

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

NICARAGUA

INTEGRATED HEALTH CARE NETWORKS

(NI-L1068)

LOAN PROPOSAL

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ELECTRONIC LINKS
Required <ol style="list-style-type: none">1. Annual work plan (AWP) (plan of activities for the first disbursement and the first 18 months of implementation) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=370584812. Monitoring and evaluation arrangements http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=370584863. Full procurement plan http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=370584994. Environmental and social management report (ESMR) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37058512 Optional <ol style="list-style-type: none">1. Study of costs and economic viability http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=370596822. Progress toward RIS-1 outputs and outcomes http://idbdocs.iadb.org/wsdocs/getdocument.aspx?DOCNUM=370790853. Safeguard Screening Form for the classification of projects (SSF) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37079190

ABBREVIATIONS

DALY	Disability-adjusted life years
ENDESA	Encuesta Demográfica y de Salud [Demographic and Health Survey]
EOC	Emergency obstetric care
ESMP	Environmental and social management plan
ESMR	Environmental and social management report
GCI-9	Ninth General Capital Increase
MINSA	Ministry of Health
MOSAFC	Modelo de Salud Familiar y Comunitaria [Family and Community Health Care Model]
PAAS	Plan de Acción Ambiental y Social [Environmental and Social Action Plan]
PMIS	Plan Maestro de Inversiones en Salud [Master Plan for Health Care Investment]
RIS-1	Integrated Health Care Networks, Stage 1
SILAIS	Sistemas Locales de Atención Integral en Salud [Local Comprehensive Health Care Systems]

PROJECT SUMMARY
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(NI-L1068)

Financial Terms and Conditions					
Borrower: Republic of Nicaragua Executing agency: Ministry of Health (MINSA)				FSO	OC
			Amortization period:	40 years	30 years
			Grace period:	40 years	5.5 years
Source	Amount US\$	Percentage	Disbursement period:	5 years	5 years
IDB: FSO	28,100,000	47%	Interest rate:	0.25%	SCF-Fixed
OC	28,100,000	47%	Inspection and supervision fee:	N/A	*
Local	3,554,220	6%	Credit fee:	N/A	*
Total	59,754,220	100%	Currency:	US\$	Single Currency Facility
Project at a Glance					
<p>Project objective: The program objective is to improve access to quality services, and thereby the health and well-being of the population, by contributing to the effective exercise of the right to health care. This will be achieved through further implementation of the clinical and management strategies developed in the first stage of the program and through local support for investment in the treatment capacity of public facilities using an integrated service network.</p>					
<p>Special contractual conditions precedent to the first disbursement: (i) approval, on terms satisfactory to the Bank, and entry into force of the program Operating Regulations (see paragraph 3.6); (ii) presentation of the chart of accounts for program accounting records in the Integrated Project Financial Management, Administration, and Audit System (SIGFAPRO) (see Annex III, page 2); and (iii) completion of the prior actions identified in the Environmental and Social Action Plan (PAAS) for the first disbursement (see paragraph 2.3).</p>					
<p>Special execution conditions: (i) each disbursement of component 1 resources subsequent to the first disbursement will be contingent upon meeting milestones on the critical path for component 1 (see paragraph 3.2); (ii) when requesting the Bank's nonobjection for rehabilitation, expansion, and new construction, the borrower will provide justification of progress on works construction as well as evidence that the environmental and social actions described in the environmental and social management report and in the program Operating Regulations have been completed (see paragraph 2.3); (iii) at the start of each year, the Ministry of Health (MINSA) will demonstrate that it has made resource arrangements and scheduled maintenance activities for the units delivered in prior calendar years (see paragraph 2.6); and (iv) MINSA will implement the other PAAS actions by the scheduled dates.</p>					
<p>Special considerations: For clarity and ownership of the expected outcomes of component 1, the disbursement of resources for component 1, except for the first disbursement, will be contingent upon meeting milestones on the critical path for component 1. These milestones will be suboutputs of the program, and will be established in the critical path agreed upon as part of the Operating Regulations, which for this component will replace the annual work plan required for the rest of the program. Disbursement requests will be supported by an itemized list of expenses incurred, which must conform to a predetermined list of eligible expenses but need not match the specific activities on the critical path, and of agreed milestones met.</p>					
<p>Exceptions to Bank policies: None.</p>					
<p>Project qualifies as: SEQ <input checked="" type="checkbox"/> PTI <input checked="" type="checkbox"/> Sector <input type="checkbox"/> Geographic <input checked="" type="checkbox"/> Headcount <input type="checkbox"/></p>					

* The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the applicable provisions of the Bank's policy on lending rate methodology for Ordinary Capital loans. In no case will the credit fee exceed 0.75% or the inspection and supervision fee exceed, in a given six-month period, the amount that would result from applying 1% to the loan amount divided by the number of six-month periods included in the original disbursement period.

I. DESCRIPTION AND RESULTS MONITORING

A. Background, problems to be addressed, and rationale

- 1.1 **Double epidemiological burden.** Nicaragua is in a process of epidemiological transition, so it faces a double disease burden: Even as the burden associated with perinatal conditions, nutritional deficiencies, and communicable diseases (Group 1), although declining, remains high, the burden stemming from an aging population and unhealthy lifestyles is now predominant and increasing rapidly.¹ Coexisting in some areas with high rates of child malnutrition, overweight and obesity are rapidly rising, especially among adult women, creating risk factors for cardiovascular disease, diabetes, and other degenerative conditions associated with overweight. Diabetes mortality has increased fivefold from 5.6 deaths per 100,000 people in 1990 to 28.5 in 2010.² The five leading causes of death illustrate this transition; they are, in descending order, cardiovascular disease, tumors, communicable diseases, external causes, and conditions during the perinatal period. Confronting this double burden requires promoting healthy lifestyles (with promotion and prevention efforts, as well as demand incentives), strengthening the health care system from the community level to the hospital level, and improving system management so that it can handle the often competing pressures on the responsiveness of health care services.
- 1.2 **Inequality, especially in mother and child health.** The epidemiological transition is not unfolding uniformly throughout the country. Group 1 diseases cause 13% of all deaths nationwide, whereas they account for over 20%, and as much as 30%, of mortality in the poorest areas (the Caribbean region and north-central Nicaragua).³ Child mortality declined from 42 per 1,000 live births in the 1993-1998 period to 29 in 2001-2006; with this, Nicaragua has met Millennium Development Goal 4.⁴ Yet neonatal mortality has not decreased in the last two Demographic and Health Surveys (ENDESA), and three fourths of all child mortality now occurs in the neonatal period. Maternal mortality has also declined, from 100 per 100,000 live births in 2001 to 67 in 2010, according to the Ministry of Health (MINSa). Aggregate data, however, conceal significant inequalities. The child mortality rate in rural areas is 34 per 1,000 live births, compared to 24 in urban areas;⁵ and the

¹ Latin American and Caribbean Demographic Centre (CELADE), in “Transición demográfica y epidemiológica en Nicaragua 2007” [Demographic transition and epidemiology in Nicaragua 2007]. Group 2 comprises chronic and degenerative diseases, and Group 3 comprises external causes.

² IDB, based on MINSa data, “Serie de defunciones 1990-2010” [Registry of deaths 1990-2010].

³ IDB, based on MINSa data, “Causas de defunciones por SILAIS” [Causes of death by local comprehensive health care system (SILAIS)], 2010.

⁴ Rajaratnam, J. K., et al. (2010). “Neonatal, postneonatal, childhood, and under-5 mortality for 187 countries.” *Lancet*, 375(9730).

⁵ National Development Information Institute (INIDE), ENDESA 2001 and 2006-2007. The 2011-2012 ENDESA survey will be available in February 2013. The 2006-2007 ENDESA survey is cited because data on demand and by levels of affluence are available only there, or when comparisons need to be made to previous surveys.

poorest quintile has a child mortality rate of 35 per 1,000 live births, compared to 19 in the most affluent quintile. Chronic malnutrition in children under 5 years of age in the poorest quintile was 35% in 2006-2007 (compared to 22% nationwide). More than 70% of all maternal deaths recorded by MINSA occur in rural areas, and the maternal mortality rate in the Local Comprehensive Health Care Systems (SILAIS) for the North Atlantic Autonomous Region averaged 194 deaths per 100,000 live births in 2009-2011, nearly three times the national average over the same three-year period. Organizing and prioritizing the health sector's response in light of these disparities is therefore at the heart any effort to impact inequality.

