HEALTH POLICY ANALYSIS CENTER

Overview of continuing professional medical education in the Kyrgyz Republic

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Contacts

Dr Gulzat Orozalieva
Manager of Medical Education
Reform in the Kyrgyz Republic
Project (MER Project)
Office 803, 19 Razakov Str.,
Bishkek 720040, Kyrgyzstan
Tel: +996 (312) 398296
E-mail: ime@ime.org.kg

Dr. Aida Abdraimova
Senior Analyst,
Health Policy Analysis Center
15 Razakov Str., office 7
Tel: +996(312) 975057
E-mail: aida@hpac.kg
http://hpac.kg/

Arnol Samiev
Analyst,
Health Policy Analysis Center
15 Razakov Str., office 7
Tel: +996(312) 975057
E-mail: arnolsamiev@gmail.com

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List of abbreviations

CGs/CPs	Clinical Guidelines/Clinical Protocols
CME	Continuing Medical Education
CPD	Continuing Professional Development
E-health	E-Health Center
FGP	Family Group Practice
FGP&FNA	Family Group Practices and Family Nurses Association
FM/GP	Family Medicine/General Practitioner
FMC	Family Medicine Center
GP	General Practitioner
GPC	General Practice Center
HO	Health Organization
KMA	Kyrgyz Medical Association
KR	Kyrgyz Republic
KSMA	Kyrgyz State Medical Academy
KSMIRCME	Kyrgyz State Medical Institute of Retraining and Continuing Medical Education
MICH	Merged Interregional Clinical Hospital
MoH&SD	Ministry of Health and Social Development
NGO	Non-governmental organizations
NSA	Nursing Specialists Association
OMH	Oblast Merged Hospital
OshSU	Osh State University
PDG	Peer Discussion Groups
PHC	Primary Health Care
PMA	Professional Medical Associations
SB KSMIRCME	Southern Branch of the Kyrgyz State Medical Institute of Retraining and Continuing Medical Education

1. Brief Summary

This study has been conducted as part of the Medical Education Reform Project activities funded by the Swiss Development and Cooperation Agency (SDC).

Primary research objectives are aimed at exploring the development of CME/CPD, key challenges and organizations that provide continuing medical education - CME/CPD providers. In addition, access to and quality of CME/CPD for various groups of health professionals (doctors, nurses, HO managers) have been studied.

This review was completely focused on obtaining views of key informants with regard to the existing CME/CPD system, therefore most conclusions and opinions are made based on voiced opinions and suggestions.

In recent years, due to the efforts made to implement family medicine/GP and measures aimed at strengthening primary health care, the continuing medical education of family doctors has undergone significant changes, and the leading role in this was played by the KSMIRCME with branches in all regions that provided training for the family medicine development:

- competency-oriented training programs for family doctors and nurses;

- introduced credit-based training system, certification and registration of professionals;

- implemented new training forms – e-learning, PDGs.

However, a number of barriers to further development of CME/CPD still exist:

- health personnel supply crisis, shortage of doctors, inadequate knowledge and practical skills of medical specialists;

- limited state budget for CME/CPD, lack of special funding for CME/CPD in health organizations;

- no agreements and plans of cooperation between CME/CPD providers and health organizations;

- available needs of family doctors/GPs for broader competences and practical skills in diagnosis, rehabilitation, psychological assistance, communication;

- limited access of CME/CPD providers to health organizations to teach practical skills and access to patients.

In addition, lack of coordination by regulatory authorities, as well as planning at the HO level, remain barriers to access to CME/CPD.

In order to achieve a more coherent and consistent policy of the CME/CPD system, it is recognized that there is a need for greater involvement of the MoH&SD in this process in terms of overall coordination, accreditation of CME/CPD providers, development of professional and educational standards and addressing other organizational issues through creation of the

National Medical Council responsible for coordinating CME, accreditation of providers, and the quality of training programs, etc.

The list of providers of continuing medical education has expanded considerably in recent years, therefore CME/CPD planning is important to ensure access and quality of education for doctors and nurses.

It is necessary to contribute to the development of all CME/CPD providers, such as PMAs, taking into account their strengths and weaknesses.

The KSMIRCME also needs significant support, especially for capacity-building of teachers. In this regard, it is advisable to conduct a functional analysis of its activities to identify barriers that impede further development of CME/CPD, as well as to improve approaches and activities that would increase user satisfaction.

Special attention should also be given to informing HO managers in order to support the introduction of new training formats (PDGs, e-learning, telemedicine counselling), better planning, financing and access to CME/CPD, considering the needs of doctors and nurses.

2. Introduction

In Kyrgyzstan, continuing medical education (CME) is a professional responsibility of every health professional so as to support and improve professional qualification and competences, safely and efficiently deliver health services and respond to changing demands, health policy, technologies and knowledge. CME is also a part of the system regulating the professional activities of health professionals.

This report uses the terms “CME/CPD” as complementary, since recently CME has been replaced by CPD - the term which has a broader meaning and implies continuous development not only in the area of medicine but also in managerial, social and other matters. The CPD implies available high-level competences in leadership, communications, professional responsibility etc. among health professionals. The term of supplementary vocational education is used in the education system.

In recent years, CME/CPD activities have been carried out as part of implementing the Strategy of Postgraduate and Continuing Medical Education Development in Kyrgyzstan for the period of 2014-2020. With regard to CME/CPD, the main objective of the Strategy was to establish an effective and sustainable CME/CPD system based on international standards, ensuring regular refreshment and development of the competencies of specialists who can meet the needs of the population in health services.

One of the priority areas of work was CME/CPD of primary health care specialists. With the efforts to introduce family medicine and measures to strengthen the primary health care service in the country, the continuing medical education of family doctors has undergone significant changes. In this process, the KSMIRCME played a leading role in continuing vocational training and continuing medical education. The KSMIRCME branches were established in all regions, which provided training to develop family medicine.

The MER project supports a range of CME development activities. Innovative teaching methods are being introduced (e.g. peer discussion groups and distance learning), prioritization of high prevalence diseases (such as diabetes, hypertension), training of trainers (ToT), development of protocols for doctors and nurses, and joint training of doctors and nurses. Various clinical workshops were also organized on rheumatology and angiology, palliative care, cardiac rehabilitation, diabetes and hypertension, patient education and communication.

This study was conducted from May to June 2021. The study reviewed cooperation between various organizations that provide continuing medical education - CME/CPD providers.

The main focus of the review was on topical issues related to the continuing medical education development and mutually beneficial cooperation between organizations that provide this type

of training - CME/CPD providers, taking into account their strengths and weaknesses to find the ways to improve CME / CPD countrywide.

Key objectives of the study are to explore the available diversity of the CME/CPD providers, access and quality of continuing medical education for various groups of health professionals (doctors, nurses) and review the opinions of doctors, nurses, health managers, experts with regard to the existing CME system and further ways to improve it.

3. Research goal and objectives

Goal

To review the current continuing medical education in the Kyrgyz Republic and opportunities for improvement to meet the needs and expectations of health professionals.

Objectives

1. Find out views of key informants, experts and other parties on the current CME/CPD organization, ways to involve the CME/CPD service providers and possible transformations in the CME/CPD.

2. Find out opinions of the CME/CPD service providers, their capabilities, strengths and weaknesses, needs for their improvement.

3. Find out opinions and satisfaction of health professionals - users of CME/CPD - with the organization of the learning and development process, their needs and expectations.

4. Identify key barriers in the organization of CME/CPD, develop suggestions and recommendations

5. Inform policy makers and relevant stakeholders of available options to improve the CME/CPD in the Kyrgyz Republic.

4. Methodology

Methodologically, the study was structured as a rapid assessment and based on exploring the opinions of three groups of key informants: regulators and experts, CME/CPD providers - organizations that provide training, CME/CPD users - health professionals (doctors and nurses).

