Technical Assistance Report

Project Number: 51105-001
Knowledge and Support Technical Assistance (KSTA)
December 2017

Mongolia: Improving the Screening Program for Viral Hepatitis

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Asian Development Bank

CURRENCY EQUIVALENTS
(as of 22 November 2017)

Currency unit	–	togrog (MNT)
MNT1.00	=	$0.00041
$1.00	=	MNT2,443.00

ABBREVIATIONS

ADB	–	Asian Development Bank
APF	–	advance payment facility
MOH	–	Ministry of Health
TA	–	technical assistance

NOTE

In this report, "$" refers to United States dollars.

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KNOWLEDGE AND SUPPORT TECHNICAL ASSISTANCE AT A GLANCE

1. Basic Data

Project Number: 51105-001

Project Name	Improving the Screening Program for Viral Hepatitis	**Department /Division**	EARD/EASS
Nature of Activity	Capacity Development	**Executing Agency**	Ministry of Health (formerly Ministry of Health and Sports)
Modality	Regular		
Country	Mongolia		

2. Sector

Sector	Subsector(s)	ADB Financing ($ million)
✓ Health	Disease control of communicable disease	0.80
	Total	**0.80**

3. Strategic Agenda

Strategic Agenda	Subcomponents
Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive

Climate Change Information

Climate Change impact on the Project	Low

4. Drivers of Change

Drivers of Change	Components
Governance and capacity development (GCD)	Institutional development
Knowledge solutions (KNS)	Application and use of new knowledge solutions in key operational areas

Gender Equity and Mainstreaming

Some gender elements (SGE)	✓

5. Poverty and SDG Targeting

Geographic Targeting	No
Household Targeting	No
SDG Targeting	Yes
SDG Goals	SDG3

Location Impact

Nation-wide	High

6. Risk Categorization

Low

7. Safeguard Categorization

Safeguard Policy Statement does not apply

8. Financing

Modality and Sources	Amount ($ million)
ADB	**0.80**
Knowledge and Support technical assistance: Technical Assistance Special Fund	0.80
Cofinancing	**0.00**
None	0.00
Counterpart	**0.06**
Government	0.06
Total	**0.86**

I. INTRODUCTION

1. The knowledge and support technical assistance (TA) will support the Government of Mongolia in improving prevention, screening, diagnosis, treatment, and control of viral hepatitis.

2. The TA is included in the Asian Development Bank (ADB) country operations business plan for Mongolia, 2017–2019 and is consistent with ADB's country partnership strategy for Mongolia, 2017–2020 which emphasizes social development through efficient delivery of health services under its health and social protection focus.[1]

II. ISSUES

3. Mongolia has one of the highest rates in the world for viral hepatitis incidence and prevalence. Viral hepatitis B and C have a high prevalence in the adult population of Mongolia because of weak infection prevention, screening, and control. Hepatitis B and C virus infections are closely associated with liver cancer and cirrhosis. Most cases of hepatitis B virus are transmitted from mother to child and acquired in early childhood, and it is likely that some chronic hepatitis B virus infections have resulted from transmission associated with health care. The major modality of hepatitis C virus transmission in Mongolia is through parenteral exposure within the formal and informal health sector. Hepatitis D virus infection is highly endemic among the population with chronic hepatitis B viral infection.[2] Hepatitis B vaccination is now available for children and vaccination coverage is high, however infection among adults still needs to be better controlled. Infection control in health care facilities is poor and hospital-acquired infections are thought to be underreported. The prevalence of hepatitis B and C among health workers is one of the highest in the world, and points to breaches in health safety protocol and control of infectious diseases.[3] Sterilization facilities and practices in hospitals are poor, and basic hygiene practices like hand washing are not always observed. The surveillance system currently implemented in hospitals consists of passive reporting of hospital-acquired infections. Lack of knowledge and awareness among health workers about infections, transmission, and cause of viral hepatitis exacerbates the situation. Insufficient state budget funding of infection control and prevention in the hospitals remains a challenge.