- 1.3 **Coverage gaps and deficiencies in quality.** A great deal of maternal and neonatal mortality is associated with persistent gaps in perinatal health care coverage in the poorest areas: In places where access is more limited, perinatal care is less available, and both mortality rates are consistently higher. In 2007 only 35.6% of all obstetric complications were treated at health care facilities offering emergency obstetric care (EOC),⁶ and, though such care is now more widely available, the eight SILAIS with the lowest rate of EOC availability per resident in 2011 were the ones where the maternal mortality rate was highest.⁷ Closing these coverage gaps is therefore closely tied to investment in capacity. To make an impact on final indicators, however, both the coverage and quality of care must be reach adequate levels, as evidenced by the fact that neonatal mortality has not decreased even as institutional childbirth coverage has increased significantly.⁸ The performance audit conducted for MINSA in eight of the 18 SILAIS in 2011 found that only 47% of the Basic Perinatal Medical History forms were completed to standard.⁹ Moreover, household surveys show that improving treatment, relevance, and wait times has a synergistic effect that fosters demand in addition to greater effectiveness; and that promoting the use of services is key to influencing behaviors as a primary determining factor of disease, especially for Group 2 and 3 conditions.
- 1.4 **Institutional response.** As part of the National Health Policy, in 2008 MINSA adopted the Family and Community Health Care Model (MOSAFC), which emphasizes promotion and prevention at the community level, ongoing assessment and risk evaluation of families (“dispensarización,” and expanded coverage of free essential health services, “giving priority to those most in need.” The MOSAFC promotes integrated networks and makes it a priority to restore treatment capacity

⁶ United Nations Fund for Population Activities (UNFPA), “Evaluación de cuidados obstétricos de emergencia” [Assessment of emergency obstetric care], 2008.

⁷ These are the SILAIS in the North Atlantic Autonomous Region (Puerto Cabezas and Las Minas), Jinotega, Matagalpa, the South Atlantic Autonomous Region, Río San Juan, Chontales, and Nueva Segovia.

⁸ Pérez, W. et al. (2011). “Tracking progress towards equitable child survival in a Nicaraguan community,” *BMC Public Health*, 11(1), 455.

⁹ GESAWORLD, MINSA performance audit, 2011 report.

at the local level, expanding the availability of EOC.¹⁰ MINSA is developing its Master Plan for Health Care Investment (PMIS), which will establish eligibility and prioritization criteria for investing in infrastructure with the aim of achieving integrated networks and improving the distribution of resources toward areas where they are currently lacking. For quality of care, MINSA is deploying initiatives such as the Childbirth Plan (Plan Parto),¹¹ aimed at greater community involvement in health care and improved continuity of care. Efforts to make health care more culturally appropriate and humane are ongoing: the Intercultural Health Initiative, to be consolidated in the fourth quarter of 2012, aims to raise awareness of multiculturalism among health care professionals, bring the MOFASC into line with the health care models of the autonomous regions, and integrate Western-style with traditional health care in communities where traditional care is preferred by the local population.

- 1.5 **Management and expenditure.** MINSA's expenditure as a percentage of GDP rose from 2.2% in 2001 to a peak of 4.1% in 2009 (and 3.8% in 2011), but due to the small size of the economy, this budgetary effort is part of an overall low level of spending, equivalent to US\$103 per capita.¹² With limited fiscal leeway for further increases in public spending on health care, MINSA's stewardship and management capabilities need strengthening to ensure that resources are used most efficiently. The MOFASC calls for improved management, particularly through the Social Agreements for Health and Welfare,¹³ and a cost-accounting policy was adopted in 2011 to tie physical progress to the budgetary effort, so as to enhance the quality of health care spending.
- 1.6 **Country strategy and the Ninth General Capital Increase (GCI-9).**¹⁴ One of the focus areas of the Bank's country strategy with Nicaragua 2008-2012 (document GN-2499) is development of a social welfare system and improvement, management, and coverage of basic social services. The proposed operation will directly contribute to the strategic line for sustainable improvement in the quality and coverage of health care services for the most vulnerable population, by contributing to the indicator of institutional childbirth coverage in line with the country's targets for reduced maternal and infant mortality. By investing in the treatment capacity to provide quality services known to be effective in reducing

¹⁰ Treatment capacity means having the infrastructure, equipment, and qualified personnel to provide the portfolio of services appropriate to each health unit's profile. MINSA, National Strategy for Sexual and Reproductive Health, Managua, 2008.

¹¹ Community organization to ensure timely transportation of pregnant women to a maternity waiting home and/or health unit for childbirth.

¹² MINSA, National health care accounting, 2009 (2012). According to the Economic Commission for Latin America and the Caribbean (ECLAC) (2011), the regional average is US\$545.

¹³ These are agreements setting forth production and quality targets for the public network, which strengthens the link between budget and outcomes.

¹⁴ IDB: Country strategy with Nicaragua 2008-2012 (document GN-2499). October 2008.

inequality, this operation is also aligned with the Strategy on Social Policy for Equity and Productivity (document GN-2588-4)¹⁵ called for in the GCI-9 report (document AB-2764), and will indirectly help make basic health and nutrition services accessible in line with the regional indicator pursued under that mandate, while providing support to a “small and vulnerable country.”

- 1.7 **Lessons learned in stage one of Integrated Health Care Networks.**¹⁶ In stage one of Integrated Health Care Networks (RIS-1), implemented in the SILAIS of the North Atlantic Autonomous Region, Jinotega and Matagalpa, MINSA laid the groundwork for integrated network management with initial implementation of more than 10 new instruments for monitoring quality and spending (see footnote 24). MINSA also updated and disseminated more than 20 protocols and strengthened its strategy for health promotion and prevention, with the help of new materials validated at the local level. This represents progress in quality, understood as continuity, compliance with standards, and relevance of health care, as reflected in the outcome indicators of RIS-1. Coverage of postnatal visits to women giving birth at health care facilities rose from 30% to 46%, and usage of the International Classification of Diseases in medical records increased from 38% to 75%. MINSA identified and began implementing the PMIS in the prioritized SILAIS.
- 1.8 Program supervision has confirmed the need to: (i) close coverage gaps in prioritized areas such as the three (now four)¹⁷ beneficiary SILAIS; (ii) continue improving quality; (iii) expanding treatment capacity in the service network where the largest gaps exist; and (iv) strengthening reforms to help target health care spending by encouraging the use of performance management and prioritization methods developed in RIS-1. As a result, in 2011 the Bank-financed investment portfolio was supplemented by the program to Improve Family and Community Health in Highly Vulnerable Municipios, which uses quality standards to provide incremental financing per person treated through a number of health care modalities known to be cost-effective; and to strengthen demand¹⁸ and the community platform through the first operation of the Mesoamerica Health Initiative 2015. Meanwhile, the series of programmatic policy-based loans, the first of which was approved in 2011 (loan

¹⁵ Strategy on Social Policy for Equity and Productivity (document GN-2588-4).

¹⁶ Resources for that operation (loan NI-L01014, 1897/BL-NI) are 69.4% disbursed, and 87% committed. It has two components for network management (to develop new tools and implement them in three pilot SILAIS, which will be expanded in component 1 of this operation) and one component for investment in infrastructure and development of the PMIS. A before-and-after evaluation is documenting achievements and showing that all milestones needed to trigger a second operation will be met in the fourth quarter of 2012 with the publication of the PMIS. The operation was developed under the previous country strategy, which is why this operation is being processed as a “stage,” not a “phase.” Optional link 2 shows the status of indicators from RIS-1.

¹⁷ The North Atlantic Autonomous Region is now served by two SILAIS: Las Minas and Puerto Cabezas.

¹⁸ That operation calls for issuing vouchers to cover the direct cost associated with the use of prenatal health care services, including maternity waiting homes.

