For meeting of
Board: Thursday, June 11, 2015

FROM: The Corporate Secretary

Argentina

Protecting Vulnerable People Against Noncommunicable Diseases Project

Project Appraisal Document

Attached is the Project Appraisal Document regarding a proposed loan to Argentina for the Protecting Vulnerable People Against Noncommunicable Diseases Project (R2015-0099), which will be discussed at a meeting of the Executive Directors.

Distribution:
Executive Directors and Alternates
President
Bank Group Senior Management
Vice Presidents, Bank, IFC and MIGA
Directors and Department Heads, Bank, IFC and MIGA

Document of
The World Bank

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Report No: PAD535-AR

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED LOAN

IN THE AMOUNT OF US$350 MILLION

TO THE

ARGENTINE REPUBLIC

FOR A

PROTECTING VULNERABLE PEOPLE AGAINST NONCOMMUNICABLE DISEASES PROJECT

April 30, 2015

Health Nutrition and Population Global Practice
Latin America and Caribbean

CURRENCY EQUIVALENTS
Exchange Rate Effective April 30, 2015

Currency Unit	=	Argentine Peso
ARS$8.90	=	US$1
US$0.11	=	ARS$1

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

AMI	Acute Myocardial Infarction
BOD	Burden of Disease
COFESA	Federal Health Council (*Consejo Federal de Salud)*
COPD	Chronic Obstructive Pulmonary Disease
CPS	Country Partnership Strategy
CVA	Cerebral-Vascular Accident
DNCD	Directorate of Health Promotion and Control of Noncommunicable Diseases (*Dirección de Promoción de la Salud y Control de Enfermedades no Transmisibles*)
EEPs	Eligible Expenditure Programs
ESMF	Environmental and Social Management Framework
FESP	Essential Public Health Functions Project (*Proyecto de Funciones Esenciales de Salud Pública*)
GOA	Government of Argentina
GRS	Grievance Redress Service
ICB	International Competitive Bidding
IDB	Inter-American Development Bank
INAL	National Food Institute (*Instituto Nacional de Alimentos*)
INC	National Cancer Institute (*Instituto Nacional del Cáncer*)
INDEC	National Institute of Statistics and Censuses (*Instituto Nacional de Estadística y Censos*)
IPPF	Indigenous Peoples Planning Framework
IPP	Indigenous Peoples Plan
IRR	Internal Rate of Return
IUFR	Interim Unaudited Financial Report
MAPEC	Care Model for People with a Chronic Condition (*Modelo de Atención de Personas con Enfermedades Crónicas*)
M&E	Monitoring and Evaluation
NCB	National Competitive Bidding
NCDs	Noncommunicable Diseases
NMOH	National Ministry of Health
NPV	Net Present Value
PBF	Performance-Based Financing

PDNCD	Provincial Directorate of Noncommunicable Diseases
PDO	Project Development Objective
PHC	Primary Health Care
PMOH	Provincial Ministry of Health
RENALOA	National Network of Official Laboratories for Food Analysis (*Red Nacional de Laboratorios de Alimentos)*
SBD	Standard Bidding Document
TLI	Transfer-Linked Indicator
UA	Unstable Angina
UFI-S	International Financing Unit for Health (*Unidad de Financiamiento Internacional de Salud)*
WHO	World Health Organization

Regional Vice President:	Jorge Familiar
Country Director:	Jesko S. Hentschel
Senior Global Practice Director:	Timothy Grant Evans
Practice Manager:	Daniel Dulitzky
Task Team Leaders:	María Eugenia Bonilla-Chacín
	Luis Orlando Pérez

ARGENTINA
Protecting Vulnerable People against Noncommunicable Diseases Project (P133193)

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Protecting Vulnerable People Against Noncommunicable Diseases Project (P133193)

PROJECT APPRAISAL DOCUMENT

LATIN AMERICA AND CARIBBEAN

Report No.: PAD535-AR

Basic Information			
Project ID P133193	EA Category B - Partial Assessment		Team Leader(s) Maria Eugenia Bonilla-Chacin, Luis Orlando Perez
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints [ ] Financial Intermediaries [ ] Series of Projects [ ]		
Project Implementation Start Date 31-Aug-2015	Project Implementation End Date 31-Aug-2020		
Expected Effectiveness Date 31-Aug-2015	Expected Closing Date 31-Dec-2020		
Joint IFC No			
Practice Manager/Manager Daniel Dulitzky	Senior Global Practice Director Timothy Grant Evans	Country Director Jesko S. Hentschel	Regional Vice President Jorge Familiar
Borrower: Argentine Republic			
Responsible Agency: National Ministry of Health			
Contact: Federico Kaski Fullone		Title: Secretary of Promotion and Health Programs	
Telephone No.: (5411) 4379 9002		Email: fkaski@msal.gov.ar	

Project Financing Data(in USD Million)					
[X] Loan	[ ] IDA Grant	[ ] Guarantee			
[ ] Credit	[ ] Grant	[ ] Other			
Total Project Cost:	437.50		Total Bank Financing:	350.00	
Financing Gap:	0.00				

Financing Source	Amount
Borrower	87.50
International Bank for Reconstruction and Development	350.00
Total	437.50

Expected Disbursements (in USD Million)

Fiscal Year	2016	2017	2018	2019	2020	2021
Annual	91.00	97.00	75.00	55.00	20.00	12.00
Cumulative	91.00	188.00	263.00	318.00	338.00	350.00

Institutional Data

Practice Area (Lead)

Health, Nutrition & Population

Cross Cutting Topics

[ ] Climate Change
[ ] Fragile, Conflict & Violence
[X] Gender
[ ] Jobs
[ ] Public Private Partnership

Sectors / Climate Change

Sector (Maximum 5 and total % must equal 100)

Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %
Health and other social services	Health	70		
Public Administration, Law, and Justice	Public administration-Health	30		
Total		100		

☑ I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.

Themes

Theme (Maximum 5 and total % must equal 100)

Major theme	Theme	%
Human development	Injuries and non-communicable diseases	70
Human development	Health system performance	30
Total		100

Proposed Development Objective(s)

To contribute to: (i) improving the readiness of public health facilities to deliver higher quality NCD-services for vulnerable population groups and expanding the scope of selected services; and (ii) protecting vulnerable population groups against prevalent NCD risk factors.

Components

Component Name	Cost (USD Millions)
Component 1: Improving the readiness of public health care facilities to provide higher quality services for NCDs for vulnerable population groups and expanding the scope of selected services.	189.00
Component 2: Protecting vulnerable population groups against prevalent NCD risk factors.	73.00
Component 3: Supporting the National and Provincial Ministries of Health to improve surveillance, monitoring, promotion, prevention and control of NCDs, injuries, and risk factors.	175.50

Compliance

Policy

Does the project depart from the CAS in content or in other significant respects?	Yes [ ]	No [X]
Does the project require any waivers of Bank policies?	Yes [ ]	No [X]
Have these been approved by Bank management?	Yes [ ]	No [ ]
Is approval for any policy waiver sought from the Board?	Yes [ ]	No [X]
Does the project meet the Regional criteria for readiness for implementation?	Yes [X]	No [ ]

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	**X**	
Natural Habitats OP/BP 4.04		**X**
Forests OP/BP 4.36		**X**
Pest Management OP 4.09		**X**
Physical Cultural Resources OP/BP 4.11		**X**
Indigenous Peoples OP/BP 4.10	**X**	
Involuntary Resettlement OP/BP 4.12		**X**
Safety of Dams OP/BP 4.37		**X**
Projects on International Waterways OP/BP 7.50		**X**
Projects in Disputed Areas OP/BP 7.60		**X**

Legal Covenants

Name	Recurrent	Due Date	Frequency
Framework Agreements	X		

Description of Covenant

Section I.A.2 (a) of Schedule 2 to the Loan Agreement
Signing of a Framework Agreement between MSN and each Participating Province.

Name	Recurrent	Due Date	Frequency
Annual Performance Agreements	X		Yearly

Description of Covenant

Section I.A.2 (b) of Schedule 2 to the Loan Agreement
Signing of an Annual Performance Agreement between MSN and each Participating Province.

Name	Recurrent	Due Date	Frequency
Verification Agent and EEP Audits		29-Feb-2016	

Description of Covenant

Section I.D of Schedule 2 to the Loan Agreement
Hire an independent verification agent and an independent auditor to verify compliance of TLIs and execution of EEPs, respectively. The due date for this condition is six months after the effective date, tentatively on February 29, 2016.

Conditions

Source Of Fund	Name	Type
IBRD	Retroactive Financing	Disbursement

Description of Condition

No withdrawal shall be made for payments made prior to the date of the Legal Agreement, except that withdrawals up to an aggregate amount not to exceed $52,400,000 may be made for payments made prior to this date but on or after September 1, 2014 (but in no case more than 12 months before the date of this Agreement), for Eligible Expenditures under Category (1) in accordance with the provisions of the Additional Instructions.

Source Of Fund	Name	Type
IBRD	Withdrawal conditions under Category 1 of Disbursement table (EEPs)	Disbursement

Description of Condition

1. The maximum amount allocated to each Participating Province to be disbursed in the event of its full compliance with each TLI, shall not exceed the amounts included in the Additional Instructions.
2. After the Effective Date, the Borrower may request an initial withdrawal up to $60,000,000 as an advance upon submission to the Bank of a report with forecasted EEPs for participating Provinces for the period commencing from the date of this Agreement to December 31, 2015; and
3. Thereafter, subsequent withdrawals shall be made every calendar semester, after the Bank has received reports, in form and substance acceptable to the Bank, certifying as to the extent to which: (i) each Participating Province has executed at least 70% of the amount allocated to its EEPs for the corresponding calendar semester or calendar year, as the case may be; (ii) the Additional Instructions have been adhered to by the Borrower; and (iii) the Bank has determined, on the basis of the IUFRs furnished by the Borrower, and its own verification, that the TLI targets for the preceding calendar

semester or calendar year, as the case may (as set forth in Schedule 4 to this Agreement) have been satisfactorily met and the expenditures incurred by the Borrower are consistent with the EEPs.

Team Composition

Bank Staff

Name	Role	Title	Specialization	Unit
Maria Eugenia Bonilla-Chacin	Team Leader (ADM Responsible)	Senior Economist	Senior Economist	GHNDR
Luis Orlando Perez	Team Leader	Sr Public Health Spec.	Senior Public Health Specialist	GHNDR
Alvaro Larrea	Procurement Specialist	Senior Procurement Specialist	Senior Procurement Specialist	GGODR
Alejandro Roger Solanot	Financial Management Specialist	Sr Financial Management Specialist	Sr Financial Management Specialist	GGODR
Daniela Paula Romero	Team Member	Operations Officer	Operations Officer	GHNDR
Fabiola Altimari Montiel	Counsel	Senior Counsel	Senior Counsel	LEGLE
Isabel Tomadin	Social Specialist	Consultant	Consultant, Social Specialist	GSURR
Marcelo Hector Acerbi	Environmental Specialist	Senior Environmental Specialist	Senior Environmental Specialist	GENDR
Marcelo Roman Morandi	Environmental Specialist	Consultant	Consultant, Environmental Specialist	GENDR
Maria Gabriela Moreno Zevallos	Team Member	Program Assistant	Program Assistant	GHNDR
Silvestre Rios Centeno	Team Member	Team Assistant	Team Assistant	LCC7C
Vanina Camporeale	Team Member	Senior Operations Officer	Senior Operations Officer	GHNDR
Victor Manuel Ordonez Conde	Team Member	Senior Finance Officer	Disbursement	WFALN

Extended Team

Name	Title	Office Phone	Location
Juan Sanguinetti	Economist		La Plata
Oscar Lopez	IT health specialist		Buenos Aires
Pedro Osvaldo Rico Cordeiro			

Locations

Country	First Administrative Division	Location	Planned	Actual	Comments
Argentina	Misiones	Provincia de Misiones	X		
Argentina	Formosa	Provincia de Formosa	X	X	
Argentina	Buenos Aires F.D.	Ciudad Autonoma de Buenos Aires	X		
Argentina	Entre Rios	Provincia de Entre Rios	X	X	
Argentina	Corrientes	Provincia de Corrientes	X		
Argentina	Buenos Aires	Provincia de Buenos Aires	X	X	
Argentina	Tucuman	Provincia de Tucuman	X	X	
Argentina	Tierra del Fuego	Provincia de Tierra del Fuego, Antartida e Islas del Atlantico Sur	X		
Argentina	Santiago del Estero	Provincia de Santiago del Estero	X	X	
Argentina	Santa Fe	Provincia de Santa Fe	X	X	
Argentina	Santa Cruz	Provincia de Santa Cruz	X	X	
Argentina	San Luis	Provincia de San Luis	X		
Argentina	San Juan	Provincia de San Juan	X	X	
Argentina	Salta	Provincia de Salta	X		
Argentina	Rio Negro	Provincia de Rio Negro	X		
Argentina	Neuquen	Provincia del Neuquen	X	X	
Argentina	Mendoza	Provincia de Mendoza	X	X	
Argentina	La Rioja	Provincia de La Rioja	X		
Argentina	La Pampa	Provincia de La Pampa	X		
Argentina	Jujuy	Provincia de Jujuy	X	X	
Argentina	Cordoba	Provincia de Cordoba	X		
Argentina	Chubut	Provincia del Chubut	X		
Argentina	Chaco	Provincia del Chaco	X	X	
Argentina	Catamarca	Provincia de Catamarca	X	X	

I. STRATEGIC CONTEXT

A. Country Context

1. **Since the economic crisis of 2002, Argentina has seen a significant reduction in poverty and inequality.** Total poverty (measured at US$4 a day) declined from 31.0 percent in 2004 to 10.8 percent in 2013, while extreme poverty (measured at US$2.50 a day) fell from 17.0 to 4.7 percent. The middle class grew by 68 percent between 2004 and 2012, reaching 53.7 percent of the population. Income inequality, measured by the Gini coefficient, fell from 50.2 in 2004 to 42.5 in 2012; the proportion of the population with unsatisfied basic needs reached 12.5 percent in 2010.[1] Argentina's poverty rate and Gini coefficient are among the lowest in Latin America and the Caribbean.

2. **Despite the reduction in poverty and inequality, substantial differences in poverty rates and access to services persist, particularly across provinces.** Poverty rates in the northern provinces are two to three times higher than the country average. Inequalities in access to quality social services and outcomes remain. For instance, approximately 38 percent of the population is not covered by social or private health insurance (INDEC, 2010). This vulnerable segment of the population is more likely to be poor, since it lacks formal employment, and is also less likely to receive priority health services, including screening and control for noncommunicable diseases (NCDs).[2]

3. **Strong economic growth over the past decade was accompanied by rising macro imbalances**. Key macroeconomic challenges include the existence of inflationary pressures, deficits in the fiscal and current accounts, and limited international reserves. Argentina has relatively modest fiscal and current account deficits, as well as a low ratio of public sector debt to gross domestic product. Nonetheless, given the limited access to international markets, they create pressure on the economy. These imbalances need to be resolved in order to avoid unwanted effects on the medium-term sustainability of the gains in equity and development achieved during the last decade. In this regard, the Government of Argentina (GOA) has recently implemented various public policy interventions aimed at resolving key macroeconomic imbalances. Continued and consolidated efforts are required for achieving the desired results.

4. **The GOA remains committed to promoting growth with equity and inclusion by reducing the gap in basic services**. In an increasingly challenging economic environment, the difficulty is not only sustaining the social policies established in recent years, but also creating space to promote effective social inclusion, with universal access to basic services. The aim is to ensure that families who remain poor or have escaped poverty can sustain better livelihoods and benefit from shared prosperity, and to build better opportunities for all. This requires efficient deployment of public resources geared to provide services that protect the most vulnerable.

[1] National Institute of Statistics and Censuses (*Instituto Nacional de Estadística y Censos,* INDEC).

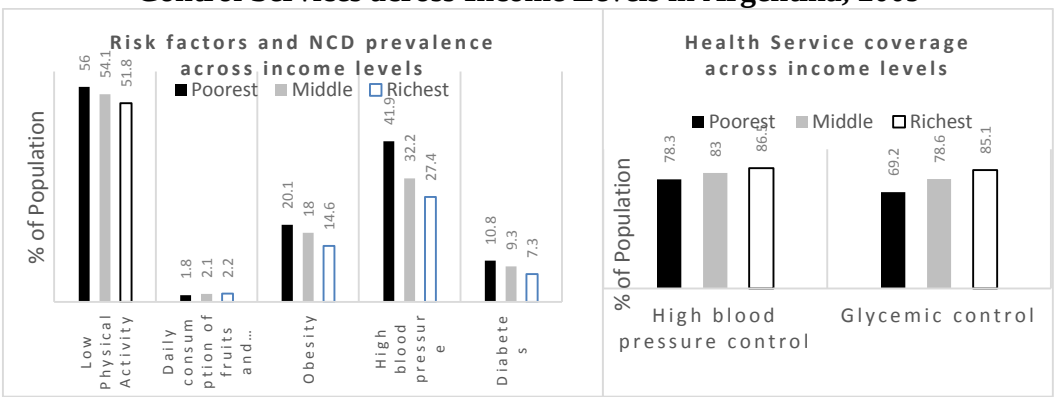
[2] Noncommunicable diseases are chronic conditions that are not the result of an acute infectious process; hence, they are not communicable. These are diseases that have a prolonged course that does not resolve spontaneously and for which a complete cure is rarely achieved.

B. Sectoral and Institutional Context

5. **NCDs and injuries generate a heavy health and economic burden in Argentina.** NCDs are responsible for 81 percent of all deaths and about 62 percent of the years of potential life lost in the country.[3] In 2010, cardiovascular diseases caused a third of all deaths, cancer caused 22 percent (colon cancer caused 11 percent of these), and chronic respiratory diseases about 9 percent. About half of these deaths (45 percent) were in adults younger than 65 years.[4] NCDs require care over extended periods of time. If left untreated or uncontrolled, they may result in costly hospitalizations, thereby generating an important negative economic impact to households, the health system, and the economy.[5] NCDs may also generate large productivity losses caused by worker absenteeism, disability, and premature deaths.[6] Injuries are the fifth leading cause of death, responsible for 7 percent of all deaths, and the leading cause of death for people under age 45 years, with devastating effects on families and society.[7]

6. **An important share of the NCD burden can be prevented or controlled**. These conditions are closely related to common risk factors, especially to unhealthy diets, physical inactivity, tobacco use, and alcohol abuse. According to the 2010 Global Burden of Disease (BOD) study,[8] the five main risk factors for health in Argentina are: dietary risks, followed by high body mass index, smoking, high blood pressure (hypertension), and high plasma glucose in the blood. Among the dietary risks, the study identified the following as the main factors: diets low in fruits, low in nuts and seeds, low in vegetables, high in sodium, and low in whole grains.[9]

Figure 1 Prevalence of Chronic Conditions, Health Risk Factors, and NCD Prevention and Control Services across Income Levels in Argentina, 2009

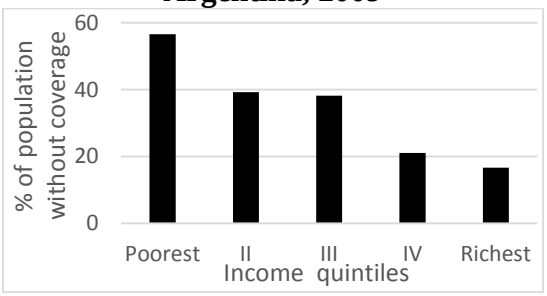


Source: National Risk Factors Survey 2009.

[3] National Ministry of Health and M. Borruel, I. Mas, and G. Borruel. "Estudio de Carga de Enfermedad," Buenos Aires Ministerio de Salud de la Nación, 2010.
[4] Data from the National Ministry of Health.
[5] World Health Organization. 2005. *Preventing Chronic Diseases a Vital Investment.* Geneva: WHO.
[6] Bonilla-Chacin, M., ed. 2014. *Promoting Health Living in Latin America and the Caribbean: Governance of Multisectoral Activities to Prevent Risk Factors for Noncommunicable Diseases* Directions in Development, Washington DC: World Bank.
[7] National Ministry of Health and M. Borruel, I. Mas, and G. Borruel. "Estudio de Carga de Enfermedad," Buenos Aires Ministerio de Salud de la Nación, 2010.
[8] Institute for Health Matrix and Evaluation, *Global Burden of Disease: Argentina* (Seattle: IHME, 2013).
[9] Lim et al., "A Comparative Risk Assessment of Burden of Disease and Injury Attributable to 67 Risk Factors and Risk Factor Clusters in 21 Regions, 1990–2010: A Systematic Analysis for the Global Burden of Disease Study 2010," *The Lancet* 380 (2012): 2224–60.

7. **There is a strong association between poverty, nutrition, and NCDs.** With increasing urbanization, the cost of fresh foods, especially fruits, vegetables, and meat, has increased, while processed foods have become much cheaper. As a result, the poor are more likely to eat more processed foods,[10,11] which contain higher levels of saturated fats and salt, and less variety of foods. Therefore, the poor tend to be the most negatively affected by NCDs and their risk factors; the poor also receive fewer screening and control services for these conditions. The poorest third of the population is less physically active and consumes fewer fruits and vegetables than the richest third. The poorest also suffer more from hypertension, diabetes, and obesity, and receive fewer screening services for these conditions (fig. 1). Vulnerable people are defined in this document as those with no contributory health insurance coverage, who are thus more likely to be poor (fig.2).

Figure 2 Population without Contributory Health Insurance across Income Quintiles in Argentina, 2009



Source: Juan Sanguinetti 2012, using data from the National Ministry of Health's Health Utilization and Expenditure Surveys.

8. **Argentines consume high levels of wheat-based products[12] (some of the cheapest foods available) with very high sodium content.** Indeed, 25 percent of the total sodium consumption in Argentina comes from breads. In addition, the poor also consume high levels of sodium from processed foods and sugar-sweetened beverages[13]. This pattern is worrisome, because high sodium intake is a major risk factor for the development of high blood pressure; thus, reducing sodium intake reduces blood pressure and the risk of cardiovascular diseases and stroke. As a result, the World Health Organization considers sodium reduction strategies as some of the most cost-effective interventions to reduce NCDs.

9. **In Argentina, people who are not covered by social security or private health insurance receive health services from public providers**. Formal sector workers and retirees are insured by social security schemes; a small percentage of the population buys insurance from the private sector in addition to formal sector coverage. Most of this population receives health services from private providers. Given the federal nature of the GOA, health care responsibilities

[10] http://www.fph.org.uk/uploads/bs_food_poverty.pdf.
[11] http://www.publichealth.ie/healthinequalities/foodpoverty.
[12] On average, Argentines consume 64 kilos per capita of artisan breads, 10 kilos of pasta, 7 kilos of cookies, 9 kilos of home processed wheat products, and 4 kilos of industrial bakery products (*Federación de Industriales Molineros de Argentina*, 2012).
[13] http://www.fph.org.uk/uploads/bs_food_poverty.pdf and http://www.publichealth.ie/healthinequalities/foodpoverty

are shared among the federal, provincial, and municipal levels. Most health care responsibilities are assigned to the provincial level. The overall coordination role rests at the national level.

