



# Project Information Document (PID)

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Concept Stage | Date Prepared/Updated: 24-Oct-2022 | Report No: PIDC34932



**BASIC INFORMATION**

**A. Basic Project Data**

Country Argentina	Project ID P179534	Parent Project ID (if any)	Project Name Strengthening the Digital Health Agenda in the Buenos Aires Province (P179534)
Region LATIN AMERICA AND CARIBBEAN	Estimated Appraisal Date Mar 17, 2023	Estimated Board Date Jun 16, 2023	Practice Area (Lead) Health, Nutrition & Population
Financing Instrument Investment Project Financing	Borrower(s) Province of Buenos Aires	Implementing Agency Provincial Directorate of Multilateral Organizations and Bilateral Financing	

**Proposed Development Objective(s)**

Improve effective access to health services for the beneficiary population and strengthen health management and information systems.

**PROJECT FINANCING DATA (US\$, Millions)**

**SUMMARY**

<b>Total Project Cost</b>	50.00
<b>Total Financing</b>	50.00
<b>of which IBRD/IDA</b>	50.00
<b>Financing Gap</b>	0.00

**DETAILS**

**World Bank Group Financing**

International Bank for Reconstruction and Development (IBRD)	50.00
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Environmental and Social Risk Classification  
Moderate

Concept Review Decision  
Track II-The review did authorize the preparation to



continue

Other Decision (as needed)

## B. Introduction and Context

- 1. Argentina, with a gross domestic product (GDP) of US\$491 billion, was the third-largest economy in Latin America in 2021.** The country has a large territory of 2.8 million square kilometers, and its population of about 45 million inhabitants is highly urbanized with 89 percent of the total population living in cities.
- 2. The middle class has historically been large and strong, with social indicators generally above the regional average; however, persistent social inequalities, economic volatility, and underinvestment have limited the country's development.** The rate of urban poverty reached 37.3 percent in the second semester of 2021, and 8.2 percent of Argentines live in extreme poverty. Childhood poverty, for those under 15 years old, is at 51.4 percent. The high frequency of economic crises in recent decades—the economy has been in recessions during 21 of the past 50 years—has resulted in an average annual growth rate of 1.8 percent, well below the world average of 3.6 percent and the region's average of 3.2 percent. Decades of chronic underinvestment have led to sizeable gaps in capital stock relative to comparable countries, with public capital expenditures as a share of GDP stagnated at historically low records.
- 3. Bolstered by favorable external conditions, the economy recovered from the COVID crisis at a fast pace, reaching pre-pandemic activity levels by mid-2021.** Argentina's economy grew by 10.3 percent in 2021. Higher commodity prices and trading partners' growth, notably Brazil's, combined with public investment led to a robust growth recovery. However, since end-2021 increasing macro imbalances and a more turbulent global context, started to slow down the pace of GDP growth. The Government of Argentina (GoA) has concluded the process of restructuring its debt in foreign currency (both local and external) with private creditors, significantly improving the maturity profile for the next five to eight years. However, debt service obligations as of 2028 are projected to be equivalent to those that triggered the debt swap in 2020–2021.
- 4. By March-2022, Argentine authorities have reached an agreement with the International Monetary Fund (IMF), on an Extended Fund Facility (EFF) program for a period of 30 months and an amount of US\$45 billion, to address the economy's macroeconomic imbalances and set the basis for sustainable growth.** This amount will cover the remaining obligations under the 2018 Stand-By Arrangement (US\$40.5 billion) and already provided a small net financing support for reserves accumulation (US\$4.5 billion). According to the memorandum of economic and financial policies, the EFF will support the government's objectives of (i) improving public finances in a gradual and sustainable manner to ensure debt sustainability without jeopardizing the economic recovery, (ii) durably reduce persistent high inflation, through a multi-pronged strategy, (iii) strengthening the balance of payments, and (iv) improving the sustainability and resilience of growth. Accordingly, the memorandum sets a gradual fiscal consolidation path toward a zero primary deficit in 2025 (2.5 percent of GDP in 2022, 1.9 percent in 2023, and 0.9 percent in 2024), a reduction of monetary financing of the deficit (eliminated by 2024), and the framework for monetary policy involving positive real interest rates, as part of a strategy to fight inflation.
- 5. The Second Review of the EFF program has been approved by the IMF Executive Board on October 7th 2022,**



