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Report No. 99213-CR

PROGRAM APPRAISAL DOCUMENT

ON A

PROPOSED LOAN

IN THE AMOUNT OF US$420 MILLION

TO THE

REPUBLIC OF COSTA RICA

FOR A

STRENGTHENING UNIVERSAL HEALTH INSURANCE IN COSTA RICA PROGRAM-FOR-RESULTS

February 18, 2016

Health Nutrition and Population Global Practice
Central America Country Management Unit
Latin America and the Caribbean Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective January 31, 2016)

Currency Unit = Costa Rican Colones (CRC)

US$1 = CRC$537.605

FISCAL YEAR

January 1 – December 31

ABBREVIATIONS AND ACRONYMS

CCSS	Costa Rican Social Security Administration (*Caja Costarricense de Seguro Social)*
CGR	Office of the Comptroller General *(Contraloría General de la República)*
CPF	Country Partnership Framework
DALYs	Disability-Adjusted Life Years
DLI	Disbursement-Linked Indicator
DRGs	Diagnosis-Related Groups
EBAIS	Basic Primary Health Care Teams (*Equipos Básicos de Atención Integral en Salud)*
EDUS	Unique Digital Health Record e-health package *(Expediente Digital Único de Salud*)
ESSA	Environmental and Social Systems Assessment
FROs	Revolving Funds *(Fondos Rotativos)*
FY	Fiscal Year
GDP	Gross Domestic Product
IRR	Internal Return Rate
IT	Information Technology
IVE	Independent Verification Entity
LAC	Latin American and the Caribbean
NCDs	Non-communicable Diseases
NPV	Net Present Value
OECD	Organization for Economic Cooperation and Development
PAHO	Pan American Health Organization
PAP	Program Action Plan
PDO	Program Development Objective
PforR	Program-for-Results
PHC	Primary Health Care
SASHI	Strategic Agenda for Strengthening the Health Insurance *(Agenda Estratégica para el Fortalecimiento Seguro de Salud)*
SIPA	Automated Payments System *(Sistema de Pagos Automatizado)*
TVM	Time Value of Money

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REPUBLIC OF COSTA RICA
Program-for-Results: Strengthening Universal Health Insurance in Costa Rica

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REPUBLIC OF COSTA RICA

Program-for-Results: Strengthening Universal Health Insurance in Costa Rica

PROGRAM APPRAISAL DOCUMENT

Latin America and the Caribbean Region
Central America Country Management Unit
Health Nutrition and Population Global Practice

Basic Information				
Date:	February 18, 2016		Sectors:	Health
Country Director:	J. Humberto Lopez		Themes:	Health Insurance
Practice Manager / Senior Global Practice Director:	Daniel Dulitzky Timothy Grant Evans			
Program ID:	P148435			
Team Leader(s):	Fernando Montenegro Torres			
Program Implementation Period: Expected Financing Effectiveness Date: Expected Financing Closing Date:	Start Date:	April 30, 2016 August 30, 2017 April 30, 2022	End Date:	April 30, 2022

Program Financing Data					
[X]	Loan	[ ]	Grant	[ ]	Other
[ ]	Credit				

For Loans/Credits/Others (US$M):					
Total Program Cost:	US$1,575		Total Bank Financing:	US$420	
Total Co-financing:	US$0		Financing Gap:	0	

Financing Source	**Amount (US$M)**
BORROWER/RECIPIENT	US$1,155.00
IBRD/IDA	US$420.00
Total	US$1,575.00

Borrower: Republic of Costa Rica – Ministry of Finance			
Contact:	Jose Pacheco	Title:	Vice Minister of Finance
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Responsible Agency: Costa Rican Social Security Administration *(Caja Costarricense del Seguro Social)*			
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Expected Disbursements (in USD Million)							
Fiscal Year	FY17	FY18	FY19	FY20	FY21	FY22	Total
Annual	110	110	30	110	30	30	420
Cumulative	110	220	250	360	390	420	420

Program Development Objective(s)

The objectives of the Program are to contribute to: (i) improving the timeliness and quality of health services; and (ii) enhancing the institutional efficiency of the CCSS.

Compliance

Policy

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

Overall Risk Rating: Moderate

Legal Covenants

Name	**Recurrent**	**Due Date**	**Frequency**

Description of Covenant

Team Composition			
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I. STRATEGIC CONTEXT

A. Country Context

1. **Costa Rica stands out for being among the most politically stable, progressive and prosperous countries of the Latin America and the Caribbean (LAC) region.** The country's development model has resulted in important economic, social, and poverty dividends, with sustained growth, upward mobility for a large share of the population, important gains in social indicators, and one of the lowest poverty rates in LAC. Using the poverty and extreme poverty lines of US$4 per day and US$2.5 per day respectively, just 12 percent of the Costa Rican population is considered poor (less than half of the LAC average), and 4.7 percent is considered extremely poor (about one-third of the LAC average). Moreover, only 1.4 percent of the population lives under the US$1.25 poverty line. The country's success is also reflected in other indicators, such as upward mobility, which has contributed to the rise of the middle class[1] from one-third of the population in the early 2000s to nearly half of the population today, as well as its strong human development indicators, which continue to rank higher than those of other countries in LAC.

2. **Costa Rica's health outcomes are among the best in LAC, and the country's social policies have to be credited for many of the social outcomes as they have resulted in sustained investments in human capital over many decades.** Costa Rica's signature universal public health insurance (*Seguro de Salud*) managed by the Costa Rican Social Security Administration (*Caja Costarricense de Seguro Social*, CCSS) has provided access to health care to its entire population, including the poor and bottom 40 percent. The country's universal health care system is considered one of the key reasons for its strong health outcomes with around 95 percent of the population formally enrolled. For example, life expectancy has increased from 62 years in 1960 to about 80 years in 2014 similar to other Organization for Economic Cooperation and Development (OECD) countries, and the infant mortality rate declined from 90 deaths per 1,000 live births in 1960 to just 8 deaths per 1,000 today—one of the lowest rates in LAC.

3. **As in other high-middle income countries, there are emerging structural issues that threaten the sustainability of Costa Rica's public health sector achievements.** These are related to: (i) a demographic transition resulting in changing demand for health services; (ii) stagnation of quality of care improvements to respond to non-communicable diseases (NCDs) and epidemics; and (iii) financial sustainability issues related to increasing health care costs.

- ***Demographic transition***. Low mortality rates and longer life expectancies have resulted in a demographic transition with a rapidly aging population and an increase in the prevalence of NCDs. Mirroring trends in other high income countries with aging populations, some NCDs increased by more than 25 percent between 1990 and 2010 (e.g. diabetes, ischemic heart disease, chronic kidney diseases, and major depression and anxiety). This demographic transition is having both a financial impact (as chronic

[1] Defined as the share of the population with incomes between US$10 and US$50 per day. World Bank Group (2015) "*Costa Rica's Development: From Good to Better – Systematic Country Diagnostic.*" World Bank Group Washington DC.

conditions are more costly to treat) and an organizational impact (as not all facilities are equipped to treat the shift in demand).

- ***Quality of care***. The national network of primary health care (PHC) services that served the country well in the past has not kept up with the expanding demand for services across the country. Preventive and early control strategies have not expanded as fast as specialized care and surveillance information systems require investments to respond to NCDs and epidemics using the existing network of PHC. This challenge has proven even more critical in light of recent global health emergencies, such as the Ebola crisis in 2015 and the ongoing Zika crisis. Furthermore, there is insufficient coordination among the PHC and specialized services (both outpatient and inpatient), leading to bottlenecks, increased waiting times, and erosion of patient satisfaction.

- ***Health insurance financial sustainability***. The country's response to the 2009 fiscal crisis resulted in a complex fiscal situation, and the Government is working with the Legislative Assembly to address it. Yet these fiscal pressures also limit the CCSS's ability to increase the public health insurance (*Seguro de Salud)* revenues to tackle increasing costs due to the demographic transition and the need to modernize infrastructure given that any increase to payroll taxes would have a direct impact on the Government's financial obligations as an employer.

4. **There is widespread consensus in Costa Rica that the health system is in need of significant transformation to continue providing the services as expected.** The CCSS Board of Directors, which oversees CCSS operations and is made up of representatives from the Government, trade unions, and the private sector, has approved a strategic agenda that the proposed operation will support. The lines of action to support this transformation were developed using international best practices with support of various national and international experts, including the World Bank, and therefore, the proposed operation builds on knowledge acquired in recent years.

B. Sectoral and Institutional Context

5. **The CCSS manages Costa Rica's public health insurance system and is the largest health care provider in the country.** With the exception of a small set of health services and facilities that cover work injuries, the CCSS is the sole public provider of health services at all levels of care[2] and is also responsible for public health insurance revenue collection and pooling. CCSS services are used by most of the population at substantially high rates across all income groups.[3] As both the provider and insurer for the health insurance system, the CCSS is a vertically integrated organization and has a unique comparative advantage in improving efficiency and quality of care. While other countries may benefit from vertically integrated social security administrations,[4] provision of services is often fragmented between the Ministry of Health and Social Security Administration. By contrast, in Costa Rica all public services are provided under the CCSS, opening up opportunities for gains in efficiency in the public sector.

[2] The Ministry of Health transferred all health care facilities to the CCSS in the 1990s.
[3] World Bank. 2015. Costa Rica - Central America Social Sector Expenditure and Institutional Review.
[4] Integrated in the sense that they own the facilities and staff is salaried and financed by the same institution.

6. **Costa Rica's health insurance model provides truly universal coverage and has many strengths**. The public health insurance (*Seguro de Salud)* provides health care services to the entire population. As the percentage of the population with formal insurance fluctuates around 95 percent, the Government effectively subsidizes individuals from poor and indigent households that cannot afford any contribution to health insurance. An important feature of the model is the network of PHC providers. Another key strength is the ability of the CCSS to facilitate changes in the national health insurance system without the need for difficult inter-agency coordination. The CCSS already provides a single risk pool for cross-subsidies, collects its own revenues, and uses its purchasing power for negotiating better prices for several costly pharmaceuticals. Finally, the CCSS has a body of decision makers in place at a centralized level that has the potential to take more strategic decisions and make adjustments to the system when provided with the right information in a timely manner.

7. **Despite these strengths, the system does require important changes to be able to respond to the needs of an aging population and the increase in NCDs and other public health challenges in a financially sustainable way**. The increasing prevalence of chronic conditions such as hypertension, diabetes and different types of cancer, along with the growing demand for specialized care, is putting a strain on the health system in many ways. Likewise, recent global health crises have highlighted the need for a system that is flexible enough to respond to unexpected challenges. In the past two years, the CCSS carried out an in-depth review of the main institutional capacity challenges to improving quality and efficiency of care. The analysis found three priority areas of weakness that needed to be addressed.

8. **First, the delivery of health care has not fully adapted to the changing needs of the population, given the rise of NCDs**. Addressing NCDs successfully in mature health systems (for example, in many OECD countries) requires detecting NCDs early on through adequate screening programs at primary care levels and following up those diagnosed at lower levels of care rather than in hospitals, a more costly and less efficient alternative. To do this, the information collected information has to be used in a coordinated manner across levels of care, and the health insurance system has to provide the right incentives to ensure that care is delivered at the right level. Low risk patients should be followed by primary care physicians or specialists, while higher risk patients should be referred to more complex levels of care as needed. Lack of effective health care management across all levels of care has impeded both the effective and proactive screening of individuals for NCD risks and the adoption of a more efficient mechanism to manage them.

9. **Second, the CCSS requires more effective institutional capacity to manage the system.** In particular, the capacity of CCSS's central level structure could be enhanced, including streamlining the central management structure, strengthening the efficiency of budget allocation, ensuring a managed approach to strategic investments, and introducing tools for shifting from inputs towards a results-based budgeting system. Other aspects of this priority area include developing a more proactive human resources management function, monitoring the impact of various user satisfaction interventions, and using data more efficiently to improve the overall institutional capacity for timely decision-making, both for NCDs and for improved surveillance and enhanced response in real-time of vector borne epidemics (see Box 1).

10. **Third, financial management within the CCSS will need to be improved and modernized in order to allocate resources more efficiently**. At present, the CCSS relies on outdated management and information systems for both accounting and budgeting practices, contributing to systematic inefficiencies. For example, historical line item budgeting, in which budgets are prepared based on actual historical costs, does not take into account the changing needs of the population and represents a barrier to introducing results-based budgeting and accounting practices. Similarly, CCSS's tools are outdated and ill prepared to analyze the growing wealth of improved financial and costing data. Finally, certain decisions related to infrastructure and other strategic investments have been taken in an *ad hoc* manner without consideration of national and regional goals and demand. This has resulted in overlapping services and over-emphasis on discrete specialized curative interventions.

Box 1: Smarter Control and Prevention of Epidemiological Emergencies

Key lessons learned from the previous responses to emerging epidemics indicate that increasing investments in E-Health systems combined with strengthening the PHC network can yield better responses and improved control for both non-communicable and infectious diseases. E-Health systems serve the dual roles of enabling the information sharing that is necessary to treat patients with many chronic diseases while also allowing for data to be generated in real-time to track and control fast-spreading epidemics.

The CCSS is aware of these lessons and will use this operation to build additional capacity needed to combat new national and global epidemiological challenges, such as Zika. For example, planned investments in E-heath systems will help improve the prevention and control of new epidemics, and prepare responses to future health emergencies. These systems are critical to monitor and quickly determine the changes in incidence trends of infectious diseases, and therefore, serve as an early warning system to adjust to changing epidemic dynamics. In parallel, efforts to strengthen the network of PHC Teams (*Equipos Básicos de Atención Integral en Salud,* EBAIS) will also support the generation of information that is vital for containing any highly contagious disease outbreak. The proximity of EBAIS to the population have a double benefit. On the one hand, their ability to feed real time data into the system (using smartphones or tablets) provides decision-makers with data that enables visualization and analysis of the rapid changes of epidemics. On the other hand, EBAIS have the ability to provide preventive information and education custom-tailored to the different households and types of epidemiological challenge.

By improving E-health tools and PHC networks, Costa Rica aims to continue being an example implementing financially sustainable best practices for dealing with infectious and non-communicable diseases simultaneously.

11. **To improve the efficiency and quality of care, the CCSS has put forth a comprehensive program in its *Agenda Estratégica para el Fortalecimiento del Seguro de Salud* (Strategic Agenda to Strengthen Health Insurance, or SASHI).** SASHI is a comprehensive and ambitious institutional capacity building program with the dual goals of increasing the efficiency and quality of the CCSS health insurance system. This Agenda was developed by the technical staff of the CCSS and its Senior Management with the support of various institutions, including the World Bank, and represents a unique window of opportunity to improve the CCSS' universal health insurance model by operationalizing and harmonizing new

and existing initiatives under the framework of a single, comprehensive national program. The Agenda was approved by the CCSS Board of Directors in November 2014.

12. **The proposed six-year Program-for-Results (PforR) will support the implementation of SASHI and actions in the three priority areas.** SASHI includes the following three priority areas: (i) strengthening the health care model to better integrate PHC with secondary level care in a given catchment area and network of providers in order to improve prevention, early diagnosis, and timely management of NCDs and ensure more efficient use of health care resources; (ii) enhancing the institutional management of the CCSS while increasing accountability and responsiveness to users; and (iii) adopting international best practices relevant to Costa Rica to improve financial management of the public health insurance (*Seguro de Salud).* The proposed PforR will support SASHI over six years.

C. Relationship to the Country Partnership Framework (CPF) and Rationale for the Use of this Instrument

13. **The proposed operation is fully aligned with the Costa Rica CPF (FY16-20).** The CPF was discussed by the Executive Directors on May 26, 2015 (Report No. 94686-CR) and aims to support the Government's objectives of reducing constraints to productive inclusion and bolstering fiscal, social, and environmental sustainability. These themes are priorities in both the Government's 2015-2018 National Development Plan and in the World Bank Group's Systematic Country Diagnostic Containing the growth trajectory of key public expenditures, notably within the CCSS, is a critical component of ensuring fiscal and social sustainability of both the public health insurance (*Seguro de Salud)* and overall Government expenditure. If unaddressed, inefficiencies in health sector spending could undermine the sustainability of the universal health insurance model and contribute to the national deficit. The proposed PforR aims to directly respond to this challenge by focusing on improving the efficiency of the CCSS and improving the quality of health services. The PforR is also fully aligned with the World Bank's corporate twin goals. The use of health care services by the bottom 40 percent is high, with 87 percent of individuals in the first quintile (poorest) and 85 percent of those in the second quintile reporting use of outpatient health services through the CCSS.[5] By improving the quality of health services, the operation will contribute to improving the living standards of all Costa Ricans, including those in the bottom 40 percent. The operation will also contribute to reducing inequality by enhancing financial protection in health.

14. **The PforR instrument is well suited to supporting the CCSS in the implementation of SASHI.** The PforR was deemed the most suitable instrument for a number of reasons. First, the CCSS already has developed and has full ownership of a comprehensive program for improving the health insurance model that will be supported by the proposed PforR. Moreover, the CCSS seeks to shift emphasis from the management of program inputs to management of program results and risks. Second, the Government seeks to use its own country systems in the implementation of the PforR in support of SASHI. The World Bank's assessments have confirmed the capacity of national program systems to successfully implement the operation.

[5] World Bank (2015). "Costa Rica: Estudio de Gasto Publico Social y sus instituciones – Educacion, Salud, Proteccion Social y Empleo". World Bank Group. Washington, DC.

This would be the first use of this instrument in Costa Rica and, as such, may be a good learning experience for other sectors as they work to move towards a stronger focus on results.

II. PROGRAM DESCRIPTION

A. Program Scope

The Strategic Agenda for Strengthening the Health Insurance (SASHI)

15. **SASHI focuses on three priority areas: (i) strengthening the health care delivery model; (ii) improving institutional management of the CCSS; and (iii) optimizing financial management of the public health insurance.**

16. ***Strengthening the Health Care Model*: SASHI aims to boost the scope and capacity of PHC to prevent and control NCDs, and integrate health services across different levels using international best practices (Box 2).** The CCSS will implement a series of activities to modernize and strengthen the PHC network nationwide to improve the quality of services, increase coverage of the population, and ensure that the network has greater capacity for prevention, early diagnosis, and control of NCDs and other conditions that are relevant to the local, regional, and national epidemiological profile including new challenges, such as Zika. The CCSS also continues to work to progressively strengthen the integration of PHC services into the network of services at all levels of care. Key activities and inputs include: (i) expanding infrastructure and equipment at the first and second levels of care; (ii) improving human resources to attend to the needs of patients; (iii) upgrading equipment; (iv) updating clinical guidelines and pathways, with an emphasis on chronic conditions affecting a large part of the population; and (v) increasing the use and impact of household data collected by the PHC teams. A pilot program will be carried out to test new mechanisms for integrating PHC with second level services (hospitals) using international best practices.[6] The pilot aims to improve the navigation of the patient across all levels of care, with the help of strengthened teams at the first level of care and new E-Health tools that would facilitate the exchanges between medical staff at the first level of care and specialists. This would reduce lengthy travel time and distances to reach services, and ensure that complex conditions are treated in a timely fashion and in accordance with quality standards introduced by the new clinical guidelines and pathways.

17. ***Improving Institutional Management and Optimizing Financial Management:*** In the aftermath of an internal financial crisis in 2011, the CCSS convened a panel of independent experts who recommended various interventions to enhance the efficiency, governance, and accountability of CCSS central level management. Subsequently, the Board of Directors identified a number of key activities to strengthen institutional capacity to better manage the CCSS in general, and the public health insurance (*Seguro de Salud)* in particular. These include: (i) aligning central level management to reduce the complexity of administrative processes; (ii) reducing management in silos through linking health care decisions with their impact on administrative and financial changes and nation-wide objectives; and (iii) improving the quality of financial data for Senior Management and the Board of Directors to enable them to closely

[6] The pilot has been under discussion for nearly a year, and has received input from various international organizations, including the Pan American Health Organization (PAHO) and the World Bank.

monitor actuarial analysis and income/expenditure trends. These activities are expected to enable the CCSS to make more strategic, evidence-based decisions and avoid new income/expenditure crises. These institutional changes also aim to enable the CCSS to stay abreast of the ever-evolving technology and international quality standards or new pandemics. To facilitate these activities, it is critical to harness the power of available health and demographic information by digitalizing data and linking it to existing E-Health tools to generate big data pools for directors and managers to enable them to better allocate resources and monitor results. An expanded description of the chain of results and expected changes is included in Annex 1.

Box 2: Addressing NCDs: Lessons from the OECD

The OECD, on the basis of an analysis of available evidence from its member countries, concluded that the following elements are critical for success in improving health care efficiency and quality in aging populations with a large burden of NCDs:

(i) strengthening PHC to proactively identify individuals at high risk of using services intensively and moving frequently between ambulatory and acute care, or having simultaneous intensive health and social care needs;

(ii) setting up teams that can take responsibility for care coordination, including delivery of social services, allowing individuals to go to one place to access a range of services, preferably investing in effective lower cost services (such as ambulatory surgeries and home care); and

(iii) focusing at the macro-level on interventions in institutional and financial management, such as the development of strategic plans to build a shared common view across central level managers and health facilities, to enable all levels to provide more effective and efficient services in the public sector.

Sources: OECD (2011), Health Reform: Meeting the Challenge of Ageing and Multiple Morbidities, OECD Publishing. http://dx.doi.org/10.1787/9789264122314-en.
European Observatory on Health Systems and Policies. (2012) "Health Systems, Health, Wealth and Societal Well-being: Assessing the case for investing in health systems". Open University Press. Berkshire, England.
OECD (2013). "OECD Reviews of Health Care Quality: Denmark 2013 – Raising Standards". OECD Publications, Paris.

Scope and Boundaries of the Proposed PforR

18. **The Program will support all critical areas of SASHI**. It will focus on strengthening the PHC network and increasing the integration of services across all levels of care. The support of the PforR for investments in the first and second levels of care will allow the CCSS to free up resources for capital investments, including hospitals. The activities that SASHI includes with its own sources of funding (i.e. outside the boundaries of the Program) include replacement or large civil works for various hospitals to replace existing ones that are obsolete or severely damaged. The total cost of implementing SASHI from 2017-2022 is estimated to be US$2.14 billion, which includes the high value contracts for hospital replacement (Table 1). The total cost of activities under the Program is estimated to be US$1.575 billion. Of these, the PforR will finance US$420 million. The rest will be financed by the CCSS.

19. **The Program's expenditure framework reflects needed investments for improvements in the three priority areas of SASHI.** The expenditure framework includes key investments required to strengthen PHC and the overall readiness of health services for

expanding ambulatory services and increasing integration across all levels of care (Table 2). In addition, the expenditure framework highlights important investments in digital and electronic platforms that, along with other management tools, will enhance institutional and financial management capacity (for a detailed analysis see Annex 4).

Table 1: PforR Program and SASHI Expenditure Framework Overview

Scope	**Expenditure (US$ million)**
SASHI Total*	2,140
Less hospital replacement	565
PforR Program Total	1,575
Financing Source	**Expenditure (US$ million)**
World Bank	420
CCSS	1,155
Program Total	1,575

** This amount includes the financing of replacement of hospitals that are large civil works, and therefore will not be financed by the PforR.*

20. **The fiscal impact of the proposed PforR is likely to be neutral.** In the short-term, the direct impact of the operation is expected to be neutral. The CCSS will not require any additional resources from the central Government to support the implementation of the program or achievement of the PDOs. Instead, the CCSS will finance the operation with its existing sources of revenues, including payroll taxes and other contributions made by enrollees along with the current level of subsidies from the central Government for the poor. In the medium- and long-term, the operation would have a positive indirect impact on health spending. Due to the results supported by the operation, the allocated resources are expected to be used more efficiently, as Costa Rica adopts relevant international good practices on health care delivery and management. This will allow the CCSS to reduce the risk of needing additional revenue and, hence, of requesting contributions to the central Government for the public health insurance (*Seguro de Salud*).

