The idea of healthcare quality improvement (QI) and disseminating evidence-based practice has been attractive for local health policy makers in Uzbekistan since the early 2000s. At the same time, international institutes started wide-ranging activity in the country by declaring their adherence to QI and evidence-based strategies in their health projects. However, nowadays, one cannot say that national health reforms and international projects are leading to steady improvement in the quality of clinical practice and supply of patients’ needs, despite good examples of the effectiveness of such projects abroad. This provokes the view that the transitional health systems are designed to satisfy the requirements of potential foreign partners rather than to benefit patients.\(^1\)

One aspect that is in need of discussion is the degree to which Uzbekistan’s healthcare system is open for the proposed QI activities. Funding of health care resulted in building and equipping rural primary care practices, training medical and administrative personnel for these practices, and vesting some regulatory functions at primary care level and enhancing their autonomy from the central regional hospitals. However, these inputs did not provide the sustainability of practices required to meet the needs for improvement in local quality of care.

Although standards are effective tools for external and internal quality control, their development in Uzbekistan is rather sporadic and has not been regulated.

An important quality of care issue is the need for evidence-based medicine fundamentals to be taught in graduate and postgraduate curricula. However, efforts to implement this through the training of medical school teachers and students have weak support from faculty heads, despite being declared to be among the institute’s priorities.

International policy regarding Uzbekistan currently ranges from local short-term health projects to large-scale medium-term efforts. The latter are very ambitious, but are the most resource- and time-consuming. In contrast to the view that developing world health systems are becoming more flexible to local QI projects, the post-Soviet health systems, including that in Uzbekistan, seem to resist such interventions.
Financing and structuring

Funding of health care in Uzbekistan in terms of per capita total government expenditure decreased from 1999 to 2003. Government initiatives along with World Bank support in strengthening primary health care under the ‘Health’ project was promising, with investments of 82.33 mln.USD (including 29.55 mln.USD of bank loans). This resulted in building and equipping rural primary care practices, training medical and administrative personnel for these practices, and vesting some regulatory functions at primary care level and enhancing their autonomy from the central regional hospitals. However, these inputs did not provide the sustainability of practices required to meet the needs for improvement in local quality of care. One reason for this could be that although the main outcome of the project was rather ambitious, i.e. reduction of morbidity and mortality of the population, the processes that could provide such results were not fully considered and responsibility was simply delegated to the World Health Organization and the United Nations Children’s Fund (UNICEF) programmes.

At present, the financial mechanism of per capita funding of primary care is being promoted in Uzbekistan, but this change has both positive and negative aspects. The capitation is not yet standardized, and it is not clear if it will motivate as supposed, caring for more patients. Although it may be a good tool to decrease the total volume of interventions, there is no certainty that it will reduce the use of processes with poor evidence and increase the use of evidence-based practices, especially given that Internet access is limited and data cannot be appraised critically by practitioners due to lack of skills. Hospital budgets are divided into four categories, and the most expensive item (50–60%) is staff salaries. To increase the relatively low wage of public sector specialists, the Government attempted to boost this using a quarter of the non-state funds for salary payments. The problem is that hospital funds are credited due to the mechanism, promoting a direct financial incentive to increase and maintain capacity, e.g. patients’ beds, stays, admissions without any concern for the quality of care provided. A case-based approach of payment for hospital services could limit the length of hospital stay and, again, the volume of interventions, but seems to be a direct recipe to increase the number of beds and admission of ‘healthy’ patients, i.e. has a weak motive to change current practice.

Another aspect is that the contribution of the Government to total health expenditure, in comparison with the early post-Soviet period, has decreased dramatically. This situation apparently motivated the Government to re-examine the role of the private sector, and consider it either as a source of finance or as a provider of care. However, the quality of care provided by the private health sector is chaotic; minimal, if any, quality control exists, despite activity of a new department in the Ministry of Health (MoH) since 2007. Therefore, uniform quality criteria for both the public and private health sectors could be important to prevent prejudices such as ‘private care is not good and is expensive’ or ‘if you pay, you get better care’. This could promote developing by government quality instead sector (public or private) oriented strategy and widely use the alternative providers’ offers to create competition in the system. However, as Berwick wrote, market forces are not the best friends in health care, so regulating the country health sector to avoid duplicating and fragmenting care is necessary in perspective.

