

TC Document/Appendice [DRAFT] Template

FORMAT AND CONTENT

I. Basic Information for TC

▪ Country/Region:	COLOMBIA
▪ TC Name:	Support the Ministry of Health and Social Protection in the digital transformation of the health system
▪ TC Number:	CO-T1672
▪ Team Leader/Members:	Ortiz Hoyos, Jose Luis (SCL/SPH) Team Leader; Tejerina, Luis R. (SCL/SPH) Alternate Team Leader; Cardenas Garcia, Claudia Mylenna (VPC/FMP); Delfs Ilieva, Isabel (SCL/SPH); Hillman, Eugenio F. (VPC/FMP); Hyunju Lee (SCL/SPH); Kang, Donghyun (SCL/SPH); Mariangela Chavez (SCL/SPH); Natalia Almeida (LEG/SGO); Nelson, Jennifer A (SCL/SPH); Rojas Acuna, Monica (CAN/CCO); Vanessa Curran (SCL/SPH)
▪ Taxonomy:	Client Support
▪ Operation Supported by the TC:	N/A
▪ Date of TC Abstract authorization:	07 Jul 2022.
▪ Beneficiary:	Ministerio de Salud y Protección Social de Colombia
▪ Executing Agency and contact name:	Inter-American Development Bank
▪ Donors providing funding:	Korea Poverty Reduction Fund(KPR)
▪ IDB Funding Requested:	US\$700,000.00
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period (which includes Execution period):	36 months
▪ Required start date:	October 14, 2022
▪ Types of consultants:	Individual; Firms
▪ Prepared by Unit:	SCL/SPH-Social Protection & Health
▪ Unit of Disbursement Responsibility:	CAN/CCO-Country Office Colombia
▪ TC included in Country Strategy (y/n):	No
▪ TC included in CPD (y/n):	No
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Productivity and innovation

II. Objectives and Justification of the TC

- 2.1 This Technical Cooperation (TC) will support the Ministry of Health and Social Protection (MSPS) in the digital transformation of the health system, strengthening the knowledge regarding the implementation of digital health tools, mainly through four components: (i) the building of the foundations for the Interoperability of Clinical Record in Colombia; (ii) the development of the interoperable electronic health record (IEHR) proof of concept platform; (iii) measurement of information and communications technology capacity; and (iv) training and education for the implementation of health digital systems.
- 2.2 Information systems in health and social protection are critical pillars of robust and sustainable health systems because the quality and quantity of information allow

governments to make better decisions, plan effective programs, and implement public policies with high impact.

- 2.3 The World Health Organization / Pan American Health Organization (WHO/PAHO) found that some of the weaknesses of information systems in Latin America are (i) the low coverage of the data; (ii) lack of knowledge of how to use data; (iii) poor interoperable systems; and (iv) low feedback between institutions (WHO, 2020).
- 2.4 In terms of information system coverage, Colombia has a large repository of health services and drug sales data (SISPRO,¹ RIPS,² Suficiencia, MIPRES,³ and SISMED⁴) which record most of the system's transactions every year. These databases are mainly used for calculating the per-capita health insurance premium, monitoring, and regulating drug prices, approving high-cost health technologies, and recently monitoring mandatory preventive basic health services. However, these systems are fed through outdated processes, they support few transactions and are only available for analysis after many months due to data cleansing processes. Information gathered from hospitals is seldomly used to provide feedback.
- 2.5 Colombia, like other countries from the region, has legislation that defines, regulates, and validates telemedicine services and electronic medical records. Regarding the digitization of health services themselves, Colombia still has limitations related to the lack of financing resources to implement electronic information systems. Despite the milestones, there are urgent needs to be covered in the digital transformation of the General System of Social Security in Health (SGSSS by its acronym in Spanish) and training health personnel to use technological tools.
- 2.6 The implementation of Electronic Health Records (EHRs) shows that approximately 61.7% of Hospitals (private and public) use EHRs, but there are only three regional clusters that interoperate their EHRs. As a result, there are still significant limitations related to the lack of data coverage, mainly in rural areas, information is not disseminated or used in many cases, and there is an absence of articulation between the institutions. Other problems are associated with the lack of a reporting culture and missing information. Lastly, there is a constraint on financing resources to implement electronic information systems, especially since hospitals are decentralized and should be self-financed institutions.
- 2.7 The Colombian health system has been working on the development of an interoperable legal framework since 2020, aiming to facilitate, expedite, and guarantee access to health services (Law 2015, 2020, art. 1; Resolution 866, 2021). Recently, due to the pandemic of Covid-19, the MSPS focused on bringing health services to all territories through digital tools. Some of the results of these efforts can be seen in the increase in the offer of telemedicine services; between 2019 and 2021 the authorized digital health services went from 3.047 to 11.807. The provider institutions showed similar behavior, reaching 2.882 authorized health service providers (IPS) at the beginning of 2021 (MSPS, 2021).

