Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 11-Apr-2023 | Report No: PIDA35242

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Project Name	Parent Project ID (if any)
Argentina	P179534	Strengthening the Digital Health Agenda in the Province of Buenos Aires	
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
LATIN AMERICA AND CARIBBEAN	14-Apr-2023	16-Jun-2023	Health, Nutrition & Population
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	Province of Buenos Aires	Provincial Directorate of Multilateral Organizations and Bilateral Financing	

Proposed Development Objective(s)

Increase access to health services and improve coordination and continuity of care in the public healthcare network of the Province of Buenos Aires.

Components

Implementing Electronic Health Records (EMR)/Integrated Health Records (HSI)
Developing and Implementing Virtual Tools for Health Provision and Communication
Project Management

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

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

DETAILS

World Bank Group Financing

International Bank for Reconstruction and Development (IBRD)	50.00

Environmental and Social Risk Classification

Moderate

Decision

The review did authorize the team to appraise and negotiate

Other Decision (as needed)

B. Introduction and Context

Country 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 living in cities. The Province of Buenos Aires (PBA) alone constitutes 38 percent of the national population and generates close to 33 percent of Argentina's GDP.

2. **The middle class has historically been large and strong, with social indicators generally above the regional average; however, persistent social and territorial inequalities, economic volatility, and underinvestment have limited the country and the PBA's development.** The rate of urban poverty reached 36.5 percent in the first semester of 2022, and 8.8 percent of Argentines live in extreme poverty. This represents 10.6 million poor, of which 6 million live in the PBA, up from 5.5 million before the pandemic. 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. In the PBA, the combination of increasing population, high budgetary rigidity, and a misrepresentation of the PBA in the automatic revenue sharing scheme (*Coparticipación*), led to low levels of per capita public investment. Indeed, per capita public investment in the PBA (adding both federal and provincial budgets) is the lowest in the country, 3 times smaller than the national average and more than 10 times smaller than in the top five provinces.

3. **The Argentine economy has remained virtually stagnant in the last decade, dealing with mounting macroeconomic imbalances.** As the commodity price boom waned, and despite a large increase in the tax burden, the country has been experiencing difficulties in financing public recurrent spending, which also caused a collapse of public investment. By mid-2018, amidst tighter global financial conditions, growing concerns around Argentina´s debt repayment capacity triggered a run against Argentine assets, leading to a balance of payment crisis and a request for an International Monetary Fund (IMF) Stand-By Arrangement (SBA). Despite unprecedentedly large financial support from the IMF, the country suffered a new crisis in August 2019, prompting the re-introduction of capital controls.

4. **Consequently, the COVID-19 outbreak hit Argentina when its economy was still facing significant macroeconomic imbalances and a highly uncertain outlook**. Following a two-year recession, high inflation, and lack of access to capital markets, the pandemic triggered a GDP loss of 9.9 percent in 2020, the largest decline since 2002. In response, the country has prioritized social spending. In a context of restricted market access, financing the response to the pandemic required monetization of the deficit. This exacerbated macroeconomic imbalances, notably by exerting

pressures on reserves, widening the persistent large gap between the official and parallel exchange rates, and fueling inflation.

5. **Bolstered by favorable external conditions, the economy recovered from the COVID-19 crisis at a fast pace, reaching pre-pandemic activity levels by mid-2021.** Argentina's economy grew by 10.4 percent in 2021. Higher commodity prices and trading partners' growth, combined with expansionary domestic policies 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. In this context, the authorities requested an IMF-supported program to help the country meet its large balance of payment needs, including those arising from the 2018 SBA.

6. **In March 2022, Argentine authorities reached an agreement with the 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.** According to the memorandum of economic and financial policies, the program sets a gradual fiscal consolidation path toward a zero primary deficit in 2025, a reduction of monetary financing of the deficit, and the framework for monetary policy involving positive real interest rates, as part of a strategy to fight inflation.

7. **The Argentine authorities and IMF staff have reached staff-level agreement on the fourth review under Argentina's 30-month EFF arrangement**. The agreement is subject to approval by the IMF Executive Board. Upon completion of the review, Argentina will have access to about US$5.3 billion (SDR 4.0 billion). According to the IMF statement, prudent macroeconomic management in the second half of 2022 supported stability and helped secure program targets through end-2022 with some margin. Against a more challenging economic backdrop, particularly the increasingly severe drought, stronger policy actions are necessary to safeguard stability, address rising inflation and policy setbacks, and maintain the anchoring role of the program. In this context, revisions to the reserve targets for 2023 are being requested.

8. **Despite meeting all the performance criteria under the IMF EFF by end-2022, downside risks are elevated.** Capital controls and deficit monetization continue to cause a large gap between the official and parallel exchange rates and limit foreign reserve accumulation. Inflation accelerated to historically high levels (102 percent year-over-year, as of February 2022), denting purchasing power. While fiscal targets have been met so far, a still sizable fiscal deficit continues to put pressure on monetary policy, given limited access to capital markets. A severe drought is expected to strongly affect agricultural production in 2023, reducing exports and fiscal revenues while limiting the capacity of the Central Bank to accumulate international reserves. As for the PBA, despite its fiscal accounts are in relatively better shape than 5-6 years ago, it is still the province with the second largest deficit (3.3 percent of its revenue in 2021), it has a high degree of budgetary rigidity and a high dependence on transfers from the federal government, which still places PBA in a vulnerable situation.

9. **Argentina is also at high-risk of climate-related hazards.** Floods are the most frequent climate-related hazard representing 52 percent of the total natural hazards in the country. Approximately 14.2 million people live in flood-prone areas, with most of the exposed population located in the Greater Buenos Aires, Pampas, and Gran Chaco regions, accounting for 65 percent of the Argentine population.[1] Argentina suffers an average of US$1.08 billion each year in direct asset losses and US$3 billion in welfare losses due to floods.[2] From 2000 to 2011, flooding events affected 5.5

[1] Ministerio de Salud, Argentina. Clima y Salud en Argentina: Diagnóstico de situación 2019. Extracted from: https://bancos.salud.gob.ar/recurso/clima-y-salud-en-la-argentina-diagnostico-de-situacion-2019

[2] Hallegatte, Stephane; Vogt-Schilb, Adrien; Bangalore, Mook; Rozenberg, Julie. 2017. Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters. Climate Change and Development. Washington, DC: WB.

million people. The country is also vulnerable to wildfires, storms, landslides, droughts, and extreme temperatures.[3] Droughts have affected agricultural production in the country, impacting crops like wheat; and heatwaves have become more frequent, affecting mainly urban populations due to the heat island effect. Indeed, projected climate patterns in Argentina show a temperature increase of +1.6 C by the 2050s, and by 3.3 C by the end of the century under a high emissions scenario, worsening climate extremes.[4] Overall, Argentina ranks amongst the ten emerging economies most vulnerable to climate change.[5]

Sectoral and Institutional Context

10. **There are large geographic variations in population density and in unmet basic needs[6] in the PBA.** Its population is unevenly distributed across 135 municipalities. About 80 percent of the population lives in only 33 of them, the majority located in the north-east of the province, around the city of Buenos Aires. In these municipalities, the percentage of population with unmet basic needs is relatively high.

