



Completion Report

Project Number: 49313-001
Technical Assistance Number: 9188
December 2020

People's Republic of China: Development of Geriatric Nursing Policy Principles and Training Program in Liaoning Province

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TECHNICAL ASSISTANCE COMPLETION REPORT

TA Number, Country, and Name: TA 9188-PRC: Development of Geriatric Nursing Policy Principles and Training Program in Liaoning Province		Amount Approved: \$400,000.00	
		Revised Amount: Not applicable	
Executing Agency: First Affiliated Hospital of China Medical University	Source of Funding: Technical Assistance Special Fund–Other Sources	Amount Undisbursed: \$667.69	Amount Used: \$399,332.31
TA Approval Date: 29 September 2016	TA Signing Date: 24 October 2016	TA Completion Date	
		Original Date: 30 September 2019	Latest Revised Date: 31 December 2019
		Financial Closing Date: 29 June 2020	Number of Extension: 1
TA Type: Policy and advisory TA			

Description

The People's Republic of China (PRC) has one of the world's largest elderly populations. It was considered an aging society in 2000 when people aged over 65 exceeded 7.0% of its population.¹ The proportion of PRC's elderly population above 60 is projected to surge to 34.6% (480 million) by 2050.² Liaoning Province was one of the first to become an aging society.³ According to the Liaoning Provincial Aging Office, the total population of the province comprised 22.6% senior citizens in 2018. About 56.9% of the elderly suffer from chronic diseases and about 13.4% of them are disabled. The PRC Government recognizes the need for a sustainable geriatric care system to address the growing long-term care requirements of its elderly population. The Twelfth Five-Year Plan, 2011–2015 for the development of aged care services outlines the creation of three-tiered old age care system—home-based, community-based, and institutional-based care. The Thirteenth Five-Year Plan, 2016–2020 and the 2013 Law on the Protection of the Rights and Interests of the Elderly further strengthened the agenda of the elderly care sector. As with most provinces in the PRC, Liaoning Province needs to improve social and medical services for the elderly including geriatric nursing services. A study of the Liaoning Medical University Nursing College in 2012 showed only 6.9% of nurses in the province have certified geriatric nursing qualifications compared with the national average of 10.0%. Elderly care is complex, with the need to focus on maintaining quality of life and function while addressing health issues of the elderly population. This complexity is compounded by the shortage of qualified elderly care providers, specifically of those who specialize or have the appropriate training for geriatric care services. Geriatric education, the lack of evidence-based practice, and updated textbooks are important issues in elderly care. A key strategy is to increase the elderly care workforce and improve the quality of care. The policy and advisory technical assistance (TA) was envisaged to (i) develop geriatric nursing training policy recommendations and a strategy, implementation framework, standards, curriculum, and modules for geriatric nursing training; and (ii) train nursing teachers and nurses in Liaoning Province.

Expected Impact, Outcome, and Outputs

The TA's intended impact was improved access to geriatric nursing services, and the expected outcome was improved quality of geriatric nursing services. Four outputs were to be delivered: (i) preparation of policy recommendations, principles, and strategy for geriatric nursing training; (ii) development of guidelines, standards, and implementation framework for geriatric nursing training program; (iii) design of curriculum and training modules and materials for geriatric nursing training program; and (iv) increase in the capacity of trainers and nurses in geriatric care delivery.

Implementation Arrangements

The First Affiliated Hospital of China Medical University (FAH-CMU) was the executing agency, and the Nursing Department of FAH-CMU was the implementing agency. FAH-CMU appointed a permanent project director to oversee the TA implementation. It also organized a technical working group which comprised representatives from the provincial departments of finance, education, health, family planning, and civil affairs bureau to provide policy guidance and

¹ China Global Television Network. 2019. [Challenges and Opportunities of China's Aging Population](#). Beijing.

² Z. Zhenwu. 2015. [Ageing in China: Trend, Process and Character](#). Beijing: School of Sociology and Population Studies, Renmin University of China.

³ Z. Wenqing, M. Danmeng, and R. Qiuyu. 2019. [Ageing Liaoning Province Weighs New Measures to Boost Birthrate](#). *Caixin Global*. Beijing.

overall direction to TA implementation. An international individual consultant—senior geriatric nursing specialist—was engaged using single-source selection, with a lumpsum-based contract, from March 2017 to November 2019. The consultant worked closely with a team of CMU professors with specialization in geriatrics, neurology, oncology, rehabilitation, psychiatry, critical medicine care, epidemiology, respiratory, endocrine, orthopedics, neurosurgery, urology, nursing management, and nursing education; and together they were tasked to create policy recommendations on elderly care education and training, develop curricula and training materials, and train the next generation of elderly care teachers. Office equipment and geriatric simulation suits were procured and were turned over to the executing agency upon completion of TA activities.

