

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

ARGENTINA

DIGITAL HEALTH AGENDA OF THE CABA HEALTH SYSTEM

(AR-L1408)

LOAN PROPOSAL

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ABBREVIATIONS	
CABA	Autonomous City of Buenos Aires
EHI	Historia de Salud Integrada (Electronic Health Record)
ESPS	Environmental and Social Performance Standards
IEHRS	Integrated Electronic Health Record System
LGBTQ+	Lesbian, gay, bisexual, transgender, queer/questioning, intersex, asexual/aromantic
MSCABA	Ministerio de Salud de CABA (CABA Ministry of Health)
PAHO	Pan American Health Organization
SIGEHOS	Sistema de Gestión Hospitalaria de CABA (CABA Hospital Management System)
SOFR	Secured Overnight Financing Rate
SSPSGER	Subsecretaría de Planificación Sanitaria y Gestión en Red del MSCABA (Office of the Undersecretary for Health Planning and Network Management of the CABA Ministry of Health)
UEPEX	Sistema de Unidades Ejecutoras de Préstamos Externos (External Loan Execution Unit System)
UPE	Unidad de Proyectos Especiales, Transformación Digital en Salud y Registro de Historia Clínica Electrónica (Special Projects Unit, Digital Transformation in Health and Electronic Health Records)

PROJECT SUMMARY
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Financial Terms and Conditions			
Borrower		Flexible Financing Facility ^(a)	
Autonomous City of Buenos Aires		Amortization period:	25 years
Guarantor		Disbursement period:	4 years
Argentine Republic		Grace period:	5.5 years ^(b)
Executing agency		Interest rate:	SOFR-based
The Borrower through its Ministry of Health		Credit fee:	^(c)
Source	Amount (US\$)	%	Inspection and supervision fee:
IDB (Ordinary Capital):	85 million	100	^(c)
Total:	85 million	100	Weighted average life:
			15.25 years
			Approval currency:
			U.S. dollar

Project at a Glance

Project objective/description: The general development objective of the project is to contribute to improving timely, comprehensive, and continuous access to public health services in the Autonomous City of Buenos Aires. The specific development objective of the project is to improve the timeliness, comprehensiveness, and quality with which the health data produced by the CABA is generated and analyzed.

Special contractual conditions precedent to the first disbursement of the loan: The borrower, through the executing agency, submits evidence of the approval and entry into force of the project Operating Regulations, under the terms and conditions previously agreed on with the Bank (paragraph 3.7).

Exceptions to Bank policies: None.

Strategic Alignment								
Objectives:^(d)	O1 <input checked="" type="checkbox"/>		O2 <input checked="" type="checkbox"/>			O3 <input type="checkbox"/>		
Areas of Operational Focus:^(e)	EO1 <input checked="" type="checkbox"/>	EO2-G <input checked="" type="checkbox"/>	EO2-D <input checked="" type="checkbox"/>	EO3 <input checked="" type="checkbox"/>	EO4 <input checked="" type="checkbox"/>	EO5 <input type="checkbox"/>	EO6 <input type="checkbox"/>	EO7 <input type="checkbox"/>

^(a) Under the terms of the Flexible Financing Facility (FN-655-1), the borrower has the option of requesting changes to the amortization schedule, as well as currency, interest rate, commodity, and catastrophe protection conversions. The Bank will take operational and risk management considerations into account when reviewing such requests.

^(b) Under the flexible repayment options of the Flexible Financing Facility, changes to the grace period are permitted provided that they do not entail any extension of the original weighted average life or the last payment date as documented in the loan contract.

^(c) The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges in accordance with the applicable policies.

^(d) O1 (Reduce poverty and inequality); O2 (Address climate change); and O3 (Bolster sustainable regional growth).

^(e) EO1 (Biodiversity, Natural Capital, and Climate Action); EO2-G (Gender Equality); EO2-D (Inclusion of Diverse Population Groups); EO3 (Institutional Capacity, Rule of Law, and Citizen Security); EO4 (Social Protection and Human Capital Development); EO5 (Productive Development and Innovation through the Private Sector); EO6 (Sustainable, Resilient, and Inclusive Infrastructure); EO7 (Regional Integration).

I. Description and Results Monitoring

A. *Background, problem addressed, and rationale*

- 1.1 **The health system of the Autonomous City of Buenos Aires (CABA) has distinctive characteristics that frame its health challenges.** CABA is one of the Argentine jurisdictions with the highest proportion of the population covered by private health insurance or social security (84% versus 64% at the national level).¹ Most residents who have exclusive public coverage belong to the lowest income deciles.² However, residents with other forms of coverage also use public services (particularly at the hospital level), and nearly half of the consultations served by CABA's public sector are made by people living outside the jurisdiction, mainly in Greater Buenos Aires.³
- 1.2 **CABA began reorganizing its public services starting in 2016, following the Integrated Health Service Delivery Network model.** This process seeks to ensure that the city's health care providers make up an integrated and coordinated network of progressive care, with the health and community action centers—of lower biomedical complexity, broad geographical reach, and preferential regionalization (with each health center having explicit responsibility for the health of the population living in a specific area of the city)—acting as the gateway to the health care network. The Pan American Health Organization (PAHO) has proposed this model to enhance timely, comprehensive, and continuous access to health care. A notable milestone in this process is that all CABA residents with exclusive public coverage are currently assigned to a primary care health team. Each of these teams is responsible for the health care of approximately 3,500 people through health personnel and uniform community coordination.
- 1.3 **The public health care system's digital transformation is one of the cornerstones of the reorganization process that CABA has been implementing.** The digital transformation of health systems has emerged as an essential component in the implementation of the Integrated Health Service Delivery Network model, because it facilitates the interconnection of services and the flow of information.^[1] CABA's public health care system has reached critical milestones in its digital transformation process, including notably: (i) the implementation of the Autonomous City of Buenos Aires Health Information System (SIGEHOS) in all primary health care and hospital outpatient settings; (ii) the implementation of an electronic appointment system; and (iii) electronic prescription and drug dispensing in all primary health care facilities.
- 1.4 **Despite these advances, the digital transformation of CABA's health system still faces challenges.** Firstly, the interactions of people with the city's public

¹ National Census of Population, Households, and Housing, 2022.

² According to estimates prepared by the authors based on the Permanent Household Survey for the fourth quarter of 2023, 67% of the population with exclusive public coverage is concentrated in the first four income deciles, compared to 19% for those with other forms of coverage.

³ Estimates by the Department of Information Systems under the Autonomous City of Buenos Aires Ministry of Health (MSCABA). Overall, one out of three patients making use of public hospital services in the city is covered by private health insurance or social security.

services are not yet digitally recorded in a comprehensive manner. In particular, SIGEHOS does not yet record information on scheduled or emergency hospital admissions, and although it has a prehospital emergency module and a telemedicine module, they are not yet integrated into the platform. In addition, there are still a significant number of health centers that are unable to integrate diagnostic imaging or laboratory reports into SIGEHOS. No CABA hospital currently integrates diagnostic imaging reports into SIGEHOS. In all, 67% of the 33 hospitals and 74% of the 46 outpatient and community health centers in CABA integrate laboratory reports. This challenge is exacerbated by the fact that much of the diagnostic equipment in city hospitals still uses analog technology. At present, 29% of diagnostic imaging equipment is directly digital, 50% has the capacity to digitize images, and 21% is analog. Secondly, the MSCABA needs to strengthen its capacity to efficiently analyze the information it generates. Thirdly, the MSCABA lacks quality control mechanisms for the digital information it collects—a process that is indispensable to properly report management activities and fed both by the daily use of management information and data analytics tools. Additionally, the Buenos Aires health system faces two particular challenges relating to the fragmentation of the Argentine health system due to sources of funding and among jurisdictions: integrating the health information of its entire population and not only those who are treated in the public sector (among other benefits, this would make data analytics more robust at the population level) while securely and efficiently sharing the information of those treated in the city, yet are residents of other jurisdictions, with the authorities responsible for managing their health.