11. **Reflecting this large variability, health outcomes in the PBA are highly unequal, despite large improvements over time.** Infant mortality rate and life expectancy at birth in the province have been improving steadily and remain close to Argentina's averages. However, both infant and overall mortality rates vary substantially across municipalities. In poor rural municipalities, infant and maternal mortality remain high relative to other areas, mainly due to limited access to health services.[7] Nonetheless, chronic noncommunicable diseases (NCDs) are the main causes of death and disability in the province, disproportionately affecting the poor. In 2019, cardiovascular diseases and tumors represented 50 percent of the deaths in the province.[8] Adults living in the PBA's urban poor areas lose more years to premature mortality (YLLs) than other adults living in the province, years lost mainly to NCDs such as cardiovascular

https://openknowledge.worldbank.org/handle/10986/25335; Hallegatte, Stephane; Rentschler, Jun; Rozenberg, Julie. 2019. Lifelines: The Resilient Infrastructure Opportunity. Sustainable Infrastructure. Washington, DC: WB. https://openknowledge.worldbank.org/handle/10986/31805.

[3] Emergency Events Database, https://www.emdat.be/.

[4] https://climateknowledgeportal.worldbank.org/sites/default/files/2021-06/15850-WB_Argentina%20Country%20Profile-WEB%20%281%29.pdf

[5] World Bank (2018). ARGENTINA: Escaping crises, sustaining growth, sharing prosperity. Extracted from: https://documents1.worldbank.org/curated/en/696121537806645724/pdf/Argentina-Escaping-Crises-Sustaining-Growth-Sharing-Prosperity.pdf

[6] In this document UBN is used as proxy for poverty, since poverty indicators are only available for urban conglomerates. Households with Unmet Basic Needs (UBN) are defined as those with at least one of the following deprivation indicators: an inconvenient type of dwelling; no toilet or with a toilet without water discharge; with more than three people per room; have at least one child of school age who does not attend school; have four or more people per employed member, whose head has not completed the third primary school grade. Source: http://www.estadistica.ec.gba.gov.ar/dpe/Estadistica/ANUARIO%202021/Definiciones/Definiciones.html

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

[8] Calculations based on official data published by Dirección de Estadísticas e Información de la Salud (DEIS). Data can be found at: http://deis.msal.gov.ar/estadisticasvitales/

diseases.[9]

12. **Improving health outcomes in the province requires improving access to quality health services, particularly for those residents who rely exclusively on the public delivery network and are thus more likely to be poor.** Access to health insurance in Argentina is linked to participation in the formal labor market. About 59 percent of the PBA's population has social or private health insurance and receives health services from private providers. The rest of the population only has access to public health facilities; this population is not engaged in formal employment and is thus more likely to be poor. Indeed, in each municipality, the share of the population with exclusive public coverage increases with the share of the population with unmet basic needs; this coverage varies from 10 to 80 percent of the population.

13. **People that rely exclusively on the public system have lower coverage of essential health services, particularly for NCD-related services, than people with social or private insurance.** The percentage of adults in the province that have received NCD screening and control services tends to be lower among those with exclusive coverage from the public health delivery network.

14. **There are also gender differences in coverage of essential services in the PBA; although women are more likely to receive screening services for NCDs than men, they are less likely to receive related treatments to help them control these diseases**. In the case of specific cancers that mainly affect women, cervical and breast cancers, the coverage of screening and management services remains low, particularly for those relying exclusively in the public delivery network.

15. **This lower coverage of essential services in the PBA denotes not only problems with access to services, but also lack of coordination and continuity of care that results in poor quality health services**. For instance, a large share of patients that have been diagnosed with chronic conditions, such as diabetes and hypertension, do not receive treatment. Additionally, according to the Fourth National Risk Factor Survey, in 2018 most diabetics did not receive the needed diagnostic exams to avoid future complications (i.e., diabetic retinopathy, diabetic foot); only 31 percent of diabetics in the PBA received a foot exam, 45 percent an eye exam, and 20 percent some education about diabetes. These percentages are likely to be lower among those exclusively covered by the public delivery network as is the case in the country. In addition, women with diabetes in the province are less likely than men to receive the needed controls for avoiding complications. Only 23 percent of women with diabetes received a foot exam, 39 percent an eye exam, and 15 percent education on diabetes. In contrast, 41 percent of men with diabetes received the foot exam, 52 percent the eye exam, and 25 percent education. According to medical protocols, these exams should be performed at least once a year. The low percentage of diabetics that receive these exams, suggest lack of access to specialists, lack of an effective two-way referral system, or both. An effective two-way referral system enables communication between physicians at the same or different levels of care, guaranteeing optimal quality of care.

16. **Improving the quality of health services in the PBA is challenging, since the fragmentation of the public health sector limits coordination and continuity of care**. The public service delivery network, the main provider of health care for households without health insurance, is decentralized. Primary Health Care (PHC) facilities are the responsibility of the municipalities, while hospital care is a provincial responsibility. This has generated challenges in the development of a well-functioning and integrated health network that can ensure the continuity of care for all patients. For instance, referrals and counter-referrals remain mostly informal and based on physicians/health personnel relationships with the referral center. Some municipalities, with provincial support, have tried to formalize their health networks, but often

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

these networks do not extend beyond the municipality, generating inefficiencies, difficult access to specialist services, and poor quality of care. Additionally, the heath management and information systems in the PBA mirror the sector's fragmentation and do not effectively contribute to better coordination and the formation of integrated networks. The different health information systems do not fully interact across levels of government, levels of care, or subsystems; the records often belong to a different jurisdiction. In addition, different health programs have created a multitude of management and information systems that often duplicate efforts, are not interconnected, or cannot be easily accessed, while some remain paper based.

17. **For the public health delivery system to be able to provide quality services, health professionals and health services need to be coordinated across levels of care, among different health professionals, and among services (e.g., laboratory and diagnostic imaging). There should also be continuity of care for the same patient across services and through time.**[10] This is particularly the case for patients with NCDs, who require coordinated and continuous care for long periods of time to ensure disease management and avoid complications. The continuity and coordination of services in the province are particularly weakened by fragmented information systems that limit the sharing of patient's information across providers, between patients and providers, and across levels of care (referrals from PHCs to hospitals as well as counter-referrals are limited).