Conduct of Activities

The TA was carried out from October 2016 to December 2019, including extension of TA completion date by 3 months. Although all key activities were completed within the planned implementation period, the government requested (i) further review and observation of successful elderly care service system in order to strengthen recommendations for competency standards and safe quality care, and (ii) launch the new textbook on geriatric training. These necessitated a 3-month extension of the TA completion date.

Through the TA, FAH-CMU was able to establish international cooperation and exchange of experiences on elderly care programs with key institutions in Japan and Germany. International study visits were organized to learn standards and best practices on elderly care including on effective training of elderly care providers. A study visit to Chiba, Japan in March 2017, which included Chiba University and other benchmark elderly care institutions, led to lessons learned on (i) holistic approaches that address social as well as psychological needs of elderly populations; and (ii) effective training development techniques using participatory and qualitative research to better focus on actual needs, assessment tools for determining ability of self-care, and indicators for the development of end-of-life care. A study visit to Berlin, Germany in October 2019, which included Alloheim Senior Nursing Home and Queen Elizabeth Hospital, generated lessons on the importance of combining rehabilitation with recreational activities. Domestic study visits to First Affiliated Hospital of Chongqing Medical University, Qinggang Elderly Care Center, and geriatric ward of Anhui Provincial Hospital to better understand national best practices were conducted in March 2017.

A study *The Present Situation, Needs and Development of Elderly Care in Liaoning Province* was conducted to provide evidence-based policy recommendations and strategies for elderly care services and training of care providers. A *One in Four Whole Procedure Health Management System* was developed as a model to provide guidance for implementation of an integrated system for improving the quality of life of the elderly through the prevention of diseases, treatment in hospital, post-rehabilitation supervision, and hospice care. This was implemented in FAH-CMU and promoted for use in other health facilities in Liaoning Province. A three-tiered training system was developed which begins with training the elderly care training experts (Level 3) and then incorporate training methods and content into the curriculum system for elderly care teachers (Level 2). Training for Level 2 consisted of 120 hours of theoretical training and 40 hours of practice. Training sessions for the elderly caregivers (Level 1) consisted of similar theoretical and practical learning. A series of training was organized for trainers and nurses in the six cities of Liaoning province: Anshan, Benxi, Dalian, Dandong, Jinzhou, and Shenyang from June 2017 to October 2018. The TA initially targeted five cities, but training was extended to include Dandong city. The training further expanded to Tieling and Chaoyang cities from May–August 2019. A total of 400 trainees—100 geriatric nursing teachers, 100 geriatric nursing staff, and 200 elderly care givers, have completed elderly care training by 2019. Those who completed training underwent stringent assessments before being awarded with a qualification certificate from the National Nursing Training Center of CMU.

Through the compilation of the lessons learned and under the guidance of experts from Chiba University, the textbook *Geriatric Nursing Training Course* was developed which was eventually published by the People's Medical Publishing House, the PRC's largest medical textbook publisher, in July 2019. The textbook provides (i) a comprehensive description of geriatric nursing training program in the context of the PRC; and (ii) teaching curricula and methods, and evaluation plans for nursing and elderly care providers. This was presented at the national conference of the PRC Nursing Association with 200 representatives from all provinces and this was duly adopted by the Nursing Association and by the National Health Commission as a standard national geriatric nursing training textbook. The textbook was distributed to elderly care institutions nationwide and will be used for national nursing and health care worker training in the CMU system. The TA has also invigorated scientific research and CMU initiated studies on a range of issues including trends in the nursing industry and long-term care needs of elderly population in Liaoning province.

Standardized training modules and other training materials developed were provided to various training centers and social welfare institutions. TA achievements and lessons were promoted in various national events such as the National Academic Exchange Conference on Aged Nursing (August 2018), the National Elderly Care Academic Exchange Conference of the Chinese Nursing Association (June 2019), and the Senior Care Academic Conference (August 2019). Overall, 200 nurses as well as health workers, FAH-CMU faculty members, and provincial officials including representatives from the Provincial Health Committee and Provincial Civil Affairs Department participated in the TA

final workshop in November 2019. An Asian Development Bank (ADB) Brief⁴ was published to share the TA achievements and training methodology developed.