- 1.5 **Comprehensive and continuous effective access to CABA’s public health services could be improved were its health information better integrated and produced in a timelier manner while ensuring quality.** Implementing complete digital records of clinical and diagnostic practices yields significant improvements in health management and quality of care.⁴ On the one hand, it facilitates a more comprehensive and personalized approach to care, resulting in better clinical outcomes, as it helps to reduce the fragmentation of care.^[2] On the other hand, implementing these records is associated with reduced wait times for care and greater diagnostic accuracy, which contributes to more timely and efficient care.^[3] In addition, the absence of robust information quality control mechanisms compromises the data’s accuracy and reliability, leading to errors and decisions based on incorrect or incomplete information. These errors can have significant consequences, not only for patient health but also for the overall efficiency of the health services, by increasing operating costs and unnecessarily prolonging hospitalization and treatment times.^[4] Deficits in the completeness, timeliness, and quality of health information also undermine the continuity of care, as people’s interactions with the health system become episodic and disconnected, rather than structured within a continuum of care.^[5]
- 1.6 **Programmatic approach.** To drive forward the digital transformation of health systems, the Bank considers it necessary to make balanced investments in the six dimensions of the “[Digital Health House](#)”: governance and leadership; people and culture; infrastructure; infostructure; applications and digital services; and, lastly, informed health policy and practice. In order to advance this agenda in Argentina,

⁴ The calculations of the project economic analysis ([optional link 1](#)) gauge these results for studies analyzing different dimensions of the health impact of the implementation of electronic health records.

the Bank has supported the definition of a [Roadmap for the Digital Transformation of the Health Sector](#); the development of digital public goods, such as the [Integrated Health Record](#) (applications and digital services dimension), and, through a results-based financing mechanism, the implementation of the Integrated Health Record at the jurisdictional level (infostructure-interopability dimension);⁵ and the implementation of digital imaging systems in hospitals with interoperability standards (infrastructure, infostructure, and applications and digital services dimensions).⁶ This same approach is being applied in CABA through the development of a model and plan to make the city's health services (public, social security, and private) interoperable.⁷

- 1.7 **Project strategy.** The project will consolidate the digital transformation process of the CABA health system by adopting a strategic approach that encompasses three key aspects: system interoperability, integration of clinical information, and advanced data analytics. A robust and scalable interoperability model will be designed and implemented to facilitate seamless and secure communication among the various information systems of the city's health care ecosystem and, eventually, with the systems of other jurisdictions and of the entire country. In parallel, functional modules will be developed and implemented to ensure all clinical and diagnostic information is fully and efficiently integrated into SIGEHOS. Complementing these initiatives, data analysis platforms will be developed to optimize both the clinical and operational management of the health services and the administrative and economic management of the ministry. These platforms will incorporate geospatial analysis and artificial intelligence tools, thus enabling more informed and accurate decision-making as well as a more efficient and equitable allocation of resources across administrative divisions.
- 1.8 As part of this consolidation, the project will also spearhead a process to improve the timeliness, accuracy, and quality of the information produced by the CABA public health system. It will support the city in its process of replacing obsolete or analog diagnostic equipment with modern, digital, and more energy-efficient technology that has a lower environmental impact, following a diagnostic services network logic that will optimize the time available for specialists in the analysis of images or laboratory studies, based on an artificial intelligence-assisted prioritization incorporated in some of the new pieces of equipment. In addition, a quality control mechanism for health information will be implemented to ensure data reliability.⁸ A crucial aspect of this transformation will be the democratization

⁵ Through operation "Immediate Public Health Response Project in the Context of the COVID-19 Pandemic to Contain, Control, and Mitigate its Impact on Health Service Delivery in Argentina" ([5032/OC-AR](#)), in execution (100% disbursed). Currently, 10 of the country's 24 jurisdictions use the Electronic Health Record (HER) as their electronic health record system. Within the project framework, the 24 jurisdictions of the country received financial incentives conditioned on the achievement of the targets for the registration of clinical actions performed by their public health services in an electronic health record.

⁶ Through the operation "Program for Strengthening and Integration of Health Networks in the Province of Buenos Aires (PROFIR II) ([5430/OC-AR](#)), in execution (84% disbursed). By the time the project closes, it will be expected to have achieved its goal of installing the IEHRS in 118 primary health care centers (currently installed in 73 centers) and the target that 80% of diagnostic imaging reports will be completed in a timely manner, according to standards defined by the type of imaging.

⁷ Through the knowledge and advisory service "Digital Health Strategy of the City of Buenos Aires" (AR-R0004), in execution, the output of which will be the Roadmap for the Digital Transformation in Health of CABA.

⁸ The preliminary standard established to analyze the quality of the indicators can be consulted in the project's monitoring and evaluation plan ([required link 2](#)).

of access to information, facilitating access both for the health care providers that produce it—promoting its use to improve the management of services—and for citizens—empowering them in their interaction with the health care system and promoting better self-management of their health. Table 1 shows the project’s theory of change.

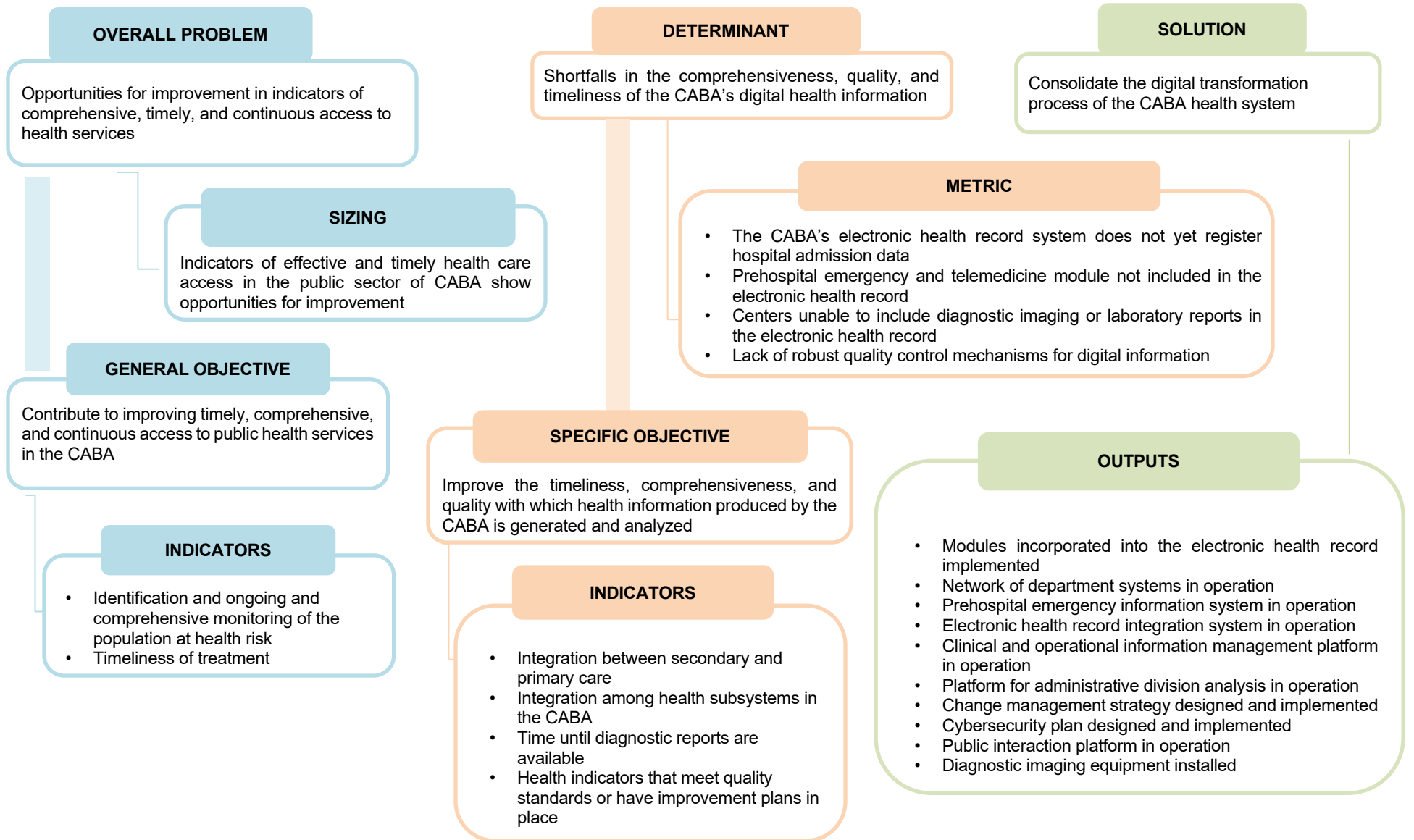
- 1.9 **Human resource development for digital transformation with a gender perspective.** In the medium term, consolidating CABA’s digital health system will require the availability of sufficient human resources with the capacity to manage health information, develop applications to use that information, or analyze and protect the information. To this end, the project includes training activities for the health care personnel who will participate in implementing the digital tools to be financed; the development of a strategic change management plan aimed at facilitating the transition to and adoption of new digital practices; and the preparation of a medium-term development plan for these resources. According to a Polo IT survey, in 2020 women held only 30% of jobs in the information and technology sector in CABA, thus evidencing a gender gap in a sector that is characterized by well-paying jobs. This gap is likely to be replicated in the digital health sector. For example, in the MSCABA 39% of staff positions requiring training in digital areas are held by women, with this disparity increasing for management positions (18%).
- 1.10 **Challenges and opportunities for health inclusion in a digital health ecosystem.** The project design recognizes that the deployment of digital tools in health brings with it challenges and opportunities for the health inclusion of certain population groups. In terms of challenges, the use of digital media as a predominant form of interaction with health services could create an access barrier for people with a low level of digital literacy or with certain types of disabilities if such services are not developed following a universal design approach.^[6] According to the Permanent Household Survey for the fourth quarter of 2023, 46% of CABA residents ages 80 and older did not regularly use the Internet, compared to 10% of the general population. In addition, the 2018 CABA Annual Household Survey found that 8.6% of residents have some form of visual impairment that cannot be corrected by using glasses. Further, the greater granularity of digital information represents both a challenge and an opportunity in terms of managing barriers to access health services. For example, the use of artificial intelligence algorithms can support information analysis and decision-making, but also discriminate against certain population groups if they are not developed following an ethical perspective. It also enables for a deeper analysis of sociocultural determinants of access to services and of health outcomes, particularly for population groups that face cultural barriers, such as LGTBQ+ persons. SIGEHOS currently records gender identity and self-identified name, but this information has not yet been leveraged.
- 1.11 **Gender and diversity actions in the framework of the project.** The project will help close gender gaps in female participation in digital health by implementing a gender action plan to promote and include women in the digital transformation of the CABA health system. The action plan will have two pillars. The first will consist of a prospective study to estimate the medium-term demand for digital health profiles in CABA, together with a strategy to promote greater female participation in this market. The second pillar will identify strategies to actively promote an

increase in the hiring of women within the framework of project implementation, taking care to ensure that these strategies do not increase the risk related to attracting and retaining digital human resources during execution, as discussed in the section on the project's risks (paragraph 2.5). The public interaction platform—one of the project's critical outputs—will be developed in compliance with accessibility standards, and the information analysis platforms will incorporate algorithms designed and implemented following data ethics principles to avoid discrimination based on gender and diversity.⁹ The project will also promote the use of information on the sociocultural determinants of health to be structured during implementation and will finance a study on the challenges and opportunities for the health inclusion of LGBTQ+ persons. The gender and diversity annex ([optional link 3](#)) provides further details on these actions.

