

ACHIEVING SUCCESS STEP BY STEP

Improving Hypertension Care in Kazakhstan

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Twenty-five to thirty percent of adults worldwide are estimated to be affected by hypertension, a “silent killer” that is frequently asymptomatic until a heart attack or stroke occurs. In Kazakhstan, cardiovascular disease is the leading cause of death in adults, and like in many neighboring countries, mortality rates here are on the rise. Estimated at 536 per 100,000 population, annual mortality in Kazakhstan related to cardiovascular disease far outweighs other leading causes of death like infectious diseases (28 per 100,000 population) and cancer (66 per 100,000 population).

The USAID-funded ZdravPlus project is working to reverse this alarming trend by facilitating a hypertension integrated improvement program (IIP) that pools the capacities and expertise of a wide range of stakeholders who are committed to strengthening the ability of primary health care providers to improve the diagnosis and treatment of this important disease.

Together with the Karaganda Oblast Health Department, the Republican Cardiology Institute, and ZdravPlus partner the Kazakhstan Association of Family Physicians (KAFP), ZdravPlus began piloting the use of a new clinical practice guideline (CPG) on hypertension in six outpatient facilities in the city of Karaganda in 2005. In addition to improving diagnosis and treatment of hypertension, the project is designed to act as an example of how CPGs for other important conditions can be implemented by family medicine professionals in primary health care settings.

Training Doctors and Nurses

If diagnosed in time and treated properly, hypertension can be easily regulated – improving quality of life, saving lives, and reducing costs to the health care system. As such, ZdravPlus’s first priority in the Karaganda pilots was to train doctors in the standards set forth in the new CPG, which provides primary health care professionals with comprehensive, evidence-based guidance on how to diagnose and treat hypertension.

In late 2005, ZdravPlus, in collaboration with partners, delivered a three-day hypertension clinical training along with a one-day training on continuous quality improvement for doctors practicing in the pilot sites. Since 2005, a total of 439 doctors and 61 nurses have participated in the hypertension training module, which the Almaty Post Graduate Institute for Physicians and Post Graduate Family Medicine Departments of Karaganda and Semipalatinsk State Medical Academies have also integrated into their own primary health care training curricula.



Dr. Serik Shukbaev critiques doctors’ blood pressure measuring skills during a hypertension CPG clinical training

A family doctor and former head of a pilot IIP facility, Dr. Serik Shuakbaev was trained as a trainer in the hypertension clinical training module in 2005. As a faculty member of the Family Medicine Department of the Karaganda State Medical Academy, Dr. Shuakbaev recently commented on his appreciation for the training and the IIP pilots. “I am very satisfied with the training I received through the project,” Dr. Shuakbaev told ZdravPlus. “By implementing the clinical practice guideline, we greatly improved the quality of care we provide to our clients; we have also trained nurses and strengthened their ability to provide blood pressure measurements for all adults who come to the facility. At the Medical Academy, we have incorporated the training into our continuing medical education

courses, and doctors really like to teach using the CPG.”

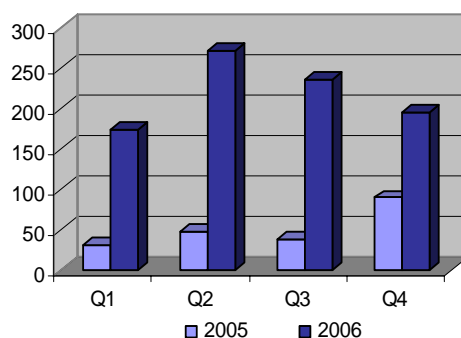
Continuous Quality Improvement

Continuous Quality Improvement (CQI) techniques enable doctors and nurses to 1) monitor changes in clinical practices and health outcomes over time, 2) analyze barriers that hinder improvements in clinical practices and health outcomes, and 3) make substantive conclusions about the relative strengths and weaknesses of the quality improvement interventions they employ.

While the hypertension CPG mandates that all adult patients visiting a primary health care facility should have their blood pressure measured at least once per year (regardless of the reason for their visit), it was clear to CQI planners that facilities were not reaching this important target. Since the implementation of CQI, doctors and nurses in the pilots are utilizing Karaganda Health Information System (HIS) data and monthly patient chart reviews in order to increase detection of hypertension in their patient populations and to chart their progress toward this goal. With support from KAFP, providers review a random selection of patient charts on a month-to-month basis, tracking the percentage of patients who receive a blood pressure measurement while determining appropriate ways to improve providers’ adherence to this component of the CPG. Now at 81%, the pilots have documented an 11% increase in the number of patients receiving blood pressure measurements at least once per year since the pilots’ inception in 2005.

Under ordinary circumstances, it would seem strange to call an increase in incidence of any disease an *improvement*. In Kazakhstan, however – where hypertension is known to be under-detected and underreported – increasing detection is an important first step in delivering effective medical treatment to thousands of individuals who go without care simply because they do not know that they are ill. Encouragingly, HIS data have shown that diagnoses of hypertension in pilot facilities *quadrupled* in 2006 versus 2005. Furthermore, twice as many diagnoses were made in pilot facilities in 2006 than in similar facilities that have not begun implementing CQI programs.

Hypertension Incidence Rate in 6 Pilot Sites (per 100 000 population)



Educating Patients

The pilots have also made strides in giving individuals the tools they need to care for their own cardiovascular health. By making informed decisions about diet and exercise and consistently adhering to the medical treatment prescribed by their doctor, individuals with hypertension can greatly increase their ability to keep their blood pressure under control. Because it is sometimes difficult to give patients the comprehensive information they need in the setting of a busy doctors office, ZdravPlus partnered with the Cardiology Institute to create Hypertension Patient Schools.

Two such schools were established in pilot facilities in 2006, educating a total of 157 patients to date. The five-day course – delivered in convenient 30- to 45-minute increments – focuses on the role of lifestyle choices and medication in controlling hypertension as well as the danger signs of complications that can arise from the disease. The course also allows for doctor-instructors to give detailed answers to patient’s questions and for patients to share their experiences with one another.

Over the coming year, the Cardiology Institute will update the current hypertension CPG to ensure its alignment with evidence-based standards. ZdravPlus will continue to support the hypertension pilots and will help to coordinate the rollout of their exciting achievements by partners and stakeholders – including KAFP, which will develop new monitoring indicators for Karaganda pilot sites, provide clinical training in their branch offices, and continue to advocate for the use of CQI in doctors’ everyday practice.

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