**allowing for an immediate disbursement of US\$3.8bn.** All quantitative program targets of the second quarter 2022 (end-June) were met, except for the floor on net international reserves. According to the IMF statement, decisive actions by the new economic team have been critical to stabilizing markets and to begin rebuilding confidence. In addition, the IMF pointed out that relevant end-September targets were met, too (including floor for net international reserves mentioned above as well as ceiling on monetary financing of the fiscal deficit). The program key targets remain unchanged over the period 2022 and 2023, although near-term quarterly targets are slightly modified to adjust for high than projected inflation. The IMF Board also approved waivers of non-observance for the continuous performance criteria relating to exchange restrictions and multiple currency practices, as the soy differential FX rate contravenes the Fund's policy on Multiple Currency Practices. However, downside risks are elevated. Despite increasing terms of trade, capital controls and deficit monetization cause a large gap between the official and parallel exchange rate and limit foreign reserve accumulation. Inflation accelerated to historically high levels (82 percent, as of September), denting purchasing power. While the gradual fiscal consolidation targets set by the IMF program were met, a still sizable fiscal deficit crowds out private investment and puts pressure on monetary policy. Moreover, potential global effects caused by a protracted war in Ukraine -which increases the cost of imported energy- could hamper the fiscal consolidation program.

#### Sectoral and Institutional Context

**6. The Province of Buenos Aires (PBA) is the country's most-populated jurisdiction, with a high degree of inequality within its territory.** There are more than 17.5 million people living in PBA, distributed unevenly across 135 municipalities. About 80 percent of the population lives in 33 municipalities, the majority located in the north-east of the province, around the city of Buenos Aires. In this area, the percentage of population with unmet basic needs is relatively high. These large disparities are also reflected in differences in health insurance coverage across municipalities, as social insurance is linked to participation in the formal labor market.

**7. Comparable to Argentina's, PBA's health outcomes have improved significantly over time; however, these averages hide large disparities.** Infant mortality rate and life expectancy at birth have been improving steadily over time and remain close to the country's averages. However, both infant and overall mortality rates vary largely across municipalities. Similarly, adults living in PBA's urban poor areas lose more years to premature mortality (YLLs) than other adults living in the province, this is particularly the case of noncommunicable diseases (NCDs) such as cardiovascular diseases and chronic respiratory diseases.<sup>1</sup> In poor rural municipalities, infant and maternal mortality remains high relative to other areas, mainly due to limited access to health services.<sup>2</sup>

**9. NCDs represent a large and increasing burden of disease in PBA, adding pressure to the provincial health system.** In 2019, the main causes of death in the province were cardiovascular diseases and tumors, representing 50 percent of deaths in the province.<sup>3</sup> The health system still needs to fully adjust to this reality and the need for continuous care.

**10. This unequal and complex health scenario is partly the result of a fragmented health delivery system which posits important challenges to the provincial government.** The public service delivery network, the main provider for poor households, is decentralized. Primary Health Care (PHC) facilities are the responsibility of the municipalities, while hospital care is a provincial responsibility. Variations in management capacity and in financial resources across local

<sup>1</sup> Report prepared by the Provincial Ministry of Health "Análisis de Situación de Salud de la Población en la Provincia de Buenos Aires", ASIS Report 2022. <https://www.ms.gba.gov.ar/sitios/media/files/2022/07/INFORME-ASIS-PBA-baja-resolucion.pdf> Latest access on October 3rd, 2022.

<sup>2</sup> ASIS Report 2022.

<sup>3</sup> Own calculations based on official data published by Dirección de Estadísticas e Información de la Salud (DEIS). Data can be found at: <http://deis.ms.gov.ar/estadisticasvital/>



governments lead to different health service performance. In addition, service delivery networks are also fragmented across subsystems: public, social security and private. Since there is limited coordination, these subsystem's structure also results in large inequalities, for instance, with respect to coverage for preventive and chronic care.

11. **This fragmentation generates inequalities in access to care.** The greater the social vulnerability of the municipality, the lesser its supply of health facilities (HFs). The most disadvantaged municipalities have half the number of PHC facilities (outpatient) per 100,000 inhabitants than the better-off ones. For inpatient care, the gap is even larger.

12. **The fragmentation also leads to poor quality of services as it limits the continuation of care, which is crucial for the management of patients with NCDs.** Referrals from PHCs to hospitals as well as counter-referrals are limited. These shortfalls weaken the system's ability to provide continuous care which depends on the possibility of connecting patients with different health professionals at different levels of care and of sharing the patients' medical records among them. For instance, for cervical cancer, there are multiple opportunities for early intervention and follow up. Still, age-standardized five-year survival for cervical cancer in Argentina (53 percent) is among the lowest in Latin America and the Caribbean<sup>4</sup>, and mainly affects women in poorest group.<sup>5</sup> The coordination across different programs and levels of care, and the availability of "on-time" data to identify women that need screening and follow-up are key to improve this outcome.

