FuturasGeneraciones / Perú

estudiando, demostrando y enseñando el desarrollo de comunidades

Cost-Efficiency of

CLAS Associations

for Primary Health Care in Peru

Laura C. Altobelli Ana Sovero U.

December 2, 2004

Modified English version May 24, 2006

This study was made possible by financing from the Mulago Foundation and the British Department for International Development (DFID).

Futuras Generaciones / Perú

Study of Cost-Efficiency of CLAS Associations for Primary Health Care in Peru

Laura C. Altobelli y Ana Sovero Utrilla

Rights reserved:

Futuras Generaciones / Perú Av. Prolongación Primavera 2159 - 2397 Santiago de Surco, Lima 33 Teléfono: (511) 436-9619 / 436-9623 peru@future.org www.future.org

ACRONYMS

APP	Preventive-promotional activity
	(Atención Preventiva-Promocional)
ATC	Curative health care activity
	(Atención)
CLAS	Local Community Association for Health Administration
	(Asociación Comunidad Local de Administración de Salud)
D.L.	Law Decree
	(Decreto Ley)
DISA	Regional Health Directorate
	(Dirección de Salud)
DIRESA	Regional Health Directorate
	(Dirección Regional de Salud)
GOP	Government of Peru
HIS	Health Information System
MEF	Ministry of Economy and Finance
MOH	Ministry of Health
	(Ministerio de Salud)
PAAG	Management Administration Program
	(Programa de Administración de Acuerdos de Gestión)
PAC	Shared Administration Program
	(Programa de Administración Compartida)
RDR	Directly collected revenues
	(Recursos directamente recaudados)
SIS	Integrated Health Insurance Program
	(Seguro Integral de Salud)

I. Introduction

II. Background and Justification

Since 1994, the Ministry of Health (MOH) of Peru has implemented the Shared Administration Program (SAP) as a means to improve management of primary health care services with the involvement of organized community groups. The program works on the basis of a legal contract signed by the respective Regional Health Office (DISA) of the MOH and the private non-profit organizations called CLAS Associations (Local Community Associations for Health Administration), which are composed of six elected members of the communities served by the health facility. The seventh member of a CLAS Association (or CLAS) is the medical chief of the health facility.

The legal framework of SAP includes a set of norms and regulations that affect three levels: the central MOH, DISA Offices of the MOH, and CLAS Associations. Legal dispositions are divided into two groups: specific public sector norms which are issued by the government and the Ministry of Health (Decrees, Ministerial Resolutions, and others) that refer exclusively to SAP, and general norms that apply to any private legal entity in the country (tax law, labor law, and others). Legal issues constitute one of four major aspects of the functional model under which CLAS operate: others aspects involve administration and accounting procedures, technical health issues, and processes for community participation

CLAS-managed health facilities are run under the same group of health-related norms that guide other non-CLAS health facilities of the Ministry of Health. The two types of facilities differ in that CLAS have improved systems for human resources and financial management. Human resources are contracted under the law D.L. 728 on private sector labor contracts or agreements. CLAS sign private sector contracts with health personnel, and therefore maintain social control over personnel performance. Financial management of primary health care also differs radically in CLAS. Each CLAS has a private commercial bank account into which public funds are transferred for use by the CLAS to pay health personnel salaries. CLAS also get to maintain control over selfgenerated income from fees-for-services or from Integrated Health Insurance (SIS) Program reimbursements. These funds are used at the discretion of CLAS to hire more personnel, purchase equipment or supplies and make improvements in the health facility, or for any other use that improves the quality of services provided to the The SAP Program provides that the Local Health Plan (PSL) that forms population. the basis of the Shared Administration Contract should incorporate the community's opinion on priorities. The community should also participate in monitoring completion of the agreed goals for health and development, which ensures a better fit of interventions with the real needs of the population. The PSL is an instrument of community development that should articulate intersectoral support to the community in a framework of the local district or provincial development plan. The PSL should not be only an instrument for programming health care consultations and services.