Table 2: Expenditure Framework by Categories

Category	**Amount (US$ million)**	**% of total**
Civil works	591	37.5%
Digital & Electronic Technology (Goods & Services)	246	15.6%
Human Resources	235	14.9%
Medical Equipment	234	14.9%
Non-medical Equipment	226	14.3%
Services & Operational Costs	24	1.5%
Technical Assistance	12	0.8%
Training and Communications	7	0.4%
Total	**1,575**	100%

B. Program Development Objectives (PDOs)

21. **The objectives of the Program are to contribute to: (i) improving the timeliness and quality of health services; and (ii) enhancing the institutional efficiency of the CCSS.** These PDOs will in turn contribute to the higher goal of enhancing the financial sustainability of the public health insurance (*Seguro de Salud).*

C. Key Results and Disbursement-linked Indicators (DLIs)

22. **The proposed PforR will provide funds to the CCSS based on a set of seven DLIs selected by the CCSS and agreed upon with the World Bank.** The DLIs are fully aligned with CCSS priorities and are designed to be challenging but achievable combining ambition and feasibility so that the financial risk attached to each DLI will have the right impact. The DLIs are presented in Table 3 and described in detail in Annex 3. Some of the selected DLIs are designed to be disbursed proportional to the quantitative achievement of the results (i.e. scalable). The complete disbursement arrangements are presented in Annex 3, with a summary of the most salient aspects of these arrangements as follows:

- Upon loan effectiveness, an advance of a lump sum of 25 percent of the total disbursement value may be provided to support the CCSS in the implementation of key action lines.

- Upon loan effectiveness, disbursements against already achieved DLIs (prior results) may be made for up to 25 percent of the loan amount.

- DLIs with quantitative targets will be scalable, and payments will be proportional to the achievement set out in the estimated schedule (see Annex 3 for more details). Disbursements against all DLIs will be made according to the arrangements outlined in Annex 3 irrespective of the estimated dates as long as these targets are achieved (or proportional to them for those that are quantitative and therefore, scalable).

23. **Achievement of the PDOs will be measured by four outcome indicators selected from the seven DLIs.** Eight intermediate outcome indicators will also measure other important intermediate steps in the implementation of SASHI (see Annex 2 for the complete Results Framework). The outcome indicators are as follows:

(i) Percentage of major surgeries from priority list conducted in outpatient settings according to institutional guidelines;
(ii) Cumulative percentage of target population personally invited to undergo colon cancer screening in the five priority counties;
(iii) Percentage of total number of primary health care units (*Áreas de Salud*) with the Unique Digital Health Record e-health package (EDUS, *Expediente Digital Único de Salud*); and
(iv) Development and execution of a comprehensive medium- and long-term plan to ensure the financial sustainability of the CCSS.

Table 3: Disbursement-Linked Indicators

#	DLI	Expected Results
1	Percentage of major surgeries from priority list conducted in outpatient settings according to CCSS institutional guidelines	Expansion of major surgeries in ambulatory settings
2	Cumulative percentage of target population personally invited to undergo colon cancer screening in five priority counties (the definition of priority counties is included in Annex 3)	Implementation of a large-scale cancer screening program in the top five priority counties
3	Percentage of individuals diagnosed with Diabetes Type II that are under optimal clinical control	Improvement of quality of care of individuals diagnosed with diabetes
4	Pilot project on integrated health networks approved by the CCSS Board and implemented for a selected population and territory and evaluated with the results publicly disseminated	Design, implementation and evaluation of pilot for a new health care network management model
5	Percentage of total number of primary health care units (*Áreas de Salud*) with the Unique Digital Health Record e-health package	Expansion of the coverage of Unique Digital Health Record e-health package (EDUS)
6	Redesign, implementation and use of data collected by the new annual survey to measure impact of new interventions to improve patient satisfaction	Evaluation of the results of the interventions to improve patient satisfaction
7	Development and execution of a comprehensive medium- and long-term plan to ensure the financial sustainability of the CCSS	Improvement in institutional capacity for financial management and budgeting

III. PROGRAM IMPLEMENTATION

A. Institutional and Implementation Arrangements

24. **The CCSS is the sole implementing agency for SASHI.** As such, and as agreed by the CCSS Board of Directors and Senior Management, the PforR will be implemented using CCSS' institutional arrangements, in line with the guidelines and priorities of SASHI. The Board of Directors will oversee the overall implementation of SASHI, while the Executive President of the Board along with the CCSS Senior Management will lead the implementation of the PforR with the support of a coordination team composed of selected members of Senior Management. To ensure a fluid flow of funds, an implementation agreement will be signed between the Ministry of Finance and the CCSS for the implementation of the PforR's activities under terms and conditions acceptable to the World Bank.

25. **The Board of Directors plays a strategic management role and is responsible for the overall functioning of the CCSS.** This includes preparation and approval of CCSS internal guidelines and norms. The members of the Board of Directors are appointed by the Employers' Associations (three representatives), the *Sector Cooperativo* (Employee Associations, Trade Unions and other independent workers associations) (three representatives), and representatives of the state (Executive President and two representatives). The Executive President of the CCSS is appointed by the President of Costa Rica and presides over the Board of Directors.

26. **Implementation of the PforR will be overseen by the Executive President in collaboration with a coordination team drawn from Senior Management**. Specifically, the coordination team will include the Director of the Institutional Planning Unit and the Directors of

the Health Care Management, Administrative Management, and Financial Management Departments, as well as an ad hoc technical coordination team that will be defined by the CCSS. The senior management structure is composed of six management departments: (i) Health Care Management Department; (ii) Administrative Management Department; (iii) Financial Management Department; (iv) Infrastructure and Medical Equipment Management Department; (v) Procurement; and finally, outside the scope of the health insurance, (vi) the Pension Services Management Department. Although the Pension Services Management Department is not related to the Health Insurance, it shares some of the resources of the Financial Management Department to provide key financial services to the Pension Fund. All Senior Management report directly to the Executive President, who is responsible for overseeing all CCSS operations and services, including health insurance, and acts as the *de facto* General Manager. The internal auditor is governed by the procedures, guidelines and regulations of the Office of the Comptroller General (*Contraloría General de la República*, CGR) and both carry out independent reviews, perform audits, and ensure adherence of the CCSS to its own regulations, external laws, and regulatory frameworks. Finally, an Institutional Planning Unit works in collaboration with all CCSS Management Departments and reports to both the Board of Directors and the Executive President. Prior to the declaration of Loan effectiveness, the CCSS will establish the details of the internal organizational arrangements, roles, and procedures that will enable the institution to carry out the operational, financial, and administrative processes of the Program's implementation in an efficient way.

B. Results Monitoring and Evaluation

27. **Progress towards achievement of the PDOs will be tracked using four outcome indicators, which are also included in the seven DLIs**. The Institutional Planning Unit of the CCSS will be responsible for timely collection of all documentation supporting achievement of the DLIs, ensuring that the respective Management Departments responsible for each DLI have documented and verified the indicators. Certain indicators have existing sources of data and methods of data collection (mostly quantitative indicators) and thus verification will be carried out through existing internal verification methods. However, other indicators (mainly qualitative indicators) required new data collection arrangements, which have now been established by the Board of Directors (for details, see Annex 3, Table 3.2).

28. **The World Bank will provide implementation support based on a detailed Implementation Support Plan (Annex 8).** The World Bank will pay particular attention to reviewing the monitoring data and verification documentation for the PforR's results and DLIs submitted by the CCSS, retaining the right to make the final decision, for disbursement purposes, on whether the agreed DLIs have been achieved.

C. Disbursement Arrangements and Verification Protocols

29. **The total loan amount will be distributed across the DLIs as follows: DLIs 1 to 7 will be assigned an equal amount of US$60 million.** Scalable disbursements (proportional to quantitative results) will be applied to four out of the seven DLIs (see Annex 3). This mechanism recognizes that DLIs can be partially achieved and that, under these circumstances, a proportion of the agreed disbursement amount can be paid. These disbursement arrangements are intended

to stimulate and reward gradual, continuous improvements and to maintain motivation and commitment to achieving the PDOs over the implementation period.

30. **To support a faster implementation of activities, an advance equivalent to 25 percent of the total loan (US$105 million) will be disbursed once the proposed PforR is declared effective.** This is consistent with the new World Bank guidelines, and if by the closing date the advance or some portion of the advance is still outstanding due to a DLI or combination of DLIs not having been fully met, the Government will need to refund the outstanding balance of the advance.

31. **Disbursements may also be made for DLIs that have already been achieved at the time of loan effectiveness.** Given that SASHI is already under implementation and, as noted in the CPF, a substantial length of time is often required for project approval by the Costa Rican Legislative Assembly, disbursements against DLIs that have already been achieved at the time of loan effectiveness (prior results) may be made for up to 25 percent of the loan amount (US$105 million).

32. **The DLI verification protocols include clear definitions of the agreed DLIs, as well as baseline and target values, and procedures for their measurement (Annex 3).** The timeline for targets is indicative and withdrawal applications for disbursements can be made once the targets are achieved (or partially achieved, as applicable), either individually or in groups. Since the Program aims to support overall strengthening of quality, efficiency, and sustainability of the CCSS, the country's existing monitoring and evaluation systems will be used for the measurement and verification of progress toward achievement of the Program's objectives. The complete description of disbursement arrangements is presented in Annex 3.

33. **An external entity to be hired by the CCSS will independently verify the achievement of DLIs before a request for disbursement is submitted to the World Bank.** The external entity is likely to be a qualified United Nations organization, other international organization, or a qualified local university, and will be contracted before the first disbursement for a DLI is requested. The verification process will rely on existing administrative data and not on household or other *ad hoc* surveys. The quality of this bio-statistical data is internationally acknowledged by other Governmental entities, universities, and the Pan American Health Organization (PAHO).

34. **The World Bank will routinely monitor progress towards DLI achievement based on the agreed monitoring and reporting arrangements, including the Program's progress reports and the DLI verification protocols.** Upon achievement (or partial achievement) of a DLI, the CCSS will provide the World Bank with evidence that the DLI has been met (see Annex 3, Table 3.2 for verification protocols). Following review of the complete documentation, including any additional information considered necessary, the World Bank will send an official communication to the CCSS and the Ministry of Finance as to the achievement of the DLI(s) and the level of Program financing proceeds available for disbursement against each particular DLI, including any partial disbursement for the scalable DLIs where applicable.

IV. ASSESSMENT SUMMARY

A. Technical Assessment

Strategic Relevance and Technical Soundness

35. **The proposed Program is comprehensive and technically sound.** The Program's approach to improving the quality and efficiency of the national health insurance is based on recognized best practices and is appropriate for the Costa Rican context. Further, the implementation of SASHI through three-year operational plans will allow the CCSS to make any necessary adjustments as the Program progresses. The Program's objectives are fully aligned with SASHI goals, which are in turn aligned with the CCSS' priorities outlined in Costa Rica's National Development Plan. These objectives also benefit from the full support and buy-in of the CCSS Board of Directors.

Institutional Arrangements

36. **An adequate governance structure is in place to implement the Program.** Institutional arrangements have been defined to allow for strong collaboration both within the CCSS and with other stakeholders. An implementation agreement will be signed by the CCSS and the Ministry of Finance to ensure fluid flow of financial resources. Finally, the CCSS Executive President will lead the implementation of the PforR with the support of the Senior Management team and an *ad hoc* technical coordinator.

Results Framework and Monitoring and Evaluation Capacity

37. **The Results Framework and the selected DLIs have been agreed with the CCSS to monitor the Program.** All DLIs have been clearly defined and responsibilities for data collection and verification have been agreed upon. As the CCSS has already demonstrated its ability to successfully track results of SASHI (currently under implementation), no major issue is expected with regard to the country's monitoring and evaluation capacity.

Cost/Benefit

38. **Economic analysis suggests that SASHI is cost effective.** The economic impact of SASHI has been evaluated through a cost-benefit analysis (Annex 4). The analysis uses the total costs of the PforR (US$1,575 million) and related health benefits as measured by Disability-Adjusted Life Years (DALYs), where each DALY is valued at the annual per capita income for Costa Rica. To ensure the robustness of the estimates, the operation's Net Present Value (NVP) and Internal Rate of Return (IRR) are compared under different inflation (5 percent and 9 percent) and economic growth scenarios (4 percent and 2 percent). The results are positive, as the IRR ranges between 11 percent and 14 percent, and the NPV oscillates between US$576 million and US$89 million. Though negative, the NPV of the most adverse scenario is close to point where the costs equal the benefits, a very unlikely scenario, as it requires sustained high inflation and low growth for 15 years. Hence, the SASHI program is expected to be cost-effective.

Technical Assessment Risks

39. **The most relevant risks from a technical point of view stem from the challenges of consensus building with many stakeholders.** The CCSS Board of Directors and Senior Management have carried out internal consultations and prioritized consensus building to

mitigate the risks that stem from these ambitious institutional change goals. The proposed timeline of the activities and outputs is well aligned with the schedule of outcomes, and thus the risk of not achieving the expected results is not substantial. Furthermore, the CCSS has already started to implement key activities (i.e. E-Health tools) with its own funds to ensure that there is substantial progress by the time effectiveness is achieved. Other risks are described in detail in the Technical Assessment (Annex 4).

B. Fiduciary Assessment

40. **The fiduciary and governance frameworks are adequate to support implementation of the proposed PforR, and thus the fiduciary risk is rated Moderate.** Existing financial management and procurement systems are in place to support budget planning and execution, carry out procurement, record transactions, and produce financial reports. However, there are areas in need of improvement to ensure a more efficient and effective use of resources, which are further discussed below and in Annex 5. Nonetheless, the overall fiduciary risk for the operation is rated as moderate. Key mitigating measures required to strengthen CCSS's capacity are included in the Program Action Plan (PAP) and directly through the Program.

41. **The CCSS budget is comprehensive and realistic.** Overall budget preparation and approval is carried out using orderly and well-established processes, including approval by the Board of Directors and the CGR. In principle, budget allocations are aligned to strategic priorities; however, in practice, the ability to implement the budget as planned may depend on effective collection of contributions. At an aggregate level, budget credibility is adequate, but reallocations between executing units are frequent.

42. **Budgeting and accounting records are maintained, and financial statements are prepared on a monthly basis.** The CCSS uses an accrual basis of accounting and compares actual expenditures to budgets on a monthly basis. However, financial statements are prepared using a manual process of information collection and are aggregated from over twenty un-linked information systems and databases. As a result, systematic and timely use of financial reports for decision-making is a challenge. With support from the PforR, the CCSS will start to move towards International Public Sector Accounting Standards to enhance its capacity to provide accurate, timely, and reliable financial information for decision-making, performance assessment, and resource allocation.

43. **The CCSS has ample experience in the area of procurement, being one of the largest buyers in Costa Rica.** Procurement planning is based on needs identified by CCSS Executing Units and is consistent with the Institutional Operation Plan and the budget allocated. The annual procurement plan is approved by the CCSS and published in the first month of the fiscal year. Competitive procurement is the default method. The CCSS has a pool of experienced staff to prepare bidding documents and specifications, conduct evaluations, and carry out contract administration. Finally, there are internal procurement oversight and control systems, including internal audit, as well as external controls by the CGR. There are opportunities for improvement through streamlining processes for efficiency gains, increasing centralized procurement and decentralized supply for small value large volume purchases, and building an integrated information system to allow for real time monitoring of procurement and contract management.

44. **The overall internal control environment is adequate.** Internal control procedures follow a basic set of rules for processing and recording transactions. While sufficient for the Program, controls may be excessive in some cases and require improvement in others (Annex 8) to avoid duplications and cumbersome processes that can affect budget execution. The lack of an integrated tool for the management of personnel records and preparation of the payroll entails using cumbersome and costly ex-ante and ex-post controls, and, although errors sometimes occur, they are identified and addressed. The Internal Audit Unit is well staffed and well structured, allowing it to tailor services to the needs of CCSS operations.[7]

45. **The CCSS is subject to external audit or specialized review by the CGR.** Annual financial statements are also subject to external audit by a private firm. At present, there are no requirements to rotate external auditors (considered a sound corporate governance practice). Program auditing will be carried out as part of the entity's financial and budget audit, with a separate section for the Program.

C. Environmental and Social System Assessment

46. **The Environmental and Social System Assessment (ESSA) was carried out to identify any adverse environmental and social impacts that the Program could generate and was disclosed prior to appraisal.** The ESSA has taken into consideration the requirements of the World Bank PforR Policy and Directives and was informed by a review of available information as well as a stakeholder consultation in August 2015. The Program does not include activities that could have significant or unprecedented adverse impacts on the environment and/or affected people. Based on ESSA systems and risk evaluation, a PAP was developed and discussed with the relevant Program entities (see Annex 7 for PAP and Annex 6 for ESSA summary). The Spanish version of the ESSA was disclosed both in-country and in the World Bank's Infoshop on January 6, 2016.

47. **The existing and planned systems for environmental management are adequate to mitigate any potential negative impact of the Program.** Some activities associated with the Program may have potential negative environmental impacts in particular from the construction, rehabilitation and operation of medical facilities.[8] In relation to the Program, Costa Rica's environmental, health and safety laws as well as the institutional capacity of its environmental regulatory authority is adequate. Acceptable mechanisms exist within the CCSS and the environmental regulatory authority to assess the potential environmental impact and establish appropriate mitigation measures related to new construction and rehabilitation of facilities. However, there are opportunities to support more efficient and effective environmental, health, and safety management with the CCSS, including: (i) improving coordination among CCSS departments responsible for environmental management; (ii) ensuring robust oversight and management of environmental requirements at all facilities; (iii) putting in place an integrated environment, health, and safety information system to improve compliance with regulatory requirements and strengthen decision-making and resource allocation; and (iv) developing a plan for future investments to ensure full compliance with environmental regulatory requirements at

[7] The Internal Audit Unit is governed by the Audit Standards for the Public Sector issued by the CGR.

[8] Primary potential negative impacts relate to operation of facilities and include waste water discharges, generation of both solid and medical waste, and air emissions.

all existing facilities, in particular related to potable water, waste water, air emissions, and solid and hospital wastes.

48. **The Program's social system was assessed as adequate and without risk of substantial negative societal impacts; thus, the overall risk profile is rated as Low.** Participation and citizen engagement processes are well-established in the CCSS and will likely improve as a result of Program implementation. The Program will support the CCSS in ensuring that programs and outreach activities are relevant and accessible to all vulnerable populations. With the understanding that indigenous populations and other vulnerable groups face access barriers, the Program will ensure that culturally appropriate information is shared in a timely and sensitive manner. The Program also features several mechanisms to allow citizens to provide feedback on the quality, timeliness, and effectiveness of the health care services provided by the CCSS. The World Bank will work with the CCSS to ensure that citizen engagement mechanisms and dialogue spaces are improved or created and that they suit the needs of all Costa Ricans, particularly the indigenous and other groups with special needs.

49. **Communities and individuals who believe that they are adversely affected as a result of a World Bank-supported PforR operation, as defined by the applicable policy and procedures, may submit complaints to the existing program grievance redress mechanism or the World Bank's Grievance Redress Service.** The latter ensures that complaints received are promptly reviewed in order to address pertinent concerns related to the operation. Affected communities and individuals may submit their complaint to the World Bank's independent Inspection Panel that determines whether harm occurred, or could occur, as a result of World Bank 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 World 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, 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.

D. Risk Assessment

50. **The overall risk of the Program to achieve its development objectives is considered Moderate.** Key risks stem from potential challenges related to political and governance and macroeconomic stability. The most significant political risk is related to the need for support of diverse stakeholders for the successful implementation of SASHI and the achievement of PDOs. As a country with active physician organizations, strong trade unions, and vocal patient associations (among other stakeholders), there is a risk that such groups may see the proposed changes as a threat and potentially affect legislation. There is also risk that some lines of action, such as a shift towards outpatient procedures, may be politicized. In both of these cases, the likely impact would be that the speed of implementation may be slower than originally envisioned or that the overall impact may be less than originally hoped. It is, therefore, imperative that the CCSS proactively engages with stakeholders to ensure strong buy-in throughout the implementation period. With respect to macroeconomic risks, given the rising debt-to-Gross Domestic Product (GDP) ratio, growing deficit, and stagnant and low revenues, any economic shock could threaten the sustainability and level of CCSS financing and, in turn, limit the ability to implement the Program and achieve the PDOs. As the Government is one of

the largest employers in Costa Rica, a potential macroeconomic shock could negatively impact both employment and payroll tax contributions, and potentially impact the operation's ability to achieve the PDOs given that most of the financing of the proposed program comes from the CCSS.

Table 4: Risk Ratings

Risk Categories	Rating (H, S, M, L)
1. Political and governance	S
2. Macroeconomic	S
3. Sector strategies and policies	M
4. Technical design of project or program	M
5. Institutional capacity for implementation and sustainability	M
6. Fiduciary	M
7. Environment and social	L
8. Stakeholders	M
Overall	M

Annex 1: Detailed Program Description

1. This Annex is divided into three parts: the first section lays out the causal framework for the PforR, explaining the relevance and rationale for choosing the specific DLIs. The second section provides the full list of SASHI objectives and lines of action by priority areas; and the final section provides a visual schematic representation of the chains of results by priority areas.

Section 1: PforR Results Chain and Rationale for DLIs

2. Section 1 lays out the causal framework of the PforR in Table 1.1 and in greater detail in the accompanying text. First, it states the key system changes towards which the seven DLIs of the PforR will be contributing. Next, it explains how each DLI will play a role in the achievement of the broader change. Third, it includes the causal chain for how the changes and DLIs will contribute to the PDOs and finally, explains which actions are required for the system changes to be accomplished.

3. Each of the seven DLIs spanning the three priority areas is included. In terms of the health care model, the most necessary and important changes: (i) strengthening primary care with an emphasis on prevention, early diagnosis, and control of NCDs (DLIs 2 and 3) and performing more procedures outside of hospital settings (DLI 1), and (ii) creating integrated health care networks (DLI 4) with E-Health tools that facilitate coordination across levels of care (DLI 5). The institutional and financial management components are included as well (DLIs 6 and 7).

Institutional change:	Shift towards ambulatory care
Priority area:	Health care model
DLI:	(1) Percentage of major surgeries from priority list conducted in outpatient settings according to CCSS institutional guidelines.
Contribution of DLI to institutional change:	Expansion of major surgeries in ambulatory settings

4. **Contribution of institutional change to PDOs:** By using more cost-appropriate health care resources, CCSS can reduce costs and eliminate bottlenecks in service delivery. International evidence shows that shifting certain surgical procedures from hospitals to alternative, less-invasive procedures in ambulatory settings will allow more surgeries to be performed in lower-cost settings without being limited by hospitals' operating room capacity. In order to ensure that resources for highly specialized care are allocated equitably and yield better results for all of those in need of care regardless of their area of residence, SASHI will also work to expand the availability of non-acute hospital beds. By moving more care to ambulatory settings, resources will be freed up in tertiary hospitals. This initiative promises to help reduce long waiting lists for surgeries (a key driver of poor patient satisfaction in Costa Rica) and reduce the average cost per procedure. Further, by offering surgery in a timelier manner and with less-invasive procedures, the quality of care is improved as well, as ambulatory surgeries improve quality by shortening recovery and avoiding invasive and risky interventions.

Table 1.1: Desired institutional changes and their contributions to PDOs

Desired Health System Change to achieve to PDO	Contribution of DLI to the change	Relevance of DLI to achieving PDOs	Activities and outputs required to achieve DLI target
Shift towards ambulatory care	DLI1: Expansion of major surgeries in ambulatory settings	Performing surgeries in less expensive settings Freeing hospital resources will reduce waitlist times Improved timeliness Improved quality in terms of recovery times	Expanding outpatient capacity through the optimization of existing capacity and the development of new clinical guidelines
Improved prevention, diagnosis and control of NCDs	DLI2: Implementation of a large-scale cancer screening program in the top five priority counties	Early diagnosis of colon cancer to improve health outcomes in these types of patients and contain costs Contribution to improved quality	Assigning new staff roles and responsibilities Developing information systems. Purchasing new medical equipment Performing systematic analysis of health risks in the population
Improved prevention, diagnosis and control of NCDs	DLI3: Improvement of quality of care of individuals diagnosed with diabetes	Reduction in preventable complications from chronic conditions Contribution to improved quality	Developing and applying clinical guidelines Developing and rolling out E-Health tools at 1st, 2nd levels of care
Greater integration of health care network established at national level	DLI4: Design, implementation and evaluation of pilot for a new health care network management model	Improved communication and coordination across levels of care Improved continuity of care for patients Strategic decision-making and resource allocation by network managers Contribution to timeliness as flow of patients improves	Re-organizing financing arrangements Re-allocating of staff time and human resources to case management responsibilities Investing in infrastructure and equipment Creating new roles and authority structures Investing in E-health tools
Expanded E-Health tools for PHC	DLI5: Expansion of the coverage of Unique Digital Health Record system (EDUS)	Improved monitoring of trends and timelier decision-making for health care managers with better access to data would result in more efficient management of the system	Investing in software and hardware Training of new staff Re-allocating staff time Developing internal regulations for privacy and data security
Improved institutional responsiveness to users and strategic decision-making	DLI6: Evaluation of the results of the interventions to improve patient satisfaction	Enables better priority setting Encourages patient centered focus. Informs culturally appropriate practices Avoids costly litigation	Reviewing existing redress mechanisms for users and main causes of litigation Developing new survey sampling model
Improved strategic long-term planning and monitoring of budget trends & financial equilibrium	DLI7: Improvement in institutional capacity for financial management and budgeting	By enabling decision-makers to analyze long-term trends in revenue and expenditures, budget and costs, the CCSS can avoid acute revenue and expenditure crises and make more informed decisions Would result in better management of the system	Introducing international standards on financial accounting Digitalizing cost information and linked administrative data Developing risk adjustment capitation models

5. **Activities to be implemented by CCSS:** Shifting surgical procedures to ambulatory settings will be accomplished through:

- **Expanded capacity:** Investments in infrastructure, equipment and training at first and second levels of care will expand capacity for surgery in ambulatory settings.
- **New clinical pathways and guidelines:** Clinical pathways will be established that guide patients to have surgeries in ambulatory settings for certain conditions.
- **Results-based financing:** Once established, integrated health care networks could receive results-based financing from CCSS based on targets.