To this end, semi-structured questionnaires have been developed for each group of informants:

1) MoH of the KR, experts and other stakeholders;

2) providers of CME/CPD educational services;

3) users of CME/CPD – doctors, nurses with emphasis on family doctors/general practitioners and family nurses.

The questionnaires have been basically aimed at exploring the existing barriers and pressing challenges, solution approaches in CME/CPD; and consisted of open questions in order to stimulate the expression of informants' opinions and discussion (Annex 1)

Fifty-nine respondents were interviewed in the study, of them:

- MoH&SD specialists – 3 persons.

- MoE specialists – 1 person.

- Experts and stakeholders (MER Project and Health Management System Strengthening Project) – 2 persons.

- Senior management and specialists of educational organizations (KSMIRCME, KSMA, OshSU, SB KSMIRCME) – 10

- Directors of raion HOs, heads of departments (hospital and primary level) – 6

- Directors of OMHs and oblast coordinators – 4

- Leaders and representatives of PMA - 3 (KMA, FGP&FNA, ANS)

- Practitioners – 12

- Nurses - 18

Interviews and focus groups were carried out with visits to health organizations of Osh oblast, Bishkek and Osh cities. Doctors and nurses from GPCs, both in-patient and primary level (FGP) were involved in the survey.

The rest interviews were conducted online – with respondents from Talas, Naryn and Batken oblasts.

5. Legal and regulatory framework of CME/CPD

In the Kyrgyz Republic, the CME/CPD is accomplished based on the Regulation on Advanced Professional Education #53 approved by the KR Government Resolution as of 03.02.2004 – "The Regulation on Advanced Professional Education in the Kyrgyz Republic"

The main Provisions of this Resolution regulate the provision of volumes of continuing professional education:

- Continuing qualification upgrading (from 72 to 100 hours)

- CPD/CME in the amount of over 100 hours are accomplished with the aim of in-depth study of current problems.

- Specialization is fulfilled in the amount of over 500 hours of the curricula that provide the required knowledge, skills and abilities to a specialist to perform a new type of professional activity within available professional education.

- In order to expand qualifications and implement a new type of professional activity, training programs are being fulfilled in addition to higher education with the assignment of an additional qualification on the basis of the received specialty in the amount of over 1000 hours.

It should be noted that the established volumes of additional education should be taken into account when upgrading qualifications and retraining health specialists in other specialties.

When retraining for the specialty of "Family Medicine / GP" - if it relates to the retraining of a therapeutic / related specialty, such as "Therapy" for "Family Medicine / GP" - then the retraining should be in the amount of more than 500 hours. If the retraining of specialists is carried out as an additional qualification, then the volume of training programs should be over 1000 hours.

In recent years, a significant work has been carried out at the level of the Ministry of Health to revise the CME/CPD regulatory framework.

Main RDs that were approved by Orders of the Ministry of Health:

- The Strategy of the Postgraduate and Continuing Medical Education Development in the Kyrgyz Republic for the period of 2014 – 2020;

- The Program for Nursing and Nursing Education Development Program in the KR for 2019-2023 approved by joint Order#575 of the KR MoH and Ministry of Education and Science (MoE&S) as of May 06, 2019;

- Order of the KR MoH #266 as of 13.04.18 "Regulations on the accumulative system of credit hours in the system of continuing medical education";

- Order of the MoH&SD #755 as of June 08, 2021 «Regulation on certification and registration of medical and pharmaceutical workers";

- Order of the KR MoH #1028 as of 05.11.2019 "Manual for health personnel of health organizations and educational institutions for integration of a new training form - peer discussion groups (PDG) into CME "

As part of the activities to improve CME/CPD with the support of the MER Project, together with many interested organizations and professional medical associations, at present, a new draft Concept on continuing professional medical development in the Kyrgyz Republic has been developed. This draft is currently being discussed, it is planned to approve it at the level of the Cabinet of Ministers of the Kyrgyz Republic.

The transformations in continuing medical development carried out in recent years have led to a number of changes and improvements in the process of continuing education:

- Development of competency-oriented curricula – to train doctors in specialty “Family Medicine/GP” meeting new standards. For the first time ever a Catalogue of Competences was developed and approved, on the basis of which postgraduate medical education programs have been developed. The CME/CPD programs have also begun to build on the competencies developed. The definition of competences and development of requirements for narrow specialties have also started and are coordinated by the Kyrgyz Medical Association (KMA). With the lead coordination of the KMA, some professional associations have also been involved in the development of test assignments for certification of health professionals. To this end, the MER Project supported the training of specialists, both teachers and practitioners, members of PMAs on the development of tests using the principles of testology.

- Implementation of credit-based education - currently, there is an ongoing transition from the old CME system, which consisted in taking courses of various durations (weekly, two-week, monthly, etc.) in the KSMIRCME every five years, to a decentralized system based on credits accumulated through participation in CME training events. The credit system has also undergone changes; it has moved from 150 credit hours to the accumulation of 250 credit hours. Over a five-year period, accumulation of mastered CME elements should now be at least 250 credit-hours in total, of which the annual training volume should be 50 credit-hours. About 70% is recommended for the share of mastering educational programs within the framework of "formal education", the remaining volume of educational activity (30%) is recommended to be filled with educational elements of "self-education", such as on-the-job training, PDGs, participation in conferences and workshops, clinical supervision of residents, mentoring.

- Certification and registration of health professionals – became compulsory conditions for admission to practice owing to adoption of a new Regulation on Certification. The role of PMAs has been strengthened in terms of certification organization, and the procedures for certification and documents for specialists have been simplified.

- Introduction of new learning forms, such as Peer Discussion Groups (PDGs) – are a unique opportunity to introduce a new approach to CME. This approach was first piloted in primary health facilities in Naryn oblast, which proved to be quite successful and began to be implemented in other regions of the country.

The functions and purpose of PDGs are defined as regular meetings / meetings of family group practices and nurses in order to assess and improve the quality of health care in various ways: through thematic presentations, discussion of new guidelines, critical discussion of personal medical practice, etc. A special Manual was developed for health personnel of health organizations and educational institutions in order to familiarize with and integrate a new form of training into CME - a peer discussion group (PDG); a short version of this Manual was also developed with a step-by-step description of the process for creating a PDG in a health facility. By the beginning of 2021, there were 16 PDGs in the republic: 4 PDGs for family doctors and 12 PDGs for nurses.

- Implementation of e-learning and telemedicine - e-learning has been developed as a key element of both postgraduate and continuing medical education. The KSMIRCME has introduced electronic/distance learning and telemedicine in the CME for both doctors and nurses. An important role in further development of distance learning was played by the MER project, with the support of which the distance learning center has been strengthened and distance learning programs are developed. In total, by 2021, 42 online courses have been developed for doctors, mainly for family doctors and 37 courses for family nurses. These distance courses are available for specialists on the KSMIRCME distance learning website.

The KSMIRCME (at the Testing Center) has launched a database of health professionals who have passed certification and have a qualification category. Since 2020, these data have been routinely transferred to the e-Health Center.

Further development of the CME/CPD system is going on and supported through the implementation of the RBP project (the Results-Based Program implemented by the MoH&SD with technical and financial support from donors). It is planned to improve the e-learning platform for health professionals, which will have to centrally upload data on all CME/CPD training courses provided by different providers and centrally track the accumulation of credit hours.

- **Strengthening the competence and role of nurses at the PHC level**. Over the past few years, changes have focused on improving training standards, training programs for nurses with a strong emphasis on practical skills and a new role for nurses in strengthening primary health care. A number of activities aimed at continuing education are particularly active for nurses: distance learning, PDGs work particularly actively for nurses, involving the hospital level. The certification of nursing specialists has been improved, the Regulation on Certification of Nursing and

Midwifery Specialists has been revised. Online certification has been introduced on the Ai-test platform. Members of the Association, teachers and nursing professionals were also trained in the methodology for developing test questions.

