



# Report and Recommendation of the President to the Board of Directors

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Project Number: 50391-001  
September 2019

## Proposed Loan People's Republic of China: Demonstration of Guangxi Elderly Care and Health Care Integration and Public–Private Partnership Project

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Asian Development Bank

## **CURRENCY EQUIVALENTS**

(as of 2 September 2019)

Currency unit	–	yuan (CNY)
CNY1.00	=	\$0.1397
\$1.00	=	CNY7.1567

## **ABBREVIATIONS**

ADB	–	Asian Development Bank
EMP	–	environmental management plan
GGH	–	Guangxi Guidong Hospital
GGZAR	–	Government of Guangxi Zhuang Autonomous Region
GPMO	–	Guangxi project management office
GZAR	–	Guangxi Zhuang Autonomous Region
ha	–	hectare
HMG	–	Hezhou Municipal Government
IEE	–	initial environmental examination
NSWI	–	Nanning Social Welfare Institute
PAM	–	project administration manual
PIE	–	project implementing entity
PPP	–	public–private partnership
PRC	–	People’s Republic of China

## **NOTE**

In this report, “\$” refers to United States dollars.

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## PROJECT AT A GLANCE

<b>1. Basic Data</b>		<b>Project Number:</b> 50391-001	
<b>Project Name</b>	Demonstration of Guangxi Elderly Care and Health Care Integration and Public-Private Partnership Project	<b>Department /Division</b>	EARD/EASS
<b>Country Borrower</b>	China, People's Republic of PRC	<b>Executing Agency</b>	Government of Guangxi Zhuang Autonomous Region, through Guangxi Foreign Loans Project Management Office
<b>2. Sector</b>	<b>Subsector(s)</b>	<b>ADB Financing (\$ million)</b>	
✓ <b>Health</b>	Health sector development and reform		50.00
	Health system development		50.00
		<b>Total</b>	<b>100.00</b>
<b>3. Strategic Agenda</b>	<b>Subcomponents</b>	<b>Climate Change Information</b>	
Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive	CO <sub>2</sub> reduction (tons per annum)	721
Environmentally sustainable growth (ESG)	Global and regional transboundary environmental concerns	Climate Change impact on the Project	Medium
		<b>ADB Financing</b>	
		Adaptation (\$ million)	0.47
		Mitigation (\$ million)	3.24
<b>4. Drivers of Change</b>	<b>Components</b>	<b>Gender Equity and Mainstreaming</b>	
Governance and capacity development (GCD)	Institutional development	Effective gender mainstreaming (EGM)	✓
Knowledge solutions (KNS)	Pilot-testing innovation and learning		
Private sector development (PSD)	Promotion of private sector investment		
<b>5. Poverty and SDG Targeting</b>		<b>Location Impact</b>	
Geographic Targeting	No	Rural	Low
Household Targeting	No	Urban	High
General Intervention on Poverty	Yes		
SDG Targeting	Yes		
SDG Goals	SDG1, SDG3, SDG5, SDG10, SDG12, SDG13		
<b>6. Risk Categorization:</b>	Low		
<b>7. Safeguard Categorization</b>	<b>Environment: B Involuntary Resettlement: B Indigenous Peoples: C</b>		
<b>8. Financing</b>			
<b>Modality and Sources</b>		<b>Amount (\$ million)</b>	
<b>ADB</b>		<b>100.00</b>	
Sovereign Project (Regular Loan): Ordinary capital resources		100.00	
<b>Cofinancing</b>		<b>0.00</b>	
None		0.00	
<b>Counterpart</b>		<b>93.52</b>	
Government		93.52	
<b>Total</b>		<b>193.52</b>	
<b>Currency of ADB Financing:</b> USD			



## I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed loan to the People's Republic of China (PRC) for the Demonstration of Guangxi Elderly Care and Health Care Integration and Public–Private Partnership Project.

2. The proposed project aims to support Guangxi Zhuang Autonomous Region (GZAR) to promote, coordinate, and deliver integrated elderly care and health care services to provide continued care for those in need. It will serve as a demonstration for the PRC of an integrated elderly care and health care system and will be the first project in GZAR to introduce internationally accepted public-private partnership (PPP) principles and standards in the elderly care sector.

## II. THE PROJECT

### A. Rationale

3. The PRC is facing a serious change in its demographic structure. In 2017, 158 million people—11.4% of the population—were aged 65 years and above. The aging rate is expected to reach 14% in 2025 and 21% in 2035.<sup>1</sup> The aging population increases incidence of age-related diseases. Elderly people typically have chronic diseases and experience multiple morbidities. The primary cause of their care dependence is the loss of physical function resulting from chronic diseases and age-associated impairments.<sup>2</sup> Further, many elderly people have complex cases of multiple chronic diseases and physical and/or cognitive disabilities which require a continuity of services for both elderly care and health care. Coordination of care between health sector and elderly care sector is necessary to provide seamless care services for elderly people in need and to reduce avoidable hospitalization.

4. In an aging society, elderly people tend to be readmitted to hospital because of lack of appropriate elderly care institutions that allow them to transition back to their homes.<sup>3</sup> However, it would be difficult for families to provide adequate care for elderly people who are discharged from hospitals and still require medical and elderly care services. Inadequate care at home can cause further health problems, which may require readmission to hospital. Frequent transitions between hospitals and homes or long stays in hospitals further reduce the functional abilities of the elderly.

