Quality in Primary Care 2009;17:165–77

Research paper

Measuring mechanisms for quality assurance in primary care systems in transition: test of a new instrument in Slovenia and Uzbekistan

Dionne Sofia Kringos MSc
International Health Services Researcher

Wienke Boerma PhD
Senior Researcher International Health Services

NIVEL – Netherlands Institute for Health Services Research, Utrecht, The Netherlands

Martina Pellny MSc
Programme Officer for Primary Health Care, WHO Regional Office for Europe, Copenhagen, Denmark

ABSTRACT

Background This World Health Organization (WHO) study aimed to develop and field test an instrument to assess the availability of structures and mechanisms for managing quality in primary care in countries in transition.

Method The instrument is based on a literature study, consensus meetings with experts, and observations in these countries. It consists of three parts: a semi-structured questionnaire on national policies and mechanisms; a structured questionnaire for general practitioners (GPs); and a structured questionnaire for use with managers of primary care facilities. The instrument has been field tested in 2007 in Slovenia and Uzbekistan.

Results In Slovenia, leadership on quality improvement was weak and local managers reported few incentives and resources to control quality. There was a lack of external support for quality-improvement activities. Availability and use of clinical guidelines for GPs were not optimal. GPs found teamwork and communication with patients inadequate. In Uzbekistan, primary care quality and standards in health centres were extensively regulated and laid down in numerous manuals, instructions and other documents. Managers, however, indicated the need for more financial and non-financial levers for quality improvement and they wanted to know more about modern healthcare management. GPs reported strong involvement in activities such as peer review and clinical audit, and reported frequent use of clinical guidelines.

Overall, the information gathered with the provisional instrument has resulted in policy recommendations. At the same time, the pilot resulted in improvements to the instrument.

Conclusion Application of the instrument helps decision makers to identify improvement areas in the infrastructure for managing the quality of primary care.

Keywords: healthcare evaluation mechanisms, healthcare quality assurance, primary health care, Slovenia, Uzbekistan

How this fits in with quality in primary care

What do we know?
The trend to improve the quality of care at a primary care level results from the general need for more cost-effective health services. In most countries, quality assessment is much less advanced in primary care than in the hospital sector. Although many primary care providers are anxious to keep up to date, the lack of explicit procedures and monitoring mechanisms is a barrier to quality assessment and improvement.

What does this paper add?
This paper presents first results with an instrument to assess structures and mechanisms for primary care quality assurance. The instrument allows countries – especially those in transition – to take a snapshot of their primary care quality-assurance infrastructure and, on the basis of the results, to take proper action.

Introduction

Healthcare systems should have inbuilt mechanisms that allow a monitoring of the quality of services provided.[1,2] Policy objectives to improve the quality of care result from a more general requirement that health systems are cost-effective.[3,4] Strong primary care (PC) is supposed to enhance the cost-effectiveness of the system as a whole. Strong PC refers to easy access to first-contact services, a comprehensive supply of curative, preventive and rehabilitative services, continuity of care, and co-ordination with other PC providers and other levels of care.[5–9]

Many studies have pointed to large variations in the quality of PC services and in providers keeping to accepted standards.[10,11] Since PC is usually delivered in small and relatively independent units, quality assurance is more difficult to organise.[12,13] In developing healthcare systems, 'quality awareness' is usually low and mechanisms for maintaining and improving healthcare services are not well developed. The development of a strategy for quality improvement and the implementation of mechanisms to routinely provide feedback information on the quality of facilities and health services is often part of health sector reforms in these countries.[14]

The WHO Regional Office for Europe

The World Health Organization (WHO) Regional Office for Europe supports member states to strengthen their health systems.[15] The *World Health Report 2008* urged countries to act on the evidence that access to PC services should form the core of appropriate healthcare systems.[16] Individual member states are supported to develop, among other things, strategies and mechanisms for systematic quality improvements by means of Biennial Collaborative Agreements (BCAs). WHO's initiative to support development of the instrument presented in this paper fits well into this policy. Box 1 provides background information on the PC mission of WHO Europe.