The SAP began as a pilot in 13 primary care facilities in two departments (Ayacucho and Ica) and has expanded now to over 2100, or 35%, of all 6700 health centres and health posts in the country. Evaluations show that CLAS perform better than non-

CLAS primary care services on issues of quality of care and equity.^{1,2} At the same time, it has been observed that CLAS has not been managed in the same way by all the DISA Offices. Inadequate support and monitoring from that level to CLAS likely originates in the lack of a clear policy to that effect by the Ministry of Health.

A clearer mandate to DISA Offices undoubtedly will result in greater support to CLAS and to the development of a more effective system working jointly with communities who benefit from public services. Better ways to articulate health management networks and micro-networks with the CLAS model are required in the context of the decentralization process with community participation, based on successful pilot experiences in the country which shed light on the positive relationship that can be achieved through a demand-based approach between CLAS and local municipalities and other public and private institutions.

A little-known fact in the Ministry of Health of today is that the Maternal-Child Health Insurance (SMI) Program, the predecessor of the Integrated Health Insurance (SIS) program, was designed in 1998 on the basis of the CLAS management model. This was due to the financing structure offered by the CLAS model which provides for sending insurance reimbursements directly to the CLAS bank account at the primary level of care, ensuring an efficient operation of the insurance system. Since non-CLAS health facilities cannot receive direct reimbursement, when the time came to expand the SIS program nationally it was necessary to devise a way to administer reimbursements through the DISA Office for the non-CLAS. Consequently, there are now serious problems with proper distribution of reimbursements through regional DISA office administration.

A recent proposal for a payment system^a at the primary level of care considers that CLAS provides a decentralized environment that would work well as an organized financing system with social control by the community to ensure accountability. The proposal considered that SIS would be the primary source of financing, and the health management network center ("gerencia de red" in the current Peruvian health system governing the primary level of care) would coordinate this financing with all facilities within its network.³

To provide further empirical evidence of PAC's and CLAS's management model contribution to the health sector, a study compared the two systems from the financing and service provision viewpoints and thus evaluate the establishments' efficiency at the first level of health care. The study was designed and carried out by Future Generations Peru with financial support from Mulago foundation and DFID/British Council.

II. Objective of the Study

The study's main objective was to determine coverage and cost levels of health services at the primary care level by comparing CLAS versus non-CLAS data.

III. Methodology

^a Called the Ambulatory Payment Innovation (API), Partners for Health Reform Plus, Abt Associates, Inc. 2002.

This study establishes the financial and service supply framework for the Shared Administration Program (*Programa de Administración Compartida*-PAC) as a function of: (1) amounts and sources of revenues and expenses at the health centers and posts; (2) health services production, including comprehensive health insurance (*Seguro Integral de Salud*-SIS) coverage; and (3) their relationship with the changes and adjustments in MINSA and PAC's funding policies from 2000 to 2003-I.

Data for the CLAS facilities was gathered from existing records for the whole period between 2000 and the first quarter of 2003 (2003-I). In addition, non-CLAS data was gathered for the entire 2002 year for the Directly Collected Revenues (RDR) and transfers of goods and services. No data is available for non-CLAS facilities on the amount spent on personnel salaries or remunerations, due to the fragmentation of personnel hiring regimens and the lack of a centralized reporting system for personnel costs. Therefore it was not possible to compare personnel costs between CLAS and non-CLAS health facilities that would have allowed a more complete cost analysis.

Unit of analysis: This was established at the primary health care facilities and classified as: (1) **CLAS** – those establishments managed by a CLAS Association, and (2) **Non-CLAS** – that are staffed either by personnel hired on a Service Contract basis under the Basic Health for All Program or by permanent health staff on the government payroll. Both are run by the Management Administration Program (Programa de Administración de Acuerdos de Gestión - PAAG) under the Ministry of Health. In addition, both programs include payroll staff.