5. In the PRC, more than 100 million elderly people had at least one chronic disease in 2013 (footnote 2). The burden of chronic disease is expected to increase by 40% by 2030 from the status of 2013. The number of elderly people with multiple chronic conditions is also increasing significantly in the PRC. Those elderly people would require post-acute care and rehabilitation to restore or stabilize their functionality after discharge from hospital as well as elderly care (long-term care) to maintain their activities of daily living.<sup>4</sup> A coordination system, linking the acute phase care, post-acute phase care, rehabilitation, and elderly care in an effective and efficient way, is at

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<sup>1</sup> The aging rate is the ratio of population aged 65 years and above to the total population. United Nations Development Programme. 2016. [Asia–Pacific Human Development Report: Shaping the Future—How Changing Demographics Can Power Human Development](#). New York; and Government of Japan, Cabinet Office. 2017. *Kourei Syakai Hakusho (White Paper on Aging Society)*. Tokyo.

<sup>2</sup> World Health Organization. 2015. [China Country Assessment Report on Ageing and Health](#). Geneva.

<sup>3</sup> Such readmission of the elderly cost about \$10 billion in unnecessary medical expenditures in Japan in 2002. T. Hatano. 2004. Shakaiteki Nyuin no Ryoteki Haaku to Hiyo Keisan (Costs of Hospitalization for Non-Medical Reasons). *Iryo Keizai Kenkyu (Journal of Health Economics and Policy)*. Tokyo.

<sup>4</sup> Activities of daily living are defined as basic self-care tasks such as eating; toileting, or actions associated with personal hygiene; bathing; and transferring or the ability to sit, stand, and walk independently.

the core of integrated health and elderly care. Such a system needs to ensure smooth linkage of care services across the elderly care and health care sectors.

6. To create a coordination system, a functional hospital discharge management system needs to be established. The discharge management system will (i) clarify care needs after hospitalization, including needs for medical care, medication, rehabilitation, and elderly care; and (ii) identify where and how an elderly person can access his or her needed care. Such individualized care plans should be prepared based on discussions with the elderly people, their families, medical experts, therapists, social workers, and elderly care experts. Further, it is necessary to strengthen the elderly care service capacity to meet a range of care needs. The integration of health and elderly care will provide seamless care services across the two sectors based on needs, and avoid using medical resources for the elderly care service provision.<sup>5</sup>

7. Enhanced private sector involvement is vital to fill the gap in supplying coordinated elderly care and health care services. Quantity of private providers varies greatly across localities, and no scheme has been established to ensure their quality. Considering substantial increase in care needs due to rapid aging of the population, it would be unrealistic for the public sector to be the main provider of care services. Meanwhile, the public sector needs to take responsibility for establishing standardized care needs assessment and service quality monitoring systems. The private sector could bring its knowledge and experience to better design facilities, engage skilled staff, and provide efficient services under the guidelines and regulations set by the public sector. Such alignment of responsibilities is not yet clearly established in the PRC elderly care sector.

8. The Government of the PRC has recognized the importance of integrated elderly care and health care services to respond to its rapidly aging population, and issued a related policy in 2015.<sup>6</sup> In line with the central policy, the Government of GZAR (GGZAR) in 2016 issued policies on the implementation of elderly care and health care integration, and for enhancing the involvement of the private sector in care service provision for elderly people.<sup>7</sup> While the GGZAR issued those policies, it has limited experience and capacity in promoting the integration of elderly care and health care, and private sector involvement in the coordinated care service provision.

9. In order to build the institutional capacity and system, the municipalities of Nanning and Hezhou were selected as pilot cities for elderly care and health care integration in 2017.<sup>8</sup> In the same year, people aged 65 years and above were 0.8 million and 0.2 million in Nanning and Hezhou municipalities which account for 11.4% and 10.1 % of the population, respectively. More than 85% of those elderly people have at least one chronic disease and about 60% have multimorbidity. The integration of elderly care and health care is necessary to provide needed care services for those elderly people. However, most elderly patients directly return home after discharge from tertiary level hospitals. A functional coordination system is not established between hospitals and elderly care facilities in those municipalities. The inter-sectoral coordination among bureaus, such as the civil affairs bureaus and the health commission, needs to be established.

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<sup>5</sup> The PRC's social security system includes medical insurance, which helps finance medical care services. The PRC has not yet established a long-term care insurance system. Most local governments provide some capital and operational subsidies for elderly care institutions.

<sup>6</sup> Government of the PRC, State Council. 2015. *Notice [84] on the Integration of Elderly Care and Health Care*. Beijing.

<sup>7</sup> GGZAR. 2016. *Opinion [82] on Implementation of Elderly Care and Health Care Integration Promotion*. Nanning; and GGZAR, Department of Civil Affairs. 2016. *Promote Involvement of Private Sector in the Elderly Care Sector*. Nanning.

<sup>8</sup> Hezhou Municipal People's Government. 2017. *Notice [90] on Pilot of Promoting Elderly Care and Health Care in Hezhou City*. Hezhou; and People's Government of Nanning Municipality. 2017. *Notice [235] on Implementation of Elderly Care and Health Care Integration Promotion*. Nanning.

10. In 2014, the Asian Development Bank (ADB) began to support the PRC's local governments in promoting elderly care service development, including support to develop a PPP model in the elderly care sector. Lessons from those initial experiences suggested a strong need for strengthening the governments' knowledge and capacities in elderly care and PPP.<sup>9</sup> ADB has extended its support for the central government to establish an overall policy framework for the PRC's elderly care system.<sup>10</sup> Previous ADB interventions focused on the three-tiered elderly care system and indicated that coordination of health care and elderly care services is a challenge in the PRC, which requires urgent policy action. Building on ADB's experiences and knowledge in the elderly care sector, the project will further support GZAR to achieve its policy target of elderly care and health care integration to better adapt to the needs of its aging population (footnote 7).