Institutional change:	Improved prevention and early diagnosis of NCDs
Priority area:	Health care model
DLI:	(2) Cumulative percentage of target population personally invited to undergo colon cancer screening in five priority counties.
Contribution of DLI to institutional change:	Implementation of a large-scale cancer screening program in the top five priority counties

6. **Contribution of institutional change to PDOs:** By pro-actively reaching out to target populations for cancer screenings, cases can be treated at earlier stages before they become more serious (and costly). Without any additional guidance, most patients fail to take the initiative to seek preventive services. Evidence shows that population health management programs enable at-risk individuals to be screened earlier than they would be if they had not been contacted. Costa Rica currently does not have a robust program for targeting individuals for cancer screening, but instead relies on patients to seek screenings on their own. The plan to roll out an extensive colon cancer-screening program will allow patients to begin receiving care at earlier, easier-to-treat stages.

7. **Activities to be implemented by CCSS:** The implementation of the large-scale colon cancer screening program will be accomplished through:

- **New staff roles and responsibilities:** Staff members of PHC teams will need to spend time identifying at-risk individuals and reaching out to them (usually through a home visit). This will require staff time to be re-assigned or new health workers to be hired.
- **Information systems:** The expansion and digitization of *Ficha Familiar* household records will be necessary for primary health teams to identify at-risk individuals. With better health records, health care providers will be able to follow up with patients.
- **Investments in new medical equipment**: Additional medical equipment will be purchased for colonoscopies.
- **Systematic analysis of health risks in the population:** In order to target individuals for screening, population health risks must be analyzed through E-Health tools and big data analysis.

Institutional change:	Improved quality of care of NCDs
Priority area:	Health care model
DLI:	(3) Percentage of individuals diagnosed with Diabetes Type II that are under optimal clinical control.
Contribution of DLI to institutional change:	Improvement of quality of care of individuals diagnosed with diabetes

8. **Contribution of institutional change to PDOs:** By adopting evidence-based guidelines for treating chronic conditions, the incidence of complications can be reduced, in turn reducing the health burden and cost of care. Chronic diseases such as diabetes and hypertension require consistent management to avoid serious complications and deterioration of the patient's condition. Ensuring that all doctors are consistently adhering to internationally recognized best practices will be key to avoiding unnecessary suffering and treatment costs for complications and problems that could have been averted.

9. **Activities to be implemented by CCSS:** The widespread adoption of best practices for treating patients with diabetes will be accomplished through:

- **New clinical guidelines:** New guidelines will be established for improved treatment of patients with diabetes and physicians will receive training on new practices.
- **Clinical supervision and support:** Ongoing monitoring and evaluation of the adoption of the new clinical guidelines will be carried out using clinical audits.
- **Investments in E-health tools:** Physicians and (eventually) health care network managers will have access to improved information on patients with diabetes and other chronic conditions. They will need to have the administrative and electronic tools to maintain registries of patients with chronic conditions and keep track of patients' treatment plans to ensure adherence.
- **Financial incentives:** Once established, integrated health care networks could receive results-based financing from CCSS based on targets.
- **Increased integration and coordination of care:** Many patients, especially those with co-morbidities, require care from many providers and specialists. Increased integration will facilitate collaboration and communication between providers.

Institutional change:	Integrated health care network established at national level
Priority area:	Health care model
DLI:	(4) Pilot project on integrated health networks approved by the CCSS Board and implemented for a selected population and territory and evaluated with the results publicly disseminated.
Contribution of DLI to institutional change:	Design, implementation and evaluation of pilot for a new health care network management model

10. **Contribution of institutional change to PDOs:** An integrated health care network has the potential to improve the quality of care and institutional efficiency of CCSS in numerous ways:

- **Improved communication and coordination across levels of care:** By increasing coordination among providers across levels of care, unnecessary, inappropriate or duplicative care can be eliminated and patients can enjoy a more coherent and connected health care experience. Allowing providers to communicate and coordinate their care requires a more "integrated" health care system that eliminates barriers to communication and aligns incentives for working together.
- **Improved continuity of care for patients:** By tasking the PHC team with the responsibility of helping patients to navigate the health system, patients are relieved of the confusing and difficult task of having to navigate between multiple providers and facilities on their own and can receive care in a more timely way. This is especially beneficial for patients with co-morbidities, who are the most costly patients in the Costa Rica health insurance model.
- **Strategic decision-making and resource allocation by network managers:** Integrated health care network managers can analyze data on health outcomes and services in their geographic catchment areas and can make strategic decisions in real-time based on this data.

11. **Activities to be implemented by CCSS:**

- **Re-organizing financing arrangements:** Prospective budgets will be used as inputs for integrated health care networks.
- **Re-allocation of staff time and human resources to case management responsibilities.** Based on international best practices selection of PHC staff to work on case management and coordination of care.
- **Infrastructure and equipment investments:** An integrated health care network has different physical infrastructure requirements.
- **Creation of new roles and authority structures:** Integrated health care network managers will have the flexibility to re-allocate resources within the network.
- **Investments in E-health tools:** Digital systems will provide important real-time information to health network managers.

Institutional change:	Expansion of E-Health tools for PHC
Priority area:	Health care model & institutional management
DLI:	(5) Percentage of total number of primary health care units (*Áreas de Salud*) with the Unique Digital Health Record e-health package (EDUS).
Contribution of DLI to institutional change:	Expansion of the coverage of EDUS

12. **Contribution of institutional change to PDOs:** Establishment of large data pools at the local, regional and national levels will ensure improved monitoring of trends and timelier decision-making by health care managers at the network level and for administrative and financial purposes at the national level. With new data information systems, CCSS will be better able to make decisions, evaluate performance, allocate resources, and identify inefficiencies. The use of such tools should yield more accurate and timely information to enable policymakers to benchmark providers and to make informed budgeting choices. Currently, CCSS lacks comprehensive information systems and policies to conduct strategic planning and monitoring of intermediate outcomes. Its monitoring systems for clinical, financial, and administrative information are highly fragmented, use obsolete data management tools, and prevent decision-makers from making timely decisions. For example, the CCSS lacks a unified, universally accessible digital platform for patient and user records. The expansion of digital and electronic tools will further support improved decision-making at both the national and regional levels. A centralized strategic unit will be established within CCSS dedicated to supervising and supporting the management of hospital services and consolidating existing centers of excellence. By working to avoid duplication of efforts across the system, the unit will also help to reduce inefficient expenditures. Eventually, the goal is capture everything that happens to patients at every single CCSS health care facility using the same module.

13. **Activities to be implemented by CCSS:**

- **Investment in digital platforms, hardware/software:** Major investments will be needed in hardware as well as in digital platforms, especially for big data management.
- **Agreement with telecommunications firm:** Data will be transferred using cellular towers in a data network or using another technology deemed to be appropriate.
- **Creation of new internal regulations:** Rules and protocols for confidentiality, access to information, etc. will need to be established.
- **New staff and responsibilities:** Staff will need to be hired or re-trained to take on these data management and data entry roles in health facilities.

Institutional change:	Improve institutional responsiveness to users and decision-making
Priority area:	Institutional management
DLI:	(6) Redesign, implementation and use of data collected by the new annual survey to measure impact of new interventions to improve patient satisfaction.
Contribution of DLI to institutional change:	Evaluation of the results of the interventions to improve patient satisfaction

14. **Contribution of institutional change to PDOs:** By introducing new mechanisms to gauge patient satisfaction, decision-makers will be better equipped to set priorities. As it is now, efforts to improve patient satisfaction and employee working conditions have come about as reactions to crises rather than as the result of proactive endeavors to identify problems early and propose solutions. Based on user satisfaction data, it is possible to adjust the design of the

infrastructure of health care with a patient-centered focus to reduce unnecessary mobility of patients across the system to improve continuity of care and enable culturally appropriate practices to be integrated. Incorporating the user satisfaction dimension will improve the design of alternative complaint and redress mechanisms that will not only reduce costly litigation but can also enhance the experience of patients and users in the interface with the CCSS. Collecting better data on barriers to improve the user experience by medical and non-medical staff will result in improved investment decisions and simpler bureaucratic administrative processes.

15. **Activities to be implemented by CCSS:**

- **Improving agility responsiveness to users and patients**: Review existing use complaint and redress mechanisms and identify the main causes of complaint and litigation and develop alternative more agile mechanisms.
- **Improve sampling method, questionnaire for patient satisfaction survey**: Develop a new sampling model to incorporate dimensions previously not analyzed, such as users who do not seek services from CCSS, ethnicity, poverty, etc.

Institutional change:	Strategic long-term planning and monitoring of budget trends & financial equilibrium
Priority area:	Financial management
DLI:	(7) Development and execution of a comprehensive medium- and long-term plan to ensure the financial sustainability of CCSS.
Contribution of DLI to institutional change:	Improvement in institutional capacity for financial management and budgeting

16. **Contribution of institutional change to PDOs:** By enabling decision-makers to analyze long-term trends in revenue and expenditures, budget and costs, CCSS can avoid acute revenue and expenditure crises and make informed decisions on large investments.

17. **Activities to be implemented by CCSS:**

- **Improving financial accounting practices**: Introduce international standards on financial accounting as per new national legal and regulatory framework.
- **Generating online bases**: Digitalize financial accounting and eventually link cost centers and corresponding information and to health facilities and corresponding administrative data to develop database for morbidity using international standards for adjusting risk for capitated budget allocations by integrated health care networks.
- **Introducing prospective financing tools**: Develop risk adjustment capitation models based on new cost and morbidity databases.

Section 2: SASHI Objectives and Activities

Table. 1.2 Synthesis of SASHI Objectives and Lines of Action by Priority Area

Priority Area	Objectives	Lines of Action
Health Care Model	Organize the provision of health services in care networks, strengthening accountability and transparency in the management and use of institutional resources	Preparation of the proposal to strengthen the provision of health services and the organization of health networks focusing on the individual, family and community Preparation of a model for the management of services in hospitals and health facilities using the criteria of quality and efficiency based on evidence of cost-effective actions
	Decrease in the average number of days of waiting lists for surgical procedures	Development of a comprehensive strategy for waitlist management and for shifting surgeries for select conditions to ambulatory settings
	Prevent & control of priority NCDs	Enhancement of the quality of clinical control of diabetes and hypertension and increasing the percentage of patients diagnosed with hypertension or type II diabetes
	Prevent & treat cancer	Early detection, control, and rehabilitation of cancer patients with an emphasis on colon, gastric, cervical and breast cancers
	Prevent & control drug addiction and other mental health conditions	Expansion of access and improving quality of prevention and control of drug addiction and other mental health conditions at first level of care with special emphasis on teenagers and young adults
	Expand coverage PHC coverage	Establishment of 100 additional PHC teams providing services to low density population areas and other areas that previously faced geographical barriers to PHC services
	Integrate management of regional health care provider networks	Implementation of a pilot of new integrated management approach completed and fully evaluated
Inst. Mgmt.	Develop long-term institutional vision "*Caja Centenaria*" (health insurance component)	Analysis of the burden of disease, identifying priorities and goals, and assessing major institutional, legal and regulatory strengths and weaknesses to achieve results
	Design the policy for institutional governance	Analysis and design of the policy for institutional governance using the criteria of strategic integration and with emphasis on service delivery, financial sustainability, institutional management, pensions and others
	Optimize strategic and operational processes related to institutional management	Carry out a functional review of core management functions aimed at enhancing institutional capacity for managing core health insurance functions with a patient centered

Table. 1.2 Synthesis of SASHI Objectives and Lines of Action by Priority Area

Priority Area	Objectives	Lines of Action
		approach Creation of an innovation plan for financial, administrative and logistic processes Implementing restructuring projects
	Institutional strategic intelligence system	Enable decision-makers to take timely decisions at the regional and national levels and measuring progress and evaluating impact of SASHI through the creation of monitoring and control dashboards
	Enhance governance and interoperability of E-Health technology	Development of E-Health technology policies and interoperability regulation and guidelines
	Provide information technologies and effective, efficient communication and quality, consistent with the needs of continuity and efficiency required in the services provided to internal and external users	Expansion of E-Health tools to ensure that household and individual health digital data files are online and ready to be used for benchmarking intermediate and final health outcomes, and for improved resource allocation
	Strengthen procurement, supply chain and delivery of medicines	Strengthening of centralization and efficiency of procurement and supply chain logistics of medicines and other medical supplies Implementing E-Prescription system
	Improve human resources and skills development	Strengthening of the human resources management function and enhancing institutional capacity to take advantage of vertical integration and new models of integrated management of health care networks
	Improve working conditions for enhanced the delivery of health care services	Design and implementation of mechanisms to gather actionable information on how to improve work environment and providing timely feedback to management from medical and non-medical staff
	Align incentives to boost productivity and staff performance	Alignment of budget and financial and non-financial incentives with new management models for enhanced accountability and productivity in the delivery of health care, financial and administrative services
	Expand coverage of PHC services	Refurbishment of and investment in medical equipment for PHC facilities
	Support the improvement of the quality of the provision of health services through the implementation of strategic, tactical and operational actions necessary for the implementation of the EDUS	Support the improvement of the quality of the provision of health services through the implementation of strategic, tactical and operational actions necessary for the implementation of the EDUS
	Improve patient satisfaction & access to	Improvement of overall satisfaction of clients

Table. 1.2 Synthesis of SASHI Objectives and Lines of Action by Priority Area

Priority Area	Objectives	Lines of Action
	the right to health	across all the CCSS and avoiding unnecessary expensive litigation through creation of new mechanisms for grievances and conflict resolution
Financial Mgmt.	Enhance management of financial risks	Identification of new strategies and mechanisms to monitor financial equilibrium while improving health insurance revenue collection and avoiding the risk of revenue pooling fragmentation (i.e. earmarked revenues from tobacco taxes) Development of new financial sustainability strategy that considers the redesign of the financing model, a new model for resource allocation, and improvements in the efficiency of the management of health services

Section 3: Results chain schematic for three priority areas

Figure 1.1: Financial Management activities in SASHI

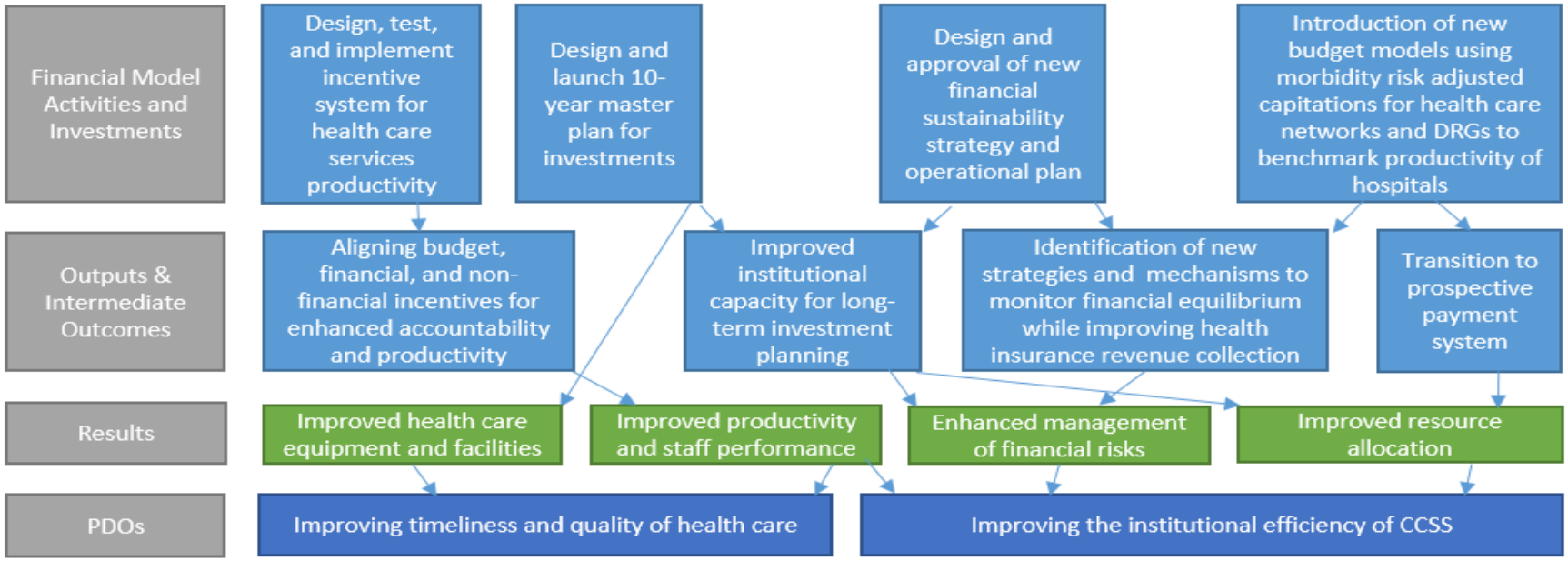


Figure 1.2: Health Care Model activities in SASHI

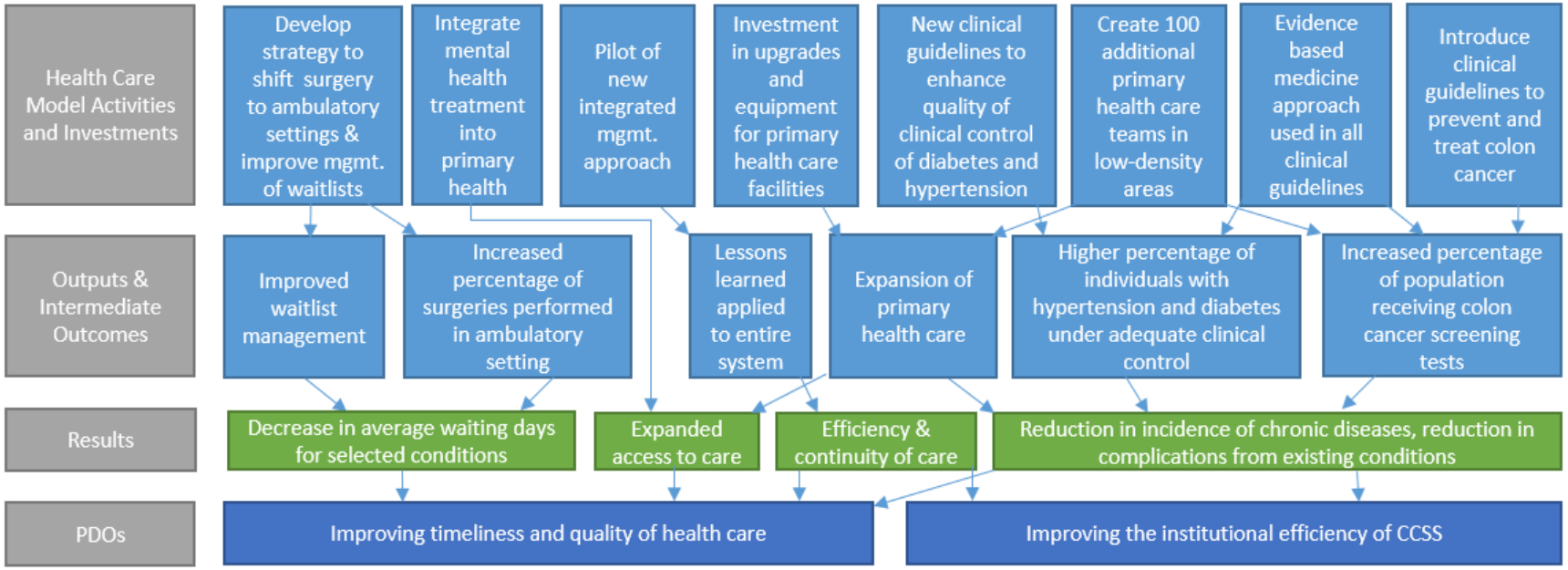
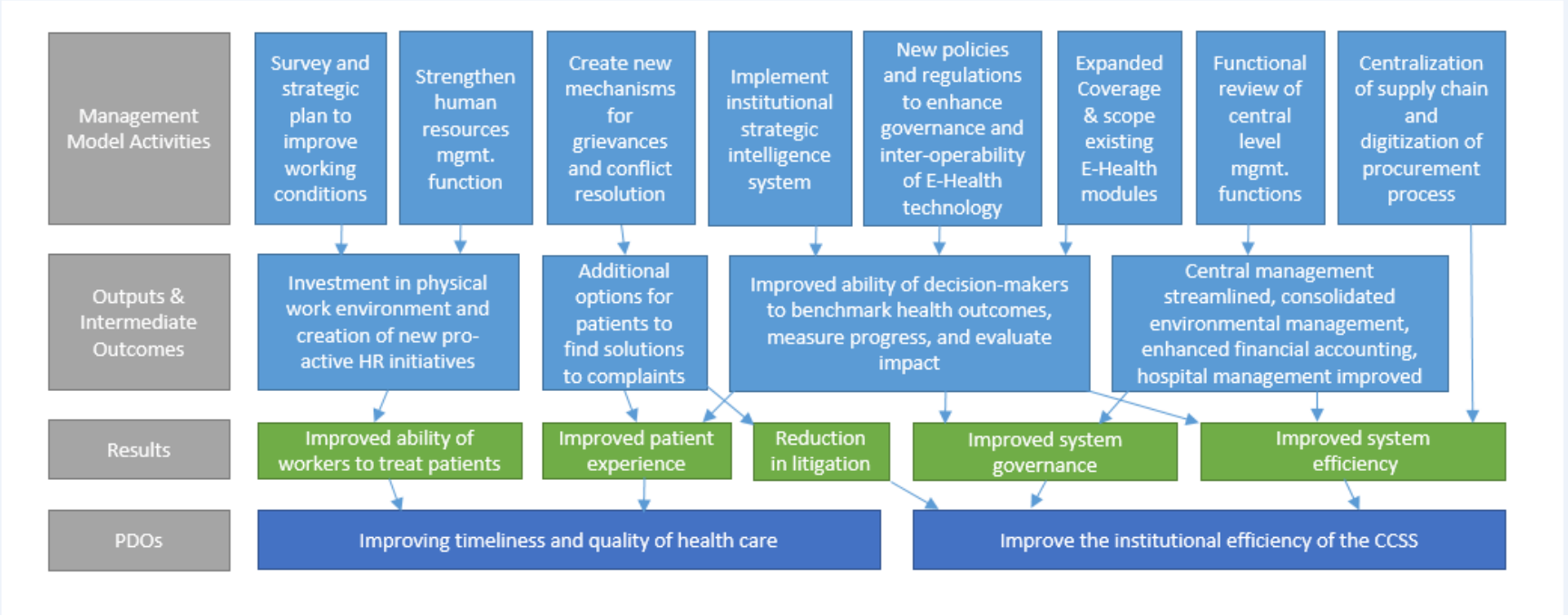


Figure 1.3: Institutional Management activities in SASHI



Annex 2: Results Framework Matrix

PDO Level Results Indicators	DLI	Unit of measure	Baseline 2013	Target Values						Freq.	Data Source	Responsible for Data Collection
				Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr6			
PDO Indicator 1: Percentage of major surgeries from priority list conducted in outpatient settings according to CCSS institutional guidelines.	■	Pct.	18%	-	20%	-	-	40%	-	Yearly	Dept. of Health Services	CCSS Health Dept. Manager.
PDO Indicator 2: Cumulative percentage of target population personally invited to undergo colon cancer screening in five priority counties.	■	Pct.	0%	-		10%[11]		40%[12]	-	Yearly	PHC Facility Records	CCSS Health Dept. Manager
PDO Indicator 3: Percentage of total number of primary health care units (*Áreas de Salud*) with the Unique Digital Health Record e-health package (EDUS).	■	Pct.	50%	-	60%	-	80%	-	-	Yearly	EDUS Records	CCSS Admin. Dept. Manager
PDO Indicator 4: Development and execution of a comprehensive medium- and long-term plan to ensure the financial sustainability of the CCSS.	■	Text	Budget does not use prospecti ve tools	-	-	-	-	-	Annual budget execution using prospective tools	Yearly	Financial Mgmt. Dept.	CCSS FM Dept. Manager
Intermediate Results Indicator 1: Cumulative percentage reduction in average waiting days for selected procedures (tracers): hip and knee replacement.		Pct.	1032 days[9,10]		15% lower	-	-	35% lower	-	Yearly	Implement ation Records	CCSS Strategic Planning Unit

[9] These procedures refer to surgeries conducted at the third level (specialized) hospitals and were selected as tracers for progress in improving the management of waiting lists but the final list will be agreed during appraisal.
[10] Average waiting days in National Hospitals as of end- March 2015.

