



KAZAKHSTAN

Transforming primary health care during the pandemic

MULTIDISCIPLINARY TEAMS FOR BETTER ALIGNMENT OF PRIMARY HEALTH CARE SERVICES TO MEET THE NEEDS AND EXPECTATIONS OF PEOPLE

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MOTIVATION

Kazakhstan has moved towards multidisciplinary teams, supported by a range of health system levers including financing and digital solutions, to deliver primary health care (PHC) services. This has been rolled out via a phased change management strategy. A key objective is to expand services to reflect the complexity of individual needs in the 21st century, specifically by including more preventive, social care and mental health services alongside strengthened delivery of clinical services at PHC level.

Kazakhstan embarked on these reforms to accelerate improvement in health outcomes and to better respond to the changing needs and expectations of its people. Problems to be addressed included people's continued preference to use specialists and hospitals for PHC-amenable conditions, the narrow task profile of mono-profile PHC teams, low capacity to provide comprehensive services organized around people's upstream needs, a reactive approach to treatment rather than proactive population health management, fragmentation of, and the high costs associated with, laboratories and diagnostics, and inequity in utilization of services.

These developments embody good practices in line with the Alma Ata and Astana declarations championed by Kazakhstan as global platforms to maintain political focus on strengthening PHC as the driving force of the universal health coverage agenda.

The COVID-19 pandemic hit during Kazakhstan's phased implementation of these changes and showed that the multidisciplinary approach is not only important to addressing the 21st century disease burden, but is also vital to responding to pandemic situations.

Towards psychosocial health needs

Strengthening family medicine

TRANSFORMATIONAL INSTRUMENTS AND POLICIES

To improve PHC's responsiveness and prestige, Kazakhstan embarked on a transformation of its biomedical, doctor-centred PHC model towards a people-centred PHC model that is based on personal relationships within a social context (1).

Socioeconomic factors and correlated behavioural and mental health problems were found to be the main drivers of health and health-care-seeking behaviour. Experience of innovative PHC best practices in Nur-Sultan and international evidence showed that PHC teams had to be strengthened through enabling greater autonomy for, and increasing the competence of, nurses, social workers and psychologists to provide better PHC responses to meet people's needs comprehensively (2).

Integration of PHC services with specialized care was introduced through evidence-based clinical pathways that enable patients to get the right services from the right specialist at the right time, in alignment with individual clinical needs. As a result, and to avoid care fragmentation in an era of multimorbidity and optimize use of scarce health-care resources, narrow specialists were no longer considered as first-contact physicians.

Central to the reform was strengthening family medicine as the backbone of PHC. Special attention has been paid to training family doctors in the new system of interaction with patients, which places a greater focus on patients' needs. Family doctors who are members of multidisciplinary teams have furthered their skills by improving their clinical knowledge in evidence-based medicine and non-clinical competencies in areas such as communication with patients and within the PHC team, and assessing the individual medical and social needs of patients. This has made it possible for them to conduct more holistic assessments of patient needs, paying attention not only to their biomedical requirements, but also to their psychosocial needs and preferences. Improved communication skills have also helped family doctors move away from a paternalistic approach to the doctor-patient relationship to one that involves collaborative decision-making based on individual needs and expectations.

An intensive six-month retraining programme has been introduced to improve the qualifications of community doctors and general practitioners in family medicine. Today, PHC organizations employ approximately 10 000 doctors and 28 000 paramedics; this comprises 47% of all doctors and paramedics in rural areas, covering 19 million people.



Expanding scope of practice of nurses

Gradual expansion of the scope of practice of nurses was planned following international experiences which showed that nurses with full scope of practice in team-based PHC services improve quality of care and increase patient satisfaction, access and equity. The number of nurses in PHC teams has been tripled to include up to three nurses per family doctor. The Ministry of Health has identified improving the autonomy of nurses to carry out preventive work at individual and community levels, including education and counselling of patients with noncommunicable diseases (NCDs), as a key priority. The national policy on strengthening the role of nurses allows the three team nurses flexibility in adopting approaches tailored to the local context and needs during profiling tasks. Typically, one of the three nurses is a patronage nurse, a second is responsible for disease management programmes and the third supports triage of patients for doctors' visits.