18. **The lack of coordination and continuity often results in ineffective care, including discontinuation of treatments and medical errors; as well as gaps and duplications that generate waste (e.g., lab tests, diagnostics).** One example of this is that of cervical cancer care, where Argentina's age-standardized five-year survival rate (53 percent) is among the lowest in Latin America and the Caribbean.[11] In the PBA, about 35 percent of women without public health coverage aged 25 to 65 years had no received screening for cervical cancer in the last two years.[12] Among those that have received one, many do not obtain the results or are provided treatment in a timely manner. According to a research study carried out in one of the most vulnerable areas of the PBA, the main reason provided for abandoning treatment was related to the organization of the health system, mostly linked to delays in receiving results.[13] Women that were screened in a PHC facility were more likely to abandon treatment than those that received the test in a hospital, suggesting weaknesses in the coordination and continuity of care. Women also mentioned lack of time for treatment linked to housework and the care of children. Similarly, in the case of breast cancer, according to the PBA Provincial Cancer Institute (IPC, *Instituto Provincial del Cancer*) women with this condition with exclusive public coverage, on

[10] According to WHO, care coordination is "a proactive approach to bringing together care professionals and providers to meet the needs of service users, to ensure that they receive integrated, person-focused care across various settings; and continuity of care refers to "the extent to which a series of discrete health care events is experienced by people as coherent and interconnected over time and consistent with their health needs and preferences". See:
http://apps.who.int/iris/bitstream/handle/10665/274628/9789241514033-eng.pdf?ua=1

[11] 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

[12] Own calculation based on Encuesta Nacional de Factores de Riesgo (2018)

[13] The research study took place in the municipality of Florencia Varela with a total population of 426 thousand inhabitants. This municipality exhibits one of the higher cervical cancer death rates area (16 per 100,000 women in 2009–2011), more than twice the national rate (7.2 per 100,000 women in the same period). The municipality has 36 centers of primary health care (PHC), a General Hospital with a laboratory cytology and pathology, and a cervical pathology service and a diagnosis and treatment center in one of the PHCs. Screening, diagnosis, and treatment are free of charge.
Available at: https://iris.paho.org/bitstream/handle/10665.2/8665/v34n6a10.pdf?sequence=1&isAllowed=y

average, wait 31 days to receive the medication for her treatment. Women with breast cancer currently have no choice but to take their paper prescriptions to the local drug bank and/or make frequent calls to the drug bank to check if the drug is ready for pickup.

19. **Timely access to specialist care is particularly challenging in the PBA.** Most physician specialists practice in large urban centers, often providing services in large hospitals. Thus, access to these services for those located outside these urban areas is difficult. The lack of an integrated provincial health network with integrated information systems often generates barriers to even access a nearby referral service if the service is provided by a health facility from a different municipality from the one where the patient resides. This is because the provider of origin does not have access to the consultation schedule for the recipient provider; they often don't even have information about where the service can be provided outside the municipality. This lack of a fully integrated provincial network limits opportune treatment, since patients are frequently left to figure out for themselves where to find a particular specialist service, or they must wait for services that could be provided in a timely manner in a nearby provider of a different municipality or province.

20. **In these cases, Telemedicine can help deliver more cost-effective health services, improving patient outcomes and reducing the cost of care**. Telemedicine can be defined as using telecommunications technologies to support the delivery of all kinds of medical, diagnostic, and treatment-related services.[14] For example, this includes conducting diagnostic tests, closely monitoring a patient's progress after treatment or therapy, and facilitating access to specialists that are in a different location.

21. **Climate change is posing additional threats to the provincial health system.** Effects of climate change in AMBA[15] are noticeable, in the form of increased cases and risks of flash or surface flooding, heatwave events, and wind gusts accompanied by precipitation. Annual average precipitation in AMBA has increased by 29 percent between 1961-1970 and 2011-2014. Rainfall intensity and the number of days with extreme rainfall levels (over 30 mm per event) have also increased over time. Floods are expected to cause at least US$700 million in economic losses every year in Argentina, with AMBA accounting for 35 percent of all these losses.[16] Mean annual temperature in the project location is projected to increase by 0.4 to 1℃ in the near future. An increase of 2 to 15 days in the year with heatwaves is to be expected. These changes in extreme temperature may induce heat stress among the project's target population, increasing mortality and morbidity for the most vulnerable, especially the elderly, children, and pregnant women. Projected increases in seasonal rainfall, total runoff, and the proportion of rainfall in heavy events will have profound implications for flooding. These increases in rainfall and flooding may encourage the growth and survival of the vector and moderately increase the prevalence of dengue and chikungunya fever among the project's target audience. Indeed, in early April 2023, the PBA Ministry of Health alerted on a large dengue outbreak[17] as almost 1200 cases were already identified. Some cases of chikungunya fever have also been identified (217 autochthonous cases, out of 314 cases). Populations living around irrigated areas are nearly six times more at risk. Finally, these extreme whether events also lead to increasing damages to health care facilities, sometimes disabling them completely at times when their services

[14] See: *https://www.fcc.gov/general/telehealth-telemedicine-and-telecare-whats-what*

[15] AMBA refers to the Metropolitan Area of Buenos Aires (Area Metropolitana de Buenos Aires) which includes the City of Buenos Aireas as well as 40 municipalities of the PBA that are close to the City of Buenos Aires. This area is home to more than 14.8 million of Argentineans.

[16] https://climateknowledgeportal.worldbank.org/sites/default/files/2021-06/15850-WB_Argentina%20Country%20Profile-WEB%20%281%29.pdf

[17] For more details, see: https://www.gba.gob.ar/saludprovincia/noticias/dengue_y_chikungunya_salud_alerta_sobre_casos_y_pide_intensificar_los

are most needed and causing severe disruptions to access and continuity of care, by limiting the mobility of healthcare workers and patients, and damaging equipment, infrastructure, and paper health records.