- 1.12 **Information security and privacy.** While providing numerous benefits as set out above, the digital transformation in the city also opens up new risks in terms of information security and data privacy. The sensitive nature of medical information requires that this issue be addressed with the utmost responsibility and diligence. Accordingly, the project includes specific actions designed to safeguard data integrity and confidentiality, ranging from the design of a master plan and the implementation of strong encryption and authentication systems to the creation of strict access and data management policies. In addition, regular audit protocols will be established and security incident response plans developed. Ongoing staff training in information security and data protection will be a constant priority during project execution.

⁹ The framework will be based on the principles, recommendations, and tools set out in the [fAIR LAC](#) initiative.

Table 1. Project theory of change



- 1.13 **Lessons learned.** Under Component 1, the project design draws on lessons learned from similar digital transformation operations. A significant project in this regard is the series of investment loans “E-government Management Project in the Health Sector” (I, II, and III) in Uruguay ([3007/OC-UR](#); [4300/OC-UR](#); and [5176/OC-UR](#), respectively). This series gave rise to important lessons about basing digital health strategies on international interoperability standards and building broad stakeholder consensus. It also takes into account lessons about the importance of having a roadmap that sets a path toward health targets and a comprehensive strategy to address them, including at least six dimensions defined in the digital house used by the Bank in digital health projects, such as: Immediate Public Health Response to Contain and Control the Coronavirus and Mitigate its Impact on Service Delivery in El Salvador ([5043/OC-ES](#)) and the Program to Create Integrated Health Networks ([4726/OC-PE](#)). In addition, the Bank has extensive experience in identifying and diagnostically assessing artificial intelligence solutions to ensure that they are not biased against minority population groups, gained through the technical-cooperation research and dissemination project “Design and Execution of Pilot Projects under the fAIr LAC Initiative” ([ATN/OC-19936-RG](#)). Lastly, lessons learned from two recent operations have been included: Health Care Network Strengthening in Guyana ([5706/OC-GY](#)) and Modification of the Public Sector Modernization Programme (Loan 4920/OC-BA) and the supplementary nonreimbursable investment financing “Digital Transformation of The Queen Elizabeth Hospital” ([GRT/ER-19884-BA](#)), which resulted in the development of a best practices guide for the procurement of digital health solutions; this guide will be used in the procurement process. Component 2 incorporates lessons learned from similar operations, such as the Immediate Public Health Response Project in the Context of the COVID-19 Pandemic to Contain, Control, and Mitigate its Impact on Health Service Delivery in Argentina ([5032/OC-AR](#)), regarding the strategic planning for the procurement of equipment, through the [Investment Master Plans with a Network Approach](#) methodology, as well as the definition of technical specifications for the procurement and network-based organization of this type of equipment.
- 1.14 **IDB nonfinancial additionality and innovation.** The Bank is squarely positioned as a technical leader in digital transformation in health care at the regional level, through, inter alia, its support for the development and implementation of digital public goods, the generation and exchange of analytical and operational knowledge in this area, and the development of diagnostic and capacity-building tools to implement transformation processes and leverage data analytics. Within the framework of this operation, the IDB project team provides and will continue to provide technical support to the MSCABA in the implementation and evaluation of a set of innovations relating to the production and use of health information, including: (i) the design and launch of a strategy to promote the interoperability of information systems between the public, social security, and private health subsectors; (ii) the reengineering of management processes for the diagnostic imaging network to enable more efficient operation by using, among other strategies, artificial intelligence tools to support the process of prioritizing analysis by level of health risk; and (iii) the use of structured information to improve health management by implementing continuous improvement cycles for the early detection and monitoring of people with hypertension and diabetes, which are considered tracer diseases of the health services network. In addition, the Bank

will provide technical support to the ministry to strengthen its competencies for project execution, by, among other lines of action: (i) developing a management plan for the human resources responsible for its execution; (ii) strengthening its procurement management and financial administration capacity in compliance with IDB policies; and (iii) developing technical specifications for the procurement of goods and services based on best practices for the sector.

- 1.15 **Coordination with PAHO.** The IDB's position as a regional technical leader in the digital transformation in health care is buttressed by its close collaboration in this area with PAHO. As mentioned above, the Bank has been contracted by CABA to provide advisory and knowledge services through the operation "Digital Health Strategy of the City of Buenos Aires," the main output of which will be the Roadmap for the Digital Transformation in Health of CABA, the development of which is a critical input for preparing the project. This roadmap will be developed in technical collaboration with PAHO.
- 1.16 **Strategic alignment.** The project is consistent with the IDB Group Institutional Strategy: Transforming for Scale and Impact (CA-631) and aligns with the objectives of: (i) reducing poverty and inequality by focusing on strengthening the institutional capacity of the CABA government in health management and enhancing the human capital formation of its citizens (particularly those with exclusive public coverage) by promoting improvements in their timely, comprehensive, and continuous access to health services; and (ii) addressing climate change by acquiring computer hardware with energy efficiency labeling, replacing analog diagnostic imaging equipment with digital equipment (more energy efficient and less polluting), and launching a pilot project to use solar panels to save or recover energy at two health centers (approximately 200 solar panels). The project is also aligned with the following operational focus areas: (i) biodiversity, natural capital, and climate action; (ii) gender equality and inclusion of diverse population groups; (iii) institutional capacity, rule of law, and citizen security; and (iv) social protection and human capital development.
- 1.17 The project is aligned with the IDB Group Country Strategy with Argentina 2021-2023 (GN-3051),¹⁰ contributing to strategic objective 1.2 to "strengthen the health system." The project is consistent with the Health Sector Framework Document (GN-2735-12), in that it will contribute to the improved organization and quality of CABA's health service delivery, and with the Climate Change Sector Framework Document (GN-2835-13), by promoting the approach to environmental and climate change issues with contributions in terms of energy efficiency and renewable energy.
- 1.18 **Paris alignment.** This operation has been analyzed using the [Joint Multilateral Development Bank Assessment Framework](#) for Paris Alignment and the [IDB Group Paris Alignment Implementation Approach](#) (GN-3142-1). It has been found to be: (i) aligned with the adaptation target of the Paris Agreement and (ii) aligned with the mitigation target of the Paris Agreement based on a specific analysis relating to a data center. Alignment was based on consideration of the following issues: (i) as per the project Operating Regulations, Energy Star or an

¹⁰ Effective until 30 June 2025 under the Extension of the Transition Period of the Country Strategy with Argentina (GN-3051-2).

equivalent energy efficiency labeling is required for all equipment purchased for the data center; and (ii) cooling equipment will include energy efficiency criteria and use less carbon-intensive cooling gases. Therefore, the operation is not inconsistent with national climate targets, and no committed emissions or transition risks are identified.

- 1.19 **Climate and green finance.** Climate finance (7.67%) and green finance (6.94%) account for 14.61% of the resources contributed by the IDB. These resources will be used for: (i) computer stations that bear energy efficiency labels; (ii) a pilot project to install 200 solar panels to save or recover energy at two health centers; and (iii) medical diagnostic equipment that reduces hazardous content and minimizes waste disposal.

B. Objectives, components, and cost

- 1.20 **Objectives.** The general development objective of the project is to contribute to improving timely, comprehensive, and continuous access to public health services in CABA. The specific development objective of the project is to improve the timeliness, comprehensiveness, and quality with which health data produced by the city is generated and analyzed.
- 1.21 **Component 1. Development and implementation of digital health tools (US\$59.65 million).** This component will finance the procurement of consulting and nonconsulting services and computer hardware with energy efficiency certification to develop the following outputs, among others: (i) new SIGEHOS features in operation;¹¹ (ii) one integrated electronic health record system (IEHRS) to manage the interoperability of electronic records between the public, social security, and private subsectors; (iii) management systems for diagnostic support studies integrated with SIGEHOS and in operation;¹² (iv) health data management and analysis platform in operation; (v) features of the platform for the analysis of administrative divisions and social determinants of health in operation;¹³ (vi) emergency information system integrated with SIGEHOS and in operation; (vii) features of the health administrative management system in operation;¹⁴ (viii) studies and evaluations on project monitoring and evaluation, and an exploratory study on challenges and opportunities for the health inclusion of

¹¹ Planned features: (1) outpatient manager; (2) outpatient electronic health record; (3) on-call electronic health record; (4) episodic visit manager; (5) inpatient electronic health record; (6) immunization electronic health record; (7) prescription interoperability in electronic health record; (8) internal master charts; and (9) district master charts.