The initiative of the MoH to found the ministerial system of quality control has not actually provided the specific tools and incentives, except for administrative ones. The highly centralized relations do not allow regional authorities to provide favourable grounds for successful local QI projects. For example, UNICEF recommendations for respiratory infection and diarrhoea in children contradicted some national outdated epidemic control regulations, and limited their implementation into practice. Therefore, decentralization appears to be fundamental at this stage of healthcare transition. However, if this process requires simply delegating administrative functions to regional health departments while leaving the overall decision-making in the hands of the MoH, one arrives at exactly the same situation as the former Soviet administration. The Russian experience warns that there is no standard way to carry out this process. In this state, the stratification of national health system functioning items, and the extent to which decisions or financing can be devolved to regions, hospitals and practices, could be important.

Involving patients in clinical decision making is limited, making them passive recipients of the service with no means of taking part in the process of care. Therefore, developing a public control of health care competing with not always effective administrative one is also important. In Singapore, the provision of better information to consumers started the effective tripartite relations in the health system, and led to a decrease in the cost of care in the public and private sectors.

Facilities and standards

The important inputs include the provision of utilities, i.e. permanent water, power and heating supply, to healthcare offices, especially in rural areas. Rural practice staff often cannot provide good care because even basic diagnostic equipment does not work in the absence of power. In winter, some hospitals deliver babies in rooms with a low ambient temperature that may harm the newborns, e.g. causing pneumonia which was the most prevalent cause of death (16.8%) after neonatal causes among children under 5 years of age in Uzbekistan in 2000. Provision of the infrastructure for rural practices should have been financed by the Government under the ‘Health’ project, but this was not implemented sufficiently. At the hospital level, the share of expenses to providing facilities is also going down, making the salary rate critical for quality improvement. All these aspects need to be considered in licensing to achieve an equal starting point for care providers. The problem is that the scanty budget cannot provide all that is needed for all facilities, even in cases of urgent need. Thus, business investment is agreeable but the money should cover the accepted input standards; otherwise, the risk of misspending is high.

Although standards are effective tools for external and internal quality control, their development in Uzbekistan is rather sporadic and is not regulated. The US Agency for International Development (USAID) and UNICEF programmes are having positive experiences in the development of clinical standards in Uzbekistan, but inconsistent country leadership damages these initiatives. Creating guidelines and protocols was historically popular among medical academic groups in the country, but their methodology was not systematic and usually reflected the developers’ own opinions. An evidence-based medicine centre is attempting to work in the area of guideline development, using methodology adapted from the Scottish Intercollegiate Guideline Network (Fig. 1) that could be disseminated among working groups, ideally within the national network. Developed and implemented guidelines could form the basis for developing quality of care indicators and review criteria; this is now part of the National Health Service’s policy. The effect of an audit using developed indicators can be greater when baseline adherence to recommended practice is low, as seems to be the case in Uzbekistan at present. Another aspect is developing a national drug formulary that is the bestselling item in all post-Soviet countries but not getting the necessary methodological support. The problem, apart from following systematic tools with use of evidence-based data, is in integrating it to healthcare quality...
control, e.g. for limiting unnecessary prescriptions; otherwise, it just becomes another ‘helpful’ list of drugs.

If items of developing process standards are not yet systematized, the input requirements (staff, equipment, buildings etc.) developed in the Soviet period exist but have not been upgraded. As a result, they are not fully followed by providers and cannot be used for licensing of healthcare providers at this stage.

Education

An important quality of care issue is the need for evidence-based medicine fundamentals to be taught in graduate and postgraduate curricula. Efforts to implement them through the training of medical school teachers and students have weak support from faculty heads, despite being declared to be among the institute’s priorities. The reason for this could be that the academicians are too conservative in reforming the curricula, and they are unfamiliar with implementation of the associated WHO and UNICEF programmes and guidelines. On the other hand, international institutes should be consistent and develop guidelines based on stronger evidence; they should only support changes demonstrating a positive impact after implementation in the country. This tactic could uphold the evidence-based medicine strategy in education and win more QI followers nationally.