10. **Public primary health care facilities in Argentina have traditionally focused on maternal-child health interventions and have not completely adapted to the changing needs of the aging vulnerable population.** Maternal and child services have been significantly strengthened with support from projects financed by the World Bank, such as *Plan Nacer* (P071025 and P095515) and the ongoing *Programa Sumar* (P106735). However, studies conducted on a sample of public providers have identified several shortcomings in the management of health care that are crucial for the early detection and control of patients with NCDs, including the absence of adult outpatient medical records, nominalized patient records, and clinical guidelines; lack of access to scheduled attention and a clinical information system that accounts for the quality of care; poor coordination across different levels of care; inadequate follow-up of patients; and unsuitable professional profiles.[14]

11. **In 2009, the GOA developed and initiated the implementation of the National Strategy for the Prevention and Control of NCDs and established a National Program for the Prevention and Control of Injuries.** Despite these efforts, significant challenges remain. Changes are needed in the current health care model to improve service delivery in the provincial public health care networks to provide vulnerable people with timely access to quality NCD prevention and control services. In addition, further work is needed to strengthen the epidemiological surveillance and monitoring systems and the enforcement of tobacco, sodium, and trans fats regulations at the provincial and municipal levels.

12. **The GOA has requested World Bank support for the implementation of the NCD strategy at the national and provincial levels to protect vulnerable people against these conditions, through ensuring access to quality services while improving health promotion and epidemiological surveillance**. This Project will be an essential part of the overall World Bank support to the health sector in Argentina, a long-term partnership that has focused on improving access to and quality of health services for vulnerable groups (Box 1).

Box 1 World Bank Support for Argentina's Federal Health Plans over the Past Decade

For the past 10 years, the Bank's partnership with Argentina's health sector has been formulated in support of the Federal Health Plans (*Plan Federal de Salud*) I and II. In this context, the Bank supported eight health operations over the past decade. Three of these projects have supported the expansion of an explicit package of health services, mainly maternal and child services, for those without social security coverage: (i) *Plan Nacer* I (P071025, US$135 million); (ii) *Plan Nacer* II (P095515, US$300 million); and (iii) *Programa Sumar* (P106735, US$400 million).Three other projects have supported strengthening the public health system which is a complement to the insurance reform: (i) Essential Public Health Functions Project I (P090993, US$219 million); (ii) Essential Public Health Functions Project II (P110599, US$461 million); and (iii) Prevention and Management of Influenza Type Illness and Strengthening of Argentina's Epidemiological System Project (P117377, US$141 million). Additional Bank-financed projects have supported innovative multisector interventions with an impact on the health sector at the provincial level: (i) Road Safety Project (P116989, US$30 million); and (ii) San Juan SWAP (P113896, US$50 million).

In addition, the Bank supports the Federal Health Plans through analytical work and especially impact evaluations. The results of the *Plan Nacer* Impact Evaluation Study are among the first to emerge from results-based financing

[14] D. Ferrante, B. Linetzky, and J. Konfino , *Estudio multicéntrico sobre barreras para la implementación de guías de práctica clínica y herramientas para mejorar la calidad de atención en el primer nivel Revista Panamericana de Salud Pública.*

projects. The results from this evaluation show that being a beneficiary of *Plan Nacer* reduces the probability of stillbirth by 26 percent and the probability of low birth weight by 7 percent. In a subset of provinces, the study also shows that beneficiaries have a 74 percent lower chance of in-hospital neonatal mortality.[15]

C. Higher-Level Objectives to which the Project Contributes

13. **The Project is a key contribution to achieving the results articulated in the FY2015–18 Country Partnership Strategy (CPS) for Argentina (Report 81361-AR), discussed by the Executive Directors on September 9, 2014**. The CPS focuses on promoting shared prosperity and reducing poverty by working within three broader themes: (i) creating employment in firms and on farms; (ii) increasing the availability of assets for people and households; and (iii) reducing environmental risks and safeguarding natural resources. Within the second broader theme, the Project will contribute to the CPS results area of Achieving Universal Health Care Coverage. The Project will contribute by improving the scope of services, laying the groundwork for the provision of quality services for those without contributory health insurance, and implementing population-based health interventions to reduce exposure to health risk factors. Finally, in consonance with the CPS, the Project focuses on performance. The operation incorporates a set of cross-cutting initiatives—introduced by the CPS for a gradual shift of the Bank's engagement with Argentina—that will improve implementation. These initiatives include focusing on supporting in-depth assessments, increasing the involvement of low-income areas, and improving health sector governance through the inclusion of a performance-based mechanism.

14. **In close alignment with the CPS objective of ensuring shared prosperity and the World Bank Group's twin goals, the Project has a strong poverty focus.** This focus is reflected in three main features: (i) the distribution of loan resources among provinces follows a pro-poor formula (annex 3); (ii) the Project focuses on primary care at public health facilities, which are almost exclusively used by the poor and uninsured; and (iii) the Project activities aim at supporting improvements in NCD-related services and protecting against prevalent health risk factors, since the burden of disease associated with NCDs affects the vulnerable population disproportionately.

II. PROJECT DEVELOPMENT OBJECTIVES

A. PDO

15. The Project Development Objectives (PDO) are to contribute to (i) improving the readiness of public health facilities to deliver higher quality NCD services for vulnerable population groups and expanding the scope of selected services; and (ii) protecting vulnerable population groups against prevalent NCD risk factors.

B. Project Beneficiaries

16. **The activities supported by the Project will benefit vulnerable people.** The Project will support interventions to change the model of care at public health facilities, increasing the focus on NCD-related health care services. This support will benefit vulnerable groups, those with

[15] Gertler P.; Giovagnoli P.; & Martinez S. (2014). "Rewarding Provider Performance to Enable a Healthy Start to Life: Evidence from Argentina's Plan Nacer". World Bank Policy Research Working Paper 6884.

no contributory insurance coverage, who do not have formal employment, and who are more likely to be poor and use public health facilities. Among vulnerable people, the Project will particularly benefit those in the highest risk age bracket (40–64 years), approximately 3.2 million people. The activities aimed at surveillance and promotion of healthy living will also benefit vulnerable people, given their disproportionate exposure to health risk factors for NCDs.

C. PDO Level Results Indicators

17. **The key results expected from this Project and the performance indicators that will be used to track progress are**:

Result 1: Improved readiness of public health facilities to deliver higher quality NCD-services for the vulnerable and expanded scope of selected services. The performance indicators to track this result will be:

i. Percentage of public primary health care facilities certified to provide quality services for the detection and control of NCDs.

ii. Number of public health care facilities providing new services for early detection of colon cancer.

Result 2: Vulnerable population groups protected against most prevalent NCD risk factors. The performance indicators to track this result will be:

iii. Prevalence of tobacco consumption among vulnerable population.

iv. Prevalence of sodium consumption among vulnerable population.

III. PROJECT DESCRIPTION

A. Project Components

18. **Component 1**: **Improving the readiness of public health care facilities to provide higher quality services for NCDs for vulnerable population groups and expanding the scope of selected services (US$189 million).** This component will finance payments under the Eligible Expenditure Programs (EEPs) in support of: (a) changes of the model of care of provincial health care networks, to generate the conditions needed to ensure effective access to quality health care to Vulnerable Population Groups; and (b) the development of the capacity to provide early detection of colon cancer[16] and increase the scope of screening services beyond what is currently covered, including, *inter alia*: (i) hands-on training of PHC facility personnel on early detection and effective control of NCDs; (ii) creation, adaptation, distribution, and implementation of NCD clinical guidelines at PHC facilities and hospitals; (iii) training of PHC facility personnel to adopt electronic medical records; (iv) seminars on NCDs for MSP personnel; (v) consultations and working meetings between health center and hospital teams working with chronic patients to ensure the continuity and coordination of services; (vi) development of administrative procedures to manage integrated lines of care for NCDs and training of administrative personnel to implement them; (vii) the development, implementation, and monitoring of new supervision procedures for PHC facilities; (viii) the development and implementation of new procedures for patients' flows within the health care networks; (ix) improvements in managerial guidelines; (x) design and implementation of communication procedures between the PHC facilities and chronic patients to

ensure their programmed care; (xi) NCD education sessions and sessions to support self-care for chronic patients at PHC level; and (xii) updates and improvements in information systems and data bases.. The changes in the model of care aim at: (i) providing continuous and programmed care to patients; (ii) supporting patients' self-care; (iii) improving case management; and (iv) developing clinical information systems. This will require intense hands-on training and supervision, the reorganization of the provincial health networks, and the introduction of changes in the incentive frameworks faced by providers and the Provincial Ministries of Health (PMOHs).

19. **Component 2: Protecting vulnerable population groups against prevalent NCD risk factors (US$73 million).** This component will support the implementation of population-based multisectoral interventions at provincial and municipal levels focused on healthy diets, physical activity, and tobacco control with a focus on vulnerable population groups. Interventions under this component include the following: (i) activities aimed at improving the local environment to promote physical activity, including the promotion of *ciclovías*, active spaces, training and communication activities; (ii) interventions aimed at promoting healthy eating habits (particularly the reduction of sodium and trans fat intake, and the promotion of fruit and vegetable consumption) including regulations, the signing of agreements with the food industry and other actors, monitoring of the implementation of agreements and regulations, training and communication activities; and (iii) implementation of tobacco control policies.

20. **Components 1 and 2 will finance the transfer of resources from the National Ministry of Health (NMOH) to the PMOHs, to reimburse eligible expenditure programs (EEPs) subject to the achievement of targets defined as transfer-linked indicators (TLIs).** The expenditures included in the selected EEPs are: (i) personnel salaries of the PMOHs and (ii) logistic services needed to implement the activities, such as utilities (i.e., water and electricity), communications, transport, and per diems. (Table A3.1 in annex 3 shows the link between EEPs, Project activities, and TLIs.)

21. **The list of TLIs for Components 1 and 2 is shown in table 1, which indicates whether the TLIs would need external verification**. The targets for each TLI that the provinces need to achieve per semester or per year, and the funds allocated to each TLI are given in annex 3.

Table 1: List of Transfer-Linked Indicators for Components 1 and 2

Transfer-linked indicator	External verification
1. Percentage of public PHC facilities with personnel trained to provide quality NCD-related health services	
2. Percentage of public PHC facilities that are implementing electronic medical records	✓
3. Percentage of public PHC facilities certified to provide quality services for the detection and control of patients with NCDs	✓
4. Provincial PHC facilities certification teams working according to an approved action plan	
5. (i) Provincial units in charge of surveillance, promotion, prevention, and control of NCDs and their risk factors are functioning; and (ii) the participating province has signed its Annual Performance Agreement	
6. Percentage of vulnerable population groups with increased opportunities for physical activity in participating municipalities	
7. Percentage of vulnerable population groups protected against second hand tobacco smoke in participating municipalities	

Transfer-linked indicator	External verification
8. Percentage of vulnerable population groups protected against excessive sodium consumption in participating municipalities	
9. Regular analysis and reporting of integrated information systems on NCDs, injuries, and risk factors have been carried out	

22. **Component 3**: **Supporting NMOH and the PMOHs to improve surveillance, monitoring, promotion, prevention, and control of NCDs, injuries, and their risk factors (US$87.1 million).** This component will support: (i) strengthening of the capacity of NMOH and the PMOHs and autonomous agencies under their responsibility to design, implement, and monitor policies aimed at health promotion, prevention and control of NCDs, injuries, and their risk factors; and (ii) project implementation. This component will provide support through the procurement of goods (including lab equipment), small works to install lab equipment, pharmaceutical products, consultant and non-consultant services, operating costs, and training. Figure A2.1 in annex 2 presents a schematic conceptual framework which summarizes the rationale for the choice of activities to be supported and their links to the development objectives.

B. Project Financing

23. **The Project would be supported through an Investment Project Financing over a five-year period**. The Project amount is US$437.50 million, of which US$350.00 million would be financed by an IBRD loan, combined with US$87.50 million financed by the GOA.

Table 2: Project Components and Costs

Project component	Project cost (US$, millions)	IBRD financing (US$, millions)	Financing (%)
Component 1: Improving the readiness of public health care facilities to provide higher quality services for noncommunicable diseases (NCDs) to vulnerable population groups and expanding the scope of selected services.	189.00	189.000	100
Component 2: Protecting vulnerable population groups against prevalent NCD risk factors.	73.00	73.000	100
Component 3: Supporting the National and Provincial Ministries of Health to improve surveillance, monitoring, promotion, prevention, and control of NCDs, injuries, and their risk factors.	175.50	87.125	50
Front-end fees		0.875	
Total Project costs	437.50	350.000	80

24. **The Project design combines three critical and interrelated elements:** (i) provincial EEPs; (ii) a financial mechanism for Components 1 and 2 to reimburse the agreed EEPs based on performance, a mechanism that will serve as an incentive between NMOH and the PMOHs to ensure the achievement of the PDOs; and (iii) a technical support component (Component 3) to strengthen the sustainability of the operation (Table 2).

C. Lessons Learned and Reflected in the Project Design

25. **The reforms to be supported are long-term reforms, hence the importance of a clear outline, detailed action plans, and appropriate support through Bank financing.** Limited experience from previous NCD projects[17] shows that population-based preventive interventions, the reorientation of public health facilities to provide quality NCD-related care, and patient adherence to control treatments constitute important cultural and behavioral changes that take a long time to develop and reap benefits. However, the cycle of World Bank–financed projects provides a relatively short timeframe for these types of reforms; thus, it is important to have a clear outline and action plan for the entire timeframe these reforms require and to provide appropriate support for the reforms through Bank financing.

26. **It is important to strengthen the supply side to provide effective clinical preventive and control services for NCDs.** Experience from the *Previniendo* pilot of the NCD Prevention Project in Uruguay (P050716) showed that strengthened supply is a necessary condition to ensure the provision of systematized and high-quality preventive and control services for NCDs. It took several years to change the model of care and develop the basic capacity needed to provide early detection and control services in the public sector. In this context, this Project would strengthen the supply of health services to ensure that all the needed features to provide quality NCD services are present, particularly at the primary health care facility level. This support will set the base needed to improve the quality of the services provided. Therefore, the Project will focus on measuring progress in improvements of the capacity of the health care centers to provide these services rather than specific clinical quality improvements.

27. **The Bank's recent experience, with the *Plan Nacer* Project, Phases I and II (P071025 and P095515), Provincial Health Insurance Project–*Programa Sumar* (P106735), and the Essential Public Health Functions Project (FESP) I and II (P090993 and P110599),** indicates that PBF schemes, rather than traditional financing of inputs, successfully foster governance of service delivery and health results. Performance agreements and financial transfer mechanisms with effective monitoring have offered clear incentives to provinces and health providers to accomplish specific health results.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

28. **The Project will be implemented by NMOH through the Directorate of Health Promotion and Control of NCDs (*Dirección de Promoción de la Salud y Control de Enfermedades no Transmisibles*, DNCD).** High-level institutional coordination with the provinces will be carried out within COFESA, among others. DNCD depends on the Undersecretary of Prevention and Risk Control and is led by the Secretary of Promotion and Health Programs, who will be the Project's National Director.

29. **DNCDs will be the technical coordination unit responsible for carrying out Project activities through its departments of Surveillance, Health Promotion, and Health Care Services, and Provincial Coordination Unit.** There will be an Operational Coordination Unit

[17] Uruguay P050716, NCDs Prevention Project (ongoing).

under the Secretary of Promotion and Health Programs, who will be the liaison with the Project's National Director and the Bank for administrative and technical aspects of the Project, and with the heads of all other substantive program areas in NMOH and the PMOHs.

30. **The International Financing Unit of NMOH (UFI-S) will be responsible for overall administrative and fiduciary matters,** such as financial management and procurement. UFI-S is NMOH's central fiduciary agency that manages external financial resources and provides support to all NMOH units involved in Project implementation. UFI-S has its own Operations Manual (approved by the Bank), which will be part of the Project's Operations Manual. UFI-S has conducted financial management and procurement functions over the past 14 years for Bank-financed projects. NMOH's structure and staff will be used to coordinate and implement the Project activities. UFI-S and DNCDs will receive support from a number of consultants until Project completion. Consultants will be recruited following specific terms of reference included in the Operations Manual.

31. **The PMOH of each participating province will be responsible for the implementation of Project activities within their jurisdiction; there will be a counterpart official responsible for implementation at the provincial level.** Each province will be supported by its Provincial Directorate of Noncommunicable Diseases (PDNCD) or the equivalent technical line unit in charge of the substantive programs related to NCDs and injuries, and by its structure and staff. Provincial health service delivery areas will work with the PDNCDs in the implementation of Component 1. NMOH will finance one consultant for the first two years of Project implementation to facilitate coordination of Project administrative management among PMOHs.

32. **Participation is open to all 24 provinces**. The provinces will express their intention of participating in the Project's activities through a Letter of Intent (*Carta de Adhesión*) that has been signed by 13 provinces. The effective participation of the provinces will be governed by an Umbrella Agreement (*Acuerdo Marco*) to be signed by each province and NMOH, wherein each party agrees with the following: the Project's design, legal framework, and conditions for Project execution; the EEPs and TLIs to be used to reimburse resources to the provinces; safeguard policies and reporting and verification mechanisms; and conflict resolution mechanisms. The Project's Operational Manual will be an annex to this Umbrella Agreement.

33. **Annual Performance Agreements will be signed by NMOH and the PMOHs.** These agreements will include: the PMOH's annual activity plan, setting annual targets to be met and specific commitments between the parties. The Umbrella Agreement and Annual Performance Agreements must be acceptable to the Bank.

34. **UFI-S and an independent auditor with qualifications under terms of reference acceptable to the World Bank will verify that the execution of the EEPs complies with the agreed ratio (70 percent)**. Compliance with TLIs will be verified by DNCDs, with the support of a third-party agent for two indicators.

35. **All activities under Component 3 of the Project will be implemented at the national level by NMOH**. This component will use traditional Bank transaction-based procedures, including the national procurement of goods and services that will be distributed to the provinces based on progress in Project implementation.

B. Results Monitoring and Evaluation

36. **NMOH's monitoring and evaluation (M&E) system will be used to assess Project outcomes and targets.** Several information sources and instruments will be used, including: (i) a health risk factors surveillance system; (ii) biannual Project management reports (prepared by DNCD and UFI-S); (iii) biannual progress monitoring reports of the implementation of the NCD strategy at the provincial level, measured through TLIs and the execution of EEPs; (iv) midterm and final assessments; (v) evaluations of interventions at the provincial level; and (vi) laboratory evaluation of interventions aimed at reducing sodium and trans fats in processed foods. Although the Project development indicators related to the vulnerable population protected against risk factors are measured globally, the government tracks the indicators by gender, with data provided by the National Risk Factor Surveys.

37. **The Project will use intermediate indicators to track progress in the implementation of the supported activities at the provincial level**. These indicators are related to the TLIs and will provide information on provincial progress toward the implementation of the NCD strategy at public health facilities and in municipalities, including, among other things: (i) improving the access of vulnerable people to quality NCD-related services and (ii) implementing various promotion interventions to improve healthy living. The Project will support the NMOH M&E system through the following activities: (i) supporting the surveillance of NCDs, injuries, and risk factors, through conducting national surveys and supporting other mechanisms, such as telephone-based risk factor surveillance; (ii) supporting NMOH's digital information systems and the development of electronic medical records; and (iii) contributing to the evaluation of the interventions financed by the Project.

C. Sustainability

38. **The activities to be financed will be sustainable as:** (i) they represent a marginal additional expenditure for the NMOH (less than 3 percent of total expenditure), while the reimbursement of the provincial EEPs for activities in Components 1 and 2 represent on average about 2 percent of the EEPs' actual budgets; (ii) health authorities at all levels of government are committed to prevent and control NCDs to reduce the burden of disease in the country and this commitment will likely remain; and (iii) these activities are needed to ensure the efficiency and effectiveness of the entire health system, generating benefits that far outweigh their cost.

V. KEY RISKS AND MITIGATION MEASURES

A. Risk Ratings Summary Table

Risk Category	Rating
Stakeholder Risk	Substantial
Implementing Agency Risk	
- Capacity	Moderate
- Governance	Moderate
Project Risk	
- Design	Substantial
- Social and Environmental	Low

- Program and Donor	Moderate
- Delivery Monitoring and Sustainability	Moderate
Overall Implementation Risk	**Substantial**

B. Overall Risk Rating Explanation

39. **The overall risk rating for the Project is substantial.** Given the number of stakeholders involved and furthermore the requirements for behavioral and lifestyle changes, there is a risk that coordination efforts may not be adequate to ensure the success of proposed Project interventions. To manage these risks, support would be provided to the establishment of mechanisms for coordination to ensure the effective participation of all stakeholders as well as to assist initiatives aimed at promoting healthy behaviors. All other risks involved were considered moderate or low (annex 4).

VI. APPRAISAL SUMMARY

A. Economic and Financial Analyses

40. **The economic analysis estimates Project benefits of US$156 million in net present value (NPV) terms, with an 8 percent annual discount rate, and an internal rate of return (IRR) of 19 percent over a 10-year period.** In addition to the US$437.50 million in costs projected for this operation, the analysis takes into account the recurrent expenses needed to sustain the proposed actions for 10 years. As a result of the policies and programs implemented under this Project, NCD risk factors, the incidence of NCDs, and the number of hospitalizations, medical consultations, and tests caused by them are expected to decrease, and many premature deaths and disabilities would be prevented. Project implementation does not have a major impact on the NMOH budget, increasing it by an average of 3 percent throughout the period analyzed. This also means that many of the programs and actions envisaged in the Project's various components can be made sustainable (annex 6).

B. Technical

41. **The Project design is guided by the country's priorities and consistent with international good practice.** The interventions to change the model of care aim at introducing some features of the Chronic Care Model[18] (i.e., self-management support, clinical decision support, delivery information systems, care coordination, etc.). International experience in the reorganization of health service delivery following this model shows significant quality and efficiency improvements in the care of patients with chronic conditions.[19] The Project includes an integrated incentive framework for the provinces to ensure the achievement of the expected results. The selection of population-based interventions followed international evidence on best practice,

[18] E.H. Wagner, B.T. Austin, and M. Von Korff, "Organizing Care for Patients with Chronic Illness," *Milbank Quarterly* 74 (1996): 511–44.

[19] *Health Affairs* 33 (2014):1540–48; doi:10.1377/hlthaff.2014.0428; L. Coleman, B. T. Austin, C. Brach, and E. H. Wagner, "Evidence on the Chronic Care Model in the New Millennium," *Health Affairs* 28 (1) (2009): 75–85; M. Stellefson, K. Dipnarine, and C. Stopka, "The Chronic Care Model and Diabetes Management in US Primary Care Settings: A Systematic Review," *Preventing Chronic Disease* 013 (10) (2013): E26.

as detailed in annex 2. In addition, the Project involves strengthening the capacity of NMOH and the PMOHs to: (i) select and prioritize cost-effective interventions to promote healthy living and reduce population exposure to the country's main health risk factors (i.e., dietary risks, tobacco use, and a sedentary lifestyle); (ii) strengthen surveillance of NCDs and risk factors; (iii) monitor and evaluate activities; and (iv) reorient health services to provide continued and better care for vulnerable patients with NCDs and their risk factors.

42. **The main technical issues discussed with the GOA are related to the reorientation of the model of care at public health facilities, the selection of health risk factors, and the use of a performance mechanism as a financial incentive for the PMOHs**. Regarding the reorientation of the model of care, the Project will support the certification of health facilities for the provision of quality NCD prevention and control services for the vulnerable. In addition, the Project will focus on preventing and mitigating risk factors that are linked to the main causes of BOD: poor diet, physical inactivity, and tobacco use. The Project will support surveillance of these three risk factors. Finally, the Project will use a financial mechanism to reimburse provincial EEPs based on performance. This mechanism will generate an incentive framework between the national level and the provinces that would ensure the achievement of the PDO.