11. The project also supports Healthy China 2030, highlighting the optimization of health services as a critical development challenge in the PRC.<sup>11</sup> It is in line with ADB's (i) country partnership strategy for the PRC, 2016–2020, focusing on inclusive growth; (ii) Operational Plan for Health, 2015–2020, which has elderly care as a focus area; and (iii) Strategy 2030, as it (a) demonstrates the “One ADB” approach with the Office of Public–Private Partnership's support for catalyzing investments through PPP and delivering integrated solutions, and (b) supports operational priorities 1 (addressing remaining poverty and reducing inequality) and 2 (accelerating progress in gender equality).<sup>12</sup> The project addresses issues of upper middle-income countries, as in ADB's Strategy 2030, through strengthening institutions, developing a demonstrative project, expanding PPPs, and responding to critical social issues, i.e., the aging population. The project's demonstrative and innovative experiences in the areas of elderly care and PPP will have an essential knowledge transfer impact not only on other provinces in the PRC but also on other developing member countries facing challenges regarding their aging populations.

## B. Impact and Outcome

12. The project is aligned with the following impact: integrated elderly care and health care services in GZAR established (footnote 7). The project will have the following outcome: utilization of coordinated health care and elderly care services in GZAR increased.<sup>13</sup>

## C. Outputs

13. **Output 1: Coordinated care services and facilities improved.** This output will include strengthening the coordination between elderly care and health care services provision by (i) improving the hospital discharge management systems in the target hospitals (project

<sup>9</sup> ADB. [People's Republic of China: Strategic Elderly Care Services Development in Yichang](#); ADB. [People's Republic of China: Development of Geriatric Nursing Policy Principles and Training Program in Liaoning Province](#); ADB. [People's Republic of China: Public–Private Partnerships Demonstration Program to Transform Delivery of Elderly Care Services in Yichang, Hubei](#); ADB. [People's Republic of China: Hebei Elderly Care Development Project](#); and ADB. [People's Republic of China: Hubei Yichang Comprehensive Elderly Care Demonstration Project](#).

<sup>10</sup> ADB. [People's Republic of China: Policy and Capacity Development for Elderly Care](#).

<sup>11</sup> Government of the PRC, State Council. 2016. *The Healthy China 2030*. Beijing.

<sup>12</sup> ADB. 2016. [Country Partnership Strategy: People's Republic of China, 2016–2020—Transforming Partnership: People's Republic of China and Asian Development Bank](#). Manila; ADB. 2015. [Health in Asia and the Pacific: Operational Plan for Health, 2015–2020](#). Manila; and ADB. 2018. [Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific](#). Manila.

<sup>13</sup> The design and monitoring framework is in Appendix 1.

implementing entities [PIEs]);<sup>14</sup> (ii) building four elderly care facilities in the municipalities of Hezhou and Nanning and a medical facility in Nanning, with age-friendly design and gender-sensitive facility use; (iii) establishing elderly care institutions to operate the elderly care facilities;<sup>15</sup> (iv) strengthening the capacity of PIEs to provide rehabilitation (physical and occupational therapy) appropriately; (v) strengthening the capacity of PIE-operated elderly care institutions to adequately provide care services, such as care for activities of daily living, dementia care, and terminal care; and (vi) developing a capacity-building plan for PIEs to strengthen their capacity to ensure proper and sustainable provision of care services.

**14. Output 2: Public–private partnership project for integrated elderly care and health care services provision developed.** The output will help build and operate an elderly care facility in Hezhou municipality under a PPP modality (the Hezhou PPP subproject). It will include: (i) an implementation arrangement for the construction, operation, and maintenance of an elderly care institution through a PPP model which will be set up; and (ii) an elderly care institution using a PPP model which will be created.<sup>16</sup> The PPP structure will define a risk allocation between the public and private sectors based on internationally accepted PPP norms and principles for bankability and sustainability in PPP implementation.<sup>17</sup> The elderly care facility operation will also be coordinated with the health care services provided by the PIE.

**15. Output 3: Management and policy development capacities in promoting integrated elderly care and health care services developed.** This will (i) support the executing agency, implementing agencies, and PIEs in implementing the project; and (ii) ensure that the elderly care-related functions, facilities, and services to be delivered under each elderly care institution is technically appropriate. It will support domestic and international study visits of local governments, including female officials and staff, to strengthen their knowledge on elderly care development, integrated elderly and health care, rehabilitation, and dementia care. Through its Office of Public–Private Partnership, ADB will assist the GGZAR in structuring the Hezhou PPP subproject; and implementing the development, financing, and tendering of the Hezhou PPP subproject.

#### D. Summary Cost Estimates and Financing Plan

16. The project is estimated to cost \$193.52 million (Table 1). Detailed cost estimates by expenditure category and by financier are included in the project administration manual (PAM).<sup>18</sup>

**Table 1: Summary Cost Estimates**  
(\$ million)

Item	Amount <sup>a</sup>
<b>A. Base Cost<sup>b</sup></b>	
1. Output 1: Coordinated care services and facilities improved	115.79
2. Output 2: Public–private partnership project for integrated elderly care and health care services provision developed <sup>c</sup>	37.85
3. Output 3: Management and policy development capacities in promoting integrated elderly care and health care services developed <sup>d</sup>	6.50
<b>Subtotal (A)</b>	<b>160.14</b>
<b>B. Contingencies<sup>e</sup></b>	<b>23.40</b>

<sup>14</sup> The PIEs are (i) Nanning Traditional Chinese Medicine Hospital, (ii) Hezhou People's Hospital, (iii) Guangxi Guidong Hospital (GGH), and (iv) Nanning Social Welfare Institute (NSWI). The first three PIEs are public hospitals while NSWI is a public entity, providing long-term care.