In addition to the gradual expansion of the numbers and task profile of PHC nurses, the Ministry of Health has introduced a new regulation for strengthening PHC multidisciplinary teams with a minimum of one social worker and one psychologist per 10 000 inhabitants. The scope of practice of psychologists includes psychological counselling of patients referred to them by other PHC team members, or through self-referral. Social workers, in addition to assessing social needs of patients referred by other PHC team members, now have more proactive roles in identifying the social needs of groups in the community who live in vulnerable situations, including people with disabilities, older people and those living in socially disadvantaged families with small children.

Composition of multidisciplinary PHC team

The new composition of PHC teams requires more emphasis on non-clinical skills and changes in organizational culture. For many years, training priorities have focused on biomedical, disease-centred approaches, and narrow specialisms have been afforded greater prestige within the medical community. To create a supportive person-centred environment, it was necessary to address the rooted paternalistic approach in communication with patients and modify the organizational culture that traditionally has supported an hierarchy chain from narrow specialist to general practitioner, and from doctors to nurses and allied health professionals.

Multidisciplinary training courses to improve interprofessional communication were implemented through participatory approaches, looking at topics like holistic assessment of the population and individual needs at PHC level, leadership and management in PHC, organizational culture and teamwork, holistic approaches and person-centred communication. Trained supervisors were selected to provide continuous coaching to their peers and facilitate ongoing implementation of changes in their post-training practice.

Multidisciplinary courses provided a great opportunity for PHC colleagues from different professions to better recognize each other's roles and jointly adjust task profiles, while also focusing on identifying what new tasks were necessary for preventive work with individuals and communities. The training resulted in better recognition and acceptance by general practitioners of the role of PHC nurses, social workers and psychologists.

After training and expansion of their autonomy, nurses started to apply a more holistic lens to the complexity of individual health needs, and to plan contextualized interventions that reflect personal preferences and goals. When more comprehensive assessment and complex management are needed, they can refer patients to psychologists and social workers, and jointly design and implement shared care plans.

Psychologists who wish to join PHC teams are required to have at least a bachelor's degree in psychology. The expertise they acquire during training allows them to provide psychological counselling, and their interdisciplinary training gives them a good grasp of the general principles of organizing PHC and working in a team. Additional on-the-job training has been provided to equip psychologists with specific skills and competencies in areas such as social risk assessment, working with vulnerable populations and social passports. A bachelor's degree in any subject is the minimum requirement for a full-time social worker in a PHC team.

Guidelines to support disease management at PHC

A new approach to developing and introducing guidelines, characterized by combining clinical and non-clinical aspects of diagnosis and management, individual and population-level outcomes and person-centred communication, has been applied. The initial stage focused on four priority NCDs — arterial hypertension, diabetes, chronic heart failure and chronic obstructive pulmonary disease (COPD). Special disease management programmes (DMPs) were designed for PHC teams to provide them with contextualized evidence-based clinical protocols and guidelines and supportive tools for patient education.

Improving patients' health literacy and strengthening their role in self-management were key objectives of DMPs and one of the main tasks of PHC nurses. Nurses were trained to assess holistically people's health problems and come to shared decisions on how to manage them, taking into account the person's literacy level, individual priorities and personal goals for well-being.

The health of pregnant women and children up to 5 years is another selected priority for enhanced performance of PHC teams. With the support of the United Nations Children's Fund (UNICEF), multi-profile team-based services have been targeted on delivering more holistic assessments and addressing the needs of vulnerable families with children up to 5 years. Teams have been equipped with guidance materials and supportive tools on how to more comprehensively address the medical and psychosocial needs of targeted families. A key role has been assigned to patronage nurses, who visit families to conduct comprehensive assessments and, when needed, supply interventions and develop shared plans with social workers and/or psychologists.