¹ *Sistema Integrado de Información de la Protección Social* (Integrated Social Protection Information System).

² *Registros Individuales de Prestación de Servicios de Salud* (Individual Records of Provision of Health Services).

³ *Mi Prescripción* (My Prescription).

⁴ *Sistema de Información de Precios de Medicamentos* (Price Medicine and Technologies Information System).

- 2.8 In the same direction, the Law 215 of 2020 allowed the implementation plan for the Interoperability of Electronic Medical Records, the mechanism for the exchange of relevant clinical data. Given these milestones, it is important to support the Ministry of Health in the development and consolidation of interoperability as an essential component for the transformation of the country's digital health. In terms of normative, the Colombian government has proposed a period of five years, since 2022, for the country to fully implement the interoperability of medical records at the national level. The MOH affirms that it is necessary to advance in different phases, which strategically allow milestones to be consolidated, generate trust within the different actors, and advance consistently in an adoption process.
- 2.9 The digitalization of the health sector can bring many benefits in terms of the quality of medical services and the efficiency of primary health care. By a way of illustration, a well-implemented electronic health record has demonstrated quality improvements and cost reductions by increasing the adherence of patients to clinical guidelines, reduction of duplication of examinations, errors, and time spent transcribing information, and providing essential information for patient care (Nelson et al, 2019). Especially during the COVID-19 period, face-to-face healthcare demonstrated the limits in providing quality services. Therefore, the digital transformation of the health sector is important for the Colombian government for future pandemic preparedness. To support these development initiatives, the IDB has been actively supporting the MSPS in its process of digital transformation through the TC "Support to the Program to Improve the Sustainability of the Health System in Colombia with an Inclusive Approach" (ATN/OC-18853-CO), which has contributed to the development of the digital transformation route of the SGSSS on a solution's design scheme to improve the opportunity, quality, and access to the information through the systems integration around a financial portal. Some of the data that would be integrated are the Individual Registry of Health Services Provision (RIPS), electronic billing of medical technologies and services, and a systematized electronic medical record.
- 2.10 Additionally, the Bank approved the first loan based on results (LBR) in Colombia (Program to Enhance Sustainability and Inclusiveness in the Colombian Health Care System - CO-L1248), which contributed to improving SGSSS sustainability and consolidating gains made in coverage, equity, financial protection, and improvements to public health. This TC will invest in the development of guidelines and technical documents to improve interoperability; it will also invest in the implementation of conectathons in the country to test and implement the exchange of information through practical exercises and will invest in the development of capacity in digital health in the Government.
- 2.11 **Strategic alignment.** This TC is consistent with Second Update to the Institutional Strategy (AB-3190-2) and is strategically aligned with the challenge of Social Inclusion and Equality by contributing to improving the quality and access of health services to the vulnerable population. It is also aligned with the transversal area of Institutional Capacity and Rule of Law, since it seeks to improve the sustainability, response capacity, and quality of the SGSSS in the country. Additionally, it is aligned with the Country Strategy with Colombia 2019-2022 (GN-2972) through the strategic objectives of consolidating a sustainable and inclusive pension and health system and increasing the quality of spending and the management capacity of public investment at all levels of government. Likewise, it is consistent with the Health Sector Framework (document GN-2735-9) by involving assistance activities and financing strategies that seek the sustainability of the system. Additionally, it is aligned with the bases of the National

Development Plan 2018-2022 within the framework of the “Pact for Colombia.”⁵ Pact for equity”, through a “pact for equity” that ensures a sustainable long-term vision of the health system and social inclusion through efficient and quality access to services. At the same time, the TC components are aligned with the Government Plan “Colombia potencia mundial de la vida” (2022-2026) in chapter 3.8, which seeks to develop a unified information digital health system. Finally, it is consistent with the objective of the Strategic Program for Social Development Financed with Ordinary Capital (document GN-2819-1), which refers to strengthening the efforts made by public institutions to be more effective and efficient in their social programs