C. Financial Management

43. **Project financial management arrangements in place at NMOH have been assessed during preparation and are acceptable to the Bank.** Accounting and financial reporting, budgeting, internal control, external auditing, and treasury operations will follow the procedures applied to other Bank operations supported by UFI-S, as defined in its Operations Manual. The unit was created by a Resolution of the NMOH and has satisfactory experience carrying out the financial management aspects of projects financed by the Bank.

44. **Loan proceeds will be disbursed as advances into a separate designated account in dollars to be opened in Argentina's official bank, *Banco de la Nación,* and managed by UFI- S.** The flow of funds between NMOH and the PMOHs for Components 1 and 2 will comprise a reimbursement mechanism for EEPs. Ensuring NMOH reimbursement to provinces participating in the Project will require compliance with the following two criteria: (i) a "70 percent rule," requiring that the province spends at least 70 percent of the amount budgeted for the EEPs in a calendar semester, as certified by each province's Accountant General on the accuracy of the financial reporting related to the agreed EEPs for the previous period; and (ii) compliance with performance indicator targets defined as TLIs agreed by NMOH and the PMOHs, detailed in annex 2, as evidenced by technical reports to be produced by the PMOHs and verified by the NMOH DNCD. It is expected that the portion of the PMOHs' EEPs to be reimbursed by NMOH to participating provinces will be less than 10 percent of the PMOHs' annual EEPs. Some of the provinces will require that their health sector EEP financial reporting structure be strengthened. Technical support to improve PMOH budget execution and financial reporting will be provided as part of Component 3.

45. **In addition to the standard covenants on Project audits and interim financial reports, an external audit will be undertaken to verify that the actual expenditure of selected eligible expenditures complies, for each province budget program and subprogram, with the 70 percent budget spending ratio agreed in the loan agreement.** It is expected that one or more

independent auditors acceptable to the Bank will be selected for this assignment following terms of reference acceptable to the Bank as well. The Borrower through UFI-S shall furnish to the Bank semiannual audit opinions setting forth whether the EEPs implemented in the precedent period have complied with the spending requirement rules.

D. Procurement

46. **A Procurement Assessment on the capacity to implement procurement actions for the Project was carried out of the UFI-S and was considered adequate.** UFI-S has extensive prior experience using Bank procurement and consultant guidelines, procedures, and standard documents; such experience was acquired in the successful implementation of several Bank-financed programs and a similar number of operations financed by other multilateral development agencies. UFI-S's Procurement Area is properly staffed with more than 40 specialized professionals and is coordinated by a well-seasoned professional with more than 14 years of specific experience in procurement under World Bank policies and procedures.

47. **UFI-S has recently successfully concluded the implementation of a Governance and Accountability Action Plan, and the first phase of a Performance Improvement Plan in Procurement, which was jointly developed with the Bank's procurement team.** Both exercises have significantly improved the way the overall procurement activities are carried out and have had a significant impact on performance indicators (e.g., bidding process time) and the quality of the produced documents. At UFI-S's request, a second phase of the Performance Improvement Plan in Procurement is currently under implementation.

E. Social (including Safeguards)

48. **Argentina's broad experience in the management of Indigenous Peoples Safeguards,** particularly the experience with the FESP I and II (P090993 and P110599), *Plan Nacer* Phases I and II (P071025 and P095515), and *Programa Sumar* (P106735) projects, will greatly benefit the Project. A new Indigenous Peoples Planning Framework (IPPF) was prepared, building on the existing IPPF and Indigenous Peoples Plans (IPPs) developed under FESP I and II, *Plan Nacer*, Phases I and II, and on lessons learned from the implementation of these projects. Due to all these previous experiences, the implementation agency has the capacity needed to implement the IPPF.

49. **The Project triggers the Indigenous Peoples Policy (OP/BP 4.10). It will directly benefit indigenous communities and dispersed rural populations in 20 provinces with indigenous populations.** In addition to the positive impact of the Project in improving promotion, prevention and control of NCDs among indigenous populations; some of the possible negative social impacts of the Project could include the following: (i) that the services are not used by indigenous peoples due to fear of discrimination; (ii) poor knowledge of indigenous peoples culture by health teams; (iii) lack of variable that would allow the surveillance of NCDs and risk factors among indigenous peoples. These impacts would be mitigated through, among other things, capacity building among health teams to provide culturally adequate services; including an ethnic variable in all information systems to ensure adequate surveillance. The IPPF was done with the participation of all relevant stakeholders (i.e. health teams, indigenous peoples representatives, and others). The IPPF identifies direct and indirect beneficiaries and the potential impacts of the Project on them. A consultation with representative groups of indigenous peoples

organizations at the national level[20], was carried out on November 27, 2013; the IPPF received their support, as reflected in the Act signed by the representatives of the indigenous peoples. Some of the suggestions received during the consultations have started to be implemented, some with support of other Bank financed projects (FESP II and *Programa Sumar*), including: (i) the inclusion of the communities in the intersectoral working tables of the National Program of Healthy Municipalities and Communities; and (ii) the establishment of provincial areas of Indigenous Health. The Indigenous Peoples Planning Framework was disclosed in Argentina and on the Bank's external website.

F. Environment (including Safeguards)

50. **The project triggers OP/BP 4.01 Environmental Assessment and has an Environmental Risk Category B.** The Project will finance the installation of laboratory equipment needed for the analysis of sodium and trans fat levels in processed foods. Initial Environmental Reviews in the selected laboratories will be required. Environmental concerns related to the Project's support for colonoscopies will be addressed through the management of health services waste, with a focus on handling, transportation, treatment, and final disposition of hazardous biological waste. The implementation of electronic medical records also requires an analysis of the environmental impact of the disposal of computer equipment and possible adjustments in the buildings for cables. Since the Project triggers social and environmental safeguard policies, an Environmental and Social Management Framework (ESMF) has been developed, which complements the framework developed by the FESP II (P110599) project. ESMF incorporates capacity building and institutional measures for preparation, supervision, and monitoring of the Project from an environmental and social standpoint. The consultations on the ESMF took place on June 25, 2013 and the document was disclosed both in country and on the Bank's external website.

G. World Bank Grievance Redress

51. **Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS).** The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

[20] This included representatives from the following organizations: National Organization of Indigenous Peoples of Argentina (*Organización Nacional de Pueblos Indígenas de Argentina*), members from the Health Commssion of the National Table of the Indigenous Participation Council (*Mesa Nacional del Consejo de Participación Indígena del Institutio Nacional de Asuntos Indígenas*).

Annex 1 Results Framework and Monitoring

Country: Argentina

Project Name: Protecting Vulnerable People against Noncommunicable Diseases Project (P133193)

Results Framework

Project Development Objectives

PDO Statement

To contribute to (i) improving the readiness of public health facilities to deliver higher-quality NCD-services for vulnerable population groups and expanding the scope of selected services; and (ii) protecting vulnerable population groups against prevalent NCD risk factors.

Project Development Objective Indicators

Indicator Name	Core	Unit of Measure	Baseline	Cumulative Target Values					Frequency	Data Source/ Methodology	Responsibility for Data Collection
				YR1	YR2	YR3	YR4	End Target			
Percentage of public primary health care facilities certified to provide quality services for the detection and control of NCDs	☐	Percentage	0.00	10	20	30	40	50	Annual	Report from certification teams validated by the provincial area for NCDs and certified by DNCDs	Directorate of Health Promotion and Control of Chronic Conditions and Injuries (DNCDs)
Number of public health care facilities providing new services for early detection of colon cancer	☐	Number	0	50	150	300	500	700	Annual	Report certified by the province and verified by DNCDs	DNCD

Indicator Name	Core	Unit of Measure	Baseline	Cumulative Target Values					Frequency	Data Source/ Methodology	Responsibility for Data Collection
				YR1	YR2	YR3	YR4	End Target			
Prevalence of tobacco consumption among vulnerable population.	☐	Percentage	33	N/A	N/A	32	N/A	31	Annual	Prevalence data from National Risk Factor Survey and telephone surveillance system	DNCDs
Prevalence of sodium consumption among vulnerable population.	☐	Percentage	29	26	22	20	18	16	Annual	Prevalence data from National Risk Factor Survey and telephone surveillance system	DNCDs

Intermediate Results Indicators											
Indicator Name	Core	Unit of Measure	Baseline	Cumulative Target Values					Frequency	Data Source/ Methodology	Responsibility for Data Collection
				YR1	YR2	YR3	YR4	End Target			
Percentage of public PHC facilities that have been evaluated regarding changes in their model of care for NCDs		Percentage	0	20	30	40	50	60	Annual	Report presented by the provincial NCDs area and validated by DNCD	DNCDs
Health personnel receiving training	☒	Number	0	500	1,000	2,000	2,500	3,000	Annual	Reports from the PHC certification teams	DNCDs
Number of provinces that have developed an NCD Plan	☐	Number	0.00	5.00	10.00	15.00	20.00	22.00	Annual	Public document of the Plan presented and approved	DNCDs
Number of provinces that have implemented recommended actions for tobacco control	☐	Number	16.00	17.00	19.00	20.00	21.00	22.00	Annual	Report presented by the provincial NCDs area and validated by DNCDs	DNCDs
Prevalence of tobacco consumption among adults		Percentage	27.0	27.0	26.0	25.0	24.0	23.0	Annual	Prevalence data from National Risk Factors Survey and telephone surveillance system	DNCDs
Number of Provinces that have implemented recommended actions to	☐	Number	4.00	6.00	10.00	14.00	18.00	22.00	Annual	Report presented by the provincial NCDs area and	DNCDs

reduce population sodium consumption										validated by the DNCD	
Number of Provinces that have an Intersectional working table in place with an NCD focus that include CSOs and NGOs.		Number	0.00	3.00	6.00	9.00	12.00	15.00	Annual	Report on Annual Meeting Acts	DNCDs

Results Framework (Indicator's Definition)

Project Development Objective Indicators	
Indicator Name	**Description (indicator definition, etc.)**
Percentage of public primary health care facilities certified to provide quality services for the detection and control of NCDs	• This indicator refers to the percentage of prioritized public PHC facilities offering a minimum set of conditions needed to implement the Model of Care for People with Chronic Diseases (*Modelo de Atención de Personas con Enfermedades Crónicas,* MAPEC). This evaluation will be based on a certification instrument (based on the Assessment of Chronic Illness Care (ACIC) internal client version 3.5). • The selected public PHC facilities are those that concentrate 70 percent of all the care consultations in the province (approximately 1,600 PHC facilities nationally). • The indicator will be constructed as: Numerator: Number of selected public PHC facilities that have been certified through MAPEC in the province. Denominator: Total number of selected public PHC facilities in the province.
Number of public health care facilities providing new services for early detection of colon cancer	This indicator refers to the number of health care facilities, both PHC and hospitals, that will implement actions for early detection of colon cancer. To be considered as providing new "screening" services, a facility must have one of the following: fecal occult blood tests, flexible endoscopies, or colonoscopies.
Prevalence of tobacco consumption among vulnerable population.	• This indicator refers to the percentage of tobacco use among vulnerable adults ages 18–64. This is individual self-reported information, collected through the National Risk Factor Surveys or through the telephone surveillance system. • Vulnerable population groups refer to population not covered by contributory health insurance schemes. • This indicator will be constructed as: Numerator: Vulnerable adults ages 18 and older that smoke. Denominator: Total number of vulnerable adults ages 18 and older. • Note: Although this indicator is measured globally, the Government tracks it by gender using data provided by the National Risk Factor Surveys.

Prevalence of sodium consumption among vulnerable population	• This indicator refers to the percentage of population that adds salt to the food at the table. This is individual self-reported information, collected through the National Risk Factor Surveys or through the telephone surveillance system. • Vulnerable population groups refer to population not covered by contributory health insurance schemes. • This indicator will be constructed as: Numerator: Adults ages 18 and older that answer always or almost always to the question on whether they add salt to the food at the table. Denominator: Adults ages 18 and older that were asked whether they add salt to the food at the table. • Note: Although this indicator is measured globally, the Government tracks it by gender using data provided by the National Risk Factor Surveys.
Intermediate Results Indicators	
Indicator Name	**Description (indicator definition, etc.)**
Percentage of public PHC facilities that have been evaluated regarding changes its model of care for NCDs	This indicator refers to the percentage of selected PHC facilities that have been evaluated about the change in the model of care to better prevent and control NCDs, independently of the results of the certification process. This evaluation will be carried out by the provincial team in charge of the PHC facilities certification process. The selected public PHC facilities are those that concentrate 70 percent of all the care consultations in the province (approximately 1600 PHC facilities nationally)
Health personnel receiving training (number)	This indicator measures the cumulative number of health personnel receiving training through the Project.
Number of provinces that have developed an NCDs Plan	This refers to the number of provinces that have presented a plan for the surveillance, prevention and control of NCDs and injuries that complies with the minimum requirements set by the Nation, including: (i) an overview of the NCDs and injuries situation in the province; (ii) a diagnostic of the situation of NCDs promotion, prevention, and control activities (i.e., situation at PHC facilities, care networks, regulation, promotion activities at schools and municipalities, and others); (iii) NCDs-related lines of work prioritized and their execution plan; (iv) the existence of a structure responsible for the execution of the activities included in the plan; and (v) definition of roles and responsibilities.
Number of provinces that implement recommended actions for tobacco control	This refers to the implementation of the strategies included in the National Tobacco Control Law (Law No. 26687) aimed at reducing tobacco use.
Prevalence of tobacco consumption among adults	• This indicator refers to the percentage of tobacco consumption among adults ages 18 and older. This is individual self-reported information, collected through the National Risk Factor Surveys or through the telephone surveillance system. • This indicator will be constructed as: Numerator: Adults ages 18 and older that smoke.

	Denominator: Total number of adults ages 18 and older. • Note: Although this indicator is measured globally, the Government tracks it by gender using data provided by the National Risk Factor Surveys.
Number of provinces that implement recommended actions to reduce population sodium consumption	This refers to the implementation of the strategies included in the National Sodium Control law (Law No. 26905) aimed at limiting population sodium intake.
Number of provinces that have an Intersectional Working Table in place with an NCD focus that include CSO and NGOs.	This indicator notes citizen engagement on Project's activities. It refers to the number of provinces that have created an Intersectoral Working Table focused on NCDs and injuries that is currently functional with at least one annual meeting. These tables include representatives of various government agencies, private sector organizations, and representatives from CSOs and NGOs.

Annex 2 Detailed Project Description

ARGENTINA: Protecting Vulnerable People against Noncommunicable Diseases Project (P133193)

CONTEXT

1. **Noncommunicable diseases (NCDs) and injuries generate a heavy health and economic burden in Argentina.** NCDs are responsible for 81 percent of all deaths and about 62 percent of the years of potential life lost in the country.[21,22] In 2010, cardiovascular diseases caused a third of all deaths, cancer caused 22 percent (colon cancer caused 11.2 percent of these), and chronic respiratory diseases about 9 percent. About half of these deaths (45 percent) were in adults younger than age 65 years.[23] NCDs require care over an extended period of time, usually under the management of a primary care physician. If left untreated or uncontrolled, NCDs may result in costly hospitalizations, thereby generating an important negative economic impact on the health system and the economy. NCDs may also generate large productivity losses caused by worker absenteeism, disability, and premature deaths. Injuries are the fifth leading cause of death, responsible for 7 percent of all deaths, and the leading cause of death for people under age 45, with devastating effects on families and society.

2. **An important share of the NCD burden can be prevented or controlled.** NCDs are not only a consequence of genetics and population aging, but also of exposure to common risk factors, such as unhealthy diets (e.g., diets rich in sodium, saturated and trans fats, refined carbohydrates, and poor in fruits and vegetables), physical inactivity, and tobacco use, among others. According to the 2010 Global Burden of Disease (BOD) study,[24] the main risk factors for health in the country, due to the disability-adjusted life years attributed to them, are: dietary risks, followed by high body mass index, smoking, high blood pressure, and high plasma glucose in the blood (alcohol abuse was ranked seventh). Among the dietary risks affecting people in Argentina, Chile, and Uruguay, the 2010 Global BOD study identified the following as the main five: diets low in fruits, low in nuts and seeds, low in vegetables, high in sodium, and low in whole grains.[25]

3. **The poor and vulnerable in Argentina are the most negatively affected by NCDs and their risk factors; the poor also receive fewer screening and control services for these conditions.** The poorest third of the population is less physically active and consumes fewer fruits and vegetables than the richest third. The poorest third also suffers more from hypertension, diabetes, and obesity, and receives fewer screening services for these conditions. And poor women receive fewer cervical and breast cancer screenings than the rich.[26] Vulnerable people, defined in this document as those with no health insurance coverage and thus more likely to be poor, also

[21] National Ministry of Health and M. Borruel, I. Mas, and G. Borruel. "Estudio de Carga de Enfermedad." Buenos Aires Ministerio de Salud de la Nación, 2010.
[22] Years of potential life lost is an estimate of the average number of years a person would have lived if he or she had not died prematurely.
[23] Data from the National Ministry of Health.
[24] Institute for Health Matrix and Evaluation, *Global Burden of Disease: Argentina* (Seattle: IHME, 2013).
[25] Lim et al., "A Comparative Risk Assessment of Burden of Disease and Injury Attributable to 67 Risk Factors and Risk Factor Clusters in 21 Regions, 1990–2010: A Systematic Analysis for the Global Burden of Disease Study 2010," *The Lancet* 380 (2012): 2224–60.
[26] National Health Risk Factors Survey 2009.

consume fewer fruits and vegetables, suffer more from obesity, and receive fewer screening and control services for NCDs, including breast and cervical cancer screening, than those covered by social health insurance (table A2.1).

4. **There is a strong association between poverty, nutrition, and NCDs.** With increasing urbanization, the cost of fresh foods, especially fruits, vegetables, and meat, has increased, while processed foods have become much cheaper. As a result, the poor are more likely to eat processed foods[27,28] containing higher levels of saturated fats and salt,[29] and they are more likely to eat less variety of foods.[30]

5. **Argentines consume high levels of wheat-based products[31] (some of the cheapest foods available) with very high sodium contents.** Indeed, 25 percent of the total sodium consumption in Argentina comes from breads.[32] In addition, similar to international patterns, the poor in Argentina consume high levels of sodium from processed foods and sugar-sweetened beverages. This pattern is worrisome, because sodium intake is a major risk factor for the development of high blood pressure (hypertension).[33] Reducing sodium intake reduces blood pressure and the risk of cardiovascular diseases and stroke.[34] As a result, the World Health Organization considers sodium reduction strategies as some of the most cost-effective interventions to reduce NCDs.

[27] http://www.fph.org.uk/uploads/bs_food_poverty.pdf.
[28] http://www.publichealth.ie/healthinequalities/foodpoverty.
[29] Salt is a key ingredient in processed foods with not only adds taste, it is used as a food preservative.
[30] E. Dowler and C. Calvert, *Nutrition and Diet in Lone Parent Families in London* (London: Family Policy Studies Centre, 1995).
[31] On average annually, Argentines consume 64 kilos per capita of artisan breads, 10 kilos of pasta, 7 kilos of cookies, 9 kilos of home processed wheat products, and 4 kilos of industrial bakery products (*Federación de Industriales Molineros de Argentina*, 2012)
[32] D. Ferrante, N. Apro, V. Ferreira, M. Virgolini, V. Aguilar, et al., "Feasibility of Salt Reduction in Processed Foods in Argentina," *Revista Panamericana de Salud Pública* 29 (2) (2011): 69–75.
[33] E. D. Freist, *Salt, Volume and the Prevention of Hypertension* (Copyright © 1976 by American Heart Association).
[34] Brian L. Strom, Ann L. Yaktine, and Maria Oria, Committee on the Consequences of Sodium Reduction in Populations; Food and Nutrition Board; Board on Population Health and Public Health Practice; Institute of Medicine. ISBN: 978-0-309-28295-6. Available at: http://www.nap.edu/catalog/18311/sodium-intake-in-populations-assessment-of-evidence.

Table A2.1 Prevalence of Health Risk Factors and NCD Prevention and Control Services across Income Levels and Social Insurance Coverage in Argentina, 2009

	Income level (tercile)			Coverage		Total
	Poorest	Middle	Richest	Social funds and prepaid	Only public	
Low physical activity	56	54.1	51.8	55.7	52.4	54.9
Tobacco use	27.7	26.5	28.2	24.3	34	27.1
Daily consumption of fruits and vegetables (portions)	1.8	2.1	2.2	2.1	1.7	2
Obesity	20.1	18	14.6	17.5	19.2	18
High blood pressure	41.9	32.2	27.4	36	32	34.8
High cholesterol	32.1	27.8	26.8	29.8	25.6	29.1
Diabetes	10.8	9.3	7.3	10.5	7.3	9.6
High blood pressure control	78.3	83	86.5	86.5	69.8	81.4
Cholesterol control	70.2	78.4	87.7	82.4	54.8	76.5
Glycemic control	69.2	78.6	85.1	82.2	60.6	75.7
Pap	50	64.5	78.4	63.5	52.7	60.5
Mammography	40.5	60.6	72.3	58.3	37.7	54.2

Source: National Risk Factors Survey 2009.

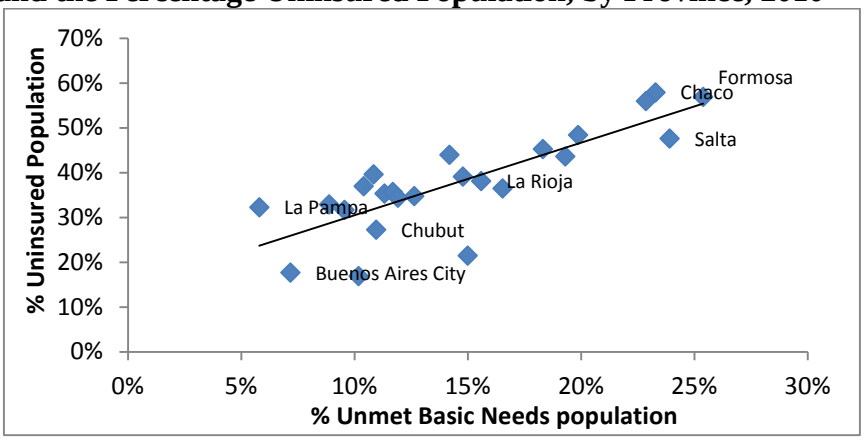
6. **This Project will focus on vulnerable people, defined as those not covered by a social security scheme or private insurance**. **This segment of the population does not have access to formal employment and thus tends to be poor.** According to the 2010 Census, about a third of the Argentine population is uninsured. In 2010, while more than 80 percent of the population in the richest quintile of the income distribution was insured, only 43 percent in the poorest quintile was (table A2.2). Vulnerable people are also likely to be classified by the National Institute of Statistics and Censuses (*Instituto Nacional de Estadística y Censos*) as people with unmet basic needs (figure A2.1).

Table A2.2 Population with Health Insurance, by Income Quintile, 2003, 2005, and 2010

Income quintile	2003	2005	2010
Poorest	25.8	36.9	43.4
II	54.0	40.8	60.7
III	73.2	70.2	61.8
IV	70.0	74.5	78.9
Richest	85.6	84.2	83.3

Source: Juan Sanguinetti 2012, using data from the National Ministry of Health's Health Utilization and Expenditure Surveys.

Figure A2.1 Correlation between the Percentage of the Population with Unmet Basic Needs and the Percentage Uninsured Population, by Province, 2010



Source: World Bank team with National Institute of Statistics and Censuses data from 2010.