13. **To lessen these challenges the Provincial Government developed its Plan Sextenal<sup>6</sup> which in the health sector seeks to strengthen the digital health agenda, among other areas.** The Plan recognizes the role of the management and information system as a key enabling factor to enhance health processes, improve the integration and coordination of the health system, and ultimately achieve better health. As stated by the World Health Organization "an information system integrated within the institutional workflow has the potential to promote better disease management, improve quality of care, prevent complications, decrease health expenditure, and inform policies".<sup>7</sup>

14. **The provincial digital agenda<sup>8</sup> is focused on two main objectives:** (i) to contribute to the development of telemedicine and virtual communication tools to facilitate population's access to information and health consultations; and (ii) to integrate Electronic Medical Records (EMRs)<sup>9</sup> across municipalities. In 2021, the Provincial Ministry of Health (PMOH) started the implementation of EMRs in selected municipalities. As most of municipalities within the province do not have EMRs in use, the province offers to start implementation with the *Historia de Salud Integral*<sup>10</sup> (Integrated Health Record, HSI), an open-source software initially developed by the National Government. In addition, the province adopts and follows the national interoperability standards and uses the National interoperability Bus – a central structure for information exchange – to transfer relevant information to and from both HSI and other EMR systems. The province uses the national infrastructure for health record indexes, reference registries, and patient identification.<sup>11</sup>

<sup>4</sup> Five-year net survival refers to the cumulative probability of cancer patients surviving five years after diagnosis, after correction for the risk of death from other causes, which varies widely between countries, over time, by age and sex. See <https://www.oecd-ilibrary.org/docserver/6089164f-en.pdf?expires=1666012293&id=id&accname=guest&checksum=2DA0F128E24EE3737BC90C18E7946349>

<sup>5</sup> Nuche-Berenguer1 B and Sakellariou D. "Socioeconomic Determinants of Participation in Cancer Screening in Argentina: A Cross-Sectional Study". Public Health, 24 August 2021. Sec. Life-Course Epidemiology and Social Inequalities in Health. Available at <https://www.frontiersin.org/articles/10.3389/fpubh.2021.699108/full>

<sup>6</sup> Plan Provincial de Salud. Líneas Estratégicas e Indicadores para el Monitoreo de las Políticas de Gobierno en Salud de la Provincia de Buenos Aires. Mayo 2022. Also known as "Plan 6x6".

<sup>7</sup> Global strategy on digital health 2020-2025. Geneva: World Health Organization;2021. License: CC BY-NC-SA 3.0 IGO.

<sup>8</sup> Plan Estratégico. Implementación del Programa Salud Digital Bonaerense 2022-2027.

<sup>9</sup> The EMR includes not only medical records, but also computerized system(s) that support healthcare service delivery process, such as appointments, referrals, prescriptions, administrative processes, etc.

<sup>10</sup> A complete description of HSI and related technical documents can be found here: <https://www.argentina.gob.ar/salud/digital/hsi>

<sup>11</sup> See <https://www.argentina.gob.ar/salud/digital> for additional details on national infrastructure and interoperability standards



## Relationship to CPF

15. **The Project contributes to the World Bank Group’s Twin Goals of reducing poverty and promoting shared prosperity and the World Bank Green, Resilient, and Inclusive Development (GRID) framework by** improving access and quality of health services to the population not covered by health insurance in the PBA, where 6 million people live in poverty (about 57 percent of Argentina’s poor). It also contributes to increasing the resilience of health services by supporting the provision of remote health services through telemedicine.

16. **The proposed project is aligned with World Bank Group (WBG) FY19-22 Country Partnership Framework (CPF)<sup>12</sup> for the Argentine Republic discussed by the Executive Directors on April 25, 2019 and revised by the Performance and Learning Review (PLR)<sup>13</sup> on May 24, 2022.** It supports the CPF focus area 2, "Strengthening Service Delivery to Protect the Poor and Vulnerable". Specifically, it would contribute to Objective 4, "improving access to basic service delivery in vulnerable areas", by: (i) extending EMRs and thus access and continuity of care; (ii) increasing access to second opinion consultations through the telemedicine pilot; and (iii) increasing access to information and basic consultations through the teleconsultation and web-portal. Additionally, the Project contributes to objective 5, "improving human capital of vulnerable populations", by strengthening access and quality of essential services needed to protect and build human capital. Finally, the Project is also well aligned with Objective 6 of this policy area, "improving governance and transparency", by extending and integrating health information systems in the PBA.