Objective

This article aims to describe how an instrument to assess strategies and mechanisms for quality assurance

Box 1 WHO Europe supporting countries in transition in the development of PC systems

- *Country work*: WHO supports 53 member states to strengthen their healthcare system.
- *Health system approach*: since 2000, WHO has increased its focus on health systems; PC is a focal point in health system reforms.
- *Advocate for evidence-based policy*: WHO aims to provide policy makers in health care with evidence as the basis of decision making.
- *Collaborating Centre for Primary Care*: WHO commissioned its Collaborating Centre NIVEL to develop a tool to assess the availability of quality assurance strategies and mechanisms in PC.
- *Biennial collaborative agreements (BCA)*: a BCA is a joint agreement between a ministry of health and WHO Europe. In their BCAs with WHO for 2007–2008, Slovenia and Uzbekistan expressed the intention to prioritise PC quality management. As a consequence the PC Quality Management Tool was pilot tested in these two countries. The final version of the tool can be implemented in any member state.

of PC staff and services has been developed and to present the results of a test of the tool, in Slovenia and Uzbekistan.

Method

Study design

A full description of the study design and development process of the instrument has been reported elsewhere.[17,18] This section therefore provides a summary.

The study took place in 2007/2008 and started with a literature review to identify key functions and existing instruments to measure quality management in PC. This resulted in a typology and checklist for quality-improvement policies and activities. The results were discussed in a meeting with 14 policy makers from ministries of health from five countries, researchers from NIVEL, and representatives from WHO. Participants validated the initial ideas and provided the researchers with country-specific information. The next step was the development of the draft instrument, consisting of three questionnaires (one for the national level; one for managers in PC and another for general practitioners (GPs)). The draft was revised after the researchers had visited the countries selected for the pilot implementation. The questionnaires were translated into the Slovenian and Uzbek languages. The fieldwork, jointly conducted by a local co-ordinator and researchers, included the sampling procedure, training of field workers, distribution and collection of questionnaires and organisation of data entry. Analysis and reporting were carried out by the research team in the Netherlands, presenting results, experiences with the instrument and recommendations for its future use.[17,18] At an international review meeting, organised by WHO, 34 primary care experts (including researchers, policy makers from ministries of health, academics and consultants) from 14 countries discussed the provisional results and evaluated the instrument.

Countries and regions for the pilot

The pilot study took place in Slovenia and Uzbekistan. In Slovenia, the capital Ljubljana and the relatively rural region of Gorenjska were selected by way of contrast. In Uzbekistan, the provinces of Fergana, Syrdarya and Tashkent (excluding the capital) were appointed as pilot areas because these were in different stages of PC reform.

Sampling and data-collection strategy

Details of the study population and data collection are summarised in Table 1. In Slovenia the directors of PC units and the heads of family physicians in the PC facilities were included as managers. GPs were recruited from both public and private practice. In Ljubljana city as well as in Gorenjska the total population of managers and GPs were included. Following advice by local investigators, questionnaires were distributed by post, and followed up by telephone reminders.

In Uzbekistan, the target population of managers were the deputy head district doctors. All managers were included. The population of primary care physicians included GPs who had completed a retraining programme as well as doctors who had not. In the provinces mentioned, random samples were drawn from alphabetical lists of GPs. In order to have approximately equal numbers in each region, a 20% sample was drawn in Fergana; in Syrdarya and Tashkent 50% samples were taken. GPs received a questionnaire and a sealable envelope via their manager. The freedom to participate and confidentiality were stressed.

To answer the national-level questionnaire, in both countries panels of experts were formed, consisting of representatives from the Ministry of Health and stakeholder groups (such as medical associations, health insurers and academics).

Data processing and analysis

For data entry, SPSS Data Entry Station version 3.0.3 was used. The program was installed and explained to local staff responsible for data entry. For analysis, SPSS version 14 was applied.

The Primary Care Quality-management Instrument (PCQmI)

For quality management to be embedded in healthcare systems, various functions, related to different parties, need to be activated, such as stewardship or governance; advocacy; facilitation and advising; implementation; teaching and training; monitoring and evaluation; research; communication among stakeholders.[2,4] The PCQmI has focused on the state of institutionalisation of these functions in PC systems. It aimed to identify the currently available structures in a country and possible areas of improvement and, thus, enable decision makers to set priorities for further development of quality systems in PC. The instrument focused on different levels in the healthcare system: regulation and structures at the national level, the management of PC facilities and the providers of care – the physicians in PC. Table 2 shows for each questionnaire the topics that were addressed.