6. Key organizations providing continuing medical education – CME/CPD providers

The list of providers of continuing medical education has expanded considerably in recent years, taking into account all CME/CPD providers, including those currently not authorized to award credit hours to specialists for training.

CME/CPD providers	**Role in CME/CPD**
KSMIRCME	The Basic Institute for the Continuing Medical Education and Qualification Upgrading of health professionals provides retraining and qualification upgrading for practitioners and nursing specialists by organizing regular courses and advanced training cycles, maintains a database of trained specialists, including accumulated credit hours and testing results for certification.
KSMA, OshSU	Provide full-time pregraduate, postgraduate and continuing medical education.
Professional Medical Associations (PMA)	Deliver training programs for qualification upgrading of health professionals including those with the financial support of pharmaceutical companies.
Tertiary/national health organizations, research centers and research institutes	Provide educational services at postgraduate and continuing medical education levels. CME is basically provided with the support of pharmaceutical companies.
Non-governmental organizations supported by international donors and Health Projects (CAPS, ICAP, Defeat TB/USAID UNICEF, MER Project, etc.)	Carry out training activities for doctors and nurses in various areas. The training is attended by teachers of medical educational organizations, health system experts and specialists. The training is coordinated with the Ministry of Health and credits hour accrual is ensured through the KSMIRCME.
Private health organizations, clinics, private practitioners	Conduct training sessions for doctors and nurses on a fee-paying basis

- **The KSMIRCME named in honour of Daniyarov S.B.**

It is the basic institution that implements the system of continuing professional development of health professionals. In terms of CME/CPD, the institute carries out:

1. Regular courses of retraining and qualification upgrading for practicing doctors and nursing specialists based on the calendar course schedule.
2. Unscheduled courses as requested by Health Organizations
3. Implements new learning forms such as PDGs
4. Testing for certification
5. Personalized database on health specialists who have been trained and the number of credit hours accumulated through training provided by the KSMIRCME and other organizations.

More than 20,000 doctors are trained annually. In 2020, in response to the COVID-19 pandemic, more than 40,000 doctors have been trained; a relatively larger number of courses have been delivered through online courses on COVID-19 and topical issues of primary health care (non-communicable and communicable diseases management of which becomes more difficult during the response to a pandemic).

It is worth noting a few examples **when the KSMIRCME showed responsiveness during the first periods of the pandemic**. The unscheduled CME courses on hematology, namely, on deficient conditions, for primary health care doctors in Osh, Batken and Jalalabad regions made it possible to move a part of hematological patients to the primary health care level and, thus, unload the hematology department at the Oblast Interregional Clinical Hospital (Osh city). The training was aimed at obtaining practical skills.

In addition to mentioned examples, respondents reported the training courses on infection control, as well as on the clinical aspects of COVID-19, which were conducted jointly with foreign specialists from China, Poland and other countries. To arrange these courses, including e-learning courses, the KSMIRCME organized a review of these training course programs and adapted them to the needs of the Kyrgyz health care system.

The priority is given to training of doctors and nurses from remote areas. Specialists have the opportunity to study several times a year, including remotely.

- **Higher Education Institutions of pregraduate and postgraduate medical education**

Currently, the majority of higher medical education institutions provide training based on pregraduate and continuing medical education programs.

In parallel with this, some higher education institutions have licenses and implement programs on additional professional education in a relevant discipline with the right to improve the qualifications.

For example, the KSMA has a license and provides educational services on additional professional education – qualification upgrading courses, training programs for research personnel, research and academic personnel. Mainly, this training is carried out for teachers of the universities. Also, there are public health, management and biostatics training programs. However, these training courses are not carried out so often for practitioners, 1-2 times a year.

Additionally, in 2020, courses on COVID-19 treatment and prevention were organized for residents and young doctors in the KSMA.

The OshSU also has a license for additional professional education and conducts some training programs, including pharmacy issues. It was noted that training provided by OshSU is not so in demand, since most doctors are trained in the KSMIRCME, where credit hours are awarded.

The KRSU also has a license for additional education and basically carries out qualification upgrading of teachers in their disciplines, pedagogy and psychology.

These higher education institutions noted that there are plans and opportunities for further development of continuing medical education. They can provide both Master program training and short-term courses on various health issues, such as development of health organizations, public health, health financing, bioethics and health statistics, leadership and communication building.

▪ Professional Medical Associations

Professional Medical Associations (PMA) play a significant role in development of standards, catalogues of competences (qualification requirements) by various specialties for the CPD development, advise on the CPD and participate in development of the CME regulatory framework.

PMAs are involved in certification of doctors and nurses; and development of test assignments.

PMAs have the opportunity to obtain a license to conduct CME/CPD courses (as additional education). Today there is an example of one association (the Association of Obstetricians and Gynecologists of Kyrgyzstan), which has a license for additional education of health professionals in 4 areas:

- Perinatal care
- Colposcopy and endoscopy
- Resuscitation of newborns

- Gynecological endocrinology

Funding of PMA is ensured from 3 major sources:

- Membership fees from specialists who are members of associations (as individuals or legal entities - HOs), the amount of membership fee for individuals is about 150 soms per year.
- Financial support from pharmaceutical companies for training events. The costs cover salaries of lecturers, printing of certificates on a course completion, rental of premises, accommodation expenses, travel expenses for participants, teaching materials, booklets, etc.
- Funds received from fee-based training courses.

At the same time, it was noted that PMA cannot always ensure the accrual of credit-hours to specialists, since the accrual of credit-hours is provided out by the KSMIRCME only. In order to accrue credit hours for conducting a training course, the PMA must agree upon the course program with the KSMIRCME, but, as noted by the PMA, this process has its limitations and PMAs believe that there are no relevant specialists in the KSMIRCME who can qualitatively review training programs in various specialties.

However, as noted by the young doctors interviewed, they are ready to take such courses organized by the PMAs without accruing credit hours, since they acquire very good skills. For example, an urologist from Kara-Suu TH took a fee-paying training in andrology, organized by the Association of Urologists. As a result of the course, he did not gain credit hours, however, he does not regret it, as it was a very high quality course and he obtained real practical skills.

Most frequently, PMAs provide the CME training courses with financial support from pharmaceutical companies. Most often these are 2-4 hour seminars, conferences, held after obtaining permits from the Department of Pharmaceuticals Supply and Medical Equipment and agreement with HOs. This requirement was introduced to limit possible violations of ethical codes and the risks of unethical marketing (promotion) of their products (medicines and medical supplies).

The respondents from amongst managers of health facilities expressed the opinion that, despite the receipt of permits and approvals, violations occur on the ground that potentially undermine the implementation of Clinical Guidelines and Clinical Protocols (CG/CP). There is a promotion of pharmaceuticals in a way that doctors are forced to not comply with the approved CG/CP and administer unnecessary treatment, diagnostics and medicines that are more expensive, whereas there are effective and inexpensive ones.

However, it was also suggested that training seminars and conferences supported by pharmaceutical companies are comparatively better than training courses provided by other

CME/CPD providers. The training material is better presented, focuses on one specific topic (without attempts to cover all possible topics), and arises a real interest in the audience, provides practical advice, and it is possible to talk about innovations in medicine and healthcare.

PMA faces a number of challenges in its development:

- Inadequate funds and resources for development and maintenance. PMAs do not earn money, that distinguishes them from many professional associations in developed countries where PMAs are quite successful in fee-based educational activities;

- In some PMAs there is a so-called *personality cult*, when a PMA leader simultaneously manages a health facility, own private clinic, and runs a department in the educational organization. This becomes a problem, since the PMA cannot establish cooperation with other PMAs or organizations, due to various personal circumstances and relationships of the PMA leaders;

- In some clinical disciplines, there is unhealthy competition among PMAs for certification of specialists, recognition of credit hours received in training courses provided by other PMA. This creates certain problems for medical and nursing professionals who need CME/CPD;

- Low capacity and activity of the PMA members. The PMA members and leaders themselves need appropriate training to develop the competences needed to develop the PMA as an institution.