17. **The Project would also build on the lessons learned from the Implementation of the Supporting Effective Universal Health Coverage in Argentina (P163345) and Protecting Vulnerable People against Noncommunicable Diseases Project (P133193).** The first project aims at: (i) increase effective and equitable coverage of key health services provided to the eligible population; and (ii) increase the institutional capacity of the national and Provincial ministries of health to implement mechanisms for an integrated delivery system. The second one, aims at (i) improving the readiness of public HFs to deliver higher quality Non-Communicable Diseases (NCD)-services for vulnerable population groups and expanding the scope of selected services; and (ii) protecting vulnerable population groups against prevalent NCD risk factors.

### C. Proposed Development Objective(s)

The proposed Project’s Development Objective is to improve access and quality of health services for the beneficiary population through integrating and strengthening health management and information systems.

#### Key Results (From PCN)

The key PDO results indicators for the proposed project would potentially be the following:

- i. Percentage of beneficiaries with at least one registered consultation, in an Electronical Medical Records (EMRs) interoperable system.
- ii. Number of beneficiaries with at least one “two-way digital referrals” for a selected line of care.
- iii. Number of consultations resolved through telemedicine platform.
- iv. Number of virtual second opinion consultations.

<sup>12</sup> Report No. 131971-AR, World Bank.

<sup>13</sup> Report No. 170668-AR, World Bank.



#### D. Concept Description

21. **The proposed Project would support PBA to improve health care provision by strengthening and integrating the health information system.** The Project would expand the implementation of HSI at the point of care and its functionalities and, by improving interoperability, it will integrate other EMRs across HFs and services. In addition, it would contribute to the development and implementation of telemedicine and virtual communication tools.

22. **The health management and information system is a key enabling factor to enhance health processes and ultimately improve patients' health outcomes.**

23. **The project will be structured in three components:** (i) Strengthening Electronic Medical Records/Integrated Health Records (HSI); (ii) Developing and implementing virtual tools for health provision and communication; and (iii) Project management.

24. **Component 1: Strengthening Electronic Medical Records/Integrated Health Record (HSI).** This component aims to facilitate integration, coordination, and continuation of care in an efficient and secure manner by supporting the following activities: (i) expansion of HSI across HFs; (ii) expansion of HSI's functionalities; and (iii) development of legal framework and technical solutions for municipalities that implemented other EMRs to assure interoperability with HSI (Table 1). Accurate and more complete patient information would be easily and timely shared across providers and services under a secure environment by gradually expanding HSI geographically, across HFs, and in its functionalities.

25. **The strategy for the expansion of HSI that this project would support is part of a more comprehensive and long-term government plan.** According to Plan Sextenal, the goal is to achieve the implementation of EMRs in the 135 municipalities of the province by 2027. This project would contribute to this strategy by supporting the implementation in 35 out of 135 municipalities.<sup>14</sup> The number of HFs selected to start HSI implementation is pending agreement with municipalities, however, the plan is to start in 150 HFs (out of 525 HFs) and in 40 provincial hospitals (out of 41). This strategy, while fostering a wider EMR adoption in HFs, does not close the door for the implementation of other solutions available in the market. The geographical and functional HSI expansion creates an open environment for systems' components and modules that will allow cooperation and data exchange between HSI core components and other systems.

26. **The expansion of HSI functionalities would include those relevant for patients' diagnosis and follow-up.** Specifically, this component would develop, test, and integrate four services/functionalities into HSI: (i) diagnosis services;<sup>15</sup> (ii) e-pharmacy: medicines and inputs management; (iii) two-way digital referral integrated to the appointment system; and (iv) a tool set to consolidate dataflows from different sources.

27. **Finally, to improve interoperability, through this component the province will also assist municipalities that already started implementing EMRs different from HSI.** These municipalities have their EMR homegrown development or a service contracting software. This component will support five municipalities with the development of the legal framework and technical solutions to ensure the adoption of basic information systems' quality and interoperability standards<sup>16</sup> and provide technical assistance to help the integration of their EMR systems with the HSI platform.

<sup>14</sup> Depending on the loan approval date, the project would retroactively finance the implementation in another 10 municipalities which are currently expanding HSI and will continue to do so during 2023.

<sup>15</sup> Diagnosis services refers to laboratory and radiology & images services - in public hospitals. LIS: Laboratory Information System, RIS: Radiology Information System.

<sup>16</sup> Such as SNOMED CT (Systematized Nomenclature of Medicine – Clinical Terms), Fast Healthcare Interoperability Resources (FHIR), HL7 data, functional and quality standards, and clinical exchange documents through the National Interoperability Bus.