7. **In Argentina, people who are not covered by social security or private health insurance receive health services from public providers**. Formal workers and retirees are insured by social security schemes. A small percentage of the population, in addition to formal coverage, buys insurance from the private sector. Most of this population receives health services from private providers. In contrast, vulnerable groups, those not covered by social security or a private scheme, receive health services free of charge from public providers. Given the federal nature of the Government of Argentina (GOA), health care responsibilities are shared among the federal, provincial, and in some cases municipal levels. Most health care responsibilities are assigned to the provincial level. However, in the three largest provinces, Buenos Aires, Santa Fe, and Cordoba, primary health care services are managed by municipalities. The overall coordination role rests with the national government. Although this arrangement allows for better adaptation to local needs, it also makes coordination of the design and implementation of health policies challenging.

8. **The Argentine public health system has traditionally focused on maternal-child health interventions and has not adapted to the changing needs of the population.** Maternal and child services have been significantly strengthened with support from the Bank–financed projects *Plan Nacer* Phases I and II (P071025 and P095515)[35] and the Provincial Public Health Insurance Development Project–*Plan Sumar* (P106735). However, studies of public providers have identified several shortcomings in the management of health care that are crucial for the early detection and control of patients with NCDs, including the absence of adult outpatient medical records, nominalized patient records, and clinical guidelines based on high-quality evidence for decision making; lack of access to scheduled attention; lack of a clinical information system that accounts for the quality of care; poor coordination between different levels of care; inadequate follow-up of patients; and unsuitable professional profiles.[36]

[35] Plan Nacer uses a performance-based financing mechanism to finance maternal and child services.

[36] D. Ferrante, B. Linetzky, and J. Konfino, *Estudio multicéntrico sobre barreras para la implementación de guías de práctica clínica y herramientas para mejorar la calidad de atención en el primer nivel Revista Panamericana de Salud Pública*. Under revision.

9. **The GOA has requested Bank support for implementation of an NCD strategy at the national and provincial levels to ensure access to quality services for vulnerable people, while improving health promotion and epidemiological surveillance**. Some activities in the NCD strategy are ongoing and receive financial support from Bank–financed projects, such as the Provincial Public Health Insurance Development Project (P106735), the Essential Public Health Functions Project (FESP) II (P110599), and the Argentina Road Safety Project (P116989). (See box 1 for details on the history of the World Bank health program in Argentina.) In addition, the ongoing *Remediar + Redes* Phase I and II project, financed by the Inter-American Development Bank (IDB), also supports activities under the NCD strategy, including the procurement of some pharmaceutical products and support for the development of health care networks. This new operation proposes to strengthen the capacity of the National Ministry of Health (NMOH) and Provincial Ministries of Health (PMOHs) to implement the NCD strategy by providing a holistic framework for improved coordination and reducing fragmentation in the implementation of the strategy.

Project Description

10. **The Project will be financed through Investment Project Financing to support the GOA over a five year period**. The total Project amount is US$437.5 million, of which US$350 million will be financed by the IBRD. The Project is comprised of the following three components:

11. **Component 1: Improving the readiness of public health care facilities to provide higher-quality services for NCDs to vulnerable population groups and expanding the scope of selected services (US$189 million).** This component will support changes to the model of care of provincial health care networks to generate the conditions needed to ensure effective access to quality health care to vulnerable patients with highly prevalent NCDs. The component will also support the development of the capacity to provide early detection of colon cancer by increasing the scope of screening services beyond what is currently covered. The changes in the model of care aim at: (i) providing continuous and programmed care to patients; (ii) supporting patients' self-care; (iii) improving case management; (iv) developing clinical information systems; and (v) strengthening clinical support systems. These changes will require intense hands-on training and supervision, the reorganization of the provincial health networks, and the introduction of changes in the incentive frameworks faced by providers and the governance structures. Progress in the implementation of this component will be closely monitored through a certification instrument that will be carried out by provincial implementation teams, known as micromanagement teams (*equipos de microgestión*). These micromanagement teams will regularly visit primary health care (PHC) facilities to provide hands-on training and support for the implementation of the new model of care.[37]

12. **The changes in the model of care will be supported through the following PMOH activities**: (i) hands-on training of PHC facility personnel on early detection and effective control of NCDs; (ii) creation, adaptation, distribution, and implementation of NCD clinical guidelines at PHC facilities and hospitals; (iii) training of PHC facility personnel to adopt electronic medical records; (iv) seminars on NCDs for PMOH personnel; (v) consultations and working meetings between health center and hospital teams working with chronic patients to ensure continuity and

[37] The certification instrument is based on the Assessment of Chronic Illness Care (ACIC) internal client version 3.5.

coordination of services; (vi) development of administrative procedures to manage integrated lines of care for NCDs and training of administrative personnel to implement them; (vii) development, implementation, and monitoring of new supervision procedures for PHC facilities; (viii) development and implementation of new procedures for patient flow within the provincial health care networks; (ix) improvements in managerial guidelines; (x) design and implementation of communication procedures between the PHC facilities and chronic patients, to ensure their programmed care; (xi) NCD education sessions and sessions to support self-care for chronic patients at the PHC level; and (xii) updates and improvements in information systems and databases.

13. **This component will finance the transfer of resources from NMOH to the PMOHs, to reimburse eligible expenditure programs (EEPs) subject to the achievement of targets defined as transfer-linked indicators (TLIs).** The TLIs are related to changes in the model of care in public PHC facilities (Table 1 in the main text lists the TLIs for Components 1 and 2). The expenditures included in the selected EEPs are: (i) PMOH personnel salaries and (ii) logistical services needed to implement these activities, such as utilities (i.e., water and electricity), communications, transport, and per diems (annex 3).

14. **The reimbursement of EEPs will act as a financial incentive for the PMOHs**, since the PMOHs will receive additional resources for implementation of the activities supported by this component. Following the successful experience of *Plan Nacer*, the PHC facility teams will also have an incentive to make the changes supported by this component. The PHC teams will have a voice in the decision on how to use the resources that the PMOHs will receive as reimbursement from progress in achieving the TLI targets linked to PHC performance.

15. **Component 2: Protecting vulnerable population groups against prevalent NCD risk factors (US$73 million).** This component will support the implementation of population-based multisectoral interventions at the provincial and municipal levels, focused on healthy diets (particularly the reduction of sodium and trans fat intake, and the promotion of consuming more fruits and vegetables), physical activity, and tobacco control with a focus on vulnerable population groups. A summary of international examples of cost-effective multisector interventions for the prevention of NCDs at the population level that could be financed through this component is presented in table A2.3. The table also presents international examples of the implementation of these policies and the various sectors involved.

Table A2.3 Multisector Interventions Designed to Reduce NCD Risk Factors, Organization for Economic Cooperation and Development and the Americas

Risk factor	Cost-effectiveness	Intervention	Examples of successful interventions at the international level	Interventions selected in Component 2	Sectors involved
Unhealthy diet	Best buy[a]	Salt-reduction strategies	North Karelia, Finland, community program subsequently extended nationwide	Salt-reduction strategies focused on foods consumed by the poor (i.e., breads, cold cuts, canned foods)	Agriculture, health, food industry, food retail industry, advertising industry, city governments, the legislature, others
		Replacing trans fats	• New York City, ban on trans fats • Denmark, legislation regulating trans fat levels in processed foods • Puerto Rico, ban on trans fats	Monitoring of Food Code application to reduce amount of trans fats in processed foods	
		Nutrition labeling	• United Kingdom, food labeling (Traffic Light System) • United States, 1994 Nutrition and Education Bill • New York City, regulation on calorie content in restaurants • United States, 2010 Health Care Act extended requirement of nutritional labels on menus to chain restaurants nationwide		
		Social-media campaigns	• United States, "5-A-Day" campaign to increase consumption of fruits and vegetables • Wheeling, West Virginia (U.S.), "1% or less" campaign to switch to low- or no-fat dairy products to reduce heart disease • Europe, EPODE project	Social campaigns focused on dietary habits more prevalent among the poor	
	Other cost-effective[b]	Regulating advertising on marketing of foods and beverages high in salt, fat, and sugar, especially to children	• Industry self-regulation: International Chamber of Commerce Code, School Beverage Guidelines, Children's Food and Beverage Advertising Initiative • United Kingdom, statutory regulation on advertising		
		Taxes and subsidies to promote healthy diets	• United States, taxes on sodas • Poland, elimination of butter and lard subsidies		

Risk factor	Cost-effectiveness	Intervention	Examples of successful interventions at the international level	Interventions selected in Component 2	Sectors involved
Physical inactivity	Best buy[a]	Social media campaigns	• United States, VERB campaign • Brazil, "Agita São Paulo" program	Social campaigns focused on physical activity habits more prevalent among the poor	City governments, urban planning, transport, health, civil society organizations, the media
	Effective with insufficient evidence[c]	Modifying the built environment to increase physical activity	• New York City, bike lanes and bike paths • Bogotá, Colombia, sustainable public transportation, Ciclovía, CicloRutas, and outdoor gyms	Modifying the built environment to promote physical activity among vulnerable groups	
Community-based programs to improve nutrition and increase physical activity	Effective with insufficient evidence[c]	Work-based programs	United States, "Treatwell 5-a-Day" program to increase fruit and vegetable consumption		Agriculture, health, food industry, food retail industry, schools, work places, food retailers, others
		School-based programs	• United States, Child and Adolescent Trial Cardiovascular Health (CATCH) • United States, Pathways (randomized control study among American Indian schoolchildren)		
		Other community-based programs	• North Karelia, Finland, decreasing salt and fat consumption and increasing fruit and vegetable consumption • Europe, EPODE • Mexico, National Accords for Food Health; Technical Guidelines for the Sale and Distribution of Food and Beverages in Basic Education Establishments		
Tobacco use	Best buy[a]	• Fiscal measures banning smoking in public places • Raising awareness and increasing knowledge about dangers of tobacco use	• Several successful examples worldwide • Uruguay's tobacco-control policy may be Latin America and the Caribbean's most successful effort in this regard	Support to tobacco- control policy application	Finance, health, legislature, international organizations, tobacco industry, civil society organizations

Source: Bonilla-Chacin 2014.

Note: The table includes most of the programs reviewed for this study.

a. "Best buys" are interventions that the World Health Organization (WHO) considers as "cost-effective, low cost, and can be implemented in low resource settings." World Health Organization, *Global Status Report on Noncommunicable* Diseases (Geneva: WHO, 2011).

b. These are other cost-effective interventions that are not among WHO's "best buys."

c. These are effective interventions for which there is insufficient evidence on their cost-effectiveness.

16. **This component will support, among other things, the following activities**:

(a) **Implementation at the provincial level of the national communication strategy on NCDs.**

(b) **Support for intersector coordination at the provincial and municipal levels for the design and implementation of interventions aimed at the promotion of healthy lifestyles.** These activities will be focused mainly on tobacco control, the promotion of physical activities, and the promotion of healthy diets, particularly the reduction of sodium and trans fats in diets and the promotion of consuming more fruits and vegetables. The activities include the following:

(i) **Promotion of physical activity at the local level.** This component will support activities aimed at improving the local built environment to promote physical activity, including the promotion of ciclovías,[38] active spaces, and training and communication activities.

(ii) **Municipal interventions to promote healthy eating habits.** This will include support for multisector interventions aimed at promoting healthy eating habits (i.e., reduction of sodium and trans fats, and promotion of eating more fruits and vegetables), through regulations, agreements with industry, and other actions.

(iii) **Municipal interventions to promote 100 percent tobacco smoke–free environments.**

17. **This component will support the above referenced interventions through activities that include the following:** (i) carrying out policy dialogue between the PMOHs and municipal authorities, municipal councilors, and key municipal social actors; (ii) coordination between the PMOHs and municipalities to develop and implement these interventions; (iii) gatherings, consultations, and working meetings with representatives of the food industry, including bakeries, to negotiate their adherence to agreements to reduce sodium and trans fat intake in processed foods; (iv) monitoring of the food and beverage service sector and the food and beverage industry's adherence to national and local regulations on salt and trans fat reduction; (v) technical support to municipalities on legal issues related to agreements and regulations of the food industry for sodium and trans fat reduction; (vi) technical support on food technology issues to support consultations with the food industry; (vii) technical support to municipalities on monitoring agreements and regulations on health promotion, and more general health promotion issues; (viii) technical support to municipalities for the design and implementation of *ciclovías*, and guided exercise groups; and (ix) social and communication activities to promote healthy diets.

18. **This component will also finance the transfer of resources from NMOH to the PMOHs, to reimburse EEPs subject to achievement of the TLI targets**. The expenditures included in the selected EEPs are: (i) PMOH personnel salaries and (ii) logistical services needed to implement the activities, such as utilities (i.e., water and electricity), communications, transport, and per diems.

[38] Temporarily closing main roads to motor traffic for sports and recreational purposes.

19. **The TLIs for Components 1 and 2 are shown in table A2.4**. These indicators would trigger transfers from NMOH to the provinces to reimburse EEPs. The table also shows the indicators that would need external verification.

Table A2.4 List of Transfer-linked Indicators for Components 1 and 2

Indicator	Operational definition	Frequency	Data source	External verification
Percentage of public PHC facilities with personnel trained to provide quality NCD-related health services	• The indicator will be constructed as: Numerator: Number of selected public PHC facilities with personnel trained to provide quality NCD-related health services. Denominator: Total number of selected public PHC facilities in the province. • A selected public PHC facility is considered as having its staff trained if at least two of its staff members have finalized the MAPEC training. • The selected public PHC facilities are those that concentrate 70 percent of all the care consultations in the province (approximately 1,600 PHC facilities nationally). • Note: This indicator measures the first step in an ongoing and hands-on process to train health care personnel to ensure a reform in the model of care provided to patients with NCDs. The indicator measures whether at least two health personnel in PHC facilities have completed the initial online training. Given the size of these facilities, this would imply the training of 50 to 100 percent of all health personnel in the 1,600 facilities to be supported by the Project.	Biannual	Report from certification teams validated by the provincial area for NCDs and certified by DNCDs	The information provided in the report will not need verification from a third party.
Percentage of public PHC facilities that are implementing electronic medical records	• The indicator will be constructed as: Numerator: Number of selected PHC facilities that are carrying out activities related to the implementation of electronic medical records. Denominator: Total number of selected public PHC facilities in the province. • PHC facilities implementing electronic medical records refers to selected public PHC facilities that carry out at least one of the following activities: (i) two or more members have been trained by the province or DNCDs in this area; (ii) it applies and adequately uses the national norms on this subject. • The prioritized public PHC facilities are those that concentrate 70 percent of all the care consultations in the province (approximately 1,600 PHC facilities nationally). • Note: The use of information systems, and particularly electronic medical records, is an important measure to ensure a change in the model of care of patients with NCDs. Electronic medical records would allow the follow-up of patients among different health care providers and across different levels of care, since the information registered could be shared among all. This would support the effective monitoring of patients' conditions; the continuity of care; when combined with clinical support systems, could also support the implementation of evidence-based clinical guidelines; and when combined with other eHealth tools to communicate with patients, could also support self-care. The implementation would be a lengthy process, at the moment, the paper-based adult clinical record is relatively new and it is not commonly used.	Biannual	Report from certification teams validated by the provincial area for NCDs and certified by DNCDs.	The information provided in the report will be verified by a third party agent.

Indicator	Operational definition	Frequency	Data source	External verification
Percentage of public PHC facilities certified to provide quality services for the detection and control of patients with NCDs	• The indicator will be constructed as: Numerator: Number of selected PHC facilities that have developed MAPEC in the province. Denominator: Total number of selected public PHC facilities in the province. • PHC facilities that have developed the chronic disease care model refer to those that offer a minimum set of conditions that favors the implementation of MAPEC. This will be evaluated with an instrument designed from the adaptation of the Assessment of Chronic Illness Care (ACIC) internal client version 3.5. A facility will meet the minimum set of conditions to provide quality services if it scores 10 points in this instrument. • The selected public PHC facilities are those that concentrate 70 percent of all the care consultations in the province (approximately 1,600 PHC facilities nationally). • Note: This certification tool scores the progress in PHC facilities toward a change in the model of care. In other words, it measures whether the facility has the needed capacity to offer high-quality prevention and control services for NCDs. The tool measures whether the following features are present: (i) evidence-based clinical guidelines in use in all health facilities; (ii) trained health care personnel in the interpretation and use of these guidelines; (iii) developed health care networks of increasing complexity to ensure the continuity of care of patients with NCDs; (iv) developed health information systems that would allow patient follow-up among different providers, support their self-care, and provide support for clinical decision making (e.g., electronic medical records); (v) capacity to support patient self-care; and others.	Biannual	Report from certification teams validated by the provincial area for NCDs and certified by DNCDs.	The information provided in the report will be verified by a third-party agent.
Provincial PHC facilities certification teams working according to an approved action plan	• During the first year of Project implementation, this indicator will be evaluated by the designation of a provincial team that will be in charge of the certification of PHC facilities to better prevent and control NCDs, independently of the results of the certification process. This team will work according to an action plan approved by the PDNCDs. • Starting the second year, this indicator will be evaluated by the presentation of the management reports prepared by the provincial team in charge of the certification process.	Annual	Report presented by the provincial NCDs area and validated by DNCDs.	The information provided in the report will not need verification from a third party.
(i) Provincial units in charge of surveillance, promotion, prevention, and control of NCDs	This indicator refers to the signing of the Annual Performance Agreement between the Nation and the provinces and the creation of a formal area within the PMOHs with assigned mission and functions needed to implement the NCD strategy at the provincial level. This area or unit will be in charge of the promotion, surveillance, and reorientation of services to better deal with NCDs and their risk factors. Starting the second year, in addition to the Annual Performance Agreement signed between the	Annual	Public document of the agreements presented and approved (the document will	This information does not require third-party verification, since these are agreements signed

Indicator	Operational definition	Frequency	Data source	External verification
and their risk factors are functioning; and (ii) the participating province has signed its Annual Performance Agreement.	Nation and the provinces, a report will be required documenting the activities implemented by the unit.		be validated by DNCDs) and signed Annual Performance Agreement.	by corresponding authorities and this information can be provided.
Percentage of vulnerable groups with increased opportunities for physical activity in participating municipalities	• This indicator will be constructed as: Numerator: Number of vulnerable people living in municipalities that promote physical activity in the province. Denominator: Total number of vulnerable people in the province. • The indicator refers to the vulnerable population living in those municipalities that implement a municipal project for the promotion of physical activity according to the tool presented by the national level, which includes: social activities, environmental activities, open air gyms, and communication strategies. In addition, to be accredited as a municipality that promotes physical activity, it must adhere to the National Program of Healthy Municipalities and Communities. • Vulnerable population groups refer to population not covered by contributory health insurance.	Biannual	Report presented by the provincial NCDs area and validated by DNCD. This report should include all public documentation related to regulations, norms, and/or agreements.	This information does not require third-party verification, since the information provided in the reports comes from sources that are publicly available (i.e., regulations, norms, agreements enacted by the provincial and/or municipal levels).
Percentage of vulnerable population groups protected against secondhand tobacco smoke in participating municipalities	• This indicator will be constructed as: Numerator: Number of vulnerable people living in municipalities that are certified or recertified as 100 percent smoke-free environments in the province. Denominator: Total number of vulnerable people in the province. • The indicator refers to the vulnerable population living in those municipalities that are certified or recertified as 100 percent smoke-free environments and thus that comply with the requirements of the National Tobacco Control Program to be certified as a Smoke-Free Municipality. In addition, to be accredited as a 100 percent Smoke-Free Municipality, it must adhere to the National Program of Healthy Municipalities and Communities. • Vulnerable population groups refer to populations not covered by contributory social insurance schemes.	Biannual	Report presented by the provincial NCDs area and validated by DNCD. This report should include all public documentation related to regulations, norms, and/or agreements.	This information does not require third-party verification since the information provided in the reports comes from sources that are publicly available (i.e., regulations, norms, agreements enacted by the provincial and/or municipal levels).

Indicator	Operational definition	Frequency	Data source	External verification
Percentage of vulnerable population groups protected against excessive sodium consumption in participating municipalities	• This indicator will be evaluated biannually and will be constructed as: Numerator: Number of vulnerable people living in municipalities that adhere to the strategy "Less Salt, More Life" in the province. Denominator: Total number of vulnerable people in the province. • The indicator refers to populations living in municipalities that adhere to the strategy "Less Salt, More Life," which means that they are committed, through the signing of an agreement letter or through a municipal legislation (*ordenanza*), to the following activities: (i) voluntary agreements to reduce sodium content with local food industry; (ii) agreements with local bakeries to produce bread with less sodium; (iii) ban of systematic provision of salt shakers in places that sell foods; etc. In addition, to be accredited as a municipality that adheres to the "Less Salt, More Life" strategy, it must also adhered to the National Program of Healthy Municipalities and Communities. • Vulnerable population groups refer to populations not covered by contributory social insurance schemes.	Biannual	Report presented by the provincial NCDs area and validated by DNCD. This report should include all public documentation related to regulations, norms, and/or agreements.	This information does not require third-party verification, since the information provided in the reports comes from sources that are publicly available (i.e., regulations, norms, agreements enacted by the provincial and/or municipal levels).
Regular analysis and reporting of integrated information on NCDs, injuries, and risk factors have been carried out	During the first year, this indicator refers to the identification and integration of various sources of information at the provincial level related to NCDs, injuries, and their risk factors and the production of a first report. For the next years, it refers to production of regular reports each semester.	Annual	Report presented by the provincial NCDs area and validated by DNCDs	The information presented in the report does not require third-party verification.

Note: DNCDs = Directorate of Health Promotion and Control of NCDs; MAPEC = Care Model for People with a Chronic Condition (*Modelo de Atención de Personas con Enfermedades Crónicas*); NCD = noncommunicable disease; PDNCD = Provincial Directorate of Noncommunicable Diseases; PHC = primary health care; PMOH = Provincial Ministry of Health.

20. **Component 3: Supporting NMOH and the PMOHs to improve surveillance, monitoring, promotion, prevention, and control of NCDs, injuries, and risk factors (US$87.1 million).** This component focuses on policies aimed at coordinating multisector activities; harmonizing management instruments within NMOH and the PMOHs; and, in general, improving the capacities of NMOH and the PMOHs for the design, implementation, monitoring, and evaluation of policies aimed at surveillance, prevention, and control of NCDs, injuries (only in the case of surveillance), and their risk factors. This component includes all the activities that will be implemented at the national level, including the procurement of goods and services that will take place at the national level, but that will later be distributed to the provinces. The Project will provide this support through goods, pharmaceutical products, consultant and non-consultant services, operating costs, and training for carrying out the following three set of activities as indicated below:

21. **First set of activities are mainly activities aimed at strengthening the capacity of the Ministry of Health of the Nation**:

(a) **Inter-institutional and intra-institutional coordination activities aimed at harmonizing processes and activities for the design and implementation of interventions related to NCDs**. This will include:

(i) Coordinating agencies within and outside the health sector (including those in charge of education, transport, urban planning, agriculture, finance, etc.) at different levels of government for the design, implementation, and evaluation of multisector policies aimed at preventing risk factors for NCDs. The activities to be supported include the following: (i) the continuous development of the structural organization of NMOH and particularly of DNCD; (ii) the development of NMOH's capacity to monitor and evaluate national and provincial plans for the surveillance, promotion, prevention, and control of NCDs; and (iii) support for the formation and maintenance of alliances between NMOH and agencies within and outside the health sector, including the development of an institutional framework to allow these alliances.

(ii) Harmonizing the management instruments of the various programs and institutional areas within NMOH and the PMOHs, which are needed for an integral and coordinated implementation of the NCD strategy. This will include the strengthening and integration of NMOH's information systems.

(iii) Designing a regulatory framework and standards for the development of a clinical information system. The activities to be financed include the development of a regulatory agenda that will allow the advancement of a clinical information system and its governance structure.