4. Measures to improve the viral hepatitis epidemiological status include improving infection prevention and control in hospitals, and ensuring blood products are safe and health workers are protected. To improve hepatitis control, a comprehensive active surveillance system needs to be established. This will require capacity development of staff based on establishing standard operating procedures, sentinel surveillance nodes, and a national viral hepatitis surveillance and information system. The comprehensive active surveillance system will help determine the actual burden of disease and identify effective measures for hepatitis prevention, control, and treatment. Policy dialogue to allocate sufficient state budget funding for hepatitis infection prevention and control in the health care facilities will be held.

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[1] The TA first appeared in the business opportunities section of ADB's website on 2 October 2017. ADB. 2017. *Country Partnership Strategy: Mongolia, 2017–2020*. Manila; ADB. 2017. *Country Operations Business Plan: Mongolia, 2017–2019*. Manila.

[2] World Health Organization. 2015. *Viral Hepatitis in Mongolia: Situation and Response*. Geneva.

[3] Various publications since 1998 report a wide range of the prevalence of hepatitis B and C carriers in various population groups in Mongolia (blood donors, health workers, general population, males, and outpatients). The reported proportions vary from 8% to 29% for hepatitis B and from 2% to 48% for hepatitis C carriers.

5. The government has developed and started implementing an action plan to improve the epidemiological status with respect to viral hepatitis. The government's Decree No. 112 of 12 April 2017 approved the Healthy Liver Program and set a range of steps to mobilize the required funds, human resources, and an action plan to improve the screening, diagnosis, and treatment of hepatitis C.[4] The government allocated MNT4.35 billion for screening and diagnosis, and another MNT23 billion for hepatitis C treatment from the 2017 state budget. The Ministry of Health (MOH) has established working groups to improve screening and diagnosis of viral hepatitis. To support this, the government needs additional funding to improve human resources capacity to implement regulatory measures, guidelines, and plans, and develop an active surveillance system. Several development partners are supporting the government to address these issues, but significant gaps exist in the areas of institutional and human resources capacity development, monitoring, and surveillance.

6. To implement the action plan, the government needs further help to (i) improve hospital hygiene and prevention systems, and standard operating procedures; (ii) implement screening and prevention of hospital-acquired viral hepatitis infection; (iii) undertake and make operational the sample screening of vaccinated newborns, adolescents, and adults to assess efficacy of vaccination; (iv) initiate and regularize the screening of health workers, especially those involved in the delivery of invasive procedures and operations; (v) provide training to specialists in *aimag* (province) and Ulaanbaatar city hospitals on hepatitis screening, diagnosis, treatment, and prophylaxis; and (vi) provide training of government agencies, including the MOH and the Government Agency for Specialized Inspection, to monitor hygiene and prevention in public and private health care facilities and other facilities administering invasive procedures such as tattoo salons and dental offices. The MOH requested ADB's assistance to undertake the above-mentioned activities aimed at improving the epidemiological status and to identify the infection vector in health care facilities.

7. ADB has been the largest external financier of the health sector in Mongolia and continues to play a key role in assisting the government in implementing health sector reforms which will improve health care system efficiency and accessibility of affordable health services. ADB has been assisting the government to (i) develop a primary health care and referral system and introduce public–private partnership in service delivery, (ii) rationalize hospital services and improve hospital management and governance, (iii) improve sector governance through introducing licensing and accreditation systems and using information and communication technology for health data collection and reporting, and (iv) reform health care financing by introducing new output-based payment methods and budgeting principles. Building on ADB's extensive experience, the government is requesting ADB support to improve the prevention and control of hepatitis. This requires a specific set of epidemiologic surveys, policy dialogue, capacity development, and other measures to ensure that all aspects of hepatitis prevention and control are addressed and implemented in a sustainable manner. The TA will support the government's efforts to strengthen the screening, diagnosis, and treatment of viral hepatitis. The TA activities will complement the blood safety and hospital hygiene improvement work under the ADB-funded Fifth Health Sector Development Project.[5]

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[4] Government of Mongolia. 2017. *Government of Mongolia Decree* No. 112. Ulaanbaatar.

[5] ADB. 2012. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to Mongolia for the Fifth Health Sector Development Project.* Manila.