<sup>15</sup> NSWI will continue to operate its expanded facility.

<sup>16</sup> The operating period of the concession could be about 10–15 years. The PPP structure could also be design–build–finance–operate, depending on the private sector's appetite.

<sup>17</sup> The private sector includes nonprofit and for-profit organizations and enterprises.

<sup>18</sup> Project Administration Manual (accessible from the list of linked documents in Appendix 2).

Item	Amount <sup>a</sup>
<b>C. Financial Charges During Implementation<sup>f</sup></b>	<b>9.98</b>
<b>Total (A+B+C)</b>	<b>193.52</b>

<sup>a</sup> Includes taxes and duties of \$11.88 million. The Asian Development Bank (ADB) will finance taxes and duties of \$7.86 million on ADB-financed expenditures. Such amount does not represent an excessive share of the project cost. The government will finance taxes and duties of \$4.03 million as cash contribution.

<sup>b</sup> In mid-2019 prices as of April 2019.

<sup>c</sup> ADB and counterpart contribution may change depending on the potential investment made by the private sector.

<sup>d</sup> Includes reimbursement of ADB's cost for third-party consultancy services and other out-of-pocket reimbursable costs on a cost-recovery basis for the public-private partnership structuring to a maximum of \$1 million to be paid to ADB from the loan proceeds.

<sup>e</sup> Physical contingencies computed at 8% for civil works and all other costs. Price contingencies computed at average of 1.6% on foreign exchange costs, and 2.0% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

<sup>f</sup> Includes interest and commitment charges. Interest during construction for the ordinary capital resources loan has been computed at the 6-year United States dollar fixed swap rate plus an effective contractual spread of 0.5% and maturity premium of 0.1%. Commitment charges for the ordinary capital resources loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: Asian Development Bank estimates.

17. The government has requested a regular loan of \$100 million from ADB's ordinary capital resources to help finance the project. The loan will have a 25-year term, including a grace period of 6 years; an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; a commitment charge of 0.15% per year (the interest and other charges during construction will not to be capitalized in the loan); and such other terms and conditions set forth in the draft loan and project agreements. Based on the straight-line method, the average maturity is 15.75 years, and the maturity premium payable to ADB is 0.10% per year. The PRC is the borrower of the loan and will make the loan available to the GGZAR on the same terms and conditions as those of the ADB loan. The GGZAR will make the loan proceeds available, through the implementing agencies, to the PIEs.<sup>19</sup>

18. The summary financing plan is in Table 2. ADB will finance the expenditures in relation to works, equipment, services, and financing and structuring cost.

**Table 2: Summary Financing Plan**

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank		
Ordinary capital resources (regular loan)	100.00	51.67
Government	93.52	48.33
<b>Total</b>	<b>193.52</b>	<b>100.00</b>

Source: Asian Development Bank estimates.

19. Climate mitigation is estimated to cost \$6.47 million and climate adaptation is estimated to cost \$0.94 million. ADB will finance 50% (\$3.24 million) of mitigation costs and 50% (\$0.47 million) of adaptation costs. Details are in the PAM (footnote 18).

## E. Implementation Arrangements

20. The GGZAR, through Guangxi project management office (GPMO), is the executing agency responsible for coordinating with concerned bureaus and agencies. Nanning Municipal Government and Hezhou Municipal Government (HMG) are the implementing agencies for the

<sup>19</sup> For the Hezhou PPP subproject, loan proceeds for the construction of the facility would be expected to be applied to the costs of the facility by a company owned either solely by GGH or jointly by GGH and the PPP concessionaire.

subprojects in their municipalities and will oversee overall project implementation. Four PIEs under the implementing agencies are (i) Nanning Social Welfare Institute (NSWI), (ii) Nanning Traditional Chinese Medicine Hospital, (iii) Hezhou People’s Hospital, and (iv) Guangxi Guidong Hospital. The first three PIEs will be responsible for the day-to-day administration of the respective subprojects. Under the PPP concession agreement, Guangxi Guidong Hospital will monitor the PPP concessionaire’s administration and implementation of the Hezhou PPP subproject.

21. Goods, works, and consulting services procured under the ADB loan will follow the ADB Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time). The implementation arrangements are summarized in Table 3 and described in detail in the PAM (footnote 18).