Table 1 Sampling and data collection in Slovenia and Uzbekistan

	Slovenia	Uzbekistan
Target groups	GPs Directors of primary healthcare units and heads of GPs National experts	GPs Deputy head doctors in districts (managers) National experts
Locations	Gorenjska region Ljubljana city	Province of Fergana Province of Syrdarya Province of Tashkent
Type of data collection	GPs: pre-structured postal questionnaire Managers: pre-structured postal questionnaires National experts: pre-structured questionnaire and expert consensus meeting	GPs: pre-structured questionnaire Managers: pre-structured questionnaire National experts: pre-structured questionnaire and expert consensus meeting
Sampling method	GPs: population (all) in two regions Managers: population (all) in two regions National experts: selected by local partner	GPs: random sample in three regions Managers: population (all) in three regions National experts: selected by local partner
Sample size	GPs: Ljubljana: 130 (= all) Gorenjska: 70 (= all) Managers: Ljubljana: 14 (= all) Gorenjska: 13 (= all) National experts: 17	GPs: Fergana: 117 (20%) Syrdarya: 97 (50%) Tashkent: 103 (50%) Managers: Fergana: 16 (= all) Syrdarya: 9 (= all) Tashkent: 15 (= all) National experts: 11

Experiences with the instrument

The questionnaires have been revised as a result of experiences and feedback during the field tests and comments made by the experts in the Copenhagen meeting organised by WHO (the latest version of the structure of the three questionnaires can be requested at www.nivel.eu/who). In general, questions have become more factual. The character of the national-level questionnaire was drastically changed into a template for a background document. These backgrounds were to be prepared by a small panel of experts, and subsequently discussed in a national validation meeting. Questionnaires for managers and GPs have been reduced in size. Furthermore, it was advised to improve the sensitivity of the instrument by supplementing it with additional document inspection and site visits.

For reasons of comparability between countries and within one country over time, the importance of uniformity was stressed. However, to allow for local priorities, an optional variable annex to the generic core of the instrument would strengthen its applicability.

Results of the pilots

Slovenia

Response

Out of 17 invited experts, ten effectively filled in the national level questionnaire, and only five of these participated in the consensus meeting. Among the included and approached managers about half completed the questionnaires (nine in Ljubljana and five in Gorenjska). On average, managers in Ljubljana had been working in this position for 27 years, in Gorenjska for 13 years.

The response among GPs was low. Only 63 GPs in Ljubljana returned the questionnaire (48%) and 18 in Gorenjska (26%). Three-quarters of the GPs were female. The average age in both areas was around 47 years. About three-quarters of the GPs, in both Ljubljana and Gorenjska, had completed a postgraduate training in family medicine. On average, the GPs had well over 20 years of working experience, most of the time at the place they were currently working.

Table 2 Topics addressed by the three questionnaires

National-level questionnaire	Questionnaire for managers of PC facilities	Questionnaire for GPs/PC physicians
• Aspects of quality assurance in PC addressed in laws and regulations and the role of governmental and non-governmental bodies	• Practice staff and conditions	• Involvement in quality-improvement activities
• Availability of formal job descriptions in PC	• Availability of manuals, routine statistics and other quality-related documents	• Availability and use of clinical guidelines
• Co-ordination and follow-up of PC quality management	• External information and support for quality assurance	• Involvement in continuing medical education
• Availability and use of information on the quality of PC services	• Involvement in quality-assessment activities	• Participation in work evaluation meetings
• Mechanisms in place to assess the quality of PC services	• Human resources management	• Availability and use of practice-based data
• Explicit incentives to promote the quality of PC services	• Routines with continuing medical education	
• Availability of clinical guidelines	• Planned quality-improvement activities	
• Formal requirements for continuing medical education		

Quality assurance in Slovenia: national level

Table 3 provides an overview of main results on the national level, based on opinions of PC experts.

Quality assurance was not a priority in PC in Slovenia. At different levels, leadership and a clear vision on maintaining and improving quality of services were lacking. Legislation was proceeding slowly. At the time of the study, three laws relating to quality in health care were pending. The system was not prepared for accountability, illustrated by the rare use of external quality assessments commissioned by the Ministry of Health, low use of available public health data, and a lack of supervision on complaint procedures. Beyond the formally arranged inspection and supervision in health care, supervision of quality in PC was fragmented and poorly co-ordinated. The continuing medical education (CME) system was based on credit points, and not driven by the educational needs of physicians. Access to guidelines and protocols could have been improved. Independent guidelines were for sale only. Those provided by the pharmaceutical industry were freely available, but less suitable for use in PC.

PC managers in Slovenia

Table 4 provides a selection of proxy indicators for *managers* in both pilot areas in Slovenia.