The Ministry of Health introduced a phased stepwise approach to achieving sustainable transformation of the PHC model towards multi-profile PHC teams, starting with selected good-practice centres in every region and the bigger cities followed by further roll-out after evaluation and the generation of sufficient know-how. Seventeen good-practice centres have become pioneers in transforming the PHC model towards implementing the multidisciplinary teams-based PHC model in practice.

The Government of Kazakhstan applied a unique model of change management through partnerships with the national PHC association and municipal administrations. The PHC association is composed of internationally recognized Kazakh leaders in PHC professional development. In cooperation with academic institutions, it has designed and implemented training for PHC professionals and managers, with municipal administrations covering the expenses.

Phased implementation

MULTIDISCIPLINARY PHC APPROACH DURING THE COVID-19 PANDEMIC

Integrated approach

At the start of the pandemic, the Government of Kazakhstan promptly transformed the model of PHC service delivery to ensure a dual-track response: providing assistance related to COVID-19, and providing essential PHC services for other health needs. PHC organizations have assumed an important role in ensuring the early detection of COVID-19 cases by providing access to testing and monitoring quarantined contacts and COVID-19 patients in isolation at home. As the patient's primary point of contact with the health-care system, PHC services have worked alongside public health services to ensure the identification of people with COVID-19 and have played an important role in contact-tracing, thereby reducing the further spread of the infection among the population. Working closely with the public health laboratory system, PHC has helped ensure that patients with suspected and probable COVID-19 are tested.

National protocol

According to the national protocol for the diagnosis and treatment of COVID-19, PHC provides outpatient care for patients with mild and moderate cases who do not have any risk factors for severe illness and do not need to be hospitalized. PHC has also taken on the role of managing patients following discharge from specialized COVID-19 hospitals, relieving the burden on secondary care and providing patients with urgently needed medical follow-up and rehabilitation. As the prevalence of post-COVID-19 conditions increases, so too does the role of PHC in providing multidisciplinary medical and social care for patients with such conditions and ensuring their access to, for instance, specialized doctors, rehabilitation services, mental health services and psychosocial support.

Infection control in health facilities

The Ministry of Health and WHO have introduced appropriate recommendations to prevent outbreaks of the disease within health facilities. These include screening and triage for early detection and control at the source of infection, standard precautions for all patients, precautionary measures based on the path of transmission, personnel training, the introduction of administrative control, monitoring cases among medical and non-medical personnel, and the creation of conditions at PHC facilities that prevent the spread of the infection, including improved ventilation. Separate entrances to clinics and triage for potential COVID-19 patients have been established in all PHC facilities: patients with COVID-19 symptoms are admitted and triaged externally, while patients with respiratory symptoms are being sent to designated areas with the right conditions to prevent the spread of infections transmitted by contact and air-borne droplets.

Remote consultations

Teleconsultations based on standard operating procedures for patient triage were introduced in an effort to maintain access to basic health-care services and reduce the risk of exposure to the virus, especially for people who are at increased risk of severe illness from COVID-19, who make up the vast majority of patients who need continuous assistance in managing their NCDs. By conducting teleconsultations using standard operating procedures, nurses are able to identify triggering symptoms that require consultation with a primary care physician or immediate referral to the emergency and urgent care system with possible hospitalization. Face-to-face consultations are prioritized for those who need a more in-depth examination and/or have difficulty using teleconsultations. An extensive awareness campaign was conducted to inform people about the new platforms for seeking care.

Expanded multidisciplinary PHC teams helped with the prompt organization of remote medical services (consultations) and ensure the effective provision of medical services at home through the creation of mobile teams.

Mobile teams

Mobile teams have been set up in all PHC organizations to provide timely medical care to coronavirus patients at PHC level and to monitor patients with COVID-19, including those with risk factors (hypertension, diabetes mellitus, coronary artery disease, COPD, asthma and other conditions) and pneumonia (likely case of COVID-19 according to the national protocol). Mobile teams included social workers, nurses, psychologists and family doctors.