22. **In this context of increase in frequency and severity of extreme whether events, the province needs to better adapt health services to prepare and protect the population, while ensuring access and continuity of care.** To reduce the risks of disruptions in health care services, a critical action is to ensure health records and patient data is not lost and can still be accessible during extreme weather events, and that services are still available to allow for continued support under these situations. In addition, digital health and communication technologies can play a critical role in collecting data, monitoring disease patterns, generating early risk assessments, warning vulnerable populations of potential risks from climatic and geophysical hazards, initiating investigation and control activities and can facilitate the delivery of care and medical services to remote or resource-limited areas in disasters and provide a platform for community data sharing and raising awareness of such risks.[18]

Province of Buenos Aires Digital Health Agenda

23. **To address these challenges the Provincial Government developed a Five-Year Health Plan 2023-2027,[19] aimed at guaranteeing the right to health, as well as the 2022-2027 Provincial Digital Health Agenda (*Programa Salud Digital Bonaerense*), which serves as an anchor to the Plan.[20]** The Health Plan aims at developing a comprehensive and integrated public health care network to ensure timely access and continuity of care for patients, even in the event of climate related events. The Plan recognizes the role of the management and information system as a key enabling factor to enhance health processes and ultimately achieve better health outcomes. 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".[21]

24. **The Digital Health Agenda aims at improving access, coordination, and continuity of care, including during climate related emergencies in the public health delivery network through the inclusion of information and communication technology (ICT).**[22] The strategy seeks to implement an interoperable digital health ecosystem in the PBA that includes: (i) Electronic Health Records[23] (EHRs) at the point of care; (ii) digital medical imaging, laboratory, and

[18] Hania Rahimi-Ardabili, Farah Magrabi, Enrico Coiera, Digital health for climate change mitigation and response: a scoping review, Journal of the American Medical Informatics Association, Volume 29, Issue 12, December 2022, Pages 2140–2152, *https://doi.org/10.1093/jamia/ocac134*

[19] *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".

[20] *Plan Estratégico. Implementación del Programa Salud Digital Bonaerense 2022-2027. https://www.ms.gba.gov.ar/sitios/saluddigitalbonaerense/files/2022/11/Resumen-del-Plan-Estrategico-de-Implementaci%C3%B3n-del-Programa-Salud-Digital-Bonaerense-2022-2027.pdf*

[21] Global strategy on digital health 2020-2025. Geneva: World Health Organization;2021. License: CC BY-NC-SA 3.0 IGO.

[22] https://www.ms.gba.gov.ar/sitios/saluddigitalbonaerense/institucional/salud-digital-bonaerense/

[23] According to the Office of the National Coordinator for Health Information Technology "The EHR represents the ability to easily share medical information among stakeholders and to have a patient's information follow him or her through the various modalities of care engaged by that individual." See https://www.healthit.gov/buzz-blog/electronic-health-and-medical-records/emr-vs-ehr-difference

pharmacy; (iii) a telemedicine[24] management platform; and (iv) a Citizen's Web Portal.[25] The ecosystem would enable the secure exchange of timely clinical data across providers, contributing to the coordination and the continuity of care throughout the public health network. The program seeks to guarantee the integration of health information systems, the strengthening of coordination and continuity of care, including during extreme weather situations, access to services, and the overall improvement of health care processes. To ensure the implementation of the digital agenda, the province will provide the necessary equipment, will offer training courses for the use of digital tools, will improve connectivity across health facilities, and will update information systems to include new functionalities. The strategy will allow health facilities to systematically store and access high quality data and avoid duplicate registries and paper records. The system will also streamline administrative processes. Finally, the digital agenda will help patients avoid repeating health studies, access appointments electronically, and access specialist care that otherwise would be very difficult, particularly under extreme weather situations, such as current heatwaves, for those most vulnerable.

25. **The Government of the PBA has requested the World Bank (WB) support for the gradual implementation of the Digital Health Agenda**. In 2022, a pilot program, financed with Government's resources, expanded EHRs in 6 municipalities covering 221 municipal health facilities and 37 provincial hospitals.[26] The proposed Project would support the expansion of EHRs in another 30 municipalities, contributing to achieving the medium-term goal of 810 health facilities with EHRs implemented by 2027 and covering about 55 percent of the total yearly health consultations. Since most municipalities do not have their own EMR development or software service agreement, the PBA offers an open-source solution: the Integrated Health Record (Historia de Salud Integral, HSI).[27] This strategy provides a critical push for the wider EHR adoption in health facilities but does not close the door for the implementation of other solutions available in the market.[28] The geographical and functional HSI expansion keeps creating an open ecosystem of systems, components, and modules that will allow cooperation and data exchange between HSI core components and other systems. In fact, the Project would also provide technical assistance to five additional municipalities that already implemented other EMR solutions, to align these solutions with interoperability standards. In this way, there would be a total of 35 municipalities participating in the project. These municipalities were selected to concentrate a large share of vulnerable population.

26. **The WB support would build on the lessons learned from the implementation of two Bank-financed projects**. The Supporting Effective Universal Health Coverage in Argentina (P163345) and Protecting Vulnerable People against

[24] Telemedicine can be defined as using telecommunications technologies to support the delivery of all kinds of medical, diagnostic, and treatment-related services usually by doctors. For example, this includes conducting diagnostic tests, closely monitoring a patient's progress after treatment or therapy, and facilitating access to specialists that are not located in the same place as the patient. See: https://www.fcc.gov/general/telehealth-telemedicine-and-telecare-whats-what

[25] *Portal de la Ciudadanía en Salud PBA.* Agenda Digital en Salud. Ministerio de Salud. Provincia de Buenos Aires. Argentina. The Web Portal was initially developed for the reporting of symptoms and visualization of vaccination appointments against COVID-19. See https://vacunatepba.gba.gob.ar/# A formal registration from the user is needed to access the Citizen Portal at *https*://sso.gba.gob.ar/web/login/SALUD

[26] Boletin Mensual Programa Salud Digital Bonaerense available at https://www.ms.gba.gov.ar/sitios/saluddigitalbonaerense/files/2023/02/Bolet%C3%ADn-N%C2%B0-8-DICIEMBRE-2022-.pdf. The 6 municipalities that already started the EHRs implementation are: Berisso, Admiral Brown, Moreno, Mercedes, San Nicolás and Quilmes

[27] The HSI was initially developed by the National Ministry of Health jointly with the Universidad Nacional del Centro from PBA. A complete description of HSI and related technical documents can be found here: *https://www.argentina.gob.ar/salud/digital/hsi* and *https://hsi.pladema.net/*

[28] The strategy is being implemented following national interoperability standards, see below for more details.

Noncommunicable Diseases Project (P133193) have financed the strengthening of management and information systems in Argentina, supporting the development of regulations, guidelines, and infrastructure at national and provincial level. The proposed Project also complements the preparation of a new Program for Results with the national government, the Program for Effective Universal Health Coverage and National Health System Integration (P179595), as it will support the National Ministry of Health to strengthen the National Digital Health Network to continue developing standards, dictionaries, and regulations for ICT.[29] The National Interoperability Bus – a central structure for information exchange – as well as standards, dictionaries and regulations are key to implement EHRs and telemedicine solutions at the provincial level.