Coverage and data: Information was collected at DIRESA level in three departments, i.e. Cuzco, Huanuco and La Libertad in close cooperation with the respective DIRESA, i.e. senior management and the corresponding technical-administrative departments, including their economics, statistics and shared administration bureaus.

Number of establishments included by coverage area: All (100%) facilities at the primary attention level in the three DIRESA's were surveyed by urban and rural location.

	Rural	Urban	Total
CLAS	142	58	200
NO CLAS	285	189	474

Data categories in the three areas:

- For all CLAS facilities from 2000 to 2003-I:
 - Salary transfers to CLAS
 - Goods and service transfers
 - SIS refunds (independent revenue)
 - Independent resources (independent revenue)
- For all CLAS and Non-CLAS facilities from 2002:
 - Goods and service transfers
 - SIS refunds (independent revenue)
 - Other income from fees-for-services (independent revenue)

- For all CLAS and Non-CLAS facilities from 2000 to 2003-I:
 - Health care service activity (ATC) and prevention-promotion activity (APP) reported by each facility (Health Information System)
 - Total population within each area's jurisdiction
 - Population of pregnant women, 0 to 4 children and 5 to 17 children in each health establishment's jurisdiction in the three areas.
- Health facility classification:
 - Department
 - Urban/Rural location
 - Old/New status (only CLAS facilities)
 - Aggregate/Individual (only CLAS facilities)

IV. Preliminary Considerations

The dispersion of financial data reporting and archives created some difficulties in data gathering. Funds are transferred to CLAS bank accounts through several channels. First, the Ministry of Health PAAG office transfers funds to CLAS to pay salaries of CLAS personnel. Secondly, CLAS receive transfers from the SIS Health Insurance Program office for SIS reimbursements. The former National Programs for maternal and child health finance costs for program operations, passing money through PAAG administrative offices to DIRESA encumbered accounts. These funds are not deposited in CLAS bank accounts, rather the funds are Through PAAG, outsourced operating expenses not included in CLAS accounts or the providing units. Instead, these expenses are paid through networks or micronetworks, by reporting expenses as per diems of DIRESA personnel, expense reports or as deliveries of office supplies or food to network and micro network program coordinators. DIRESAs get funding through their respective Regional Governments. They generally use these funds to pay current expenses at their headquarters and hospitals, with only a very small amount remaining for fuel and food expenses for the network or micronetwork management centers. These fund transfers take place three times a year at best. In addition, DIRESAs get other revenues created by non-CLAS establishments (hospitals that are not implementing units, or health centers and posts) and from international technical cooperation donations. DIRESAs mostly use these resources for training, DIRESA officials' travel expenses, for network directors wages and, only to a small degree, on primary care establishments. SIS refunds should flow directly through DIRESAs to CLAS. However, since the refunded amount is subject to occasional discretionary decisions by DIRESA, these refunds may eventually be used for other purposes. SIS refunds created by non-CLAS are entirely managed by DIRESAs.

In other words, DIRESAs are funded by transfers from the GOP Treasury or External Cooperation through the existing regions; independent revenues; cash transfers and goods sent by several Ministry of Health's departments from Lima, and through investments in works directly undertaken by the Regional Governments. Almost 60% of the region's budget is spent on wages. The balance is used in paying current expenses and productivity bonuses for payroll staff. These may also be paid for from the independent revenues created by the establishments' collections. In sum, funding allocated by Treasury for primary health care service supply is barely used for this identified goal.

From this standpoint, CLASs enjoy more freedom because they can use the funds they raise as "independent revenues" and "SIS refunds" to pay their own expenses. On the contrary, non-CLAS facilities must be authorized to open a petty cash reserve or to refund their workers' incurred expenses.