Mobile teams make house calls to provide initial treatment to patients with signs of acute respiratory disease and suspected coronavirus infection. Samples of biological materials are taken for polymerase chain reaction (PCR) examination, and medicines are prescribed in accordance with the clinical protocol for diagnosis and treatment, "Coronavirus infection COVID-19". People with coronavirus are subject to ongoing observation, including through telemedicine (audio or video consultations).

Mobile team members have undergone special training in detecting COVID-19 cases, conducting patient questionnaires, carrying out contact investigations, taking biomaterial samples for real-time PCR for SARS-CoV-2, managing outpatient cases and emergency care, and identifying triggers for referral to diagnostic studies and inpatient treatment. They have also been trained in occupational health and infection prevention and control to prevent disease among health-care workers and the further spread of the infection. Special methodological materials developed by the Ministry of Health have been distributed among PHC workers.

Functions assigned to members of the mobile team include: two nurses being responsible for monitoring contact persons; two nurses holding teleconsultations and visiting COVID-19 patients as needed; two nurses communicating with and visiting NCD patients; and social workers being responsible for delivering medicines to their homes, which reduces the risks of contact among the population when patients have to visit PHC facilities to receive medicines to treat chronic conditions.

"THE MINISTRY OF HEALTH INTRODUCED A PHASED STEPWISE APPROACH TO ACHIEVING SUSTAINABLE TRANSFORMATION OF THE PHC MODEL TOWARDS MULTI-PROFILE PHC TEAMS, STARTING WITH SELECTED GOOD-PRACTICE CENTRES IN EVERY REGION AND THE BIGGER CITIES FOLLOWED BY FURTHER ROLL-OUT AFTER EVALUATION AND THE GENERATION OF SUFFICIENT KNOW-HOW."

EARLY ACHIEVEMENTS AND SUSTAINABILITY

Better coverage with preventive services

Multidisciplinary teams with a more holistic scope of service have driven PHC activities closer to root causes of illness and upstream health determinants. This has contributed to better coverage of vulnerable population groups with preventive services.

Better tailored services

The expansion of PHC teams with social workers and psychologists has made it possible to widen the scope of management of individual problems and better address the psychosocial aspects of health problems that often are key drivers of underutilization and overutilization of resources.

Greater resolute capacity

Increased coverage with preventive services and better tailored PHC services have resulted in reduced use of specialized outpatient and hospital services. In Enbekshikazakskii rayon, for example, visits to PHC nurses and social workers increased by more than 100 times (nurses from 4800 to 55 271 and social workers from 1700 to 50 496) in 2019 compared to 2016. The number of visits to family doctors almost tripled – from 226 267 in 2016 to 634 267 in 2019. During the same period, visits to narrow specialists decreased by 50% (from 253 149 to 121 184) (Fig. 1 and Fig. 2).

Fig. 1. Visits to PHC nurse, psychologist and social worker in Enbekshikazakskii rayon, Almaty region, 2016–2019