- 2603/BL-NI), encourages improved spending and management by strengthening policies for targeting and monitoring spending and making it more efficient.
- 1.9 Lastly, implementation of RIS-1 was speedy in terms of investment, though it took longer to achieve the outputs related to management and quality, as these involved a host of activities carried out by various actors. This suggests the need for greater ownership of expected management-related macro-outputs, possibly through the use of an explicit, binding critical path (see paragraph 3.2).
- 1.10 **Complementarity with other donors.**¹⁹ Under the PMIS, MINSA hopes to secure external resources for investment in an organized manner. Capacity-building is supported with bilateral cooperation resources, though these contributions have fallen significantly since the international crisis. With support from the World Bank, MINSA is developing a program to expand the coverage of ongoing assessment and risk evaluation (“dispensarización”) and promotion using an approach similar to that of the Program to Improve Family and Community Health with regard to targeting (through indicators) and financing (per family receiving ongoing assessment and risk evaluation), but it benefits other SILAIS not served by this program.
- 1.11 **Alignment with evidence.** The program is aligned with evidence and international research²⁰ on cost-effectiveness, in view of its combined emphasis on quality and access. Specifically, the literature shows that the main elements of the program—strengthened integration between levels of the health network, ongoing management of risk factors through medical records, and primary-level capacity with emphasis on family and community health—led to reductions in child and maternal mortality, adult mortality due to chronic illness, and hospitalizations due to avoidable causes, according to studies in Brazil and Costa Rica.²¹ Noteworthy in the area of health promotion is the “Casa Materna” maternity waiting homes

¹⁹ When RIS-1 was being designed, MINSA was developing an sector-wide approach that included the Five-year Health Plan, initial costing of targets, and donor coordination mechanisms. Since 2009, MINSA has been governed by its Institutional Plan and the Medium-term Budget Framework, which reflect the guiding principles of the National Human Development Plan and have lessened the emphasis on costing targets for health care. The country systems have not undergone a review process to enable their use in Bank operations. Thus, this proposal does not call for pooling of resources with other sources.

²⁰ See Pan-American Health Organization, *Integrated health service delivery networks: concepts, policy options and a road map for implementation in the Americas*; World Health Organization, *Informe sobre la salud en el mundo, la atención primaria de salud: más necesaria que nunca* [The World Health Report, Primary health care: now more than ever]; and CHOICE Program, *Disease control priorities for developing countries-2*.

²¹ See Guanais F, Macinko J. 2009. “Primary care and avoidable hospitalizations: evidence from Brazil.” *J Ambul Care Manage*. Apr-Jun 32(2):115-22.; Rocha R, Soares RR. 2010. “Evaluating the impact of community-based health interventions: evidence from Brazil’s Family Health Program.” *Health Econ*. 19: 126-158.; Bixby LR. 2004. “Assessing the impact of health sector reform in Costa Rica through a quasi-experimental study.” *Rev Panam Salud Pública*. Feb 15(2):94-103.

strategy,²² which has proven successful in improving access to institutional childbirth for poor women in remote rural areas, with specific evidence for Nicaragua and other countries.²³

B. Objectives, components, beneficiaries, and cost

- 1.12 The program objective is to improve access to quality services, and thereby the health and well-being of the population, by contributing to the effective exercise of the right to health care. This will be achieved through further implementation of the clinical and management strategies developed in the first stage of the program and through local support for investment in the treatment capacity of public facilities using an integrated service network. Seven SILAIS (encompassing 65 municipios and an estimated 2.3 million people) were prioritized in view of their current unfavorable indicators of access and health and the fact that no other cooperation program is in place to benefit them. They are: (i) the same four SILAIS benefited by RIS-1, the Program to Improve Family and Community Health, and the first operation with resources from the Mesoamerica Health Initiative 2015 (see paragraph 1.7); and (ii) three additional SILAIS with low levels of access, whether due to their rural character (Río San Juan, Nueva Segovia) or rapid growth (Chinadega). In the Chinadega SILAIS, the risk factors for chronic and degenerative diseases have increased the most significantly, and rates of teenage pregnancy and sexually transmitted diseases are the highest in the country.
- 1.13 **Component 1: Strengthening of integrated network management in prioritized SILAIS (US\$5,044,703).** This component seeks to build the capacity of MINSA's network to meet to the population's health care needs by integrating its clinical and management levels. This component will deliver four macro-outputs consisting of implementation of the following in the seven prioritized SILAIS: (i) three clinical management strategies to ensure longitudinality of care (ongoing assessment and risk evaluation, referral/counter-referral, and medical records); (ii) tools for integrated network management; (iii) the intercultural health initiative; and (iv) a safe motherhood program. Financing will be provided in this component for technical assistance and provision of information technology, communication, and patient transportation equipment, as well as for logistical expenses and materials needed to validate standards and training of personnel and the community network, and incentives in kind for users of institutional perinatal services.

²² These are community shelters near a health care facility to house pregnant women from rural areas in the final weeks of pregnancy and the postnatal period, improving their access to such facilities. Inter-American Development Bank and World Bank, "Las CAM en Nicaragua" [Maternity waiting homes in Nicaragua], *Cuadernos de Género* 5, 2009.

²³ García Prado A., Cortez R.. "Maternity waiting homes and institutional birth in Nicaragua: policy options and strategic implications." *International Journal of Health Planning and Management*. 2011; Stekelenburg J., Kyanamina S., Mukelabai M., Wolffers I., van Roosmalen J. 2004. "Maternity waiting homes in rural districts in Africa; a cornerstone of safe motherhood?" *Trop Med Int Health* 9(3): 390-399.

- 1.14 Managing integrated networks entails using the tools developed in the RIS-1 program,²⁴ while the Intercultural Health Initiative will include actions to raise awareness among health care professionals of the worldview and culture of indigenous and Afrodescendant peoples and integrate traditional medicine into treatment protocols.²⁵ Lastly, the safe motherhood program will include a temporary initiative for incentives in kind for pregnant women reached in the four municipios with the highest maternal mortality rates,²⁶ for one pregnancy, to promote the use and appreciation of institutional perinatal services. Financing will also be provided to develop, implement, and evaluate a sustainability strategy for the maternity waiting homes, which will include developing technical and dissemination materials on the cost-effectiveness of this strategy and seeking partnerships with local governments, the private sector, and the cooperation sector to sponsor the maternity waiting homes.
- 1.15 **Component 2: Improvement of treatment capacity in prioritized networks (US\$45,174,250).** This component will finance 80 PMIS projects to support the service networks in the seven prioritized SILAIS. These projects entail rehabilitating one regional hospital and two departmental hospitals, building or rehabilitating 55 first-level units and 20 units in the community network (maternity waiting homes and housing units for personnel in remote municipios), and building the regional medical supply warehouse for the central region, which is critical to more-timely provisioning and response in the event of a disaster occurring in the region or affecting the central warehouse in Managua. Fifty-two percent of the infrastructure resources are allocated to rehabilitation, and 48% to construction; part of this construction work is to replace buildings that have reached the end of their life span. Thus, the net expansion of the network and additional staffing needs are limited, but treatment capacity will be improved by reactivating or introducing services currently underutilized due to their poor condition. The beneficiary units

²⁴ Technical standard for integrated networks, monitoring and evaluation guide, evaluation of Social Agreements for Health and Welfare, standard for technical councils, scorecard, and medical supply inventory system. In addition, other tools will be strengthened or updated, such as clinical protocols, tools for local management of human resources, a consolidated technical standard for logistical supply management, and new applications of the Health Care Information System to provide local support.

²⁵ An estimated 42 of the 65 municipios have concentrations of indigenous or Afrodescendant populations, totaling some 300,000 people. The initiative also calls for adapting, translating to Miskito and Mayangna, and copying material for health promotion at the community level (e.g., distribution and proper use of medication).