- The HR crisis in professional associations - poor development of mentoring, which often leads to a situation when there is no one to continue and develop the PMA activities.

- **Tertiary/national health facilities, research centers and research institutes**

Tertiary health facilities, research centers and research institutes most often organize training in Bishkek and Osh. This training is also, most often, carried out with the financial support of pharmaceutical companies.

There are fee-based training courses of high quality that are offered in conjunction with professional medical associations.

Training activities are coordinated with the Ministry of Health and most often carried out jointly with the KSMIRCME. Tertiary HOs play an important role in CG/CP development, implementation and training.

- **Health programs and projects supported by international donors**

With the support of international donors Health Programs and Projects provide training for doctors and nurses in various areas and important topics in the field of HIV, tuberculosis, diabetes mellitus, etc. These are projects supported by such programs as CAPS, ICAP, Defeat TB / USAID, UNICEF, MER project, etc.

Invited teachers of medical educational organizations, health system experts and specialists take part in the training. The training is coordinated with the Ministry of Health and the accrual of credit hours is carried out through the KSMIRCME.

These training events are fully funded by donors: payment for invited teachers and lecturers, travel and accommodation for trainees, rent of premises (venue), handouts, etc.

- **Private health organizations, clinics and private practitioners**

Many doctors take new specialties or training in private clinics. This is especially true of doctors who are trained in functional and ultrasound diagnostics (ultrasound), echocardiography, endoovideosurgery, endoscopic types of investigation, etc.

Public health facilities are often not interested in training doctors of these specialties, because after training, many doctors leave for work in private clinics and offices. Therefore, if possible, doctors choose to study in private clinics at their own expense. On the one hand, this is an opportunity for doctors to get a higher salary, on the other hand, public health facilities lack qualified specialists. Unfortunately, these CME/CPD courses take place without award of credit hours, although they cover important medicine issues. Therefore, in order to obtain a certificate, some doctors repeatedly undergo similar training on the basis of the KSMIRCME, while it was noted that in terms of practical part the training process lagged far behind the content of the training delivered in a private clinic.

The doctors interviewed also noted that often private practitioners, especially in Bishkek and Osh, provide practical training for those who wish to learn the required specialties and skills, such as ultrasound diagnostics. This training is especially valuable because more time is devoted to individual training with access to patients and development of practical skills.

Strengths and weaknesses of CME/CPD providers

CME/CPD providers	Strengths	Weaknesses
KSMIRCME	1. It has a large number of CME/CPD teachers, primarily due to Job Combination (second employment) of practitioners. 2. Broad representation in regions owing to the SB KSMIRCME, branches for family medicine doctors and nurses 3. Responsiveness during critical periods of health system functioning.	1. Combination of theory and practice in CME courses does not always satisfy users. Users appreciate more practical skills next to the patient, using training models, dealing with complex cases. 2. Innovative courses - online courses, PDGs - now require further improvements in organization and teaching

	An example could be the CME/CPD courses on topics related to infection control, PHC courses on selected topics of primary health care, which are conducted online, with field visits. The KSMIRCME organized review of courses, organization of courses and the conduction of courses. 4. Training funded from the republican budget is in great demand among doctors and nurses, especially in regions. This demand, largely driven by the motivation to be certified, may be a good resource for further improving training in general. However, to improve access to these courses, a qualitative contribution from HO managers is required.	
PMA	1. Some PMAs offer CME/CPD courses of such quality that many users are willing to pay for participation. The courses delivered by such PMA involve more practical materials, accompanied by work with patients, simulations (models), involving modern equipment.	1. PMA funding today remains a weak link for their development. PMAs are not able to earn well, membership fees are small, fee-paying courses are not yet widely available and in demand. 2. The level of activity of PMA members is low, and many PMA members are supported by activity of their leaders, their willingness and ability to cooperate with other providers, including each other.
Tertiary/national health organizations, research centers and scientific-research institutes	1. Some HOs provide training in their specialties with optimal combination of theory and practice, in particular, National Center of Cardiology and Therapy, National Mother and Child Health Center.	1. In some tertiary HOs actual content of CME/CPD courses and real training actions do not correspond to the topics declared in vouchers for training courses. Examples include both free and fee-based courses. In fact, in such cases, the trainee enrolls to the CME to obtain an official

		certificate rather than to acquire knowledge and skills.
Private clinics and private practitioners	1. Private clinics are used by users who want to acquire real knowledge and skills in modern technologies and treatment methods. 2. They may devote more time to doctors because their number is relatively smaller. 3. More flexible in building cooperation with HO, PMA and the KSMIRCME	1. Training is carried out only on a fee-paid basis 2. Doctors do not receive credit-hours for CME/CPD courses in private clinics. 2. There are attempts to involve private clinics in CME/CPD as clinical settings, but it has not been widespread.
PMA and tertiary HO supported by pharmaceutical companies	1. Training courses are focused on a specific and relevant topic of practical medicine, lecturers with good presentation skills. 2. Training, which is provided with the support of pharmaceutical companies becomes a factor of a financial sustainability and image of some providers which successfully cooperate with them: PMA, tertiary HOs, research institutes, private clinics.	1. There are risks for undermining efforts to standardize management of certain diseases and conditions (clinical guidelines and protocols) due to the fact that training supported by pharmaceutical companies may incline doctors to prescribe more expensive and unproved medicines and medical supplies (unethical marketing).
International Health Programs and Projects	1. Training is delivered on relevant health topics, for which other providers do not have the opportunity to provide up-to-date data and information. Examples of topics: HIV / AIDS, TB, diabetes. 2. Most of these training courses are coordinated with the KSMIRCME and the MoH&SD; doctors and nurses receive being recognized credit hours. 3. In some areas, training courses are well delivered by specific health	1. Training on selected topics is not sustainable after the programme/project termination.

	organizations. For example, courses on HIV/AIDS and related topics, after the support of international projects, are successfully taught by AIDS Center, the Republican Narcology Center, some NGOs.	

7. Organization of the CME/CPD process for doctors and nurses

7.1. Organization of training

Organization and planning of training by the KSMIRCME and its branches is ensured based on the training course schedules which are approved once or twice a year and agreed upon with the Ministry of Health (HR Policy and Organizational Work Department). There is a training and methodology unit in the KSMIRCME which coordinates planning, organization and control of the educational process.

The training plan is regularly posted on the KSMIRCME's and its branches' websites, and is also sent to all HOs.

Other CME/CPD providers also try to plan training activities but their efforts are not permanent. Training activities are most often demand-driven and coordinated with the Ministry of Health when necessary.

Curricula are developed by educational organizations on their own. In recent years, the curricula are developed on the basis of relevant competencies, in particular, based on programs for doctors of family medicine specialty/GP.

In addition, when obtaining a license for additional education by organizations, the curricula are reviewed by the Ministry of Education, and a special commission of the Ministry of Health is involved in this process.

The KSMIRCME and its branches, other universities, like KSMA, OshSU, KRSU have the approved teaching staff, while involving practitioners, experts, specialists from public organizations through secondary employment or contracts.

Other CME/CPD providers, such as PMA, tertiary HOs, research institutes and centers, organizations and projects, which provide educational services, most often involve teachers of the KSMIRCME, universities, practitioners and experts based on short-term contracts.

7.2. Financing

The state budget and collaboration with international projects is the main source of funding for the KSMIRCME. In addition, the KSMIRCME offers training programs on a fee-paying basis.