**Table 3: Implementation Arrangements**

Aspects	Arrangements		
Implementation period	April 2020–April 2026		
Estimated completion date	31 October 2025		
Estimated loan closing date	30 April 2026		
Management			
(i) Oversight body	Project leading group, led by the vice governor of GGZAR		
(ii) Executing agency	GGZAR through GPMO		
(iii) Key implementing agencies	(a) Nanning Municipal Government (b) Hezhou Municipal Government		
(iv) Implementation units	(a) Nanning Social Welfare Institute (b) Nanning Traditional Chinese Medicine Hospital (c) Hezhou People’s Hospital (d) Guangxi Guidong Hospital		
Procurement	OCB with national advertisement	18 contracts	\$85.63 million
	OCB with international advertisement	1 contract	\$38.77 million
Consulting services	QCBS (implementation support)	142.5 person-months	\$1.22 million
	QCBS (construction supervision)	320.0 person-months	\$2.00 million
	CQS (external monitoring)	28.0 person-months	\$0.18 million
	CQS (technical capacity)	120.0 person-months	\$1.73 million
	ICS (technical capacity)	20.0 person-months	\$0.37 million
Retroactive financing and advance contracting	Advance contracting and retroactive financing will be undertaken for the procurement of goods, works, and consulting services. Retroactive financing will be allowed for eligible expenditures incurred up to 20% of the loan amount before loan effectiveness, but not earlier than 12 months before the date of loan agreement.		
Disbursement	The loan proceeds will be disbursed following ADB’s <i>Loan Disbursement Handbook</i> (2017, as amended from time to time) and detailed arrangements agreed between the government and ADB.		

ADB = Asian Development Bank, CQS = consultants’ qualifications selection, GGZAR = Government of Guangxi Zhuang Autonomous Region, GPMO = Guangxi project management office, ICS = individual consultant selection, OCB = open competitive bidding, QCBS = quality- and cost-based selection.

Source: Asian Development Bank.

### III. DUE DILIGENCE

#### A. Technical

22. The project was found to be technically feasible following careful examination of the project’s compatibility with local conditions and capacity for operation and maintenance. Design options in feasibility study reports were compared and least-cost alternatives were selected. The architectural design (layouts), following relevant PRC regulations, incorporated international and national standards as well as good practices, and follows age-friendly, elderly care-focused, efficient, and inclusive principles. Low-carbon, seismic structure, and resource-efficient measures (including solar hot water systems, intelligent lighting control, and passive energy-saving designs)

will be adopted. The facility design should meet respective functionalities and suitable operation of elderly care facilities. To ensure proper facility design, preliminary and detailed designs will be reviewed by an elderly care architect and cleared by ADB.

## B. Economic and Financial

23. **Economic.** The project foresees the provision of coordinated elderly care and health care services to the rapidly aging populations in Nanning and Hezhou municipalities. The cost-effectiveness approach was used for economic analysis, in accordance with ADB guidelines.<sup>20</sup> The approach required that the elderly care facilities and a medical facility be compared with alternative designs, which aim to achieve the same number of elderly people served during the same time frame as the project design. The results of the cost-effectiveness analysis showed that the net present value of the alternative designs would cost \$3.64 million more than the project scenario over the 20-year operation period, making the project the more cost-effective option.

24. **Financial.** The financial analysis was conducted to determine the viability and sustainability of the proposed subprojects. It examined the possible revenues to be generated by subprojects and assessed their projected incremental financials over a life cycle period in real terms. The financial internal rate of return of 10.82% for a subproject (medical facility), which is higher than the weighted average cost of capital of 2.27%, shows its financial viability. A fiscal sustainability analysis conducted for the elderly care facility subprojects showed that the total project incremental costs will have a negligible impact on the budgets of those municipalities, thus confirming their project sustainability. The maximum impact of the incremental costs will be less than 0.8% of the annual fiscal revenues of the municipalities.

## C. Governance

25. **Financial management assessment.** The financial management assessment was conducted in accordance with ADB guidelines.<sup>21</sup> It considered the financial management capacity of Nanning Municipal Government, HMG, and PIEs. The assessment covered fund flow arrangements, staffing, accounting and financial reporting systems, internal and external auditing arrangements, and financial information systems. The GPMO has experience in implementing ADB-financed projects and has a proven record in project financial management. The financial management risk is *moderate* mainly because the PIEs have no experience in implementing ADB projects, and their staff will need to be familiarized with ADB policies and procedures. Mitigation measures to address identified deficiencies were agreed with the executing and implementing agencies, and PIEs. The financial management actions are included in the PAM (footnote 18).

26. **Procurement risk assessment.** The procurement risk assessment was conducted in accordance with ADB guidelines.<sup>22</sup> It confirmed that the GPMO, implementing agencies, and PIEs, acting through a procurement agency and with the assistance of ADB and project implementation support consultants, will have adequate capacity to facilitate compliance with the ADB Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time). The project procurement risk was rated *medium*. The GPMO has experience in implementing ADB-financed projects and is familiar with ADB procurement procedures. However, the PIEs lack ADB project experience, and their staff

<sup>20</sup> ADB. 2017. [Guidelines for the Economic Analysis of Projects](#). Manila.

<sup>21</sup> ADB. 2005. [Financial Management and Analysis of Projects](#). Manila; and ADB. 2009. [Financial Due Diligence: A Methodology Note](#). Manila.

<sup>22</sup> ADB. 2015. [Guide on Assessing Procurement Risks and Determining Project Procurement Classification](#). Manila.

will need to be familiarized with ADB policies and procedures. Mitigation measures to address identified deficiencies have been agreed with the GPMO, implementing agencies, and PIEs.

27. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and the GGZAR. The specific policy requirements and supplementary measures are described in the PAM (footnote 18).

