

## Policy Brief

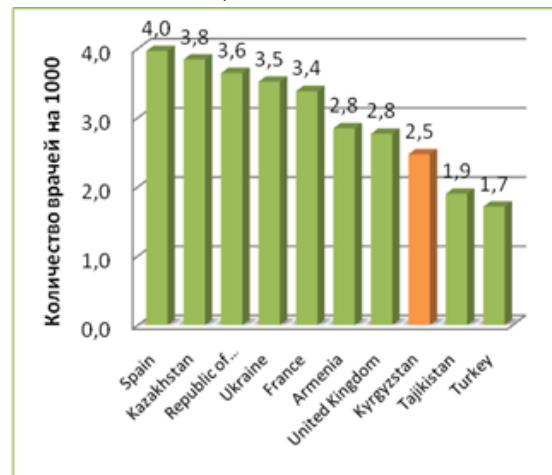
# Evaluation of family doctors' and nurses' roles in providing care for non-communicable diseases

### Background

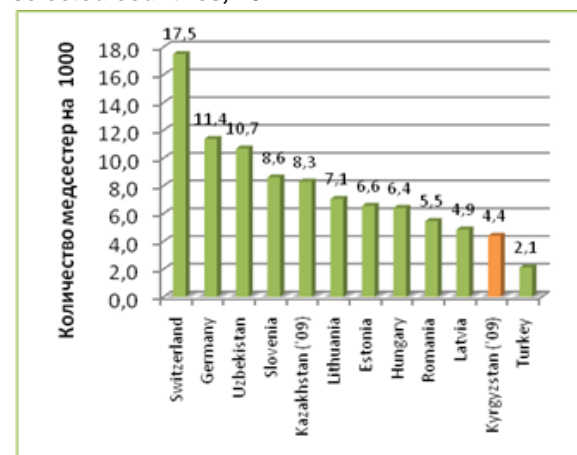
Health system reforms which have been implemented in Kyrgyzstan over the past 15 years focused on strengthening primary healthcare. Despite the efforts, coverage with individual healthcare services, which provide the highest achievements (for example, effective control of hypertension, diabetes and other cardiovascular risk factors) have remained suboptimal.

The human resource challenges have been found a key barrier to provision of individual services for non-communicable diseases (NCDs), as represented by their insufficiencies, caveats in training, and low profile role of family doctors and nurses in managing major NCDs. Multiple attempts to attract and retain doctors to service in rural areas have been made; however, they never delivered any long-term effects, and recent trends point to no increases in numbers of medical school graduates employed at PHC units. The human resource deficit has been exacerbated by low motivation of staff and availability of competences that do not meet needs of care provision.

**Figure 1. Number of doctors per 1,000 population in selected countries, 2011.**



**Figure 2. Number of nurses per 1,000 population in selected countries, 2011.**



Source: *Better non-communicable disease outcomes: challenges and opportunities for health systems, Country evaluation Kyrgyzstan, Melitta Jakab et al.; Statistics of the Ministry of Health. Data on Kyrgyzstan and Kazakhstan as of 2009; database of the WHO Global Health Observatory as of 24 July 2013.*

As of January 1, 2014 in Kyrgyzstan there were estimated 1.9 doctors per 1,000 and 4.6 nurses per 1000 population. These numbers have been relatively stable in recent few years; however, they are still the lowest in WHO European Region.

A group of family practitioners should comprise of at least three doctors; however, 60 FGPs in the country have missed doctors, and 198 FGPs have only one doctor operating. Staffing with nurses throughout the country is almost 97%, but they carry out only a limited range of tasks due to lack of training.

Given the human resources crisis in Kyrgyzstan's health system, in particular due to shortage of doctors in primary care, promoting the role of nurses in management of selected non-communicable diseases (NCDs) is essential.

In 2015, the role of family nurses was evaluated in several stages, with focus on NCDs at primary care, and the barriers were identified for extending nurse functions in providing care for NCDs.

This Policy Brief summarizes findings in all stages of evaluation of existing barriers to enhance the role of nurses in providing care for NCDs at the primary care level.

## Methodology

The evaluation was conducted in three stages:

The first stage focused to study the existing regulatory framework, to identify legislative barriers to enhance the role of general practitioners/family doctors and nurses in management of NCDs.

The second stage assessed barriers to enhancing the role of nurses in managing selected NCDs (hypertension, diabetes, chronic obstructive pulmonary disease, palliative care), as identified from perspective of doctors, patients and nurses themselves. In addition, it assessed knowledge and skills of nurses in management of selected NCDs.