²⁶ These municipios are El Tortuguero, La Cruz de Río Grande, El Ayote, and Nueva Guinea (although, as part of the South Atlantic Autonomous Region, they are served by the Matagalpa SILAIS). None of these municipios is benefited by the Mesoamerica Health Initiative 2015. The approach also differs from that of the initiative, where vouchers are used to subsidize the cost of transportation to the service (economic barrier). In this case, the program seeks to use a temporary incentive (and additional improvements in quality) to encourage greater appreciation of services. The incentives consist of baskets of hygiene products for women and children, basic grains, and health-promotion materials, to be delivered at the time of the first timely prenatal checkup and the fourth checkup, delivery of the baby, and postnatal checkup. Nearly 12,000 pregnant women are expected to receive care within two years.

will be equipped to operate in accordance with their respective level in the network. To that end, this component prioritizes the same areas as component 1.²⁷ At the time the works are delivered, the beneficiary units must have the personnel required to provide the services appropriate to their profile. This is expected to be achieved primarily by relocating staff members in accordance with the new Health Care Career Policy.

1.16 Component 3. Administration, supervision, and evaluation (US\$1,670,035).

This component will finance the cost of administration, which will include rounding out the support team for technical monitoring of the program from MINSA's line structures, in particular the beneficiary SILAIS, technical assistance, and operating costs for monitoring and evaluation arrangements. This last item includes the engagement of independent consultants to conduct: (i) the quasi-experimental evaluation of the safe motherhood program, to rigorously document whether demand for family planning and institutional perinatal care services increased in the prioritized municipios (see paragraph 3.5); and (ii) a midterm and final evaluation (see paragraph 3.5). Table I.1 below shows the program's summary budget, including US\$3 million for contingencies and projected finance charges of US\$1.3 million.

Table I.1. Summary Budget

		IDB	%	Government of Nicaragua
1	Strengthening of integrated network management in prioritized SILAIS	5,044,703	9.0%	-
1.1	Longitudinality of care	2,298,500		
1.2	Integrated network management	545,660		
1.3	Cultural access to health care	250,000		
1.4	Safe motherhood program	1,950,543		
2	Improvement of treatment capacity in prioritized networks	45,174,250	80.4%	3,554,220
2.1	Construction of new infrastructure	16,665,000		
2.2	Rehabilitation of infrastructure	18,020,000		
2.3	Equipping of constructed units	8,155,000		
2.4	Social and environmental public consultations	100,000		
2.5	Supervision*	1,734,250		
2.6	Maintenance of infrastructure and equipment**			3,554,220
2.7	Strengthening of environmental and risk management	500,000		
3	Administration, supervision, and evaluation	1,670,035	3%	-
3.1	Technical assistance, administration, monitoring	995,035		
3.2	Evaluation	375,000		
3.3	Audit	300,000		
4	Finance charges	1,311,012	2.3%	***

²⁷ Unless MINSA identifies alternative financing for the pre-identified projects and frees up resources to finance other PMIS projects. In such case, the superseding projects must have the same degree of priority in the PMIS, the same profile (complexity), and the personnel in their intake areas must be performing activities of similar scope to those in component 1.

Table I.1. Summary Budget

		IDB	%	Government of Nicaragua
5	Contingencies	3,000,000	5.3%	-
5.1	Escalation	2,600,000		
5.2	Unforeseen expenses	400,000		
	TOTAL	56,200,000	100%	3,554,220
* Calculated as 5% of the amount for works		94.16%	100%	5.84%

** Calculated as 3% of the value of the infrastructure and equipment accumulated at the end of the preceding year.

*** The Ministry of Finance is using country resources to cover the credit fee, although this is not reflected in the program's financial statements. The interest is considered an expenditure eligible for financing with the loan proceeds.

C. Key results indicators

- 1.17 Table I.2 shows the outcomes and impact targets set in the [Results Matrix](#) (see Annex II). In addition to the vertical logic from expected outputs to outcomes, the components also exhibit horizontal logic by ensuring the comprehensive strengthening of networks, and therefore more effective interventions. Investment is better leveraged in networks with improved management and clinical capacities, and continuity and quality of care is strengthened when the capacity of the health care network is built at each level.

Table 1.2. Expected Impacts and Outcomes

Description	Baseline	Final target
Impacts		
<i>The indicators marked with an asterisk will be disaggregated by ethnicity and gender, whenever possible.</i>		
Teen birth rate* in prioritized SILAIS (source: MINSA, 2007-2009 average)	28.5%	22%
Hospitalization rate for diarrhea in children under 5* in prioritized SILAIS (per 1,000 children under 5, based on the discharged child's habitual residence)	7.8%	6.4%
Hospital discharge rate among patients* with hypertension in prioritized SILAIS (per 10,000 people)	10%	9%
Hospital discharge rate among patients* with diabetes in prioritized SILAIS (per 10,000 people)	11%	10%
Outcomes		
Percentage of births at health centers with beds or establishments with greater treatment capacity among mothers* in prioritized SILAIS	65%	75%
Percentage of pregnant women* in rural areas discharged from the maternity waiting home in prioritized SILAIS	20%	60%
Percent shortfall ²⁸ of key supplies for emergency obstetric care: anticonvulsants, antibiotics, oxytocics	5%	1%
Percentage of audited medical records showing satisfactory implementation of appropriate protocols in units of prioritized SILAIS	60%	68%

²⁸ MINSA's Logistical Management and Medical Supply System tracks this indicator, which measures the percentage of units in the network that show zero availability in the monthly measurement of a supply or group of supplies vis-à-vis all units in the network that should have the supply or supplies in stock.

II. FINANCING STRUCTURE AND RISKS

A. Financing instruments

- 2.1 The program is financed with a investment loan of US\$56.2 million, drawn in equal parts from the Single Currency Facility of the Bank's Ordinary Capital and the Fund for Special Operations. The Government of Nicaragua will provide an estimated US\$3.5 million from its general budget to maintain the investments financed by the program, recording this amount as a counterpart contribution, for a total program cost of US\$59.7 million.

B. Environmental and social safeguard risks

- 2.2 This operation is classified as category "B" under the Environment and Safeguards Compliance Policy (Operational Policy OP-703) since the potential adverse environmental impacts are localized and short-term, and the mitigation measures are well known and easily implemented. The most significant social and environmental risks identified for this operation involve the presence of environmental liabilities in the three hospitals identified for rehabilitation with program resources (the three most complex works). These liabilities relate to the handling of solid waste and discharges of hospital and general effluents; the inefficient use and poor quality of resources such as water and energy; failure to implement, or deficiencies in, the occupational health and safety plan; and inconsistent compliance with environmental licensing and/or permit requirements. Other potentially significant risks were identified for the hospitals' operational phase, including: (i) greater demand for energy and clean drinking water; (ii) discharges of hospital and general effluents; (iii) generation of residential and hazardous solid waste (sharps, bio-infectious substances, pharmaceuticals, and chemicals); (iv) greenhouse gas emissions from the climate control system; and (v) electrical power generators.
- 2.3 An Environmental and Social Action Plan (PAAS) with immediate corrective measures and actions to mitigate and prevent these environmental liabilities has been developed jointly with MINSA. **A condition precedent to the first disbursement will be completion of the prior actions identified in the PAAS for the first disbursement of the loan proceeds.** As a special execution condition, MINSA will implement the other PAAS actions by the scheduled dates. The PAAS includes actions to: (i) improve integrated solid waste management; (ii) evaluate and improve the disposal system for liquid effluents; (iii) design and implement a plan for internal management of the water supply; (iv) evaluate and manage matters related to environmental permits and regulations; (v) strengthen MINSA's Environmental and Social Management System; and (vi) develop a strategy and plan for holding public consultations to disseminate the environmental and social management plan (ESMP), which will be part of the Operating Regulations and therefore binding. Program component 2 includes a budget of US\$500,000 to strengthen environmental and risk management, including medium-term actions based on the ESMP. The findings of the environmental analysis are given in the

environmental and social management report (ESMR), which is attached to this document. As a special contractual condition, the borrower, when requesting the Bank's nonobjection for rehabilitation, expansion, and new construction, will provide evidence that the environmental and social actions described in the ESMR have been completed, as well as justification of progress on works construction. These provisions will also be included in the program Operating Regulations. The operation does not call for, nor anticipate, the resettlement of persons for any of the projects but, should this occur, the borrower will comply with the Bank's Operational Policy on Involuntary Resettlement (OP-710).