III. THE TECHNICAL ASSISTANCE

A. Impact and Outcome

8. The TA is aligned with the following impact: health and quality of life of people of Mongolia improved (footnote 4). The TA will have the following outcome: viral hepatitis screening, diagnosis, and treatment improved.[6]

B. Outputs, Methods, and Activities

9. **Output 1: Capacity of health workers for delivering viral hepatitis screening, diagnosis, and treatment improved.** Output 1 will focus on capacity building of health workers for viral hepatitis screening, diagnosis, and treatment in health care facilities. The component will include the following: (i) update of clinical guidelines and standard operating procedures for screening, diagnosis, and treatment of viral hepatitis based on latest evidence and best international practices; (ii) development of training materials for screening, diagnosis, and treatment; and (iii) training of health managers and workers of *aimag* and Ulaanbaatar city hospitals on up-to-date protocols, methods, and technologies for screening, diagnosis, and treatment of viral hepatitis.

10. **Output 2: An active surveillance system for viral hepatitis screening, diagnosis, and monitoring developed.** Output 2 will (i) develop and operationalize active surveillance systems for hospital-acquired infections, including hepatitis; (ii) initiate and systematize the screening of health workers, especially those who perform invasive procedures and operations; (iii) undertake a sample screening to assess the efficacy of hepatitis vaccination and treatment; (iv) develop and operationalize measures, including vaccination of health workers, to prevent hospital-acquired viral hepatitis infection; (v) develop health information technology solutions, applications, and systems for managing national data on testing, care, and treatment outcomes of people living with viral hepatitis; and (vi) build the capacity of government health care agencies, including the MOH and the Government Agency for Specialized Inspection, to ensure compliance with hygiene standards and use of prophylactics in public and private health care facilities, and other facilities that administer invasive procedures.

11. The TA implementation will build on the following lessons from previous ADB-funded projects[7] in Mongolia's health sector: (i) strong project ownership by the government ensures successful project implementation and achievement of the project goals; (ii) active dialogue and collaboration of the project team with national and international project stakeholders is important; and (iii) involvement of technical experts from reputable international organizations, such as the World Health Organization, will add value to the project by applying the latest know-how in areas such as epidemiology, evidence-based medicine, hospital-acquired infections, and active infections surveillance.

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[6] The design and monitoring framework is in Appendix 1.

[7] ADB. 2007. *Report and Recommendation of the President to the Board of Directors: Proposed Grant to Mongolia for the Third Health Sector Development Project.* Manila; ADB. 2010. *Report and Recommendation of the President to the Board of Directors: Proposed Grant to Mongolia for the Fourth Health Sector Development Project.* Manila; ADB. 2012. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to Mongolia for Additional Financing of the Fourth Health Sector Development Project*. Manila; ADB. 2012. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to Mongolia for the Fifth Health Sector Development Project.* Manila.

C. Cost and Financing

12. The TA is estimated to cost $864,000, of which $800,000 will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF 6). The key expenditure items are listed in Appendix 2.

13. The government will provide counterpart support in the form of office accommodation for the project implementation unit and consultants, venue for meetings, access to data, and other in-kind contributions.

D. Implementation Arrangements

14. The TA will be implemented from January 2018 to December 2019. The executing agency will be the MOH. The implementing agency will be the Medical Services Department of the MOH. ADB will administer the TA through the project implementation unit that will be established in the MOH.

15. The proceeds of the TA will be disbursed in line with ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time). A financial management assessment of the executing agency was conducted and the executing agency has sufficient capacity and internal control to maintain the TA financial records. To facilitate implementation, ADB will establish an advance payment facility (APF) for the executing agency to support certain agreed cash expenditures to organize workshops and training sessions, and for project administration. The APF will be denominated in United States dollars, will have a ceiling of $50,000, and will be administered by the project implementation unit.[8] The project implementation unit will submit quarterly reports and substantiation for the APF funds. Details of the proposed activities and cost estimates will be submitted by the executing agency to ADB for prior approval. ADB will also make certain direct payments.

16. The (i) office equipment; (ii) measurement equipment; (iii) control, diagnostic, and rapid test kits for hepatitis surveillance and evaluation training; and (iv) goods for printing and publishing will be procured by the executing agency in accordance with ADB's Procurement Policy (2017, as amended from time to time) and the associated project administration instructions and technical assistance staff instructions. Equipment will be transferred to the executing agency upon completion of TA activities.

