1. Project Data

<table>
<thead>
<tr>
<th>Project ID</th>
<th>Project Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>P126210</td>
<td>CN-Chongqing Urban Rural Integration II</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Practice Area(Lead)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>Health, Nutrition &amp; Population</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L/C/TF Number(s)</th>
<th>Closing Date (Original)</th>
<th>Total Project Cost (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBRD-81710</td>
<td>31-Aug-2017</td>
<td>86,908,584.86</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bank Approval Date</th>
<th>Closing Date (Actual)</th>
<th>IBRD/IDA (USD)</th>
<th>Grants (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-Jun-2012</td>
<td>31-Jan-2021</td>
<td>Original Commitment</td>
<td>100,000,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Revised Commitment</td>
<td>86,908,584.86</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Actual</td>
<td>86,908,584.86</td>
</tr>
</tbody>
</table>

Prepared by: Salim J. Habayeb
Reviewed by: Judyth L. Twigg
ICR Review Coordinator: Eduardo Fernandez Maldonado
Group: IEGHC (Unit 2)

2. Project Objectives and Components

a. Objectives
The stated objective of the project was to improve the access of populations in selected non-metropolitan areas to county/district level hospital-based services, raising the efficiency of service production and improving the quality of care in the targeted hospitals (Loan Agreement, July 11, 2012, p. 5).

Associated outcome targets were revised upward in April 2017, and both original and revised outcome targets were achieved or exceeded; therefore, this ICR Review did not apply a split evaluation.
b. Were the project objectives/key associated outcome targets revised during implementation?
   Yes

   Did the Board approve the revised objectives/key associated outcome targets?
   Yes

   Date of Board Approval
   14-Apr-2017

c. Will a split evaluation be undertaken?
   No

d. Components

   Subcomponent 1.1: Institutional Readiness for Reform would support the introduction of instruments and management techniques through the provision of technical advisory services and equipment to carry out several sets of activities at project hospitals, including:

   i. installation of a standardized and uniform cost accounting system, including for measuring and disaggregating costs related to patient care, diagnostic tests, administration and overhead, and capital investments;
   ii. strengthening the coordination between project hospitals and lower-level facilities through a mix of measures to link professionals and organizations in the health system, and to emphasize patient-centered care integration;
   iii. development and application of evidence-based clinical pathways for in-patient and emergency cases in project hospitals, and promotion of the rational use of antibiotics;
   iv. continuous quality improvement, consisting of a formalized and ongoing effort to improve the quality of care and to provide services that meet patient expectations through structured organization-wide planning and implementation; and
   v. strengthening Traditional Chinese Medicine through the development of treatment regimens and clinical pathways to address non-communicable diseases, preparation of nursing protocols to standardize therapies, and establishment of a center for preventive care and health promotion to focus on preventing complications from diseases such as diabetes and hypertension.

   Chongqing Health Bureau would carry out two sets of activities:

   i. establishment of a uniform system of monitoring to track hospital performance based on the Hospital Management Assessment Guidelines of the Ministry of Health; and
ii. carrying out studies and evaluations to address knowledge gaps related to the health sector reform agenda and implementation progress of the above-mentioned sets of activities.

**Subcomponent 1.2: Training:** Provision of a series of theoretical and hands-on training aimed at: (a) developing a cadre of specialists; (b) upgrading the skills of medical professionals at county, township, and village levels; and (c) enhancing the skills of managers, including hospital directors, nursing directors, and health bureau officials.

**Subcomponent 1.3: Health Management Information System:** Supporting on-going efforts as a "national pilot" to improve the system in project hospitals, through the provision of hardware, software, training of staff on using the system, and provision of networking and telemedicine capabilities.

**Subcomponent 1.4: Implementation Support and Supervision by Chongqing Health Bureau:** Supporting activities associated with project implementation, monitoring, and supervision.