27. **HSI and other health personal data are stored in the provincial cloud, which complies with the national cybersecurity standards; the province is also part of the National Digital Health Network,[30] adopting national interoperability standards.** The Bank has assessed these national standards in the Digital Inclusion and Innovation in Public Services Project (P174946) and in Strengthening Data Infrastructure to Close the Digital Gap in Argentina Project (P178609) and found them acceptable. In the PBA, the Digital Government Sub-secretariat (*Subsecretaría de Gobierno Digital*)[31] is the authority responsible for the cybersecurity program. Following cybersecurity policies, the PBA created the "CSIRT" (Computer Security Incident Response Team),[32] a group of experts dedicated to developing, preventing, and reacting against any information system security incidents. In addition, as the province is part of the National Digital Health Network, it uses the national infrastructure for health record indexes, reference registries, and patient identification.[33] To transfer relevant information to and from both HSI and other EHR systems, the province relies on the National Interoperability Bus – a central structure for information exchange.

C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

28. The proposed Project's Development Objective is to increase access to health services and improve coordination and continuity of care in the public healthcare network of the Province of Buenos Aires.

Key Results

(a) Percentage of consultations properly registered in the HSI, by gender.
(b) Percentage of women 25 to 64 years old with positive cervical cancer screening that have received a colposcopy or have a scheduled colposcopy consultation within a three-month period.
(c) Percentage of diabetics that received eye fundus exam through the tele-ophthalmology strategy.

[29] For a detailed list of activities to strengthen the Nation Digital Health Network, see at: https://www.argentina.gob.ar/salud/digital/red/etapas

[30] The National Digital Health Network (Red Nacional de Salud Digital) aims at ensuring the interoperability of the Health Information Systems throughout the country. The Network is made up of "nodes", which represent independent health information systems, used at provincial, municipal or Health Facilities level. Each "node" has a Patient Identification System and is own data repository. For more details see: https://www.argentina.gob.ar/salud/digital/red

[31] https://www.gba.gob.ar/gobiernodigital https://www.ciberseguridad.gba.gob.ar/

[32] CSIRT-PBA was created by "Resolución 97/19 2019"

[33] See *https://www.*argentina*.gob.ar/salud/digital* for additional details on national infrastructure and interoperability standards.

D. Project Description

29. **The Project has three components:** (i) Implementing Electronic Health Records/Integrated Health Records (HSI); (ii) Developing and Implementing Virtual Tools for Health Provision and Communication; and (iii) Project Management.

30. **Component 1: Implementing Electronic Health Records (EHRs)/Integrated Health Records[34] (HSIs) in public health facilities to improve integration, coordination, and continuity of care (US$39.1 million).** The implementation of this component would allow health professionals to have relevant clinical data (including laboratory results, medical diagnostic imaging, and prescribed medication) readily and securely accessible for clinical informed decision-making. The implementation of this component would also help protect the patient's information from destruction caused by extreme weather event, linked to climate change, or other situations (e.g., flooding, pests). Since digitalized records can be accessible regardless of location, the care for patients displaced by climate-related or other adverse events would not be disrupted. Additionally, electronic records facilitate the identification of patients at risk and better prepare them in case of an impending extreme climate event (e.g., patients at higher risk in case of a heatwave, such as the elderly or those with heart conditions). As climate change impacts become more severe and frequent in the PBA, this component will directly support the capacity of health facilities to provide care without disruptions. This component is divided into the following three subcomponents:

31. ***Subcomponent 1.1. Adopting HSI in public health facilities of 30 municipalities (US$32.9 million)****:* Under the umbrella of the Digital Health Agenda, this component would expand the utilization of HSI in public hospitals and PHC facilities in 30 municipalities of the PBA. The implementation would be scaled-up at municipality level in three phases between 2023-2026. Within each municipality, five PHC facilities would be initially selected for HSI implementation. By the end of the Project, there would be 150 PHC facilities with HSI implemented. The HSI implementation in hospitals is also planned as a gradual process, starting in 13 hospitals during the first year, for a total of 40 provincial and municipality hospitals by the end of the Project. Data storage is centralized in the provincial cloud, supported by the Strategic Plan for the Modernization of the Public Administration of the Province of Buenos Aires,[35] which complies with the national cybersecurity standards.

32. This subcomponent would directly support the continuity of care during adverse climate or other events. The digitalization of health records and their storage in a cloud facilitates access to health records in the event of a climate disaster (e.g., flooding). There are also backup systems in place that prevent data loss. The digitalization will also reduce the need to rely on paper records, saving printing paper.

33. ***Specifically, subcomponent 1.1 would finance goods, consultancy services, non-consultancy services, and training for, inter alia, the following:***

(a) Equipment: This would include, inter alia, computers, printers, tablets, barcode readers and television screens. All equipment procured would have an Energy Star type efficiency label[36], since there is no energy efficiency label for computers in Argentina. Good practices for the use of low consumption equipment will also be followed. This equipment would be distributed, inter alia, in health facilities' admissions, medical offices, and diagnostic imaging, laboratory, and pharmacy areas.
(b) Connectivity: Network adaptations or high-range wireless network using Wi-Fi 6 technology to assure

[34] HSI is indeed an EHR. We use HSI terminology, as it refers to the open-source solution offered by the Province of Buenos Aires to municipalities, particularly those without EHR already developed nor software service agreement.
[35] See https://www.gba.gob.ar/gobiernodigital and https://www.gba.gob.ar/gobiernodigital/nube_provincial for further details.
[36] The Best Available Technology for energy efficiency in this type of electronic equipment within the project location.

connectivity in provincial hospitals.[37]

(c) Training: of health workers on the use of HSI; this training would also support the change management process.[38]

34. ***Subcomponent 1.2: Promoting interoperability across health information systems of five municipalities (US$1.2 million).*** For five municipalities that developed their own EMR or have a software service agreement, this component would finance consultancy services to support the development of the normative framework and technical solutions to ensure the adoption of basic information system's quality and interoperability standards.[39] The EMRs in these municipalities and their data storage strategies must comply with quality and cybersecurity standards, which would be evaluated prior to implementation. When a municipality does not comply with these standards, the Project would provide technical assistance to develop a roadmap to achieve compliance. The interoperability adaptation would only take place once the information system's quality and cybersecurity standards are compliant with those of the province. This subcomponent, by supporting the interoperability of existing EMRs with the rest of the provincial information systems, would support the continuity of care during adverse climate or other events, by allowing providers to access patient data remotely even when physical access to health records is not possible.

35. **Specifically, this subcomponent would finance consultancy services for the following activities**:

(a) Technical Assistance: specialized professionals to provide technical assistance.
(b) Development of ICT solutions: including those needed for the interoperability of the EMRs with HSI.