Annual quality reports were unusual. There was a low use of formal quality-assessment instruments, particularly in Ljubljana, such as attestation of physicians, voluntary certification and accreditation, and mandatory licensing of physicians or nurses and organisations. Internal assessment mechanisms, such as routine inspection of medical files, were not generally applied in all centres. In contrast to managers in Gorenjska, those in Ljubljana generally rated the conditions and means available for quality improvement as insufficient. In both regions, human resources management was insufficiently suited to quality improvement. Only a minority of the managers (20% in Ljubljana and 40% in Gorenjska) reported offering staff training for quality improvement, for using personal development plans and to monitor job satisfaction of staff. Managers agreed with the statement that a more positive attitude of staff towards innovation was needed. Protocols and guidelines were not generally implemented – only in about half of the centres. Managers expressed their intention to invest in further implementation,

Table 3 Overview of main results from the national questionnaire based on opinions of PC experts in Slovenia and Uzbekistan

	Slovenia	Uzbekistan
General context	Quality management was not a major issue in PC.	The 1996 Law on Health Protection set the first guidelines for health sector reform
	National guidelines on quality management adopted but not ready for implementation	With donor support of the World Bank, the PC system has undergone major restructuring
	The national institute for quality improvement was planned for 2006 but not established yet	The Centre for Evidence-based Medicine, and the Centre for Continuing Medical Education have been established
	There is a lack of trust between stakeholders. This is perceived as a major obstacle to leadership on quality of care	Medical education became subject to accreditation, and a licensing scheme was introduced for professionals
	Healthcare managers should become more familiar with accountability, competence, incentives and evidence. Few GPs see quality assessment and improvement as a core task	Financial and human resources management in PC continues to be an area for improvement
Legislation and regulation	Legislation is proceeding slowly	Improvement of (primary) healthcare services has been subject to many laws and regulations
	Co-ordination and support for quality programmes is weak, and clinicians and managers lack performance information	Patients' rights were said to be a point of debate
	Laws deal with quality systems, licensing, and medical auditing	
	Patients' rights have been generally addressed in several laws. A new comprehensive Law on Patients' Rights was accepted in 2008	
Co-ordination and formal/voluntary mechanisms	Instruments to commission external quality assessments are not well used	The Ministry of Health has the final responsibility for the quality of PC facilities
	Data collected by the public health institutes not used for quality purposes	The following formal mechanisms were reported to be in place: supervision of CME activities; formal investigations into shortcomings and significant events in PC; mandatory licensing; benchmarking; financial incentives for providers; non-financial incentives (several awards); national programme(s) for the development of clinical guidelines
	Licensing and supervision of continuing medical education (CME) has been delegated to the Medical Chamber	

Table 3 Continued

	A complaint procedure for patients formally exists but is not supervised nationwide.	Official job descriptions reported to exist for all PC disciplines, contain elements that can be used for performance evaluation.
	Co-ordination between stakeholders in assuming different responsibilities could be improved.	
	Voluntary local initiatives, such as community surveys, voluntary accreditation or benchmarking, are rare.	
Education and access to information	Quality assurance is a major subject in the postgraduate programme for family medicine.	Experts reported the current undergraduate and postgraduate programme and the retraining course paid sufficient attention to quality management. Methods of quality improvement were introduced in the curriculum in 2005.
	CME focuses on clinical subjects, rather than on performance improvement and quality management.	Current CME programmes were reported to meet the need to keep up to date.
	The current CME system (based on 'credit points') is insufficiently driven by educational needs.	GPs need to pass a qualification exam every five years.
	Most GPs do not use computers for medical documentation or professional expert systems.	GPs and nurses need better clinical and other information for feedback on performance.
	Independently produced guidelines are only for sale.	
	Managers often lack a managerial background.	
	Quality management is a low priority.	

and to update obsolete procedures. However, they reported they were confident that patients were treated according to the latest professional evidence.

Slovenian GPs

A selection of indicators concerning GPs in Slovenia is shown in Table 5. GPs were more involved in *ad hoc* forms of quality improvement, than in structured and formalised procedures. Clinical guidelines were not optimally used. A co-ordinated approach was missing in the production of clinical guidelines. GPs were positive about CME courses, stating that these helped them to provide better care to their patients. About 75% of the GPs in both regions saw opportunities to improve teamwork and co-operation within PC, for example with nurses, as well as in the interface with secondary and tertiary care. GPs widely acknowledged that the motivation of healthcare workers to improve the quality of care left something to be desired and that better incentives would help to change the situation.