#### **D. Poverty, Social, and Gender**

28. A poverty and social analysis was conducted in Nanning and Hezhou municipalities by focusing on care needs of elderly people and the availability of care services. The household survey presented that about 20% of elderly people reported their self-rated health status as poor. Further, about 15% of respondents showed physical and/or cognitive impairments at moderate to severe levels.<sup>23</sup> Meanwhile, the systematic coordination between medical and elderly care institutions has not yet been established. The capacity of needed care, such as rehabilitation, is also significantly limited.<sup>24</sup> The elderly people in need are not able to receive adequate care services. The project will improve the provision of coordinated care services, thereby providing elderly people with better access to urgently needed care services.<sup>25</sup>

29. The project is categorized *effective gender mainstreaming*. Better coordinated elderly care and health care services will alleviate the burden of the young, especially young women, from informal family care responsibilities, and enable them to concentrate on improving their professional skills and finding jobs. The project will support the gender-sensitive facility use, enhance job opportunities for women during the construction and operation phases, and provide training opportunities for women to strengthen their skills and capacity.

#### **E. Safeguards**

30. In compliance with ADB's Safeguard Policy Statement (2009), the project's safeguard categories are as follows.<sup>26</sup>

31. **Environment (category B).** An initial environmental examination (IEE), including an environmental management plan (EMP), was prepared for five elderly care facilities<sup>27</sup> and a medical facility, and was disclosed on the ADB website in June 2019.<sup>28</sup> The IEE concluded that the anticipated environmental impacts can be mitigated through effective EMP implementation. During construction, impacts anticipated—including noise, air pollutants, demolition waste, and risk to community and occupational health and safety—are localized and short-term and can be effectively mitigated by implementing good construction practices.<sup>29</sup> Contractors will address management of wastewater and drainage, medical waste, and their linkage with associated facilities, as required in the IEE and EMP. The EMP lists mitigation procedures that must be strictly

<sup>23</sup> The data were collected from the household survey conducted in Nanning and Hezhou municipalities. ADB. 2019. *Poverty and Social Analysis Report for the Demonstration of Guangxi Elderly Care and Health Care Integration and Public-Private Partnership Project*. Manila (TA 9437-PRC).

<sup>24</sup> The ratio of physical therapists to beds is very low, i.e., 0.005–0.01, even in hospitals.

<sup>25</sup> The project will provide direct, cumulative benefits to an estimated 2,000 elderly people.

<sup>26</sup> ADB. [Safeguard Categories](#).

<sup>27</sup> Includes four elderly care facilities under output 1 and one facility under output 2.

<sup>28</sup> The IEE was prepared based on a domestic environmental impact assessment in Chinese language and will be approved by the Nanning or Hezhou Municipal Environmental Protection Bureau.

<sup>29</sup> If any asbestos-containing materials are found during the demolition of old facilities, the executing agency will engage the services of a certified agency capable of handling and disposing of the asbestos-containing materials in accordance with international best practices.

followed in compliance with PRC regulations and ADB guidelines. The executing agency has confirmed its commitment and capacity to implement the EMP. Further capacity building is proposed in the EMP. It will assign a safeguards officer within the GPMO to supervise effective implementation of the EMP. The procedures, reporting timelines, and roles and responsibilities of relevant agencies are described in the EMP. Environmental complaints will be handled in accordance with the grievance redress mechanism established for the project by the GPMO.

32. **Climate change.** A climate risk and vulnerability assessment found that all project sites would have a *medium* risk to climate change impact. Flood resilient designs and evacuation devices are the principal measures to mitigate the anticipated impact. Electrical and other water-sensitive facilities will not be installed in the basement and lower floors to avoid incidents related to flooding. Air drying, heating, and cooling systems will be installed to help disadvantaged citizens adapt to extreme climate conditions. All buildings will achieve energy efficiency standards, as required by official regulations. Preserving existing buildings, using renewable energy such as solar heaters, and resource saving such as minimizing the use of cement are main methods to mitigate greenhouse gas emissions. The implementing agencies and PIEs will ensure these measures are incorporated in the detailed designs as proactive adaptation measures.

33. **Involuntary resettlement (category B).** The project requires 11.38 hectares (ha) of land, comprising 4.94 ha of rural collective lands and 6.44 ha of state-owned lands. Rural collective lands will be acquired for the second elderly care facility under the Hezhou People's Hospital subproject and will affect 56 households with 296 persons in Xiadao village, of which 26 households with 152 persons will be significantly impacted because of house demolition.<sup>30</sup> The income losses for households with land impacts has been assessed to be insignificant, with less than 1% of their household incomes affected. A draft resettlement plan was prepared following the laws and regulations of the PRC, GZAR, and Hezhou Municipality; and ADB's Safeguard Policy Statement (2009). HMG will be responsible for paying compensation and assisting affected persons before land acquisition and relocation. The other five facilities will be located on state-owned lands, and the resettlement due diligence confirmed that there is no past nor present concerns related to involuntary resettlement. During project implementation, the GPMO and resettlement management staff of implementing agencies and PIEs will be trained in involuntary resettlement procedures. A grievance redress mechanism has been established, and an external agency will be engaged for semiannual resettlement monitoring and evaluation.

34. **Indigenous peoples (category C).** In subproject areas of Nanning Municipality, ethnic minorities account for 50% of the total population. In the subproject area in Pinggui District, Hezhou Municipality, they account for 2% of the total population. The Zhuang is the dominant ethnic minority in Nanning while the Yao is the dominant ethnic minority in Hezhou. Ethnic minorities live in harmony with others and anticipate no obstruction or discrimination in accessing improved elderly care and health care services under the project. The subprojects will not adversely affect their community identities, beliefs, religions, or customs. Therefore, an ethnic minority development plan to ensure that they receive improved elderly care services and health services is not required.

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<sup>30</sup> Among the 56 households, land acquisition will affect 30 households with 144 persons, house demolition will impact 11 households with 88 persons, and both land acquisition and house demolition will affect 15 households with 64 persons.