36. **The 35 municipalities (30 from subcomponent 1.1 and 5 from subcomponent 1.2) were selected to concentrate on a large share of the vulnerable population.** About 40 percent of people with exclusive public health coverage in the PBA live in these 35 municipalities (2.8 million people).[40] These municipalities also concentrate a higher percentage of people living with unmet basic needs (9.1 versus 8 percent in the remaining municipalities) who mainly depend on the public sector to access health services. These 35 municipalities are geographically distributed across 11 of the 12 Health Regions (*Regiones Sanitarias*).[41] About 35 percent of the total public health visits and 30 percent of public hospital discharges in the province occur in health facilities located in the municipalities prioritized by the Project.

37. ***Subcomponent 1.3: Expanding HSI functionalities (US$5 million).*** This subcomponent would improve HSI functionalities with the development of new modules to integrate different health services and care levels to ensure coordination and information flows.

38. **Specifically, this subcomponent would finance consultancy services for, inter alia, the following functionalities:**

(a) Integration of HSI with Radiology Information Systems (RIS), Laboratory Information Systems (LIS), and pharmacy.
(b) The organization of a two-way digital referral system, and its integration with the digital appointment booking system.

[37] Connectivity in municipal health facilities should be provided by the Municipality and is a pre-condition to implement HSI. This condition is signed in the Agreement (Convenio) between the Municipality and the Province.
[38] Please see Annex 1 for a detailed description of the training format.
[39] 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.
[40] Data from the updated roster of Sumar Program.
[41] There is only one region excluded in the expansion of HSI, Region IX, but it is included in Component 2 of this project. This region concentrates less than 2 percent of total health visits of the province, one of the regions with the lowest population density.

(c) The development of a Clinical Decision Support System (CDSS) for health facilities. Based on clinical protocols, the CDSS would provide health professionals with automatic alerts and reminders on the patient's care, particularly those with NCDs.
(d) The development of a provincial dashboard. This dashboard would be a data visualization tool showing key performance indicators, consolidating, and organizing them on a single screen.

39. **There is a vast literature that provides evidence on how the digital health interventions financed by component 1 will support continuity of care in a climate vulnerability context.** Digital health interventions are seen as "*a potential contributor to healthcare climate change adaptation and mitigation, through improved access to healthcare, reduced inefficiencies, reduced costs, and increased portability of patient information*".[42] Component 1.1 - adoption of HSI- and Component 1.2 - promotion of interoperability across health information systems -will allow the instant access, availability, and portability of patient's health records. In a disaster setting, these features are essential to the continuity of care and management of ongoing health conditions for displaced populations. Once the project is implemented, if health facilities need to evacuate due to extreme climate event, health professionals from any other health facilities will be able to access EHRs, and thus to patient medications and e-prescriptions avoiding, for instance, medical treatment discontinuity. Component 1.3-expansion of HSI functionalities- support digital access to test results and reports, digital appointments, and digital referrals. These health interventions will also reduce the environmental impact of healthcare by reducing the need for patient travel, contributing both to population and environmental health. Avoiding the need to travel into a health facility for a face-to-face visit or to pick up printed results or reports directly reduce the net CO2 emissions. Despite the difficulties on measuring all these impacts, there are some studies showing that indeed the reduction in CO2 emissions is significant.[43]

40. **Component 2: Developing and Implementing Virtual Tools for Health Provision and Communication (US$10.5 million).** This component would finance telemedicine solutions aimed at improving access to services, particularly under situations that could pose higher risks to patients in commuting to a health care facility, for example under heat waves and flooding events. Telemedicine is defined as "the use of ICTs to deliver health care at a distance. Key elements of this definition are the use of ICTs, the delivery of clinical services, and the delivery at a distance".[44] Telemedicine can support the provision of health care remotely when it is difficult to physically access services, as was shown during the height of the COVID-19 pandemic.

41. ***Subcomponent 2.1. Enabling a chatbot and implementing a virtual healthcare center (US$5.1 million)***. This subcomponent would support: (i) the development of a chatbot within the PBA Citizen Web Portal[45] to provide information and guidance to citizens on prioritized lines of care. This chatbot would automatically provide recommendations and structured responses related to prioritized lines of care. It would also enable the possibility of interacting with a health worker (operator); (ii) the implementation of a virtual healthcare center, a telemedicine solution that would allow the patient to interact through a chat with trained health workers (operators) who would

[42] See Bhandari, D., Bain, C., Borda, A., Kariotis, T. C., & Reser, D. (2023). Lessons Learned from Natural Disasters around Digital Health Technologies and Delivering Quality Healthcare. International Journal of Environmental Research and Public Health, 20(5), 4542. https://doi.org/10.3390/ijerph20054542
[43] See https://www.researchsquare.com/article/rs-1262007/v1 for specific example on measuring the reduction on net CO2 emissions due to digital health interventions.
[44] Tiago Cravo Oliveira Hashiguchi. Bringing Health Care to the Patient: An Overview of the Use of Telemedicine in OECD countries. OECD Health Working Paper Nr 116. https://www.oecd.org/els/health-systems/health-working-papers.htm
[45] Portal access uses biometric data and second authenticator factor to increase security. https://sso.gba.gob.ar/web/login/SALUD.

provide health counseling and risk triage. The operators, following a medical protocol, could also refer patients to a teleconsultation with a doctor of basic specialties (i.e., general medicine, internal medicine, pediatrics and/or gynecology). Virtual care would not only improve access and timing by eliminating travel and providing care when needed, especially during climate related emergencies where access to a facility might not be possible, but it would also decrease hospital saturation, where patients often go for consultations and non-urgent spontaneous demand that can be resolved at lower levels. Finally, these solutions, particularly (i) and (ii), will provide in-time and reliable information and guidance to the population in cases of adverse events such as heat stress, vector-borne diseases, and other epidemics, increasing population resilience to climate and other adverse shocks. The provision of timely alerts and guidance to the population will reduce the exposure of vulnerable populations to climate related diseases and increase their resilience by advising on potentially dangerous activities (such as performing strenuous work outdoors during heatwaves, for example) and providing knowledge of prevention and treatment options.

42. **Specifically, this subcomponent would finance goods and consultancy services, as follows**:

(a) ICT equipment to implement the telemedicine solution.
(b) Human resources: health workers (operators).
(c) ICT Consultancy services for the development and adaptation of the existing software, clinical protocols, and patient pathways to this new healthcare service delivery model. Although there is a National Telehealth Program with its associated regulatory framework, the province needs to enforce regulations to improve adherence to "good practices in telemedicine care."