(iv) Supporting NMOH's support to the provinces in the implementation of electronic clinical records at the PHC level. The goods and activities to be financed include the following: informatics equipment, training, technical assistance, and operational costs.

(b) **Strengthened monitoring and surveillance of NCDs, injuries, and their risk factors.** This subcomponent will support the implementation of the following surveys: (i) the third National Risk Factors Survey, including core questions from the Adult Questions for Surveys; (ii) the School Health Survey with a Youth Tobacco survey module; (iii) an individual food consumption survey; and (iv) a biannual emergency services survey (to monitor injuries and emergency care in case of injuries). The subcomponent will also support the development and implementation of a telephone surveillance system and some studies, including a new burden of disease study.

(c) **Support for the design, implementation, monitoring, and evaluation of interventions aimed at promotion, prevention, and control of NCDs.** This will include the following activities: (i) strengthening the capacity of the National Food Institute (*Instituto Nacional de Alimentos*, INAL) to monitor the regulations to reduce sodium and trans fats in processed foods, including the development of a national database on food composition, and equipment, technical assistance, and training for an INAL central lab; (ii) designing a national communication strategy on the promotion of healthy lifestyles; (iii) strengthening the preexisting e-learning platform to support the dissemination and adaptation of many of the instruments needed to support the design and implementation of national and provincial NCD strategies; (iv) reformulating the 0800 tobacco phone line; and (v) supporting the monitoring of the composition of tobacco products.

(d) **Support for the reorientation of services for the control of NCDs and their risk factors.** This will include the following activities: (i) the design of instruments needed for a change in the model of care of patients with chronic diseases (e.g., clinical guidelines for screening and control of patients with NCDs, eHealth tools to support continuous care, self-care, etc.); (ii) improvement of the capacity of public health facilities to control NCDs through the procurement of equipment and pharmaceutical products (for asthma and chronic obstructive pulmonary disease); and (iii) support for the National Cancer Institute through strengthening screening for colon cancer.

22. **The second set of activities will support PMOHs** in the promotion, prevention, control, monitoring, and surveillance of NCDs, injuries (for surveillance purposes), and their risk factors. This component will support provinces in the development of their NCD plans. The subcomponent will finance the following activities:

(a) **Developing or strengthening of provincial structures** in charge of surveillance, monitoring, promotion, prevention, and control of NCDs through, among others, consultancies, training, operations costs, and goods.

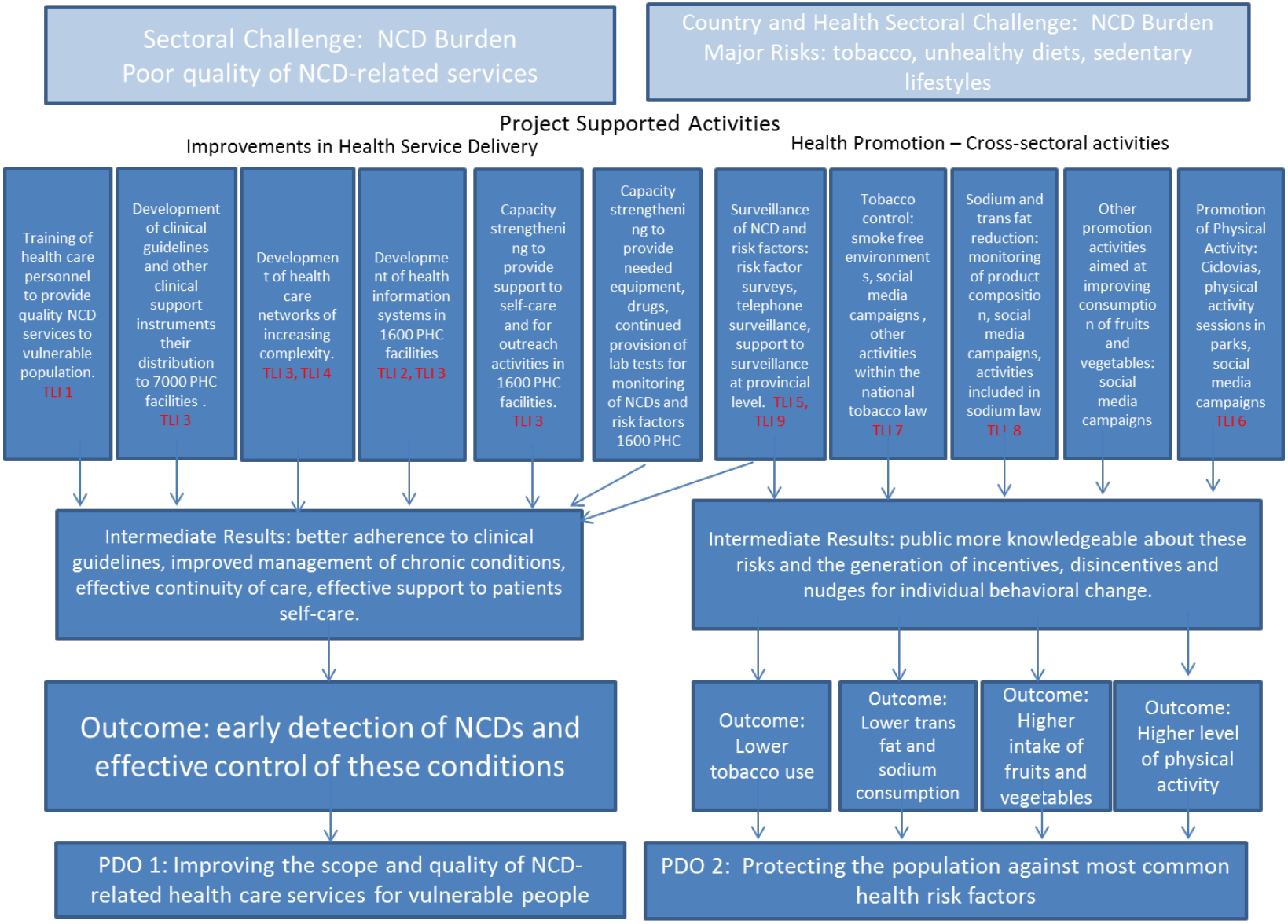
(b) **Strengthening surveillance and monitoring and evaluation of NCDs at the provincial level**. This support will include improvement of monitoring and surveillance systems for NCDs, injuries, and their risk factors at the provincial level, including support for health situation rooms (after the closing of FESP II (P110599)) and for the Injury Surveillance System (*Sistema de Vigilancia de Lesiones de Causa Externa*, SIVILE). This support will mainly be provided through consultants and training.

(c) **Improving the capacity of regional- and municipal-level structures for the implementation, monitoring, and evaluation of interventions related to NCDs**. This will include strengthening the capacity of the National Network of Official Laboratories for Food Analysis (RENALOA), linked to INAL, and a central INAL lab to monitor the agreements with the industry to reduce sodium in processed foods and monitor the regulation to reduce trans fats in processed foods. This support will include equipment, technical assistance, and training for six regional labs and a national lab.

23. **The third set of activities will include those aimed at providing Project implementation support**, such as support to UFI-S, and the implementation of an external financial audit and concurrent audit for the Project. The component will also include technical support for the PMOHs to improve their budget and financial reporting of spending related to NCDs and injuries.

24. **Figure A2.2 presents a schematic conceptual framework for the entire Project.** The framework summarizes the rationale for the choice of activities to be supported and their link to the development objectives and long-term results.

Figure A2.2 Project Conceptual Framework and Results Chain



Annex 3 Implementation Arrangements

ARGENTINA: Protecting Vulnerable People against Noncommunicable Diseases Project (P133193)

Project Stewardship

1. **The Project will be implemented by the National Ministry of Health (NMOH) through the Directorate of Health Promotion and Control of Noncommunicable Diseases (NCDs) (*Dirección de Promoción de la Salud y Control de Enfermedades no Transmisibles*, DNCDs).**[39] High-level institutional coordination with the provinces will be carried out within the Federal Health Council (*Consejo Federal de Salud*, COFESA), among others. DNCDs depends on the Undersecretary of Prevention and Risks Control and is led by the Secretary of Promotion and Health Programs,[40] who will be the Project's National Director. The Secretariat of Promotion and Health Programs has had successful experience carrying out national programs and working with World Bank-supported projects.

Institutional Arrangements at NMOH

2. **DNCDs will be the technical coordination unit responsible for carrying out Project activities through its departments of Surveillance, Health Promotion, Health Care Services, and a Provincial Coordination Unit.** There will be an Operational Coordination Unit under the Secretary of Promotion and Health Programs, who will be the liaison with the Project's National Director and the World Bank, for administrative and technical aspects of the Project, and with the heads of all other substantive program areas in NMOH and the PMOHs.

3. **The International Financing Unit of NMOH (UFI-S) will be responsible of overall administrative and fiduciary matters such as financial management and procurement.** UFI-S is NMOH's central fiduciary agency that manages external financial resources and provides support to all the executing units involved in Project implementation. UFI-S was created by NMOH Resolution 98/2000 and reports directly to the NMOH Secretariat of Coordination. UFI- S has its own Operations Manual, which describes procedures for separating functions among the different stages of the Project. This Operations Manual will be part of the Project Operations Manual. UFI-S has conducted financial management and procurement functions over the past 14 years for Bank–financed projects.[41]UFI-S will be responsible for the following: managing procurement processes; monitoring contract administration (conducted by NMOH's line units); processing payments to suppliers and consultants; managing the Project finances, including control of the designated account and flow of funds; accounting and financial reporting; collecting

[39] This Directorate was created by NMOH Resolution 1083/2009 for leading the implementation of the NCD strategy.
[40] The Secretariat of Promotion and Health Programs has had successful experiences carrying out national programs and working with World Bank–supported projects. The Plan Nacer I and II (P071025 and P095515), FESP I (P090993), and H1N1 (P117377) projects were managed by the same Secretariat; currently, it also manages the *Programa SUMAR* (P106735) and FESP II (P110599) projects.
[41] Health Surveillance Program and Disease Control VIGIA (P055482), *Plan Nacer* I (P071025), *Plan Nacer* II (P095515), FESP I and II (P090993 and P110599), Emergency Project for the Prevention and Management of Influenza-Type Illness and Strengthening of Argentina's Epidemiological System (P117377), and *Programa Sumar* (P106735).

and controlling the provincial financial reporting required for performance-linked transfers; and external auditing arrangements.

4. **Project activities will be coordinated and implemented using NMOH's structure and staff.** DNCDs will be adequately staffed to oversee this Project in terms of experience and technical qualifications, developed through its implementation of the NCD strategy and its supporting for FESP II (P110599) implementation as well as *Remediar+Redes* (a project financed by the Inter-American Development Bank). UFI-S and DNCD will receive support (technical, financial management, procurement, and safeguards) from a number of consultants until Project completion; the support will be recruited according to specific terms of reference included in the Operations Manual.

Institutional Arrangements at the PMOHS

5. **The PMOH of each participating province will be responsible for the implementation of Project activities under Components 1 and 2; there will be a counterpart official in charge of implementation at the provincial level.** Each province will be supported by the Provincial Directorate of Noncommunicable Diseases (PDNCDs), or the equivalent technical line unit in charge of the substantive programs related to NCDs and injuries, and by their structure and staff. Provincial health service delivery areas will work with PDNCDs in the implementation of Component 1. NMOH will finance one consultant for the first two years of Project implementation to facilitate coordination of Project administrative management among the PMOH areas.

Implementation Arrangements

6. **The provinces will express their intention of participating in the Project's activities through a Letter of Intent (*Carta de Adhesión*);** 13 provinces have already signed this letters.

7. **The reimbursement of the provincial EEPs will be governed by an Umbrella Agreement (*Acuerdo Marco*) between each province and NMOH.** Under the Umbrella Agreement, each party agrees to the following: the basic Project design, legal framework, and conditions for Project execution; the EEPs and TLIs used to reimburse resources to the provinces; and World Bank safeguard policies, reporting and verification mechanisms, and conflict resolution mechanisms. The Project's Operational Manual will be an annex to the Umbrella Agreement.

8. **Annual Performance Agreements will be signed by NMOH and the PMOHs.** These agreements will include: the PMOHs' annual activity plans, setting annual targets to be met and specific commitments between the parties. The Umbrella Agreement and Annual Performance Agreements must be acceptable to the Bank previous to signature.

Performance-Based Financing (Phf) Mechanisms (EEP Link to the Achievement of TLIs)

9. **The Project will follow a PBF approach for Components 1 and 2.** NMOH will reimburse provincial expenditure for implemented Project activities through EEPs that are provincial budget programs or subprograms. Since Project activities need to be carried out by provincial health personnel and supported by provincial logistic services, the identified and agreed EEPs will be Health Care Services Programs, based on the PMOH payroll, and Logistic Service Programs, based on selected non-personnel services expenditures (water and electricity utilities,

communications, transport, and per diems), and thus will finance the time for all health care personnel and the additional logistical services involved in these change processes The reimbursement of EEPs will act as a financial incentive for the PMOHs, since they will receive additional resources during the Project cycle to finance the implementation of the reform in the model of care of their health networks and population-based interventions. Following the successful experience of Plan NACER/SUMAR, the primary health care (PHC) facility/municipality, will receive information about the resources reimbursed to the province as a result of their performance. The PHC/municipality teams will then be able to decide how to use the additional resources to improve the care provided to vulnerable patients with NCDs. Table A3.1 shows schematically the link between EEPs, Project activities, and TLIs.

Table A3.1 EEPs, Project Activities, and TLIs under Components 1 and 2

EEPs	Component	Project activities	TLIs
Personnel Payroll: *Permanent* *Personnel* *Temporary* *personnel* Non-personnel services: *Basic services* i. Water ii. Electricity iii. Gas iv. Telephone, Internet, videos v. Cellular phones vi. Post	Component 1	(i) Hands-on training of PHC facility personnel on early detection and effective control of NCDs, including support for patients' self-care (ii) Hands-on training in clinical process reforms needed to ensure coordination, continuity of care, support for patients' self-care, etc. (iii) Creation, adaptation, distribution, and implementation of NCD clinical guidelines at PHC facilities and hospitals, to ensure evidence-based clinical decision making (iv) Training of PHC facility personnel to adopt electronic medical records to support the coordination and continuity of care (v) Seminars on NCDs for PMOH personnel (vi) Gatherings, consultations, and working meetings between health centers and hospital teams working on chronic patients to ensure the continuity and coordination of services across levels of care (vii) Development of administrative procedures to manage integrated lines of care for NCDs and training of administrative personnel to implement them (viii) Development, implementation, and monitoring of new supervision procedures for PHC facilities to support PHC teams in the process of change toward a new health care model for chronic patients (ix) Development and implementation of new procedures for patient flow within the provincial health care networks (x) Improvements in managerial guidelines (xi) Updates and improvements in information systems and databases (xii) Work of the micromanagement teams to evaluate 1,600 PHC facilities and certify them	Percentage of public PHC facilities with personnel trained to provide quality NCD-related health services Percentage of public PHC facilities that are implementing electronic medical records Percentage of public PHC facilities certified to provide quality services for the detection and control of patients with NCDs Provincial PHC facilities certification teams working according to an approved action plan
	Component 2	(i) Gatherings, consultations, and working meetings with municipal authorities, councilors, and civil society groups at the local level (ii) Participation in the intersector groups at the municipal level that are part of the National Program on Healthy Municipalities and Communities (iii) Design and/or adaptation of national health promotion policies and their implementation (iv) Support for the municipal authorities in the creation of *ciclovías* (i.e., temporary closings of main roads to transport vehicles, providing security to the users) (v) Lobbying for regulation enactment at the municipal level related to tobacco control and sodium and trans-fat control (vi) Gatherings, consultations, and working meetings with the food industry to lobby for inclusion in agreements to reduce sodium and trans fats in processed foods at the local level	Percentage of vulnerable population groups with increased opportunities for physical activity in participating municipalities Percentage of vulnerable population groups protected against secondhand tobacco smoke in participating municipalities Percentage of vulnerable population groups protected against excessive sodium consumption in participating municipalities

Per diems, *compensation* ii. Per diems iii. Transport iv. Compensation		(vii) Gatherings, consultations, and working meetings to lobby the service sector that sells foods and beverages at the local level to adhere to the national guidelines on salt and trans fat reduction (viii) Working meetings with bakers and baker associations to ensure their adherence to the program "Less Salt, More Life" and reduce sodium content in breads (ix) Technical support to the municipalities on legal issues related to agreements/regulations with the food industry to reduce sodium and trans fat; on technical issues related to food technology; on monitoring agreements and regulations linked to the supported interventions; and more general health promotion issues (x) Adaptation of national health promotion media campaigns to local levels and distribution of various promotional materials	
	Component 1 and Component 2	(i) Development of an overview of the NCDs and injuries situation in the province (ii) Development of a diagnostic of the situation of NCD promotion, prevention, and control activities (i.e., the situation at PHC facilities, care networks, regulation, promotion activities at schools and municipalities, and others) (iii) Development of NCD-related lines of work and their execution plans (iv) Creation of an institutional structure responsible for the execution of the activities included in the plan (v) Definition of roles and responsibilities (vi) Development and dissemination of bulletins or reports describing the health situation in the provinces related to NCDs, injuries, and their risk factors, with the aim of helping identify priority action areas and decision making about the evolution of the NCD plan	(i) Provincial units in charge of surveillance, promotion, prevention, and control of NCDs and their risk factors are functioning; and (ii) the participating province has signed its Annual Performance Agreement Regular analysis and reporting of integrated information on NCDs, injuries, and risk factors have been carried out.

Note: EEP = eligible expenditure program; NCD = noncommunicable disease; PHC = primary health care; PMOH = Provincial Ministry of Health; TLI = transfer-linked indicator.

10. **Reimbursement of the EEPs will represent about 2 percent of the actual budget amount of the agreed EEPs.** As shown in table A3.2, the estimated Project financing for Components 1 and 2 in the first year will represent on average up to 2 percent of EEPs. However, there are differences across provinces; the highest percentage in a province is 7 percent.

Table A3.2 Annual Project Financing Impact on EEPs, Based on Province Data, 2014
(US$, millions)

Item	Amount
Total Provincial Public Health Expenditure	7,068
Total EEPs	4,532
Maximum Project Financing for Component 1 and 2 (*)	79
Percentage of Project Financing for Component 1 and 2 with respect to EPP	2%

Source: Sanguinetti 2014
(*) This figure represents the expected disbursement for Component 1 and 2 for the first year of Project Implementation which is the highest according the disbursement schedule.

11. **The distribution of resources under Components 1 and 2 across years of Project implementation gives provinces incentives to adhere to the project, while the distribution across provinces follows a pro-poor formula.** To provide incentives to the provinces to adhere to the Project, the first years of Project implementation will concentrate a large share of the resources as per table A3.3. In addition, to distribute resources across provinces, the following dimensions were taken into account: (i) 20 percent of the resources available each year will be distributed equally across the provinces to provide support for capacity-building activities at the PMOH level; (ii) 30 percent of the resources will be allocated on the basis of the population in the provinces classified by the National Institute of Statistics and Censuses (*Instituto Nacional de Estadística y Censos*) as having unsatisfied basic needs; (iii) 30 percent will be allocated on the basis of the provincial burden of disease (i.e., using indicators of hypertension, cholesterol, and diabetes prevalence); and (iv) 20 percent will be allocated based on the number of public PHC facilities. Box A3.1 includes the formula for the distribution of resources across the 24 provinces. Table A3.4 shows the distribution of funds for Components 1 and 2 across provinces, accordingly.

Table A3.3 Distribution of Resources from Components 1 and 2 across the Project's Implementation Years *(percent)*

Implementation year	Effectiveness	1st year	2nd year	3rd year	4th year	5th year
Annual distribution	20	10	25	20	15	10

Box A3.1 Formula for Distribution of Resources for Components 1 and 2 across the 24 Provinces

Provincial weight = 0.2 * 1/24 + 0.3 * (population with unsatisfied needs in province *i*/total population with unsatisfied needs) + 0.3 * [0.33 * (quartile value of province *i* in relation to the % of provincial population with hypertension/∑quartile value of each province in relation of the % of population with hypertension) + 0.33 * (quartile value of province *i* in relation to the % of provincial population with diabetes/∑quartile value of each province in relation of the % of population with diabetes) + 0.33 * (quartile value of province *i* in relation to the % of provincial population with high cholesterol/∑quartile value of each province in relation of the % of population with high cholesterol)] + 0.2 * (public primary health care facilities in province *i*/public primary health care facilities in the entire country).

Table A3.4 Distribution of Funds by Province *(US$)*

Province	Total amount
Buenos Aires	47,075,907
Catamarca	8,300,664
Chaco	9,803,291
Chubut	7,428,517
Ciudad de Buenos Aires	7,508,552
Córdoba	15,909,725
Corrientes	11,170,145
Entre Ríos	10,204,210
Formosa	7,531,115
Jujuy	8,617,052
La Pampa	6,939,979
La Rioja	7,758,531
Mendoza	11,620,100
Misiones	9,901,750
Neuquén	6,229,149
Río Negro	7,586,401
Salta	11,047,253
San Juan	8,134,557
San Luis	7,152,563
Santa Cruz	6,094,605
Santa Fe	13,490,030
Santiago del Estero	13,486,163
Tierra del Fuego	6,168,810
Tucumán	12,840,932
Total	**262,000,000**

Note: A retroactive disbursement against EEPs incurred up to 12 months prior to the loan signature is expected for US$52.4 million, so the total amount to be transferred to the provinces would be **US$209.6 million.**

12. **Table 5 shows the percentage of the maximum amount of resources allocated to each TLI per year of Project implementation.** There are nine TLIs for each calendar year. If the yearly targets for the TLIs are met, the resources to be transferred to the provinces correspond to the percentages shown in table A3.5.

Table A3.5 Distribution per TLI per Calendar Year (percent)

Transfer Link Indicator	Year 1	Year 2	Year 3	Year 4	Year 5
1. Percentage of public PHC facilities with personnel trained to provide quality NCD-related health services	15	18	13	10	10
2. Percentage of public PHC facilities that are implementing electronic medical records		10	12	18	20
3. Percentage of public PHC facilities certified to provide quality services for the detection and control of patients with NCDs		22	30	35	33
4. Provincial PHC facilities certification teams working according to an approved action plan	10	5	5	5	5
5. (i) Provincial units in charge of surveillance, promotion, prevention, and control of NCDs and their risk factors are functioning; and (ii) the participating province has signed its Annual Performance Agreement	30	10	6	6	6
6. Percentage of vulnerable population groups with increased opportunities for physical activity in participating municipalities	6	9	8	6	6
7. Percentage of vulnerable population groups protected against secondhand tobacco smoke in participating municipalities	6	9	8	6	6
8. Percentage of vulnerable population groups protected against excessive sodium consumption in participating municipalities	6	9	8	6	6
9. Regular analysis and reporting of integrated information systems on NCDs, injuries, and risk factors have been carried out	6	8	10	8	8
	100	100	100	100	100

Note: NCD = noncommunicable disease; PHC = primary health care; TLI = transfer-linked indicator.

13. **Reimbursements from NMOH to the PMOHs for Components 1 and 2 will be based on the following criteria**: (i) a "70 percent rule" requiring that each province spends at least 70 percent of the amount budgeted for the EEPs in a calendar semester; and (ii) compliance with the TLIs. If either of the two rules is not met, the province will not be reimbursed. Table A3.6 shows targets and funds allocated to each TLI, some of which would be measured by semester, while others by year. The yearly funds allocated to each TLI by province will be included in the Disbursement Letter.