¹² Planned features: (1) laboratory study interoperability; (2) laboratory reporting system; (3) imaging management and reporting system; (4) application programming interfaces; (5) hemotherapy reporting system; and (6) pharmacy reporting system.

¹³ Planned features: (1) referral and counter-referral; (2) visualization tool and network design; (3) epidemiological surveillance; (4) geographical representation; (5) social determinants; (6) chronic noncommunicable diseases; and (7) patient automation and active population balancing.

¹⁴ Planned features: (1) enrollments; (2) cost recovery; (3) document manager; (4) document digitizer; (5) notification manager; (6) billing rules engine; (7) human resources manager; (8) endowments; (9) vacant positions.

LGBTQ+ persons completed;¹⁵ (ix) public interaction platform with accessibility standards for persons with disabilities in operation; (x) action plan for the promotion and inclusion of women in digital transformation of the CABA health system implemented; (xi) health information security plan approved; (xii) change management plan for the implementation of the project designed; (xiii) computer stations bearing energy efficiency labels installed; and (xiv) station with energy efficiency labeling for the Emergency Medical Care System data center installed.¹⁶

- 1.22 **Component 2. Strengthening of CABA's network of public diagnostic services (US\$22.5 million).** This component will finance the procurement and installation of digital diagnostic equipment, including an estimated 3 tomographs, 2 mammographs, 1 magnetic resonance imaging machine, 35 x-ray machines, 3 radiographs, and 4 angiographs. Building and electrical adaptation services may be included to install the equipment, which could be less than what is usually required, since obsolete or analog equipment is being replaced. The component also plans to finance a pilot project for a solar panel system at two CABA health centers where digital diagnostic equipment will be installed.¹⁷
- 1.23 **Administration and audit (US\$2.85 million).** The project will finance expenses associated with the operation's execution, such as (i) administration, (ii) audit, and (iii) project fiduciary coordination.

C. Key results indicators

- 1.24 Achievement of the general development objective will be measured by five indicators: (1) percentage of the CABA population age 18 and older with exclusive public coverage and diabetes mellitus type 2 identified; (2) percentage of the CABA population age 18 and older with exclusive public coverage and diabetes mellitus type 2 with annual monitoring; (3) percentage of the CABA population age 18 and older with exclusive public coverage and hypertension identified; (4) percentage of the CABA population age 18 and older with exclusive public coverage and hypertension with annual monitoring; and (5) average time between a mammogram and respective follow-up visit in the CABA public sector. Conceptualizing diabetes mellitus type 2, hypertension, and breast cancer as tracer diseases of the health services network, indicators 1 and 3 cover the dimension of the comprehensiveness of care between clinical and diagnostic support services; indicators 2 and 4, the dimension of continuity of care through

¹⁵ Planned studies and evaluations: (1) research study during implementation; (2) study of the impact of digital health tools on the redesign of health services; (3) evaluation on rapid-cycle improvement to improve the screening and monitoring of patients with diabetes and hypertension; (4) study on challenges and opportunities for the health inclusion of LGBTQ+ persons in a digital health ecosystem; (5) project monitoring study; and (6) midterm evaluation.

¹⁶ The Emergency Medical Care System infrastructure already exists. The Emergency Medical Care System, under the responsibility of the MSCABA, serves the city's entire population.

¹⁷ The pilot project is included in the operation with the understanding that any digitization project entails higher energy consumption beyond the efficiencies considered in the procurement of equipment. The project will generate energy efficiencies in existing processes while creating new energy requirements, by incorporating digitization to processes that are currently manual or analog. Preliminarily, it is estimated that the pilot project will entail the procurement of 200 solar panels.

longitudinal tracking of patients; and indicator 5, the dimension of timeliness in diagnosis.¹⁸

- 1.25 Achievement of the specific development objective will be measured by four indicators: (1) hospital inpatient episodes with digital discharge summaries in the integrated health record of SIGEHOS; (2) health institutions or support services of the private or social security subsystems with effective exchange of at least one type of feature through the Integrated Electronic Health Record System (IEHRS); (3) average time between a mammogram in the CABA public sector and the availability of the report in SIGEHOS; and (4) percentage of the MSCABA health indicators that exceeded quality standards or have a quality improvement plan. Indicators 1 and 2 cover the dimension of comprehensiveness of information, the former between the primary and secondary level of care (health and community care centers and general hospitals) and the latter between health financing subsystems; indicator 3, the dimension of timeliness of information availability; and indicator 4, the dimension of quality of health information.
- 1.26 **Beneficiaries.** The project will directly benefit the population that regularly uses the CABA public health system, estimated at more than 1 million people (a little more than half a million are CABA residents). According to the 2022 census, women account for 49.8% of CABA residents with exclusive public coverage. According to SIGEHOS records, 0.1% of the CABA population currently identifies as nonbinary. Indirectly, the project will also benefit the 2.1 million CABA residents who have social security or prepaid health insurance coverage and the 3 million people in Greater Buenos Aires who receive episodic care in CABA each year, whose health information will be available for consultation by their respective health institutions if they agree to interoperate with SIGEHOS through the IEHRS.¹⁹
- 1.27 **Long-term impact and scalability.** The project will contribute to making all health information of the population with exclusive public coverage that is regularly treated in CABA's public sector available both for health care at the individual level and for anonymized use to improve the management of public health services. CABA's data architecture has been and will continue to be structured on the basis of international standards, which in the future will enable the interoperability of its health information system with that of other jurisdictions in the country and with the national government. Through the IEHRS, the project also lays the foundation for and initiates the process of interoperability of health information between the public, social security, and private subsectors—an essential milestone to maintain the completeness of the health information of those who receive care in multiple subsectors and to have complete information available on the CABA resident

¹⁸ Because of their prevalence in the population and their level of disease burden, hypertension, diabetes mellitus type 2, and breast cancer are often chosen in Argentina as tracers of the health services network. As a whole, chronic noncommunicable diseases, including these three pathologies, were responsible for 60.8% of the life years lost prematurely in Argentina in 2021, according to estimates by the Institute for Health Metrics and Evaluation. In order to promote the program's consistency with the Argentine Ministry of Health's oversight role, indicators 1 to 4 replicate at the CABA level a subset of the disbursement-linked indicators stipulated at the federal level under the loan Based on Results, "First Individual Operation of the Program for Integration of the Argentine Health System ([5744/OC-AR](#)), executed by the Argentine Ministry of Health.

¹⁹ The project's direct and indirect beneficiaries account for 2.2% and 11%, respectively, of Argentina's population.

population for data analysis at the city level. This process is also aligned with the Pan-American Highway for Digital Health initiative, jointly promoted by PAHO and the IDB, to facilitate the cross-border exchange of health information.

- 1.28 As a result of the project, CABA will have timelier, integrated, and quality information. The project will also initiate a process to use this information to improve health management, targeting key areas such as the identification and monitoring of people with hypertension and diabetes and the reduction of the average time between a mammogram and the availability of the results for a follow-up consultation. Going forward, the project's potential impact will depend on whether having this information available can drive sustainable and scalable change in health care processes and in the culture of using data for decision-making. To promote this change, one of the project outputs is the development of a change management strategy, which will produce recommendations to facilitate the transformation of processes and organizational culture.
- 1.29 **Cost-benefit analysis.** Based on specific evidence for CABA, the economic analysis ([optional link 1](#)) quantifies the incremental benefits derived from the project investments, including: (i) productivity gains from reduced morbimortality; (ii) gains from the implementation of care lines associated with the early detection and management of primary care-sensitive conditions with the implementation of digital tools; and (iii) operational gains from the implementation of a digital transformation. The analysis quantifies the disability-adjusted life years that can be saved as a result of access through investments in digital health as well as operational savings through decreases in the number of repeat diagnostic images taken, the number of avoidable hospital admissions, patient length of stay in the hospital, and the rate of medical errors. In the baseline scenario, with conservative assumptions in terms of the effectiveness of the interventions, over a four-year horizon, and using a 3% discount rate,²⁰ the range of the benefit-cost ratio is 1.36. The project's total internal rate of return is 53%. In addition, sensitivity analyses show that the benefit-cost ratio is greater than 1 in most cases, even in the least favorable scenarios.

²⁰ The economic analysis ([optional link 1](#)) presents a justification for the use of this discount rate in this project and a sensitivity analysis using higher rates.

II. Financing Structure and Main Risks

A. Financing instrument

- 2.1 The operation will be structured as a specific investment loan, since its scope and costs are defined and its components cannot be divided without affecting its logic. The operation amount will be up to US\$85 million from the Bank's Ordinary Capital.