II. Improving County/District Level Health Facilities (Appraisal: US$148.6 million; Actual US$135.1 million).

**Subcomponent 2.1: Construction of County/District Level Health Facilities:** Construction of new facilities in the compounds of project hospitals, or on a different new site, including in-patient buildings, out-patient service buildings, and medical technology buildings, consistent with national standards on hospital construction, incorporating flexible hospital design and energy efficient requirements.

**Subcomponent 2.2: Implementation Support and Capacity Building:** Supporting activities associated with project implementation, monitoring, and evaluation through the provision of costs associated with services and technical assistance required for supervision, regular administrative and logistics management, procurement, financial, and disbursement processing, contract management, financial management, project management, design review, training, and policy development.

e. **Comments on Project Cost, Financing, Borrower Contribution, and Dates**
   The estimated cost at appraisal was US$155.5 million, consisting of a World Bank Loan of US$100 million, and US$55.1 million from Chongqing Municipality. The second project restructuring of October 28, 2019 included a partial cancellation of US$10 million for the reasons explained below under project
Project restructurings:

1. The first restructuring of April 14, 2017 extended the closing date by 36 months from August 31, 2017 to August 31, 2020 to catch up with significant delays in hospital construction designs and in the preparation of bidding documents during the first three years of implementation. It revised the Results Framework and raised outcome targets; changed the financing plan; reallocated funds between disbursement categories; and changed the implementation schedule.

2. The second restructuring of October 28, 2019 cancelled US$10 million from the loan proceeds in view of the suspended construction of Wushan Traditional Chinese Medicine Hospital resulting from a landslide, and because domestic resources were made available for financing Qianjiang Hospital construction. For these two hospitals, only the cost of construction of new facilities was dropped from the loan, and the project continued to support other planned activities at previously existing and functioning hospital facilities.

3. The third restructuring of June 16, 2020 extended the closing date by five months from August 31, 2020 to January 31, 2021 to catch up with implementation delays, primarily in construction, exacerbated by COVID-19 pandemic.

3. Relevance of Objectives

Rationale

According to the PAD (pp. 1-5), project objectives were driven by the need to address inequality that was a major source of concern for policy makers. In 2009, the government issued guidelines for national health care reform to address challenges facing the broader health system and its hospitals. Large scale and rapid urbanization posed many challenges, including a significant disparity between urban and rural areas. Many hospitals faced internal inefficiencies and deficient management practices. The public hospital reform was among priority areas for the sector, as resources were disproportionately concentrated in major urban areas at tertiary hospitals. Within the larger agenda to promote integrated development of urban and rural areas, Chongqing was selected by the central government as a provincial-level national pilot (PAD, p. 1). The project aimed at improving service capacities at County/District level to allow the local population to receive quality health services in local proximity without going to higher-level urban hospitals where services were more costly and less accessible (PAD, p. 5), while also supporting a subset of reform actions in targeted county hospitals.
Previous sector experience in Chongqing included two Bank-supported operations. The China Rural Health Project, 2008-2014, supported health reforms in 40 counties located in eight provinces, including Chongqing; and the first Chongqing Urban-Rural Integration Project, 2010-2017, a multisectoral project, aimed at increasing access of residents to improved public services, including roads, water supply, employment training, and primary health care. The focus of this project was on hospital-based services that could not be effectively addressed under the first urban-rural integration engagement that focused on primary health care and other sectors.

The objectives continued to be fully aligned with health sector priorities and objectives of the Government. The 14th Five-Year Plan (2021–2025) for National Economic and Social Development noted that the objective of deepening health system reform was to improve the quality of care and efficiency of service delivery, and that strengthening county-level hospitals was a priority for health service delivery (ICR, p. 14).