The third stage of the evaluation focused on the state of undergraduate nurse education in the Kyrgyz Republic, barriers and needs of nurse education to be used for designing the nursing component under the next phase of the Medical Education Reform Project.

**Methods and assessment tools** were discussed and developed with participation of the working group, which was established as part of this assessment, and involved data collection based on:

- Regulatory acts, statistics and indicators related to activities of healthcare organizations;
- Semi-structured interviews with health staff (doctors, nurses, primary care managers);
- Focus group discussions with patients and public;
- Assessment of nurse knowledge and skills in 4 conditions (blood pressure measurement, symptoms assessment in palliative care patients, prevention of diabetic foot syndrome, rules for use of inhalers, peakflowmeters and spacers), using specifically designed evaluation sheets.

## Key findings and conclusions

- In general, the evaluation found that at the moment there are no rules or regulations that may prevent extending nurse functions in terms of managing selected NCDs. However, extending functions of nurses will require a serious review of existing legislation regulating the practices and responsibilities of family doctors and nurses. Regulations of functions of family nurses and family doctors overlap; there is no clear delineation of functions between them. This prevents complete definition of nurse functions and differentiation of nurse responsibilities from responsibilities of family doctors.
- At the moment, the Standards of Nursing Practice in management of type 2 diabetes and hypertension have been developed. These standards have been recommended for implementation; on the ground, however, these standards are not used yet.
- Serious efforts are required to revise the staffing standards and workloads of healthcare professionals in primary healthcare organizations. Currently, used standards of staffing and workload are not working and do not meet the existing needs. Number of nurse positions depends on number of doctor positions, with rate of 1.5 family nurses per 1.0 family doctor. Such ratio was not followed in any of studied organizations. For example, when applied this ratio in the studied FMCs in Bishkek, there was a lack of staffing units of family nurses in the amount of 42.0 units, while in Naryn oblast there was an excessive

- number of staffing units of family nurses by 56 units on average.
- Not all NCDs are managed by family doctors at the primary level. Diabetes, hypertension, conditions associated with heart failure often are controlled only by specialists. Family doctors attribute this to the lack of knowledge and skills; this was in particular referred to patients with type 1 diabetes, complications of heart failure.
  - Family doctors came up with contradicting perceptions of the family nurses' roles. Family doctors in Bishkek reported the role of nurses confined to compliance with disinfection rules in the office, sorting and control of lab tests in ambulatory cards, and, if necessary, doing selected procedures and measurements, implementing census, filling and formulating referrals for hospitalization, doing selected prescriptions. In the regions, for example, in Naryn oblast, family doctors reported the family nurses were more self-reliant, they take full charge of required measurements of anthropometric data, advise on disease prevention, nutrition and others issues. At the same time, family doctors reported they did not always rely on nurses, and often themselves measure blood pressure, peakflowmetry, blood glucose etc., because they think the nurses have insufficient knowledge and skills.
  - Almost all family nurses noted they often performed unusual functions, which consume major part of work time, such as courier work, implementing the plan for census. Precinct Site work of the nurse confines to identification of the assigned population. This prevents nurses effectively do their work with people having diseases and with high risks.
  - Assessment knowledge of family nurses about the nursing process found that most nurses did not possess sufficient knowledge. Many nurses did not know stages of the nursing process. Assessment of skills demonstrated relatively poor proficiency in relation to selected NCDs (hypertension, diabetes, palliative care).
  - Starting from 2013, all higher and technical schools have been implementing the 3-d generation State Educational Standard for all specialties. Training guided by SES is assessed via formation of student's professional knowledge and skills. SES specifies and classifies knowledge and skills through a set of competence.
- At the moment, the medical education reforms have stressed on training of general practitioners for primary care. It is planned to introduce a mandatory 2-year residency in family medicine for all graduates. However, reforms are progressing slowly, while training of such high number of residents is a major challenge, given the limited medical skills amongst medical school graduates and lack of teachers on family medicine working in primary healthcare across the country. Similar difficulties arise in the training of nurses. Nurses have traditionally not been taught the basic skills of clinical assessment or management of common and uncomplicated NCDs, such as hypertension and diabetes. Nurse education also should focus on training of general practice nurses, with emphasis on practical skills and communication with patients in clinical settings.
  - Medical training of nurses and doctors does not account for needs of healthcare organizations in various specialists. Therefore, there is an imbalance between the training of specialists in different areas and the needs.
  - There should be a clear link and consistency between normative acts regulating the nurse activities and available training programs at all levels of education, both undergraduate, postgraduate, and continuous training levels.