Other CME/CPD providers deliver educational services on a fee-paying/extrabudgetary basis. The cost of training is determined at the level of the organizations.

In addition, free education is provided for doctors and nurses through PMA, tertiary health organizations, research institutions and centers with support of pharmaceutical companies, NGOs financed by international projects and donors.

There are limited opportunities for state-financed training in the KSMIRCME. And there is a shortage of state-financed places for training of all doctors and nurses.

The list of continuing medical education providers has broadened considerably in recent years. Therefore, the CME/CPD planning is an important factor of access to the state-funded training for doctors and nurses. In addition, further development of other CME/CPF providers, such as PMA, which can provide training, including fee-based training, should be considered.

7.3. Quality of the curricula

As noted by the interviewed respondents, organization, timetable, as well as curriculum and programs for the CME/CPD remain rather chaotic and focused on teaching theoretical disciplines.

It was noted that in the KSMIRCME, some of the topics in the curriculum are already outdated and have not been updated in recent years, and the choice of topics and teachers does not depend on demand (does not correspond to the needs of doctors and nurses). Doctors and nurses select topics for training from the list of those topics determined by the KSMIRCME.

The surveyed doctors and nurses most frequently appreciated the practical skills and performance of medical procedures in CME rather than theoretical training (lectures). Therefore, specialists are increasingly giving preference to such providers of CME / CPD, which are focused on training in the form of master classes and ensure more access to patients, when they have the opportunity to consolidate practical skills using simulation medical equipment and moulages (models).

In general, there was a low satisfaction with the CME courses at the KSMIRCME among the surveyed doctors, nurses and health facility managers, although opinions varied widely. There were respondents who stated that some teachers and lecturers deserve respect due to their dedication to work, quality content of training materials, desire to share new knowledge, and ability to present the materials.

In addition, it was noted that after training, managers do not have objective tools and methods for assessing the knowledge gained. Also, the list and scope of services for specialists, depending on the skills and category of a specialist, have not been determined. For example, two nurses - one of them has the highest category and the other has no category, while at the workplace they perform the same amount of services. The situation is the same with doctors with different skills and experience levels.

The health managers interviewed stated that they need objective and practically applicable criteria for assessing the competencies of doctors and nurses, in order, for example, to decide who is allowed to certain procedures or operations, and who is not. Thus, it is necessary to achieve such a quality of the CME that one can see any noticeable (and preferably measurable) changes in the competencies of doctors and nurses after the CME / CPD courses.

Excerpts from the interview with a manager of the OMH:

> *"The credit hours themselves are not a problem! The problem lies in the quality of the CME. Also, there are no objective criteria for assessing whether a doctor has grown or not after a course of CME. For example, there are two doctors with the same categories. How to judge who of them should do this or that procedure. The situation is even more complicated when one doctor with a higher category does not know how to perform the procedure (for example, a caesarean section), while another doctor with a lower category can ... With nurses it is even more difficult to objectively determine their competencies and skills, because they perform the same scope of services".*

It is clear that in the context of increasing need for training, improving health-care technologies, implementation of new treatment methods, etc., in general, the KSMIRCME cannot physically cover all the needs and disciplines. This also applies to the needs to improve competencies in psychological assistance, communication relations. Health managers also express great needs for training in leadership, relationship building and professional responsibility, financial management, etc.

Today the KSMIRCME and other providers use opportunities to attract practicing doctors, experts, specialists from public organizations through second employment or on a contractual basis. This allows for a more responsiveness to changing conditions and needs. However, the disadvantages of attracting practicing specialists as teachers were noted that (a) there are not always enough pedagogical skills among practicing doctors; 2) It is difficult for the KSMIRCME to influence the professional development of the involved teachers in their specialty.

In addition, the respondents noted that some teachers lack teaching skills and didn't express motivation to teach and share knowledge.

Among the respondents there were many doctors who prefer to obtain knowledge at their own expense (from 6,000 to 10,000 soms per course), at the courses carried out by other providers, PMA, private clinics, often abroad (Russia, Kazakhstan, Turkey). Basically, these are young and middle-aged doctors, graduates of clinical residency who plan to work in private clinics in the future or who are preparing for exams abroad, where they plan to continue their studies and stay there to work.

An important gap in the quality of CME is the fact that the declared CME course does not correspond to the actual content of the course. For example, a doctor in one of the health facilities said that, based on the KSMIRCME voucher, he was enrolled in a CME course on one specific surgical topic, but in fact, as an outpatient surgeon, he was given access only to the department of purulent surgery in the clinical site, where he spent the entire period, assigned to the course. Not a single lecture or seminar was delivered and there were no practical sessions on the declared topic of the course.

The interviewed managers of health facilities expressed complaints that the KSMIRCME does not satisfactorily control the attendance of CME courses, and it is desirable to somehow find ways to give feedback to the health care facilities, up to reporting the facts of non-attendance at courses by trainees.

7.4. Education (training) forms

There are no established requirements to training methods in Kyrgyzstan. Teachers choose education methods depending on the expected results of the discipline. The most common forms of training at all levels are lectures, seminars, practical classes, master classes in health organizations.

Training programs suggest access to databases and library funds, lectures and seminars on the online platform, they also provide opportunities for sharing information with domestic and foreign universities, enterprises and organizations.

Recently, the KSMIRCME has been actively introduced new forms of training: distance learning, PDGs:

Distance learning - online courses have proved to be a required method of the CME/CPD during the COVID-19 pandemic. However, online lectures face some organizational challenges:

- Poor Internet connection still remains a relevant barrier;
- Users sometimes do not have time for lectures during working hours;
- Some users find it difficult to get rid of visitors and patients during online lectures;
- It is difficult for teachers to get comments and feedback, especially from large audiences.

Peer Discussion Groups (PDG) - have become a part of the teaching methodology for the CME, basically within the activities of the KSMIRCME. PDGs are most active in the field of family medicine/GP and for training nurses.

Upon completion of PDGs, doctors and nurses can receive credit hours, however, a number of challenges have been specified:

- Good HR capacity is required; namely, people with appropriate skills are needed to conduct the PDGs in the right format, not formally;
- It is difficult to carry out PDGs in villages where there are already so few doctors and where participants have to travel long distances to the raion centre or FGPs;
- the successful implementation of a PDG as a learning method largely depends on the understanding and initiative of health facility managers, which is lacking today;
- concerns were expressed about how to verify the accrual of credit-hours gained after participation in PDGs. To date, PDGs have not achieved the required level of trust of health

organization managers and PMA, which recognize the learning outcomes and take into account the required number of credit hours for certification;

- an important condition for a better-quality PDG was the need for development of supervision (mentoring).

7.5. Accrual of credit hours

Health professionals must obtain 250 credit hours over a period of five years (50 credit hours annually) of which it is proposed to allocate 175 credit hours for full-time studies or remotely on the basis of educational organizations or other CME/CPD providers, which have the right to conduct additional educational activities.

Additional credit hours can be obtained through on the job individual activity of specialists.

Amongst educational activities in the workplace there are participation in peer discussion groups, attending conferences, seminars, and clinical (supervision) mentoring of residents and young doctors were noted.

However, among the interviewed specialists in the framework of this study, there was not a single example when credit-hours were received for this activity in the workplace. It is clear that such types of CME/CPD imply involvement of electronic technologies, appropriate organization of courses and activities on the ground, adherence to formats, and other features of the CME/CPD organization at the local level.

As for accrual and accounting of credit hours obtained by trainees as a result of training in the KSMIRCME and other CME/CPD providers respondents expressed ambiguous opinions.

In particular, **it is not always clear which providers' credit-hours for the CME/CPD training will be recognized and accrued to the trainees and entered into the KSMIRCME database.**

The interviewed specialists identified the accounting and accrual of credit hours as a big problem, when, in order to pass certification, they have to prove that they have completed training and find out the reasons why some training is not recognized.