At project closing, objectives remained generally consistent with the World Bank Group Country Partnership Framework (CPF) for the People’s Republic of China for the period 2020-2025 through its Engagement Area 3 on “Sharing the Benefits of Growth,” specifically under its Objective 3.1 for “Increasing Access to Quality Health and Aged Care Services.” The CPF intervention logic was that China’s health care system is fragmented, hospital-centric, and volume-driven, contributing to rising costs. The CPF noted that an ongoing China Health Reform PforR (FY17) provides support to the government program in implementing comprehensive healthcare reforms in Anhui and Fujian; that knowledge generation and learning will ensure that lessons are shared countrywide; that the Bank’s Advisory Services and Analytics will contribute towards specific reform areas, including provider payment reform and strengthening the quality of care; and that IFC will continue to focus on supporting private sector provision of affordable healthcare in areas where it can be more efficient and effective than public provision. The CPF noted that the World Bank Group will help build a policy and institutional framework for aged care, and referred to the ongoing Anhui Aged Care System Demonstration Project (FY18) and Guizhou Age Care System Development PforR. The CPF stated that engagement in this area is expected to continue with modest financial contributions and technical assistance at the national level. Also, the CPF does not appear to envisage objectives entailing large investments in health infrastructure development.

Rating
Substantial

4. Achievement of Objectives (Efficacy)
**Objective**

Improve access of populations in selected non-metropolitan areas to county/district level hospital-based services

**Rationale**

**Theory of change:** The established theory of change encompassed the three objectives whose determinants were interlinked, as follows:

- **Improving health facilities** would be reasonably expected to result in district-level health facilities being constructed and renovated, with the necessary equipment installed, including for telemedicine. These would plausibly contribute, along with service quality improvements, to increasing access that would be measured by an increased number of outpatients and in-patients, increased number of beds, and decreased percentage of in-patients referred to upper-level hospitals.

- **Improving hospital management and service efficiency** would be reasonably expected to result in standardized cost accounting systems in operation, rational budgeting, hospital performance being assessed, a Health Management Information System installed and operational, clinical pathways applied (see explanatory note under Objective 3), and managerial training programs delivered. These would plausibly contribute to improved efficiency of service production reflected by the reduction in the average length of stay of hospital in-patients.

- **Improving service delivery** would be reasonably expected to result in coordination and referral agreements signed with Community Health Centers and Township Health Centers, clinical pathways developed and applied, Continuous Quality Improvement processes implemented, Traditional Chinese Medicine protocols developed, clinical training programs delivered, telemedicine in operation, and increased numbers of certified health professionals. The above outputs would plausibly contribute to improved quality of care reflected by increased treatment using clinical pathways (see explanatory note under Objective 3).

**Outputs and intermediate results**

The project expanded hospital capacity to accommodate more patients. The total number of beds increased from 2,860 to 4,345 beds (ICR, p. 53). Six district-level hospitals were constructed and/or renovated and equipped, filling critical gaps, such as for ventilators and electrocardiogram machines. As previously noted in Section 2e, the initial target was eight hospitals, but construction costs were excluded for two hospitals: the construction of Wushan Traditional Medicine Hospital was suspended in 2018 as a result of a landslide, and the construction costs of Qianjiang Central Hospital were withdrawn from the loan proceeds, as domestic resources were secured.
All constructed facilities met or exceed the National Energy Saving Standard; had a cooling system that met the national standard on energy consumption cap and energy efficiency; attained the target of 60% for the proportion of the construction area having central heating/air conditioning systems; and used telemedicine technology for tele-diagnosis and treatment advice.

The project strengthened human resource skills by training 2,500 medical personnel. This number included 1,863 professionals (58% women) in various areas, and 637 (63% women) for certification under degree programs, including 188 nurse specialists. Also, 40 senior-level medical specialists were recruited, bringing with them the ability to perform about 100 new medical procedures.

Telemedicine equipment was made available allowing patient access to diagnosis and medical management services provided by health professionals working at upper-level hospitals. A total of 27,418 teleconsultations were carried out by the end of 2020.

Note on access to hospital services during construction: Access was not interrupted during project implementation. All hospitals were operational prior to the project, and continued to operate (in existing facilities) and implement project interventions while new and additional facilities were being constructed. Also, Wushan landslide affected construction at a new site in a new development zone, but Wushan hospital with its older facilities continued to function (Task Team clarifications, December 6, 2021).