Table 2.1 Estimated project costs (US\$)

Components	IDB Total	%
Component 1. Development and implementation of digital health tools	59,650,000	70.18
1.1 New SIGEHOS features	8,906,770	10.47
1.2 IEHRS	22,970,000	27.02
1.3 Management system for diagnostic support studies	10,950,000	12.82
1.4 Health data management and analysis platform	2,570,000	3.02
1.5 Platform for the analysis of administrative divisions and social determinants of health	198,000	0.23
1.6 Emergency information system	130,000	0.15
1.7 Health administrative management system	750,230	0.88
1.8 Studies and evaluations	720,000	0.84
1.9 Public interaction platform	1,950,000	2.29
1.10 Action plan for the promotion and incorporation of women in digital transformation	150,000	0.17
1.11 Health information security plan	870,000	1.02
1.12 Change management plan	2,945,000	3.46
1.13 Computer stations bearing energy efficiency labels	6,540,000	7.69
Component 2. Strengthening of CABA's network of public diagnostic services	22,500,000	26.47
2.1 Digital tomographs	4,720,000	5.55
2.2 Digital mammographs	900,000	1.05
2.3 Digital magnetic resonance imaging machines	1,800,000	2.11
2.4 Digital x-ray machines	8,650,000	10.17
2.5 Digital radiographs	1,800,000	2.11
2.6 Angiographs	4,330,000	5.09
2.7 Renewable energy pilot project	300,000	0.35
Administration and audits	2,850,000	3.35
Total	85.00	100

* The amounts at output level for the components are indicative.

Table 2.2 Preliminary annual disbursement schedule (US\$ millions)

Source	2025	2026	2027	2028	Total
IDB	35.84	28.00	12.78	8.38	85.00
%	42.2	32.9	15	9.9	100

B. Environmental and social risks

- 2.2 In accordance with the IDB's Environmental and Social Policy Framework, the operation's environmental and social impact category was classified as "C," and both the environmental and social risk rating and the disaster and climate change risk classification were classified as "low," since it is expected to have minimal or no negative environmental or social impacts.
- 2.3 The Environmental and Social Performance Standards (ESPS) triggered for the operation are ESPS 1 (Assessment and Management of Environmental and Social Risks and Impacts), ESPS 2 (Labor and Working Conditions), and ESPS 10 (Stakeholder Engagement). The borrower's environmental and social management system includes the socioenvironmental and health and safety procedures necessary to carry out activities pursuant to the ESPSs applicable to this operation. In accordance with ESPS 1, an environmental and social management plan will be developed prior to the start of works (e.g., occupational health and safety plan and waste management plan) for the Component 2 pilot project that includes the installation of 200 solar panels at 2 health centers.
- 2.4 The measures contained in this operation will be fully aligned with: (i) the IDB Group's Measures to Address the Risk of Forced Labor in the Supply Chain of Solar Panels with Silicon Components (GN-3062-1); (ii) the new applied requirements of the IDB's Environmental and Social Policy Framework (GN-2965-3); and (iii) the IDB's procurement policies (GN-2349-15, GN-2350-15).

C. Fiduciary risks

- 2.5 An analysis using the IDB's Institutional Capacity Assessment Platform (ICAP) found that the executing agency has a partially satisfactory institutional capacity for execution, since it has no recent experience in managing projects with international financing. Two medium-high fiduciary risks were identified in this analysis: (i) a lack of trained and sufficient personnel in the fiduciary area could lead to delays in the procurement and financial management processes and thus in execution; and (ii) if there are no processes and manuals that clearly define the coordination mechanisms between the parties involved in execution, the deadlines foreseen in the planning could be extended. The first risk will be mitigated by contracting personnel with prior experience in the execution of programs with international financing, preferably with experience in IDB programs. Existing personnel will also be trained in financial management policies, procurement, the use of the External Loan Execution Unit System (UEPEX), and the Procurement Plan Execution System. The second risk will be mitigated by including these manuals in the project Operating Regulations, where the fiduciary circuits and processes are clearly detailed.

D. Other key risks

- 2.6 Three additional medium-high risks were identified: (i) high turnover of the personnel in charge of designing and implementing the self-developed digital solutions could delay execution; (ii) if national social security authorities or medical companies with a high number of covered persons are unwilling to have their electronic health records interoperate, then the level of achievement for the

outcome indicator relating to the integration of information between subsystems that provide services in CABA would be lower; and (iii) if the project interventions create new vulnerabilities in the network due to insecure integration and interoperability among different information systems of different health institutions, then the risk of sensitive data leakage or even malware propagation would increase. To mitigate these risks it is respectively proposed to: (i) prepare a human resources management plan for project execution to be included in the project Operating Regulations prior to the kickoff workshop; (ii) provide nonmonetary incentives to social security or private institutions that agree to interoperate with the public subsector, including in the costing of the IEHRS; and (iii) develop and launch a systems security plan as an output of Component 1 (the scope of which is expanded in paragraph 1.12) during the first year of project execution.

- 2.7 The project's sustainability is based on the fact that digital transformation not only introduces new technologies, but also brings about a profound change in the operational and management processes within the MSCABA's services. This change will be implemented through change management strategies and reengineering processes that optimize and redefine existing practices, guided by productivity and efficiency indicators. As these new processes are integrated and prove their value in terms of results and service quality, dependence on them will increase, making a return to traditional methods unlikely and often unfeasible. This ensures that the tangible benefits obtained will continue to drive the transformation even after the financing is completed, thus locking in long-term sustainability. The MSCABA budget also regularly includes a specific line item (3.3.3) for the maintenance, repair, and purchase of spare parts for equipment (hardware and diagnostic equipment) such as the equipment to be procured under the project. The MSCABA uses the [World Health Organization's guidelines](#) for budget planning in this line item. The aim of the Human Resources Management Plan is to attract and retain the human resources necessary for the development and implementation of the digital tools foreseen in the project in an efficient manner, either through direct hiring or through firms. Given that the project will expand and consolidate a digital transformation process already initiated by the city, the MSCABA has a human resources base that will be in charge of managing these tools at the end of the project. To minimize the need for hiring additional human resources, the plan will analyze the possibilities of internal reorganization of current CABA staff prior to the identification of new resources to be hired. The city has a training platform that includes general and specific digital literacy courses for specific topics, which will be used as part of the change management activities to close digital gaps among ministry officials.

III. Implementation and Management Plan

A. *Summary of implementation arrangements*

- 3.1 **Borrower.** The Autonomous City of Buenos Aires (CABA) will be the borrower.
- 3.2 **Guarantor.** The Argentine Republic will be the guarantor of the borrower's financial obligations in accordance with the policy on guarantees required from borrowers (GP-104-2) for loans to subnational entities.

- 3.3 **Executing agency.** The executing agency will be the borrower, through the MSCABA. Responsibility for overall project coordination will fall to the Office of the Undersecretary for Health Planning and Network Management (SSPSGER) attached to MSCABA, through its Special Projects, Digital Transformation in Health, and Electronic Health Records Unit (UPE).²¹ The UPE will rely on the Office of the Undersecretary for Health System Administration to perform administrative, accounting, and fiduciary processes.
- 3.4 In order to manage the technical quality of the project outputs, the UPE will coordinate with the Health Information Systems Administration of the SSPSGER and the Operations Management Office of Health Technology Assessment and Planning, an agency of MSCABA's Office of the Undersecretary for Hospital Care.
- 3.5 The UPE will be responsible for project coordination and will have coordinators for each digital output, who will work in a matrix with the rest of the MSCABA line areas involved in project execution.²²
- 3.6 **Project Operating Regulations.** Project execution will be governed by the provisions set out in the loan contract and in the project Operating Regulations, which will include at least: (i) the results matrix; (ii) the project's organizational structure, coordination mechanism among the actors involved, and the institutional relations diagram; (iii) the description of the responsibilities of each actor involved in the project, as well as the coordination functions within the UPE; (iv) the technical and operating arrangements for project execution; (v) the reporting protocols and information flow; and (vi) the outcome evaluation programming, monitoring, and evaluation mechanism.
- 3.7 **Special contractual conditions precedent to the first disbursement of the loan. The borrower, through the executing agency, submits evidence of the approval and entry into force of the project Operating Regulations, under the terms and conditions previously agreed on with the Bank.** This condition is necessary to ensure that the executing agency has detailed regulations in place to execute the program that sets out the necessary guidelines and responsibilities of each of the actors involved.
- 3.8 **Retroactive financing.** In accordance with the Bank Policy on Retroactive Financing and Advance Procurement (GN-2259-1/OP-507), the Bank may retroactively finance against the loan proceeds up to US\$3,900,000 (4.6% of the proposed loan amount) in eligible expenditures incurred by the borrower prior to the date of loan approval for: (i) goods and nonconsulting services relating to medical equipment; and (ii) individual consulting services to start developing the critical digital health outputs, provided that requirements substantially similar to those set out in the loan agreement have been met. Such expenditures must have been incurred on or after 8 August 2024 (project profile approval date) but may under no circumstances include expenditures incurred more than 18 months prior to the approval date of the loan by the Bank's Board of Executive Directors.