14. **Compliance with transfer-linked indicators will be verified by DNCD, with the support of a third-party agent for some of the indicators (see table A2.4, annex 2); UFI-S and the concurrent financial audit will verify the execution of the EEPs**. For each period, if yearly targets are met, the amount to be transferred to each province will be the product of the total number TLIs achieved and the amount assigned to each of them. In case the achievement of a TLI is lower than the yearly target, the funds will be transferred proportionally. If less than nine TLIs are achieved per province per year or if a province does not sign the Umbrella Agreement, the total remaining amount will be reassigned to the next calendar year according to the provincial distribution formula (box A3.1). If the achievement of a TLI cannot be verified by the third-party agent, an amount equivalent to the unitary TLI will be deducted in the following period. The detailed mechanism for transferring EEPs against the compliance of the TLIs will be included in the Operations Manual. During the Project's midterm review, NMOH and the Bank will decide the following: (i) entry conditions for provinces that did not sign the Umbrella Agreement before the midterm review; and (ii) the reallocation of expenditure categories for the last 24 months of Project implementation.

Table A3.6 Funds Allocated to TLI per Year

TLI	Frequency	Year 1			Year 2			Year 3			Year 4			Year 5			Total Amount per TLI
		Target	% Transference	Amount USD	Target	% Transference	Amount USD	Target	% Transference	Amount USD	Target	% Transference	Amount USD	Target	% Transference	Amount USD	UDS
Percentage of public PHC facilities with personnel trained to provide quality NCD-related health services.	March	10%	7,5%	1,965,000	25%	9%	5,895,000	35%	7,5%	3,930,000	45%	5%	1,965,000	60%	5%	1, 310,000	**30,130,000**
	Sept	20%	7,5%	1,965,000	30%	9%	5,895,000	40%	7,5%	3,930,000	50%	5%	1,965,000	70%	5%	1, 310,000	
Percentage of public PHC facilities that are implementing electronic medical records.	March	5%	4%	1,048,000	12%	15%	3,275,000	25%	6%	3,144,000	35%	9%	3,537,000	45%	10%	2,620,000	**27,248,000**
	Sept	10%	4%	1,048,000	16%	20%	3,275,000	30%	6%	3,144,000	40%	9%	3,537,000	50%	10%	2,620,000	
Percentage of public PHC facilities certified to provide quality services for the detection and control of patients with NCDs.	March	5%	6,5%	1,703,000	15%	12%	7,860,000	25%	15%	7,860,000	35%	17,5%	6,877,500	45%	16,5%	4,323,000	**57,247,000**
	Sept	10%	6,5%	1,703,000	20%	12%	7,860,000	30%	15%	7,860,000	40%	17,5%	6,877,500	50%	16,5%	4,323,000	
Provincial PHC facilities certification teams working according to an approved action plan.	Annual	**YES/NO** Assignation of PHC evaluation functions to a provincial team.	10%	2,620,000	**YES/NO** Monitoring document	5%	3,275,000	**YES/NO** Monitoring document	5%	2,620,000	**YES/NO** Monitoring document.	5%	1,965,000	**YES/NO** Monitoring document.	5%	1,310,000	**11,790,000**

TLI	Frequen-cy	Year 1			Year 2			Year 3			Year 4			Year 5			Total Amount per TLI
(i) Provincial units in charge of surveillance, promotion, prevention and control of NCDs and their risk factors are functioning; and (ii) the Participating Province has signed its Annual Performance Agreement.	Annual	**YES/NO** Agreement signed and formal document indicating the unit has been created.	30%	7,860,000	**YES/NO** Agreement signed and formal document giving account of the unit work.	10%	6,550,000	**YES/NO** Agreement signed and formal document giving account of the unit work.	6%	3,144,000	**YES/NO** Agreement signed and formal document giving account of the unit work.	6%	2,358,000	**YES/NO** Agreement signed and formal document giving account of the unit work.	6%	1,572,000	**21,484,000**
Percentage of vulnerable population groups with increased opportunities for physical activity in participating municipalities.	March	2%	3%	786,000	7%	4%	2,620,000	12%	4%	2,096,000	17%	3%	1,179,000	22%	3%	786,000	**15,589,000**
	Sept	5%	3%	786,000	10%	5%	3,275,000	15%	4%	2,096,000	20%	3%	1,179,000	25%	3%	786,000	
Percentage of vulnerable population groups protected against second hand tobacco smoke in participating municipalities.	March	2%	3%	786,000	7%	4%	2,620,000	12%	4%	2,096,000	17%	3%	1,179,000	22%	3%	786,000	**15,589,000**
	Sept	5%	3%	786,000	10%	5%	3,275,000	15%	4%	2,096,000	20%	3%	1,179,000	25%	3%	786,000	
Percentage of vulnerable population groups protected against excessive sodium	March	2%	3%	786,000	7%	4%	2,620,000	12%	4%	2,096,000	17%	3%	1,179,000	22%	3%	786,000	**15,589,000**
	Sept	5%	3%	786,000	10%	5%	3,275,000	15%	4%	2,096,000	20%	3%	1,179,000	25%	3%	786,000	

TLI	Frequen-cy	Year 1			Year 2			Year 3			Year 4			Year 5			Total Amount per TLI
consumption in participating municipalities.																	
Regular analysis and reporting of integrated information systems on NCDs, injuries and risk factors have been carried out.	Annual	**YES/NO** Identification and integration of data bases	6%	1,572,000	**YES/NO** Definition of the evaluation framework for the data	6%	3,930,000	**YES/NO** Identification of priority studies	8%	4,192,000	**YES/NO** Develop-ment of evidence-based studies	8%	3,144,000	**YES/NO** Dissemination of studies	8%	2,096,000	**14,934,000**
				26,200,000			**65,500,000**			**52,400,000**			**39,300,000**			**26,200,000**	**209,600,000**

Note: PHC = primary health care; NCD = noncommunicable disease.

15. **There will be one retroactive disbursement against EEPs incurred up to 12 months prior to the loan signature**. This retroactive disbursement—up to 20 percent of the total amount for Components 1 and 2—is for provincial activities in preparation to the implementation of this loan. To process this reimbursement, PMOHs will need to provide evidence of accomplishment of the following two actions: (i) baseline information on the PHC facilities to be supported by Component 1 of the Project, providing information on infrastructure and personnel; and (ii) an analysis on the reporting of the PMOHs' budgetary information. If a province does not meet the conditions for the retroactive financing, the funds will be distributed according the provincial distribution formula (box A3.1) across the Project implementation years. Table A3.7 shows the targets and total amounts to be paid retroactively.

Table A3.7 Targets and Total Amount to Be Paid Retroactively

Indicator	Frequency	Transfer (%)	Amount (US$)
(a) Baseline information on the PHC facilities to be supported by Component 1	Effectiveness	50	26,200,000
(b) Analysis on the reporting of PMOH budgetary information	Effectiveness	50	26,200,000
			52,400,000

Note: PHC = primary health care; PMOH = Provincial Ministry of Health.

16. **All activities under Component 3 of the Project will be implemented at the national level**. Component 3 will use traditional Bank transaction-based procedures, including the national procurement of goods and services that will be distributed to the provinces based on progress in Project implementation. This component is the only one that finances procurable goods and services.

FINANCIAL MANAGEMENT AND DISBURSEMENT ARRANGEMENTS

17. **Project financial management arrangements in place at NMOH have been assessed during preparation and they are acceptable to the Bank.** Accounting and financial reporting, budgeting, internal control, external auditing and treasury operations will follow the procedures applied to other Bank operations supported by UFI-S as defined in its Operations Manual. The unit was created by a Resolution of the NMOH and has had satisfactory experience carrying out the financial management aspects of Bank-financed projects over the past 10 years.

Summary of the Financial Management Arrangements

18. **Budgeting arrangements**. The national integrated budget and accounting system will be applied at the national level. A separate line item in NMOH's annual budget will be created so budget resources from different sources and Project expenditures can be tracked. The national integrated budget and accounting system is reliable and will support the Project's budget

accounting requirements. In addition, each participating province shall maintain during Project implementation specific budget lines in their annual budgets to keep track of the corresponding eligible expenditure programs incurred during Project implementation.

19. **Accounting system and financial reporting**. Interim and annual financial reports will be prepared by UFI-S, which will be responsible for submission of reports to the Bank. Project accounts will be maintained in the UEPEX system, which is an in-house information tool developed by the federal government; its use is mandatory for multilateral-financed operations and is deemed adequate for accounting purposes. Project transactions will be recorded on a cash basis using a chart of accounts that reflects disbursement categories, program components, and sources of funding. UFI-S will also forecast Project expenditures each semester, to request advances that are supported by quarterly Interim Unaudited Financial Reports (IUFRs). These reports will show the sources and uses of funds by disbursement category for each quarter and cumulatively, as well as uses by component accompanied by a statement of movements in the designated account. Execution of the EEPs will be recorded in the provinces' financial accounting information systems following their own accounting policies and procedures. Some of the provinces may require their health sector EEP financial reporting structure to be strengthened. Technical assistance will be provided as part of Project implementation to improve PMOH financial reporting.

20. **Internal controls**. The internal control environment is part of Argentina's legal and institutional framework and UFI-S's operational processes and procedures, which provide for an adequate internal control framework and proper segregation of duties. The EEPs will be subject to the regulatory framework and control of expenditure commitments by each province's system. As part of the Project preparation, UFI-S has collected information on the provinces' annual budget processes, comprising the following: the legal framework for budget formulation and execution, including legislative approval; the budget structure, including program classification in the PMOHs and internal control procedures for budget recording and monitoring; and financial management information systems. As part of this process, the internal controls operating in the provinces have been assessed by UFI-S in NMOH, following guidance of the Project Financial Management Specialist. Internal controls as assessed by UFI-S are deemed acceptable to provide timely and reliable financial reporting of the EEPs required for this operation.

21. **Annual financial audit.** The Project's annual financial statement will be audited under the terms of reference prepared according to World Bank guidelines and performed by an independent auditor following standards acceptable to the Bank. It is expected that the financial audit will be conducted by the Argentine Supreme Audit Institution, *Auditoría General de la Nación*.

22. **External audit of provincial EEPs will be undertaken to verify the execution of the PMOHs' eligible expenditures, for each province's budget programs.** It is expected that one or more independent auditors acceptable to the Bank will be selected for this assignment, following terms of reference acceptable to the Bank as well. The NMOH through UFI-S shall furnish to the Bank semiannual audit opinions setting forth whether the EEPs implemented in the precedent period have complied with the spending requirement rules. It is also envisaged that in a second stage, the supreme audit institutions of some participating provinces may be involved in auditing provincial implementation activities. Training will be provided to the supreme audit institutions

within Component 3 to strengthen their capacity so that they can potentially participate in audits under the Project.

Flow of Funds and Disbursements Arrangements

23. **Loan proceeds will be disbursed as advances into a separate designated account in dollars to be opened in the Argentine official bank, *Banco de la Nación*.** The ceiling for advances to the designated account will be US$70 million, which is considered sufficient to cover six months of local currency operations.

24. **The following disbursement methods may be used under the loan: (a) reimbursements, (b) advances, and (c) direct payments.** Advances will be made based on a six-month forecast of Project expenditures supported by IUFRs and adjusted accordingly. Similarly, reporting on the use of advances will be supported by IUFRs documenting eligible expenditures incurred or to be incurred in the EEPs and for all other eligible expenditures. All documentation of expenditures and records will be retained by UFI-S for at least two years after the Bank receives the final audited financial statements. The disbursement arrangements are as set out in table A3.8.

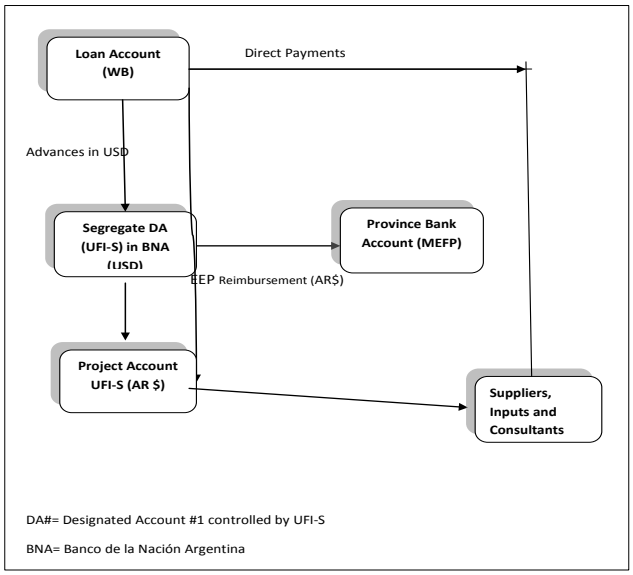
Table A3.8 Disbursement Arrangements

Reimbursement for pre-financed expenditures to be financed retroactively	EEPs only under Components 1 and 2: - Are paid up to one year before the date the loan is signed. - Do not exceed 20 percent of the total amount allocated to Components 1 and 2. - Comply with the following two indicators: (i) Report detailing the current condition of PHC facilities that will benefit from activities under Components 1; (ii) Analysis detailing the current situation of the provincial budget information reporting. Withdrawal applications for retroactive financing of EEPs will be supported by each province budget execution (actuals) report of the budget line of the agreed EEPs as included in each said province's annual budget reporting/annual financial statements submitted to the province's legislature.
Other disbursement methods	- Advances: To a segregated designated account in US$ managed by UFIs, in BNA, with a ceiling of US$70 million for the entire project advances; while US$60 million will be the ceiling for category 1. - Direct payments to suppliers. The minimum application size for direct payment requests will be defined in the Disbursement Letter.
Supporting documentation	- Interim Financial Reports along with concurrent audit reports validating compliance with the rule of 70% provincial budget spending of EEP under Components 1 and 2[a]; and - Records (supplier contracts, invoices, and receipts) for Component 3.

Note: BNA = National Bank of Argentina; EEP = eligible expenditure program; PHC = primary health care; UFI = International Financing Unit.

a. The Borrower shall retain all records (contracts, orders, invoices, bills, receipts, and other documents) evidencing expenditures under the Project until at least the later of: (i) two years after the World Bank has received the audited Financial Statements covering the period during which the last withdrawal from the Loan Account was made; and (ii) three years after the closing date. The borrower shall enable the Bank's representatives to examine such records.

Figure A3.1 Flow of Funds Chart



25. Loan proceeds will be disbursed against the expenditure categories in table A3.9.

Table A3.9 Disbursements per Expenditure Category

Category	Amount of the loan allocated (US$, millions)	Percentage of expenditures to be financed (inclusive of taxes)
(1) EEPs under Parts 1 and 2 of the Project	262.000	100% subject to the provisions of Part B of this Section
(2) Goods and works under Part 3 of the Project	59.420	50
(3) Consultants and non-consultant services, including audit services and training under Part 3 of the Project	19.465	45
(4) Operating costs under Part 3 of the Project	8.240	80
(5) Front-end fee	875,000	Amount payable pursuant to Section 2.03 of this Agreement in accordance with Section 2.07 (b) of the General Conditions
(6) Interest rate cap or interest rate collar premium		Amount due pursuant to Section 2.08(c) of this Agreement
TOTAL AMOUNT	**350,000,000**	

Note: EEP = eligible expenditure programs.

26. **Transfers from NMOH to reimburse each participating province for the EEPs incurred (Components 1 and 2) will be triggered by the following:** (i) compliance with specific transfer-linked indicators, as evidenced by reports to be produced by the PMOH and verified by NMOH DNCD, and (ii) a certification issued by each said province Accountant General on the accuracy of the province's financial reporting related to the agreed EEPs.

27. An advanced version of the Operations Manual has been prepared by NMOH, containing the following: (i) accounting practices, charts of accounts, and any other specific requirements to allow the proper recording of the Project's transactions by source of financing; (ii) content, format, and periodicity of interim and annual financial reports; iii) a model of a certification report to be issued by provinces' accounting offices to validate the EEPs reporting; iv) terms of reference for the semiannual audit on the actual execution of budgeted EEPs expenditures reported by each participating province under Components 1 and 2; and v) terms of reference for the financial statement audit.

PROCUREMENT

A. General

28. **Procurement for the Project will be carried out in accordance with the World Bank's "Guidelines**: Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers," dated January 2011; "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers," dated January 2011, revised on July 2014; and the provisions stipulated in the Legal Agreement. The general descriptions of various items under different expenditure categories are described below. For each contract to be financed by the loan, for the different procurement methods or consultant selection methods, the need for prequalification, estimated costs, prior review requirements, and time frame will be approved by the Bank with the No Objection to the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

29. **Procurement activities under this Project are aligned to the Country Partnership Strategy objective related to supporting open procurement.** First, all invitations to bid, bidding documents, minutes of bid openings, requests for expressions of interest, and the pertinent summary of the evaluation reports of bids and proposals of all goods, works, non-consultant services, and consultants' services procured by the Borrower, through NMOH, will be published on the web page of Argentina's Office of National Procurement (*Oficina Nacional de Contrataciones*). Second, the Procurement Plan, including execution data, will be managed through SEPA (the World Bank's Procurement Plan Execution System), which is publicly accessible once the plan has the Bank's No Objection.

30. **Procurement of Works**: Contracting major civil works under this Project is not foreseen and only minor works of refurbishment or to install laboratory equipment have been identified at this stage. Therefore, no International Competitive Bidding (ICB) processes are foreseen during implementation, although, if needed, procurement shall be done using the World Bank's Standard Bidding Documents (SBDs) for all ICB processes. Procurement of works under National Competitive Bidding (NCB) and Shopping procedures shall be done using simplified SBDs

satisfactory to the Bank. Such SBDs will be included as annexes in the project's Operations Manual.

31. **Procurement of Goods**: Goods to be procured under this Project will include laboratory equipment, medical equipment, and health-related goods (i.e., medicines). Procurement of goods will be done using the World Bank's SBD for all ICB processes; procurement of goods under NCB and Shopping procedures shall be done using SBDs satisfactory to the Bank. Such SBDs will be included as annexes in the Project's Operations Manual.

32. **Procurement of Non-Consulting Services:** Non-consulting services for the Project will include logistics for capacity-building events, printing of training materials, media campaigns, and related services for the institutional strengthening components. Procurement of non-consulting services will be done using SBDs and simplified formats satisfactory to the World Bank for ICB and NCB and Shopping procedures, respectively. Said SBDs and simplified formats will be part of the Project's Operations Manual.

33. **Selection of Consultants:** Selection and employment of consultant firms and individual consultants will be needed to provide technical assistance, perform audit reviews, and design and implement a series of health-related surveys. Short lists of consultants for services estimated to cost less than $1,000,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines. Regardless of the method used or the estimated cost of the contracts, selection and contracting of consultant firms will be done using the World Bank's Standard Request for Proposals. Selection and contracting of individual consultants will be done using a simplified request for curriculum vitae and a contract model acceptable to the World Bank; processes for the competitive selection of individual consultants shall be made public. Such documents shall be part of the Project's Operations Manual.

34. **Operational Costs:** Operating costs refer to reasonable recurrent expenditures that will not have been incurred by the implementing agency in the absence of the Project. They may include but are not limited to operation and maintenance of office equipment purchased under the Project, as well as nondurable/consumable office materials, as needed for the implementation of the Project. All these activities will be procured using the implementation agencies' administrative procedures, which were reviewed and found acceptable to the Bank.

B. Assessment of the Agency's Capacity to Implement Procurement

35. **A procurement assessment of the capacity to implement procurement actions for the Project was carried out of the UFI-S within MOH and was considered adequate.** UFI-S has extensive previous experience using the World Bank's procurement and consultant guidelines, procedures, and standard documents; such experience was acquired in successfully implementing seven Bank-financed programs (VIGIA (P055482), *Plan Nacer* I and II (P071025 and P095515), *Programa Sumar* (P106735), FESP I and II (P090993 and P110599), and AH1N1 (P117377)) over the past 14 years—two of which are currently under implementation, and a similar number of operations financed by other multilateral development agencies. The UFI-S Procurement Area is properly staffed with more than 40 specialized professionals who are divided into three units (i.e., planning and contact management, procurement processes management, and human resources)

and is coordinated by a well-seasoned professional with over 10 years of specific experience in procurement under World Bank policies and procedures.

36. **UFI-S is properly equipped and has in place in-house systems to monitor the whole procurement cycle**; furthermore, it has been using SEPA (the Bank's Procurement Plan Execution System) since its inception, and has a well-functioning filing and record-keeping system. UFI-S has developed and progressively improved an Operations Manual, which includes the Bank's SBDs already adapted for the health sector, as well as all the necessary SBDs, evaluation formats, etc. The Operations Manual as well as all the documents included as annexes will be fine-tuned for its use in this operation.

37. **UFI-S has recently successfully concluded the implementation of a Governance and Accountability Action Plan, and the first phase of a Performance Improvement Plan in Procurement,** which was jointly developed with the Bank. Both exercises have significantly improved the way the overall procurement activities are carried out and have had a significant impact on performance indicators (e.g., bidding processes' time), and on the quality of the produced documents. At UFI-S's request, a second phase of the Performance Improvement Plan in Procurement is currently under implementation, which includes, among many other activities, a joint capacity-building program aimed to specialize further UFI-S staff in complicated procurement processes.

38. **Given the aforementioned situation, along with the overall complexity that health sector procurements inherently have, the overall procurement risk rating for the project has been established as medium-I** (high impact–low likelihood). As mentioned, the second phase of the Performance Improvement Plan in procurement aims to overcome all the downfalls identified during the capacity assessment.

C. Procurement Plan

39. **UFIS will develop a detailed Procurement Plan for the first 18 months for the implementation of the Project**. The plan will provide the basis for the use of different procurement methods, and for the Bank's review process. The plan was agreed between the GOA and the Bank before negotiations of the loan agreement. As soon as the Project is effective, the Procurement Plan will be available on the SEPA portal. The plan will also be available in the Project's database and on the Bank's external website. The Procurement Plan will be updated annually, or as required to reflect the actual Project implementation needs and improvements in institutional capacity.

D. Frequency of Procurement Supervision

40. In addition to the prior review supervision to be carried out from the Bank's offices, annual supervision missions will visit the field to carry out post review of procurement actions. One of every 10 contracts should be post reviewed when applicable.

E. Details of the Procurement Arrangements Involving International Competition

41. Thresholds for the use the different procurement methods and recommended thresholds for Bank prior review are given in table A3.10.

Table A3.10 Thresholds for Procurement Methods and Recommended Bank Review

Estimated Value Contract Threshold	Procurement Method	Bank Prior Review
Works:		
>=US$15,000,000	ICB	All
<US$15,000,00 and >=US$350,000	NCB	First
<US$350,000	Shopping	First
Any Estimated Cost	Direct Contracting[a]	All
Goods and Non-Consulting Services:		
>=US$500,000	ICB	All
<US$500,000 and >= US$100,000	NCB	First
<US$100,000	Shopping	First
Any estimated Cost	Direct Contracting	All
Consulting Firms:		
Any Estimated Cost	SSS[b]	All
>=US$300,000	QCBS, QBS, FBS, LCS, CQS	All
<US$300,000	QCBS, QBS, FBS, LCS, CQS	First for each selection method
Individual Consultants:		
Any Estimated Cost	SSS	All
>=US$100,000	IC	All
<US$100,000	IC	First

Note: ICB = International Competitive Bidding. NCB = National Competitive Bidding.
SS = Sole Source. QCBS = Quality- and Cost-Based Selection
QCS = Quality-Based Selection FBS = Selection under Fixed Budget
LCS = Least-Cost Selection CQS = Selection Based on the Consultant's Qualifications
IC = Individual Consultant.

a. Direct Contracting of Works and Goods, regardless of the contract amount, shall comply with all the provisions stated in paragraphs 3.7 and 3.8 of the Procurement Guidelines and, therefore, shall be subject to Bank's prior review

b. Sole Source selection of Consultants, regardless of the contract amount, shall comply with all the provisions stated in paragraphs 3.8 to 3.11 of the Consultant Guidelines and, therefore, shall be subject to Bank's prior review

42. **The Procurement Plan will define the contracts that are subject to Bank prior review based on the recommended thresholds given in table A3.10**. Such recommended thresholds could be revised at every update of the Procurement Plan.