Note on target revisions (applicable to two outcome targets under Objectives 1 and 2): Upward revisions for two associated outcome targets showed "lower numerical values" because of the nature of the indicators: lowering numerical benchmarks for in-patient length of stay and for referrals were "upward" revisions reflecting a higher standard to achieve.

Outcomes

Results showed improved access of populations to county/district hospital services, as the yearly number of outpatient visits in project hospitals increased from 1.62 million in 2012 to 2.80 million in 2019 with an annual growth rate of 8.2%. The number of yearly in-patient admissions increased from 120,600 admissions in 2012 to 201,600 admissions in 2019 with an annual growth rate of 7.6%. Importantly, the project contributed to poverty alleviation by expanding and strengthening health services in rural and poverty areas of Chongqing. Also, since two out of eight project hospitals were maternal & child health hospitals, and based on project results, the operation further contributed to improving women's access to quality health services (ICR, p. 21).
Chengkou Hospital, six hours by car from the urban districts of Chongqing, was accredited by the National Health Commission as a Secondary Level-A Hospital in July 2020, upgrading it from a Secondary Level-B. This national accreditation reflected the significant improvement in access to hospital-based services for the population living in remote areas (ICR, p. 15).

In four general hospitals (excluding Traditional Chinese Medicine and Maternal & Child Health), the average share of surgical discharges increased from 21.4% in 2012 to 32.7% in 2020, indicating improved access to more advanced or complicated medical interventions.

The percentage of in-patients referred to upper-level hospitals "improved" from a baseline of 8.5% in 2012 to 4.4 % by January 2021, exceeding the target of 5%, reflecting reduced referrals and improved service delivery capacity of project hospitals, where more sophisticated treatments could be provided to their catchment populations. The achievement rate was 4.3% for females and 4.5% for males.

Rating
High

OBJECTIVE 2
Objective
Raise the efficiency of service production in targeted hospitals

Rationale
Theory of change: the same as under Objective 1, above.

Outputs and intermediate results

The project equipped hospitals with a standardized cost accounting system producing quarterly departmental-level unit cost data. The system measured disaggregated costs related to patient care, diagnostic tests, administration and overhead, and capital investments, and facilitated the identification of areas where efficiency could be improved. Also, the project supported annual performance assessments that comprised over 50 indicators tailored according to the type of hospitals (general, maternal & child health, or Traditional Chinese Medicine).
The project supported four hospitals to strengthen care coordination with Township Health Centers and Community Health Centers. 98 centers signed coordination and referral agreements, exceeding the target of 42 health centers. A technical advisory service was provided to hospitals to define their roles and responsibilities in the delivery of coordinated care. Disease-specific coordinated care packages (e.g., for hypertension, diabetes, and stroke) specified the roles and responsibilities of health facilities in prevention, treatment, and rehabilitation. Training was provided to 355 health personnel to strengthen capacity at the primary level in facilitating a more efficient patient flow.

The project financed activities that would strengthen internal management practices, including training programs for hospital managers, heads of clinical departments, and nursing directors. Trainings had specific modules such as hospital performance management, clinical pathways, and Continuous Quality Improvement. The project also supported the development of the Health Management Information System.

Outcomes

Efficiency of service production was measured by the reduction in the average in-patient length of stay, that decreased from a baseline of 10.6 days in 2012 to 7.5 days in January 2021, slightly beyond the target of 8 days.

Rating

Substantial

OBJECTIVE 3
Objective
Improve the quality of care in targeted hospitals.

Rationale
Theory of change: The same as above, under Objective 1.

Outputs and intermediate results

The project instituted the use of clinical pathways for in-patient and emergency cases, as they contribute to improving quality of services and containing the costs of care. (Explanatory Note: Clinical pathways are tools such as templates for clinical care depicting the sequence of steps and expected workflow for health care provision and patient management. They promote a focused rather than a shotgun approach to patient care.)
They guide diagnostic and treatment decisions, contribute to reducing unnecessary actions, reduce variation in patient management and costs, and improve the quality of care.