Technical Assistance Assessment Ratings

Criterion	Assessment	Rating
Relevance (weight 0.35)	Long-term care for the elderly population is an urgent issue in the PRC and is fully recognized in the comprehensive development agenda of the government for inclusive and sustainable growth. The TA is aligned with PRC's Thirteenth Five-Year Plan, 2016–2020 which state the need to develop elderly care services. It is also consistent with ADB's country partnership strategy for the PRC, 2016–2020 specifically in support of the development of elderly care policies and services; and the Operational Plan for Health, 2015–2020 which has elderly care as a focus area. Geriatric nursing services is an essential element of an effective elderly care program. The TA design was appropriate and responded well to the need to strengthen the availability of qualified elderly care professionals, including robust policy recommendations for standardized training which is crucial to ensuring access to geriatric nursing services by the elderly population. The TA introduced improvements to the performance of professional elderly care providers by establishing a formal training system, policies and standards, and explored practical methods as well as acquired experiences to develop an effective elderly care system. The choice of policy and advisory was sound and appropriate as the TA enhanced understanding that professional clinical and management staff for elderly care are needed to ensure a transition to a modern, high quality, and long-term elderly care system.	Relevant (rating value: 2; weighted rating 0.70)
Effectiveness (weight 0.35)	The TA was effective in providing policy and advisory support to the government of Liaoning Province. It was tailored to the actual needs of the province on geriatric nursing training to enable more effective elderly care program. All TA outcome and output targets were fully achieved, and some were exceeded. The number of certified geriatric nurses has increased considerably which is crucial in delivering integrated care to meet the complex needs of older people in the long-term care setting. Elderly clients have been satisfied with the geriatric nursing services as a result of much improved elderly care practices for which the TA has contributed. Policy recommendations, standards, and training framework for elderly care teachers and providers have been realized and institutionalized in the province. The standards assessment system was an important inclusion as it facilitates continuous quality improvements of the nursing care training program. TA outputs such as training materials and textbook were disseminated nationally including to nursing association and other medical universities to contribute to building capacity of future elderly care workers. The TA has also deepened scientific research development to better distil evidence on the long-term care needs of the elderly population.	Highly Effective (rating value: 3; weighted rating 1.05)
Efficiency (weight 0.30)	The TA was completed without significant delay. The international expert, the technical working group, and the specialized team of CMU professors were mobilized in a timely manner. Financial and procurement requirements were complied with. The three months completion date extension was decided to enable the use of savings to organize one more international study visit which greatly benefitted stakeholders with advanced knowledge on specialized elderly care practices. TA resources was used for the development of standardized training program and materials. Better planning and use of resources allowed the TA to expand training in three more cities in Liaoning Province. The TA was completed within the TA original cost.	Efficient (rating value: 2; weighted rating 0.60)

⁴ N. Habib. 2019. [Caring for Carers in Liaoning Province: Strengthening Elderly Workforce in the People's Republic of China](#). ADB Briefs. No. 123. Manila: Asian Development Bank.

Criterion	Assessment	Rating
Overall Assessment	The TA has succeeded in addressing a gap in the access for and the availability of quality elderly care services. It was instrumental in advancing a professionalized long-term care workforce crucial to the provision of quality elderly services. The TA initiated the development of research proposals to enable comprehensive elderly care moving forward.	Highly successful (overall weighted rating: 2.35)
Sustainability	The government of Liaoning Province is committed to the development of a long-term care system for their elderly population. Expansion of training for elderly care teachers and providers is an ongoing initiative with the continued support of CMU, provincial health committee, finance and civil affairs departments, and some private sector entities. Collaboration with the national Chinese Nursing Association facilitated integration of elderly care focused training under the formal education system for nurses.	Most likely sustainable