C. Fiduciary risks

- 2.4 MINSA, as the executing agency for Bank-financed operations, is subject to procurement supervision. The most recent reviews (May 2012) confirm that MINSA conducts procurement processes in a satisfactory manner. MINSA's capacity is being strengthened with external resources financed in part by the RIS-1 loan. This program provides opportunities to standardize specifications for projects with a similar profile and to take advantage of the thresholds for current operations, allowing goods and works procured through national competitive bidding and the competitive contracting of individual consultants to be subject to ex post review. A review of MINSA's financial capacity was conducted under the Institutional Capacity Assessment System (ICAS) in late 2010, and financial management reviews and external audit reports on operations in execution confirm that MINSA has a low level of financial management risk. Disbursements, therefore, will be subject to ex post review, and funds may be advanced to meet actual liquidity needs for periods of up to six months.

D. Other risks

- 2.5 **The safe motherhood program poses two main risks.** The incentives could have the perverse effect of encouraging pregnancies, and if the quality of services is low, especially in terms of how relevant and supportive they are, these incentives may not be enough to encourage the use of such services, much less sustained changes in behavior. These risks have been taken into consideration as follows: (i) the incentive will be offered for only one pregnancy; (ii) the total amount of the four incentives is comparable to the estimated direct cost for the patient to keep the appointments (cost of transportation, mainly), so the net income transfer would not be significant; (iii) information and communication actions for program recruitment and during the services will emphasize the prevention of early and multiple pregnancies and the spacing of pregnancies as the best strategies for safe motherhood; and (iv) to mitigate the risk that poor services may undermine the incentive effect, a prior investment will be made, and the content and quality of care will be closely monitored in the four municipios that will also benefit from the rest of the program.
- 2.6 **Economic viability and financial sustainability.** The economic analysis estimates that, given the emphasis in the Master Plan for Health Care Investment on

rehabilitating the existing network and expanding the availability of hospital beds by less than 7%, the investments' fiscal impact in terms of staffing costs will be limited, and certainly less than the increase in MINSA's budget as projected in its Medium-term Budget Framework.²⁹ One of the outputs of RIS-1 has been the methodology for programming maintenance needs, which calls for adding this to the indicators for the Social Agreements for Health and Welfare, and making local network maintenance a priority in planning and budgeting. In addition, MINSA began working with municipal governments in 2012 and reached an agreement with 130 (out of 153) municipalities for them to allocate 7.5% of the transfer they receive from the central government (set by law at 10% of the national budget) to MINSA in order to fund network maintenance. These resources totaled more than US\$1.5 million in 2012, more than double the projected annual amount needed to maintain the program works. As a special execution condition, at the start of each year, MINSA will demonstrate that it has made resource arrangements and scheduled maintenance activities for the works delivered in prior calendar years. Meanwhile, there is evidence that greater clinical and management capacity can foster a more efficient use of resources.³⁰ Although expenses and service production will initially increase with the net expansion of the network and promotion of demand, this will be mainly through outreach (maternity waiting homes), primary care (health posts, health centers, and primary care hospitals), and nonspecialized secondary care (departmental and regional hospitals; see paragraph 1.15) within integrated networks aimed at continuity of care. In this sense, investment in essential services is associated in the literature with greater cost-effectiveness than in interventions without continuity, whether promotion-related or specialized interventions. For the safe motherhood program, the incentives do not represent a recurring cost because they are limited to one pregnancy and will not be ongoing, since they seek to change behavior regarding the appreciation of institutional services. The analysis concludes, in its ex ante estimation of cost-effectiveness,³¹ that investment in clinical and management capacity and in infrastructure—by closing gaps in access for populations that depend on the public network, and by helping to improve the health of currently vulnerable populations—may yield health gains estimated at 407,953 disability-adjusted life years (DALY) for every five years of intervention, at an estimated cost of US\$146.47 per DALY gained.

²⁹ The Medium-term Budget Framework projects a 62% increase in MINSA's budget between 2011 and 2015 in current córdobas (MINSA, 2011), while staffing and supply costs related to net growth of the network are projected to rise an estimated 14% by the end of the program, accounting for 9% of the overall increase in the budget.

³⁰ Examples include the use of medications through timely prescriptions, rational distribution, and inventory control (promoted in component 1), although estimating these potential savings was beyond the scope of the analysis.

³¹ The analysis uses data on effectiveness (DALYs saved) and costs of various combinations of interventions, and at various levels of health care system development, gathered by the World Health Organization in the CHOICE program: www.who.int/choice.

This, when compared to other programs or to Nicaragua's GDP per capita, appears to be an affordable investment for the country.

III. IMPLEMENTATION AND ACTION PLAN

A. Summary of implementation arrangements

- 3.1 **Executing agency and disbursement period.** MINSA is the executing agency for the program. The disbursement period is five years, running from the effective date of the contract. MINSA has delegated general program coordination to its External Cooperation Directorate, with technical support to be provided by the general and specialized directorates involved in the program, specifically the Directorate for Expansion and Quality of Care, the Directorate for Monitoring Public Health, the Planning and Development Division, the Medical Supply Division, the Directorate of Physical Resources for Health Care, the Human Resources Division, and the Directorate of Regulation. These, along with the Administrative and Financial Division and the Procurement Directorate, comprise MINSA's Technical Council, which formulates recommendations for MINSA's senior leadership to consider. The Technical Council meets on a weekly and monthly basis, and its plenary session includes the leadership bodies of the 18 SILAIS. The Technical Council is the governing body for Bank-financed programs (in alignment with institutional provisions). The program Operating Regulations, which apply to all Bank-financed operations, also include mechanisms for the planning, notification, and implementation of the Technical Council's decisions by the general coordination area and by operational/fiduciary support areas.
- 3.2 For clarity and ownership of the expected outcomes of component 1, as a special execution condition, the disbursement of resources for component 1, except for the first disbursement, will be contingent upon meeting milestones on the critical path for component 1. These milestones will be suboutputs of the program.³² The critical path will establish the fixed number of disbursements and the milestones to be met in order to request them, as well as the initial financial projection, which will be agreed upon as part of the Operating Regulations and for this component will replace the annual work plan required for the rest of the program. Disbursement requests will be supported by an itemized list of expenses incurred, which must conform to a predetermined list of eligible expenses but need not match the specific activities on the critical path. Disbursement requests must be accompanied by evidence that the corresponding milestones have been met. For procurement processes, Bank policies will apply just as they do to operations now in execution, as detailed below.

³² Milestones may be "technical standard for ongoing assessment and risk evaluation amended and approved," "300 health care professionals serving the first 20 of the 65 prioritized municipios have received comprehensive training on the amended standard for referral and counter-referral," or "100 pregnant women in prioritized municipios recruited for the safe motherhood program." Identification of the critical path began during program orientation, which also helped to estimate the cost of the program.

- 3.3 **Procurement and financial management.** Program implementation will be based on a procurement plan managed through the Procurement Plan Execution System (SEPA) and governed by the “Policies for the procurement of works and goods financed by the Inter-American Development Bank” (document GN-2349-9) and the “Policies for the selection and contracting of consultants financed by the Inter-American Development Bank” (document GN-2350-9). The thresholds listed above will apply (see paragraph 2.4). Single-source contracting is planned for the continuation of services of the audit firm engaged in 2012 for the joint audit of financial statements on operations with financing from the Bank and Health Fund donor agencies. MINSA will use the SIGFAPRO country systems³³ for financial execution of the program and the SISCAE government procurement system to disseminate procurement procedures. For components 2 and 3, MINSA will receive advances in amounts sufficient to cover projected disbursements for up to the following six months, as set forth in the Financial Plan; two separate advances will be made for component 1 and for the rest of the program. The ex post review of disbursements will examine the eligibility of expenditures made with the loan proceeds in terms of whether: (i) they correspond to types of expenses predefined as eligible; and (ii) the SILAIS or municipio to which the expenditure relates is one of the seven prioritized SILAIS or 75 prioritized municipios. The financial audit will be conducted annually, with its scope agreed upon in view of the findings of the financial supervision (see paragraph 2.4).