²¹ MSCABA also uses the acronym UPETDESRHCE when referring to the UPE.

²² In line with this organization, full-time personnel will be hired with experience in executing projects with international financing to strengthen the Office of the Undersecretary for Health System Administration.

Annex III includes a link to the detailed description of the goods, nonconsulting services, and consulting services considered for retroactive financing.

- 3.9 **Fiduciary agreements and requirements.** The guidelines for financial management and procurement execution that will apply to the program are explained in Annex III.
- 3.10 **Procurement.** Procurements financed, in whole or in part, with loan proceeds will be conducted in accordance with the Policies for the Procurement of Goods and Works Financed by the IDB (GN-2349-15) and Policies for the Selection and Contracting of Consultants Financed by the IDB (GN-2350-15).
- 3.11 **Maintenance.** The executing agency will be responsible for reporting to the Bank every six months on compliance with the warranty and maintenance conditions of the hardware and diagnostic equipment procured under the project.²³ Within the framework of the output “features of the health administrative management system in operation,” the investment master plans with network approach methodology will be operationalized and linked to the procurement and maintenance processes for clinical diagnostic support equipment, which will enable a more strategic management of this type of equipment.
- 3.12 **Financial management.** Loan proceeds may be disbursed in the form of advances, reimbursements, and/or direct payments in accordance with the Financial Management Guidelines for IDB-financed Projects (OP-273-12). For advances of funds, disbursements will be made based on a financial plan to cover the program’s liquidity needs for up to six months. The minimum percentage required to replenish advances of funds will be 80%. To manage the loan funds, the executing agency will open two bank accounts, one in U.S. dollars and the other in Argentine pesos, both for exclusive program use. The UEPEX will be used as the financial administration system.
- 3.13 **Financial audits.** During execution, the executing agency will submit the annual audited financial statements for the project, under the terms required by the Bank’s policies (OP-273-12). These audited financial statements will be submitted within 120 days after the end of the fiscal year. The project’s closing audit reports will be submitted within 120 days after the end of the disbursement period or any extensions thereof. Based on the terms of reference agreed on with the Bank, the audit may be conducted by an independent, Bank-eligible audit firm.

B. Summary of arrangements for monitoring results

- 3.14 **Monitoring arrangements.** The main monitoring mechanism for reporting project results will be the progress monitoring report, for which the main sources of information will be the semiannual progress reports, to be submitted by the executing agency to the Bank within 60 days after the end of each six-month period, and the risk management plan. The main mechanism for monitoring the status of activities and achievement of the planned outputs will be the multiyear

²³ The MSCABA has a hardware management plan.

execution plan. An updated version of the multiyear execution plan will be discussed at the project's bi-monthly's technical monitoring meetings.

- 3.15 **Arrangements for evaluation.** The project evaluation strategy will assess the program's contribution to the achievement of the general and specific objectives, measured through its results indicators. For these purposes, an impact evaluation will be conducted based on the synthetic control method using the information available in the Results Matrix. For the purpose of attributing the observed results to program intervention, this analysis will be supplemented with qualitative evidence and a review of the theory of change supported by relevant evidence of the effectiveness of similar interventions in comparable contexts.
- 3.16 The monitoring and evaluation plan ([required link 2](#)) presents in more detail the arrangements for project monitoring and evaluation.

Development Effectiveness Matrix		
Summary		AR-L1408
I. Corporate and Country Priorities		
Section 1. IDB Group Institutional Strategy Alignment		
Operational Focus Areas	<ul style="list-style-type: none"> -Biodiversity, natural capital, and climate action -Gender equality and inclusion of diverse population groups -Institutional capacity, rule of law, citizen security -Social protection and human capital development 	
[Space-Holder: Impact framework indicators]		
2. Country Development Objectives		
Country Strategy Results Matrix	GN-3051	Strategic Objective 1.2. Strengthen the health system
Country Program Results Matrix	GN-3207-3	The intervention is included in the 2024 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability		Evaluable
3. Evidence-based Assessment & Solution		10.0
3.1 Program Diagnosis		2.5
3.2 Proposed Interventions or Solutions		3.5
3.3 Results Matrix Quality		4.0
4. Ex ante Economic Analysis		10.0
4.1 Program has an ERR/NPV, or key outcomes identified for CEA		1.5
4.2 Identified and Quantified Benefits and Costs		3.0
4.3 Reasonable Assumptions		2.5
4.4 Sensitivity Analysis		2.0
4.5 Consistency with results matrix		1.0
5. Monitoring and Evaluation		9.5
5.1 Monitoring Mechanisms		4.0
5.2 Evaluation Plan		5.5
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood		Medium High
Environmental & social risk classification		C
IV. IDB's Role - Additionality		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)	Yes	Budget, Treasury, Accounting and Reporting. Procurement: Information System.
Non-Fiduciary		
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project	Yes	AR-R0004

Evaluability Assessment Note: The document presents an investment project of US\$ 85 million. The general objective is to contribute to improving timely, comprehensive, and continuous access to public health services in the Autonomous City of Buenos Aires (CABA, its Spanish acronym) in Argentina. The specific objective is to enhance the generation and analysis of health information in the City. The project will finance technological solutions for the integration of information systems and data analysis. Additionally, it will fund the replacement of obsolete or analog diagnostic equipment with digital technology, enabling the seamless integration of diagnostic reports into the City's health information system.

The diagnosis is adequate and supported by international evidence. The main issue identified lies in the existence of opportunities to improve comprehensive, timely, and continuous access to health services in the City. To seize these opportunities, it is essential to reduce a set of barriers to the digital transformation of the health system: deficiencies in the integration of the different modules of health information systems, lack of coordination between actors from the public, social security, and private sectors, and the obsolescence of part of the diagnostic equipment.

The results matrix is consistent with the vertical logic of the operation. Reasonable, well-specified, and adequate impact, outcome, and product indicators are presented to measure the achievement of the general and specific objectives. The evaluation of the results will be carried out through a comprehensive evaluation approach called "implementation research," which includes several methods, including a special type of RCTs (pragmatic RCTs). However, the details of some of these evaluations are yet to be defined. The cost-benefit analysis shows that the investment is socially profitable at a discount rate appropriate for this type of investment.

The project received an Environmental and Social classification of Category C, as the financed interventions are expected to cause minimal or no negative environmental and social impacts. The project has a global medium-high risk rating, with five risks identified as high or medium-high. These include: high turnover of personnel in charge of digital solutions and lack of trained staff for fiduciary tasks; potential reluctance of private actors to implement the desired interoperability; emergence of information vulnerabilities due to system integration; and lack of clear processes for necessary coordination, which could delay the project. Mitigation measures have been proposed for all these risks.

RESULTS MATRIX¹

PROJECT OBJECTIVE:	The general development objective of the project is to contribute to improving timely, comprehensive, and continuous access to public health services in the Autonomous City of Buenos Aires (CABA). Its specific development objective is to improve the timeliness, comprehensiveness, and quality with which the health data produced by the CABA is generated and analyzed.
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GENERAL DEVELOPMENT OBJECTIVE

Indicator	Unit of measure	Baseline	Baseline year	Target	Target year	Means of verification	Attribute measured by the indicator
General development objective: Contribute to improving timely, comprehensive, and continuous access to public health services in CABA							
1. Percentage of the CABA population age 18 and older with exclusive public coverage and diabetes mellitus type 2 identified	Percentage	23	2024	27.5	2028	SIGEHOS (CABA Hospital Management System)	<u>Comprehensiveness</u> : coordination between clinical, community health, and department diagnostic support services
2. Percentage of the CABA population age 18 and older with exclusive public coverage and diabetes mellitus type 2 with annual monitoring	Percentage	12	2024	16.5	2028	SIGEHOS	<u>Continuity of care</u> : through the longitudinal tracking of the person
3. Percentage of the CABA population age 18 and older with exclusive public coverage and hypertension identified	Percentage	11.5	2024	16	2028	SIGEHOS	<u>Comprehensiveness</u> : coordination between clinical, community health, and department diagnostic support services
4. Percentage of the CABA population age 18 and older with exclusive public coverage and hypertension with annual monitoring	Percentage	7	2024	11.5	2028	SIGEHOS	<u>Continuity of care</u> : through the longitudinal tracking of the person
5. Average time between a mammogram and respective follow-up visit in the CABA public sector	Days	37	2024	30	2028	SIGEHOS	<u>Timeliness</u> of care

¹ The monitoring and evaluation annex presents the methodology for constructing the indicators relating to the development objectives, the information used to construct their baselines, and the justification for setting their targets.