Recommended improvements in Slovenia

Although the main aim of the pilot was to test the implementation of the instrument, the results give rise to suggestions for decision makers. The recommendations listed in Box 2 have been formulated by the authors on the basis of the results of this pilot

Table 4 Overview of a selection of quality management indicators for managers in the pilot areas in Slovenia and Uzbekistan

	Slovenia		Uzbekistan		
	Ljubljana ($n = 9$)	Gorenjska ($n = 5$)	Fergana ($n = 16$)	Syrdarya ($n = 9$)	Tashkent ($n = 15$)
Available documents relevant for maintaining quality of care					
Mission statement for centre	78%	60%	100%	89%	93%
Annual budget specification	67%	80%	69%	44%	27%
Annual reporting on QI	33%	0%	88%	78%	93%
Unsatisfied conditions and means for quality improvement (QI)					
Internal management info	56%	20%	81%	56%	100%
Access to external sources of info	89%	40%	44%	56%	94%
Effective support	100%	40%	44%	33%	87%
Effective incentives	100%	100%	6%	22%	87%
Executive power	78%	100%	44%	55%	87%
Available support for improvement actions					
Internal resources	67%	80%	44%	56%	27%
Internal co-ordination group	67%	60%	75%	67%	53%
External support	22%	40%	94%	44%	40%
Application of external assessment instruments					
Mandatory licensing of centre	56%	100%	69%	44%	20%
Mandatory licensing of physicians and/or nurses	67%	100%	50%	33%	47%
Voluntary accreditation of centre (assessment of standards)	11%	0%	50%	44%	27%
Voluntary certification of centre (informal evaluation)	0%	0%	38%	22%	13%
Attestation of physicians	0%	40%	69%	89%	100%
Benchmarking other centres	0%	0%	69%	44%	40%
Use of internal assessment instruments					
Inspection medical files	44%	60%	88%	78%	93%
Routine evaluation reports	33%	60%	56%	67%	73%
Internal medical audits	89%	60%	63%	56%	47%
QI programmes	0%	60%	69%	89%	40%
GP peer review	0%	60%	63%	67%	60%
Monitoring patients needs	11%	60%	50%	56%	20%
Monitoring opinions secondary care	0%	0%	50%	56%	27%
QI committee	11%	0%	56%	67%	53%
Systematic analysis patients complaints	78%	80%	75%	89%	73%
Application of human resources management actions					
Job evaluation interviews	33%	60%	94%	89%	60%
Monitoring job satisfaction	22%	40%	75%	56%	20%
Personal development plans	11%	40%	100%	89%	93%
Staff training for QI	44%	20%	88%	89%	87%
Use of protocols and guidelines for:					
Specific clinical topics	56%	60%	94%	78%	80%
Use of medical equipment	56%	60%	100%	78%	67%
Referrals to specialists	56%	60%	100%	78%	67%

Table 4 Continued

Patient complaints	100%	80%	88%	89%	80%
Patient information	78%	0%	81%	78%	53%
Future plans for quality improvement					
Improve clinical practice by guidelines and protocols	100%	100%	100%	78%	100%
Update obsolete clinical guidelines or protocols	78%	80%	88%	78%	87%
QI reflections and expectations					
Patients are treated according to latest professional evidence	100%	100%	82%	77%	67%
Staff members need a more positive attitude towards innovation	100%	60%	94%	89%	100%

Table 5 Overview of a selection of quality management indicators for GPs in the pilot areas in Slovenia and Uzbekistan

	Slovenia		Uzbekistan		
	Ljubljana ($n = 9$)	Gorenjska ($n = 5$)	Fergana ($n = 16$)	Syrdarya ($n = 9$)	Tashkent ($n = 15$)
Involvement in informal QI activities					
Incidental consultation of a colleague about diagnosis or treatment	90%	94%	96%	98%	98%
Reading prof. journals (min 2x p/m)	95%	78%	92%	95%	89%
Planning specific improvements in practice management	87%	83%	92%	99%	87%
Planning specific improvements in clinical work	76%	56%	96%	96%	86%
Any clinical or epidemiological research	43%	44%	30%	68%	49%
Involvement in formal QI activities					
Medical files inspection by a chief	8%	22%	98%	97%	93%
Regular use of standards for teamwork with a nurse	60%	56%	92%	94%	83%
Development treatment protocol(s) with colleagues from same centre	19%	17%	89%	89%	74%
Internal audit	16%	11%	83%	89%	67%
External audit	22%	33%	72%	80%	54%
Attending CME courses (min 2 p/y)	90%	94%	49%	57%	55%
Conducting a patient satisfaction survey	57%	39%	52%	58%	56%
Clinical guidelines					
Use on a regular basis	81%	67%	98%	97%	85%
Drafted by Ministry of Health	27%	58%	100%	98%	95%
Drafted by consensus procedure inside the centre	20%	17%	62%	53%	44%
Drafted by consensus procedure outside the centre	57%	50%	69%	72%	48%
Imported from abroad	67%	75%	62%	57%	47%