Implementation Arrangements

Aspects	Arrangements		
Indicative implementation period	January 2018–December 2019		
Executing agency	MOH		
Implementing agency	MOH (Medical Services Department)		
Consultants[a]	To be selected and engaged by ADB		
	Individual: individual selection	International (0.5 person-month)	$12,625
	Individual: individual selection	National (104.0 person-months)	$301,160
Procurement[b]	To be procured by the executing agency in accordance with ADB's Procurement Policy (2017, as amended from time to time) and the associated project administration instructions and technical assistance staff instructions.		

[8] The APF will not be subject to audit by the government.

Aspects	Arrangements		
	Shopping	Office equipment	$12,000
	Shopping	Measurement equipment	$88,700
	Shopping	Control, diagnostic, and rapid test kits for hepatitis surveillance and evaluation training	$61,300
Disbursement	The TA resources will be disbursed following ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time). ADB will establish the APF for the executing agency to support certain agreed cash expenditures to organize workshops and training sessions, and for project administration.		
Asset turnover or disposal arrangement upon TA completion	All the equipment will be transferred to the executing agency upon completion of TA activities.		

ADB = Asian Development Bank, APF = advance payment facility, IT = information technology, MOH = Ministry of Health, TA = technical assistance.
[a] The cost estimates for consultants only reflects remuneration and per diem.
[b] Procurement Plan (accessible from the list of linked documents in Appendix 3).
Source: Asian Development Bank.

17. **Consulting services.** In close consultation with the executing agency, individual consultants will be engaged by ADB in accordance with ADB's Procurement Policy (2017, as amended from time to time) and the associated project administration instructions and technical assistance staff instructions.[9] The consultants will provide specialized consulting services (60.5 person-months in total) in hepatology, hospital-acquired infection prevention and control, and health information technology. ADB will also engage a project coordinator (22 person-months) and an administrative and finance coordinator (22 person-months) who will be responsible for day-to-day activities of the TA. ADB will engage experts from the World Health Organization as resource persons for workshops, training sessions, and conferences organized under the TA.

18. TA progress will be evaluated during review missions based on the performance targets and indicators defined in the design and monitoring framework (footnote 6).

IV. THE PRESIDENT'S DECISION

19. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of $800,000 on a grant basis to the Government of Mongolia for Improving the Screening Program for Viral Hepatitis, and hereby reports this action to the Board.

[9] Terms of Reference for Consultants (accessible from the list of linked documents in Appendix 3).

DESIGN AND MONITORING FRAMEWORK

Impact the TA is Aligned with
Health and quality of life of people of Mongolia improved (the Government of Mongolia Decree No. 112)[a]

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome Viral hepatitis screening, diagnosis, and treatment improved	**By 2020** At least 20 health centers with viral hepatitis screening, diagnosis, and treatment in operation (2017 baseline: NA)	MOH, hospital, and ADB mission reports	Changing priorities of the government in the health sector because of fiscal constraints
Outputs 1. Capacity of health workers for delivering viral hepatitis screening, diagnosis, and treatment improved	**By 2019** 1a. Up-to-date methodologies, guidelines, protocols, and training materials for screening, diagnosis, treatment, and prevention of viral hepatitis in health care facilities developed (2017 baseline: NA) 1b. Up to 530 health workers in the *aimag* (province) and Ulaanbaatar city hospitals involved in intrahospital infection prevention report improved knowledge and skills on viral hepatitis prevention (2017 baseline: NA)	1a. ADB and PIU reports 1b. MOH and hospital reports	Insufficient commitment of MOH and health care provider management to implement new protocols and guidelines Insufficient worker commitment to attend the trainings because of busy work schedule and lack of incentives
2. An active surveillance system for viral hepatitis screening, diagnosis, and monitoring developed	2a. Hepatitis B immunization coverage in the cities and provinces with high incidence monitored (2017 baseline: NA) 2b. 50% of vaccinated individuals monitored to assess efficacy of hepatitis vaccination (2017 baseline: NA) 2c. Screening of health workers, especially those who perform invasive procedures and operations, are initiated and systematized (2017 baseline: NA)	2a–2c. MOH, PIU, and ADB mission reports; TA progress reports; GASI reports	Frequent turnover of MOH management and staff Lack of government funding to sustain the active surveillance system because of fiscal constraints Insufficient commitment of family group practitioners and other health workers to sustain regular and systematic assessment of the vaccination and treatment efficacy