Lessons Learned and Recommendations

Design and/or planning	The TA addressed an important issue which continues to be a key development challenge for the PRC. TA design was appropriate to the needs of Liaoning Province. Additional TA support for establishing standards for high quality elderly care services and staff training will be of benefit for PRC.
Implementation and/or delivery	A 3-year implementation period is suitable when advocating for policy change and undertaking reforms of training standards and the development of a pool of trainers essential for the expansion of capacity building. Strong alignment with local needs and ownership of the government successfully facilitated the implementation of key TA outputs.
Management of staff and consultants	A well-motivated and technically proficient TA team assigned by the government was vital to achieving TA outcome. ADB staff time was efficiently utilized having the executing and implementing agencies fully involved in the TA.
Knowledge building	The TA generated substantive policy dialogue results and knowledge which were packaged into knowledge products such as textbooks, training materials, and other publications disseminated widely through training, conferences, and on websites. Policy recommendations, standards, and materials developed were successfully disseminated through strong collaboration with national entities, such as medical universities and the national nursing association.
Stakeholder participation	Better elderly care services is a recognized common aim for the government of Liaoning Province which facilitated the involvement of diverse stakeholders, including beneficiaries, the private sector, finance and civil affairs departments, and provincial health commission. This recognition was a key factor in good participation of stakeholders.
Partnership	The TA fully benefitted from the collaboration with international programs in Japan (Chiba University) and Germany (Alloheim Senior Nursing Home and Queen Elizabeth Hospital), which provided state-of-the-art technical and management strategies for capacity building for modern elderly care programs.
Replication and/or scaling up	TA projects with similar approaches can be adopted successfully in other provinces in the PRC. Similar TA can be a start-up for a project with focus on public-private partnerships, including investments for an integrated elderly care and medical services, where quality medical services is made available at all levels (institution-, community-, and home-based services). Lessons learned can be applicable to the region.

Follow-up Action

Continue dialogue with the government of Liaoning Province to ensure expansion of capacity building training.

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Designation and Division: Health Specialist, Urban and Social Sectors Division

DESIGN AND MONITORING FRAMEWORK

Impact Access to geriatric nursing services improved (PRC's Thirteenth Five-Year Plan, 2016–2020) ^a		
Results Chain	Performance Indicators with Targets and Baselines	Achievements
<p>Outcome The quality of geriatric nursing services is improved</p>	<p>a. Number of certified geriatric nurses in Liaoning Province increased to 300 by 2019 (2016 baseline: 0)</p> <p>b. Percentage of clients (sex-aggregated data) satisfied with the geriatric nursing services from trained nurses increased to 80% by 2019 (2016 baseline: not applicable)</p>	<p>a. The number of certified geriatric nurses in Liaoning Province increased to 300 in 2019 as reported by CMU.</p> <p>b. A survey conducted by FAH-CMU showed that in 2019, 100% of clients was satisfied with the geriatric nursing services provided by trained nurses.</p>
<p>Outputs</p> <p>1. Policy recommendations, principles, and strategy for geriatric nursing training prepared</p> <p>2. Guidelines, standards, and implementation framework for the geriatric nursing training program developed</p> <p>3. Curriculum and training modules and materials for geriatric nursing training program designed</p> <p>4. Capacity of trainers and nurses in geriatric care delivery increased</p>	<p>1a. A gender-inclusive study report completed by May 2017, including broad policy recommendations and principles for geriatric nursing training</p> <p>2a. New set of gender-inclusive guidelines, standards, and implementation framework completed and discussed during the midterm review workshop in June 2017</p> <p>3a. New set of gender-inclusive curriculum and training modules and materials for geriatric nursing training program completed by August 2017</p> <p>4a. A gender-inclusive knowledge product on geriatric nursing policy principles and standards completed by September 2019</p> <p>4b. At least 10 trainers (minimum 50% female) with new skills and knowledge of geriatric care delivery training methods assessed and certified by CMU by 2018</p> <p>4c. At least 50 nurses (minimum 50% female) with new skills and knowledge of geriatric care delivery assessed and certified by CMU by 2019</p> <p>4d. At least 100 stakeholders with new knowledge of geriatric nursing policy principles and standards by 2019</p>	<p>1a. A study <i>The Present Situation, Needs and Development of Elderly Care in Liaoning Province</i> was completed in April 2017, outlining evidence-based policy recommendations and strategy for sustained elderly care and availability of qualified elderly care professionals.</p> <p>2a. A standardized training framework was developed and discussed with project stakeholders in June 2017. The framework incorporated detailed guidelines with admission criteria for teacher trainees, training standards, evaluation standards, and goals and timetables.</p> <p>3a. New curriculum and training modules and materials, including an assessment system with indicators to ensure qualification standards are met, were completed in July 2017.</p> <p>4a. A course book on Geriatric Nursing Training Course was published in July 2019 and available to elderly care professionals and nursing and medical students through the CMU.</p> <p>4b. 100 trainers (50% female) were certified with new skills and knowledge for geriatric care by CMU in 2018.</p> <p>4c. 100 nurses (50% female) were certified to have new skills and knowledge of geriatric care by CMU in 2019.</p> <p>4d. 200 stakeholders have acquired new knowledge geriatric nursing policy principles and standards by 2019.</p>