The Continuous Quality Improvement approach was introduced to assess and improve quality of care processes in hospitals. According to the ICR, quality of care became a priority in the hospital management agenda, both for monitoring and improvement.

The ICR reported that quality assessment scores in five project hospitals implementing the Continuous Quality Improvement program showed regular increases, but that aggregated quantitative results were not available as hospitals identified different quality improvement areas to implement the program (ICR, p. 17).

Training outputs are noted under Objective 1, above, and reflected a higher level of skills for delivering quality services.

Outcomes

The number of high-volume in-patient conditions or diseases treated using clinical pathways in four project hospitals reached 20, surpassing the target of 16 conditions. The indicator is valuable, but it reflects process quality. Given available capacity, the project could have expanded its evidence base by measuring downstream improvement outcomes in the quality of care, such as for selected clinical outcomes, including complications.

Patient satisfaction was measured over a period of one year only, as the indicator was added at the third restructuring. It attained 92.9% in January 2021 compared with a baseline of 89% in December 2019, exceeding the target of 90%. Setting a target that had only one percentage point increase from the baseline (89% to 90%) was understandable in view of the short tracking period, but it had minimal statistical significance. Nevertheless, the results indicated that patient satisfaction appeared to be on the right track during CY2020.

Rating
Substantial
OVERALL EFFICACY

Rationale
The project fully achieved its first objective to improve access to county/district level hospital-based services in selected non-metropolitan areas. It almost fully achieved its two other objectives to raise the efficiency of service production and to improve the quality of care in targeted hospitals. The aggregation of achievements under the three objectives is consistent with a substantial efficacy rating.

Overall Efficacy Rating
Substantial

5. Efficiency
The PAD’s economic and financial analysis (pp. 13-14) provided valid arguments about the challenges of conducting a cost-benefit analysis under this project and the difficulties in assigning a monetary value to expected improvements in health outcomes. Another challenge for undertaking a full cost-benefit analysis was that the evidence base for making assumptions about the impact of project activities on health outcomes was weak. Hence, the PAD’s analysis illustrated the economic logic of the project by presenting the mechanisms (largely project outputs) through which project interventions would improve efficiency, generate cost savings for the health sector in Chongqing, and improve equity in health care use.

The ICR’s economic analysis was in line with the approach taken by the PAD and focused on increased allocative efficiency and expected cost control benefits. Specifically, the ICR noted that the increase in allocative efficiency was indicated by shifting patients from seeking treatment "out of county" to "in county," and that cost control was indicated by less costly treatment in the project hospitals compared to other hospitals. The ICR’s analysis estimated that total expenditures would be reduced to RMB 869 million, compared to the project cost of RMB 555 million. The net benefit was estimated at RMB 314 million (US$48 million). The ICR noted that there were other benefit dimensions that could not be quantified, and concluded that project benefits outweighed the cost (ICR, p. 20).

However, the inefficiency of implementation was significant. There were extended delays and slow implementation with a disbursement rate attaining less than 10% during the first four years, and reaching only 27% near the end of the fifth year of implementation. The project was extended by 41 months resulting in a total implementation period of 8.5 years. The ICR highlighted the opportunity cost of capital utilization and the additional interest paid by the Borrower. The landslide at the new hospital construction site in Wushan County resulted in an indefinite suspension of construction, where an investment of US$5 million had already been made.
According to the ICR (p. 29), the administration of procurement contracts was difficult, ineffective, and inefficient. The high turnover of hospital management teams and key staff in the Project Implementation Units resulted in a repetitive steep learning curve, hindered steady implementation, and reduced the effectiveness of innovative project interventions (ICR, p. 23). The additional project workload, without compensation, was among the causes of high staff turnover, presenting a persistent challenge during implementation, according to the ICR.