43. **Short lists composed entirely of national consultants:** Short lists of consultants for services estimated to cost less than US$1,000,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

44. **Special Procurement Conditions:** The following shall apply to procurement under the Project:

(i) Procurement of Goods, Works, Non-Consultant Services, and Consultants' Services (in respect of firms) shall be carried out using: (i) (A) standard bidding documents (which bidding documents in respect of works shall include, if applicable, a provision whereby the pertinent contractor must comply with the pertinent provisions of: (I) the Environmental and Social Management Framework; and (II) the corresponding environmental management and/or indigenous peoples' plan (including the provisions of any updated/adjusted version) or similar safeguards instrument acceptable to the Bank; and (B) standard requests for quotations/proposals (as the case may be), all acceptable to the Bank, which shall all include a settlement of dispute provision and the pertinent provisions of the Anti-Corruption Guidelines; (ii) model bid evaluation forms, and model quotations/proposals evaluation forms (as the case may be); and (iii) model contract forms, all acceptable to the Bank;

(ii) All contracts for Works to be procured under the Project shall contain a methodology, acceptable to the Bank, whereby the price of each said contracts shall be adjusted through the use of price adjustment formulas, in a manner acceptable to the Bank;

(iii) A two-envelope bidding procedure shall not be allowed in the procurement of Goods, Works, and Non-Consultant Services;

(iv) After the public opening of bids for Goods, Works, and Non-Consultant Services, information relating to the examination, clarification, and evaluation of bids and recommendations concerning awards shall not be disclosed to bidders or other persons not officially concerned with this process until the publication of contract award. In addition, bidders and/or other persons not officially concerned with said process shall not be allowed to review or make copies of other bidders' bids;

(v) After the public opening of consultants' proposals, information related to the examination, clarification, and evaluation of proposals and recommendations concerning awards shall not be disclosed to consultants or other persons not officially concerned with this process until the publication of contract award (except as provided in paragraphs 2.23 and 2.30 of the Consultants Guidelines). In addition, consultants and/or other persons not officially concerned with said process shall not be allowed to review or make copies of other consultants' proposals;

(vi) Foreign bidders or foreign consultants shall not, as a condition for submitting bids or proposals and/or for contract award: (i) be required to be registered in Argentina (except as provided in the standard bidding documents referred to in the first bullet point above); (ii) be required to have a representative in Argentina; and (iii) be required to be associated or subcontract with Argentine suppliers, contractors, or consultants;

(vii) The invitations to bid, bidding documents, minutes of bid openings, requests for expressions of interest, and the pertinent summary of the evaluation reports of bids and proposals of all Goods, Works, Non-Consultant Services, and Consultants' Services procured by the borrower, through NMOH, shall be published on the web page of the Borrower's Office of National Procurement (*Oficina Nacional de Contrataciones*), and in a manner acceptable to the Bank. The bidding period shall be counted from the date of publication of the invitation to bid or the date of the availability of the bidding documents, whichever is later, to the date of bid opening;

(viii) Provisions set forth in paragraphs 2.49, 2.50, 2.52, 2.53, 2.54, and 2.59 of the Procurement Guidelines shall also be applicable to contracts for Goods, Works and Non-Consultant Services to be procured under National Competitive Bidding procedures;

(ix) References to bidders in one or more specialized magazines shall not be used by the GOA, through NMOH, in determining if the bidder in respect of goods whose bid has been determined to be the lowest evaluated bid has the capability and resources to effectively carry out the contract as offered in the bid, as referred to in the provision set forth in paragraph 2.58 of the Procurement Guidelines. The provision set forth in paragraph 2.58 of the Procurement Guidelines (including the limitation set forth herein) shall also be applicable to contracts for goods to be procured under National Competitive Bidding procedures;

(x) Witness prices shall not be used as a parameter for bid evaluation, bid rejection or contract award;

(xi) The GOA, through NMOH, shall: (i) supply the SEPA with the information contained in the initial Procurement Plan within 30 days after the Project has been approved by the Bank; and (ii) update the Procurement Plan at least every three months, or as required by the Bank, to reflect the actual Project implementation needs and progress and shall supply the SEPA with the information contained in the updated Procurement Plan immediately thereafter;

(xii) The provisions of paragraphs 2.55 and 2.56 of the Procurement Guidelines providing for domestic preference in the evaluation of bids shall apply to goods manufactured in the territory of the Borrower in respect of contracts for goods to be procured under International Competitive Bidding procedures;

(xiii) Compliance by bidders with the norms issued by ISO with respect to any given good procured under the Project shall not be used as parameter for contract award;

(xiv) Consultants shall not be required to submit bid or performance securities;

(xv) Contracts of Goods, Works, and Non-Consultant Services shall not be awarded to the "most convenient" bid, but rather to the bidder whose bid has been determined: (i) to be substantially responsive; and (ii) to offer the lowest evaluated bid, provided that said bidder has demonstrated to the Borrower, through NMOH, to be qualified to perform the contract satisfactorily; and

(xvi) The types of contracts described in Section IV of the Consultant Guidelines shall be the only types of contracts to be used by the Borrower, through NMOH, in connection with the contracting of consultants' services provided by a firm and to be financed with the proceeds of the Loan.

Environmental and Social (Including Safeguards)

45. **The project triggers OP/BP 4.01 Environmental Assessment and has an Environmental Risk Category B**. It is a Category B Project because while there are potential environmental impacts from medical and IT hardware waste disposal, they present a low to moderate risk and are readily manageable with known technology. The Project mainly involves the potential collection, management and disposal of hazardous medical waste. Lab diagnostics generated through detection and surveillance of NCDs; the generation of technological waste. The Project will also finance the installation of laboratory equipment needed for the analysis of sodium and trans fat levels in processed foods. This could also involve some environmental impacts due

to the modifications in the labs needed to install the equipment. The installation will be carried out in seven laboratories of the National Network of Official Laboratories for Food Analysis (RENALOA). The installation may require small-scale works and may also include the installation of gas fume hoods and deposits for inputs and hazardous waste. Initial Environmental Reviews in the selected laboratories will be required. These reviews will include an analysis of the labs' remodeling projects, the identification of possible noncompliance with environmental rules, and will recommend impact mitigation measures to include in the procurement processes for the equipment adaptation works alongside the contractor's obligations. Environmental concerns related to the Project's support to the National Cancer Institute (including the strengthening of screening and care for patients with colorectal cancer) will be addressed through the general management of health services waste. The implementation of Electronic Medical Records also requires an analysis of the environmental impact of the disposal of computer equipment and possible adjustments in the buildings for cables, with special attention to X-ray rooms and laboratories. Since this Project triggers social and environmental safeguard policies, an Environmental and Social Management Framework (ESMF) has been developed, which complements the framework developed by the FESP II (P110599) project.

46. **NMOH has solid experience in the management of environmental safeguards,** as reflected in the implementation of the FESP I (P090993), H1N1 Prevention and Management of Influenza Type Illness (P117377), and FESP II (P110599) projects. Thanks to all these previous experiences, the implementation agency has the capacity needed to implement the IPPF. Nevertheless, the current framework includes activities aimed at further strengthening the country's capacity with an emphasis on management of chemical waste and work safety in food, tobacco, and cancer diagnostic labs. Equal attention will be given to waste diagnostic equipment for conventional X-rays.

47. **Currently, there is no national legislation regarding the disposal of electronic equipment.** In this context, the ESMF will identify good practices and extract lessons from Project implementation regarding reusing, reconditioning, and/or the final disposal of electronic waste. The consultations on the ESMF took place on June 25, 2013 and the document was disclosed both in country and on the Bank's external website.

48. **This Project will benefit from Argentina's broad experience in the management of Indigenous Peoples Safeguards**, particularly from experience with the FESP I and II (P090993 and P110599), *Plan Nacer* Phases I and II (P071025 and P095515), and *Programa Sumar* projects (P106735). Under these projects, the Government developed indigenous people's plans, frameworks, and provincial indigenous peoples plans (IPP). These frameworks and provincial IPPs, particularly those prepared for the FESP II project, covered the same diseases covered by this new operation. For this Project, a new Indigenous Peoples Planning Framework (IPPF) was prepared, building on the existing IPPF and IPPs developed under the FESP I and II and *Plan Nacer*, Phases I and II, as well as on lessons learned from the implementation of these projects. Thanks to all these previous experiences, the implementation agency has the capacity needed to implement the IPPF. The Project will continue to interact with existing areas of the Ministries of Health, such as the Community (Health) Doctors Program (Indigenous Peoples areas) and the Areas of Indigenous Health at provincial level, with DNCD and PDNCDs.

49. **The Project will directly benefit indigenous communities and dispersed rural populations in 20 provinces with indigenous populations.** In addition to the positive impact of the Project in improving promotion, prevention and control of NCDs among indigenous populations; some of the possible negative social impacts of the Project include the following: (i) that the services are not used by indigenous peoples due to fear of discrimination; (ii) poor knowledge of indigenous peoples culture by health teams; (iii) lack of variable that would allow the surveillance of NCDs and risk factors among indigenous peoples. These impacts would be mitigated through, among other things, capacity building among health teams to provide culturally adequate services; including an ethnic variable in all information systems to ensure adequate surveillance. The IPPF was done with the participation of all relevant stakeholders (i.e. health teams, indigenous peoples' representatives, and others). The IPPF identifies direct and indirect beneficiaries and the potential impacts of the Project on them. A consultation with representative groups of indigenous peoples' organizations at the national level[42], was carried out on November 27, 2013; the IPPF received their support as reflected in the Act signed by the Indigenous Peoples representatives. Among others, participants suggested that a Department or Program for Indigenous Health be created at NMOH to function as the head of health policies for indigenous peoples; similarly, at the provincial level, participants suggested the creation of Indigenous Peoples advisory boards legitimized by indigenous communities and organizations. Directly linked to the Project, participants suggested the inclusion of an ethnic variable in the risk factors surveys. They also suggested the inclusion of an ethnic variable in the information systems to be developed with the loan proceeds. Some of the suggestions have started to be implemented, some with support of other Bank– financed projects (FESP II and *Programa Sumar*), including: (i) the inclusion of the communities in the intersectoral working tables of the National Program of Municipalities Healthy Communities; and (ii) the establishment of provincial areas of Indigenous Health. The Indigenous Peoples Planning Framework was disclosed in Argentina and on the Bank's external website.

Monitoring & Evaluation

50. **Project outcomes and targets will be assessed using NMOH's monitoring and evaluation (M&E) systems**. Several information sources and instruments will be used, including: (i) a health risk factors surveillance system; (ii) biannual Project management reports (prepared by DNCDs and UFI-S); (iii) biannual monitoring progress reports of the implementation of the NCD strategy at the provincial level, measured through transfer-linked indicators and the execution of the eligible program; (iv) midterm and final assessments; (v) evaluations of interventions at the provincial level; and (vi) laboratory evaluation of interventions aimed at reducing sodium and trans fats in processed foods.

51. **The Project will use intermediate indicators to track progress in the implementation of the NCD strategy at the provincial level**. These indicators are related to the transfer-linked indicators and will provide information on provincial progress toward the implementation of the NCD strategy at municipal and public health facilities, including, among other things: (i) the

[42] This included representatives from the following organizations: National Organization of Indigenous Peoples of Argentina (*Organización Nacional de Pueblos Indígenas de Argentina*), members from the Health Commssion of the National Table of the Indigenous Participation Council (*Mesa Nacional del Consejo de Participación Indígena del Institutio Nacional de Asuntos Indígenas*).

implementation of different promotion interventions to improve healthy living; and (ii) reforming the model of care in provincial health care networks.

52. **The Project will use two indicators to measure progress on the implementation of population-based interventions on vulnerable groups: one measuring sodium consumption and a second, tobacco prevalence**. Tobacco prevalence among vulnerable groups is expected to have a slow and variable decrease trend and thus there are complexities in measuring this tendency.

53. **The Project will support NMOH's M&E system through the following activities**: (i) supporting the risk factors surveillance system as well as injury surveillance, through conducting national surveys and supporting other surveillance systems, such as telephone-based risk factor surveillance; (ii) supporting NMOH's digital information systems and the development of electronic medical records; and (iii) contributing to the evaluation of the different interventions financed by the Project.

Annex 4: Operational Risk Assessment Framework (ORAF)

Argentina: Protecting Vulnerable People against Noncommunicable Diseases Project (P133193)

Risks

1. Project Stakeholder Risks								
1.1 Stakeholder Risk	Rating	Substantial						
Risk Description: Contradiction with other donor programs or with other public agency programs. The Project will finance activities that require the participation of different agencies both within and outside the Government. It will also require the participation of different units (not always well coordinated) of NMOH and the PMOHs. Although we do not expect any major opposition from any of the agencies, major coordination efforts will be required to ensure the participation of all and to avoid duplications and contradictions. PMOH might not agree with some of the priorities set for the National Strategy for the Prevention and Control of NCDs or with modalities for its implementation.	**Risk Management:** During preparation, NMOH created an intra-agency commission with the aim of coordinating activities and harmonizing different administrative instruments to ensure a coordinated design of the Project and a coordinated and integrated implementation of the National Strategy for the Prevention and Control of NCDs. Currently there is a commission working on these issues; however, this commission does not always have the participation of all actors needed to ensure full coordination and harmonization. During implementation, this commission (or different ones created for specific purposes) will need to include the participation of agencies from outside the health sector. There is a precedent, since an intersectoral commission was created for the reduction of sodium and trans fats in processed foods. During implementation, the Bank team will support NMOH coordination efforts with other donors and agencies and with different units within NMOH. NMOH will need to discuss and agree with the provinces the national strategy and modalities for implementation. NMOH has already started this process.						
	Resp: Both	Status: In progress	Stage: Both	Recurrent:	Due Date:	Frequence:		

2. Implementing Agency (IA) Risks (including Fiduciary Risks)									
2.1 Capacity	Rating	Moderate							
Risk Description: The NMOH has little experience in directly managing donor funded investment operations. Most previous donor funded operations in the sector have been managed by project implementation units. There is only one precedent of the ministry directly managing a	**Risk Management:** As part of the Project's financed activities, NMOH will be strengthened with new information systems, personnel, and training of existing staff to ensure effective management of the Project.								
	Resp:	Both	Status:	Not Yet Due	Stage:	Implementation	Recurrent:	Due Date:	Frequency:

project, the case of an emergency operation for the management of influenza type illness (P117377). Although successful, this was an operation with a limited focus.									
2.2 Governance	Rating	Moderate							
Risk Description:	**Risk Management:**								
Shortcomings in the UFI-S capacity to perform procurement activities. Accountability and governance mechanisms at the provincial level are still limited. Overall program governance (including transparency) and effective administration are still a challenge.	Strengthening of internal control procedures to enhance quality of procurement processes. Regular supervision, comprising measures included in the action plan to improve procurement performance. Regular post-procurement reviews to assess the quality of the procurement process. Framework agreements between provincial and national levels will be put in place and internal controls strengthened. An institutional capacity assessment of financial management and procurement was conducted and arrangements verified to secure a proper fiduciary design for the operation. External technical audits will be contracted under in this operation to reduce FM and procurement risks.								
	Resp: Client	Status: Not Yet Due	Stage: Implementation	Recurrent:	Due Date:	Frequency:			
3. Project Risks									
3.1 Design	Rating	Substantial							
Risk Description:	**Risk Management:**								
A. Lack of coordinating actions of many different agencies: The Project finances multisectoral activities that require the participation of many agencies within and outside the health sector and in some cases	A. See mitigation strategies on stakeholder risk above.								

within and outside the Government. This creates a high level of complexity that might create difficulties in the implementation of some of the activities to be financed by the Project.	
B. Risks related to the complexity of many activities aimed at promotion, prevention, and control of NCDs: Promotion of healthy lifestyles requires individual behavioral changes that are difficult to influence. In addition, control of these diseases requires continuous contact with the health sector, which requires major organizational changes in the sector.	B. The risk of not being able to change individual behaviors is high. The GOA will ensure that existing international and local evidence in influencing individual behaviors is used in the design of interventions. This risk was taken into account when defining PDO indicators and targets. To ensure the provision of continuous and programmed services for patients with NCDs and their risk factors, the Project will support a reform of the model of care for patients with chronic conditions through the implementation of various management tools aimed at supporting self-care, the development of clinical practice guidelines for the screening and control of patients, etc.
C. Risk related to the complexity derived from the federal nature of the Government: NMOH has very little responsibility in the delivery of many of the activities involved in the promotion, prevention, control and surveillance of NCDs. These are the responsibilities of the provinces and in some cases, (in 3 of 24 subnational jurisdictions) the municipalities.	C. This risk is also high. However, lessons learned from previous operations showed that aligning incentives at the national and provincial levels through PBF mechanisms can mitigate this risk. In this regard, NMOH will transfer funds based on achievement of predetermined results indicators to the provincial level for many of the activities to be financed by the Project.
D. There is also the risk that priorities in the sector change once a new Government takes office in 2015.	D. This risk is low since NCDs represent the main cause of death and disability in Argentina and thus their prevention and control are likely to remain a priority in the sector. However, there is a moderate risk that the new administration will have a different view on the strategies used to prevent and control NCDs. To mitigate this risk, any activity to be financed by the Project will be based on evidence on their effectiveness.

Resp: Both	Status: Not Yet Due	Stage: Implementation	Recurrent:	Due Date:	Frequency:

3.2 Social and Environmental	Rating	Low			
Risk Description: The Project does not intend to finance any health service directly. It will only finance health management tools including information systems that are aimed at improving the quality of services for patients with NCDs and their risk factors. The Project will not finance infrastructure. Thus the environmental risk is low. However, since the Project will support improvements in regional labs linked to INAL (i.e. small works to install equipment, including the installation of gas fumes hoods and deposits for inputs and hazardous materials) and the acquisition of new technology (i.e., cancer detection, electronic equipment), there could be an environmental impact associated to the proper management of labs and hospital waste and electronic waste during the replacement of existing equipment. With an increase in the number of people affected with NCDs due to population aging and improvements in care brought about by the Project, a larger number of screening and control services is expected. The country's physical and institutional capacities for the adequate treatment of medical waste was evaluated by the FESP II (P110599) project. The staff of the laboratories that will analyze trans fats and sodium in processed foods and where the new equipment will be installed may require adequate training in the management of hazardous products and wastes. The improvements and expansions of labs will require prevention and/or mitigation measures that need to be anticipated, not only to achieve functional improvements, but also for the Project's implementation. The implementation of the electronic medical records pilot is likely	**Risk Management:** The Project executing agency already has experience and knowledge partly acquired through other Bank financed operations. Specific environmental and social management tools will be developed to address the potential environmental issues triggered by the Project and mostly related to an increment in hospital waste, electronic waste and proper handling of radiological equipment. These tools will be included in the already existing Environmental and Social management Framework prepared for the active loans, and has developed a complementary ESFM for other activities that this Project will finance that were not covered by the currently active loans.				
	Resp: Both	Status: Not Yet Due	Stage: Implementation	Recurrent:	Due Date:	Frequency:

to require a change in hardware in the national and provincial public health facilities, generating as a result technological waste. Limited institutional capacity of Provincial Ministries of Health to implement the Indigenous Peoples Plan.						
3.3 Program and Donor	Rating	Moderate				
Risk Description: Risks of contradictions and duplications due to the existing multiple sources of funds for activities aimed at prevention and control of NCDs: Currently, two Bank–financed projects, *Programa Sumar* (P106735) and FESP II (P110599) finance activities aimed at promotion, prevention, and control of NCDs, as well as an IDB-funded project, *Remediar+Redes*.	**Risk Management:** The Bank will maintain dialogue and close coordination with the different GOA teams responsible for implementation of relevant programs. It will also maintain dialogue and close coordination with the IDB.					
	Resp: Bank	Status: Not Yet Due	Stage: Both	Recurrent:	Due Date:	Frequency:
3.4 Delivery Monitoring and Sustainability	Rating	Moderate				
Risk Description: Currently different programs financing activities under the National Strategy for Prevention and Control of NCDs use different information systems and often require different information and information structures. This generates a risk for monitoring any integral program.	**Risk Management:** The Government has created an intra-sector commission that is currently working on harmonizing information systems and tools. The Project will also finance activities aimed at further harmonizing the information system and creating an integral system that includes electronic clinical records.					
	Resp: Client	Status: Not Yet Due	Stage: Implementation	Recurrent:	Due Date:	Frequency:

4. Overall Risk

Overall Implementation Risk: Substantial

Risk Description:
We rate the implementation risk as substantial, given the substantial risks involved in its design, the moderate risks related to stakeholders, program and donors and the moderate country risk.

Annex 5 Implementation Support Plan

ARGENTINA: Protecting Vulnerable People against Noncommunicable Diseases Project (P133193)

Strategy and Approach for Implementation Support

1. The strategy for implementation support has been developed based on the nature of the Project and its risk profile as well as lessons learned from the FESP I and II (P090993 and P110599) and *Plan Nacer* I and II (P071025 and P095515) Projects. The implementation support strategy focuses primarily on the implementation of the risk mitigation measures defined in the Operational Risk Assessment Framework, and on supporting the GOA in an efficient way as follows:

(a) **Coordination with other agencies and other Bank-financed projects**: To ensure coordination among projects and programs financed by other development agencies, supervision missions, and field visits, which will be carried out semiannually, will include personnel working in these other projects and programs. To ensure coordination with other World Bank–financed projects, the supervision team will include members working in these other projects.

(b) **Technical**: (i) The Project will procure highly complexity lab equipment as well as pharmaceutical products with limited markets. Thus, the Project's supervision will need the support of a pharmaceutical/equipment expert that could provide support reviewing the technical specifications. (ii) The Project also aims at designing and implementing complex eHealth tools, including electronic medical records. For this, the team will include the support of an expert on information technology in the health sector, including electronic medical records.

(c) **Monitoring and evaluation**: As the National Ministry of Health (NMOH) will be implementing the Project directly without a project coordination unit, the Bank team will provide support to NMOH in collecting and analyzing the information needed to trigger transfers to provinces.

(d) **Operational support**: Implementation support will include reviewing and providing its no objection to annual action plans and annual performance agreements with eligible provinces, designing and supervising monitoring and evaluation systems, tracking progress of the Project's indicators, monitoring of implementation progress of Project components, ensuring conformity with the Operations Manual, reviewing results-based mechanisms to transfer funds to the provinces, and monitoring Project execution according to annual action plans and interim unaudited financial reports. A senior health specialist (co-task team leader) and an operations officer, based in the country office, will provide day-to-day supervision of all operational aspects, as well as coordination with the client and among Bank team members.

(e) **Procurement**: Implementation support will include: (a) training of staff in the International Financing Unit of NMOH (UFI-S) as well as detailed guidance on the Bank's Procurement

Guidelines as needed; (b) reviewing procurement documents and providing timely feedback to UFI-S; (c) monitoring procurement progress against a detailed Procurement Plan; and (d) undertaking procurement post reviews. A procurement specialist, based in the country office, will provide timely support.