III. Description of activities/components and budget

- 3.1 This TC will develop four main components:
- 3.2 **Component 1. Foundations for the Interoperability of Clinical Record in Colombia.** This component is focused on (i) the development of the foundational bases for the interoperable electronic health record (IEHR) such as the implementation guides based on international interoperability standards, (ii) the deployment of terminology services, and (iii) the training of technical teams of the Ministry of Health in interoperability standards.
- 3.3 **Component 2. Development of the IHC Proof of Concept Platform.** This component will focus on two goals: (i) logistic support for the Connectathon Strategy; and (ii) development of tests for the interoperability pilot of the Electronic Medical Record.
- 3.4 **Component 3. Information and communications technology Measurement.** This component will develop and update the ICT Health Measurement in Colombia for 2023 through the implementation of a survey to measure the technological infrastructure for health.
- 3.5 **Component 4. Training and education for the implementation of health digital systems.** This component will focus on the knowledge sharing and the implementation of digital health systems in Colombia through online and in-person sessions including (i) decision-makers and technical leaders training program developed by SNUBH in digital health systems including the digital transformation of the health sector and healthcare innovation; (ii) high-level hospital managers training program in data-driven strategic digital hospital management developed by SNUBH including the management of pharmacy department, operation rooms, emergency department, in- and out-patient care, quality improvement and digital competency in HR management; and (iii) the field support by a group of experts from SNUBH for the implementation of the IEHR.
- 3.6 **Total costs.** The total cost of this TC is US\$700,000, founded by the Korea Poverty Reduction Fund (KPR). These resources will finance individual consultancy services and/or firms for 24 months.

⁵ See [Colombia potencia mundial de la vida \(2022-2026\)](#).

Indicative Budget (US\$)

Activity/Component	Description	IDB/Total Funding
Component 1. Foundations for the Interoperability of Clinical Record in Colombia	This component is focused on the development of the foundational bases for the IEHR.	50.000
Component 2. Development of the IHC Proof of Concept Platform	This component will develop IHC Proof of Concept Platform	200.000
Component 3. Information and communications technology Measurement	This component will develop and update the ICT Health Measurement in Colombia for 2022	150.000
Component 4. Training and education for the implementation of health digital systems	This component will focus on knowledge sharing and the implementation of digital health systems in Colombia through online and in-person sessions.	300.000
Total		700.000

- 3.7 **Monitoring.** The execution, supervision, and annual report of the TC will responsibility of the TC team leader of the Social Protection and Health Division (SCL/SPH). Additional supervision costs, if any, of local supervision or supervision meetings will be covered by the division with transactional budget resources allocated annually. The UDR will be in the Colombia Country Office (CAN/CCO).
- 3.8 The monitoring mechanisms include the continuous supervision of the contracted consultants, review of their products and payments, monthly supervision meetings with the beneficiary, as well as the preparation of annual reports on the progress and performance of the TC execution.

IV. Executing agency and execution structure

- 4.1 The MSPS has requested that the Bank, through its representation in Colombia, will oversee executing this TC, both for the technical support that the team from the Health and Social Protection division can offer to the Ministry, and for the regulatory, financial, and administrative facility. This request is based on legislative and procedural restrictions, where compliance with internal requirements can delay the effective development of the TC. At the same time, the logistics for execution will depend on direct contact between the Bank and the Government of Korea. The MSPS petition is aligned with policy GN-2629, annex 10.
- 4.2 **Procurements.** The activities will be executed under this operation have been included in the Procurement Plan (Annex IV) and will be executed by the Bank's established procurement methods, namely: (a) Contracting of individual consultants, as established in the regulations AM-650; (b) Contracting consulting firms for services of an intellectual nature according to the Policy for the Selection and Contracting of Companies for Operational Work executed by the Bank (document GN-2765-4) and

its associated operational guidelines (OP-1155-4) and (c) Procurement of logistics services and other services other than consulting, by policy GN-2303-28.

- 4.3 Under the Bank's execution, the TC's financial management follows internal financial procedures and will not include the contracting of external auditing services. No conditions precedent to disbursement are established and the project does not foresee any reimbursement of expenses.

V. Major issues

- 5.1 Regarding Component I, the risk identified is the difficulty of carrying out effective inter-institutional coordination between the MSPS, the Ministry of Information, Communication and Technologies, and the Presidency of the Republic. To mitigate this risk, coordination mechanisms will be established to achieve the agreements required during the execution of the project.

VI. Exceptions to Bank policy

- 6.1 All the procurements will be executed under the Bank policy.

VII. Environmental and Social Strategy

- 7.1 This TC does not intend to finance pre-feasibility or feasibility studies for specific investment projects or environmental and social studies associated with them; therefore, the requirements of the Bank's Environmental and Social Policy Framework (ESPF) do not apply to this TC.

Required Annexes:

[Request from the Client - CO-T1672](#)

[Results Matrix - CO-T1672](#)

[Terms of Reference - CO-T1672](#)

[Procurement Plan - CO-T1672](#)