**Efficiency Rating**

Modest

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

<table>
<thead>
<tr>
<th>Rate Available?</th>
<th>Point value (%)</th>
<th>*Coverage/Scope (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appraisal</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Not Applicable</td>
</tr>
<tr>
<td>ICR Estimate</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Not Applicable</td>
</tr>
</tbody>
</table>

* Refers to percent of total project cost for which ERR/FRR was calculated.

**6. Outcome**

Relevance of objectives is rated substantial, as objectives remained closely aligned with health sector priorities and objectives of the National Five-Year Plan (2021–2025) and remained in general consistency with the Country Partnership Framework for the People’s Republic of China for the period 2020-2025 at project closing. Efficacy is rated substantial, as objectives were almost fully met. Efficiency is rated modest because significant adverse aspects of implementation reduced efficiency. The overall outcome is rated moderately satisfactory, indicative of essentially moderate shortcomings in the project’s overall preparation, implementation, and achievement.

a. **Outcome Rating**
   Moderately Satisfactory

**7. Risk to Development Outcome**

Government ownership and commitment to deepening health reforms remain strong. According to the ICR (p. 32), most health reform activities introduced by the project have been scaled up. The standardized cost accounting system initiated by the project has been scaled up to all the public hospitals in Chongqing. The National Health Commission is moving forward the reform agenda on coordinated care, clinical pathways, performance assessment, and strengthening of Traditional Chinese Medicine, all of which were supported by
the project. Concurrently, institutional capacities and human resources skills were strengthened under the project.

However, there are persisting risks related to uncertainties in landslide stabilization affecting one new hospital site in Wushan. Although the local government continues to pursue treatment and mitigation activities, and has spent over US$10 million on stabilization, the landslide has not been effectively stabilized and the risk of deterioration remains.

8. Assessment of Bank Performance

a. Quality-at-Entry

Preparation built on existing knowledge about health system issues and on lessons learned from Bank-supported operations in several sectors over many years (PAD, p. 11). Lessons reflected in the design included the importance of service quality to supplement improvements in physical access; the key role of local ownership; and the importance of capacity building in project management, including financial management, procurement, safeguards, and supervision. A Steering Committee was set up under the leadership of the Vice Mayor and included representation from various municipal authorities, and was supported by a Project Management Office.

The Chongqing Health Bureau and the Project Management Office were familiar with World Bank operations and related financial and procurement procedures. Financial management arrangements and safeguards were adequately prepared (PAD, pp. 18-20). Reform activities were well planned with high institutional readiness (PAD, pp. 25-29). But implementation readiness for hospital construction aspects was insufficient. According to the ICR, the project preparation schedule was considered to be relatively short for major civil works. Related preparatory arrangements were not completed, and were subsequently carried out during the first two years of implementation (ICR, p. 30). Also, capacity gaps at the Project Implementation Units that were set up in project hospitals were partly caused by the fact that the majority of staff in the implementation units were medical doctors rather than engineers and architects (ICR, p. 22). The expertise-related risk was adequately identified at appraisal (lack of technical expertise and experience on health facility design and construction, PAD, p. 54), but it was rated as moderate and was to be mitigated by consultant services and technical assistance, and by intensive implementation support from the Bank.

Quality-at-Entry Rating
Moderately Satisfactory

b. Quality of supervision
According to the ICR, Bank Management set up a multidisciplinary team of senior staff and consultants to supervise the project and provide implementation support and practical training on procurement, financial management, safeguards, project management, and quality control (ICR, p. 30). Supervision and implementation support were reportedly intensive throughout the implementation period (ICR, p. 31) with sustained policy dialogue. Members of Bank Senior Management were mobilized to join supervision missions and to enhance discussions with the government about project progress and implementation threats. According to the ICR, the Task Team, supported by the Country Management Unit and by the Bank’s Global Practice, showed proactive support to the government in addressing construction and procurement challenges, resulting in the upgrading of project ratings from a moderately unsatisfactory level in 2015 and 2016 to moderately satisfactory from 2017 through project closing. In response to evolving circumstances related to construction (see Section 2e), the Task Team facilitated project restructurings in 2017, 2019, and 2020 in a timely manner. Communications with the client were reportedly regular and intensive. Also, the fact that Task Team Leaders were fluent in Chinese with a good understanding of country systems further facilitated a collaborative professional relationship and trust.