Table 5 Continued

	Slovenia		Uzbekistan		
	Ljubljana ($n = 9$)	Gorenjska ($n = 5$)	Fergana ($n = 16$)	Syrdarya ($n = 9$)	Tashkent ($n = 15$)
Opportunities to improve GPs functioning by improving:					
Teamwork with nurses in PC	76%	78%	83%	94%	88%
Co-operation with medical specialist	75%	72%	–	–	–
Referrals to medical specialists	60%	72%	80%	80%	76%
Opportunities to improve healthcare services by:					
Improving knowledge/skills of staff	84%	89%	100%	100%	97%
Strengthening staff motivation for improving care by improving incentives	84%	89%	93%	99%	97%
Allocate more resources for staff training	78%	83%	98%	100%	98%
QI reflections and expectations					
Current CME courses help to provide better care to patients	98%	94%	94%	95%	90%
Supervisors in health care should be encouraging rather than punitive	98%	95%	93%	84%	94%

Box 2 Areas of possible improvement for PC quality management in Slovenia

- Development of leadership and clinical governance at national level by establishing the planned National Institute for Quality Improvement and empowering the Department on Quality in the Ministry of Health
- To improving the legislative basis for quality assurance by speeding up pending laws
- Development of a national platform consisting of the Ministry of Health and stakeholders to launch a national approach for structured quality assurance at primary level
- To modernise the management in primary care, including education of managers; improved management information; and the introduction of quality procedures and routines
- Implementation of national measures to strengthen the position of patients; including uniform complaint procedures and a patient charter
- Innovation towards an independent system of CME driven by needs for knowledge and skills; creating incentives for periodical assessments
- To promote the use of computers for medical information and expertise, clinical record keeping and practice-based research
- Co-ordinated approach to the development and proliferation of GP clinical guidelines
- To develop human resources management in primary care, including regular job evaluation interviews, personal development plans and increased efforts on staff training

application and their experience with primary care development in countries in transition.

Uzbekistan

Response

All 11 invited experts effectively participated in the national consensus meeting. All 40 PC managers in the three provinces responded by filling the questionnaire (16 in Fergana, nine in Syrdarya, 15 in Tashkent). Most of them were male and had been working in this position and this centre between 10 and 20 years. In the densely populated Fergana province, more than two-thirds of the managers worked in inner-city or suburban areas, while in Syrdarya three-quarters were working in suburbs or small towns and in Tashkent region 60% in rural areas. The response among GPs was close to 100% and amounted 106 GPs in Fergana, 97 in Syrdarya, and 103 in Tashkent. Overall, 42% of

the GPs were male and 58% female. The average age of the GPs was 44 years. Most GPs had completed a retraining course in family medicine. Since GPs were relatively new in Uzbek PC, respondents had little experience as a GP, but much more as a paediatrician or therapist. As the introduction of GPs in PC started in the countryside, the large majority of GP respondents were working in rural practice.

Quality assurance in Uzbekistan: national level

Table 3 provides an overview of main results on the national level based on opinions of PC experts. With donor support, quality improvement in PC was an explicit national priority. Many laws, decrees and orders dealt with the improvement of (primary) healthcare services. Reforms also aimed to improve healthcare management. The Evidence Based Medicine Centre was in charge of the development and implementation of a programme for clinical guidelines in PC. The final responsibility for the quality of PC was with the Ministry of Health, but within this ministry responsibilities seemed to be fragmented. The position of non-governmental organisations (NGOs) in healthcare matters seemed to be weak. Promoting patient-centred care was not a policy priority. Major topics in the Law on Patients' Rights were compliant procedures, patients' informed consent and patients' access to their medical files.

PC managers in Uzbekistan (see Table 4)

The availability of quality-related documents (e.g. mission statements, or budget specification) was clearly better in Fergana than in Syrdarya or Tashkent. Internal assessment was fairly practised. In all three provinces, 50 to 75% answered they used evaluation reports, internal medical audits, GP peer review, and quality-improvement committees. Patients' needs were infrequently monitored.