Key Activities with Milestones

1. **Capacity of health workers for delivering viral hepatitis screening, diagnosis, and treatment improved**

1.1 Update clinical guidelines and standard operating procedures for screening, diagnosis, and treatment of viral hepatitis (Q1 2018–Q3 2018).
1.2 Develop training materials for screening, diagnosis, and treatment (Q1 2018–Q4 2018).
1.3 Train health managers and workers of *aimag* and Ulaanbaatar city hospitals on the up-to-date protocols, methods, and technologies for screening, diagnosis, and treatment of viral hepatitis (Q1 2019–Q4 2019).

2. **An active surveillance system for viral hepatitis screening, diagnosis, and monitoring developed**

2.1 Develop and operationalize active surveillance systems for hospital-acquired infections, including viral hepatitis (Q1 2018–Q3 2018).
2.2 Initiate and systematize screening of health workers, especially those who perform invasive procedures and operations (Q2 2018–Q4 2019).
2.3 Undertake sample screening to assess efficacy of hepatitis vaccination and treatment (Q3 2018–Q4 2019).
2.4 Develop and operationalize measures, including vaccination of health workers, to prevent hospital-acquired viral hepatitis infection (Q3 2018–Q4 2019).
2.5 Develop health information technology solutions, applications, and systems for managing national data on testing, care, and treatment outcomes of people living with viral hepatitis (Q2 2018–Q4 2019).
2.6 Train staff of health care agencies including MOH and GASI on surveillance system for viral hepatitis screening, diagnosis, and treatment (Q4 2018–Q4 2019).

Inputs

ADB: $800,000

Note: The government will provide counterpart support in the form of office accommodation for the project implementation unit and consultants, venue for meetings, access to data, and other in-kind contributions.

Assumptions for Partner Financing

NA

ADB = Asian Development Bank, GASI = Government Agency for Specialized Inspection, MOH = Ministry of Health, NA = not applicable, PIU = project implementation unit, TA = technical assistance.

[a] Government of Mongolia. 2017. *Government of Mongolia Decree* No. 112. Ulaanbaatar.

Source: Asian Development Bank.

COST ESTIMATES AND FINANCING PLAN
($'000)

Item	Amount
Asian Development Bank[a]	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	12.6
ii. National consultants	301.2
b. Out-of-pocket expenditures	
i. International and local travel	23.9
ii. Reports and communications	3.0
iii. Miscellaneous administration and support costs	13.0
2. Printed external publications[b]	22.2
3. Surveys	49.7
4. Equipment[c]	162.0
5. Training, seminars, and workshops[d]	
a. Seminars and workshops	60.0
b. Training	136.5
6. Contingencies	15.9
Total	**800.0**

Note: The technical assistance (TA) is estimated to cost $864,000, of which contributions from the Asian Development Bank are presented in the table above. The government will provide counterpart support in the form of office accommodation for the project implementation unit and consultants, venue for meetings, access to data, and other in-kind contributions. The value of government contribution is estimated to account for 7.4% of the total TA cost.

[a] Financed by the Asian Development Bank's Technical Assistance Special Fund (TASF 6).

[b] Includes translation, editing, and printing costs.

[c] Includes (i) measurement equipment; (ii) control, diagnostic, and rapid test kits for hepatitis surveillance and evaluation training; and (ii) computers with software, printers, photocopier, and other small office equipment to support TA administration. Equipment will be turned over to the executing agency upon completion of TA activities.

[d] Includes 2–3 days training sessions in six areas (about 530 participants), workshops and seminars in nine areas (370 participants), as well as translation and interpretation services costs.

Source: Asian Development Bank estimates.

LIST OF LINKED DOCUMENTS

http://www.adb.org/Documents/LinkedDocs/?id=51105-001-TAReport

1. Terms of Reference for Consultants
2. Procurement Plan