Task Team performance in reporting and documentation was described by the ICR as diligent, candid, and complete, including in Implementation Status & Results Reports, mission AideMemoires, Mid-Term Review, restructuring papers, and specific annexes on procurement, financial management, and safeguards.

An additional unexpected task that was adequately fulfilled by the Task Team concerned the mitigation of risks resulting from the landslide in Wushan. The Task team carried out five missions to Wushan County to ensure that the client: (a) proceeded with local government review approvals; (b) obtained the local government's official commitment to ensure implementation of subsequent major engineering measures on hospital buildings and resettlement apartments; (c) continued monitoring of the affected area; (d) did not resume hospital construction until the first phase of treatment works was satisfactorily completed; (e) evaluated the effectiveness of the landslide treatment works after completion; and (f) considered the landslide monitoring data in its final decision for repairing building damages. Two technical engineering notes with recommendations were prepared and shared with the Client in May 2019 and November 2020. The Task Team sought and obtained guidance from the Regional Safeguard Advisor and the Operations Environmental and Social Review Committee to ensure adequacy of support provided to the Client in dealing with outstanding safeguard issues after project closing (ICR, p. 31).

Quality of Supervision Rating
Satisfactory

Overall Bank Performance Rating
Moderately Satisfactory
9. M&E Design, Implementation, & Utilization

a. M&E Design
The objectives were clearly stated and reflected by the indicators, although outcome indicators on the quality of health services could have been expanded. The results chain was well illustrated. The intermediate results indicators captured progress towards intended outcomes. Most indicators met the "SMART" criteria for being specific, measurable, adequate, realistic, and targeted. Baselines for patient referrals and for the average length stay for in-patients were available. But not all M&E arrangements were embedded institutionally, since many indicators were project-specific.

b. M&E Implementation
The Project Management Office routinely updated progress and relied on self-reporting from project hospitals. Project-specific indicators had to be collected manually by designated people. Data collection methodology for some indicators was inconsistent across project hospitals or over time, and the quality and accuracy of data reported by hospitals varied. Hence, the Task Team extended efforts to review data regularly, cross validate them, and request clarifications and double-checking when an inconsistency was observed (ICR, p. 25).

c. M&E Utilization
M&E findings were used for regular project monitoring and restructuring. Despite implementation shortcomings, the ICR stated (p. 26) that M&E was able to track project progress and inform strategic directions and future engagements. As noted in Section 7 (Risk to Development Outcome), health reform activities introduced under the project are being replicated, and the standardized cost accounting system initiated by the project has been scaled up to all public hospitals in Chongqing. Coordinated care reform benefited other counties. The ICR noted that project benefits were highly regarded by the National Health Commission that is advancing the reform agenda on coordinated care, clinical pathways, performance assessment, and strengthening of Traditional Chinese Medicine (ICR, p. 32).

M&E Quality Rating
Substantial

10. Other Issues

a. Safeguards
The project was classified under Environmental Category B, as it triggered safeguard policy Environmental Assessment OP/BP 4.01 in view of construction and rehabilitation activities. The project also triggered
OP/BP 4.11 policy concerning Physical Cultural Resources, and OP/BP 4.12 policy on Involuntary Resettlement. An Environmental Management Plan and a Resettlement Action Plan were adequately implemented. A medical waste management plan was integrated with the Environmental Management Plan and implemented. All safeguards were satisfactorily complied with (ICR, p. 27); however, in view of pending environmental issues resulting from Wushan landslide, the overall safeguards rating was downgraded to moderately satisfactory near project closing, as recorded in the Operations Portal.