Actual Key Activities with Milestones**1. Policy recommendations, principles, and strategy for geriatric nursing training prepared**

- 1.1 Reviewed policy documents, international and national practices and experience in geriatric care, policy documents, and national policies and developed policy recommendations and principles for geriatric nursing training (March–April 2017).
- 1.2 Undertaken study visits to Japan and Germany, the countries with the best geriatric and elderly care systems and services in the world, and including visits to university nursing schools that teach geriatric care with a strong integrated and outreach character, including engagement with community-based and private sector service providers (March 2017 and October 2019).
- 1.3 Organized domestic study visits to learn more national best practices on elderly care including training of teachers and providers (March 2017–August 2019).
- 1.4 Analyzed gender-related dimensions of geriatric care and developed a gender-inclusive, peer-reviewed study report on international and national best experience on geriatric nursing training and services, including policy recommendations and principles and standards (April 2017).

2. Guidelines, standards, and implementation framework for the geriatric nursing training program developed

- 2.1 Assessed best international guidelines and standards for geriatric nursing training, and recommended good practices on geriatric nursing training (March–May 2017).
- 2.2 Developed gender-inclusive training standards, guidelines, and implementation framework for the geriatric nursing training program in the CMU (March–June 2017).
- 2.3 Organized education and dissemination workshops to discuss and improve the developed guidelines, standards, and training implementation framework (April–May 2017).

3. Curriculum and training modules and materials for geriatric nursing training program designed

- 3.1 Established groups of medical professionals, geriatrics specialists, and elderly care professionals (March–June 2017).
- 3.2 Developed and tested gender-inclusive curriculum and training modules and materials for the geriatric nursing training program, including training monitoring indicators and system of training (May–September 2017).
- 3.3 Organized a national conference to present and discuss the developed training modules and materials (August 2018).

4. Capacity of trainers and nurses in geriatric care delivery increased

- 4.1 Organized workshops and a national-level conference with participation of representatives of the central and provincial government agencies; international and national health care universities, institutions, and providers; and private and civil society stakeholders, to discuss and disseminate the TA findings and outputs (June 2019 and August 2019).
- 4.2 Conducted training of trainers and nurses to prepare the nursing teachers and care providers in the CMU Nursing School in 5 cities and in additional 3 cities (June 2017–August 2019).
- 4.3 Developed gender-inclusive knowledge product on geriatric nursing policy principles, strategy, standards, and training programs for dissemination (July 2019).
- 4.4 Organized a final national conference to disseminate TA outputs and policy recommendations (November 2019).
- 4.5 Prepared a final report and an ADB brief (November–December 2019).

Actual Inputs

ADB: \$399,332.31

Government: \$200,000.00 (estimated in-kind contributions from the government for counterpart support in the form of teaching faculty [10 FAH-CMU professors] and dedicated TA implementation staff, office accommodation, geriatric nursing training-related documents, statistics, remuneration of the FAH-CMU professors [20 person-months] and counterpart administrative staff, and other in-kind contributions).

ADB = Asian Development Bank, CMU = China Medical University, FAH-CMU = First Affiliated Hospital of China Medical University, PRC = People's Republic of China, TA = technical assistance.

^a Government of the PRC, State Council. 2015. *National Economy and Social Development Thirteenth Five-Year Plan, 2016–2020*. Beijing.

Source: ADB.

TECHNICAL ASSISTANCE COST

Table A2.1: Technical Assistance Cost by Activity
(\$'000)

Item	Amount		
	Original	Revised	Actual
1. Consultants	67.70	0.00	33.16
2. Equipment	30.30	0.00	30.28
3. Training, seminars, and conferences	249.00	0.00	306.04
4. Surveys	4.00	0.00	0.00
5. Miscellaneous administration and support costs	24.20	0.00	29.85
6. Contingency	24.80	0.00	0.00
Total	400.00	0.00	399.33

Source: Asian Development Bank.

Table A2.2: Technical Assistance Cost by Fund
(\$'000)

Item	Technical Assistance Special Fund—Other Sources
1. Original	400.00
2. Revised	0.00
3. Actual	399.33
4. Unused	0.67

Source: Asian Development Bank.