No difference is established in the budget structure for type of expenses at first level establishments since the software only includes reports at the Ministry of Health, DIRESA and hospital levels. In CLAS facilities, we found this expenditure under the "Support to CLAS" (Apoyo a los CLAS) heading. However, it only included PAAG transfers, but not those from other sources. Consequently, this study did not use the financial administration information system (Sistema Integrado de Administración Financiera-SIAF).

Summary of Results

We present below a sample of the most important findings from this study.

A. Public Treasure Transfers to CLAS

From 2000 to 2003-I, MEF and MINSA made a number of decisions that had impact on public financing provided to CLAS establishments. Chart 1 shows the amounts per person transferred to CLAS facilities in the three departments (states) under review.



Chart 1: FUNDS PER PERSON TRANSFERRED TO CLAS FROM 2000 to 2003-I AMOUNT PER PERSON PERIOD TRANSFERS IN S/. TOTAL CLAS POPULATION

Chart 1 shows in 2000 11.40 soles were spent per person in the CLAS jurisdictions, a smaller amount than in 1999 after significant budget cuts in October 2000 led to less Study on Cost Efficiency of CLAS 5 Future Generations Peru 5 purchases of goods and services, longer working hours for CLAS payroll workers and cuts in the July and December bonuses.⁴ In 2001, the amounts for goods and services were restored for CLAS health establishments in poor areas. In 2002, MINSA increased CLAS transfers to pay salary raises and a monthly family bonus for technical level nurses, mandated by law. In the first quarter of 2003, all CLAS goods and services were cut again, as well as "rations" for all CLAS.

This last disposition discouraged payroll CLAS medical managers from doing CLAS management work for which they were no longer paid overtime. More recently, Law 28229—that includes Medial Surgeon Personnel under temporary labor contracts in the Ministry of Health's payrolls nationwide, as regulated by Supreme Decree N° 009-2004-SA—has had a direct impact on temporary CLAS medical managers to prevent these regulations from having a negative impact on CLAS operations together with restored rationing that will encourage medical managers to perform administration activities within CLAS.

Chart 2 shows the relationship between total transfers to CLAS for salaries and goods and services during the period under study. Budget cuts in the fourth quarter of 2000 and for one whole year through the third quarter of 2001, and another cut in the first quarter of 2003, are notorious. Transfers rose again in the fourth quarter of 2002 when 32 new CLAS were added to the Huánuco DIRESA.



TOTAL GOODS AND SERVICES TOTAL WAGES

B. SIS Coverage in CLAS and Non-CLAS

Revenues from the enrollment bonus paid to CLAS for each new beneficiary affiliated to SIS provides a positive incentive for CLAS to enroll more SIS beneficiaries. Chart 3

shows the number of health care activities per inhabitant in the CLAS and Non-CLAS jurisdictions by type of SIS benefits plan^b in urban and rural areas.

Computing the "services provided per person" is an indirect way of measuring coverage linked to SIS affiliations among the total population of potential beneficiaries in a given health facility's jurisdiction. Chart 3 shows CLAS facilities cover a larger portion of their respective population through SIS benefits, compared with non-CLAS for all categories. It is particularly noteworthy that rural CLAS will provide larger coverage for 0-4 children as well as for pregnant women and new mothers, compared to urban non-CLAS.



Chart 4 shows data from the Health Information System Data Base for the three DIRESAs under review. This chart confirms CLAS facilities perform better in providing services to under 5s. HIS data show urban CLAS as providing 7.00 attentions per child, compared to 4.35 by non-CLAS (or a 1.6:1 ratio). Rural CLAS provide 5.84 attentions per child within their jurisdiction, compared to 4.88 attentions per child in rural non-CLAS (a 1.2: 1 ratio).

^b Plan A covers 5-17 school children and adolescents; Plan B covers pregnant women and new mothers; Plan C covers 0-4 children. Study on Cost Efficiency of CLAS



C. Direct Collection Resources at CLAS and Non-CLAS

Both "independent revenues" and "SIS refunds" are considered direct collection resources (Revenues) in the government's system.