The ICR (pp. 27-28) reported that post-closing safeguard issues related to Wushan landslide continued to be adequately addressed through the post-disaster recovery response, that key considerations for the safety of the community, workers, and resettled persons were well managed, and that the Bank intended to discontinue its supervision after October 1, 2021.

b. Fiduciary Compliance
The ICR reported that the project had an effective financial management system that provided, with reasonable assurance, accurate and timely information that loan funds were used for their intended purposes. Accounting and financial reporting were consistent with the regulations of the Ministry of Finance and the requirements specified in the Loan Agreement. No significant issues were noted throughout project implementation. Withdrawal procedures and fund flows were appropriate. All audit reports had unqualified opinions.

Procurement was challenging, as the clients divided large contracts into small ones, resulting in overloaded processes with inefficient contract administration. Nevertheless, procurement was undertaken in compliance with Bank guidelines (ICR, p. 29), and procurement performance improved over time. It was upgraded to satisfactory in the last two ISRs (ICR, p. 30). No quality issues of significance were reported.

c. Unintended impacts (Positive or Negative)
None reported (ICR, p. 21).

d. Other
--

11. Ratings
### 12. Lessons

The ICR (pp. 33-34) offered several lessons and recommendations, including the following lessons, partially re-stated by IEG:

### Increasing population access to hospital care through infrastructure development is facilitated by improved service quality and competencies of health personnel and hospital managers.

Constructing hospitals and equipping them could narrow infrastructure gaps, but hospitals can contribute to improved health outcomes only if health personnel have adequate skills to function in line with clinical guidelines and protocols. The project design combined activities related to infrastructure development with service quality improvements, capacity building, and health system reforms to maximize the achievement of intended outcomes.

### Providing sufficient preparation time and resources enhances implementation readiness, notably for projects with high technical requirements and design complexities, such as in hospital infrastructure development.

Under the project, construction was delayed because...
Preparatory arrangements, including construction designs and bidding documents, were not completed. A reasonable scheduling balance can be reached to meet both project delivery expectations and implementation readiness requirements.

The provision of specific training to hospital directors who monitor major civil works at their hospital sites can facilitate effective oversight. As major construction at existing hospital locations is relatively infrequent, hospital directors usually have limited experience in coping with construction complexities. Most hospital directors opted for multiple small contracts instead of integrated contracts, thus overloading and complicating implementation and its sequencing, including for procurement and contract administration. Specific training programs can be provided during project preparation, before launching actual implementation, to equip the involved hospital directors with essential know-how about the development and delivery of hospital construction projects.

Additional lesson identified by IEG Review:

Augmenting staff responsibilities by accumulating project tasks on top of existing full-time workloads without compensation can result in high and persistent staff turnover that has negative impacts on project implementation. Under this operation, project responsibilities were assigned to hospital management teams and key staff of project implementation units, who were full-time staff with pre-existing responsibilities. Regulations in China disallowed financial compensation. The additional workload resulted in a high and persistent turnover combined with repetitive training and a steep learning curve for newcomers, all hindering a steady pace of project implementation. Other forms of suitable incentives could be explored with the authorities and concerned stakeholders in future operations.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR was results-oriented and closely aligned with development objectives. It was tightly written and reasonably concise. The ICR provided a complete critique of the project and its performance. The theory of change was well articulated, and the results chain clearly illustrated the intended pathway toward attaining intended outcomes. The ICR appropriately linked the narrative and efficacy ratings to the evidence. Its analysis was thorough and candid. Its reporting on fiduciary compliance was meticulous. The ICR’s thorough reporting on environmental and resettlement safeguards was exemplary, including for post-closing follow-up on the landslide in Wushan County, post-disaster recovery response, prudent risk-based approach, mitigation
measures, and monitoring. The ICR followed guidelines and was internally consistent. It offered specific lessons derived from project experience. The ICR had a minor information lapse on the operational status of hospitals and access to health services during the construction of new facilities.

a. **Quality of ICR Rating**
   
   High