Intermediate Results Indicator 2: Percentage of individuals diagnosed with hypertension that are under optimal clinical control.		Pct.	62% (2013)	-	62%	-	64%	-	-	Yearly	Health Care Facility Records	CCSS Health Dept. Manager
Intermediate Results Indicator 3: Percentage of households covered by the Family Socio-Economic & Health Risks Information File.		Pct.	70%	-	-	90%	-	100%	-	Yearly	EDUS records	CCSS Admin Dept Manager
Intermediate Results Indicator 4: Percentage of households with Family Socio-Economic & Health Risks Information File digital geo-referencing data available online.		Pct.	0%	7%	9%	11%	13%	14%	16%	Yearly	Implement ation Records	CCSS Admin. Dept. Manager
Intermediate Results Indicator 5: Use of institutional strategic intelligence system data to publish and disseminate two annual reports measuring progress of SASHI.		Text	-	-	System designed, approved and launched	-	-	-	Two annual reports published and disseminated	Yearly	Inst. Planning Dept.	CCSS Strategic Planning Unit
Intermediate Results Indicator 6: Institutional review of core institutional management functions, and operational plan for progressive implementation of streamlining central level management.		Text	-	-	Approved by Board of Directors	-	-	-	-	Yearly	Inst. Planning Dept.	CCSS Strategic Planning Unit
Intermediate Results Indicator 7: Financial statements produced using new international public accounting standards, streamlined and digital automated processes.		Text	-	-	Approved	-	-	Eval. report of first two years	Annual Financial Statement using outputs from new automated streamlined system	Yearly	Financial Mgmt. Dept.	CCSS FM Dept. Gen. Mgr.

Intermediate Results **Indicator 8:** Shadow budget constructed based on gender and age risk adjusted capitations.		Text	ND	-	Completed	-	-	-	-	Yearly	Financial Mgmt. Dept.	CCSS FM Dept. Gen. Mgr.

Annex 3: Disbursement Linked Indicators, Disbursement Arrangements and Verification Protocols

Table 3.1: Disbursement Linked Indicators

DLIs	Financing allocated to DLI (US$ million)	Share of total financing amount (percent)	DLI Baseline	Indicative Timeline for DLI Achievement					
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
DLI 1. Expansion of major surgeries in ambulatory settings									
Percentage of major surgeries from priority list conducted in outpatient settings according to CCSS institutional guidelines.	60	14.3	18%	-	20%	-	-	40%	-
Allocated Amount (US$ million)					30			30	
Definition/description of achievement: *Numerator:* Total number of surgeries included from the priority list conducted in outpatient settings in preceding six months. *Denominator:* Total number of surgeries included in the priority list conducted in both inpatient and outpatient settings in the preceding six months. The list includes: Varicectomies, hernias, salpingectomies, bone biopsies, osteo-synthetic devices removal, and laparoscopic cholecystectomies. This list is based on Department of Health Service Network data updated as at May 12, 2015. The calculation of the percentage will only be based on this list or an expanded list with new types of surgeries—not a list that includes less procedures than listed here). Scalable disbursement proportional to the progress toward achievement of this DLI will be applied to the second 50 percent portion of the DLI. The first 50 percent (US$30M) will be disbursed once the target of 20 percent of all major surgeries from priority list conducted in ambulatory settings in the preceding six months is achieved. The remaining 50 percent (US$30M) will be disbursed proportional to achievement of the target value of 40 percent based on the following formula: US$150,000 per additional tenth of a percentage point achieved over the first target of 20 percent. (An increase from 20 percent to 40 percent would be 200 tenths of a percentage point for a total of US$30M).									
DLI 2. Implementation of a large-scale cancer screening program in the top five priority counties									
Cumulative percentage of target population personally invited to undergo colon cancer screening in five priority counties.	60	14.3	0%	-	-	10%[11]	-	40%[12]	-
Allocated Amount (US$ million)						30		30	
Definition/description of achievement: *Numerator:* Total target population (adults of ages 50 to 75 years old) in the top five priority counties (*cantones*) who have been prescribed the colon cancer-screening test. Priority counties are those with the highest incidence of colon cancer. *Denominator:* Total target population (adults of ages 50 to 75 years old) in five priority counties.									

[11] Cumulative percentage of target population.
[12] Cumulative percentage of target population.

DLIs	Financing allocated to DLI (US$ million)	Share of total financing amount (percent)	DLI Baseline	Indicative Timeline for DLI Achievement					
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Note: Patients with positive results from the screening test will be instructed to undergo colonoscopies. Scalable disbursement proportional to the progress toward achievement of this DLI will be applied to the second 50 percent portion of the DLI. The first 50 percent (US$30M) to be disbursed once the 10 percent of target population is reached. The remaining 50 percent (US$30M) will be disbursed proportional to achievement of the target value of 40 percent based on the following formula: US$100,000 per additional tenth of a percentage point increase achieved after first target of 10 percent. (An increase from 10 percent to 40 percent would be 300 tenths of a percentage point for a total of US$30M).[13]									
DLI 3. Improvement of quality of care of individuals diagnosed with diabetes									
Percentage of individuals diagnosed with Diabetes Type II that are under optimal clinical control.	60	14.3	39% (2014)	-	-	41%[14]	-	43%	-
Allocated Amount (US$ million)						30		30	
Definition/description of achievement: *Numerator:* Number of individuals aged 20 and over and under 75, seen by Diabetes Mellitus Type II, and HBAc1 test score below or equal to 7 percent in the last year. Denominator: Number of individuals aged 20 or over and under 75, diagnosed for the first time in the year for diabetes mellitus type II Scalable disbursement proportional to the progress toward achievement of this DLI will be applied to the second 50 percent portion of the DLI. The first 50 percent portion (US$30M) to be disbursed once 41 percent of all individuals diagnosed with diabetes type II are under optimal clinical control. The second 50 percent portion to be disbursed proportionate to the verified progress toward achievement of the target value of 43 percent based on the following formula: US$150,000 per additional hundredth of a percentage point increase achieved after first target of 41 percent.									
DLI 4. Design, implementation and evaluation of pilot for a new integrated health care network management model									
Pilot project on integrated health networks approved by the CCSS Board and implemented for a selected population and territory and evaluated with the results publicly disseminated.	60	14.3	-	-	-	Pilot project approved	-	-	Evaluation of pilot disseminated
Allocated Amount (US$ million)						30			30

[13] Equal disbursements of US$30M are awarded for an increase from 0 percent to 10 percent and for an increase from 10 percent to 40 percent. Although amounts are the same for different percent increases, the first target involves a complex process of preparation. The process includes: setting up a screening program involves several steps including selection of the specific method and kit for large scale screening, updating guidelines and harmonizing practices, establishing the data tools and methods to be used for identification of individuals at risk and the outreach and follow up program, etc. Once the program is established, it is expected that program coverage will progressively increase at a faster rate.

[14] Minimum percentage required to request disbursement of the first half of this DLI.

DLIs	Financing allocated to DLI (US$ million)	Share of total financing amount (percent)	DLI Baseline	Indicative Timeline for DLI Achievement					
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Definition/description of achievement: Design, implementation, evaluation and dissemination of results of a pilot of a model for integrated health care networks in a territorial area comprising first and second level of care (outpatient and hospital) based on demographic, socioeconomic and epidemiological parameters (including disease burden) approved by the Board of Directors. The design of the pilot must include the design of the evaluation, reflect PAHO conceptual definitions, and must integrate international best practices that are relevant to the Costa Rican context with an emphasis on primary care and primary care health teams. US$30M will be disbursed when the pilot project has been designed and approved by the CCSS's Board of Directors. An additional US$30M will be disbursed when the evaluation report on the impact of the pilot for a new health care network management model has been publicly disseminated.									
DLI 5. Expansion of the coverage of Unique Digital Health Record system (EDUS)									
Percentage of total number of primary health care units (*Areas de Salud*) with the Unique Digital Health Record e-health package (EDUS).	60	14.3	50%	-	60%	-	80%	-	-
Allocated Amount (US$ million)					30		30		
Definition/description of achievement: *Numerator:* Total number of PHC units with completely functional Unique Digital Health Record e-health package (EDUS) including all modules of EDUS. *Denominator:* Total number of PHC units. Scalable disbursement proportional to the progress toward achievement of this DLI will be applied to the second 50 percent portion of the DLI. The first 50 percent (US$30M) will be disbursed once target of 60 percent of all PHC units with a completely functional e-health package including all the modules of EDUS is achieved. The remaining 50 percent (US$30M) will be disbursed proportional to achievement of target value of 80 percent based on the following formula: US$150,000 per additional tenth of a percentage point achieved over the first target of 60 percent. (An increase from 60 percent to 80 percent would be 200 tenths of a percentage point for a total of US$30M).[15]									
DLI 6. Evaluation of the results of the interventions to improve patient satisfaction									
Redesign, implementation and use of data collected by the new annual survey to measure impact of new interventions to improve patient satisfaction.	60	14.3	-	-	Board approval of redesign of patient satisfaction survey	-	-	-	Report on impact of interventions to improve patient satisfaction

[15] The incentive for the first tranche seeks to incentivize the acceleration of the ongoing expansion of PHC with all modules of EDUS. In order to this the CCSS has to establish teams, institutional organizational arrangements and logistical mechanisms to speed up the pace of the expansion of the tools. Once these have been established the expansion is expected to proceed at a higher speed.

DLIs	Financing allocated to DLI (US$ million)	Share of total financing amount (percent)	DLI Baseline	Indicative Timeline for DLI Achievement					
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
									approved by CCSS Board
Allocated Amount (US$ million)					30				30

Definition/description of achievement: Evaluation of the key interventions to improve patient satisfaction using information collected by a redesigned national survey on patient satisfaction and from complementary data gathering tools. The national patient satisfaction survey will be redesigned to ensure that its questionnaire's design and sampling methods are adequate to produce statistically significant inferences on patient satisfaction from the populations of both individuals who do and do not seek health services from the CCSS at the regional level (*regiones nacionales de salud*). The survey must also include key variables in order to obtain statistically significant comparisons between populations living in urban vs. rural settings, geographical areas with high concentration of indigenous peoples, or households living below the national poverty levels. The complementary data gathering tools will need to be designed to gather statistically significant information on individuals who have used existing complaint and redressing mechanisms.

US$30M will be disbursed when the CCSS has approved the redesign of the survey and its implementation. An additional US$30M will be disbursed when the report on the impact of the patient satisfaction interventions is implemented, the report completed and approved by the CCSS' Board of Directors.

DLI 7. Improvement in institutional capacity for financial management and budgeting.									
Development and execution of a comprehensive medium- and long-term plan to ensure the financial sustainability of the CCSS.	60	14.3	-	-	Milestone I	Milestone II	-	Milestone III	-
Allocated Amount (US$ million)					20	20		20	

Definition/description of achievement:

Milestone I: Ten-year investment master plan approved by the CCSS Board of Directors. Approval of the master plan and of its implementation by the CCSS Board of Directors. The plan will prioritize key infrastructure (civil works), medical equipment, and investments in electronic digital information systems in order to ensure financial sustainability, while complying with national laws and regulations to ensure the financial and environmental sustainability and these investments. The plan must also include the activities recommended in the results of the Environmental and Social assessments.
US$20M will be disbursed when the Board of Directors approves the ten-year plan and its implementation.

Milestone II: Actuarial Valuation of Health Insurance: Study based on actuarial methods and techniques designed to establish the sustainability of short-, medium- and long-term health insurance, taking into account the total set of health and economic benefits provided to the insured population, using alternative hypotheses on the impact study produced by phenomena such as the demographic transition, epidemiological transition, innovations and costs of medical technologies, and changes in the level and sources of financing, among other factors. This study must contain a chapter of recommendations for concrete actions and measures, which enable the achievement of financial sustainability of this insurance.
US$20M will be disbursed when the report of this actuarial valuation is approved by the CCSS' Board of Directors and its results have been publicly disseminated. **Milestone III:** An annual budget executed having used risk-adjusted capitations as input for integrated networks of first and second level of care and DRGs as inputs for third level hospitals and other national specialized hospitals. The budget will be executed using as input the estimated risk-adjusted

DLIs	Financing allocated to DLI (US$ million)	Share of total financing amount (percent)	DLI Baseline	Indicative Timeline for DLI Achievement					
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
capitation by sex, age and morbidity for integrated first and second level networks. It will use the exercise of "benchmarking" of productivity of hospitals with DRGs for budgets of tertiary hospitals and other specialized hospitals. US$20M will be disbursed when the Board of Directors and CGR have approved an annual budget formulated using prospective budgeting tools as inputs, such as risk adjusted capitation and "benchmarking" of DRGs.									
Total Financing Allocated	**420**	**100**		**0**	**110**	**110**	**30**	**110**	**60**

Table 3.2 DLI Achievement and Verification Protocol

	DLI	***Scalable Disbursement (Yes/No)***	***DLI Evaluation, Achievement and Verification Protocol***		
			Data Source/Agency	***Verification***	***Procedure***
1	Percentage of major surgeries from priority list conducted in outpatient settings according to CCSS institutional guidelines.	Yes	Department of Projected Health Services Administrative Data Health Care Management	Independent Verification Entity (IVE) (to be contracted before first disbursement)	-Information is collected from each facility and aggregated through customized databases -Data is subject to validation by the Health Care Management Department.
2	Cumulative percentage of target population personally invited to undergo colon cancer screening in five priority counties.	Yes	PHC Facility Records Data Health Statistics Department	IVE	- Determination of total target population - Determination of eligible population - Participating individuals are those out of eligible population that were prescribed a cancer-screening test according to the program schedule - A participating individual can only be counted one time for being prescribed a cancer screening - If people participating in the Program for the first time have the cancer-screening test done, they will be included as first round participants - Indicator refers to the percentage of eligible population in the entire area covered by the selected *Áreas de Salud* that have been prescribed a cancer screening
3	Percentage of individuals diagnosed with Diabetes Type II that are under optimal clinical control.	Yes	"Performance Evaluation in Delivering Institutional Healthcare Services" conducted by the Health Services Procurement Department under the Medical Management with Administrative Data Health Services Procurement Department, Medical Management	IVE	Revision of clinical records of patients diagnosed with diabetes Type II and comparison with national clinical guidelines
4	Pilot project on integrated health networks approved by the CCSS Board and	No	Pilot Project CCSS Task Force Report Institutional Planning Department	IVE	Design of pilot project will include the evaluation methodology and the final report will follow the original design with

Table 3.2 DLI Achievement and Verification Protocol

	DLI	***Scalable Disbursement (Yes/No)***	***DLI Evaluation, Achievement and Verification Protocol***		
			Data Source/Agency	***Verification***	***Procedure***
	implemented for a selected population and territory and evaluated with the results publicly disseminated.				any adjustments that may have been necessary as pilot enters in the implementation stage
5	Percentage of total number of primary health care units *(Areas de Salud)* with the Unique Digital Health Record e-health package (EDUS).	Yes	Implementation Reports Institutional Planning Department	IVE	Project Management will identify progress towards increased EDUS coverage
6	Redesign, implementation and use of data collected by the new annual survey to measure impact of new interventions to improve patient satisfaction.				
	Board approval of survey redesign	No	Board of Directors Agreement Institutional planning Department	IVE	Designed Operational Plan to be presented to the Board of Directors, which will accept approval agreement. Said approval agreement will become the foundation of compliance
	Report on impact of interventions to improve patient satisfaction completed and approved	No	Report furnished by the Institutional planning Department	IVE	Evaluation report will be presented to the authorities. Said received report will become the foundation of compliance
7	Development and execution of a comprehensive medium- and long-term plan to ensure the financial sustainability of the CCSS.				
	Ten-year investment master				

Table 3.2 DLI Achievement and Verification Protocol

	DLI	***Scalable Disbursement (Yes/No)***	***DLI Evaluation, Achievement and Verification Protocol***		
			Data Source/Agency	***Verification***	***Procedure***
	plan approved and evaluation completed.	No	Financial Management Department Institutional Planning Department	PAHO	Annual Budget Reporting
	Actuarial Valuation of Health Insurance	No	Financial Management Department Institutional Planning Department	IVE	Board of Directors Approval
	One annual budget executed using risk adjusted capitations and DRGs as inputs	No	Budget Department Institutional Planning Department	IVE	Annual Budget Reporting

Table 3.3 Disbursement Table

#	*Disbursement linked-Indicator (DLI)*	*Financing allocated to DLI*	*Deadline*	*Minimum value triggering disbursement*	*Final target value*	*Amount to be disbursed*
1	Percentage of major surgeries from priority list conducted in outpatient settings according to CCSS institutional guidelines.	US$ 60 million	April Year 6	20%	40%	First 50% of disbursement amount assigned to DLI will be disbursed if minimum value triggering disbursement is achieved. The second 50% of the disbursement amount assigned to the DLI will be disbursed when the final target percentage is achieved. If it is not achieved, the second disbursement will be calculated as: Second 50% of disbursement amount assigned to DLI * (Percentage achieved – minimum triggering value percentage) / (Final target percentage – minimum triggering value percentage)
2	Cumulative percentage of target population personally invited to undergo colon cancer screening in five priority counties.	US$ 60 million	April Year 6	10%	40%	First 50% of disbursement amount assigned to DLI will be disbursed if minimum value triggering disbursement is achieved. The second 50% of the disbursement amount assigned to the DLI will be disbursed when the final target percentage is achieved. If it is not achieved, the second disbursement will be calculated as: Second 50% of disbursement amount assigned to DLI * (Percentage achieved – minimum triggering value percentage) / (Final target percentage – minimum triggering value percentage)
3	Percentage of individuals diagnosed with Diabetes Type II that are under adequate clinical control.	US$ 60 million	April Year 6	41%	43%	First 50% of disbursement amount assigned to DLI will be disbursed if minimum value triggering disbursement is achieved. The second 50% of the disbursement amount assigned to the DLI will be disbursed when the final target percentage is achieved. If it is not achieved, the second disbursement will be calculated as: Second 50% of disbursement amount assigned to DLI * (Percentage achieved – minimum triggering value percentage) / (Final target percentage – minimum triggering value percentage)

#	*Disbursement linked-Indicator (DLI)*	*Financing allocated to DLI*	*Deadline*	*Minimum value triggering disbursement*	*Final target value*	*Amount to be disbursed*
4	Pilot project on integrated health networks approved by the CCSS Board and implemented for a selected population and territory and evaluated with the results publicly disseminated. *Pilot project designed and implementation approved by Board of Directors.* *Evaluation completed and disseminated.*	US$60 million	April Year 6	 Approved	 Evaluation disseminated	 US$30 million US$30 million
5	Percentage of total number of primary health care units (*Áreas de Salud*) with the Unique Digital Health Record e-health package (EDUS).	US $60 million	April Year 6	60%	80%	First 50% of disbursement amount assigned to DLI will be disbursed if minimum value triggering disbursement is achieved. The second 50% of the disbursement amount assigned to the DLI will be disbursed when the final target percentage is achieved. If it is not achieved, the second disbursement will be calculated as: Second 50% of disbursement amount assigned to DLI * (Percentage achieved – minimum triggering value percentage) / (Final target percentage – minimum triggering value percentage)
6	Redesign, implementation and use of data collected by the new annual survey to measure impact of new interventions to improve patient satisfaction. *Patient satisfaction survey redesigned, tested, and implemented* *Report with evaluation of impact of new patient satisfaction interventions using new patient satisfaction survey completed and approved*	 US$30 million US$30 million	 April Year 6 April Year 6	 Fully implemented Completed, Approved by the Board of Directors		 US$30 million US$30 million

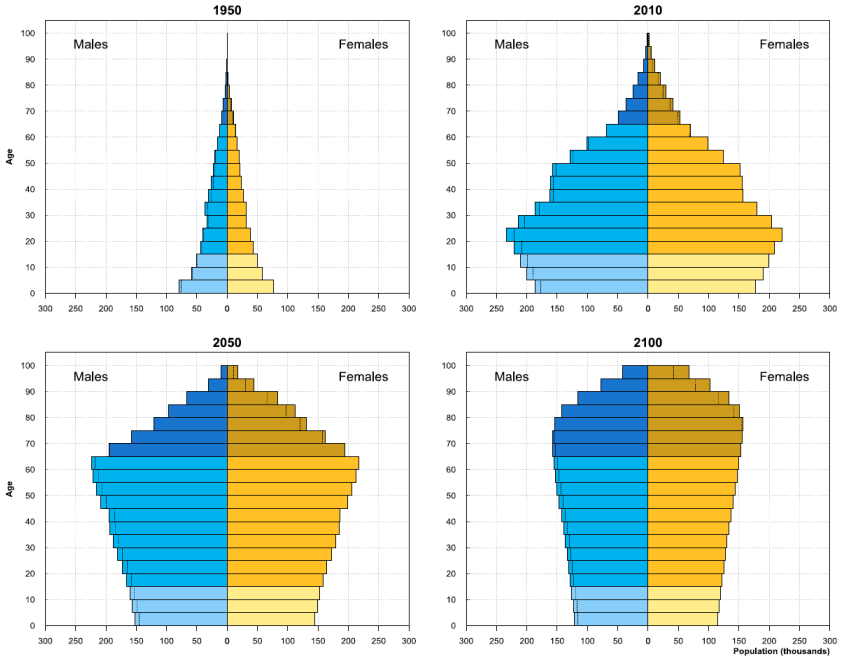
#	*Disbursement linked-Indicator (DLI)*	*Financing allocated to DLI*	*Deadline*	*Minimum value triggering disbursement*	*Final target value*	*Amount to be disbursed*
7	Development and execution of a comprehensive medium- and long-term plan to ensure the financial sustainability of the CCSS.					
	10-year investment master plan approved and evaluation completed.	US$ 20 million	April Year 6	Approved by the Board of Directors		US$20 million
	Actuarial Valuation of Health Insurance	US$ 20 million	April Year 6	Approved by the Board of Directors		US$20 million
	One annual budget executed using risk adjusted capitations and DRGs as inputs	US $20 million	April Year 6	Budget execution report approved by Board of Directors and the CGR		US$20 million

Annex 4: Technical Assessment Summary

Strategic relevance and technical soundness of the proposed Program

1. **The increase in NCDs presents a significant challenge for the CCSS.** Between 1990 and 2010, Costa Rica experienced an increase in the share of premature death caused by NCDs as well as the dramatic increase in incidence of a number of specific NCDs, such as chronic kidney disease and colorectal cancer.[16] NCDs are estimated to account for over 80 percent of all deaths in Costa Rica.[17] As demand for services grows, patients' waiting times are getting longer and, in some cases, quality of services has declined—negatively contributing to both patient satisfaction and public confidence in the CCSS. Whereas the epidemiological transitions of Europe took place over the course of more than a century, this shift in Costa Rica is on track to take place over just a few decades. This would exacerbate existing challenges and require agile and adaptable systems that use a comprehensive health care approach to avoid repeated crises and poor quality services.

Figure 4.1: Population by Age Groups & Sex, Costa Rica, 1950-2010



Source: United Nations, Department of Economic and Social Affairs, Population Division (2013). World Population Prospects: The 2012 Revision, Volume II, Demographic Profiles (ST/ESA/SER.A/345).