(f) **Financial management**: Supervision will review the Project's financial management system, including but not limited to, accounting, reporting, and internal controls, as well as compliance with financial covenants. Implementation support will be needed for review of interim unaudited financial reports, annual Project audits, and external audits (as relevant). A financial management specialist based in the country office will provide timely support. Financial management on-site supervision will be carried out semiannually during first year of implementation, and once a year thereafter if supervision results are satisfactory.

(g) **Environmental and Social Safeguards**: Implementation support will include supervision of actions agreed on the Environmental Action Plan and the review, provision of its no objection and monitoring of annual Indigenous Peoples Plans. The team will also provide guidance and recommendations to NMOH as required. Inputs from an environmental and social specialist will be required as well as field visits.

2. **A number of the Bank team members,** including operational, financial management, and procurement, environmental, and social consultants will be based in the country office to ensure timely, efficient, and effective implementation support to the client. Formal supervision and field visits will be carried out semiannually. Detailed inputs from the Bank team are outlined in table A5.1.

Table A5.1 Implementation Support Plan

Time	Focus	Skills needed	Resource estimate	Partner role
First 12 months	Task leadership	2 co-TTLs	20 SWs	NA
	Technical review of Project documents	Public health specialist	15 SWs	
	Technical review of specifications for pharmaceuticals and complex medical equipment	Pharmaceutical/ equipment specialist	2 SWs	
	Technical review of eHealth tools specifications	eHealth specialist	2 SWs	
	Operations support and supervision	Operations officer	25 SWs	

Time	Focus	Skills needed	Resource estimate	Partner role
	Procurement training and supervision	Procurement specialist	6 SWs	
	Financial management and disbursement training and supervision	Financial management specialist	4 SWs	
	Environmental training and supervision	Environmental specialist	2 SWs	
	Social safeguard supervision and reporting	Social specialist	2 SWs	
12–48 months	Task leadership	2 TTLs	15 SWs	Task leadership
	Technical review of Project documents	Public health specialist	15 SWs	Technical review of Project documents
	Operations support and supervision	Operations officer	20 SWs	Operations support and supervision
	Procurement training and supervision	Procurement specialist	6 SWs	Procurement training and supervision
	Financial management and disbursement training and supervision	Financial management specialist	2.5 SWs	Financial management supervision
	Environmental training and supervision	Environmental specialist	2 SWs	Environmental training and supervision

Note: NA = not applicable; SW = staff weeks; TTL = task team leader.

Annex 6 Economic and Financial Analysis

ARGENTINA: Protecting Vulnerable People against Noncommunicable Diseases Project (P133193)

1. **The economic analysis estimates the Project's benefits to be US$156 million in net present value (NPV) terms using an 8 percent annual discount rate and an internal rate of return (IRR) of 19 percent over a 10-year period.** In addition to the US$437.5 million in costs projected for this operation, the analysis takes into account the recurrent expenses needed to sustain the proposed actions for 10 years. As a result of the policies and programs implemented under this project, NCD risk factors, the incidence of NCDs, and the number of hospitalizations, medical consultations, and tests caused by them are expected to decrease, and many premature deaths and disabilities would be prevented.

2. **This section of the annex summarizes the economic-financial analysis developed for the Project**. The first part describes the cost-benefit analysis, which used a human capital approach and also calculated the savings in the Argentine health system resulting from a reduction in the incidence of NCDs. The second part describes the financial and budgetary impact of the Project on the national health budget.

Economic Analysis

3. In Argentina, not only are NCDs the main causes of death (81 percent of the total), [43] but also they are the main cause of potential years of life lost. As noted, NCDs generate a significant disease burden and are a major use of health resources.

4. **Acute cardiovascular diseases (acute myocardial infarction (AMI), unstable angina (UA), and cerebral-vascular accident (CVA)) are the main causes of mortality in Argentina**, accounting for 32 percent of all premature deaths. These causes also explain about 600,000 healthy life years lost and are responsible for nearly half of all deaths occurring in the productive phase of the life cycle. The main risk factors associated with cardiovascular diseases are arterial hypertension, high cholesterol levels, overweight and obesity, low levels of ingestion of fruits and vegetables, physical inactivity, and smoking. Between them, these risk factors explain about 80 percent of ischemic cardiopathy deaths and the corresponding burden worldwide, and 60 percent of CVA deaths. Rubinstein et al. (2010) estimate that modifiable risk factors explain 75 percent of all cases (fatal and nonfatal) of AMI, UA, and CVA in Argentina, and 71 percent of the burden of these diseases.[44]

[43] National Ministry of Health and M. Borruel, I. Mas, and G. Borruel. "Estudio de Carga de Enfermedad." Buenos Aires Ministerio de Salud de la Nación, 2010.

[44] Rubinstein et al., "Estimación de la carga de las enfermedades cardiovasculares atribuible afactores de riesgo modificables en Argentina" [Estimation of the Burden of Cardiovascular Diseases Attributable to Modifiable Risk Factors in Argentina], *Revista Panamericana de Salud Pública* 27 (4) (2010).

Table A6.1 Chronic Diseases and Their Risk Factors

Risk factors	Cardiovascular diseases			COPD	Cancer				Type-2 diabetes
	AMI	UA	CVA		Breast	Cervical-uterine	Colorectal	Lung	
Addictive substances									
Tobacco	x	x	x	x		x		x	
Alcohol	x	x	x		x				x
Physical activity and risks related to eating habits									
Physical inactivity	x	x	x		x				x
Low ingestion of fruits and vegetables	x	x	x						
Overweight/obesity	x	x	x		x		x		x
Arterial hypertension	x	x	x				x	x	
High cholesterol	x	x	x				x		

Source: Mariana Marchionni, Joaquín Caporale, Adriana Conconi, and Natalia Porto, "Enfermedades Crónicas No Transmisibles y sus Factores de Riesgo en Argentina: Prevalencia y Prevención" [Noncommunicable Chronic Diseases and Their Risk Factors in Argentina: Prevalence and Prevention], Working Paper No. 117, CEDLAS, La Plata, Argentina, 2011.
Note: AMI = acute myocardial infarction; COPD = chronic obstructive pulmonary disease; CVA = cerebral-vascular accident; UA = unstable angina.

5. **Chronic obstructive pulmonary disease (COPD) is a serious public health problem today**. The predominant cause of COPD is smoking, which represents almost 90 percent of the risk of developing the disease. In Argentina, between 6 and 8 percent of the general population suffers from COPD, that is, roughly two million to three million people;[45] and COPD is the fifth most frequent cause of hospitalization among the population over age 60 in Argentina.

6. **It is estimated that more than 100,000 new cases of malignant tumors occur in Argentina every year—roughly 206 for every 100,000 inhabitants each year**. While breast cancer generates the largest number of cases, with more than 18,700 new cases per year (17.8 percent of the total), lung cancer has the highest mortality rate. With almost 9,000 mortalities per year, this form of cancer accounts for roughly 15 percent of the over 58,000 deaths from malignant, benign, and "uncertain" tumors in the central nervous system that occurred in 2008. Moreover, given the clinical evolution of lung cancer, these deaths would give the pathology a roughly 85 to 90 percent lethality rate. The incidence and mortality of each type of cancer varies by gender. Of male deaths from cancer, 35 percent of patients suffer from lung cancer and 14.5 percent from colorectal cancer, whereas in the case of women, 20 percent die from breast cancer and about 11 percent from cervical cancer.[46]

[45] M. Borruel, I. Mas, and G. Borruel, *Estudio de carga de enfermedad: Argentina* [Disease Burden Study: Argentina], 1st ed. (Buenos Aires: National Ministry of Health, 2010).
[46] Abriata, Graciela, L. Roques, G. Macias y D. Loria, 2012. *Atlas de Mortalidad por Cáncer en Argentina 2007-2011*. Buenos Aires: Ministerio de Salud de la Nación; and M. Borruel, I. Mas, and G. Borruel, Estudio de carga de enfermedad: Argentina [Disease Burden Study: Argentina], 1st ed. (Buenos Aires: National Ministry of Health, 2010).

7. The cancer risk factors that are susceptible to modification include tobacco use, overweight and obesity, poor diet, physical inactivity, alcohol abuse, and sexually transmitted human papilloma virus. The significance of the various risk factors varies according to the type of cancer and the development level of the countries in question. For low- and middle-income countries, the most common cancer risk factors include smoking, poor diet (particularly low consumption of fruits and vegetables), sedentary lifestyle, and chronic hepatitis B, hepatitis C virus, and human papilloma virus infections.

8. **Diabetes is another NCD that is generating a heavy socioeconomic and disease burden (in terms of disability and mortality)—both for the community at large and for the various parts of the health system**. According to the Argentine Diabetes Foundation, there were some 1.4 million diabetics in the country in 2000, and the figure is forecast to reach 2.4 million by 2030. Almost 70 percent were diagnosed by chance, often following the appearance of chronic complications. Of the cases that were diagnosed, between 20 and 30 percent are not receiving treatment. All of this leads to high rates of complications in diabetic patients and raises the disease's mortality rate. National studies have attributed about 5 percent of annual deaths in Argentina to diabetes.

9. **The main avoidable risk factors for diabetes are recognized as overweight and obesity and physical inactivity.** Estimations for high-income countries show that these risk factors jointly account for 78 percent of diabetes deaths and 74 percent of the burden of the disease. Table A6.2 provides an estimation of the general population at risk of contracting NCDs, the incidence rates of the main NCDs, the estimated number of cases per year and deaths caused by NCDs, lethality rates, and an estimation of the joint contribution of NCD risk factors. Data on the joint contribution of risk factors were taken from CEDLAS (2011) and estimations by Ezzati, Vander Hoorn, Lopez, et al. (2006).[47,48]

[47] Mariana Marchionni, Joaquín Caporale, Adriana Conconi, and Natalia Porto, "Enfermedades Crónicas No Transmisibles y sus Factores de Riesgo en Argentina: Prevalencia y Prevención" [Noncommunicable Chronic Diseases and Their Risk Factors in Argentina: Prevalence and Prevention], Working Paper No. 117, CEDLAS, La Plata, Argentina, 2011.

[48] M. Ezzati, S. Vander Hoorn, A. D. Lopez, G. Danaei, A. Rodgers, C. D. Mathers, and C. J. L. Murray, "Chapter 4: Comparative Quantification of Mortality and Burden of Disease Attributable to Selected Risk Factors," in *Global Burden of Disease and Risk Factors*, ed. Lopez, Mathers, Ezzati, Jamison, and Murray (Oxford University Press and World Bank, 2006).

Table A6.2 Population at Risk of Contracting NCDs, Incidence Rates, Number of Cases, Lethality Rate, and Joint Contribution of Risk Factors for the Population at Large

Chronic diseases		Population at risk	Number at risk	Incidence (%)	New cases	Deaths	Lethality (%)	Joint contribution of risk factors
Cardiovascular deseases (AMI, UA, CVA)		Adult population	3,270,189	25.3	8,274	1,655	20	64/80
Chronic respiratory diseases		Adult population	3,270,189	14.8	4,840	334	6.9	63
Cancer	Breast	Women 35–60 years of age	1,563,216	38.7	6,050	218	3.6	18
	Cervical-uterine	Women 35–60 years of age	1,563,216	2.3	360	40	11.1	100
	Colorectal	Adult population	3,270,189	9.5	3,107	522	16.8	12
	Lung	Adult population	3,270,189	10.6	3,466	742	21.4	68
Diabetes	Type 1 and 2 diabetes	Adult population	3,270,189	7.4	2,420	119	4.9	78

Source: Prepared by the authors based on Mariana Marchionni, Joaquín Caporale, Adriana Conconi, and Natalia Porto, "Enfermedades Crónicas No Transmisibles y sus Factores de Riesgo en Argentina: Prevalencia y Prevención" [Noncommunicable Chronic Diseases and Their Risk Factors in Argentina: Prevalence and Prevention], Working Paper No. 117, CEDLAS, La Plata, Argentina, 2011.
Note: AMI = acute myocardial infarction; CVA = cerebral-vascular accident; UA = unstable angina.

Economic Burden of NCDs

10. **The costs of NCDs for the health system, firms, and individuals are high and rising**. Governments, communities, and private industries are all affected by the high costs of premature death and disability among individuals, and by the cost of treating and caring for NCD patients. The reason why this burden is so heavy is the large number of persons affected, particularly men and women of working age who cannot obtain secure productive employment. In the absence of adequate prevention and early detection, these costs can only increase, because treatment, surgical operations, and medications are needed, all of which are costly, and the patient's productive life is shortened.

11. **For the period 2006–15, it was calculated that the economic losses caused by cardiopathies, cerebral-vascular accidents, and diabetes amounted to US$13.54 billion in four countries in Latin America: Argentina, Brazil, Colombia, and Mexico**.[49] In Brazil, which has the second largest economy in the region after the United States, the annual cost of treatment and productivity loss caused by five NCDs (ischemic cardiopathy, cerebral-vascular diseases,

49 D. O. Abegunde, C. D. Mathers, T. Adam, M. Ortegon, and K. Strong, "The Burden and Costs of Chronic Diseases in Low-Income and Middle-Income Countries." *The Lancet* 370 (2007): 1929–38.

diabetes, chronic obstructive pulmonary disease, and tracheal, bronchial, and lung cancer) was calculated at US$72 billion.[50]

12. **Recent data from Argentina show that cardiovascular diseases alone directly cost the Argentine health system US$520 million a year**.[51] According to the same study, the estimated total cost of hospitalization for each acute event of the coronary diseases analyzed (acute myocardial infarction and unstable angina) averaged US$2,126, while the average cost for each cerebral-vascular accident was roughly US$1,731.

13. **In the case of COPDs, very little is known about the economic impact.** In Argentina, the single study available, which was conducted in the early 1990s, estimates a direct health cost of US$2,451 per COPD hospital discharge.[52] So the 24,932 COPD-related discharges in 2005 in the public subsector represent a direct health cost of roughly US$61 million per year. It is important to note that this calculation only includes hospitalizations in the public sector and does not include the associated indirect costs, so the real impact of chronic respiratory diseases is much greater than this estimation.

14. **In the case of malignant tumors, a recent study published by The Lancet Oncology Commission[53] estimated the direct and indirect costs of cancer in Argentina at US$488 million per year in 2009.** This includes the costs of medications, medical devices, visits to the doctor, emergency visits, diagnostic testing services, education, and research; and indirect costs such as loss of days of work and productivity, time, and the cost of travel, accommodation, and waiting periods.

15. **Diabetes represents a serious public health problem and imposes a major economic burden on health systems around the world. It is calculated that diabetes represented a cost of US$65 billion for the Americas region in 2000, most of the costs being indirect (US$54 billion).[54]** The most recent calculations published by the International Diabetes Federation show that diabetes accounted for 9 percent of total health expenditure in South America and Central America in 2010, and 14 percent in North America (including the English-speaking countries of the Caribbean and Haiti). In Argentina, the costs of caring for a diabetes patient are estimated at US$3,000 if hospitalized, and US$500 without hospitalization.[55] This represents a total cost for the Argentine health system of at least US$450 million per year.

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50 World Bank, Addressing the Challenge of Non-communicable Diseases in Brazil, Report No. 32576-BR, World Bank, Washington, DC, 2005.

51 Rubinstein et al., "Estimación de la carga de las enfermedades cardiovasculares atribuible afactores de riesgo modificables en Argentina" [Estimation of the Burden of Cardiovascular Diseases Attributable to Modifiable Risk Factors in Argentina], *Revista Panamericana de Salud Pública* 27 (4) (2010).

52 Sánez, et al (2001), Costos en enfermedad pulmonar obstructiva crónica. Experiencia en el Hospital Dr. Ramos Mejía y revisión de la Literatura [Costs in Chronic Obstructive Pulmonary Disease. Experience in the Dr. Ramos Mejía Hospital and Literature Review], *Revista Argentina de Medicina Respiratoria* 1 (2001): 45–51.

53 The Lancet Oncology Commission, La planificación del control del cáncer en América Latina y el Caribe [The Planning of Cancer Control in Latin America and the Caribbean].

54 A. Barceló, C. Aedo, S. Rajpathak, and S. Robles, "The Cost of Diabetes in Latin America and the Caribbean," *WHO Bulletin* 81 (1) (2003): 19–27.

55 Caporale, Calvo, and Gagliardino, "Costos de atención médica de personas con diabetes anteriores y posteriores a su hospitalización en Argentina" [Costs of Medical Care for Diabetes Patients before and after Their Hospitalization in Argentina], *Revista Panamericana de Salud Pública* 20 (6) (2006).

16. In short, at a conservative estimate, the main NCDs cost the Argentine health system at least US$1.5 billion per year—not counting the expenses incurred by families or productivity losses owing to NCD-related premature death and/or disability.

Project Beneficiaries and Expected Impact

17. **The Project involves specific primary NCD prevention actions targeting the population at large and several improvements in NCD care and prevention in public health establishments**. Better NCD care services will benefit an estimated 3.2 million people, considering the population in the highest-risk age bracket (40–64 years) with public health coverage.

18. **The proposed interventions will generate significant direct benefits in terms of potential life years gained.** The direct benefits are associated with savings in the health system resulting from avoided hospitalizations, medical consultations, and treatment for the population exposed to risk factors and lower (nonmedical) expenses paid by the families for care and services for family members with NCDs. The indirect benefits are associated with productivity gains in the labor market as a result of a reduction in the number of premature deaths and disabilities and better quality of life for the population.

19. **The project acts on the main NCD risk factors and NCD care simultaneously.** There are two clearly differentiated groups of beneficiaries: first, the general population affected by risk factors such as exposure to tobacco, inadequate diet, or physical inactivity, and, second, persons who are currently suffering from an NCD, or who could suffer from one in the very near future, and are attended in the public health subsector.

20. **To estimate the health impact of the interventions proposed in this preliminary economic evaluation, a set of targets was defined relating to the prevalence of certain risk factors directly associated with NCDs,** based on information obtained from the 2010–16 Federal Health Plan and a recent study on setting NCD risk factor targets.[56] Table A6.3 shows baseline data on the risk factors and a projected scenario for 2024, according to the effectiveness of the proposed interventions.

[56] Konfino, Martínez, Ferrante, and Mejía, *Determinación de metas de factores de riesgo para enfermedades no transmisibles para 2016* [Definition of risk factors for non-communicable diseases by 2016], *Revista Argentina de Salud Pública*, 4 (14) (2013).

Table A6.3 Prevalence of Risk Factors in Persons over Age 18 Years

	Baseline[a]	2024	Difference (%)
Tobacco use	25.0	20.0	−20.3
Inadequate diet	35.3	28.0	−20.7
Insufficient physical activity	55.1	44.0	−20.1
Obesity	20.8	16.5	−20.7
High arterial pressure	34.1	27.0	−20.8
Cholesterol	29.8	24.0	−19.5
Hyperglycemia	9.8	7.8	−20.4

a. Source: Author's calculations based on the NRFS 2013.

21. **Table A6.3 provides a preliminary estimation of the project's health impact,** according to the policies and programs of primary NCD care for the population at large and specific NCD control and monitoring interventions for the population attended in the public health subsector.

22. **By implementing national policies and programs to promote health education and prevention, the Project will make it possible to decrease the prevalence of the main NCD risk factors.** This will lead to a reduction in the incidence of these diseases, a lower hospitalization rate, fewer medical consultations and studies, a reduction in the number of premature deaths associated with these pathologies, and lastly, a reduction in disability rates.

23. **The number of NCD hospitalizations is also expected to decline** as a result of early detection, timely treatment, and better quality care for persons already suffering from NCDs, or those who display warning signs of the presence of risk factors and are attended in the public sector.

24. **Based on these preliminary estimations**, **the proposed actions should make it possible to gradually reduce the number of NCD hospital discharges (16,396 in 10 years), prevent 2,325 deaths, and avoid another 18,531 disabilities caused by NCDs.** This is a conservative scenario.

Table A6.4 Preliminary Estimation of the Project's Expected Health Impacts

Component	Year										Total
	1	2	3	4	5	6	7	8	9	10	
Discharges avoided (hospitalizations)	307	610	908	1,203	1,494	1,781	2,064	2,343	2,619	3,068	16,397
Deaths prevented	44	87	129	171	212	253	293	332	371	436	2,326
Disabilities prevented	950	1,156	1,358	1,558	1,754	1,948	2,140	2,328	2,514	2,826	18,531

Source: Bank task team.
Note: Values are based on noncommunicable disease care, prevention, and control actions targeting the population attended in the public subsector.

Economic Costs and Benefits of the Project

25. **Table A6.4 shows the economic costs and benefits expected from project implementation, considering two types of benefit**: (i) the cost savings in the health system as a result of fewer hospitalizations; (ii) productivity gains resulting from premature deaths prevented and disabilities avoided. This result should be seen as partial, because the benefits considered do not take into account the improvement in the quality of life of the population affected by NCDs and the impact this has on society as a whole.

26. **The analysis assumes an average health cost of US$1,730 for each NCD event (hospitalization).** It also assumes an average age of NCD-related mortality of 55 years, and an average productivity loss (or gain) per premature death of US$19,857 per year. According to these preliminary calculations, and retaining the conservative scenario, the NPV of the project's benefits over a 10-year implementation period, using an 8 percent discount rate, is positive by more than US$156.0 million, which represents an IRR of 19.0 percent.

Table A6.5 Project Cost-Benefit Analysis

(US$, millions)

Benefit or cost	Year										Total
	1	2	3	4	5	6	7	8	9	10	
Actions targeting the population at large											
Health costs (saving)	6.4	5.4	8.1	10.9	13.7	16.6	19.5	22.5	25.5	30.3	158.9
Productivity gains owing to premature deaths prevented	6.3	12.8	19.3	26.0	32.7	39.6	46.5	53.6	60.8	72.5	370.0
Productivity gains owing to disabilities avoided	7.6	15.3	23.2	31.1	39.2	47.5	55.8	64.3	72.9	86.9	444.0
(A) Economic benefits	**20.3**	**33.5**	**50.6**	**68.0**	**85.7**	**103.6**	**121.9**	**140.4**	**159.3**	**189.7**	**972.9**
PV of the project's economic benefits	**18.8**	**28.7**	**40.2**	**50.0**	**58.3**	**65.3**	**71.1**	**75.9**	**79.7**	**87.9**	**575.8**
(B) Project costs	**131.3**	**99.6**	**87.5**	**55.9**	**53.5**	**31.7**	**22.0**	**22.0**	**22.0**	**22.0**	**547.5**
PV of the project's costs	**121.5**	**85.4**	**69.5**	**41.1**	**36.4**	**20.0**	**12.8**	**11.9**	**11.0**	**10.2**	**419.8**
PV of the project's net benefits	**−102.7**	**−56.7**	**−29.3**	**8.9**	**21.9**	**45.3**	**58.3**	**64.0**	**68.7**	**77.7**	**156.0**
IRR											**19.0%**

Source: Bank task team.

Note: IRR = internal rate of return; PV = present value.

II. Financial Analysis

27. **As shown in Table A6.6, project implementation does not have a major impact on the NMOH budget**, increasing it by an average of 3 percent throughout the period analyzed. This also means that many of the programs and actions envisaged in the project's various components can be made sustainable.

Table A6.6 Project Financial and Sustainability Analysis

Item	2011	2012	2013	2014	2015	2016	2017	2018	2019
NMOH budget (US$, millions)	1,514	2,191	1,969	2,630	2,624	2,784	2,953	3,133	3,324
Project (US$, millions)				131.3	99.6	87.5	55.9	53.5	31.7
Variation in NMOH budget (%)				5.0	3.8	3.0	1.7	1.5	0,8

Source: Authors, based on the National Ministry of Finance database.

Note: NMOH = National Ministry of Health.