28. **Component 2: Developing and implementing virtual tools for health provision and communication.** The aim of this component is to increase access to quality care through telemedicine. Specifically, this component would support the setting up and implementation of (Table 2): (i) A virtual health center to allow patients to access a team of doctors of basic specialties (i.e., general medicine, medical clinic, pediatrics and/or gynecology) through referral from operators following protocols. (ii) A virtual second-opinion network pilot that would extend access to specialist services and support PHCs facilities in rural areas. Depending on needs, the specialists could include oncology, diabetology, nephrology, ophthalmology, hypertension, gastroenterology, among others. The pilot would include four Health Regions, those with the lowest population density (Health Regions 1, 2, 8 and 9). At least one municipality from each of these health areas will be selected for the pilot. (iii) The design and development of a simple web portal, which includes generic information on health news, policies and recommendations, information on the availability of health services and facilities, and access to citizen’s basic information.<sup>17</sup> Although there is a National Telehealth Program with its associated regulatory framework, the province will need to enforce regulations to improve adherence to "good practices in telemedicine care".

29. **Component 3:** This component will finance the strengthening of the Implementation Agency and Sub-implementation Agency in everything related to their outstanding functions, for the management and monitoring of the project, through the provision of technical assistance (including the financing of Operating Costs), monitoring and evaluation and financial and independent technical audits if needed under the Project.

30. **Gender.** The Project would place particular emphasis on cervical cancer, which impose a high burden of disease among poor women, by fostering early diagnosis and integrated health care within the public health system. Mainly, the Project will contribute to address some of the barriers for cervical cancer screening and early diagnosis<sup>18</sup> through the expansion of EMRs at health facilities, the timely notification of results to patients, and by raising awareness and ensuring that the web portal targets women’s specific needs during implementation. To this end, Project activities and indicators will be further developed to reflect its contribution towards closing this gap.

31. **Citizen Engagement (CE).** The Project will monitor CE mainly related with telemedicine interventions and the web portal and will include mechanisms for patient satisfaction. In addition, the PMOH has a webpage with contact details for information and for citizen feedback and complaints; the Project will monitor this feedback mechanism to ensure that any project-specific issue is managed quickly, responded to, and settled.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

<sup>17</sup> This will not be a “patient” web portal, which means the patient has access to their own medical records (EMR). A patient web portal requires more resources and time for building and deploying in a secure manner.

<sup>18</sup> Main barrier for implementing screening interventions and earlier diagnosis are the lack of timely consultation; limited access to health services; and poor communication between women and their health care providers. <https://www.prb.org/resources/cervical-cancer-is-major-health-problem-in-latin-america/>



Preliminary findings suggest this operation does not entail serious risks to the environment. The Project does not finance land acquisition or infrastructure. No rehabilitation or construction of new infrastructure. The actions and interventions of the project will be carried out within existing health establishments, and will not intervene in sensitive or protected areas, nor will it carry out actions or generate effects that put biodiversity, or cultural heritage at risk. The overall risks to and potential adverse impacts on the environment are likely to be minimal or negligible. Furthermore, the Project would result in valuable outcomes and recommendations for decision making related to the improvement in health behaviors in beneficiaries. The project will finance the acquisition of computer equipment and will provide education and training for the generalized use of software and hardware in the health system. For this, it will require minor remodeling linked to the installation of hardware equipment and health equipment associated with telehealth and ECR, which will require internal cable runs that could intervene from administrative areas to laboratories, hospitalization areas, patient waiting rooms, among others, posing potential safety risks for operators, health workers, patients and companions that move through these areas. The decommissioning through programmed obsolescence of the electronic equipment that forms part of the project's investments has the potential to generate Waste Electronic Devices and Equipment (WEEE).

The main social impacts associated with the Project are positive. The scale up of the health information and management systems to expand access to health care services in the Buenos Aires Province promotes efficient use of the Digital Clinical History, and the interoperability standards will ensure the timely flow of information and articulation between health facilities. The main social risks are associated with the potential exclusion of vulnerable people from participating in the benefits of the Project, and challenges associated with the stakeholder engagement activities, that will be new to the Ministry of Health. When planning and prioritizing digital health interventions the project will consider the factors of inequality, to ensure that they are not aggravated by the introduction of digital health technologies (principle of 'do no harm'), and that access for certain population groups, such as digital illiterates or those lacking connectivity, is guaranteed by maintaining current face to face and telephone administrative interactions and by developing actions with stakeholders who work in digital literacy or in assisting vulnerable groups in their needs (both public and civil society organizations). The risks associated with potential inadequate communication and dissemination of information will be addressed through actions defined in the SEP.

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### Borrower/Client/Recipient

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### Implementing Agencies



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**APPROVAL**

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