The issue of accruing credit hours for training conducted by other CME providers, for example, PMA, also arises from the coordination and approval of training programs. In accordance with Decree of the Kyrgyz Ministry of Health, the KSMIRCME is the agency responsible for accrual of credit hours; and other organizations – CME/CPD providers are obliged to coordinate training programs with the KSMIRCME for the recognition of their training and accrual of credit hours.

Some PMAs noted that this requirement for coordination (approval)/expertise of curricula looks like an excessive measure (excessive bureaucracy), especially when it comes to narrow specific topics in the curricula. At the same time, it was noted that the KSMIRCME does not have appropriate specialists in these areas for appropriate review and expertise.

The situation is complicated by the fact that the curriculum has already been approved by the Ministry of Education; and PMAs consider this to be sufficient. At the same time, a specialist from the Ministry of Education, responsible for medical education, noted that when issuing a license for educational activities, all educational programs are approved jointly with the Ministry of Health of the Kyrgyz Republic which has a special commission.

On the other hand, the KSMIRCME considers this requirement as necessary, since the KSMIRCME is the health agency responsible for CME/CPD and for the quality of CME/CPD.

Indeed, staff members of the KSMIRCME cannot be competent in all disciplines and, perhaps, such expertise has every reason to provide quality content. However, in case of any modifications to the registration process in the future, it is worth paying attention to the expertise process in terms of simplifying its procedures.

To address these issues, specialists and experts from the MoH&SD expressed the opinion that **there is a need for an open to the public, constantly being updated list of topics for CME/CPD training courses and a list of CME/CPD providers who can provide training and credit hours that will be recognized and taken into account by the KSMIRCME.**

In fact, the availability of an up-to-date list of training programs and CME/CPD providers could significantly improve the CME planning by doctors and nurses themselves and improve access to training activities.

As mentioned by the KSMIRCME additional resources are required for this activity - a separate specialist, office, computer equipment etc.

Within the frames of the RBP project (Result-based project implemented by the Ministry of Health and Social Development, with technical and financial support of donors), in 2021-2022 it is planned to improve the e-learning platform for training health professionals, which will have to centrally upload data on all CME/CPD training courses provided by various providers and centrally track the accumulation of credit hours.

7.6. Role of HOs in planning CME/CPD

Insufficient budget funding of CME/CPD requires more careful planning of the CME by health facility managers. Therefore, the issue of access to CME is discussed in this section precisely from the point of view of accessibility due to limited capabilities of the KSMIRCME for doctors and nurses wishing to take CME courses free of charge, in accordance with the requirements of annual accumulation of necessary credit hours.

Inadequate planning at the health organization level remains a barrier to access to the state-funded CME/CPD. There are public health facilities that do not submit applications to the KSMIRCME for receiving budget-financed vouchers at all. This demonstrates a poor commitment

of such health facility managers and lacking understanding of the CME role in improving the performance and long-term outcomes of a health facility.

The lack of budget-financed education for nurses is particularly acute. The surveyed nurses noted that they did not get budget-financed vouchers or had to wait a long time for them, more than two or three years. Distribution of vouchers to health care facilities is handled by the health facility personnel department, and more often vouchers for training go to older nurses or those nurses who have worked in this health facility longer time.

It should be noted that the Association of Nursing Specialists, which is actively involved in the CME process for nurses, has started the planning process for nursing education throughout the country. Requests were made to all organizations and an approximate calculation is being made of what resources and capacity are needed for regular training of all nurses, taking into account annual accumulation of 50 credits, of which 36 credits through training on the basis of an educational organization.

Many doctors and nurses noticed that they had to take paid-for courses at the KSMIRCME in Bishkek and the SB KSMIRCME (Osh city) in order to gain credit hours for certification, obtaining or extending the category. Unfortunately, such doctors and nurses are motivated solely by the financial aspect of certification and obtaining or confirming a qualification category, rather than acquiring knowledge and skills.

It should be noted that state-subsidized training implies only free tuition, while expenses related to accommodation and travel are not taken into account. Training costs of specialists related to travel and accommodation are covered by health facilities. One of the factors for the availability of the state-financed training for specialists is the specifics of the health facility budgets, which do not have special funds for training, and the CME/CPD costs are covered from the general line-item intended for business trips. It turned out that line item "Travel expenses", which is used for any trips of health facility personnel, and not only for CME, represents a certain share (%) in the health facility budget structure and, therefore, depends on the health facility budget size. It is difficult to increase the amounts of line item "Travel expenses" for health facilities **with a small enrolled/ served population.**

In most regions, there are no problems with covering accommodation costs in Bishkek and Osh; more precisely, they were not voiced by the respondents. The allocated funds from the line item "Travel expenses" are used mainly for travel. As for accommodation, trainees can use the hostels of the KSMIRCME in Bishkek and Osh, or live with relatives.

Nevertheless, there are positive examples of improving access - in the SB KSMIRCME, a system of electronic registration and pre-tests has been introduced for trainee signing up for CME. These developments are not systemic and have not yet demonstrated their effects, but they certainly have the potential to improve access to CME and should be supported.

7.7. Needs of doctors and nurses

Currently, there is a continuing trend of comparatively greater patients' preference to go to hospitals than to PHC. Therefore, the need for further development of primary health care and, accordingly, the skills of family doctors/GPs is most urgent. Gradually, the trust in family doctors/GPs is growing, but they are least of all performing various clinical manipulations and procedures, which is very much appreciated by patients in Kyrgyzstan.

Most family doctors/GPs are focused on management of patients with chronic diseases requiring care of therapeutic and pediatric profile, while after the first stages of COVID-19, competencies in the area of rehabilitation, psychological assistance, and communications become more relevant.

In this regard, many doctors and nurses expressed an opinion on the need to expand competencies and practical skills. The needs of doctors are more aimed at obtaining not theoretical knowledge, but namely practical skills and mastering different manipulations, including those which involve diagnostic equipment.

Health facility managers expressed their wish to develop their competences in the aspects of leadership, organization of HO activities, financial management in health care, professional responsibility.

Besides, the interviewed doctors and nurses also expressed the opinion that they need courses in computer literacy and communication skills.

7.8. Interaction between CME/CPD providers

There is a high level of competition among all CME service providers, a lack of overall coordination and prevailing mistrust.

For CME/CPD, it is important to have access to health facilities to obtain relevant practical skills. The lack of long-term and clear agreements between educational organizations, CME/CPD providers and health organizations; and the competition between them are obstacles to ensuring the appropriate environment for effective training of doctors and nurses. This partially occurs due to inadequacy of the budget funding size for the CME and training needs.

Due to lack of agreements and plans on cooperation between CME/CPD providers and health facilities, access to health facilities for obtaining practical skills is limited.

PMAs do not take active participation in planning and organizing the CME countrywide, while there is a problem of joint assessment and coordination of the curricula for accrual of credit hours.

In addition, many international organizations and projects supported by donor organizations also suggest various training courses depending on their area of activity. However, this does not

provide for the appropriate health facility accreditation system, which ensures training, expertise of curricula, the system for recognition of training and accrual of credit hours. CME/CPD providers evaluate the quality of training on their own and most often formally.

7.9. Certification for admission to practice

Certification and registration of health professionals are currently compulsory conditions for admission to practice in accordance with recently adopted new Regulation on Certification "Regulation on certification and registration of health and pharmaceutical professionals", approved by the MoH&SD Order #755 as of June 08, 2021.

With adoption of this Regulation, the role of PMA has been strengthened in terms of organizing certification, the certification procedures and the list of required documents have been simplified. Now certification is carried out not only for qualification, but also for admission to practice. A minimum of 250 credits for CME/CPD over a period of five years is a prerequisite for admission to certification.

The rules for assessment (certification) and awarding of qualification categories have also changed, depending on the scores gained during testing and the length of service.