SPECIFIC DEVELOPMENT OBJECTIVE

Indicator	Unit of measure	Baseline	Baseline year	2025	2026	2027	2028	End of project	Means of verification	Attribute
Specific development objective: Improve the timeliness, comprehensiveness, and quality with which city-produced health information is generated and analyzed										
1. Hospital inpatient episodes with digital discharge summaries in the integrated health record of SIGEHOS	Percentage	0	2024	0	5	10	20	20	SIGEHOS	<u>Completeness of information</u> between primary and secondary care of the public system
2. Health institutions or support services of the private or social security subsystems with effective exchange of at least one type of feature through the Integrated Electronic Health Record System (IEHRS)	Number	0	2024	0	1	7	15	15	IEHRS	<u>Completeness of information</u> among health subsystems in the CABA
3. Average time between a mammogram in the CABA public sector and the availability of the report in the electronic health records of SIGEHOS in the last 12 months	Days	15	2024	15	14	12	11	11	SIGEHOS	<u>Timeliness</u> of health information
4. Percentage of CABA Ministry of Health (MSCABA) health indicators that exceeded quality standards or had a quality improvement plan	Percentage	0	2024	0	4	18	30	30	MSCABA report	<u>Quality</u> of health information.

OUTPUTS

Indicator	Unit of measure	Baseline	Baseline year	2025	2026	2027	2028	End of project	Means of verification	Comments
Component 1: Development and implementation of digital health tools										
1. New SIGEHOS features in operation ²	Features	0	2024	2	3	3	1	9	SIGEHOS	
2. Integrated Electronic Health Record System (IEHRS) in operation	System	0	2024	0	1	0	0	1	IEHRS	
3. Management systems for diagnostic support studies integrated with SIGEHOS and in operation ³	Systems	0	2024	1	1	2	2	6	SIGEHOS	
4. Health data management and analysis platform in operation	Platform	0	2024	0	1	0	0	1	Platform analysis reports	
5. Features of the platform for the analysis of administrative divisions and social determinants of health in operation ⁴	Features	0	2024	0	2	2	3	7	Platform reports	
6. Emergency information system integrated with SIGEHOS and operational	System	0	2024	0	1	0	0	1	Emergency system reports	
7. Features of the health administrative management system in operation ⁵	Features	0	2024	2	2	3	2	9	Administrative management system reports	

² Planned features: (1) outpatient manager; (2) outpatient electronic health record; (3) on-call electronic health record; (4) episodic visit manager; (5) inpatient electronic health record; (6) immunization electronic health record; (7) prescription interoperability in electronic health record; (8) internal master charts; and (9) district master charts.

³ Planned features: (1) laboratory study interoperability; (2) laboratory reporting system; (3) image management and reporting system; (4) pathological anatomy information system; (5) hemotherapy reporting system; and (6) pharmacy reporting system.

⁴ Planned features: (1) referral and counter-referral; (2) visualization tool and network design; (3) epidemiological surveillance; (4) geographical representation; (5) social determinants; (6) chronic noncommunicable diseases; and (7) patient automation and active population balancing.

⁵ Planned features: (1) enrollments; (2) expense recovery; (3) document manager; (4) document digitizer; (5) notification manager; (6) billing rules engine; (7) human resources manager; (8) endowments; (9) vacant positions.

Indicator	Unit of measure	Baseline	Baseline year	2025	2026	2027	2028	End of project	Means of verification	Comments
8. Studies and evaluations completed ⁶	Reports	0	2024	1	1	2	2	6	Reports of studies or evaluations	
9. Public interaction platform with accessibility standards for persons with disabilities in operation	Platform	0	2024	0	0	0	1	1	Onsite testing of the website, with a disability perspective	Output linked to alignment with the diversity perspective (persons with disabilities)
10. Action plan implemented for the promotion and incorporation of women in digital transformation of the CABA health system	Plan	0	2024	0	0	1	0	1	Consultant report approved by the MSCABA	Output linked to alignment with the gender perspective
11. Health information security plan approved	Plan	0	2024	1	0	0	0	1	Consultant report	
12. Change management plan for the implementation of the project designed	Plan	0	2024	1	0	0	0	1	Consultant report	
13. Computer stations bearing energy efficiency labels installed	Stations	0	2024	2,108	1,647	770	475	5,000	Executing agency reports	Output linked to climate finance
14. Station with energy efficiency labeling for the Emergency Medical Care System data center installed	Station	0	2024	0	1	0	0	1	Executing agency reports	Output linked to Paris alignment
Component 2: Strengthening of CABA's network of public diagnostic services										
15. Digital tomographs in operation	Machines	0	2024	2	1	0	0	3	Executing agency reports	
16. Digital mammographs in operation	Machines	0	2024	1	1	0	0	2	Executing agency reports	
17. Digital magnetic resonance imaging machines in operation	Machines	0	2024	0	1	0	0	1	Executing agency reports	
18. Digital x-ray machines in operation	Machines	0	2024	10	10	15	0	35	Executing agency reports	

⁶ Planned studies and evaluations: (1) research study during implementation; (2) study of the impact of digital health tools on the redesign of health services; (3) evaluation on rapid-cycle improvement to improve the screening and monitoring of patients with diabetes and hypertension; (4) study on opportunities for the health inclusion of LGBTQ+ persons in a digital health ecosystem; (5) project monitoring study; and (6) midterm evaluation.

Indicator	Unit of measure	Baseline	Baseline year	2025	2026	2027	2028	End of project	Means of verification	Comments
19. Digital radiographs in operation	Machines	0	2024	1	2	0	0	3	Executing agency reports	
20. Digital angiographs in operation	Machines	0	2024	2	2	0	0	4	Executing agency reports	
21. Renewable energy pilot project implemented in health centers	Pilot	0	2024	0	1	0	0	1	Executing agency reports	Output linked to climate finance

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Country: Argentina **Division:** SPH **Operation number:** AR-L1408 **Year:** 2024

Executing agency: The executing agency, the Autonomous City of Buenos Aires (CABA) will be the borrower, through the CABA Ministry of Health (MSCABA).

Operation name: Digital Health Agenda of the CABA Health System

I. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY

1. Use of country systems in the operation (Any system or subsystem approved subsequently could be used for the operation, under the terms of the Bank’s validation.)

<input checked="" type="checkbox"/> Budget	<input checked="" type="checkbox"/> Reports	<input checked="" type="checkbox"/> Information system	<input type="checkbox"/> National competitive bidding
<input checked="" type="checkbox"/> Treasury	<input type="checkbox"/> Internal audit	<input type="checkbox"/> Shopping	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> Accounting	<input type="checkbox"/> External control	<input type="checkbox"/> Individual consultants	<input type="checkbox"/> Other

2. Fiduciary execution mechanism

<input type="checkbox"/>	Special features of fiduciary execution	The borrower will be CABA, and the Argentine Republic will be the guarantor of the borrower's financial obligations. The executing agency will be the borrower, acting through the MSCABA. Responsibility for overall project coordination will fall to the MSCABA's SSPSGR, through its UPE. To manage the technical quality of the project outputs, the UPE will coordinate with the Health Information Systems Administration of the SSPSGR and the Operational Department of Health Technology Assessment and Planning of the MSCABA's Undersecretariat of Hospital Care. The UPE will rely on the Undersecretariat of Health System Administration to perform fiduciary processes. Specifically, the Health Procurement Department will be responsible for carrying out procurement processes, and the Administration, Accounting, and Budget Department will be responsible for financial management processes, both within the Undersecretariat of Health System Administration.
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3. Fiduciary capacity

Fiduciary capacity of the executing agency	An analysis using the Institutional Capacity Assessment Platform found that the fiduciary capacity was partially satisfactory. While it has extensive experience in executing procurement and financial processes under local regulations, it has no experience with projects financed by multilateral development banks and, accordingly, execution will require reinforcement of the procurement and financial management teams. To help close the identified fiduciary gaps, the following actions have been recommended, among others: (i) ongoing training on fiduciary issues for the Health Procurement Department and the Administration, Accounting, and Budget Department and the hiring of at least one financial specialist and one procurement specialist with experience in IDB policies; (ii) ensure the inclusion in the project Operating Regulations of the mechanisms to coordinate the parties involved in fiduciary issues (including all areas outside the MSCABA that are involved depending on the process); and (iii) initiate the
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	request for IDB approval of the electronic procurement system "Buenos Aires Compra" to standardize processes and shorten procurement times.
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4. Fiduciary risks and risk response

Risk taxonomy	Risk	Level of risk	Risk response
Executing agency: Human resources	A lack of trained and sufficient personnel in the fiduciary area could lead to delays in the procurement and financial management processes and thus in execution.	Medium-high	This will be mitigated by contracting personnel with prior experience in the execution of programs with international finance, preferably with experience in IDB programs. Existing personnel will be trained in financial management policies, procurement, and the use of UEPEX and the Procurement Plan Execution System.
Executing agency: Internal processes	If there are no processes and manuals that clearly define the coordination mechanisms between the parties involved in execution, the deadlines foreseen in the planning could be extended.	Medium-high	This will be mitigated by including these manuals in the project Operating Regulations, where the fiduciary circuits and processes are clearly detailed. They will be communicated to all executing agency personnel on a regular basis.

5. Policies and guidelines applicable to the operation: Financial Management Guidelines for IDB-financed Projects (OP-273-12), Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank (GN 2349-15), Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (GN 2350-15), and Policy on Retroactive Financing and Advance Procurement (GN-2259-1/Operational Policy OP-507).
6. Exceptions to policies and guidelines: Not applicable.

