Evaluation of the National Clinical Diagnostic Laboratory System and Facilities in Kazakhstan

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Official languages
Kazakh (state)
Russian (official)

Kazakhstan is the world's largest landlocked country by land area and the ninth largest country in the world; its territory of 2,724,900 square kilometres is larger than Western Europe.
With an estimated 17 million people as of 2013, Kazakhstan is populated by 131 ethnicities, including Kazakh (who make up 63 percent of the population), Russian, Uzbek, Ukrainian, German, Tatar, and Uyghur. Islam is the religion of about 70% of the population, with Christianity practiced by 26%; Kazakhstan allows freedom of religion.
Laboratory medicine development prospects in Kazakhstan

During last 10 years medical technologies development is booming.
Clinical laboratory diagnostic services give about 60% of all diagnostic information to health care system that is crucial for decision making.
Laboratory services improvement

• Quality improvement
• Implementation of information technologies
• Implementation of international standards
National program «Salamatty Kazakhstan»

- To elaborate new and precise concept of development of laboratory services
- To supply clinical diagnostic laboratories with new equipment
- To centralize clinical diagnostic laboratory services with agreed actions at all levels of health care with the accent to primary care
Legal background of laboratory services reform

• Code RK «Regarding health and health care»
• Standards:
  ▪ RK ISO 15189-2008 – Medical laboratories. Specific quality requirements.
Goal of assessment

• Provide clear picture of diagnostic lab services

• Single holistic review to reveal system-based and laboratory-based view
Tools

• The laboratory system assessment using a standardized Laboratory Assessment Tool.
• Crosscutting and holistic approach
Benefits of such assessment

• Clinical laboratory system strengths and weaknesses identification

• Present assessment in standardized way in local context using international standards

• Provide with clinical lab system functioning picture

• Allow for subsequent evaluation and monitoring
Taking into account variety of laboratory services within different geographical areas of the country only representative laboratories were included in the study.
Three levels of public laboratory sector

• National republican facilities with two capital facilities
• Oblast level 14 facilities representing 14 main cities
• Rayon level 170 facilities representing small suburbia
Laboratories

• Some of them are part of its administrative structure (hospital, university, regional health department) (government accreditation)
• Some of they independent (have its own accreditation)
• Lack of network
• Lack of clear picture
Setting

• 32 labs are participated in evaluation in 6 regions of Kazakhstan

• 5 from diagnostic centers

• 15 hospital labs

• 10 health centers

• 2 private diagnostic facilities
Outcome measures
8 modules 8 indicators

- Governance
- Laboratory structure and organisation
- Biorisk management
- Quality management
- Communications
- Information management
- Human resources
- Laboratory equipment and supplies
Results

• Highest score given to
• Governance
• Laboratory structure
• Quality
• Biosafety
Conclusions

• Identify nationally recognized roles, responsibility, leadership
• Pay more attention to functions rather than facilities
• Use successful external programs as models for future policy change