Certification will be carried out only based on testing results automatically, without interview. The efficiency from adopted new certification rules is impossible to assess, still have to be seen in practice, and they should be the object of subsequent assessments and research in this area.

Currently, certification, according to the results of which a doctor or a nurse is assigned a qualification category, still remains one of the main motives for most those who take the CME courses. In private clinics, certification is not a significant motive for learning, because it does not imply additional payments for the category.

It should be noted that the Association of Nursing Specialists has already used new approaches with the use of Ai-Test electronic system for certification of nursing specialists This system is characterized by the fact that it is open, implies personal accounts with authorization of test takers, provides an opportunity to take an unlimited number of attempts during the allotted time, the results are recorded and no longer be corrected after completion and end of test taking. The same test makes the entire certification process, i.e. oral questioning and interviews are not currently available for nurses. The experts interviewed suggested that the absence of oral questioning or interview enables more objective assessment of nurses' knowledge.

7.10. Coordination of CME/CPD

Currently, the KSMIRCME is the basic organization responsible for CME/CPD and accrual of credits. In addition, the KSMIRCME approves the training programs of other CME/CPD providers for accrual of credit-hours. This situation is akin to a conflict of interest when the same organization arranges training, reviews curricula and awards credit hours.

At the same time, the overall coordination of educational processes and standards in health care, including the CME/CPD, as an additional education, is carried out by the Ministry of Education and Ministry of Health. Expertise and review of training programs for the issuance of licenses are carried out with approval of the MoH&SD, which has a special commission.

In particular, the Ministry of Education issues permits (licenses) to organizations-providers for the right to undertake educational activities, though it has no a relevant capacity for the appropriate organization of accreditation for medical education providers. It becomes obvious when developing individual forms of education, such as PDGs, participation in conferences and seminars, clinical supervision and mentoring of residents and young doctors, other self-education activities.

To achieve a more coordinated and consistent policy of the CME/CPD system, the need for greater involvement of the MoH&SD in this process in terms of general coordination, accreditation of CME/CPD providers, development of professional and educational standards and other issues of the system organization is recognized. This is also the opinion of the interviewed staff of the KSMIRCME.

Interviewed experts and responsible stakeholders expressed the need to establish norms for the development and maintenance of the CME quality through creation of the National Medical Council responsible for the CME coordination, accreditation of providers, some CME/CPD courses, as well as monitoring the performance of certain provider groups (for example, regulate training courses of pharmaceutical companies, the role of PMA in certification etc.).

8. Discussion

Key conclusions of the review relate to coordination, organization of processes by educational organizations, planning at the level of health organizations, the needs and motivation of health professionals with regard to CME/CPD, as well as factors and barriers related to the health care system, where the CME/CPD functions.

It should be noted that this review was completely focused on obtaining views of key informants with regard to the existing CME/CPD system, therefore, most findings and conclusions are made based on voiced opinions and suggestions.

Of key barriers to the CME/CPD system functioning in Kyrgyzstan, the following have been highlighted:

- **Health personnel crisis, shortage of doctors, inadequate knowledge and practical skills of health professionals are one of the main factor** for the health facility performance improvement.
- Continuing **trend among the population's preference to contact hospitals, rather than PHC organizations**. This imposes unreasonable load and inefficiency for inpatient care and needs for wider competencies of family doctors/GP, expansion of the list of manipulations and interventions being performed, as well as in terms of rehabilitation, psychological assistance, communications.
- **The specifics of budget formation by health organizations which have no separate funding for CME/CPD. Training implies payment of specialists' travel and accommodation under the line item** "Travel expenses".
- **Gaps in interaction between educational organizations, CME/CPD providers,** PMAs and health organizations. There are no agreements and plans of cooperation between CME/CPD providers and HOs.

  - access of CME/CPD providers to health facilities for training practical skills by specialists is limited.

Certification and involved with it assignment of the qualification category are still the main factors for the CME/CPD training. Health professionals plan CME in a way as to gain the required number of credit-hours closer to the time of certification. The requirements of 250 credit hours in 5 years began to be implemented since 2018, and they are still in the transition period.

Taking into account that according to E-health Center, only about 38 per cent of doctors in all specialties are certified and have qualification categories, the number of regular trainees is still insufficient, given that the majority are trained only for the reason of certification.

A new Regulation on Certification and Registration of Health Professionals has been recently adopted. In accordance with it the compulsory certification was introduced to obtain admission

to practice. This should change the available motivation amongst the majority of specialists who learn only for obtaining a qualification category.

With introduction of the compulsory certification for admission to practice of all specialists who will have to regularly learn, the issue of budget financing of CME/CPD raises, since the opportunities for budget-funded training based in the KSMIRCME are limited. At this stage already there has been a lack of places for budget-funded education.

In this regard, **the CME/CPD planning is an important factor in access to training by doctors and nurses at the expense of funds from the state budget**. In addition, it is required to consider further development of other CME/CPD providers, such as PMA, which can provide training, including training on a fee-paying basis.

In terms of planning CME/CPD, there are gaps in the activities of HOs: there is insufficient leadership of health facility managers, transparency and sequence of planning the CME, insufficient information work in order to change the behavior and motives of doctors and nurses.

Generally, it was noted that CME/CPD is not integrated into daily medical practice and centralized in Bishkek and Osh; and recognition of family medicine/GP continues to remain inadequate. The quality and opportunities for training in regional training centers (Branches of the KSMIRCME) are considered to be limited, therefore it is not possible to receive a real qualification upgrading. The results of the survey of working specialists at oblast and raion levels show that they prefer Bishkek for upgrading qualifications, and if possible, go abroad for education.

Although the continuing education curricula are constantly being refined with sufficient hours allocated for practical work, the quality of education, the curricula content and the forms of providing continuing education require further improvement. New training methods, in particular, PDGs and online courses have not yet been universally recognized as effective by doctors. Both organizational barriers and mistrust of them for accrual of credit-hours are the reasons.

Interviewed health professionals responded differently with regard to the quality of CME provided by various providers, many doctors are impressed with the quality of fee-based courses provided by National HOs, Research Institutes, international programs and projects, PMA, private clinics, primarily due to emphasis on practical skills and better access to patients.

Many doctors, especially of narrow specialties, are ready to pay for courses of some providers without accrual of credit hours. At the same time, PHC doctors and nurses of regional public facilities are in queues for free training in the KSMIRCME in order to pass certification and get a category to have salary surcharges.

To achieve a more coordinated and consistent policy of the CME/CPD system, **there is a recognized need for greater involvement of the MoH&SD in this process in terms of general**

coordination, accreditation of CME/CPD providers, development of professional and educational standards and other issues of the system organization by creating the National Medical Council responsible for the CME coordination, accreditation of providers and the quality of curricula etc.

In Kyrgyzstan, recently PMAs began to be more involved in the process of developing competencies (qualification requirements) and the regulatory framework for CME, participate in certification of doctors and nurses, they also conduct training programs for upgrading qualifications of health professionals.

The newly established Kyrgyz Medical Association (KMA), supported by the MER project, is an association of already existing professional associations in Kyrgyzstan (umbrella association). 15 PMAs with legal status have already joined the KMA. The KMA leadership and members are motivated and ready to take responsibility and take more active participation in the educational process, especially in CME.

