Kazakhstan

Country context*		
Population (000s)	16,441	
GNI per capita (PPP Int $)	20,570	
Physician density (per 10 000 population)	3.62	
Nurse & midwife density (per 10 000 population)	8.26	
Hospital bed density (per 10 000 population)	76	

Life expectancy at birth (years)	68
Total health expenditure (% GDP)	4.3
ICT Development Index rank	48
Mobile-cellular subscriptions (% population)	185.82
Internet users (% population)	53.3

1. eHealth foundations

National policies or strategies

	Country response	Global "yes" response§	Year adopted
National universal health coverage policy or strategy	Yes	75%	2013
National eHealth policy or strategy	Yes	58%	2013
National health information system (HIS) policy or strategy	Yes	66%	2013
National telehealth policy or strategy	No	22%	N/A

Funding sources for eHealth

	Country response	Global "yes" response§	Funding source %**
Public funding	Yes	77%	>75%
Private or commercial funding	No	40%	Zero
Donor/non-public funding	Yes	63%	<25%
Public-private partnerships	Yes	42%	<25%

Multilingualism in eHealth

	Country response	Global "yes" response§	Year adopted
Policy or strategy on multilingualism	Yes	28%	1995
Government-supported Internet sites in multiple languages	Yes	48%	

eHealth capacity building

	Country response	Global "yes" response§	Proportion**
Health sciences students – Pre-service training in eHealth	Yes	74%	>75%
Health professionals – In-service training in eHealth	Yes	77%	50-75%

2. Legal frameworks for eHealth

Policy or legislation – purpose	Country response	Global "yes" response§
Defines **medical jurisdiction, liability or reimbursement of eHealth services** such as telehealth	Yes	31%
Addresses **patient safety and quality of care** based on data quality, data transmission standards or clinical competency criteria	Yes	46%
Protects the **privacy of personally identifiable data** of individuals irrespective of whether it is in **paper or digital format**	Yes	78%
Protects the **privacy of individuals' health-related data** held in electronic format in an **EHR**	Yes	54%
Governs the **sharing of digital data between health professionals in other health services** in the same country through the use of an EHR	Yes	34%
Governs the **sharing of digital data between health professionals in health services** in other countries through the use of an **EHR**	Yes	22%
Governs the **sharing of personal and health data between research entities**	Yes	39%
Allows **individuals electronic access to their own health-related data** when held in an **EHR**	Yes	29%
Allows **individuals to demand their own health-related data be corrected** when held in an **EHR** if it is known to be inaccurate	—	32%
Allows **individuals to demand the deletion of health-related data** from their **EHR**	—	18%
Allows **individuals to specify which health-related data** from their **EHR** can be **shared with health professionals** of their choice	No	28%
Governs **civil registration and vital statistics**	Yes	76%
Governs **national identification management systems**	Yes	65%

World Health Organization

3. Telehealth

Telehealth programmes country overview		
	Health system level**	Programme type**
Teleradiology	National	Established
Teledermatology	Intermediate	Established
Telepathology	National	Established
Telepsychiatry	‡	‡
Remote patient monitoring	National	Established

4. Electronic Health Records (EHRs)

EHR country overview		
	Country response	Year introduced
National EHR system	Yes	2003
Legislation governing the use of the national EHR system	No	
Health facilities with EHR	**Use EHR**	**Facilities with EHR %****
Primary care facilities (e.g. clinics and health care centres)	Yes	25-50%
Secondary care facilities (e.g. hospitals, emergency care)	Yes	>75%
Tertiary care facilities (e.g. specialized care, referral from primary/secondary care)	Yes	>75%
Other electronic systems	**Country response**	**Global "yes" response§**
Laboratory information systems	N/A	35%
Pathology information systems	N/A	18%
Pharmacy information systems	N/A	33%
PACS	N/A	26%
Automatic vaccination alerting system	N/A	10%
ICT-assisted functions	**Country response**	**Global "yes" response§**
Electronic medical billing systems	Yes	58%
Supply chain management information systems	—	58%
Human resources for health information systems	Yes	69%

5. Use of eLearning in health sciences

eLearning programmes country overview		
Health sciences students – Pre-service	**Country response**	**Global "yes" response§**
Medicine	No	58%
Dentistry	No	39%
Public health	Yes	50%
Nursing & midwifery	No	47%
Pharmacy	No	38%
Biomedical/Life sciences	Yes	42%
Health professionals – In-service	**Country response**	**Global "yes" response§**
Medicine	Yes	58%
Dentistry	No	30%
Public health	Yes	47%
Nursing & midwifery	Yes	46%
Pharmacy	No	31%
Biomedical/Life sciences	Yes	34%

6. mHealth

mHealth programmes country overview

Accessing/providing health services	Health system level**	Programme type**
Toll-free emergency	National, Intermediate, Local	Established
Health call centres	National, Local	Established
Appointment reminders	Local	Pilot
Mobile telehealth	National	Established
Management of disasters and emergencies	National	Established
Treatment adherence	Local	Pilot
Accessing/providing health information	**Health system level****	**Programme type****
Community mobilization	National, Intermediate, Local	Established
Access to information, databases and tools	National, Intermediate, Local	Established
Patient records	National	Established
mLearning	National	Established
Decision support systems	Local	Pilot
Collecting health information	**Health system level****	**Programme type****
Patient monitoring	Local	Pilot
Health surveys	Local	Pilot
Disease surveillance	Local	Pilot

7. Social media

Social media and health	Country response	Global "yes" response§	Year adopted
National policy or strategy on the use of social media by government organizations	No	18%	N/A
Policy or strategy makes specific reference to its use in the health domain	‡	5%	
Health care organizations – use of social media	**Country response**	**Global "yes" response§**	
Promote health messages as a part of health promotion campaigns	Yes	78%	
Help manage patient appointments	Yes	24%	
Seek feedback on services	Yes	56%	
Make general health announcements	Yes	72%	
Make emergency announcements	Yes	59%	
Individuals and communities – use of social media	**Country response**	**Global "yes" response§**	
Learn about health issues	Yes	79%	
Help decide what health services to use	Yes	56%	
Provide feedback to health facilities or health professionals	Yes	62%	
Run community-based health campaigns	Yes	62%	
Participate in community-based health forums	Yes	59%	

8. Big data

Policy or strategy – purpose	Country response	Global "yes" response§	Year adopted
Governing the use of big data in the health sector	—	17%	N/A
Governing the use of big data by private companies	—	8%	N/A

LEGEND

*   Country context indicators
ICT Development Index Rank. 2015 - https://www.itu.int/net4/ITU-D/idi/2015/
All other country indicators. Global Health Observatory. 2012-2014 -
http://www.who.int/gho

** Glossary
§   Indicates the percentage of participating Member States responding "Yes"
—   Don't know
N/A Not applicable
‡   Indicates question was unanswered
         Question not asked
Zero No funding

International level: Health entities in different geographic regions
Regional level: Health entities in countries in the same geographic region
National level: Referral hospitals, laboratories and health institutes (mainly public, but also private)
Intermediate level: District or provincial facilities: public and private hospitals and health centres
Local or peripheral level: Health posts, health centres providing basic level of care
Informal: Use of ICT for health purposes in the absence of formal processes and policies
Pilot: Testing and evaluating a programme
Established: An ongoing programme that has been conducted for a minimum of 2 years and is planned to continue