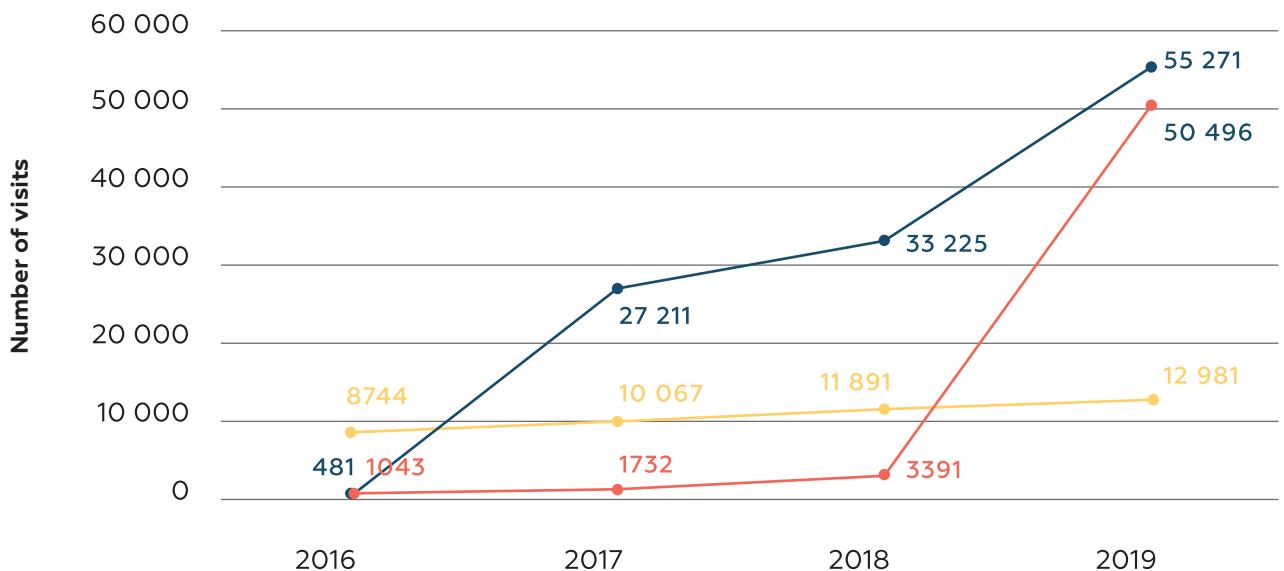
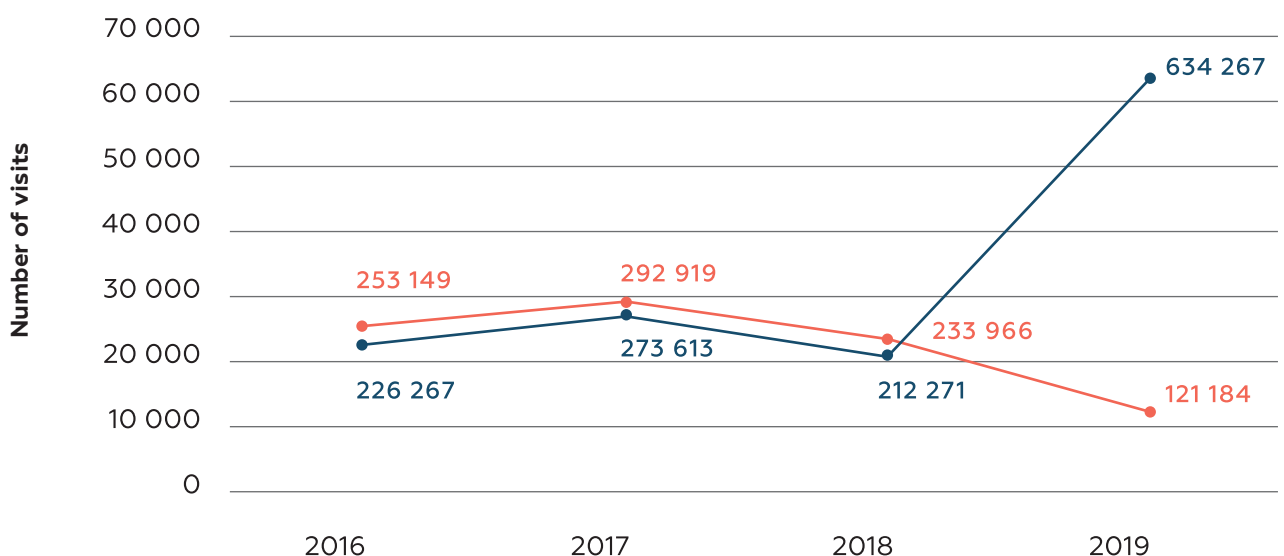


Fig. 2. Visits to general practitioners and narrow specialists in Enbekshikazakskii rayon, Almaty region, 2016–2019



Rapid transformation

Expanded PHC multi-profile teams have created opportunities during the pandemic for the rapid introduction of multi-profile mobile teams and the delivery of efficient dual-track responses at PHC facilities and in patients' homes.