## F. Summary of Risk Assessment and Risk Management Plan

35. The overall benefits and impacts are expected to outweigh the costs and risks involved. The overall risk is rated *moderate*. Significant risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan.<sup>31</sup>

**Table 4: Summary of Risks and Mitigating Measures**

<b>Risks</b>	<b>Mitigating Measures</b>
PIEs are unfamiliar with ADB's financial management guidelines and procedures	Training on ADB financial management requirements will be undertaken under the project implementation support. Financial management consultants will support PIEs and implementing agencies in the financial management.
PIEs are unfamiliar with ADB's procurement guidelines and procedures	Procurement consultants will support PIEs to carry out the project procurement management and provide training for PIEs. A procurement agency, engaged by the GPMO, will support overall project procurement.
Inadequate functionality and facility design of elderly care institutions	Technical consultants will support PIEs to ensure adequate functionality of elderly care institutions and facility designs to meet the elderly care functions.
PIEs' limited capacity in adequate coordination between hospitals and elderly care institutions	Technical consultants will support each PIE to review its current hospital discharge management system, prepare respective PIEs' reform plans, and help implement the reformed discharge management system.
Limited experience of GPMO, HMG, and PIE in structuring the PPP subproject	ADB's OPPP will assist in developing a financeable transaction structure to ensure bankability to secure a successful PPP subproject.

ADB = Asian Development Bank, GPMO = Guangxi project management office, HMG = Hezhou Municipal Government, OPPP = Office of Public–Private Partnership, PIE = project implementing entity, PPP = public–private partnership.  
Source: Asian Development Bank.

## IV. ASSURANCES AND CONDITIONS

36. The government and GGZAR have assured ADB that implementation of the project shall conform to all applicable ADB policies, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the PAM and loan documents.

37. The government and GGZAR have agreed with ADB on certain covenants for the project, which are set forth in the draft loan agreement and project agreement.

## V. RECOMMENDATION

38. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the loan of \$100,000,000 to the People's Republic of China for the Demonstration of Guangxi Elderly Care and Health Care Integration and Public–Private Partnership Project, from ADB's ordinary capital resources, in regular terms, with interest to be determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; for a term of 25 years, including a grace period of 6 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan and project agreements presented to the Board.

Takehiko Nakao  
President

2 September 2019

<sup>31</sup> Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

## DESIGN AND MONITORING FRAMEWORK

<b>Impact the Project is Aligned with</b> Integrated elderly care and health care services in Guangxi Zhuang Autonomous Region established (Opinion 82 on Implementation of Elderly Care and Health Care Integration Promotion) <sup>a</sup>			
<b>Results Chain</b>	<b>Performance Indicators with Targets and Baselines</b>	<b>Data Sources and Reporting Mechanisms</b>	<b>Risks</b>
<p><b>Outcome</b> Utilization of coordinated health care and elderly care services in Guangxi Zhuang Autonomous Region increased</p>	<p><b>By 2027</b></p> <p>a. 30% of the elderly people who need coordinated care<sup>b</sup> received services provided by the elderly care institutions created under the project; disaggregated by sex (2019 baseline: 0)</p> <p>b. 30% of the elderly patients, hospitalized in PIEs, supported by the improved discharge management system<sup>c</sup> (2019 baseline: 0)</p>	<p>a–b. Project monitoring reports of GPMO and/or annual report of civil affairs bureaus of Nanning and Hezhou</p>	<p>Shifting priorities of Government of Guangxi Zhuang Autonomous Region on health care and elderly care service coordination</p>
<p><b>Outputs</b> 1. Coordinated care services and facilities improved</p>	<p>1a. By 2026, reform plans for discharge management systems implemented (2019 baseline: 0)</p> <p>1b. By 2026, four elderly care facilities and a medical facility, with age-friendly design and gender-sensitive facility use constructed<sup>d</sup> (2019 baseline: 0)</p> <p>1c. By 2026, at least 300 therapists and other related staff of PIEs and elderly care institutions (of which 60% are women) who were trained in occupational and physical therapy report improved skills (2019 baseline: 0)</p> <p>1d. By 2026, at least 250 elderly care-related staff trained<sup>e</sup> (of which 60% are women) report</p>	<p>1a–e. Semiannual project monitoring reports of GPMO</p>	<p>Staff turnover of trained employees in the identified elderly care institutions</p>

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
	<p>improved skills in elderly care (2019 baseline: 0)</p> <p>1e. By 2026, recommendations for a capacity-building plan for identified care provision prepared<sup>f</sup> (2019 baseline: not applicable)</p>		
<p>2. Public–private partnership project for integrated elderly care and health care services provision developed</p>	<p>2a. By 2025, one elderly care institution for the coordinated care services commences operation under a PPP model (2019 baseline: 0)</p>	<p>2a. Semiannual project monitoring reports of GPMO</p>	<p>The private sector has insufficient interest in the elderly care and health care market.</p> <p>The viability support from the public sector is inadequate to catalyze private sector participation in the elderly care and health care market.</p>
<p>3. Management and policy development capacities in promoting integrated elderly care and health care services developed</p>	<p>3a. By 2021, Hezhou PPP subproject awarded (2019 baseline: not applicable)</p> <p>3b. By 2023, recommendations for elderly care facility designs to meet functionalities of the elderly care institutions<sup>9</sup> incorporated in preliminary and detailed design (2019 baseline: not applicable)</p> <p>3c. By 2026, at least 80% of domestic and international training participants reported enhanced knowledge of elderly care and health care integration, of which 50% of participants are women (2019 baseline: not applicable)</p>	<p>3a–b. Semiannual project monitoring reports of GPMO</p> <p>3c. Training questionnaires</p>	