2. **Financial sustainability is another critical challenge facing the CCSS and SASHI aims to enhance the institutional capacity to better manage these risks and reduce fiscal pressures on the central Government.** Between 2005 and 2010, the CCSS experienced the fastest increase in costs of all national health insurance systems in Latin America. A review of the national health accounts shows that total national health spending has grown from 6.5 percent

[16] Costa Rica Global Burden of Disease Study 2010 (GBD 2010) Results 1990-2010. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2013.
[17] World Health Organization – Non-communicable Diseases (NCD) Country Profiles, 2014.

of GDP in 2000 to 10.9 percent in 2010 (Table 4.1). However, this increase came from growth in private spending as opposed to from national public expenditures. Between 1995 and 2010, the share of private spending as a share of total national health spending grew from 24 percent to 32 percent.

Table 4.1: National Health Accounts in Costa Rica, 1995-2010

Indicators	1995	2000	2005	2010
Total national expenditure on health per capita in dollars[a] (constant prices)	241.2	272.1	359.8	559.2
Total expenditure on health per capita, Purchasing Power Parity (constant prices)	168	204	253	553
Total national health expenditure (percentage of GDP)	6.5	6.5	7.6	10.9
Average annual real growth rate of total national expenditure on health[b]	3.03[c]	7.34	5.29	5.12
Total public expenditure on health (percentage of total national health expenditure)	76.5	76.8	70.3	68.1
Private expenditure on health (percentage of total national health expenditure)	23.5	23.2	29.7	31.9
Government public expenditure (percentage of public health expenditure)	20.9	21.7	21	29
Total public health expenditure (percentage of GDP)	4.98	5.01	5.38	7.45
Private expenditure on voluntary health insurance (percentage of private expenditure on health)	2.6	2.3	9.3	7.7

Source: National Health Accounts (WHO), 2012

Notes: a. The estimated expenditure in absolute terms are estimated in U.S. dollars (data from WHO)
b. Estimated as the average annual growth rate in Costa Rican Colones at 1995 prices.
c. 2006 data. Purchasing Power Parity= Constant exchange rate (purchasing power parity).

Table 4.2: Trends of estimated cost of treatment of some diseases (CCSS) 1998-2009

Condition/Disease	Annual Cost of Treatment* (in millions of colones)			
	1998	2000	2005	2009
Diseases of the Circulatory System (Total)	11.506	15.935	33.605	73.525
1.Hypertension	4.917	7.35	14.969	30.74
2. All other conditions	6.589	8.585	18.636	42.785
Tumor (neoplasms in general)	5.775	7.448	17.661	43.151
Diseases of the Respiratory System	27.679	32.937	66.549	114.702
Digestive System Diseases	10.812	16.313	34.073	73.308
Conditions of the Endocrine System, Nutrition and Metabolism (Total)	6.059	10.62	21.36	41.592
1. Diabetes	4.148	6.288	12.509	24.982
2. All other conditions	1.912	4.333	8.851	16.61

Source: Department of Health Statistics, CCSS, 2011

*Includes outpatient and emergency care, inpatient days, and income compensation payment due to illness.

3. **The figures of the national health accounts suggest that equity in access to services and financial protection of the beneficiaries may create additional challenges.** The Costa Rican population has the benefit of financial protection without having any co-payment for health services or medications. Maintaining the sustainability of this approach requires strategic

management that prevents acute financial imbalances, particularly in the context of rapidly increasing costs. Between 2005 and 2010, CCSS experienced a rapid increase in spending without a corresponding increase in revenues. An increase in the number and salary of workers accounted for 97 percent of this increase. Coupled with an increased cost of treating diseases with increasing incidence (Table 4.2), CCSS faced a serious financial crisis in 2011. Fortunately, immediate cost-control measures brought CCSS out of the acute crisis, but much more needs to be done to improve the sustainability of the CCSS model.

4. **A number of administrative and financial inefficiencies continue to threaten the productivity and sustainability of the CCSS.** First, the historical line-item budgeting and expenditure line perpetuates inequalities in resource allocation. Historical budgeting allocates resources to health facilities based on previous assignments, and its connection to the health needs of the population is not always clear. Second, the combination of fragmented and duplicative systems for clinical, administrative, and financial information make it nearly impossible for decision makers within CCSS to make timely decisions to shift budget allocations and other inputs (human resources, etc.) according to need.

5. **The Program is designed to shift Costa Rica's health care model towards a more comprehensive approach.** While curative practices are a critical component of Costa Rica's national health insurance, the overemphasis on them has led to a highly complex and costly system focused on hospitals as the principal service delivery point. In response to these challenges, the Program aims to gradually shift toward emphasizing preventive practices, providing services in locations closer to the communities in need, improving the quality of services provided, and better responding to changing needs of the population. In the short- and medium-term, the proposed key areas of strategic interventions include a renewed focus on improving integration of health care services with an emphasis on NCDs, PHC, and ambulatory services while improving governance and administrative efficiency and financial sustainability of the health insurance. To accomplish these ambitious goals, the Program will provide incentives for CCSS across three priority areas.

6. **First, the health care model will aim to enhance the CCSS's institutional capacity to better respond to the rapid growth in NCDs demands for improved timeliness and equitable quality of health services.** SASHI specifically will focus and chronic conditions that have emerged as epidemiological priorities while ensuring that those living in poverty, indigenous peoples, and other vulnerable groups receive timely, high quality health care. The Program will provide incentives for the CCSS to: (i) reduce waiting times for select procedures through improve management of waiting lists; (ii) improve clinical management of hypertension and type II diabetes; (iii) implement a large scale colon cancer screening in areas with high incidence of this type of cancer; (iv) increase the use of ambulatory surgical procedures for select conditions; and (v) and implement a scalable pilot project of a new integrated management approach.

7. **Second, the management model aims to improve the continuity of care and maximize the use of available resources to improve results by strengthening the management of health care providers.** The Program will provide incentives under this model to: (i) expand use of E-health tools; (ii) introduce providers to performance benchmarking; (iii) launch a scalable pilot project of a new model of provider management with an emphasis on

efficiency and responsiveness; (iv) improve overall patient satisfaction; (v) streamline institutional processes; and (vi) develop an information dashboard to support real-time decision-making.

Box 4.1: Vertical organizations vs. integrated health networks

Vertical organizations operate all health facilities under a common structure. However, they do not necessarily integrate clinical services. Vertical organizations use a common leadership, ownership, and management structure for all facilities.[18] Such organizations tend to be hierarchical, contain an extensive system of sanctions,[19] and comprise the whole spectrum of service providers—from medical equipment factories to acute care units. However, vertical organizations are not clinically integrated, as healthcare units and their ancillary services (hospitals, care centers, laboratories, etc.) do not operate as a single unit. The Mexican Institute of Social Security and CCSS are examples of vertical organizations.

Integrated care networks operate all clinical services levels (primary, hospitals, and others) as a single unit. Integrated care networks proactively manage the health of a clearly defined population, and eliminate all distinctions between primary, secondary and tertiary care.[20] Achieving this requires deeper integration (such as financial integration, informational information) and the use of specific integration instruments such as case management and integrated health information systems. According to the Nuffield Trust,[21] six dimensions are necessary to attain an integrated care network. These are highlighted below, along with their main instruments:

- *Clinical integration*, defined as the "extent to which patient services are coordinated across the functions, activities and operating units of a system".[22] This entails removing barriers to collaboration between care levels (hospitals, primary care centers, labs) which can be achieved through case management, disease management, multi-level clinical guidelines, and other ways. According to the literate, this is the most important integration dimension.
- *Informational integration*, which enables using a single information platform to administer care and other support functions (laboratories, ambulances, administration, etc.). The Unified Electronical Medical Record is essential to facilitate care integration across the care continuum. Clinical Decision Support Systems are also necessary to ensure that care is delivered according to protocols. Enterprise Resource Planning Solutions can streamline administrative and financial processes.
- *Organizational integration*, which consists of arranging all providers into a single structure. This includes both organizational design (i.e. single organigram for the whole organization, etc.), governance mechanisms (contractual arrangements between institutions, strategic plans, etc.), and a set of common norms (vision, goals and values) for the whole organization. Vertical organizations typically concentrate on this dimension, while disregarding the rest.
- *Administrative integration*, which entails integrating the support functions (human resources, financial services, quality, and others) into a single department for the whole organization. The existing information technologies have greatly facilitated administrative integration over the last years.

[18] Mendes, E. V. (2011). As redes de atenção à saúde. *Brasília: Organização Pan-Americana da Saúde*, 549.
[19] Fleury, M. J. (2006). Integrated service networks: the Quebec case. *Health Services Management Research*, *19*(3), 153-165.
[20] Ham, C. (2006). *Improving care for people with long-term conditions: a review of UK and international frameworks*. University of Birmingham. Health services management center.
[21] Rosen, R., Mountford, J., Lewis, G., Lewis, R., Shand, J., & Shaw, S. (2011). Integration in action: four international case studies. *London: The Nuffield Trust*.
[22] Gillies, R. R., Shortell, S. M., Anderson, D. A., Mitchell, J. B., & Morgan, K. L. (1993). Conceptualizing and measuring integration: findings from the health systems integration study. *Journal of Healthcare Management*, *38*(4), 467.

- *Financial integration,* to align the incentives of providers with the organization's goals. This includes redesigning budgets (for example, a single budget for the whole integrated network, rather than for each health facility) and payment mechanisms to incentivize providers. Examples of the latter include pay for performance, capitation, and others.

Box 4.1: Continued

Whereas vertical organizations emphasize organizational integration, integrated care networks emphasize all six integration dimensions.

According to a literature review, health network integration has been associated with important benefits on two fronts.[23] On the *clinical* front, integration has promoted clinical efficacy, responsiveness, and acceptability by patients. As an example, the integrated service delivery network in Canada (PRISMA) achieved a 13.9 percent increase in patient satisfaction and 47 percent reduction in unsatisfied demand.[24] The Bidasoa Integrated Care Network in the Basque Country (Spain) has also reported 87 percent patient satisfaction with clinical care improvement, and 66 percent satisfaction with the integration between clinical and social services.[25] Positive evaluations, improved health outcomes and enhanced access have been reported in other healthcare networks in the Netherlands, Sweden, and the United Kingdom, New Zealand, and Australia.[26]

On the management front, service integration can reduce inefficiency without damaging patient satisfaction or outcomes. This is obtained through a reduction of duplication and bureaucracy, improved self-management,[27] economies of scale, and better management of high-risk patients whose treatment is responsible for a disproportionate burden of the costs. Such practices result in reduced hospitalizations and emergency room visits. For example, in the Basque Country service integration was associated with a 38 percent reduction of hospital admissions, and a 31 percent reduction emergency room visits.[28] Similar reductions were also reported in the rest of experiences reviewed (footnotes 9-13). In the same line, savings have been reported. In an integrated network in New Zealand, a savings of $6.3 million was achieved for a patient population of 60,000; the break-even point was reached after only 12 months.[29] In the United States, $103,000 were saved per case manager.[30]

[23] Organización Panamericana para la Salud. (2008). Redes Integradas de Servicios de Salud. Conceptos, Opciones de Política y Hoja de Ruta para su Implementación en las Américas. Área de Sistemas y Servicios de Salud (HSS). Equipo de Sistemas de Salud y Protección Social (HSS/SP). Serie La Renovación de la Atención Primaria de Salud en las Américas.

[24] Goodwin, N., Dixon, A., Anderson, G., & Wodchis, W. (2014). Providing integrated care for older people with complex needs: lessons from seven international case studies. *London: The King's Fund*.

[25] Polanco, N. T., Zabalegui, I. B., Irazusta, I. P., Solinis, R. N., & Cámara, M. D. R. (2015). Building integrated care systems: a case study of Bidasoa Integrated Health Organisation. *International journal of integrated care*, *15*.

[26] Goodwin, N., Dixon, A., Anderson, G., & Wodchis, W. (2014). Providing integrated care for older people with complex needs: lessons from seven international case studies. *London: The King's Fund*.

[27] Organización Panamericana para la Salud. (2008). Redes Integradas de Servicios de Salud. Conceptos, Opciones de Política y Hoja de Ruta para su Implementación en las Américas. Área de Sistemas y Servicios de Salud (HSS). Equipo de Sistemas de Salud y Protección Social (HSS/SP). Serie La Renovación de la Atención Primaria de Salud en las Américas.

[28] Polanco, N. T., Zabalegui, I. B., Irazusta, I. P., Solinis, R. N., & Cámara, M. D. R. (2015). Building integrated care systems: a case study of Bidasoa Integrated Health Organisation. *International journal of integrated care*, *15*.

[29] Goodwin, N., Dixon, A., Anderson, G., & Wodchis, W. (2014). Providing integrated care for older people with complex needs: lessons from seven international case studies. *London: The King's Fund*.

[30] Kane, R. L., Keckhafer, G., Flood, S., Bershadsky, B., & Siadaty, M. S. (2003). The effect of Evercare on hospital use. *Journal of the American Geriatrics Society*, *51*(10), 1427-1434.

8. **Finally, the financial model aims enhance the institutional capacity to make strategic decisions at a national level on key aspects of financial sustainability including major investments and improved budget planning and execution.** Additionally this priority area aims to improve budget planning and link financing to results and align incentives to improve quality of care, enhance flexibility and efficiency of resource allocation, expand and diversify revenues, and refine existing revenue collection mechanisms. Critical activities of this area include: (i) long-term planning for major investments, such as infrastructure, digital platforms, etc.; and (ii) a shift from historically driven budgets to the use of prospective budgeting tools as inputs, including risk-adjusted capitation for first and second level of care and DRGs for third level care and other specialized hospitals.

Expenditure framework

9. **The total estimated amount of the PforR for a period of six years (2017 to 2022) is US$1.575 billion.** The PforR includes various activities that have already started before and be expanding in scope or coverage during the PforR implementation period (i.e. E-Health tools); other activities will start and will be completed during the lifetime of the project (i.e. Redesign and implementation of the first of a periodic series of Patient Satisfaction Surveys). Some activities and investments that are part of SASHI but excluded from the PforR are likely to be completed after the implementation period of the PforR, such as construction of brand new hospitals or major civil works to renew existing obsolete infrastructure.

Table 4.3: PforR Program and SASHI Expenditure Framework Overview

Financing Source	Expenditure
World Bank	**420**
CCSS	**1,155**
PforR Program Total	**1,575**
CCSS (hospitals*)	**565**
SASHI Total	**2,140**

** This amount includes the financing of replacement of hospitals that are large civil works for total or partial replacement of hospitals some of which already have started.*

Table 4.4: Expenditure Framework by categories

Category	Amount (US$ million)	% of total
Civil works	591	37%
Digital & Electronic Technology (Goods & Services)	246	16%
Human Resources	235	15%
Medical Equipment	234	15%
Non-medical Equipment	226	14%
Services & Operational Costs	24	1.5%
Technical Assistance	12	1%
Training and Communications	7	0.5%

10. The PforR's support of investments in the first and second levels of care will allow the CCSS to free up resources to complement existing financing of large civil work projects that will replace hospital infrastructure independent of the implementation period of the PforR.

Technical Review of the Expenditure Framework

11. **The Expenditure Framework categorizes the main types of investments that constitute the total estimated expenses of the PforR.** The following are the top three largest types of investments that are important to bridge a gap in investments in health care that have not been carried out in the past. These investments will ensure that facilities are ready to be linked into integrated health care networks to redesign the flow of services with a new patient centric perspective that ensures accessibility and continuity of care: civil works (37 percent), medical equipment (15 percent), non-medical equipment (14 percent), and digital and electronic information technologies (16 percent). The investments that the CCSS plans to carry out in health facilities and related infrastructure, equipment and training aim to meet the new need of a more comprehensive approach to delivery of care with an emphasis on preventive and ambulatory services closer to the patient. Investments in equipment and digital technology seek both to improve efficiency (i.e. with specialized centers for reading lab or x-ray images and sending reports online and decentralized collection of samples or images) but also to feed data pools for big data analysis that will be linked to the financial and administrative system to strengthen budgeting practices and monitoring results.

12. **The largest share of civil work expenditures aims at expanding coverage of PHC and improving scope and quality of these services that are critical to improve prevention and early detection and control of chronic conditions.** The investments are geared towards the strengthening of the renewed PHC approach that focuses on the integration of the first and second levels of care ("*redes integradas de servicios de salud*"). The increase in population and the need to expand coverage to lower density population requires that CCSS invests in expanding EBAIS and the PHC centers ("*Áreas de Salud*"). The estimations of the CCSS determined the need to invest in new EBAIS and PHC Centers that provide support and act as the first referral step in the clinical pathway of patients' clinics for ambulatory care.

13. **Other important civil works investments will focus on rehabilitation and or retrofitting of services of first and second level of care facilities to improve efficiency of care and reducing waiting lists.** Investments will be used for improving scope and quality of health services delivered at the first and second level of care. They include rehabilitation and retrofitting of selected services of existing EBAIS, PHC centers, clinics and smaller hospitals to provide the full set of diagnostic and therapeutic services across the country so that the population across different regions and income levels has access to a more consistent level of quality of care. Finally, in larger third level hospitals (not those that are being renewed entirely) investments will be made to expand capacity to deliver selected specialized diagnostic therapeutic services including ambulatory surgeries.

14. **Medical and non-medical equipment constitute the second largest category of the SASHI expenditure framework.** This equipment will replace basic equipment and incorporate new medical technologies to allow earlier diagnosis, the use of telemedicine (including digital imaging), less invasive procedures, and better quality and outcomes. The selection and distribution of the new equipment will support the new integrated health care model, including preventive care and ambulatory organization of care. For instance by CCSS regulations and guidelines new X-Ray equipment will be digital to ensure that in the future when the hospitals and other facilities are progressively fully connected to the new E-Health tools data networks,

digital images can facilitate expert evaluation and sharing patient information across networks and different levels of care. The new equipment will also allow the scale up of specific screening programs, and facilitate the use of e-health tools to improve PHC, monitoring and evaluation systems and timeliness of lab results and ambulatory and inpatient care**.**

15. **Investments in digital and electronic technology account for the third largest expenditure category, but the bulk of the expenditures are estimated costs for financing the inter-institutional agreement between the Costa Rica Institute for Electricity and CCSS for expanding internet coverage and servicing health facilities.** Digital files for ambulatory services have already been financed with CCSS' own funds, but additional financing would allow CCSS to speed up the population of existing data (i.e. family health files) and the digitalization of internal processes for inpatient and ambulatory care in hospitals.

16. **Other large investments in digital and electronic technology will be incurred to progressively introduce different modules of Enterprise Results Planning systems.** Instead of a large one-shot investment the services aspire to a more efficient use of resources and a strategic approach that would focus on progressive introduction of specific modules in financing and administrative areas. Then, analyzing results and required adjustments and then expanding new modules and/or links to existing digital and electronic systems or modules. An independent consultancy will provide assistance on the overarching design of the process so as to progressively implement different modules, and depending on the readiness of streamlined functions or data pools of E-Health tools, achieve interconnectedness of clinical, financial and administrative data with various outputs and levels of security and access for different types of users. This modular approach will reduce implementation and technical risks and avoid a single megaproject that could be costly and may not take advantage of progressive implementation that is known to take place in several years.

Soundness and sustainability of investments

17. **This investment plan is technically sound, based on evidence (burden of disease) and adopts and adapts relevant international good practices to specificities of Costa Rica's universal health insurance model.** The investments have been strategically selected to exploit synergies among investments and outputs to address the priority needs for strengthening the universal health insurance model of Costa Rica. They support critical building blocks required for delivering results in the sector with a balance between investments in infrastructure and equipment (civil works and digital and electronic technology) and other investments that are critical to introduce changes in clinical, financial, and administrative care. These investment decisions are the first attempts to rationalize investments and align them with the new priorities for quality and efficiency of care that the population demands. Expenditures on digital and electronic technologies with an emphasis on addressing the need for a large database built upon one of the well-known strengths of Costa Rica's PHC system is a best practice and will have a demonstrative effect that will serve not only the improvement of Costa Rica's Universal Health Care model but probably for other developing countries as well.

18. **The sustainability of investments does not represent a major risk as various activities are already being financed with CCSS' own resources.** However, important activities built into SASHI supported by the PforR will enhance institutional capacity to manage

investments and recurring costs with tools and approaches that are considered international best practices. Although there are many needs, the CCSS seeks to use the additional funds that will be designated for SASHI to ensure all activities are adequately funded. Several ongoing interventions such as E-Health tools have already been funded and are already well underway; the program seeks to accelerate the construction and expansion of big databases to enable proactive analysis for managerial purposes. Similarly, there are other initiatives that have received or been authorized for funding in the next three-year operational plan. The financial accounting practices that will ensure that funds are solely used for this purpose are deemed sound by the fiduciary assessment.

19. **Some of the activities that are considered good practices to manage risks to the financial sustainability of health insurance are part of the Program, and some are either DLIs or part of the PAP.** The activities include the introduction of new E-Health tools that include not only clinical ambulatory data but more importantly household socio-economic, health status, and health risks data, along with introduction of financial-accounting standards and streamlined practices will permit improved quality of data for analyzing trends and use of prospective budget as inputs for budget planning and execution will be introduced to permit CCSS to use key tools of a modern public health insurance institution. Although changes will require time to enhance efficiency and boost institutional capacity to manage financial risks, upfront investments on some critical planning and monitoring tools will allow the institution to expand the scope and coverage of health services progressively ensuring that a holistic and more comprehensive approach replaces a merely curative one. Finally, the bulk of the activities as indicated above are either already been financed with CCSS' own resources either directly through budget for investments and recurring costs or through other loans and payment of debts.

Detailed Expenditure Framework for Civil Works, Equipment and Technology

Table 4.5. Civil works

Activity	Year						Total
	2016	2017	2018	2019	2020	2021	
Hospitals expanding ambulatory & upgrading services					30	30	60
Primary Health Care Area Facilities							
20 PHC Areas	14	21	21	21	21	21	119
Basic Health Centers (EBAIS)							
100 Ebais		6	10	12	12	12	52
Repair/retrofitting (minor civil works)	60	60	60	60	60	60	360
Total	**74**	**87**	**91**	**93**	**123**	**123**	**591**

Table 4.6. Equipment

Equipment	Years						Total
	2016	2017	2018	2019	2020	2021	
Hospital equipment					7.5	7.5	**15.0**
Lab&other ambulatory equipment	29.9	32.3	34.8	37.6	40.6	43.9	**219.2**
Total Medical Equipment	**29.9**	**32.3**	**34.8**	**37.6**	**48.1**	**51.4**	**234.2**
Non-medical equipment							
Production units machinery & equip	1.2	1.3	1.4	1.5	1.7	1.8	9.0
Transportation	4.9	5.3	5.7	6.2	6.7	7.2	36.1
Communication	1.0	1.1	1.1	1.2	1.3	1.4	7.2
Office furniture	1.5	1.7	1.8	1.9	2.1	2.2	11.2
Offices hardware & software	8.6	9.3	10.0	10.8	11.7	12.6	63.0
Miscelaneous	6.9	7.4	8.0	8.7	9.4	10.1	50.5
Total Non-Medical	**31.0**	**33.5**	**36.2**	**39.1**	**42.2**	**45.6**	**227.5**

Table 4.7. Digital and Electronic Technology

Activity	Years					Total
	2016	2017	2018	2019	2020	
EDUS - ARCA (inpatient care network)	-	-	-	-		
Equip. & Infraestructure *	2.89	8.23	13.56	16.01	16.01	56.69
Data network communication ICE (digital data) *	5.05	5.05	5.05	5.05	5.05	25.27
Broadcast (from facilities)	0.10	0.10	0.10	0.10	0.10	0.50
Software	0.15	0.15	0.15	0.15	0.15	0.75
Consultancies:	0.30	0.15	0.30	-	-	0.75
Change management	0.15	-	0.15	-	-	0.30
System Interoperability	0.15	0.15	0.15	-	-	0.45
EDUS All ambulatory services nationwide						
Equip. Infraestructure + ICE Network *	15.00	15.00	15.00	15.00	15.00	75.00
Other associated costs						-
Human Resources	1.63	1.69	1.76	1.83	1.90	8.82
Services and supplies	0.02	0.02	0.02	0.02	0.02	0.09
SubTotal	25.45	30.54	36.24	38.16	38.23	168.62
ERP (financial-administrative core functions)						
Consultancy overarching process	0.8					0.8
Software licenses		5.0	5.0	5.0		15.0
Consultancy implementation		4.0	12.0	12.0	12.0	40.0
Change Management		1.0	1.0	1.0	1.0	4.0
Harware and technological infrastructure		3.0	3.0	3.0	3.0	12.0
Support services		1.5	1.5	1.5	1.5	6.0
SubTotal	0.8	14.5	22.5	22.5	17.5	77.8
Total	**26**	**45**	**59**	**61**	**56**	**246**

* Convenio con el Instituto Costarricense de Electricidad y Telecomunciaciones

20. **Budget Performance.** This section provides a brief analysis on the budget credibility for the health insurance system measured by three indicators: (i) PI-1 Aggregate Revenue Out-turn Compared to Original Approved Budget; (ii) PI-2 Aggregate Expenditure Out-turn compared to original approved budget; and (iii) composition of expenditure out-turn compared to original approved budget. Together, these three indicators assess the extent to which revenue and expenditure budget is realistic and is implemented as intended.