Due to large number of stakeholders involved in the CME, it is very important to identify professional standards that should cover training programs based on the developed competencies for different specialties, the selection criteria for training, control and monitoring of the CME/CPD. **At present, the CME in Kyrgyzstan may well be transformed into the CPD, where users can gain broader competences.**

9. Recommendations

1. Discuss ways to improve the CME/CPD management. One of the options could be creation of the National Agency at the MoH&SD (National Medical Council) for CME/CPD management. This agency may perform functions to coordinate, accredit providers and CME/CPD curricula, create professional standards, coordinate certification, registration and admission to practice. The central coordinating role could be concentrated in the MoH&SD, and such a system would take into account the evolving reality in the CME/CPD area, when more and more providers are in demand among health professionals, including providers abroad.
2. As sources of CME/CPD diversify and become more decentralized with providers being close to the practitioners' working place, the MoH&SD should become the ministry in charge of CME/CPD with no involvement of the MoE, as for post-graduate medical education.
3. Establish the requirements, criteria and processes for accreditation of CME/CPD providers, taking into account CME/CPD decentralization and modernization of educational technologies and equipment available for training and practice, especially in regions. Special attention should be paid to the opportunities of broad practical skills, distance learning and telemedicine.
4. Continue improving the capacity of teachers in the KCMIRCME and its branches, as well as teachers of other CME/CPD providers. The accreditation of CME/CPD providers should include assessing the capacity of teachers and upgrading their qualification and skills on pedagogy and psychology.
5. Start development of professional standards based on competences oriented at needs and demands of practical medicine:
    - in particular, consider the feasibility of developing professional standards instead of competency catalogs by specialty. Based on them develop curricula with emphasis on development of competencies in respective specialties, as well as the criteria for selecting candidates for training, control and monitoring of the CME/CPD.
6. Improve the CME credit hours accounting system, based on the principles of transparency, assessment and equality for all accredited CME/CPD providers.
7. Contribute to development of all CME/CPD providers considering their strengths and weaknesses, including the KSMIRCME, professional medical associations and private clinics.
8. Regulation of potential risks and reducing the financial support to the CME/CPD by pharmaceutical companies. Interventions include such measures as limiting and determining the topics for training activities, a mandatory declaration of conflicts of

interest, CME sponsorship taxes, reducing the cost of CME courses, improving the quality of teaching.

9. As for new training formats – peer discussion group, online courses, telemedicine - health facility managers are recommended to reconsider their views towards the need for these formats, their value, take initiative, improve the atmosphere for their acceptability amongst doctors and nurses; and the CME/CPD providers must contribute to the emergence of doctors and nurses with competencies for conducting such training formats.
10. Health facility managers have to improve the CME/CPD planning using transparent and open to staff tools and improve information work pertaining to compulsory certification and registration for admittance to practice.
11. Routinely **monitor and assess the CME/CPD to meet user needs and provide the required programs and training formats:**
    - curricula quality in accordance with professional standards and competences;
    - focus on training of PHC doctors – family doctors/GP;
    - the process of organizing the CME/CPD by all accredited CME/CPD providers;
    - training needs of doctors and nurses for PHC and hospital levels;
    - opinions and satisfaction of patients with services delivered.

Annex 1

Survey Form

for staff members of the MoH and MoE, experts and other stakeholders

1. What do you think about the existing CME/CPD system?

2. Why is a formal emphasis made on CME rather than CPD, which provides a wider range of competences to doctors, residents and nurses?

   At present, your training is limited to clinical issues in your specialty. Does your continuing education include such areas of expertise as communication, leadership, supervision (mentoring), research, service organization, ethics?

3. Are you satisfied with the existing system?

4. Opinions on teaching methods at the KSMIRCME and other service providers? What are the expectations? Are modern technologies used and how?

5. What organizations provide CME courses? What are your attitude and expectations from various types of existing organizations providing CME? These involve the KCMIRCME and other medical universities, professional associations, pharmaceutical companies, clinical sites, etc.

6. How private clinics may be involved in provision of CME/CPD services?

7. How pharmaceutical companies providing CME/CPD services can be regulated? Are new regulations or standards needed (licensing, accreditation)? What type of regulations or standards? Who will do it?

8. It is possible if CME is not provided by facilities /institutions? For example, by Peer Discussion Groups, Self-education? Can and should these hours be counted as credits?

9. What ways of cooperation can be considered? For example, Clinical Sites + Higher Education Institutions, Private Higher Education Institutions/Clinics + Public Higher Education Institutions? How will licensing, accreditation take place?

10. Financing: tuition fees - how does the system work, what are the alternatives? Other resources - teachers, physical infrastructure, premises, literature?

11. How the CME is provided for family doctors/GP? For other specialties (obstetrics, gynecology, surgery, therapy, anesthesiology and resuscitation, cardiology, oncology, endocrinology)?

12. What improvements are suggested to ensure that doctors and nurses are more motivated and committed to CME/CPD as well as responsible for their credit hours. There is information that they take CME for certification and category only.

13. How does the assessment of doctors' competences after CME courses take place or how it should take place? What mechanisms are there?

14. In terms of credit hours in general - who and how should accrue/accumulate credit hours?

15. Who should be responsible for **coordinating** the CME/CPD, including **quality assurance, courses monitoring**? Can this be an independent agency or council that would register and nominate credit-hours to users? Roles of the Ministry of Health of the Kyrgyz Republic, the CME Council (is there such a thing or it is required), its members?

16. What are the opinions, lessons learned and plans for CME after the initial stages of the COVID-19 pandemic?

17. What concerns and challenges remain for CME?

18. Suggestions to improve CME?

SURVEY FORM

for organizations providing CME services – CME/CPD providers

1. What CME/CPD courses and training programs do you provide?

2. How many users do you serve annually? Has the number of users changed lately? What are the users' profiles (young doctors or senior doctors, young nurses or older nurses, **FD/GP** or narrow specialists, from cities or regions, etc.)?

3. Online courses or full-time courses? Practical seminars? Only clinical work or also "soft" skills (communication, doctor-nurse partnership, organization of clinic, ethics, research skills, mentoring, etc.)?

4. Financing: tuition fees - how does the system work, what are the alternatives? Other resources - teachers, physical infrastructure, premises, literature?

5. What are your strengths? What are your areas of excellence? What is your value as compared to other organizations?

6. To what extent your trainees are motivated to learn from you? What are you doing to motivate?

7. What are your weaknesses and what needs to be improved?

8. Are there mechanisms to track knowledge survival and assess skills after training?

9. What are the opinions, lessons learned, plans for CME after the initial stages of the COVID-19 pandemic?

10. Accrual of credit hours - what are the challenges, suggestions for improvement.

11. Who should be responsible for **coordinating** the CME/CPD, including **quality assurance**, courses **monitoring**? Can this be an independent agency or council that would register and nominate credit-hours to users? Roles of the Ministry of Health of the Kyrgyz Republic, the CME Council (is there such a thing or is it required), its members?

SURVEY FROM

for CME/CPD service users (doctors, nurses)

1. What are your expectations from the CME/CPD?

2. What learning formats **do you know** and what formats do you **want** to be provided by the CME/CPD service providers? Courses/lectures, peer discussion groups, online courses, case discussions on the ground etc?

3. Formally, the focus is now made on CME rather than CPD when broader range of competences is provided for doctors, residents and nurses.

   I.e. your training is currently limited to clinical issues in your specialty. Does your continuing education include such areas of expertise as communication, leadership, mentoring, research, service organization, ethics? If not, would you like to include them? Which ones? How did your needs change in response to the COVID-19 pandemic?

4. Are you satisfied with existing organizations providing CME/CPD, content of their training, teaching methods? Do their courses meet your needs?

5. What do you think about strengths of each organization?

6. What organizations do you and other users prefer on specific clinical issues or conditions/diseases?

7. Do you have an opportunity to choose the CME organizations and training topics?

8. What motives do you and other doctors have to take the CME courses? (Are there any motives except for getting a category?).

9. How do you pay tuition fee? How other expenses are covered?

10. How does the assessment of doctors' competences take place upon completion of CME courses? How it should take place? What are the existing and proposed mechanisms?

11. What do you think about the credit hour accrual system?

12. What challenges do you face to take the CME?

13. Your suggestions for improving the CME?