B. Summary of arrangements for monitoring results

- 3.4 **Results matrix, critical path, and six-monthly reports.** MINSA will prepare a general six-monthly report that: (i) describes accomplishments and progress in terms of the program Results Matrix and, in particular, the critical path for component 1; (ii) reports on implementation progress of the annual work plan for the rest of the program; and (iii) highlights the priorities for the next six months and include an analysis of any deviations from programming and the corresponding update.
- 3.5 **Evaluation.** As described in the [“Monitoring and evaluation arrangements,”](#) the program evaluation will be independent and reflexive, with the exception of the safe motherhood program, for which a quasi-experimental design will be used to compare the use of institutional services before and after implementation of the incentives and compare a random representative sample of pregnant women from beneficiary municipios to a group of pregnant women selected randomly and through statistical matching from the populations of four additional municipios previously identified as having similar conditions in terms of health and access to services. The midterm evaluation of the program will be conducted five semesters after the program is declared eligible, and the final evaluation will be conducted four semesters later. The general objective of the evaluation is to document

³³ Module in the institutions of the Integrated Financial Management, Administrative, and Audit System (SIGFA).

program outcomes and impacts in accordance with the Results Matrix, verify the baselines identified during program preparation, and explore performance factors in greater depth. The evaluation will attempt to estimate the social return on investment and assess improvements in infrastructure versus the capabilities of health care personnel. The evaluations will use official statistics on morbidity and mortality in beneficiary municipios, reports and additional information provided by MINSA, and data gathered independently to corroborate the timeliness and accuracy of institutional records. Using the midterm evaluation report, MINSA and the Bank will agree on corrective actions or adjustments to the Results Matrix to help meet targets throughout the remainder of the operation. The final evaluation will document impact targets met, putting this into the context of lessons learned on factors influencing program performance. This final evaluation will be shared at completion of the program.

- 3.6 **A condition precedent to the first disbursement will be approval, on terms satisfactory to the Bank, and entry into force of the program Operating Regulations.** The Operating Regulations will be adjusted using the current regulations for all Bank-financed operations executed by MINSA.

Development Effectiveness Matrix			
Summary			
I. Strategic Alignment			
1. IDB Strategic Development Objectives	Aligned		
Lending Program	i) Lending to small and vulnerable countries; ii) Lending for poverty reduction and equity enhancement, and iii) Lending to support climate chance initiatives, renewable energy and environmental sustainability.		
Regional Development Goals	i) Gini coefficient of per capita household income inequality; ii) Maternal mortality ratio; iii) Infant mortality ratio, and iv) Incidence of waterborne diseases.		
Bank Output Contribution (as defined in Results Framework of IDB-9)	i) Individuals receiving a basic package of health services.		
2. Country Strategy Development Objectives	Aligned		
Country Strategy Results Matrix	GN-2499	Improve health services quality and coverage for the most vulnerable populations in a sustainable manner.	
Country Program Results Matrix	GN-2661-4	The operation is included in the 2012 Country Program Document.	
Relevance of this project to country development challenges (If not aligned to country strategy or country program)			
II. Development Outcomes - Evaluability	Highly Evaluable	Weight	Maximum Score
	9.4		10
3. Evidence-based Assessment & Solution	8.7	25%	10
4. Ex ante Economic Analysis	10.0	25%	10
5. Monitoring and Evaluation	9.1	25%	10
6. Risks & Mitigation Monitoring Matrix	10.0	25%	10
Overall risks rate = magnitude of risks*likelihood	Medium		
Environmental & social risk classification	B		
III. IDB's Role - Additionality			
The project relies on the use of country systems (VPC/PDP criteria)	Yes	Financial management: i) Budget; ii) Treasury; iii) Accounting and Reporting, and iv) Internal Audit. Procurement: i) Information system, and ii) Shopping method.	
The project uses another country system different from the ones above for implementing the program			
The IDB's involvement promotes improvements of the intended beneficiaries and/or public sector entity in the following dimensions:			
Gender Equality	Yes	The project incorporates an approach to promote women's health and their capacity to take decisions regarding their health and fertility.	
Labor			
Environment			
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project	Yes	Feasibility studies and project fiduciary support staff and environmental experts will be hired with non reimbursable TC in order to anticipate the preparation of bidding documents, as well as specific action plans to enhance environmental and risk management.	
The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the sector that were identified in the project document and/or in the evaluation plan.	Yes	Evaluation of the effectiveness of providing financial transfers to pregnant women in increasing institutional perinatal attention.	

The operation is an investment loan to the government of the Republic of Nicaragua for U.S. \$ 59,754,220, with funding from the Bank's Ordinary Capital (U.S. \$ 28.1 million), the Fund for Special Operations (U.S. \$ 28.1 million) and local counterpart (U.S. \$ 3,554,220). The project aims to improve the health and welfare of the poor, through improved access to quality health services.

The loan proposal presents a proper diagnosis. It identifies, based on empirical evidence, the double epidemiological burden faced by Nicaragua and the inequalities prevailing in the country in terms of health outcomes of the populations living in rural areas and pertaining to the lowest income quintile. The document proposes as possible causes of this problem existing gaps in coverage and low quality of health services, and provides relevant statistics to document this argument. The project aims to comprehensively address the factors associated with the problem, ranging from unhealthy lifestyles, to limited access to primary care and community services. The loan proposal has a solid vertical logic where policy options are directly related to the causal factors of the problems identified, namely, coverage and quality of health services in priority areas. The main document and its attachments present empirical evidence on the effectiveness of the proposed interventions, including some results from the operation's first stage.

The results matrix follows a solid vertical logic. Impacts, expected outcomes and outputs are clearly defined and the proposed indicators are SMART. The monitoring and evaluation mechanisms are properly planned and budgeted. The plan includes an impact evaluation study with a quasi-experimental design that will measure the effectiveness of financial incentives to women in terms of access and use of perinatal care institutional services. An ex-ante cost-effectiveness analysis of the project was performed based on reasonable assumptions.

The risk matrix identifies and describes the risks of the project. It proposes mitigation measures and includes indicators to measure their implementation.

RESULTS MATRIX

Project objective	To improve access to quality services , and thereby the health and well-being of the population, by contributing to the effective exercise of the right to health care. This will be achieved through implementation in the prioritized Local Comprehensive Health Care Systems (SILAIS) of the clinical and management strategies developed in the first stage of the program and through local support for investment in the treatment capacity of public facilities using an integrated service network.		
Impact indicators	Baseline	Final target	Comments
Teen birth rate* in prioritized SILAIS	28.5% (average: 2008, 2009, 2010. MINSA statistics)	22%	The target has been estimated on the basis of a projected acceleration by a factor of 1.5 of the historical rate of decline observed in the teen birth rate in the last 10 years (with available data, 1.483%). It is assumed that the historical rate of decline would continue without the intervention; a faster rate of decline is proposed because there will be a specific public health intervention in these SILAIS. However, because factors affecting teen pregnancy are only partially addressed (psychosocial factors are not directly addressed), the final target cannot be more ambitious. Source: MINSA statistics.
Hospitalization rate for diarrhea in children under 5* in prioritized SILAIS (per 1,000 children under 5, based on the discharged child's habitual residence)	7.8	6.4	Over the 2008-2011 period, this rate averaged 7.8 per 1,000 children age 5 (residing in the corresponding municipio). An 18% reduction to 6.4 per 1,000 children is proposed for the four years of the operation.
Hospital discharge rate among patients* with hypertension in prioritized SILAIS	10 per 10,000 people	9 per 10,000 people	This indicator should decrease in five years with improved management of chronic patients in their communities and the primary care network, although the intake of undiagnosed patients in the first year or two could cause an initial increase. Source: MINSA statistics.
Hospital discharge rate among patients* with diabetes in prioritized SILAIS	11 per 10,000 people	10 per 10,000 people	This indicator should decrease in five years with improved management of chronic patients in their communities and the primary care network, although the intake of undiagnosed patients in the first year or two could cause an initial increase. Source: MINSA statistics.