PI-1: Aggregate Expenditure Out-turn Compared to Original Approved Budget

21. This indicator assesses the ability to implement the budgeted expenditures as an important factor in supporting the CCSS' ability to deliver the services for the year as expressed in approved work plans and strategic institutional documents. To do so, this indicator measures the actual total expenditure compared to the original budgeted total for the last three fiscal years (2012-2014). No amounts were excluded from the relevant calculations, as all are considered to be under CCSS' control. The closer the out-turn to the original budget, the higher the rating.

22. ***The overall rating for PI-1 is A*** meaning that in no more than one out of the last three years has the actual expenditure deviated from budgeted expenditure by an amount equivalent to more than 5 percent of budgeted expenditure.

Table 4.8. Aggregate Total Expenditure Out-turn compared to original approved budget

	Original Budget	Actual Budget	Difference	
Year	(in thousands of Colones)	(in thousands of Colones)	(in thousands of Colones)	%
CY 2012	1,390,821,496.638	1,363,348,253.002	27,473,243.636	2.0%
CY2013	1,554,145,766.310	1,468,182,381.106	85,963,385.204	5.5%
CY 2014	1,667,342,474.107	1,551,169,073.498	116,173,400.608	7.0%

PI-2: Composition of Expenditure Out-turn Compared to Original Approved Budget

23. The purpose of this indicator is to assess the extent to which the reallocations between budget line on an administrative basis (Executing Unit) contributed to variance in expenditure composition beyond the variance resulting from changes in the overall level of expenditures. Measurement against this indicator requires an empirical assessment of expenditures out-turns against the original budget at a sub-aggregate level. In the case of CCSS, this considered the administrative classification (by Executing Unit).

Table 4.9. Composition of Expenditure Out-turn compared to original approved budget

Year	Total Expenditure Deviation	Composition Variance
2012	2.0%	13.8%
2013	5.5%	14.7%
2014	7.0%	14.7%

24. Following the methodology developed by the Public Expenditure and Financial Accountability measurement framework, the variance is calculated as the weighted average deviation between actual and originally budgeted expenditure calculated as a percent of budgeted expenditure on the basis of the administrative classification (by Executing unit), using the absolute value of deviation. The Public Expenditure and Financial Accountability Secretariat has set out a formula for calculating the variance between the out-turn and the approved budget. The original provision on each main budget head is adjusted by the overall percentage difference between budget and out-turn as measured by PI-1, and the differences between these adjusted figures and the actual out-turns on each line are then summed. This measure of total variance is then represented as a percentage of the total expenditure out-turn. [31]

[31] The second dimension of this indicator looks at the amount of expenditure charged to the Contingency Reserve; the larger the amount charged to the reserve rather than reallocated to specific budget lines, the less transparent the

25. ***The overall rating for PI-2 is D.*** Variance in expenditure composition exceeded 10 percent in all of the last three years.

PI-3: Aggregate Revenue Out-turn Compared to Original Approved Budget

26. Taking into account that an accurate revenue forecast is a key input to the preparation of a credible budget, this indicator compares actual total revenue to the originally budgeted revenue estimates, providing an overall indication on the quality of revenue forecasting, which becomes the basis for the expenditure budget.

27. Considering that CCSS' main source of income comes from social contributions (approx. 85 percent), the table below also presents the comparison between the social contributions forecast and the actual amount collected.

28. ***Overall rating for PI 3 is A.*** The overall rating A for this indicator since the actual total revenue collection was above the forecasted amount. Variation is between 3 and 6 percent though. As it relates to social contributions, actual collection was below 97 percent of budgeted amount only for one out of the last three years.

Table 4.10: Aggregate Revenue Out-turn Compared to Original Approved Budget

Year	Total Revenue forecast (in thousands of Colones)	Actual Revenue collected (in thousands of Colones)	%	Total social contributions forecast (in thousands of Colones)	Actual social contributions collected (in thousands of Colones)	%
2012	1,390,821,496.638	1,441,996,088.373	103.7%	1,179,537,399.035	1,155,351,750.139	98%
2013	1,554,145,766.310	1,606,050,058.068	103.3%	1,315,740,454.842	1,269,269,005.567	96%
2014	1,667,342,474.107	1,766,975,197.325	106.0%	1,402,621,775.648	1,388,193,263.101	99%

Aggregate Expenditure Out-turn for the Dirección de Arquitectura

29. Since an important share of the Program Expenditure Framework is related to civil works, medical and non-medical equipment, and information technology, the Fiduciary Assessment also included a review of the budget performance at two additional levels: (i) budget performance for the directorates of Architecture and Engineering (*Dirección de Arquitectura y Ingeniería)* and Special Projects (*Dirección de Proyectos Especiales*), which would be in charge of key Program activities; and (ii) expenditure out-turn for capital expenditures for the last three years.

30. Table 4.11 shows information on original budget allocation, budget modifications and actual budget execution. The comparison among them, reveal and that budget originally allocated to the *Dirección de Arquitectura* is significantly increased throughout the year (increases about 400 percent and 600 percent in 2012) because funds allocated for infrastructure and equipment is originally recorded under a special-purpose line and reallocated to the different Executing Units as progress is made in procurement processes (Indicator P-2 composition of

budget, and the lower the rating. However, this dimension has not been assessed due to the fact that CCSS does not include a contingency line.

expenditure out-turn shows large deviations). When compared to the modified budget, actual expenditures are in general above 90 percent, meaning additional budget allocated is actually spent. The latter though may not allow for a proper planning and management of major infrastructure or equipment acquisition.

Table 4.11. Dirección de Arquitectura y Desarrollo de Proyectos
Aggregate Total Expenditure Out-turn compared to original approved budget
(in colones)

				Deviations (in percentage)		
Year	Original Budget	Modified Budget	Actual Budget	Modified vs. Original	Actual vs. original	Actual vs. modified
2012	1,852,419,322.320	11,492,963,348.76	11,382,423,303.310	620%	614%	99%
2013	2,008,427,584.700	12,412,607,116.92	11,382,423,303.310	618%	567%	92%
2014	6,205,270,656.160	25,197,615,776.24	24,760,866,116.520	406%	399%	98%

31. **Table 4.12** assesses budget deviation for the aggregated capital expenditure budget lines (*Bienes Duraderos*) that include machinery, equipment and furniture, and construction and rehabilitation (civil works), which are executed by several executing units within CCSS. Deviations show that original budget allocations are considerably increased throughout the year (increases around 120 to 187 percent in 2012), which may be originated in savings and or under execution of other budget lines. However, when comparing the actual expenditure with the modified budget, budget execution is below 70 percent (between 56 and 61 percent). The latter may be due to the fact that additional funds become available late in the year when procurement and contracting processes cannot be completed, and in other cases, due to some capacity issues of some executing units that are in charge of rehabilitation and minor civil works.

Table 4.12. Capital Expenditures (*Bienes Duraderos*)
Aggregate Total Expenditure Out-turn compared to original approved budget
(in thousands of colones)

				Deviations (in percentage)		
Year	Original Budget	Modified Budget	Actual Budget	Modified vs. Original	Actual vs. original	Actual vs. modified
2012	26,439,240.728	49,450,379.04	27,656,397.013	187%	105%	56%
2013	51,150,124.900	65,746,612.48	45,543,920.407	129%	89%	69%
2014	70,184,693.800	83,987,903.77	51,290,549.440	120%	73%	61%

Institutional Arrangements

32. **CCSS has an adequate governance structure in place to implement the Program.** There are six main entities within CCSS that will be associated with the implementation or oversight of the PforR: (i) the Board of Directors, (ii) the Executive President, (iii) the Institutional Planning Unit, (iv) the Medical Management Department, (v) the Administrative Management Department, and (vi) the Financial Management Department. Institutional arrangements have been defined to allow for fluid collaboration both within CCSS and with other stakeholders. The CCSS Board of Directors will oversee the overall implementation of SASHI. The Executive President will manage the implementation of the PforR with the support of a coordination team comprising the Director of the Institutional Planning Unit and the Directors of the Medical Management, Administrative, Infrastructure and Technology, Procurement and Logistics, and Financial Management Departments, as well as an ad hoc technical coordinator. An implementation agreement will be signed with the Ministry of Finance to ensure timely flow of financial resources.

33. **CCSS' institutional capacity, though strong, could be improved to further support Program implementation.** Duplicative and fragmented systems pose challenges to CCSS administration and management. While existing arrangements are adequate for Program implementation, CCSS will benefit from technical assistance and capacity building in a number of areas to enhance efficiency and impact of the Program, including: (i) data digitalization; (ii) integrated health care networks scalable pilot project design, implementation, evaluation and recommendations to expand this new model to the rest of the country; (iii) streamlining financial-accounting processes; and (iv) prospective budgeting mechanisms. CCSS is committed to drawing on technical assistance to build capacity in key areas identified above in order to strengthen institutional capability to implement the Program and proposed PAP.

Results Framework & Monitoring and Evaluation Capacity

34. **A set of DLIs has been agreed upon with CCSS to monitor the Program.** In order to monitor progress toward achieving the PDOs, the Program's Results Framework details four PDO-level Results Indicators and eight Intermediate Results Indicators, all of which have been agreed upon with CCSS. In particular, the DLIs are both achievable and challenging and have been chosen to address challenges and incentivize timely Program implementation. Further, all DLIs have been clearly defined, and responsibilities for data collection and verification have been agreed upon.

35. **As the CCSS has already demonstrated the ability to successfully track results of the SASHI (currently under implementation), no major issue is expected with regard to the country's monitoring and evaluation capacity.** Existing administrative information systems in CCSS have adequate capacity to monitor Program indicators. The Strategic Planning Unit of CCSS will be responsible for monitoring progress, collecting the data, and producing the verification documentation for all of the intermediate results indicators.

36. **The information for the independent verification of those health intermediate outcomes will be using the reliable administrative information that routinely is processed by the bio-statistical analysis unit under the Health Care Management Department.** Costa

Rica's health sector in general and CCSS in particular have an internationally acknowledged capacity to provide one of the reliable indicators as the Pan American and the World Health Organization have repeatedly recognized. Specifically the indicators that are traditionally more complex to track. Verification of these indicators can be done following the same procedures that PAHO and other health organizations routinely utilize in Costa Rica. Therefore, no ad hoc household surveys or other mechanisms to sample information are needed for this PforR. The procedures for verification of the reliability of the information produced by CCSS regarding health care management are fairly well-established and known by all of the potential institutions that may provide the independent verification, namely PAHO or a University.

Economic Evaluation

Methodology

37. **The economic impact of SASHI has been estimated through a cost-benefit analysis.** This analysis estimates the initiative's Net Present Value (NPV) and Internal Return Rate (IRR) as a function of its costs and health benefits, where the NPV represents benefits minus costs (NPV=Benefits-Costs), both of which are adjusted for inflation and the time value of money (TVM). The benefits reflect the Disability-Adjusted Life Years (DALYs) saved by SASHI. The DALYs, which represent the burden of disease (as they take into account both mortality and disability), are then converted to dollars through a widely used methodology. Sensitivity analyses review the robustness of estimates to various inflation and economic growth scenarios.

Program costs

38. **The analysis considers all SASHI costs, which add up to $1,575 million[32], $420 million of which are financed by the World Bank operation.** The biggest expenses include upgrading the infrastructure of facilities at the first and second levels of care ($591 million); technology goods and services ($246 million); human resources ($235 million); medical equipment ($234 million), and non-medical equipment ($226 million).

Program benefits

39. **DALY reductions were calculated based on the SASHI DLIs and Intermediate Results Indicators (Annex 2)**. Benefits are calculated separately for colon cancer detection (DLI 2), hypertension control (Intermediate Results Indicator 2), diabetes control (DLI 3) and overall service improvements (DLI 1, DLI 4). The latter are expressed in (a) a health service integration pilot project, and (b) the introduction of selected surgery practices (day surgery; surgical waitlist reduction initiatives) that reflect improved service delivery. Benefits are calculated separately due to the fact that these areas affect different populations. Hence, colon cancer screening affects the population over 60 years old; diabetes control affects diabetic patients; and healthcare delivery improvements affect the whole Costa Rican population. The first step in the calculations was the estimation of the DALYs saved by these interventions. Afterwards, the DALYs saved are converted to dollars as a function of the per capita GDP, where 1 DALY=1 annual per capita GDP. As the rest of SASHI interventions (DLI 5-7) focus on

[32] CCSS. "Draft Text for Expenditure Analysis". San José (Costa Rica), 2015. Unpublished

overall management, and the literature on the impact of such interventions is scant, their effect is not taken into account.

Key assumptions

40. The current evaluation relies on the following key assumptions:

- **Temporal horizon.** The NPV and IRR are estimated for 2017-2030. This period allows all costs and mid-term benefits (i.e. DALY reductions) of SASHI to be considered.

- **Benefits after 2030.** The benefits of SASHI program will continue after 2030. However, later benefits are not considered, given that no DALY tables are available after this date. Only counting benefits up until 2030 contributes to a conservative estimate.

- **Discount rate.** The Program's costs and benefits are discounted at 8 percent, thereby taking into account inflation (5 percent) and the time value of money (TVM; 3 percent). The inflation rate used is higher than the 4.1 percent projected by the International Monetary Fund for Costa Rica in 2015-2020, hence providing conservative estimates. The 3 percent TVM is built into the DALYs; therefore, it was not necessary to discount it again in the calculations on the benefits side, since doing so would induce double discounting.

- **Covered population.** The current evaluation considers that overall service improvements will affect the whole Costa Rican population, hence the total number of DALYs in the country for all conditions. The calculations for colon cancer, diabetes, and hypertension focus on the DALYs related to those conditions only (see "DALYS reduced by SASHI"). The population projections through 2030 were drawn from the HNP World Bank Statistics database[33].

- **Disbursements.** The analysis considers that the Project funds will be released according to the disbursement table available in the program financing section of this document.

- **Economic growth.** The present analysis assumes an annual economic growth rate of 4 percent. This rate is lower than the 4.3 percent[34] projected annual economic growth for 2015-2020 projected by the International Monetary Fund.

- **NPV and IRR calculations.** Though SASHI will be implemented in 2017-2022, the PforR framework leaves great flexibility for implementation timeframes. Hence, the

[33] The World Bank. "Health Nutrition and Population Statistics: Population estimates and projection". Available: http://databank.worldbank.org/Data/Views/VariableSelection/SelectVariables.aspx?source=Health%20Nutrition%20and%20Population%20Statistics:%20Population%20estimates%20and%20projections#c_c

[34] International Monetary Fund. "World Economic Outlook Database, April 2015". Available: https://www.imf.org/external/pubs/ft/weo/2015/01/weodata/index.aspx

intervention sequence is not defined ex-ante. To reduce uncertainty, the NPV and IRR are only calculated once for the program as a whole.

- **Sensitivity analysis.** In economic evaluations, sensitivity analyses estimate the vulnerability of estimates to key assumptions. In this line, the current study analyzes the results' sensitivity to alternative inflation and growth scenarios. Hence, besides the baseline scenario, the NPV and IRR have been estimated for an inflation of 9 percent (12 percent total discount rate), and a GDP growth of 2 percent.

Benefit calculations

41. The benefits were calculated as follows:

- **Counterfactual.** The counterfactual scenario reflects the DALYs in Costa Rica during 2017-2030 in the absence of the SASHI program. Hence, it expresses the inertial burden of disease in the country. Counterfactual DALY calculations thus depart from the DALY tables for Latin America and the Caribbean published by the World Health Organization[35]. These tables estimate the inertial DALYs for 2005, 2015, and 2030 for the whole region, which are based on the region's age structure and assume a time discount rate of 3 percent[36]. The current economic evaluation standardizes these regional DALYs to the total number and structure of Costa Rica's population[37].

- **DALYs reduced by SASHI.** To calculate program benefits, the burden of disease reductions attained by SASHI have been applied to the counterfactual DALYS. The disease reduction is therefore the sum of the DALY reductions generated by improved colon cancer screening (DLI 2), hypertension control (Intermediate Results Indicator 2), diabetic control (DLI 3), and overall improvements (DLI 1, DLI 4). In accordance with DLI 2, it is assumed that CCSS will invite up to 40 percent of the target population (60 years or older) to receive a colon cancer screening, only half which will receive the procedure[38]. In accordance with DLI 3, and with the Intermediate Results Indicator 2, it is assumed that SASHI will augment the control of hypertensive and diabetic patients by 1 percent yearly. Based on national sources, it is further postulated that hypertension is responsible for 13 percent of DALYs[39] and diabetes for 6 percent[40]. As the majority of diabetic patients are hypertensive, and in order to avoid double counting, the DALY reductions from improved hypertension control have been multiplied by 0.9.

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[35] World Health Organization. "Projections of Mortality and Burden of Disease 2006". Available : http://www.who.int/entity/healthinfo/statistics/bod_dalybywhoregion.xls?ua=1

[36] World Health Organization. "The Burden of Disease Concept". Available : http://www.who.int/quantifying_ehimpacts/publications/en/9241546204chap3.pdf

[37] The World Bank. "Health Nutrition and Population Statistics: Population estimates and projection". Available: http://databank.worldbank.org/Data/Views/VariableSelection/SelectVariables.aspx?source=Health%20Nutrition%20and%20Population%20Statistics:%20Population%20estimates%20and%20projections#c_c

[38] Vernon, Sally W. "Participation in colorectal cancer screening: a review."*Journal of the National Cancer Institute* 89.19 (1997): 1406-1422.

[39] Caja Costarricense del Seguro Social (2014). "La carga de enfermedad y esperanza de vida saludable en Costa Rica en el marco de la meta del sector salud 2015-2018". San José, 2014.

[40] Author's calculations based on World Health Organization. "Projections of Mortality and Burden of Disease 2006". Disponible: http://www.who.int/entity/healthinfo/statistics/bod_dalybywhoregion.xls?ua=1

- **Temporality of effects.** The current evaluation considers that while the program costs take immediate effect, the benefits will not start materializing until the fourth Project year (FY20). Further, the benefits will only increase steadily after this date. Therefore, it is assumed that colon cancer screening invitations will grow from 0 percent (year 1), to 10 percent (year 2) and 40 percent (year 4) of the target population. At the same time it is deemed that the optimal control of diabetic and hypertensive patients will increase yearly by 1 percent, until 2030. In the same vein, it is postulated that service enhancements will reduce the DALYs of the whole Costa Rican population yearly by 0.15 percent. This is in line with the national goal of a 0.15 yearly increase in health life expectancy[41].

- **Reduced DALYS.** The DALYS saved reflect the burden of disease reduced by SASHI. Hence, reduced DALYS = counterfactual DALYS - intervention DALYs.

- **DALY monetization.** To estimate the program benefits, the reduced DALYs were translated into monetary savings. To this end, each DALY has been considered to be equivalent to the yearly per capita GDP in Cota Rica (USD 11,075 in 2015). This is a conservative estimation, as the Copenhagen Consensus Guidelines[42] and the Disease Control Priority Project[43] estimate that each saved DALY is equivalent to three times the GDP per capita. Life value studies in the United States estimate a higher value for DALYs, which would entail even more extreme results.

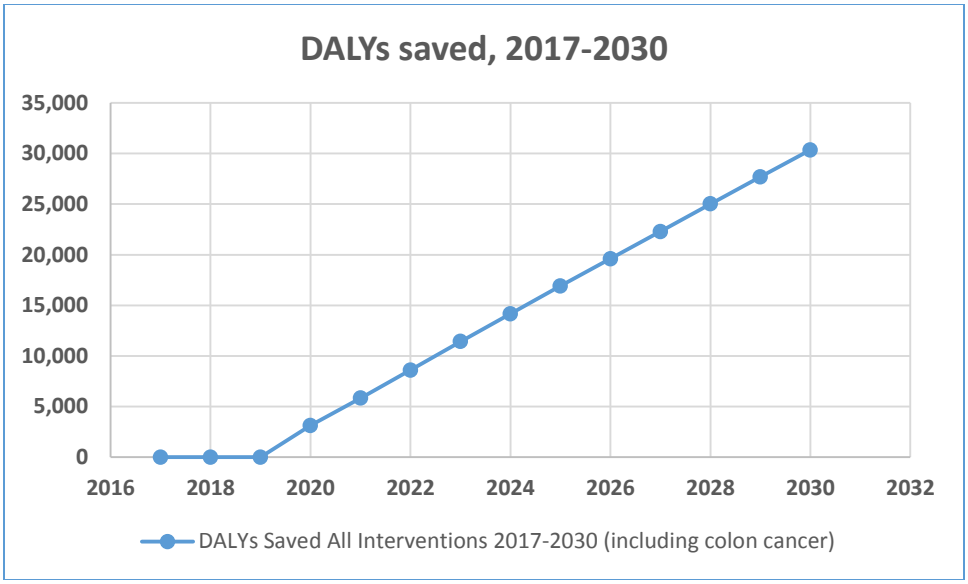
Expected results

Benefits

42. **The results show that the SASHI will reduce 184,974 DALYs in Costa Rica between 2017 and 2030.** The DALY reductions, which will occur progressively, are reflected in the following graph:

Figure 4.2: DALY reductions generated by the SASHI project: 2017- 2030

[41] Caja Costarricense del Seguro Social (2014). "La carga de enfermedad y esperanza de vida saludable en Costa Rica en el marco de la meta del sector salud 2015-2018". San José, 2014.
[42] D. Jamison, P. Jha, and D. Bloom, "Copenhagen Consensus 2008 Challenge Paper: Diseases," 2008; http://www.givewell.org/files/DWDA%202009/Stop%20TB/Copenhagen%20Consensus%20Paper-Diseases.pdf.
[43] http://www.dcp2.org/.



Cost-benefit

43. **As table 4.13 shows, SASHI is cost-effective or breaks even in all scenarios.** As the table below shows, SASHI is expected to be highly cost effective, as its IRR oscillates between 11 percent and14 percent. Indeed the PforR operation's Net Present Value ranges from $576 million at baseline (5 percent inflation and 4 percent growth, which is already a highly conservative estimate[44]) to $89 million in a highly adverse scenario (9 percent inflation and 2 percent growth). Though negative, the NPV of the most adverse scenario is relatively close to the break-even point. Further, this is a very unlikely scenario, as it requires sustained high inflation and low growth for the next 15 years. In addition, the cost-effectiveness calculations do not take into account the operation's impact on mental health conditions and other pathologies, which would surely provide incremental benefits.

Table 4.13. Net Present Value and Internal Return Rate of the SASHI initiative; 2017-2030

	Inflation 5% (8% total discount)		Inflation 9% (12% total discount)	
	NPV (USD)	**IRR**	**NPV (USD)**	**IRR**
GDP Growth 4%	$576,988,712	14%	$130,701,226	14%
GDP Growth 2%	$259,107,236	11%	($88,783,661)	11%

Implementation Support

44. **The Implementation Support Plan is in line with the PforR operational guidelines.** The Implementing Entity is in charge of the implementation of all Program activities in support of the achievement of the agreed DLIs, as well as of the elimination of inefficiencies/bottlenecks

[44] The baseline scenario provides already a conservative estimate, as it is more pessimistic than the current situation in Costa Rica, where inflation and GDP growth for 2015 are projected at 4.5 percent and 3.8 percent respectively (figures from International Monetary Fund. "World Economic Outlook Database, April 2015")

identified in the social, environment, and fiduciary assessments. The World Bank will tailor implementation support to include the following:

- Provide technical advice on the implementation of SASHI, the achievement of DLIs and elimination of other social, fiduciary, or governance-related bottlenecks relevant to the Program;
- Review program implementation progress, verify achievement of DLIs, and review program progress reports, audit reports, and such other relevant information;
- Monitor CCSS performance, with particular emphasis on the program result areas and monitoring compliance with legal agreements, keep records of risks, and propose remedy actions to improve program performance, if and as needed;
- Provide support in resolving any operational issues pertaining to the project, including review of grievance redress mechanisms.