43. ***Subcomponent 2.2. Implementing a virtual network of PHC facilities with hospital specialists (US$5.4 million).*** Access to medical specialists would be expanded by strengthening the "network" of telemedicine consultations in PHC facilities. Physician specialists related to prioritized lines of care (such as oncology, diabetology, ophthalmology, gastroenterology, gynecology, among others) based in provincial or municipal hospitals would be virtually linked to PHC facilities. The presence of medical specialists is less frequent and difficult to access for those who live in remote areas, and for those that are most vulnerable in situations of extreme heat and other climate-related severe conditions. The virtual network will start as a pilot project in selected localities in health regions with the lowest population density (Health Regions 1, 2, 8 and 9). These four regions represent 60 percent of the province's total geographic area and are home to about 20 percent of the total population, who are exposed to multiple climate stressors. For the implementation of the pilot, at least one location would be selected from each of these health regions. The activity is the first of its kind, i.e., no similar activity has been implemented previously for population living in remote localities and intends to build climate resilience against extreme weather events to ensure business continuity, by allowing patients to access services even when physical access is not safe or possible (such as during heatwaves or floods), while it also supports a large-scale transformation of service delivery.

44. **Specifically, this subcomponent would finance goods, training, and consultancies for the following activities**:

(a) ICT equipment: with tools for Telemedicine and consultations among health professionals.
(b) Training: for health professionals in the use of telemedicine.
(c) Software adaptation: for the consultations between health professionals.

45. **The implementation of telemedicine solutions and virtual networks financed by the Project ensures continuity of care under climate-related disasters**. For instance, in flood-affected areas where health facilities are disrupted, telehealth can allow the continuation of care. Telemedicine can also be used to provide a preliminary assessment of the need for transport to an emergency room. That was the case in Hurricane Florence, where telemedicine solutions

reduced transport of up to 35 percent of potential patients who would have otherwise gone to a hospital.[46] The usefulness of telemedicine in the immediate aftermath of disasters is also evident in the case of the provision of prescription refills.

46. **Component 3: Project Management (US$0.4 million).** This component would support the strengthening of the Executing Agency and Sub-executing Agency in everything related to their functions for implementing the Project**.** This component would finance consultancy services for Project management, including monitoring and evaluation. It would also finance financial and independent technical audits if needed, environmental and social management, and the Project's other operating costs.

47. **This Project has a strong focus on gender.** An analysis was conducted during Project preparation on gender disaggregated measures of utilization of key health services, particularly those related to screening and control of NCDs. Reducing identified gender gaps in coverage would be key under the Project and would be reflected in the Project's activities. For instance, the effort to implement EHRs in the province would support health providers in better identifying patients that would need screening services and thus can improve the screening rates among men. The EHRs would also improve coordination and continuity of care and thereby improve timely access to diagnostic tests results and better access to specialists for the continuation of treatment for patients. Additionally, the telemedicine pilot (Component 2, subcomponent 2.2) would also improve access to ophthalmologists to diabetes patients and would help decrease the gender gap in coverage. A particular effort would be done to ensure opportune access to care for women with cervical and breast cancer. By fostering early diagnosis and integrated health care within the public health system, the Project would contribute to addressing some of the barriers for cervical cancer screening and early diagnosis. To this end, activities to be supported include the expansion of EHRs at health facilities, raising awareness and ensuring that the web portal targets women's specific needs during implementation, and the timely notification of lab results to patients (Component 1, through its three subcomponents). Similarly, the Project would ensure opportune access to medicines for women with breast cancer. Through the Project, while a doctor prescribes a drug treatment for women with breast cancer, the provincial drug bank would receive that prescription electronically (Component 1, through its three subcomponents). Once the relevant medicines arrive at the drug bank, through the Citizen Web Portal (Component 2, subcomponent 2.1), the patient would receive a message indicating that the medicine is available for pick up. Currently, women have to take their paper prescription to the provincial drug bank and must call and check if the drug is available. On average, it takes about 31 days from the moment the medication is prescribed to the moment the patient picks up the medication. Through the Project's activities, it is expected that this waiting time would be reduced, on average, to 20 days. The Project's intermediate indicators would be further developed at Appraisal to reflect the Project's contribution towards closing these gaps.

48. **Large volumes of personal data, personally identifiable information and sensitive data are likely to be collected and used in connection with the activities financed by this Project under circumstances where measures to ensure the legitimate, appropriate, and proportionate use and processing of that data may not feature in national law or data governance regulations or be routinely collected and managed in health information systems**. To guard against abuse of that data, the Project will incorporate best international practices for dealing with such data in such circumstances. Measures may include, by way of example, data minimization (collecting only data that is necessary for the purpose); data accuracy (correct or erase data that are not necessary or are inaccurate), use limitations (data are only used for legitimate and related purposes), data retention (retain data only for as long as they are necessary),

[46] See Vo, A.H.; Brooks, G.B.; Bourdeau, M.; Farr, R.; Raimer, B.G. University of Texas Medical Branch telemedicine disaster response and recovery: Lessons learned from hurricane Ike. Telemed. J. E-Health 2010, 16, 627–633.

informing data subjects of use and processing of data, and allowing data subjects the opportunity to correct information about them, etc. In practical terms, the Project will ensure that these principles apply through assessments of existing or development of new data governance mechanisms and data standards for emergency and routine healthcare, data sharing protocols, rules or regulations, revision of relevant regulations, training, sharing of global experience, unique identifiers for health system clients, strengthening of health information systems, etc.

Legal Operational Policies

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

Summary of Assessment of Environmental and Social Risks and Impacts

49. **Environmental and Social Risk is rated Moderate, considering the nature, scale, and scope of the activities to be implemented under the Project.** The Project does not finance land acquisition or infrastructure. 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. 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. For this, it will require laying internal electrical and computer cables linked to the installation of hardware equipment and health equipment associated with telehealth and the EHRs, 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 risks during installation are injuries from falls, interference with security processes in sensitive areas, for example: X-ray rooms, hospitalization rooms, laboratories, accidental overturning of supplies and waste, risk of electric shock. During operation, if there are no adequate electrical installations and if informal current extension cables are used, there is a risk of electric shocks. 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).

50. **The Social risk rating is Moderate.** The main social impacts associated with the Project are positive. Scaling up the health information and management systems to expand access to health care services in the Buenos Aires Province promotes the efficient use of the EHRs. Likewise, interoperability standards will ensure the timely flow of information and articulation between health facilities. Despite these benefits, there is a risk of potential exclusion of vulnerable people from the benefits of the Project, including indigenous peoples. The PBA faces situations of structural inequality, worsened by the Covid-19 pandemic, that may be aggravated by the introduction of digital health technologies (principle of 'do no harm'). Hence, when planning, prioritizing, and implementing digital health interventions, the Project will need to ensure access for certain population groups, such as digital illiterates or those lacking connectivity (i.e., by maintaining current face to face and telephone administrative interactions, and developing actions through community healthcare

workers). Moreover, there are challenges associated with the implementation of the Stakeholder Engagement Plan Which will be new to the Provincial Ministry of Health. However, they do have experience with stakeholder engagement activities and will hire new staff dedicated to this (i.e., communication and participation specialists). Likewise, the Provincial Ministry of Health will draw on the existing experience of the Ministry of Finance implementing the Stakeholder Engagement Plan of P170329. Finally, an Indigenous Peoples Plan is being prepared to ensure indigenous peoples in the selected municipalities are included in the benefits of the project in an accessible, culturally diverse, and inclusive manner.