Final outcome indicators	Baseline in prioritized SILAIS	Midterm	Final target	Comments
Percentage of births at health centers with beds or establishments with greater treatment capacity among mothers* in prioritized SILAIS	55%	65%	75%	Indicator routinely reported by MINSA.
Percentage of pregnant women* in rural areas discharged from the maternity waiting home in prioritized SILAIS	20%	35%	60%	Source: MINSA, referral and counter-referral data.
Percent shortfall (0 months available in the network) of key supplies for emergency obstetric care: anticonvulsants, antibiotics, oxytocics: hydralazine 5 mg amp, magnesium sulfate, oxytocin 5 or 10 IU amp, ergometrine 0.2 mg amp, amoxicillin 500 mg oral tablet or capsule	5%	3%	1%	To identify the extent of shortfall of supplies in the network, and when ordering new supplies is urgent. (Codes with coverage = 0 x 100) / Selected codes SIGLIM: Monthly Record of Essential Logistic Data on Medical Supplies. Evaluated at pharmacies in health centers and units with high treatment capacity. In prioritized SILAIS.
Percentage of audited medical records showing satisfactory implementation of appropriate protocols in units of prioritized SILAIS	45%	60%	68%	Source: MINSA reports. The baseline is from the 2011 performance audit, data on prioritized SILAIS.
Incidence of postoperative infections at the three most complex beneficiary hospitals	ND; baseline to be set in 2013	10% decrease from baseline	20% decrease from baseline	No data on this indicator is currently reported. As part of the system being implemented to reduce risks to the safety of patients and health care personnel, data on such infections and on undesired effects of health care are beginning to be recorded and monitored. It is proposed to set a baseline in 2013, with a 10% decrease from the baseline by the midterm evaluation, and a 20% decrease by the final evaluation. The three hospitals in the sample will be the Matagalpa hospital, the Jinotega hospital, and the German-Nicaraguan hospital.

* The indicators marked with an asterisk will be disaggregated by gender and ethnicity, whenever applicable. When disaggregation by ethnicity is not possible, an estimate will be made on the basis of available ethnic data on the municipio used to build the indicator. The terms of reference for the program external evaluation (baseline, midterm, and final) will include provisions to: (i) secure data on the ethnic makeup of the beneficiary population; and (ii) document, or at least infer, impact and outcomes at the disaggregated level in accordance with the two variables of gender and ethnicity.

Outputs	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Final target	Comments
Component 1. Strengthening of integrated network management in prioritized SILAIS								Source for component indicators: MINSA reports.
Implementation of three strategies to ensure longitudinality of care in the 65 prioritized municipios (% progress)	0	15%	40%	60%	90%	95%	90%	Percentages are determined by multiplying the number of strategies implemented (ongoing assessment and risk evaluation, referral and counter-referral, and medical records) by the number of municipios where each strategy has been implemented (up to 30 of the universe of prioritized SILAIS). The 100% mark is attained when the three strategies are implemented in all 65 municipios.
Implementation of standards for integrated network management in the 65 prioritized municipios (% progress)	5%	15%	40%	70%	90%	95%	90%	Network management standards will be monitored for five factors: (i) an integrated network standard that includes upgrade of units, the service portfolio of each network, and human resources recruitment and continuing education; (ii) performance management (including the methodology of Social Agreements for Health and Welfare, and their evaluation, the technical councils, and human resource management by the SILAIS); (iii) provisioning management, including at least the scorecard, inventory management, and the introduction of Rational Use Committees; (iv) implementation of the Health Information System in the local network; and (v) ongoing update of clinical protocols. Percentages are determined in the same way as for output 1 (above), by monitoring implementation of a factor in its entirety and the number of municipios where it is implemented.
Implementation of intercultural health initiative in 42 prioritized municipios	5	15	25	30	42	42	42	Municipios where the initiative has been implemented are counted.
Pregnant women recruited to the safe motherhood program in the four prioritized rural municipios	0	2,000	5,000	5,000	0	0	12,000	The final target is cumulative (all beneficiary women throughout the program).
Maternity waiting homes incorporated in the sustainability strategy	0	7	10	15	23	27	27	Targets are cumulative (reflecting all maternity waiting homes in the program each year and at program-end).

Outputs	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Final target	Comments
Component 2. Improvement of treatment capacity in prioritized networks								Source for indicator: MINSA reports and works delivery certificates.
Projects of the Master Plan for Health Care Investment delivered in prioritized SILAIS	0	17	32	21	10	0	80	Final target is cumulative over all five years.
Component 3. Administration, supervision, and evaluation								Source for component indicators: MINSA semiannual reports.
Midterm and final evaluation reports	0	1	1		1		3	Delivery of reports and their compliance with the agreed terms of reference will be verified in terms of the program's progress, outcomes, and impacts; in particular, verification of the baseline, the intermediate outcomes and outputs, and the final outputs, outcomes, and impacts for the entire program.
Evaluation reports on safe motherhood program	0	1	0	0	1		2	Delivery of reports and their compliance with the terms of reference will be verified in terms of establishing the baseline for indicators of perinatal care coverage, and in the final evaluation report, indicators will be contrasted between municipios served and comparison municipios, as well as supplemental assessments on barriers to access to these services.
Audit of program financial statements	0		1	1	1		5	Verification of the delivery of reports with the corresponding opinions on the reliability of financial statements, the soundness of accounting and financial records, and the program's internal controls.

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Country: Nicaragua

Project number: NI-L1068

Name: Integrated Health Care Networks

Executing agency: Ministry of Health (MINSa)

Prepared by: Brenda M. Álvarez Junco, Procurement Specialist (FMP/CNI), and Juan Carlos Lazo, Senior Financial Management Specialist (FMP/CNI).

I. Executive summary

1. The assessment of fiduciary management was based on the findings of fiduciary supervision of procurement on operations executed by MINSa.
2. In view of the evaluation of the national public procurement system, using the OECD/DAC methodology and acting through its External Cooperation Directorate, the government has developed a strategic plan to modernize its procurement system. The Bank is currently working in coordination with the Ministry of Finance to achieve this objective. As detailed below, MINSa has strengthened its procurement-related fiduciary management after adopting recommendations from other Bank-financed operations (loans 1897/BL-NI and 2527/BL-NI).
 - The executing agency has gained experience in financial management, and its performance in recent Bank-financed operations has been acceptable. Still, specific training efforts will be made to achieve certain control-related improvements and to ensure that disbursements continue to be subject to ex post reviews.
3. The project does not include financing from other multilateral agencies.

II. Fiduciary context of the executing agency

MINSa's procurement division manages all of its required procurement processes, with the exception of market-value procurement processes financed with national resources, which are managed in a decentralized manner by local SILAIS and hospitals. The executing agency must ensure that balance is maintained between management capacity and work load. The profiles and technical skills of the personnel responsible for the operation's procurement processes are appropriate to its degree of complexity.

In financial management, MINSa has gained experience in executing Bank projects. It uses the Integrated Project Financial Management, Administration, and Audit System (SIGFAPRO) as a Bank-accredited country system used nationwide. Its performance

has been acceptable, although it needs strengthening in some minor respects to improve internal control management, as identified by the Institutional Capacity Assessment System (ICAS) review.

III. Fiduciary risk evaluation and mitigation measures

MINSA has a medium level of risk, and the findings of recent ex post reviews of its execution have been satisfactory. As this is the second part of the Integrated Health Care Networks program, the proposed management approach calls for expanding the program to new SILAIS. It will therefore be critical to maintain the degree of coordination achieved in the first part of the program with regard to fiduciary management of procurement processes. MINSA must ensure that all procedures are held to the same standard of quality. To that end, the use of Bank-prepared procurement guides should be promoted, market surveys conducted, and the procurement plan kept up to date. In addition to these recommendations, MINSA plans to strengthen its procurement area by hiring two additional specialists.

Other risks found in relation to minor financial aspects are a lack of dissemination of manuals of financial management procedures and the lack of a plan to replace personnel in the event of temporary absences, which leaves the organization vulnerable in such situations. These considerations have been reviewed in light of the ICAS assessment, and related actions are included among the strengthening measures agreed upon between the executing agency and the Bank.

The overall fiduciary risk for the project is regarded as low.

IV. Considerations for the Special Provisions of the contracts

To facilitate contract negotiation by the project team, and particularly by LEG, the agreements and requirements to be reflected in the Special Provisions are given below:

- a. The Finance Sector recommends the following conditions precedent to the first disbursement: (i) preparation of the program Operating Regulations and their approval by the Bank; and (ii) presentation of the chart of accounts for program accounting records in the Integrated Project Financial Management, Administration, and Audit System (SIGFAPRO). The executing agency's fiduciary structure, as described in the Operating Regulations, should be in place at the start of the operation.
- b. It is recommended that the operation use the exchange rate in effect in Nicaragua on the date on which resources were converted from foreign currency to córdobas by the executing agency.
- c. Annual financial statements audited by a Bank-eligible independent auditing firm will be delivered no later than 120 days after the close of each fiscal year and after the date of the last disbursement.