<p><b>Key Activities with Milestones</b></p> <p><b>1. Coordinated care services and facilities improved</b></p> <p>1.1 Complete detailed design by Q2 2021.</p> <p>1.2 Organize and complete bidding process by Q4 2021.</p> <p>1.3 Complete building works and outfitting by Q4 2025.</p> <p>1.4 Implement reformed discharge management systems by each PIE except Nanning Social Welfare Institute by Q4 2025.</p> <p>1.5 Prepare and submit recommendations of capacity building plan by Q4 2022.</p> <p>1.6 Complete training on occupational and physical therapy by Q4 2025.</p> <p>1.7 Complete training of elderly care-related staff by Q4 2025.</p> <p><b>2. Public–private partnership project for integrated elderly care and health care services provision developed</b></p> <p>2.1 Launch tender by Q4 2020.</p> <p>2.2 Complete construction by Q2 2024.</p> <p>2.3 Commence operation of an elderly care facility under PPP by Q2 2025.</p> <p><b>3. Management and policy development capacities in promoting integrated elderly care and health care services developed</b></p> <p>3.1 Incorporate and finalize designs for elderly care facilities by Q4 2020.</p> <p>3.2 Prepare and implement PPP model for Hezhou subproject by Q4 2025.</p> <p>3.2.1 Identify a feasible PPP modality for integrated elderly care and health care services provision by Q2 2020.</p> <p>3.2.2 Finance and structure a PPP model for Hezhou PPP subproject by Q4 2021.</p> <p>3.2.3 Support PPP implementation by Q4 2025.</p> <p>3.3 Strengthen capacity of policy development and elderly care service provision by Q4 2025.</p> <p>3.3.1 Provide training on elderly care services support by Q4 2025.</p> <p>3.3.2 Provide training on care and rehabilitation by Q3 2025.</p> <p>3.3.3 Provide training on discharge management by Q3 2025.</p> <p>3.3.4 Prepare and conduct domestic and international training by Q2 2025.</p> <p>3.3.5 Disseminate experience and knowledge on elderly care and health care integration by Q4 2025.<sup>h</sup></p> <p><b>Program Management Activities</b></p> <p>Complete selection of project implementation support consultants by Q3 2020.</p> <p>Engage construction supervision by Q1 2021.</p> <p>Prepare and manage implementation and procurement plans (Q4 2020–Q4 2025).</p> <p>Monitor project performance and ensure timely delivery of outputs (Q4 2020–Q2 2026).</p> <p><b>Inputs</b></p> <p>Asian Development Bank: \$100.00 million (loan)</p> <p>Government: \$93.52 million</p> <p><b>Assumptions for Partner Financing</b></p> <p>Not applicable</p>
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GPMO = Guangxi project management office, PIE = project implementing entity, PPP = public–private partnership, Q = quarter.

<sup>a</sup> Government of Guangxi Zhuang Autonomous Region. 2016. *Opinion [82] on Implementation of Elderly Care and Health Care Integration Promotion*. Nanning; and Government of Guangxi Zhuang Autonomous Region, Department of Civil Affairs. 2016. *Promote Involvement of Private Sector in the Elderly Care Sector*. Nanning.

<sup>b</sup> Elderly people who need coordinated care will be identified by the discharge management system of each PIE that will be strengthened by the project.

<sup>c</sup> Discharge management systems will be strengthened in PIEs (except for Nanning Social Welfare Institute, which is not a hospital) under the project to support proper transfer of elderly patients after hospitalization to elderly care institutions and homes, etc., based on needed care and their family conditions.

<sup>d</sup> Gender-sensitive facility use provides separate rooms per gender.

<sup>e</sup> Elderly-care related staff will include caregivers, care managers, nurses, and social workers.

<sup>f</sup> The plan includes gender- and age-sensitive training.

<sup>g</sup> The target functionalities of the elderly care institutions are summarized in Table 2 of the Project Administration Manual (accessible from the list of linked documents in Appendix 2).

<sup>h</sup> The knowledge dissemination activity could be organized by collaborating with other elderly care related technical assistance activities.

Source: Asian Development Bank.

### **LIST OF LINKED DOCUMENTS**

<http://www.adb.org/Documents/RRPs/?id=50391-001-3>

1. Loan Agreement
2. Project Agreement
3. Sector Assessment (Summary): Health
4. Project Administration Manual
5. Contribution to the ADB Results Framework
6. Development Coordination
7. Financial Analysis
8. Economic Analysis
9. Country Economic Indicators
10. Summary Poverty Reduction and Social Strategy
11. Risk Assessment and Risk Management Plan
12. Climate Change Assessment
13. Social Development and Gender Action Plan
14. Initial Environmental Examination
15. Resettlement Plan: Hezhou No. 2 Nursing Home for Disabled Elderly
16. Resettlement Due Diligence Report: (i) Promotion and Reconstruction Engineering (First Phase) of Nanning Social Welfare Institute, (ii) Elderly Rehabilitation Comprehensive Nursing Home of Nanning Traditional Chinese Medicine Hospital (Nanning First Nursing Home), and (iii) Hezhou No. 1 Nursing Home Construction Pilot Project
17. Resettlement Due Diligence Report: Hezhou Huanan Traditional Medical Care Nursing Home