Availability of internal resources for quality assurance, such as management information, support and incentives, seemed to be best in Fergana, followed by Syrdarya. In Tashkent, most managers found these resources to be insufficient. Furthermore, the managers indicated they needed more support for quality improvement and more modern management information and skills. Managers found the attitude of healthcare staff towards innovation to be an obstacle for quality improvement.

Uzbek GPs (see Table 5)

GPs were confident that treatment of patients was in line with the latest evidence, while managers were more reserved at this point. GPs, especially in Syrdarya and Fergana, reported they were highly involved in formal and informal quality-improvement activities. In Fergana and Syrdarya, clinical guidelines were generally used, while in Tashkent some improvement seemed possible. Like the managers, the GPs found CME courses to positively contribute to the quality of care. GPs were more strongly convinced than their managers that they spent sufficient time to keep up to date. GPs in general expressed the intention to improve many aspects of their clinical work, such as diagnostics, and drug prescriptions, but they found the style of management to be punitive rather than stimulating.

Recommended improvements in Uzbekistan

Recommendations made by the authors to improve PC quality management in Uzbekistan are listed in Box 3.

Box 3 Areas of possible improvement for PC quality management in Uzbekistan

- Further developing and implementing a model for comprehensive primary care services in cities
- Reducing the monopoly of the government in the health sector by recognising the roles of NGOs in laws and in health policy development
- Supporting the role of managers at the primary level, by training them in modern management techniques, implementing management information systems and providing them with necessary resources
- Improving clinical information and medical record keeping among GPs by systematically introducing computers in primary care facilities
- Continuing with the co-ordinated development, updating and dissemination of clinical guidelines for GPs and realising the acceptance of guidelines
- Actively involving patients in the provision of primary care services by systematic monitoring patients' needs and satisfaction, and developing service norms in primary care
- Modernising CME by introducing modern teaching methods and relating the supply of courses to the educational needs of the users
- Developing human resources management in primary care, including regular job-evaluation interviews and personal development plans

Discussion

Evaluation of the implementations

The involvement of committed counterparts and local experts turned out to be crucial for a successful implementation of the instrument. The surveys had a wider impact than just collecting data. The introduction of the activities at central, regional and local level implied information transfer and raising awareness on issues of quality in PC. The more intensive the approach and the more personal the surveys that were introduced, the stronger this effect has been. Several data-collection methods can be identified for the surveys: postal or personal; via the lines of management or parallel. Whichever method is chosen depends on available resources and local circumstances.

A deliberate choice of pilot areas is important. Preferably, these should be contrasting in variables the instrument aims to measure, for instance in the stage of healthcare reform or because of different provision of PC services. The formulation of differences between regions may serve as a reference for the interpretation of results and offer a starting point for follow-up activities.

Limitations of the pilot

The instrument relies on self-reports, rather than on direct observations or registrations. The draft instrument was revised to reduce the likelihood of bias as a result of a positive answering tendency. The acceptability of the instrument influences the response rate. This was relatively low in Slovenia, which could be for two reasons. Firstly, physicians were approached by postal questionnaires, whereas in Uzbekistan a more personal approach was used. Secondly, independently practising physicians have more freedom to reject an intervention, compared to physicians practising in a command-control system, such as in Uzbekistan. To compensate for possible low response rates, which was the case in Slovenia, additional observations and interviews have been included in the revised instrument. Furthermore, it should be stressed that the instrument is not about quality of care itself or quality indicators. Since follow-up of the formulated recommendations is still to come in both countries, an evaluation of this process is missing in this paper.

Application of the instrument

The instrument aimed to get insight into available strategies and mechanisms on quality assurance and the way managers and practitioners are dealing with quality assurance. Since this varied information is not readily available, especially not in countries in transition, the questionnaire method was considered to be the most appropriate approach. The use of surveys implemented by national counterparts, discussed and completed by diverse stakeholders, furthermore had the advantage of raising awareness on the importance of quality management. In a relatively easy way, the surveys also produce information that allow decision makers to identify areas of improvement. The involvement of stakeholders may strengthen their commitment related to quality management in PC. The catalysing role of WHO in this process is essential to move this process forward. Together with national authorities and stakeholders, workshops and conferences are organised to disseminate results and transfer expertise for follow-up.

The pilots will result in a new revised version of the instrument, which in the future can be implemented in other countries. Implementation in new countries can take place in the context of a BCA between the respective ministries of health and WHO.