Risks identified by the Technical Assessment

From the technical assessment perspective

45. **Although SASHI is an ambitious program, the selected lines of action will mutually reinforce each other and will be implemented gradually with various opportunities for readjustments—not a "big bang" approach but a progressive one with various pauses along the way for evaluation and feedback.** The bulk of the activities aim to introduce important changes in the tools, organization, and overall culture of management in order to shift from the status quo of focusing on inputs and outputs (delivery of health care services to individual patients) towards a more comprehensive strategy for dealing with the health and wellbeing of the population. Of course, individual health care will not only continue but will also be improved with the use of new approaches including the expanded use of evidence based medicine (such as clinical guidelines and pathways and E-Health tools). However, the most challenging aspect is one that is not specific to Costa Rica but applies to many high-income countries: how to reinforce PHC in order to foster prevention and early detection of non-communicable diseases, broaden the options for care beyond the highly specialized services, and help patients navigate the entire health care system. The risks of SASHI therefore are related to potential resistance from medical and non- medical staff who may encounter difficulty transitioning from traditional ways of organizing care to more holistic approaches.

46. **The lack of progress so far on enhanced accountability and transparency creates the risk of discontent among civil society actors with their level of formal participation.** Various civil society actors ranging from patient advocacy groups to concerned citizens may push and demand more rapid changes in transparency and accountability, particularly regarding health care and other important policy issues that affect the financial sustainability of CCSS. Civil society groups may use different mechanisms to challenge the pace of the institutional changes and potentially even use litigation at the Constitutional Court, which would threaten the plans for a more gradual approach to key institutional management changes. In fact, beyond the existing participatory mechanisms for individual facilities (community health boards, *Juntas de Salud*) there are currently no formal processes for civil society to express concerns on key policy issues.

To mitigate these risks, SASHI includes a line of action that will foster a carefully designed mechanism for civil society participation in the long-term vision of CCSS. CCSS will foster dialogue on building an independent entity and an internal unit that may expand the excellent work currently done on health technology evaluation. The Executive Presidency has recently opened new informal channels of dialogue with patient advocacy groups, The social assessment recommends formalizing and expanding these spaces for dialogue that presently exist in order to ensure that policy decisions (such as which medicines to finance) achieve not only technically soundness but also social legitimacy.

47. **To mitigate the risks that threaten the goal of strengthening the national health insurance through a renewed emphasis on PHC, CCSS leadership has taken the necessary time to consult, inform and build consensus on the SASHI with stakeholders within the institution.** Senior Management has conducted various workshops and internal consultations considering various aspects that are not exclusively technical. Additionally, several lines of action include different mechanisms for internal feedback and evaluation before proceeding with large-scale changes. A good example is the Board and Senior Management's decision that the pilot of the new approach to integrated health care networks is being developed by a multidisciplinary team and that it takes into account not only national best practices but also international best practices that are relevant and promising in the Costa Rican context. Another example is ensuring that nurses and other paramedical staff buy into the critical changes (a lesson learned from other countries similar to Costa Rica). SASHI was developed with the support of local universities, experienced national experts, and various international organizations including the Pan American Health Organization, the International Labour Organization, and the World Bank. SASHI is a program that was initially developed in the previous administration of CCSS but then was expanded and refined by the current administration. Therefore, the risk of lack of ownership is negligible; the technical assessment has confirmed the commitment of the Board of Directors, Senior Management, and critical technical staff to achieving the desired improvements to the quality of services and financial sustainability of the social security system—an institution viewed by all not only as a pillar of the public sector but of the Costa Rican model of democracy itself.

Annex 5: Fiduciary Systems Assessment

1. **The World Bank carried out a fiduciary systems assessment to consider whether CCSS´ fiduciary systems, which would be applied to the Program, would provide reasonable assurance that the financing proceeds will be used for the intended purposes with due attention to the principles of economy, efficiency, effectiveness, transparency, and accountability.** Overall, CCSS' fiduciary systems have been deemed acceptable. The assessment indicates the CCSS is a solid, mature, and well-established autonomous entity that has functioning financial management and procurement systems in place that allow it to plan budgets, execute, procure, record transactions, and produce in-year and year-end financial reports. There are still some potential areas for improvement that are related to improving capacity, systems, and procedures to enhance the efficiency of CCSS' administrative, procurement, and financial management processes. Considering these areas for improvement along with the mostly positive assessment of the fiduciary systems, the Program's fiduciary risk is considered to be Moderate.

CCSS Systems, rules, procedures and oversight mechanisms

2. **The proposed Program will be implemented by the CCSS through its existing structure**, which comprises six Management Units (*Gerencias*) at the central level, which report to the Executive President, as well as nearly 299 executing units, both at the central and regional/decentralized levels. CCSS is governed by a Board led by CCSS' President and comprising eight members representing the Government, the Employers and Employees.

3. **Based on the definition of the Program, the fiduciary assessment is focused on the CCSS' fiduciary systems currently applied to the Public Health Insurance (*Seguro de Salud*).** The assessment covers: (i) the Finance Management Unit, (ii) the Logistics Management Unit; (iii) the Infrastructure and Information Technology (IT) Management Unit; (iv) Administrative Management Unit; and (v) Internal Audit Unit. This core structure is responsible for procurement and financial management functions at the central, regional, and local levels and would also be in charge of supporting Program implementation.

Legal framework

4. **Public Financial Management in Costa Rica is governed by Law No. 8131, Financial Management and Public Budget and other specific regulations and guidelines issued by CGR or the Ministry of Finance.** However, due to the broad autonomy granted by its statutory law, the CCSS is only subject to some aspects of public financial management requirements, mainly relating to financial reporting, but budget execution is not part of the national budget, accounting, or treasury systems. As it relates to Procurement, CCSS follows Law No. 7494 (*Ley de Contratación Administrativa*), and its related Guidelines 7494/1995, as amended; for the purchase of medicine they follow the Law 6914 - Ley Especial and its Regulations applicable to the purchase of drugs, *reactivos* and raw materials. As it relates to internal control and external oversight, CCSS is subject to and complies with the regulations issued by CGR, including the Law of Internal Control and related guidelines and regulations, as well as audit standards for the

public sector. CCSS is also subject to external prior review by the CGR through the "*Referendo*" process for procurement contracts above certain levels.

Programming and budgeting

5. **Overall, budget preparation and approval follows an orderly and well-established process that ensures approval by the Board of Directors of the CCSS and by the CGR before the beginning of the year.** There are clear roles and responsibilities for its preparation, discussion, and approval. CCSS' budget is comprehensive and realistic, and is aligned to the priorities, objectives, and strategies defined in the Institutional Strategic Plan. Budget allocations are in principle aligned to the strategic objectives and priorities; in practice the ability to implement the budget as planned will depend on the availability and effective collection of contributions. As it relates to budget performance, at an aggregate level, both for income and expenditure, budget credibility is adequate, but there are significant reallocations between executing units. While budget classification allows for budget monitoring by the objective of expenditures and gross expenditure groups, it is not really linked to budget programmatic structure that relates to strategic objectives defined in the Strategic Institutional Plan. For Program purposes, it has been agreed that Program expenditures will be identified through a specific budget code in CCSS' health insurance budget, enabling budget reporting as the basis for the Program financial monitoring.

Procurement

6. **As one of the largest buyers in Costa Rica, CCSS has ample experience in the area of procurement.** Given its large volume of operations and decentralized structure, CCSS has 186 administrative units in charge of procurement out of a total of 299 executing units: at the central level, the *Gerencia de Logística* in charge of drugs and medical supplies, the *Gerencia de Infraestructura y Tecnología* is in charge of works, medical equipment, and IT. The remaining procurement units are at the regional level.

Procurement planning

7. **Procurement planning is based on the needs identified by CCSS Executing Units and is consistent with the Institutional Operation Plan and the budget allocated.** The procurement plan is approved by CCSS and published in the first month of each fiscal year in the *Diario Oficial* through a simple announcement; a more detailed version is available on the CCSS website (http://www.ccss.sa.cr/planes_compra), which can be updated from time to time. Purchases cannot be made outside of the procurement plan and slicing is not allowed in order to avoid higher competitive methods. The plan contains information consistent with the legal requirements including: the budget line, the subject matter of procurement, department/units in charge, estimated unit price, estimated cost, method of procurement, and estimated time when procurement starts. Each Executing Unit has its own procurement plan that aggregates its procurement needs and those of subordinate units. Large contracts for works, medical equipment, and IT systems are procured centrally. Common use goods are generally acquired under framework contracts through *CompraRed*. Nevertheless, it appears that there is more room for consolidation across Executing Units for drugs, medical supplies, common use goods, IT systems, and medical equipment, in particular for small value high volume purchases through centralized procurement and decentralized supply mechanisms.

Program procurement

8. **Procurable expenditures under the program**: The top 3 categories which involves 82 percent of total amount for the period 2017-2122 are Civil Works, Medical and Non-Medical Equipment, and Digital & Electronics Technologies, namely:

(i) Civil Works (37 percent): hospital expanding ambulatory & upgrading services, 20 PHC areas, 100 EBAIS and minor civil works for (repair/retrofitting);

(ii) Medical and Non-Medical equipment (29 percent in total; 15 percent and 14 percent respectively): hospital equipment, lab & other ambulatory equipment, production units machinery &equipment, transportation, communications, and furniture, hardware and software for offices; and

(iii) Digital & Electronics Technologies (16 percent): goods, software & services for EDUS – ARCA, EDUS all ambulatory services nationwide and Enterprise Resource Planning (financial and administrative core functions).

9. **The Program will not finance contracts above a certain threshold defined by the World Bank's Operational Procurement Review Committee**. It is not expected that any of the contracts for civil works, goods and services, or Technical Assistance will exceed the World Bank's current Operations Procurement Review Committee review thresholds. Currently, for moderate risk the thresholds for such contracts are: US$115 million for works, turnkey, and supply and installation contracts; US$75 million for goods; US$60 million for IT systems and non-consulting services; and US$ 30 million for consultant services.

10. **Methods.** The methods used for the procurement of goods, works, and services are mostly competitive and are selected based on the nature, scope, and value of the procurement contracts consistent with the requirements under the Law. The main methods are: Public Tendering, Limited Tendering and Direct Contracting (*escasa cuantía*), which is also a competitive method based on request for quotations. Consultants are hired based on the same principles. However, it is acknowledged that quality has a determinant role in the evaluation. In addition to this, the CCSS plans to carry out the civil works for 20 PHC Areas and 100 EBAIS, through a procurement and execution agent (Fideicomiso). The CCSS is currently working on defining the final scope of the work to be undertaken by the procurement agent.

11. **Tender documents**. The national legal framework identifies the mandatory content of the tender documents and requires that in the elaboration of the bidding documents it be ensured that the principles of competition and free access to public procurement are upheld. The tender documents including technical specifications are prepared in house and are based on CCSS' standardized templates and General Conditions. The technical specifications are generally prepared with the support of the technical areas of CCSS.

12. **Publicity**. Procurement opportunities are published through the procurement plan and each invitation to bid is published on the CCSS website. All public bidding documents and specifications are made available to the public. Opportunities for the centrally procured drugs and medical supplies (except for regional frameworks) and for all stages of the procurement process are available in *CompraRed.* [45] Finally, when the public interest requires it, the opportunities could be published in international media and through embassies of countries of potential suppliers established in Costa Rica. The contract award is also published in the same media where the invitation to bid was published.

13. **Registry**. Consistent with the Procurement Law, CCSS has an Institutional Registry for suppliers, including suppliers for drugs. All businesses entering into contracts with CCSS must be registered. The registry is also used for selecting providers for less competitive methods than public procurement. The criteria for registering are non-discriminatory. The registry is prepared based on a call for registration in *Diario Oficial* (at least once a year); nevertheless, the interested suppliers can ask to be registered at any time during the year.

Opening and evaluation of bids

14. **In case of public bidding, tenders are opened in public and minutes of the opening of the public bid (whose content is set by CCSS manual) are prepared.** In case of prequalification, only the prequalified bidders can attend. The evaluation follows the qualification and evaluation criteria in the bidding documents that cover both price and quality factors. The evaluation process is carried out by the respective purchasing unit and the approval of the outcome, depending of the amount, is subject to the CCSS' internal controls and CGR's approval. CCSS has elaborated useful manuals and templates that guide the evaluators.

[45] CompraRed is the electronic system for Government procurement that carries out the procurement of selected common use goods and services (about 12), through framework contracts.

Procurement Capacity

15. **CCSS has the capacity to carry out the procurement under the Program.** The procurement process is an interdisciplinary process; aside from the staff primarily involved in procurement, most of the participants are drawn from various departments of the CCSS in order to: prepare feasibility studies, designs, technical specifications, participate in bid evaluation, and conduct quality control and supervision. Only certain complex designs and studies are outsourced. Staff involved in procurement benefit from a wide range of supporting documents elaborated by CCSS to help with the implementation of the procurement process: manuals, guidelines, and instructional templates. The capacity building process is a continuum. However, with the revamping of the processes and new technologies, the capacity building model needs to be adapted to meet these new challenges.

Contract Administration

16. **The legal framework complemented by CCSS regulations ensures a good balance between rights and obligations of the parties to the contract and provides an adequate framework for contract administration.** The large hospital projects are usually turn-key and generally show a good management of scope, time, and cost. The contracts for medical equipment are generally performed on time and amendments are usually related to increases in quantities, consistent with the legal provisions. Some of the most important IT contracts are with the Costa Rica Institute of Electricity. Additionally, the IT contracts are evolving towards leasing operations and management contracts to take advantage of the private sector know-how in this area. In the area of contract management however, the Infrastructure Department would benefit from an integrated electronic system to ensure a more efficient management of all the contracts, including real-time monitoring. In the case of the Department of Logistics (in charge of the procurement of health goods and services), despite the large number of contracts, there is a generally good monitoring of the processes partly because of the availability of the Supply Management Information System *(Sistema de Información de Gestión de Suministros)*[46], an IT system that keeps track of the supply chain cycle and is in the process of establishing interfaces with other IT systems (payment, budget, *CompraRed*, Ministry of Health etc.). However, the Supply Management Information System has still not been rolled out in all Executing Units. The optimization of the administrative/logistics processes and the use of comprehensive Information Systems are two of the CCSS' priorities for improving overall efficiency, including in contract management.

Budget execution

17. **Each of the 299 Executing Units manages its expenditure budget as approved by the Board.** They procure and contract, within the established thresholds, and are responsible for recording expenditures in their "local" budget execution systems and for submitting payment requests and supporting documents to the "*Fondos Rotativos*" (FROs), a type of financial branch. The FROs or the Treasury Unit (for central level executing units) review payment requests and if approved record them in CCSS' automated payment system (SIPA). On a daily basis, the Treasury Unit prepares and approves payment tranches based on cash availability and processes

[46] Sistema de Información de Gestión de Suministros

them through the electronic National Payment System. Payments processed are accounted for in CCSS' financial information system, and on a monthly basis they are transferred to the institutional budget information system from which budget reports will be issued once the reconciliation process is completed. While budget execution follows an orderly and well-established process with clear approval and authorizing levels, internal administrative, procurement, and financial management processes and procedures are highly fragmented, and the use of multiple different information systems and tools leads to duplications, multiple approvals, and generally cumbersome and lengthy processes.

Cash management

18. **CCSS' cash and treasury management is centralized and completely independent from the Public Sector Treasury System.** CCSS' General Treasury Unit is responsible for cash management and monitoring through three basic functions: (i) management of cash inflows (the collection of contributions through the banking sector and CCSS' own financial branches), (ii) management of outflows (payments); and (iii) management of short-term investments.

19. **Cash planning is done manually on an annual basis based on income forecasts**. In addition, specific reviews are carried out to determine the cash availability to attend payment requests as recorded in SIPA on a daily basis. The latter requires daily coordination between the General Treasury Unit and FROs. While payment requests recorded in SIPA are made the same day, there is no information on invoices delivered to Executing Units UEs or submitted to FROs, which are due for payment but have not yet been recorded in SIPA.

20. **Payments for Program activities would follow the standard mechanism, which would be strengthened through the implementation of revised processes and the use of an integrated system**. The Ministry of Finance and CCSS have agreed on a specific procedure for the transfer of funds to be disbursed by the World Bank as DLIs are achieved and verified following such mechanism, the total loan amount will be recorded at once in the National Budget under the Ministry of Health as head of the sector. Once loan proceeds are disbursed, the Ministry of Health would request to the Ministry of Finance the transfer of funds to CCSS' bank accounts.

Accounting and financial reporting

21. **CCSS is able to prepare general purpose financial statements following the generally acceptable accounting principles applicable to the Public Sector in Costa Rica, which require general-purpose financial statements prepared on an accrual basis of accounting.** Those standards provide general guidelines, but do not provide a complete and comprehensive accounting framework to ensure the proper recognition, measurement, presentation and disclosure of financial information. Understanding the need for a more comprehensive framework, the Ministry of Finance is currently working on the implementation of the International Public Sector Accounting Standards for the public sector, which may become effective in CY2016. Accordingly, CCSS has also made advances in implementing International Public Sector Accounting Standards as part of the overall effort to enhance its capacity to provide accurate, timely, and reliable financial information for sound decision-making,

performance assessment, and resource allocation. With additional support, CCSS could accelerate the implementation process.

22. **Additionally, beyond the need for a stronger accounting framework, the financial statements are prepared using a manual process of collecting and aggregating information from over twenty information systems and databases that are recording financial and accounting transactions.** Moreover, these systems are not linked and thus do not allow the timely and systematic recording of transactions. The lack of an integrated platform for effectively processing and tracking the financial and accounting transactions leads to the need for burdensome and manual reconciliations across the organization, as well as additional manual controls, in order to ensure that errors are prevented or detected in a timely manner. While these manual and compensating controls allow for the timely preparation of budgetary reports (e.g. 30 days after the end of the month) and financial statements (including budget monitoring, reconciliations of accounts, analyses of fluctuations, aging of accounts, and manual and supervisory reviews), there might be transactions that are not captured in the financial information in a timely manner. For instance, expenditures incurred, invoices issued, or payment requests being processed by the FROs are only captured when payments are made. Thus, there may be expenditures and related liabilities that are not recorded or recognized in a timely fashion. The latter also prevents CCSS' ability to properly monitor payment delays and potential arrears, especially at the decentralized level.

Internal controls and internal audit

23. **CCSS' internal control framework is based on the Internal Control Law (Law No. 8292) for the public sector.** Overall, internal control rules and procedures consist of a basic set of rules for processing and recording transactions, which are understood by those directly involved in their application. Expenditures are subject to budget controls, which are incorporated in SIIP and other manual reviews, that effectively limit commitment to actual cash availability and approved budget allocations. Even though these transactional rules are generally followed, they are mostly transactional, and in some cases may become excessive. Furthermore, controls may be deficient in some important areas, as the establishment and design of internal controls does not respond to a comprehensive risk assessment. Payroll management also requires the use of some unlinked information tools and several manual ex-ante and ex-post verification mechanisms and controls. Payroll is subject to some errors and inconsistencies, which although identified and addressed require significant effort.

Internal Audit

24. **In compliance with the Internal Control Law, the CCSS has a solid and well-structured Internal Audit Unit staffed with nearly ninety audit professionals, including legal and engineering experts, organized in five areas:** (i) administrative, provision and infrastructure services, (ii) health services, (iii) IT and communication services, (iv) financial services, and (v) operational management. Such structure allows the Internal Audit Unit to tailor its reviews and services to the CCSS specific needs and nature of its operations. The Internal Audit Unit is governed by the Audit Standards for the Public Sector issued by the CGR and other

specific related guidelines. On an annual basis, the Internal Audit Unit prepares its operating plan taking into account the strategic planning and risk assessment.

Internal and External Controls in Procurement

25. **CCSS establishes the levels of authority to conduct controls of procurement processes consistent with the Law and CGR provisions.** The evaluation report is approved by *Junta Directiva* subsequent to its endorsement by the Accounting Department and Legal Department. CGR becomes involved when there are complaints under its authority, in order to approve exceptions according to the Law and also to review contracts before execution (*Referendo*), usually those subject to public bidding. The close monitoring of controls is key for improving lead-time in procurement.

Complaints handling mechanism in Procurement

26. **There is a complaint mechanism in place with right of appeal to an independent actor (CGR) and with clearly established procedures.** The Law and its Regulations and other norms elaborate on this appeal mechanism. Complaints may be directed to CCSS or CGR according to the type of complaint and the amount of the contract, and complaints may be raised by any (potential) bidder or concerned representative of the community. The system has the capacity to handle complaints in a fair manner and depends on the ability of the parties involved to make representations and provide relevant documental information. According to their objective, there are two types of complaints: (i) complaints that raise issues related to the bidding document (*Recurso de objeción*) with the objective of improving the bidding document and ensuring equal access; and (ii) complaints that raise issues with the award (*Recursos de Apelación and Revocatoria*) when there are concerns related to the awarding or cancelation of the process. The processes are clearly described, and there are time limits in the Law and Regulations for each entity that participates in the process.

27. **Complaints regarding the bidding documents are addressed to CGR for contracts above the public bidding thresholds and to the CCSS for contracts below this threshold.** The complaints related to the bidding documents may suspend the opening of the bid, if need be. Similarly, the complaints related to award decisions (*Recursos de apelación*) are submitted to CGR above the thresholds for Limited Bidding. All the others are submitted to CCSS and in this case they are named *Revocatorias*. The complaints related to award decisions will suspend the signature of the contract. The resolutions are enforceable. However, once the administrative avenue has been exhausted, the bidders can still appeal at the judiciary level while the contract follows its course if under implementation. Overall the number of complaints in CCSS is relatively low – 3 percent of the total number of contracts awarded. More than half of them are "*revocatorias*" complaints related to the award decision that are addressed directly to CCSS for contracts below the CGR thresholds. Over the last three years, the appeals to CGR (both related to the bidding documents" and award decisions) have accounted for 20-40 percent of total CCSS complaints. The complaints with most impact on the procurement lead time are those related to award decisions submitted to CGR that account for 8-10 percent of the total number of complaints but are for large value contracts, mostly for large works contracts. They can add up to two months to the procurement lead-time in the case of public and limited bidding respectively.

Bidders Sanctions and Debarment

28. **The sanctions against participants in the bidding process follow the principles of proportionality and due process.** They can be warnings (*apercibimientos*) for faults that can be rectified or can be debarment (*sanción de inhabilitación*) that results in the bidder being barred from participating in public bidding for up to 10 years. The rationale for sanctions and debarment is provided in the relevant laws; fraud and corruption are reasons for debarment while poor performance may be a reason for warning. The debarred firms are published in the *Diario Oficial* and *CompraRed* so that each agency updates its register of suppliers.

External Audit

29. **As a public sector entity, CCSS is subject to external audit or specialized review by the CGR.** Additionally, CCSS' annual financial statements are subject to an external audit carried out by a private sector audit firm according to International Standards of Auditing. Those auditors issued a modified audit opinion on the 2013 CCSS' financial statements (latest available) due to shortcomings related to cash balances, accounts receivable, potential legal threats that might have an impact in the financial statements, and valuation of inventories. There are no requirements either from the CGR or CCSS's Board that compel periodic rotation of external auditors, which would be considered a sound corporate governance practice. As a result the current audit firm has been engaged for over twelve years. For Program purposes, it has been agreed that Program audit will be included as a separate chapter within the public health insurance (*Seguro de Salud)* audit commitment (budget execution audit) following CGR's regulations.

Fiduciary Risk

30. **Based on the information available as of the date of this document and on the fiduciary systems assessment, fiduciary risk is considered moderate.** Overall, CCSS is a solid and well-established entity that has in place regulations, systems, and processes for financial management and procurement to plan, execute, and record transactions, and to prepare budgetary reports and financial statements. Although it has been granted broad autonomy, it is subject to the oversight of the CGR. There is a strong internal control framework with clear roles and responsibilities, including a well-functioning internal audit function. There are however some key areas of risk that may affect the efficiency of the existing arrangements to properly support Program implementation and overall CCSS's performance. Risk factors are related to: (i) fragmentation of internal processes and procedures that leads to duplications, cumbersome and lengthy decision-making processes; (ii) the lack of real-time integrated and comprehensive management information (administrative, logistic/procurement and financial) required to adequately monitor Program implementation; (iii) insufficient consolidation of contracts to maximize efficiency and competition and increase value for money in particular for goods and services; (iv) lengthy internal and external controls that may extend the lead time of procurement for complex contracts beyond one year; and (v) CCSS personnel in the area of financial

management and procurement may need to improve their capacity to effectively support the implementation of the ambitious strategic changes envisaged. Budget constraints and timely availability of cash to support Program implementation may be a minor risk factor, although this will be mitigated after effectiveness is achieved through advance disbursement and through disbursements for some DLIs for which first tranche targets are achieved at effectiveness (prior results). Most DLI targets have been a part of the CCSS institutional plans since before World Bank involvement and progress toward their achievement is being made.