V. Agreements and requirements for procurement execution

The fiduciary agreements and requirements for procurement establish the provisions applicable to all program procurements.

1. Procurement execution

Program procurements with IDB resources will be conducted in accordance with the policies established in documents GN-2349-9 and GN-2350-9, and executed under the responsibility of the MINSA central unit.

- Procurement of works, goods, and nonconsulting services. Contracts for works, goods, and nonconsulting services¹ generated under the program and subject to international competitive bidding (ICB) will be procured using the Bank's standard bidding documents (SBDs). Bidding processes subject to national competitive bidding (NCB) will be executed using national bidding documents agreed upon with the Bank. The program's sector specialist is responsible for reviewing the technical specifications for procurements during preparation of the procurement processes.
- Selection and contracting of consultants. Contracts for consulting services generated under the project will be procured using the standard request for proposals (SRP) issued by, or agreed upon with, the Bank. The program's sector specialist is responsible for reviewing the terms of reference for the contracting of consulting services.
- Selection of individual consultants will be based on a comparison of the qualifications of at least three candidates to perform the work. The program's sector specialist is responsible for reviewing the terms of reference for the contracting of consulting services.

Recurring expenditures include the equipment, office supplies, transportation, and operating expenses to be financed by the program within the annual budget approved by the Bank, which will be procured in accordance with the executing agency's administrative procedures. These procedures will be subject to prior review and agreement with the Bank. The maximum amount for these expenses is US\$75,000 over the life of the project.

¹ "Policies for the procurement of goods and works financed by the Inter-American Development Bank" (document [GN-2349-9](#)), paragraph 1.1: Nonconsulting services are treated as goods.

2. Table of threshold amounts (US\$000s)

Category	Amount (US\$000s)	Procurement method	Bank review
Works	$\geq 1,500$	ICB	Ex ante
	$< 1,500 \geq 150$	NCB	Ex post Except for hospital remodeling or construction
	< 150	Shopping	Ex post
Goods	≥ 150	ICB	Prior
	$\leq 150 > 25$	NCB	Ex post
	≤ 25	Shopping	Ex post
Nonconsulting services	> 150	ICB	Ex ante
	$\leq 150 > 25$	NCB	Ex post
	≤ 25	Shopping	Ex post
Consulting firms	> 200	International short list	Ex ante
	≤ 200	National short list	
Individual consultants	See Section V of document GN-2350-9.		Ex post

Note: The thresholds for ex post review are based on the executing agency's fiduciary capacity for execution, and may be modified by the Bank to the extent that such capacity changes.

3. Main procurements

MINSA's central procurement unit will be responsible for preparing the procurement plan. The main procurement processes for this operation are:

Main procurements

Activity	Procurement method	Estimated date	Estimated amount (US\$000s)
Goods			
Equipment to rehabilitate regional hospital	ICB	July 2013	1,300
Equipment to rehabilitate departamental hospital	ICB	July 2013	300
Works			
Rehabilitation of regional hospital	ICB	July 2013	4,000
Rehabilitation of departamental hospital	ICB	July 2013	2,000
Construction of primary hospital	ICB	April 2013	3,500
Expansion of former health center with beds to primary hospital	ICB	April 2013	1,800
Construction of health center	NCB	April 2013	1,000
Nonconsulting services			
Workshop on framework for integrated networks	NCB	January 2013	647
Firms²			
Program audit	QCBS		40

² For consulting services, this means a short list comprising firms of different nationalities. See "Policies for the selection and contracting of consultants financed by the Inter-American Development Bank" (document GN-2350-9), paragraph 2.6.

Activity	Procurement method	Estimated date	Estimated amount (US\$000s)
Individuals			
Technical personnel specializing in referrals and counter-referrals	NICQ	January 2013	450
Technical personnel specializing in cultural access to health care	NICQ	January 2013	600
Technical personnel specializing in community-level training and promotion activities	NICQ	January 2013	1,233
Technical personnel specializing in documentation of strategy for maternity waiting homes	NICQ	January 2013	840

* For the 18-month procurement plan, click here: [PAC](#).

4. Procurement supervision

Ex post reviews will be conducted every six months in accordance with the project supervision plan. Reports on ex post reviews will include at least one physical inspection visit,³ chosen from among the procurement processes subject to ex post review.

5. Special provisions

Measures to reduce the likelihood of corruption. Compliance with the provisions of documents GN-2349-9 and GN-2350-9 on prohibited practices and ineligibility of companies and individuals.

Unification of thresholds. At the request of the executing agency, for the procurement of goods that are in stock, easy to obtain, with standard specifications, and low-cost, or for simple low-cost civil works, the Project Team Leader, with the technical opinion of the Procurement Specialist, may authorize MINSA to use the shopping method for procurement processes with an estimated amount above the corresponding threshold, within the range of US\$25,000 to US\$150,000. This is in compliance with the corresponding tables of authority (Operations Administration Manual, Sections OA-420 and OA-421), which grant the Project Team Leader the authority to waive contractual conditions and to make procurement-related decisions in accordance with the Procurement Function Operational Guidelines (document OP-272-2).

6. Records and files

Each procurement unit will be responsible for procurement record-keeping and management, and will designate an individual responsible for this activity, have a specific area for document safekeeping, and ensure that documentary evidence of payments made to suppliers and contractors is recorded. Physical files must be kept for a period of three years.

Financial management

1. Financial management system

For financial management, the operation will use the SIGFA and SIGFA-PRO as its financial/accounting system. In the event of any change or upgrade in the project

³ The inspection will verify the existence of the procurements, leaving the sector specialist to verify quality and compliance with specifications.

management module of these systems, it is assumed that the operation would also migrate to the change or upgrade.

2. Financial reports

Annual audited financial statements will be required in accordance with the Bank's guidelines and policies (document OP-273-2 and the policy on financial reports and external audit of Bank-financed operations). To generate efficiencies, effort will be made to provide continuity in the use of the independent audit firm currently working with the executing agency, provided that the technical quality of its work remains acceptable to the Bank.

3. Disbursements and cash flow

The operation will receive funds through an APEX account at the central bank. Two accounts will be used to manage the funds of the operation: one for the component to improve the treatment capacity of prioritized networks, and the other for the remaining components. The advance of funds modality will be used to cover liquidity needs for the following six months. Separate accounts are being used to ensure smooth execution, as it may take longer to meet accountability requirements for component 2 than for the other components. The Bank may increase the amount of the advance, once justification has been provided for at least 80% of the funds advanced for component 1.

4. Internal control and internal audit

The executing agency has an internal audit unit and established mechanisms to maintain an acceptable internal control environment. In practice, however, these mechanisms are not fully used, so the Bank does not rely on them for supervision.

5. External control and reports

Reporting requirements will be similar to those of previous operations with this executing agency.

1. To generate efficiencies, effort will be made to provide continuity in the use of the independent audit firm currently working with the executing agency, provided that the technical quality of its work remains acceptable to the Bank.
2. The terms of reference for the independent audit firm will include visits for ex post supervision of disbursements.
3. The projected cost of the auditing services will be US\$250,000 to US\$300,000.

6. Financial supervision plan

Because the executing agency's fiduciary risk in financial management is regarded as low, supervision will be limited to the audited financial statements and the Bank's visit for ex post review of disbursements.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/12

Nicaragua. Loan ____/BL-NI to the Republic of Nicaragua
Integrated Health Care Networks

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Republic of Nicaragua, as Borrower, for the purpose of granting it a financing to cooperate in the execution of a program for integrated health care networks. Such financing will be for the amount of up to US\$28,100,000 from the resources of the Single Currency Facility of the Bank's Ordinary Capital, corresponds to a parallel loan within the framework of the multilateral debt relief and concessional finance reform of the Bank, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on _____, 2012)

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NI-L1068

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(Adopted on _____, 2012)

LEG/SGO/CID/IDBDOCS#37077230
NI-L1068