"Independent revenues" reported for this study include charges to patients for medical care not included in the SIS benefits plans. They exclude revenues from medicine sales, laboratory services and others. Funds under this heading are managed differently by CLAS and Non-CLAS facilities. Independent revenues earned by CLAS facilities are reported to the DIRESA but the money remains at CLAS and is deposited in the CLAS association current account. The money is spent following the consensus decision reached by the CLAS Association's Board of Directors and Manager. In the non-CLAS facilities the laws mandates independent revenues must be deposited in the DIRESA account at Bank of Nation. These funds are managed by the DIRESAs and are partly used at the respective facilities.

"SIS refunds" are transferred to each facility based on the Attention Forms filled for each service rendered and subsequently electronically audited by each DIRESA ODSIS^c. For CLAS facilities, SIS refunds reach DIRESAs directly and are then endorsed to the corresponding CLAS association. These funds are used as Revenues as decided by CLAS. On the contrary, non-CLAS facilities are not allowed to get direct SIS refunds. They depend on their DIRESA to get SIS resources and will receive inputs from DIRESA only to the extent they effectively file a request for request SIS resources.

Chart 5 shows CLAS and non-CLAS revenues classified as independent resources and SIS refunds. In both cases, amounts are in soles per capita for the respective population in the designated jurisdiction of each CLAS and non-CLAS health facility. This allows us to standardize and compare revenues for varying population sizes of the different jurisdictions.

^c ODSIS = SIS Decentralized Office.

The chart clearly shows both urban and rural CLAS facilities earn significantly higher per capita REVENUE total revenues than non-CLAS. Total REVENUE for urban CLAS reaches 8.63 soles per person compared to 4.82 soles for urban non-CLAS. Total rural CLAS REVENUE is 5.47 soles per person compared to 3.10 soles in rural non-CLAS. A breakdown of total REVENUE by origin shows SIS refunds per person match amounts already shown in Chart 3 for health services per person.

The amount of health facility income by source of "independent revenues" reveals a major difference between CLAS and non-CLAS management models. The ratio of independent revenues per capita for urban CLAS and non-CLAS reaches 2.18:1 (S/.3.67 versus S/.1.68); the corresponding rural CLAS and non-CLAS ratio is 2.19:1. This portion of revenues in CLAS-run primary health care facilities reflects revenue generation from the people that otherwise would be spent on private medical services or drug purchases from pharmacies and drug stores without a doctor's prescription. Because CLAS reinvest their revenues in improving the supply and quality of services, they reach a larger number of people looking for better quality health care, thus creating a virtuous circle of greater demand, increasing revenues, greater investment that allows improved quality, and subsequent greater consumer demand from the people.



D. Revenue Expenditures

Health facility income, known as REVENUE ("Recursos Directamente Recaudados"), include two different types of revenues, i.e. independent revenues collected for the services not included in SIS benefit plans (fees for services), and SIS insurance refunds.

Chart 6 shows the distribution of CLAS expenditures in 2002 by type of expense. The greater portion of revenues (total 54%) is expended on human resources: payrolls (28%), service outsourcing (22%) and third party services (4%) which altogether allow to hire personnel and retain services needed to improve services to the people. In

second place of importance, funds are spent on transportation (14%) and fuels (6%) both for facility administrative operations and for visits to the areas' communities. Other main expenditures include complementary payments for goods and services the cost of which used to be, but is no longer, covered by government budget transfers.



(Legend: Wages – Services – Transportation – Food – Consumables – Fuel – Utilities – Capital Goods – Third Party Services)



(Legend: Wages – Services – Transportation – Food – Consumables – Fuel – Utilities – Capital Goods – Third Party Services)

A breakdown of revenue expenditures by urban-rural location shows the differences in revenue distribution and management. Chart 7 shows that urban CLAS spent the greatest proportion of all revenues collected by all CLAS. This reflects a larger number of urban CLAS users and their greater purchasing power leading to ever bigger Revenues and investments to enhance service quality. Rural CLAS proportionally spend a larger amount of their revenue on fuel and third party services, reflecting rural CLAS' ability to operate and move around within their own communities, as well as their capacity to offer more services by hiring additional staff.