Multidisciplinary approach and DMPs

The multidisciplinary approach and DMPs have created the opportunity to establish stable communication channels between patients with chronic conditions (who were still receiving necessary care during the COVID-19 pandemic) and their PHC professionals, which enables better self-management of NCDs even when health services are less accessible. Preliminary analysis suggests that the hospitalization rate among those enrolled in DMPs in Kazakhstan declined from 14.5% in 2017 to 2.6% in 2019 and 2.3% in 2020.



LESSONS LEARNED

The selection of professionals for multidisciplinary teams should expand PHC scope of practice from disease-centredness to people-centredness and should better target the root causes of diseases. Multidisciplinary PHC teams that are expanded through professionals who are competent in moving closer to the root causes of diseases in the community and which adopt a more holistic, person-centred approach to take better account of individual health needs and expectations can reduce the burden of utilization of specialized and hospital services.

A stepwise and phased implementation approach is needed for the adoption and acceptance of a new holistic PHC approach by the population and the medical community. Transformation from a biomedical, disease-oriented model towards a more holistic model that is oriented towards the root causes of diseases is not an easy process. Leaders in professional development of newly established PHC specialties should be empowered to be change agents in facilitating the roll-out of practical changes in PHC practices. Selected PHC practices that are open to innovations should act as early adopters to implement and test the new PHC model and demonstrate change in action.

Change management strategies should prioritize multilevel governance support and engagement in transformation. Partnership between national and local government and nongovernmental organizations should be established through, for example, engaging professional associations in the delivery of multidisciplinary training courses, facilitating organizations' transformations and coaching leaders in professional development.

Multidisciplinary training is essential to move professionals from a silo approach to clinical decision-making towards a more team-based, holistic and comprehensive approach and shared decision-making. A participatory approach during multidisciplinary training allows participants to develop the competencies needed for strong teamworking, which enables more comprehensive assessments of complex individual and population health needs and shared agreement on what tasks can be shifted and/or distributed between PHC professionals.

PHC-friendly clinical protocols and guidelines are essential and should be implemented gradually, focusing on improved PHC performance outcomes. Improving clinical governance, designing optimized clinical pathways in which PHC multidisciplinary teams play essential roles and focusing performance on population health outcomes should not overload PHC teams during adoption of the new PHC model. The so-called less-is-more approach contributes to more sustainable transformation towards an outcome-oriented PHC model that is patient centred and is supportive of a teamworking organizational culture and internal quality-improvement mechanisms targeted on better outcomes. PHC-friendly and outcome-oriented clinical protocols and guidelines are essential to this endeavour.

Community awareness campaigns are important for highlighting the benefits of the new model for patients. A multidisciplinary-team-based PHC model that promotes individual and population-based outcomes is important in ensuring people use PHC services as their first contact.

Investments are needed to strengthen PHC capacity to respond to health emergencies. The current experience in responding to the COVID-19 pandemic has highlighted the importance of PHC in responding to health emergencies and providing basic public health services such as early detection, contact tracing, ensuring access to testing, isolation of COVID-19 case contacts, and providing outpatient treatment to help prevent hospital overload and follow-up of patients after hospitalization.

Moreover, PHC is a fundamental link in ensuring that important information on public health measures aimed at preventing transmission (for example, guidelines on hand hygiene, the use of masks, social distancing, and how to behave in public spaces, etc.) is communicated to the public during crisis situations. PHC should therefore be included in national and local public health emergency plans. Investments should be made, first of all, in training PHC specialists in emergency response skills, working in emergencies and providing the necessary assistance.



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