 34, 47
Belgium, 9, 11, 14, 18, 28, 44
benchmarking, 11, 24, 25, 28, 33, 35
Bosnia-Herzegovina, 9, 14
Bulgaria, 11, 15, 24, 27, 31
Business process re-engineering, 26
Canadian Council, 48
Canadian Council on Health Service Accreditation, 21
case-mix, 24
CBO, 15
Centre for Medical Technology Assessment, Bulgaria, 15
Centre for Quality and Accreditation in Health Care, 16
Centre for Reviews and Dissemination, UK, 17
certification, 9, 14, 20, 23, 34, 35, 37, 48
clinical audit, 4, 31
Clinical Standards Board, Scotland, 16
Cochrane, 4, 17
Cochrane, Archie, 45
COMAC project EU, 5
Commission for Health Improvement, UK, 12, 16
Convention on Human Rights, 4
cost, 5, 6, 11, 13, 23, 28–32, 37, 38, 40
cost-benefit, 2
council of Europe, 4, 32, 33, 39, 40, 45
Credentiaing, 34
Croatia, 28
Czech Republic, 9
Danish Institute for Health Technology Assessment, 17
data systems, 24, 31, 38
Denmark, 9, 17, 18, 25
Donabedian, Avedis, 2
Dutch Institute for Healthcare Improvement, Netherlands, 15
effectiveness, 1, 2, 5, 6, 9, 18, 35
EFQM, 10, 14, 19, 27, 34, 35, 37, 45–47
England, 15, 16
equity, 2, 9, 32
Estonia, 9, 25, 27, 31
European Commission, 4, 46
European Forum of Medical Associations, EFMA, 19
European Foundation for Quality Management, EQFM, 4, 19, 45, 47
European Health Management Association, EHMA, 19
European Organization for Quality, EOQ, 4, 7, 45
European Public Health Association, EUPHA, 19
European Quality Nursing Network, EuroQuan, 19
European Social Charter, 4
European Society for Quality in Healthcare, 4, 18, 45, 47
European Union, 5, 18, 45, 46
ExPeRT project, EU, 46
external assessment, 5, 13, 14, 19, 23, 27, 41, 48
Finland, 10, 14, 15, 17, 18, 25, 28, 32, 48
FINOHTA (Finnish Office for Health Care Technology Assessment), 17
France, 11, 15, 17–19, 22, 24, 27, 47
Georgia, 11
German Scientific Working Group of Technology Assessment in Health Care, 17
Germany, 10, 11, 13, 17, 18, 22, 25, 27, 28, 44, 46
guidelines, 4, 9, 11, 12, 14–18, 24, 26, 28, 29, 33, 35, 37, 38, 40, 43, 48, 50
Health Quality Service, UK, 21
Health Technology Board, Scotland, 16
Hospital Programme for Europe, HOPE, 19
Hungary, 11, 18, 25
incentives, 3, 9, 23–27, 32, 35, 36, 39, 41, 49
indicators, 6, 9, 10, 12, 15, 24, 25, 28, 31, 35, 38, 41, 44, 48, 50
inspection, 3, 4, 7, 12, 19, 20, 22, 23, 32, 34, 35, 37
Institute of Medicine, 26, 49
Institute of Technology Assessment – Austrian Academy of Science, 17
Instituto de Qualidade em Saude, Portugal, 18
insurers, 4, 11, 15, 22, 35, 37
International Organization for Standardization, ISO, 19, 21, 47
International Society for Quality in Health Care, ISQua, 21, 45
Ireland, 10, 18, 22, 25, 28
Irish Health System Accreditation, 22, 48
Israel, 5, 12, 14, 46
Italy, 10, 12, 15, 17–19, 22, 24, 25, 28
Joint Commission, USA, 20, 21, 48
Kazakhstan, 5
Kyrgyzstan, 22, 27
Latvia, 27, 28, 32
legislation, 2, 7, 9–12, 23, 32, 34, 36
Licensing, 10, 27, 35
Lithuania, 12, 15, 18, 22, 28
Malcolm Baldrige Award, 19
medical audit, 30
Membership societies, 18
MoniQuOr, Portugal, 15, 27
National Care Standards Commission, 16
National Centre for Quality Assessment in Health Care, Poland, 15
National Coordinating Centre for Health Technology Assessment, UK, 17
National Institute for Clinical Excellence, UK, 17
National Institute for Quality in Health, 17
National Patient Safety Agency, UK, 15
Nederlands Instituut voor Accreditatie van Ziekenhuizen, NIAZ, 22
Netherlands, 11, 12, 14, 15, 17, 18, 22, 28, 32, 45
Norway, 10, 12, 17, 18
peer review, 19, 20, 35
Poland, 5, 12, 15, 18, 22, 46
Portugal, 10, 15, 17, 18, 22, 27, 28
primary health care, 5, 25
Program Akredytacji Szpitali Hospital Accreditation, Poland, 22
Public Health Research Institute, 14, 17
purchasers, 2, 9, 11, 13, 15, 28, 36, 38
Quality Assurance Program, USA, 20
Quality Council for health care, Finland, 14
registers, 15, 25, 30
Registration, 20
resource centre, 13, 16, 37
Romania, 15
Russian Federation, 14, 17, 26
safety, 1–3, 5, 10, 12–14, 19, 20, 27, 29, 32, 35, 37, 38, 47
satisfaction, 2, 6, 9, 15, 26–28, 37, 38, 49
Scotland, 15, 16, 19, 47
Scottish Health Advisory Service, 16
self-regulation, 1, 3, 4, 7, 10–12
Slovakia, 16
Slovenia, 10, 44
Spain, 12, 14, 16–18, 21, 28, 31
stakeholders, 2, 7, 9, 12, 19, 23, 27, 36, 38
State Health Care Accreditation Service, Lithuania, 15, 22
Sweden, 10, 12, 16–18, 24, 25, 27, 48
Swedish Council on Technology Assessment in Health Care, 17
Swiss Science Council/Technology Assessment, 17
Switzerland, 17, 18, 22
technology assessment, 4, 5, 10, 15, 37, 41, 43, 50
The Norwegian Centre for Health Technology Assessment, 17
The Scottish Intercollegiate Guidelines Network, 16
TNO Prevention and Health, Netherlands, 17
training, 5–7, 12–16, 18–20, 25, 26, 29–31, 33–36, 38, 39, 44
United Kingdom, 10, 12, 14, 15, 17, 18, 21, 22, 24, 25, 27, 28, 30
users, 2, 4, 7, 13, 20, 23, 24, 27, 28, 31, 34, 38, 39
Vereinigung für Qualitätsförderung im Gesundheitswesen, 48
Vereinigung für Qualitätsförderung im Gesundheitswesen, Switzerland, 22
WHO, 1, 2, 4–6, 11, 16, 26, 33, 36, 39, 43, 44, 46, 48–50

World Bank, 4, 30
World Health Organization, 1, 5, 46, 50
World Health Report, 6, 46
Yugoslavia, 18
A background for national quality policies in health systems

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