V. Discussion

Health care management through CLAS Associations is a way to modernize and decentralize financial and human resource management by involving the communities. This study provides empirical evidence on the performance of CLAS establishments compared to non-CLAS facilities and reveals CLAS facilities' strength despite the lack of clear and continuing support policies by the health sector evidenced in budget cuts and other financial policy changes which had a special impact on CLAS.

A comparison with non-CLAS shows health facilities managed by CLAS increase SIS coverage and received more SIS refunds, while producing more health services, both in urban and rural areas. It is also shown that CLAS independent revenues are twice as large as non-CLAS independent revenues. Directly collected revenues (RDR) at CLAS are spent on better quality care and more services to meet the people's demand through a comprehensive and integrated approach.

CLAS facilities' ability to make their own decisions allows them to sail through financial crises resulting from changes in financial policy. For example, Chart 8 shows a specific sample of a CLAS in North Lima that suffered the impact of a nationwide Ministry of Health budget cut to all CLAS in their line item for goods and services. Of particular significance was the impact on prevention and promotional activities and the fee exemptions granted to indigent patients. Although in principle CLAS should be financially stable in urban non-extreme-poverty settings, Chart 8 shows this particular health facility survived on the edge of economic viability only thanks to their calculated measures to cover costs when their budget was cut. As a consequence of the budget cuts and so it could meet its financial liabilities, this CLAS increased its fees per visit. Activities for health prevention and promotion, which do not generate revenues, suffered a 27% cut. This cut was subsequently followed by another 36% reduction to a total 63% fall in preventive and promotional activities during the 6 months of the first cut. Fee exemptions for indigent patients were also drastically reduced in the short term although they were partially restored in the first quarter of 2001.⁵

Chart 8: Impact of budget cuts on CLAS. October 2001. Lima North Site Example

	L .		
	Year 2000		Year 2001
	JulSet.	OctDec.	JanMar.
MINSA transfer for payrolls	S/ 49,203	49,203	49,203
MINSA transfer for goods and services	S/ 2,316	0	0
Independent revenues (new soles)	S/ 19,044	23,094	22,950
Independent revenues as % of total	37.0%	46.9%	46.6%
N° of general medical attentions	1,951	2,114	1,782
N ^o special medical attentions	196	295	273
N° of preventive-promotional initiatives (APP)	6,013	4,375	1,615
N ^o exceptions	230	142	184
% change in general attention	-	+8.4%	-15.7%
% change in APPs	-	-27.3%	-63.1%
% change in exemptions	-	-38.3%	+29.6%
Laboratory revenues (new soles)	S/ 1,548	1,646	1,974
Fee per visit (new soles)	S/ 3	S/ 4	S/ 4

Source: CLAS Confraternidad, Centro de Salud Juan Pablo II, North Lima.

A first lesson learned from this North Lima CLAS example is that the Shared Administration management model is not a way to ensure a health facility's economic "independence" and, therefore, reduce its need to share in the public health budget. Sharing management with the community requires the government to commit public funding for personnel salaries and other basic costs without which the contract between government and the community can not be enforced.

A second lesson learned is that, at the end of the day, CLAS may be more successful because of their ability to be flexible in responding to needs and providing solutions to economic challenges by managing their independently collected resources. Without this ability to make local decisions on use of revenues, the CLAS model would remain stagnant. Undoubtedly, the community plays a significant role in ensuring proper decisions are made on resource utilization, to oversee proper management of funds, and to ensure accountability to the community served by the public health facility.