Poor access to e-databases in medical schools and clinical practice is an aggravating factor that isolates students and practitioners from evidence-based information; this is another input problem that should be solved. Teaching computer skills in graduate courses is rather formal and does not provide skills in operating free databases on the Internet (e.g. MEDLINE, The Cochrane Library) or using HINARI, the WHO programme for developing countries. Founding journal clubs could be an effective alternative in this state, covering all important skills. At graduate level, it could replace the SNOs, i.e. scientific societies in which members search for ‘some’ data about the health problem without considering the evidence level.

Professional revalidation requirements could help to ensure specialists’ competence. It currently shifts from an administrative to a specialist needs based approach, but unclear external demands for professional skills and knowledge may impede any positive initiative in this area. There are no grounds to suppose that it will promote the need for understanding or use of evidence in practice. There is also no mechanism of what to do with practitioners who did not pass through the process, nor any efforts to provide them with information containing valid data. Therefore, establishing ‘strict’ revalidation seems to be more the result than the tool of implementing evidence into the country’s health service.

National and international QI projects

International policy regarding Uzbekistan currently ranges from local short-term health projects to large scale medium-term efforts. The latter are very ambitious but are the most resource- and time-consuming. The World Bank and, partially, USAID projects suggest such reforms in financial and structural components of the health system in Uzbekistan. The pitfall is that the country’s project inputs are not always measured by QI indicators targeting clinical practice (processes) and/or supply of patients’ needs (outcomes), with open results being published. The reasons may be different but the cost of getting it wrong may be severe. Therefore, it is important to test any changes to assess their impact on quality using the canonical Plan-Do-Study-Act (Shewhart) cycle. The World Bank projects, working in tandem with regional USAID and UNICEF projects, are now being implemented widely and demonstrate quasi-positive effects in the areas of reproductive care, management of childhood illnesses (IMCI), immunization and prevention of micronutrient deficiencies. However, it is essential to note that, for example, IMCI algorithms were firstly updated basing on strong evidence in 2005 since 1996 when they were implemented in Tanzania and Uganda, so reviewing the supported evidence in a regular manner with consideration for the national epidemic status would be advantageous.

An important area for international efforts is in promoting methods of data collection and analysis, which seem to be out of date in all post-Soviet regions. This has a negative impact on assessment of the quality of care and projected outputs in the country. The UNICEF initiative to survey child health was illustrative and displayed the gap with official data.

The initiation of national QI collaborative projects by involving local and international institutes could be a good tool to mobilise the necessary resources to achieve the best outcomes, but the methods are varying and complex. Again, their effect only seems to have been proven in systems with developed support factors.

Discussion

In contrast to the view that health systems in the developing world are becoming more flexible to local QI projects, the post-Soviet health systems, including that in Uzbekistan, seem to resist such interventions and do not always deliberately concern the factors supporting quality of health care to provide necessary inputs.

Figure 1. Process of developing guidelines accepted in evidence-based medicine centre of Uzbekistan (adapted from Scottish Intercollegiate Guideline Network).
for local QI projects. On the other hand, project consultants should avoid the simple importation of even internationally well-reputed results into national healthcare systems with the hope of replicating them. It seems to be important for national and international participants to be more transparent and to pay more attention to testing QI activities in local conditions before disseminating them, with extensive discussion of positive outcomes and any barriers, including systemic barriers, to achieve them. Ruger\textsuperscript{20} reported that international policy should be more comprehensive in financial regulation of health systems at the country level through building adequate structures. This policy should assist the country in increasing external demand for quality of care through developing appropriate standards, and motivate providers in Uzbekistan for continuous improvement in the quality of health care.

Acknowledgement

The authors wish to thank Bruno Bouchet for support and preparation of the final version of this article.

Ethical approval

None sought.

Funding

None declared.

Competing interests

None declared.

References