Conclusion

Application of this new instrument in the context of WHO country activities can enable decision makers to identify areas of development in assuring the quality of PC services. Applicability can be enhanced by tuning the generic instrument to the local situation before use.

REFERENCES

1 Donabedian A. *Explorations in Quality Assessment and Monitoring. The definition of quality and approaches to its assessment.* Ann Arbor, MI: Health Administration Press, 1980.
2 Legido-Quigley H, McKee M, Nolte E *et al. Assuring the Quality of Health Care in the European Union. A case for action.* Observatory Studies Series No 12, 2008. World Health Organization, on behalf of the European Observatory on Health Systems and Policies. Geneva: WHO.
3 European Observatory on Health Care Systems and Policies. *Primary Care in the Driver's Seat? Organisational reform in European primary care.* Buckingham: Open University Press, 2005.
4 USAID and ZdravPlus. *An Introduction to the Field of Quality Improvement in Health Care: applications in Central Asia.* 2006. Washington, DC: UNAID, 2006.
5 Macinko J, Starfield B and Shi L. The contribution of primary care systems to health outcomes within Organization for Economic Cooperation and Development (OECD) countries, 1970–1998. *Health Services Research* 2003;38:831–65.
6 Franks P and Fiscella K. Primary care physicians and specialists as personal physicians: health care expenditures and mortality experience. *Journal of Family Practice* 1998;47:105–9.

7 Starfield B. Is primary care essential? *The Lancet* 1994; 344:1129–33.
8 Starfield B. *Primary Care: concept, evaluation, and policy.* New York: Oxford University Press, 1992.
9 Green LA, Philips Jr RL and Fryer GE. *The Nature of Primary Medical Care. Oxford textbook of primary medical care: principles and concepts (Volume I).* Oxford: Oxford University Press, 2004.
10 Seddon ME, Marshall MN, Campbell SM *et al.* Systematic review of studies of quality of clinical care in general practice in the UK, Austalia and New Zealand. *Quality Health Care* 2001;10:152–8.
11 Kirk SA, Campbell SM, Kennel-Webb S *et al.* Assessing the quality of care of multiple conditions in general practice: practical and methodological problems. *Quality and Safety in Health Care* 2003;12:475–80.
12 Wagner C, De Bakker DH and Groenewegen PP. A measuring instrument for evaluation of quality systems. *International Journal for Quality in Health Care* 1999; 11:119–30.
13 Wagner C, Gulácsi L, Takacs E *et al.* The implementation of quality management systems in hospitals: a comparison between three countries. *BMC Health Services Research* 2006;6:50–61.
14 World Health Organization. *Quality of Care: a process for making strategic choices in health care systems.* Geneva: World Health Organization, 2006. www.chsrf.ca/kte_docs/QualityCare_B.Def.pdf (accessed 8 April 2009).
15 World Health Organization. EUR/RC55/R8: *Strengthening Health Systems as a Continuation of the WHO Regional Office for Europe's Country Strategy 'Matching Services to New Needs'.* Geneva: World Health Organization, 2005.
16 World Health Organization. *The World Health Report 2008: primary health care now more than ever.* Geneva: World Health Organization, 2008.
17 Boerma WGW, Kringos DS, Verschuuren M *et al. Primary Care Quality Management in Slovenia. Primary care in the WHO European Region.* Copenhagen: WHO Regional Office for Europe, 2008.
18 Boerma WGW, Kringos DS, Verschuuren M *et al. Primary Care Quality Management in Uzbekistan. Primary care in the WHO European Region.* Copenhagen: WHO Regional Office for Europe, 2008.

ACKNOWLEDGEMENTS

The authors acknowledge the WHO Regional Office for Europe for initiating and funding the study. They also express their gratitude to the managers, physicians, local organisers and others involved in primary care in the provinces of Fergana, Syrdarya and Tashkent (Uzbekistan), and in Ljubljana and the Gorenjska region (Slovenia). Valuable inputs by the participants at the review meeting organised by WHO Europe are highly appreciated.

FUNDING

The research team gratefully acknowledges the financial support of the WHO Regional Office for Europe.

ETHICAL APPROVAL

None.

PEER REVIEW

Not commissioned; externally peer reviewed.

CONFLICTS OF INTEREST

None.

ADDRESS FOR CORRESPONDENCE

Dionne Sofia Kringos, International Health Services Researcher, NIVEL – Netherlands Institute for Health Services Research, PO Box 1568, 3500 BN Utrecht, The Netherlands. Email: d.kringos@nivel.nl

Received 27 January 2009
Accepted 29 March 2009