Clearly, DIRESAs may resist the CLAS shared management model as it entails lower revenues for them, since CLAS directly manage their incomes. Meanwhile, DIRESAs should reevaluate their roles as regulatory and overseeing agencies to ensure the model's goals are meet. This particularly concerns the health and development goals for the neediest people, particularly the vulnerable group of mothers and children.

VII. Conclusions and Recommendations

The following findings are worth mentioning:

- CLAS-managed health facilities provide twice the coverage for mothers and children than non-CLAS at 10% higher cost, thus demonstrating their higher cost-efficiency in the area under study.
- It is worth highlighting that the quality of spending of health facility revenues improves at CLAS facilities through greater community involvement in decision-making and in compliance with the Local Health Plan.

These findings point to the advantage of strengthening the CLAS management model through a series of actions that we could point out. CLAS need clearer norms and regulations to ensure more democratically elected community representatives, and to ensure that they promote the recognition and exercising of people's rights and responsibilities for their health. Further emphasis and compliance with PSLs' health and community development goals linked to the Local Health Programs. Better and more technical assistance, follow up and oversight for Regional Government Health Directorates and Sub-Directorates is also advisable, as well as for CLAS facilities.

Other recommended research includes deepening this study with data about costs for human resource hiring at CLAS compared to non-CLAS facilities. This will requiere data about the number, type, salaries and benefits of health and other staff at each health facility hired under different contracting regimes. This data however is not easily available. This study reviewed some major indicators to show the advantages of the CLAS management model. Other indicators may still be analyzed including the people's exercise of their health rights and duties, their role in local planning and oversight of public services, their democratic role in electing their representatives to CLAS committees and other government posts including their municipal governments. All CLAS indicators must always be compared to non-CLAS by type of dependent variable. and with specific indications of the outcomes and/or impacts resulting from each type of management model. A study is recommended on the level and quality of technical assistance, follow up and oversight provided to CLAS in the health regions and their likely relationship to CLAS facilities performance.

Acknowledgments

The authors express their gratitude to the regional health directors at the time of the study for their support and assistance. In particular to doctors César Carlín Chavarri, Regional Health Director of Cuzco, Nicolas Sánchez Caballero, Regional Health Director of Huánuco, and Angel Irribari, Regional Health Director of La Libertad. We also thank the technical and administrative teams from those offices for making available to us the information we needed from the SIS, HIS, and financial data bases on transfers to health facilities at the primary care level and detailed information about independent revenues earned by CLAS health facilities.

References

⁴ Diaz R (2001) "Los CLAS enfrentan el riesgo de la desfiguración del modelo", En: <u>Semanario</u> <u>Gestión Médica</u>. Edición 249, Año 6, del 3 al 9 de diciembre del 2001. p. 16-17.

¹ Vicuña M, Ampuero S y Murillo JP (1999) "Análisis de la demanda efectiva y su relación con el modelo de gestión de los establecimientos de salud del primer nivel de atención," Serie de publicaciones PAAG-SBPT-AC, Vol.2. Lima: Ministerio de Salud.

² Altobelli L (1998) "Reforma de salud, participación comunitaria, y inclusión social: el Programa de Administración Compartida", Informe preparado para la Evaluación de Proyecto de Medio-Término de la Cooperación UNICEF-PERU.

³ Telyukov A, Garavito M, Sobrevilla A y Loo L (2002) "Design innovations and data needs for the Ambulatory Payment Innovation in the public health sector of Peru", Partners for Health Reform Plus, Bethesda, Maryland: Abt Associates, Inc. y Proyecto 2000 (Ministerio de Salud del Perú). Feb. 2002.

⁵ Altobelli L (2002) "Participación comunitaria en la salud: la experiencia peruana en los CLAS", En: J. Arroyo (Ed.) <u>La Salud Peruana en el Siglo XXI: Retos y Propuestas de</u> <u>Política</u>, Lima: Consorcio de Investigación Económica y Social/ DFID/ Proyecto Policy. pp. 303-354.