51. **Sexual exploitation and Abuse and Sexual Harassment Risk is Low.** Argentina has a strong legal framework focused on Gender Based Violence (GBV) prevention and has a national referral pathway protocol for GBV service provision and an active GBV working group. In addition, the Project is not expected to finance infrastructure works requiring labor influx.

52. **Citizen Engagement.** The Project design is citizen oriented. The development of telemedicine and virtual communication tools, such as the virtual healthcare center and the web portal, will facilitate population's access to health consultations and information. A SMART citizen engagement indicator is included in the Results Framework and citizen engagement progress will be tracked with a Beneficiary Feedback Indicator based on the percentage of patient satisfaction with telemedicine interventions and/or the web portal.

53. **Project Environmental and Social instruments comprise an Environmental and Social Assessment (ESA) that defines two Environmental and Social Management Plans (one associated with personal computer installation, and another with WEEE management), an Indigenous Peoples Plan (IPP), the SEP and Labor Management Procedures.** The ESMP that manages the PC installation will identify and manage the potential risks and impacts linked to the laying of computer cables and power supply, to which installers, health personnel, patients and companions will be exposed. It will contain the prevention and mitigation measures, which each establishment must comply with before receiving the computer equipment. The ESMP dedicated to WEEE will determine the awareness and training processes for health personnel responsible for EEE. It will contain the guidelines so that health establishments can develop a WEEE post-consumer recovery program. The SEP identifies the stakeholders, the means to ensure effective Project communication with each group, and indicators to monitor engagement activities. The SEP includes consultations with specific public areas and civil society organizations to ensure that the design of the tools is geared to the needs of vulnerable groups. To secure inclusive development outcomes and an equal share of Project's benefits, the communication messages and materials will be prepared and disseminated in an appropriate manner to warrant proper social inclusion. The SEP also includes a Grievance Mechanism, to incorporate beneficiary feedback, drawing on (and enhancing) existing mechanisms from the Ministry of Health. 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. As explained above, an IPP will be developed to ensure indigenous peoples are included in the benefits of the project.

E. Implementation

Institutional and Implementation Arrangements

54. **The Provincial Ministry of Economy (PMOE) would implement the Project through the Provincial Directorate of Multilateral Organizations and Bilateral Financing (Dirección Provincial de Organismos Multilaterales y Bilaterales, DPOMFB) that reports to the Undersecretary of Finance**. The DPOMFB would be responsible for overall project coordination and would provide fiduciary and administrative support on financial management, procurement,

environmental and social issues and monitoring and evaluation activities.

55. **The DPOMFB would work in coordination with the PMOH, which would be responsible for technical aspects of the Project implementation and will also carry out the bulk of procurement activities**. This would be done through the Undersecretariat of Information Management, Lifelong Learning and Control (*Subsecretaría de Gestión de la Información, Educación Permanente y Fiscalización* – SSGIEPyF) which will be responsible for the technical coordination of the Project. The SSGIEPyF will coordinate the technical planning of the activities with the Provincial Directorate of Statistics and Digital Health (*Dirección Provincial de Estadística y Salud Digital - DEySD*) and Project implementation with the Health System Strengthening Unit under the Undersecretariat of Attention and Integral Care (*Subsecretaría de Atención y Cuidados Integrales* – SSAyCI), and the General Coordination of Special Projects (GCSP), under the Technical, Administrative and Legal Undersecretariat.

56. **The participation of municipalities would be governed by a Framework Agreement signed with the PMOH, to cover most of the duration of the Project period.** To ensure successful implementation, the province requests municipalities to sign a framework agreement for a minimum of a three-year period. The PBA municipalities oversee PHC facilities and thus they have a key role in ensuring the early adoption of HSI/EHRs. The agreement makes explicit the rights and responsibilities of both parties before and during the implementation phases. Since 2021, the Government started implementing HSI basic functionalities in 6 municipalities, and additional 26 municipalities initiated the HSI implementation this year.

57. **The DPOMFB will be responsible for the overall fiduciary aspects,** including the Project's budget formulation and execution; managing the designated account and requesting disbursements from the loan and documenting expenditures to the WB; maintaining the Project's accounting records and preparation of interim financial reporting and Project annual financial statements required by the WB; and complying with the Project's external auditing arrangements. It is expected that some activities will be supported by the Provincial Ministry of Health (PMOH) through the General Coordination of Special Projects (GCSP). The DPOMFB will coordinate and oversee all Project activities, including those implemented by the GCSP. The DPOMFB will be responsible for overall Project fiduciary arrangements. In addition, the DPOMFB would coordinate and supervise all procurement activities, prepare annual Procurement and Implementation Plans; ensure compliance with WB Procurement Regulations; manage procurement following the Procurement Plan; oversee technical inputs; and liaise with the WB and monitor and report on progress.

58. **The technical teams of the Ministry of Finance and the Ministry of Health from the Province of Buenos Aires are jointly responsible for environmental and social management of the Project.** The DPOMFB from the PMOE will be responsible for ensuring compliance with the actions and measures established in the environmental and social documents of the Project, including for follow-up and monitoring of environmental and social management. The Ministry of Health, through the Health System Strengthening Unit (UFSS for its acronym in Spanish) and the Provincial Directorate of Statistics and Digital Health (DPEySD) would be responsible for the design, planning and implementation of the actions and measures foreseen in the environmental and social management of the Project. Within the Ministry of Health, the UFSS and the DPEySD will work in coordination with other areas of the Ministry, such as the Provincial Directorate of Community Health and the Provincial Program of Health and Indigenous Peoples, the Provincial Directorate of Gender Equity in Health, the Provincial Directorate of Access and Inclusion in Health, the Provincial Directorate Against Violence in the field of Public Health, the Directorate of Environmental Health and the Provincial Directorate of Infrastructure, Auxiliary Services and Medical Technology. Regarding the implementation of measures under the Environmental and Social Standard 2 "Labor and Working Conditions" it would be responsibility of the contracting areas of the Ministries of Health and Finance. In this sense, each of the Ministries will implement the

provisions of Environmental and Social Standard 2 when hiring consultants and contracting firms. Finally, the Ministry of Health will lead the Project's stakeholder engagement activities and handle the Project's grievance mechanism and will develop those instruments with the support of the Ministry of Finance.

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