II. CONSIDERATIONS FOR THE SPECIAL PROVISIONS OF THE LOAN CONTRACT

Special conditions precedent to the first disbursement: N/A
<p>Exchange rate: For the purposes of Article 4.10 of the General Conditions, the parties agree that the exchange rate to be used will be the rate stipulated in Article 4.10(b)(i). For the purpose of determining the equivalence of expenditures incurred in local currency as charges against the local counterpart or of reimbursements for expenditures charged against the loan, the agreed upon exchange rate will be the exchange rate on the last business day of the prior month in which the borrower, executing agency, or any other person or legal entity to which authority has been delegated to incur expenditures, makes the respective payments to the contractor, supplier, or beneficiary.</p>
<p>Audited annual financial reports. The executing agency will submit audited annual financial reports relating to the use of resources in accordance with the terms of reference agreed with the Bank within 120 days after the end of the financial year. The final financial statements for the operation will be delivered within 120 days after the date of the last disbursement. The external audit of the project will be performed by an independent audit firm eligible to audit Bank-financed operations, selected and contracted in accordance with the terms of references and model contract previously agreed on with the Bank.</p>

III. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

<input checked="" type="checkbox"/>	<p>Bidding documents</p>	<p>The Bank’s standard bidding documents or other documents agreed upon by the executing agency and the Bank for a specific procurement will be used for the procurement of works, goods, and nonconsulting services subject to international competitive bidding, executed in accordance with the procurement policies (GN-2349-15). Likewise, the selection and contracting of consulting services will be executed according to the Policies for the Selection of Consultants (GN-2350-15) using the Bank-issued standard request for proposals or the request form agreed upon by the executing agency and the Bank for the specific selection process. For national competitive bidding and shopping of nonconsulting goods and services, the Bank’s standard templates in Argentina will be used together with the corresponding standard evaluation report templates. The project’s sector specialist will be responsible for reviewing the technical specifications and terms of reference for procurement during the preparation of selection processes. This technical review may be conducted ex ante and is independent of the procurement review method used.</p>						
<input checked="" type="checkbox"/>	<p>Recurring costs</p>	<p>The recurring costs required for project implementation will be approved by the Project Team Leader and incurred pursuant to the executing agency’s administrative procedures. These procedures will be reviewed and accepted by the Bank, provided they do not violate the principles of economy, efficiency, and competition. (See Guidelines for the Treatment of Recurring Expenses and Expense Eligibility Policy (GN-2331-5) and updates thereof).</p>						
<input checked="" type="checkbox"/>	<p>Advance procurement/ retroactive financing</p>	<p>Using the loan proceeds the Bank may retroactively finance up to US\$3,900,000 (4.6% of the proposed loan amount) in eligible expenditures incurred by the borrower prior to the date of loan approval for: (i) goods and nonconsulting services relating to medical equipment; and (ii) individual consulting services, provided that substantially similar requirements to those set out in the loan agreement have been met. Those expenditures will have been incurred on or after 8 August 2024 (date of approval of the project profile) but may not in any case include expenditures incurred more than 18 months prior to the loan approval. (See GN-2349-15, GN-2350-15, and the policy on recognition of expenditures, retroactive financing, and advance procurement (GN-2259-1)).</p>						
<input checked="" type="checkbox"/>	<p>Procurement supervision</p>	<p>The supervision method will be ex ante, except where ex post supervision is warranted. This will be indicated in the procurement plan. In addition to the reference amounts for the type of supervision, the first two processes of any selection method will be ex ante, without exception. Finally, ex post reviews will be conducted every year in accordance with the project supervision plan, subject to change during execution.</p> <p>The reference thresholds for the ex post review during program execution are as follows:</p> <table border="1" data-bbox="539 1709 1365 1797"> <thead> <tr> <th data-bbox="539 1709 786 1755">Works</th> <th data-bbox="786 1709 1073 1755">Goods/services</th> <th data-bbox="1073 1709 1365 1755">Consulting services</th> </tr> </thead> <tbody> <tr> <td data-bbox="539 1755 786 1797">N/A</td> <td data-bbox="786 1755 1073 1797">US\$100,000</td> <td data-bbox="1073 1755 1365 1797">US\$200,000</td> </tr> </tbody> </table>	Works	Goods/services	Consulting services	N/A	US\$100,000	US\$200,000
Works	Goods/services	Consulting services						
N/A	US\$100,000	US\$200,000						
<input checked="" type="checkbox"/>	<p>Records and files</p>	<p>The MSCABA will be responsible for keeping the original files on procurement and financial management within its responsibility in the framework of project execution.</p>						

Main procurement items

Description of the procurement	Selection method	New procedures/tools	Estimated date	Estimated amount US\$
Goods				
Acquisition of medical and diagnostic imaging equipment	International competitive bidding (ICB)		May-25	19,731,000
Acquisition of equipment for hemotherapy system	National competitive bidding (NCB)		Apr-25	800,000
Procurement of hardware and software for the implementation of a medical Picture Archiving and Communication System (PACS) for the health care network	ICB		Jun-25	7,000,000
Procurement of uninterruptible power supply (UPS) and electrical back-up for the health system	ICB		Jun-25	5,300,000
Procurement and upgrading of telecommunications and network electronics systems in hospital infrastructure	ICB		Jun-25	5,560,000
Firms				
Contracting of a consulting firm for TIA-942 survey and certification	Selection based on consultants' qualifications (CQS)		Oct-25	180,000
Contracting of the comprehensive analysis of the Buenos Aires health system for the digital agenda	Quality- and cost-based selection (QCBS)		Jun-25	725,000
Individuals				
Consultant to buttress the procurement team	Individual consultant selection (3CV)		Jan-25	24,000
Consultant to develop the EHR for hospitalization	3CV		Mar-25	31,000

Procurement plan for the first 18 months: [PA AR-L1408](#).

Other relevant information for the operation: [Details of the retroactive financing request](#).

IV. FINANCIAL MANAGEMENT AGREEMENTS AND REQUIREMENTS

<input checked="" type="checkbox"/>	<p>Programming and budget</p>	<p>The executing agency will be responsible for the annual budget preparation and programming process and for all procedures to consolidate the annual budget for approval. As the need arises for additions or reallocations of budget line items, the executing agency will request the respective revisions and arrange for their approval. Budget item allocations are executed through accrued quarterly and monthly commitment instalments.</p>
<input checked="" type="checkbox"/>	<p>Treasury and disbursements</p>	<p>Bank accounts: The executing agency will keep a special account in U.S. dollars and an account in Argentine pesos; they will be separate and identified for accounting and operational purposes and used exclusively for program resources.</p> <p>Financial plan: Disbursements will be made on the basis of a detailed financial plan based on the program's actual liquidity needs.</p> <p>Disbursement method: The Bank will disburse resources under the advance of funds, reimbursement, and/or direct payments modality (modalities established in the guidelines in document OP-273-12). For advances of funds, disbursements after the first advance of funds may be processed if 80% of the earlier advances has been justified.</p> <p>The Online Disbursement electronic platform will be used to handle disbursements.</p>
<input checked="" type="checkbox"/>	<p>Accounting, information systems, and reporting</p>	<p>The executing agency will use the External Loan Execution Unit System (UEPEX) as its financial administration system, which will be used by the central execution unit and the subexecution units. The UEPEX system identifies program funds and sources of financing. In accordance with the Bank-approved chart of accounts, the UEPEX system records the program investments by component in the expenses matrix. Cash-basis accounting will be used and the International Financial Reporting Standards followed, where applicable, in accordance with national criteria.</p>
<input type="checkbox"/>	<p>Internal control and internal auditing</p>	<p>The <i>Sindicatura General de la Ciudad de Buenos Aires</i> (SIGEBA) is the internal control body of the CABA government. The internal audit of each ministry is performed through the Internal Audit Unit, which reports to the Ministry of Health (UAIMS), as set out in Structure Decree 254/2024. This unit is responsible for conducting audits and making recommendations in accordance with the powers conferred under Law 70 (Law on the Management, Financial Administration, and Control of the City's Public Sector of 27 August 1998).</p>
<input type="checkbox"/>	<p>External control and financial reports</p>	<p>The General Audit Office of the Autonomous City of Buenos Aires has not been evaluated to audit IDB-financed loans, and the General Audit Office of Argentina does not have the capability to audit the city's resources. Accordingly, the program's external audit will be conducted by an IDB-eligible independent audit firm based on the terms of reference agreed on with the Bank.</p>
<input checked="" type="checkbox"/>	<p>Financial supervision of the operation</p>	<p>The initial financial monitoring plan will be based on the risk and fiduciary capacity assessments carried out on the executing agency via onsite and desk monitoring visits, analysis and monitoring of outcomes, and recommendations from audits of the program's annual financial reports.</p>

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/24

Argentina. Loan ___/OC-AR to the Autonomous City of Buenos Aires
Digital Health Agenda of the Health System
of the Autonomous City of Buenos Aires

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Autonomous City of Buenos Aires, as borrower, and with the Argentine Republic, as guarantor, for the purpose of granting the former a financing aimed at cooperating in the execution of the project "Digital Health Agenda of the Health System of the Autonomous City of Buenos Aires". Such financing will be for an amount of up to US\$85,000,000 from the Ordinary Capital resources of the Bank, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on ___ _____ 2024)