Fiduciary elements of the Program Action Plan (PAP)

31. **This section lists key technical and capacity development measures that aim to increase the operational efficiency of the CCSS to implement the Program, ensure full transparency and accountability, and mitigate existing fiduciary risk.** At the same time, some of the actions that might be supported through the Program will further increase CCSS' administrative, logistic/procurement, and financial management capacity for more sustainable and efficient service delivery.

32. **Streamlined administrative, logistic/procurement, and financial processes and procedures, will be supported by a robust internal control framework and the development of a proposal for a functional optimization of central level units.** Implementation of revised processes will be accompanied and supported by an integrated information system that allows for the automation of budgeting, accounting, administrative and financial transactions. This would improve the accuracy of financial information as well as facilitate transaction processing, ensuring consistency in the application of controls, standards, and rules and integrity of the management, administrative and financial information.

33. **Real-time, comprehensive, and consolidated financial and logistic/procurement information will be required to ensure proper management.** The implementation of an integrated system that permits the timely recording of transactions into a single and standard processing line within CCSS will also significantly improve the availability of consolidated, accurate, and comprehensive information for monitoring Program performance and decision-making.

34. **Capacity building and training will be required as revised processes, and tools are adopted consistent with the health insurance strengthening strategies.** With an increased strategic approach to procurement for instance there is need for specializing selected staff in more sophisticated approaches (spent analysis, market analysis, strategic planning, framework contracts etc.) while the new IT systems to be rolled out will require increased technology training to enable their effective use as management tools by CCSS.

Annex 6: Summary of Environmental and Social Systems Assessment

1. An ESSA of the Program was performed based upon the requirements of the PforR policy and Directives and the Environmental and Social Systems Assessment Guidance Note. The ESSA covered both environmental and social considerations. The methodology for the preparation of the ESSA consisted of: (i) collection and analysis of relevant information; (ii) field visits to representative CCSS administrative and health facilities; (iii) meetings with various entities associated with the environmental and social aspects related to the Program and stakeholders associated with the Program in general; (iv) preparation of a draft of the ESSA; (iv) stakeholder consultation on draft ESSA (see below for details); and (v) preparation of a final ESSA reflecting relevant comments and observations from the consultation. Based on ESSA systems and risk evaluation, a Program Action Plan (PAP) was developed as part of the ESSA and has been discussed with the relevant Program entities. The objective of the PAP is to improve the social and environmental management systems for the Program in the context of the guidelines established in the PforR policy.

Environmental

2. The Program does not include activities that could have significant adverse impacts that are sensitive, diverse, or unprecedented on the environment and/or affected people. Some activities associated with the implementation of the Program may have potential negative environmental impacts, in particular related to the expansion or rehabilitation of medical facilities and operation of medical facilities. The primary impacts include wastewater discharges, air emissions, and solid and medical wastes generation. The potential negative environmental impacts associated with the Program are basically of low or moderate intensity, should be limited to the medical facilities and work sites, and can be mitigated with relatively standard measures.

3. In relation to the Program, the Costa Rica environmental, health, and safety laws and the relevant institutional capacity of the applicable environmental regulatory authorities (the National Technical Environmental Secretariat) are adequate. Associated with the expansion or rehabilitation of facilities, CCSS has established procedures and staff to evaluate potential environmental impact, establish appropriate mitigation measures, and request authorization from relevant environmental authorities. Related to the day-to-day operational healthcare services and facilities, CCSS has established various measures to control, prevent, or alleviate potential environmental and occupational impacts. CCSS is also undertaking efforts to promote more environmentally sustainable operations, such as the reduction of energy and water usage.

4. The principal potential risks identified related to the environmental management of the Program are: (i) potential environmental, health and safety impacts and risks at existing health care facilities (including compliance with applicable legislation) and potential expansion or rehabilitation of existing facilities associated with the Program; and (ii) the need for improved coordination among various CCSS units responsible for environmental management and improved commitment and decision-making by senior management to ensure environmentally and social sustainable operations. Specific issues identified in the ESSA include: (i) potential lack of full compliance with environmental regulatory standards (waste water discharges, air emissions) at all CCSS facilities; (ii) potential issues with the quality of potable water at some CCSS medical facilities; (iii) lack of complete, current, and centralized information on

environmental, health and safety performance at all CCSS facilities leading to uncertainty on regulatory compliance and challenges in making sound decisions on investments; (iv) examples of inefficiencies or unaddressed actions/issues due to the various CCSS department/units that have environmental responsibilities and their lack of coordination; (v) challenges in preparation of environmental permit applications and obtaining approvals for new works or rehabilitation projects at lower level CCSS medical facilities; and (vi) some failures by CCSS senior management to ensure adequate and timely environmental management, such as completion of the institutional environmental management plan required by regulations and ensuring adequate infrastructure investments to address environmental issues (in particular waste water discharges and potable water supply).

5. Based upon the ESSA, a PAP related to environment, health, and safety aspects was developed in conjunction with CCSS and focuses on three main objectives: (1) strengthening the existing environmental management institutional structure to establish a more coherent coordination among the various CCSS departments/units responsible for environmental management, to ensure more complete management of the various environmental requirements at all CCSS facilities, and to help strengthen decision-making by senior management to provide the necessary resources to ensure compliance and adequate management of environmental, health and safety; (2) establishing an integrated environment, health, and safety information system to assist in ensuring compliance with regulatory requirements and to allow more effective decision-making and utilization of resources; and (3) establishing a plan for the investments needed to fully comply with environmental regulatory standards, particularly those related to potable water, waste water, air emissions, and solid / hospital wastes. The PAP provides specific actions and time frames for their progressive execution. The participants of the stakeholder consultation on the ESSA pointed out that the environmental strategy of the CCSS should take into account the limitations and special conditions of staff working in rural and indigenous areas, where the standards proposed (for the disposal of waste, for example) are not always easily or practically met.

Social

6. Based on an assessment of the capacity and practices of the CCSS for developing infrastructure projects, rehabilitating healthcare facilities and ensuring citizen participation, the ESSA has not found major negative social impacts associated with the Program. The sections that are less comprehensive can be resolved with the suggestions included in this PAD. Thus, the following recommendations intend to ensure that vulnerable or unattended populations benefit equally from the realignments of the CCSS and that citizen involvement and accessibility to healthcare services is strengthened.

7. The legal and regulatory framework of Costa Rica regarding healthcare access, patient rights, and differential medical services for vulnerable populations is robust and comprehensive and includes multiple national laws, numerous landmark decisions from the Constitutional Court, and several operational guidelines of the CCSS that are grounded on a human rights approach. Similarly, Costa Rica has numerous legal instruments that safeguard the territorial and sociocultural rights of indigenous peoples, including the right to consultation, land tenure, and the right to receive healthcare services attuned to their sociocultural and geographic realities.

Moreover, Costa Rica has ratified two of the most comprehensive and far-reaching international covenants that safeguard the rights of indigenous peoples (International Labor Organization Convention No. 169 and the United Nations Declaration on the Rights of Indigenous Peoples, reinforcing the legal protection of vulnerable populations.

8. The legal framework in Costa Rica not only contemplates the patient's right to information, confidentiality, dignity, and respect, but also positions healthcare services as a constitutional right. Since 1989, the Constitutional Court has dictated a series of decisions that have elevated health services as a fundamental right (even though it is not explicitly contained within the current Constitution). Many of these landmark decisions have allowed chronically ill patients to receive specialized care including diagnostic and therapeutic medical interventions as well as medicines.

9. The CCSS has designed specific programs and policy guidelines to deliver and strengthen health services for vulnerable populations, remove access barriers, and address their special healthcare needs, though there are important shortcomings at implementation and room for improvement.

10. The Program intends to include the viewpoints and needs of the indigenous populations through a differentiated health care approach. Indigenous peoples comprise about 2.4 percent of the total population (104.143 people), divided into eight groups in 24 territories. However, 41 percent of the indigenous population currently lives in urban environments. The CCCS recently launched several health initiatives grounded on the principle of intercultural health and co-design and implementation, which seek to expand the number and geographic scope of healthcare facilities (EBAIS) and incorporate local community in the decision-making process and the provision of health services.

11. The new policies and programs proposed by the CCSS also intend to reduce the high levels of morbidity and resolve the current accessibility gaps. Indigenous people have some of the worst health indicators in Costa Rica, including high rates of infectious diseases, malnutrition, substance abuse, lack of access to piped water and sanitation, high levels of NCDs, substandard immunization rates, and lack of disaggregated health data by ethnic adscription. According to a report by of the Office of the High Commissioner for Human Rights in Central America, the CCSS has 48 EBAIS, 82 *Centros de Visita Periódica*, and 19 *Áreas de Salud* that serve indigenous patients. However, many indigenous households, especially those inhabiting areas with difficult access and migrants, remain uninsured and have irregular access to health care services, and indigenous organizations have denounced discriminatory behaviors and practices in some health care facilities; several best practices have also been identified and could be replicated.

12. Overall, the Program does not pose any risk to the natural resources and lands of indigenous peoples and will not incur any forced displacement or territorial conflict. The Program will also consider the viewpoints of indigenous peoples and has contemplated spaces for participation and engagement. However, the ESSA recommends that the CCSS allocates sufficient resources for implementing its own Indigenous Health Care Plan and for creating and/or improving statistical health records disaggregated by ethnicity, measuring the percentage

of indigenous communities that receive healthcare services, tracking the number of indigenous and non-indigenous healthcare practitioners, and monitoring the number, type, and enrolment figures of programs that are carried out by the CCSS.

13. Regarding gender and sexual diversity, the CCSS has adopted a new institutional framework for addressing gender inequality and allocating resources for health problems affecting women, such as gender-based discrimination, domestic violence, teenage pregnancy, and maternal health, among others. While the CCSS has a strong legal framework for addressing gender disparities, more effort needs to be exerted to ensure that the rights of the vulnerable groups population are observed and treated with confidentiality and respect by healthcare professionals.

14. Finally, about 300,000 immigrants (mostly Nicaraguans) are currently living in Costa Rica. While the *Ley de Migración y Extranjería*, N. º 8764 (2010) indicates that a special fund will be created to address the healthcare needs of this vulnerable group, it is unclear if the CCSS has taken any steps to comply with this mandate. Thus, the World Bank will work with the CCSS to elaborate a strategy to make sure that these funds are invested adequately to expand the coverage of services and satisfy the health needs of immigrants.

15. The CCSS has a number of tools for participation and citizen engagement but, in practice, many civil society organizations and vulnerable groups seem to lack confidence in the effectiveness of these tools and the responsiveness of the CCSS to feedback and complaints, which in part explains the high rates of legal claims and litigation. This Program is partly aimed at broadening and facilitating the flow of information and user feedback and finding ways to translate these into practical solutions that improve the quality and timeliness of the services provided.

16. Health Boards or "*Juntas de Salud*" can be relevant for discussion of some individual issues and foster community participation, particularly at the first and second level of care, but for broader issues or decisions at the policy level (which can lead to judicial processes) the CCSS needs to develop other spaces for dialogue and legitimization of its technical decisions. The CCSS should also proactively participate in the National Health Sector Council, the National Council on Indigenous Health, and other dialogue spaces that already exist to discuss national guidelines and health policies of groups with special needs, such as indigenous organizations, patient advocacy groups, people with disabilities and other vulnerable groups, etc.

17. Customer satisfaction surveys and patient complaint procedures are in place and gather feedback and information on the quality, timeliness, and effectiveness of the healthcare services provided by the CCSS. While these mechanisms do enable patients to voice their concerns and complaints, it is still unclear how they are translated into concrete solutions or in what way these will retrofit the provision of healthcare services. Furthermore, the format of many of these mechanisms might not be suitable for populations receiving differential health services—such as indigenous peoples —or might fail to capture their viewpoints, aspirations, and special needs. Thus, the World Bank will work with the CCSS to adapt or develop citizen engagement and feedback mechanisms for patients receiving specialized health care services (as is the case of the

indigenous population) that take into account their own governing and communication mechanisms.

18. On citizen engagement, feedback, and dialogue mechanisms the assessment recommends:
    - The program should support the engagement of CCSS in the National Council of the Health Sector. It should also establish a mechanism for engaging civil society on key policies on CCSS health care in general as well as medicine adoption policies relevant for key advocacy civil society organizations, patient organizations, and other vulnerable groups.
    - CCSS should revamp the complaint and redress mechanisms to reduce complaints that result in lawsuits or habeas corpus petitions filed by the Constitutional Court. Based on international best experience, it should also develop a communications strategy on key health care decisions, including the adoption or rejection of medications to be financed with public funds to ensure there is a process that can contribute to the legitimacy of these decisions.

19. CCSS could also partner with the Ministry of Health, other public and sector institutions, and other international organizations to expand work on health technology assessments that eventually may lead to developing an independent health technology assessment entity, composed of multidisciplinary professionals that may issue guidelines and train younger professionals on health technology assessment. The entity should have no conflict of interests with public or private entities and be independent of health care provider organizations. It could also be designed in international collaboration with high-level institutions such as the Pan American Health Organization or well-established entities such as National Institute for Health Care Excellence International from the United Kingdom.

20. On the special needs of indigenous and other vulnerable populations the assessment recommends:
    - CCSS should develop clearer strategies and guidelines to strengthen the implementation of its directive on non-discrimination of sexual and gender minorities (DRSS-0630-12), which should include an awareness campaign to counter prejudices and discriminatory behaviors and practices against vulnerable groups and the creation of dialogue spaces to understand and incorporate their views and concerns regarding health care access.
    - CCSS must strengthen the *Programa de Atención Diferenciada a Poblaciones Indígenas* with a definition of: (i) priority actions within the lifespan of the Program and the allocation of resources for the *Programa* and its coordination (which now exists only nominally); (ii) the establishment of specific monitoring and evaluation mechanisms for indigenous peoples' goals and targets; (iii) the implementation of an initiative of *Asistentes Indígenas Comunitarios* to provide primary health care and assist the work of the CCSS in communities with difficult access; (iv) the creation of training courses and awareness campaigns on the special needs and points of view of the indigenous population; (v) the promotion of spaces of dialogue and participation with indigenous communities (including the standardization of consultation processes); and (vi) the inclusion of ethnic variables in its health records and the

production of recurrent assessments on the status and evolution of indigenous peoples' health based on these data.

Consultations

21. During the development of the ESSA, meetings were held with Program stakeholders to discuss Program design and associated environmental and social aspects, potential environmental and social impacts, and the preliminary findings of the ESSA. Meetings included CCSS, an array of federal and governmental agencies such as the Ministry of Environment and Energy, the National Technical Environmental Secretariat, and the Department of Water under the Ministry of Environment and Energy and the Ministry of Health.

Stakeholder consultation on draft ESSA with CCSS and relevant stakeholders

22. Consultations on the draft ESSA were conducted in San Jose between the 25th and 28th of August 2015 over the course of several meetings and interviews with representatives of indigenous organizations, patients' advocacy groups, representatives of other vulnerable groups, representatives of the Government of Costa Rica (Ministry of Environment and Energy, National Technical Environmental Secretariat, Ministry of Health), the academic community, and CCSS staff. Two formal meetings were held on Wednesday August 25 and Thursday August 26, 2015 with Government representatives and representatives of IP organizations respectively. After the round of consultations, the WB team received written feedback from IP organizations and the National University.

23. The main findings of the consultations included:

- Regarding environmental aspects, the consulted organizations agreed with the assessment and recommendations made for the PAP. The general consensus was that the Environmental Unit of the CCSS should be strengthened and that clearer timelines should be defined.
- Regarding social issues, patients' advocacy groups pointed out that the CCSS lacks spaces for dialogue and engagement with civil society organizations on broader health care policy issues, in general, and decisions regarding medicines and specialized treatment in particular. Complaint and grievance redress mechanisms, for their part, do not seem to be working well or are not perceived as reliable by patients' groups. Patient organizations feel that there are severe problems of communications, not only regarding timeliness but also with regards to access to information, internal processes, and transparency in decision-making.
- Other organizations highlighted that the other vulnerable groups in Costa Rica remains vulnerable to a number of specific health risks, aggravated by discriminatory behaviors and practices. They often remain excluded from the health services because of the fear of discrimination, and in some cases they are even denied access. Guards and administrative personnel at the hospitals, but also health staff, lack training and understanding of gender and sex specific needs and health concerns.
- Regarding indigenous peoples, CCSS has a *Plan de Atención Diferenciada a la Población Indígena* (PADPI), but there still are important limitations in the health service provided in IP territories, and CCSS has very limited capacity to implement its own PADPI—evidenced by the fact that the IP Coordination has only one staff member (its coordinator). CCSS also needs to adapt its strategy of health care provision to the difficulties of access and to the demographic and cultural characteristics of the indigenous population in their territories. Also, CCSS needs to generate guidelines, protocols, and knowledge on issues pertaining to health care

provision in IP areas with respect to their own medical systems and practices. Free, Prior, and Informed Consent, and monitoring and grievance redress mechanisms, for their part, must be adapted and institutionalized, as IP do not currently have access to institutionalized mechanisms to voice their concerns and complaints or to partake in decision-making.

24. The ESSA was prepared incorporating comments and inputs from the consultations conducted by the ESSA team in Costa Rica. The final ESSA was disclosed on the CCSS website and the World Bank's public website (Infoshop) on January 6, 2016.

Annex 7: Program Action Plan

Action Description	DLI*	Covenant*	Due Date	Responsible Party	Completion Measurement**
Streamlining of administrative, logistic/procurement and financial processes and procedures, supported by an integrated information system that allows provision of real-time, comprehensive and consolidated financial, including the optimization of central level units	☐	☐	Y2/Y4/Y6	Finance Management Unit	Y2 - Streamlines processes approved Y4 - Information system implemented Y6 - Financial statements produced
Capacity building and training to CCSS staff as revised processes, with an increased strategic approach to procurement (including spent analysis, market analysis, strategic planning, framework contracts, etc.) and the new IT systems to be rolled out will require increased technology training.	☐	☐	Y4	Finance Management Unit	Training reports
Strengthen the CCSS's Environmental Management System	☐	☐	24 months after effectiveness	CCSS	Diagnostic of current environmental management Options proposed to improve CCSS Environmental, and Worker Health and Safety institutional management system/organization
Environmental and Health and Safety Information Management System (SIGA-CCSS)[47]	☐	☐	30 months after effectiveness	CCSS	SIGA system in place

[47] See the Project ESSA (section 8) for complete details, including all sub-actions, dates and measurement indicators

Updated Institutional Environmental Management Plan, which includes the list of projects and actions to meet the goals outlined in the Environmental and Occupational Health Management System, as well as the design and implementation of process indicators and results [48]			12 months after effectiveness 18 months after effectiveness	CCSS	Institutional Environmental Management Plan List of projects to improve environmental management
Revamp grievance and redress mechanisms; and open dialogue spaces with other Government actors and civil society. [49]	☐	☐	24 months after effectiveness	CCSS	Assessment and action plan to revamp grievance redress mechanisms approved by board; CCSS participating in National Council of the Health Sector, and dialogue spaces with patients' advocacy groups and VG groups created; communications strategy developed and in implementation.
Strengthen and implement the *Programa de Atención Diferenciada a Poblaciones Indígenas*	☐	☐	24 months after effectiveness	CCSS	Coordination staffed and with resources; priority actions established in consultation with IP communities; implementation underway and/or schedule established; *Asistentes Indígenas de Salud* trained and hired; training courses developed and in implementation; ethnic variable incorporated in health records.

Annex 8: Implementation Support Plan

[48] See the Project ESSA (section 8) for complete details, including all sub-actions, dates and measurement indicators
[49] See the Project ESSA (section 8) for complete details, including all sub-actions, dates and measurement indicators

1. This Implementation Support Plan is in line with the PforR operational guidelines. The Borrower is responsible for all PforR activities in support of achievement of the agreed DLIs, as well as of elimination of inefficiencies/bottlenecks identified in the technical, social, environment and fiduciary assessments. After World Bank approval (even before effectiveness), the World Bank will tailor implementation support to provide intensive hands-on just in time advice and convene experts for knowledge sharing of international best practices to ensure sound technical design and early achievement of key milestones upon which the key aspects of the impact of the program rely. Key areas for technical advice include:

- Update of central level oversight and improvement of hospital management model,
- Training in analysis of equity including household surveys and population level data gathering tools (family files) to improve quality and streamline digitalization process for Primary Health Care and building data pools.
- Progressive shifting from historical budgets towards use of prospective tools including morbidity risk adjusted capitation.

2. In particular, the Task Team will work with the CCSS and other key stakeholders in the following main areas:

- ***Monitoring and evaluation***: The Team will provide technical support for monitoring DLIs and verifying the achievement of DLIs in line with the agreed protocols. The Task Team will ensure that adequate internal quality control mechanisms are in place for accurate and trustworthy results reporting. In the event that DLIs are only partially achieved, the World Bank's Team will review the submitted documentation and request any other supporting information to verify the achievement of the reported DLIs (from CCSS). The World Bank will then communicate in writing the assessed level of achievement of the DLI, informing the CCSS regarding the level of financial proceeds for disbursement or partial disbursement for the respective DLI.

- ***Environment and social***: On environmental issues, the Team will focus on implementation of the environmental management system within the CCSS, the improvement of institutional coordination between the CCSS and the responsible environmental regulatory institutions, and waste water treatment. Regarding social issues, the Team will focus on the following main areas: (i) vulnerable populations; (ii) social inclusion and equity in access to healthcare services; and (iii) broadening and facilitating flow of information and user feedback on the quality of services.

- ***Fraud and corruption***: The Team will monitor implementation of fraud and corruption mitigation measures and will stay abreast of any developments that could potentially create conflict of interest, thus providing guidance in resolving any emerging issues or early prevention of fraud and corruption practices.

- ***Procurement:*** The Team will focus on the implementation of mitigation actions for the risks included in Annex 5 to ensure the continuous and sustainable development of the capacity of staff in procurement and contract management, as well as development of an adequate contract administration and monitoring system (including defining the process

and capacity needed, the evidence of contract performance with regard to time, quality and cost, inspection of quality of the goods and services delivered, timeliness of payment and effective contractual dispute resolution, as applicable, and enforcement of contractual remedies).

- ***Financial management***: The Team will focus its support on the following: (i) working towards the integration of processes and procedures; (ii) monitoring the regular PforR financial reports and audits; and (iii) preparation of a structured road map for the adoption of international standards to effectively support the strategic changes.

3. Key members of the World Bank's implementation support team (technical, fiduciary, monitoring and evaluation and social systems) are based in Washington, D.C. and will be available to provide timely implementation support.

Table 1: Main focus of Implementation Support

Time	Focus	Skills Needed	Resource Estimate
First eighteen months	Hospital management model, Population level data gathering tools (family files). Progressive shifting from historical budgets towards use of prospective tools including morbidity risk adjusted capitations.	Health Systems and hospital management; big data management and use of E-Health tools, health financing morbidity risk adjustment (health economics and Health financing).	Four missions, eight webinars with World Bank staff and international experts.
12 months to closing	Timely implementation of program action plan and elimination of bottlenecks for achievement of Program results.	Technical, social, monitoring and evaluation, fiduciary, environmental.	Regular mission every six months.
Mid-Term Review	Revisiting the Program design and making necessary adjustments based on the implementation progress and its likelihood to achieve the PDO within the project period.	Technical, fiduciary, social and environmental, monitoring and evaluation.	One mission expected during second half of 2019.

Table 2: Task Team Skills Mix Requirements for Implementation Support

Skills Needed	Number of Staff Weeks (per year)	Number of Trips (per year)	Comments
Task Team Leader	20	4 first year (then 3)	HQ based

Technical specialists	16	4 first year (then 2)	International
Operations Analyst	4	0	HQ based
Financial Management	4	4 first year (then 2)	HQ based
Procurement	0.5	0	HQ based
Social Management	1	1	HQ based
Environmental management	1	1	HQ-based

Role of Partners in Program implementation: N/A