

### Supporting the Development of National Health Insurance in South Africa

A Review of Benefits Policy and Active Purchasing Reform in Chile

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**Results for Development Institute** (R4D) is a non-profit organization based in Washington DC whose mission is to unlock solutions to tough development challenges that prevent people in low- and middle-income countries from realizing their full potential. Using multiple approaches in multiple sectors, including Global Education, Global Health, Governance, and Market Dynamics, R4D supports the discovery and implementation of new ideas for reducing poverty and improving lives around the world.

This report reviews health system benefits policy and purchasing mechanisms in Chile to inform the development of National Health Insurance policy in South Africa. It has been prepared by R4D in consultation with South Africa's National Treasury and with financial support from The Atlantic Philanthropies.

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### Acronyms and Abbreviations

AUGE/GES	Liniversal Access with Evolicit Cuproptoos				
	Universal Access with Explicit Guarantees				
BCA	Base Capitation Amount				
Cenabast	Central Procurement Agency				
DOH	South Africa Department of Health				
DRG	Diagnosis Related Group				
FCM	Free Choice Modality				
FFS	Fee-For-Service				
Fonasa	Fondo Nacional de Salud/National Health Fund				
GDP	Gross Domestic Product				
lsapres	Instituciones de Salud Provisional				
ISP	National Institute of Public Health				
MMR	Maternal Mortality Ratio				
МОН	Chilean Ministry of Health				
NHI	National Health Insurance				
NSP	National Strategic Plan				
OHSC	Office for Health Standards Compliance				
OOPS	Out-Of-Pocket Spending				
PDE	Patient Day Equivalent				
PHC	Primary Health Care				
PPP	Purchasing Power Parity				
PSF	Programa de Salud Familiar/ Family Health Program				
SDS	Superintendencia de Salud/ National Health Regulator				
SERMENA	Chile National Medical Service				
SHI	Social Health Insurance				
SIGGES	Sistema de Información de apoyo a la Gestión de las Garantías Explícitas de Salud (Information System to Support the Management of Explicit Guarantees)				
SNSS	Chilean National Health Service System				
THE	Total Health Expenditure				
U5MR	Under-Five Mortality Rate				
UMIC	Upper Middle Income Country				
UF	Unidad de Fomento				
UP	Universal Premium				
WHO	World Health Organization				

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### **1.Executive Summary**

In 2011, the South African cabinet approved a Green Paper on National Health Insurance (NHI) envisaging a single-payer system for universal health coverage. Two major challenges in developing NHI in South Africa will be designing the benefits policy and mechanisms for purchasing health services that actively promote health system goals (active purchasing). In short, the future NHI must decide what health services to buy for the population, and how to buy them.

This in-depth case study analyzes benefits policy and purchasing systems in Chile following its 2005 universal health coverage reform known as AUGE, the Spanish acronym for Universal Access with Explicit Guarantees. The study's aim is to produce insights and options for policy makers in South Africa as they strive to turn the NHI vision into more detailed designs.

#### Chile's Social Health Insurance System

Chile's social health insurance (SHI) system delivers health services and insurance to over 17 million people (94 percent of the population), and comprises a large government-run and nonprofit public health insurer, Fondo Nacional de Salud (Fonasa), and several for-profit private health insurers created in 1981 known as Instituciones de Salud Provisional (Isapres). The vast majority of Chile's population is served by the public insurer, while about one fifth chooses the private sector for insurance and health service coverage. This system is overseen by the central Ministry of Health (MOH), which also coordinates the National Health Services System (SNSS)—a national network of public healthcare providers organized under 29 geographically decentralized Regional Health Services (RHSs).

By 2012, Fonasa covered 13.4 million people, or about 77 percent of the country's population, with beneficiaries classified into four groups based on socioeconomic status and monthly income. Besides providing health insurance coverage and purchasing services for its affiliates, Fonasa also collects revenues (general taxes and payroll) and plays an important role as a supervisor of both payroll tax collection and medical bills. Isapres covered about 3.1 million Chileans, or 17.5 percent of the population, as of 2012; about 91 percent of these beneficiaries were employees of medium and large firms. Isapres mostly purchases health services from the private sector. Overall, key sources of financing in 2011 for SHI in Chile included: mandatory and voluntary SHI health contributions from formal and informal workers (28 percent), central government general tax revenue (30 percent), direct out-ofpocket spending by households (38 percent), and voluntary contributions to SHI and commercial insurers (4 percent).

#### The Process of AUGE Reform in Chile

The two-tiered, arguably inequitable nature of Chile's health system has been one of the key debates about the health sector in Chile and a main reason for defining an explicit and enforceable benefits policy for all Chileans under AUGE program. In 1999, President Ricardo Lagos' campaign vociferously supported health reform to: improve health status, address the challenges associated with the aging of the population, reduce equity gaps in access to healthcare and in health outcomes, and set up a health system that would meet the population's expectations. Once elected, President Lagos appointed an inter-ministerial health reform committee to engage with stakeholders on issues such as: the Chilean Medical Association's concern about physicians' autonomy, doctors treating excluded illnesses, Isapres' worries about profitability, citizens at large, and the opposition parties. Dr. Osvaldo Artaza, appointed as health minister in 2002 and put in charge of advancing the reform agenda, announced the AUGE proposal as a legally enforceable benefits package covering 56 priority health problems, moving the discussion out of the executive branch of government and into the Chilean national Congress and the public arena. An aggressive public campaign about the potential benefits of AUGE and the implementation of a pilot AUGE project further contributed to generating support. AUGE was approved by the Chilean Congress in 2003 and implementation officially started in July 2005. Contributing factors credited for the successful passage of AUGE include: the president himself assuming leadership of the reform, gradualism in expanding the scope of the benefits package to contain costs, forming a broadbased inter-ministerial committee for designing the health reform, and winning public support by offering enforceable guarantees and launching public awareness campaigns.

#### Benefits Policy: South Africa and Chile

South Africa will need to develop clear policies regarding eligibility and benefits in order to ensure a reasonable level of access. Defining the benefits policy in a health delivery framework—either implicitly or explicitly—is also critical for resource planning, budgeting for adequate and high-quality delivery, ensuring equity, and managing the population's expectations about the nature of coverage.

#### Salient Benefits Policy Challenges in South Africa

South Africa's current system of limited access to private cover and poor service delivery in the public sector is not sustainable, and revitalization in the public delivery of healthcare along with expanded access is urgently required. The country has a quadruple burden of disease, a health system focused on hospital-based care, inequitable distribution of resources, and a diverse and poor population. The public sector serving most South Africans is funded from the national budget, while a parallel system of more expensive private sector "medical schemes" is funded by voluntary contributions from members and their employers as well as out-of-pocket payments. The NHI Green Paper declares that all South Africans should be able to benefit from essential healthcare services without copayments. However, these services, including the process for service delivery to facilitate budgeting and an assessment of affordability, have not been defined. The role of medical schemes (under NHI and during the transition period) is still in guestion; including what will become of the current "prescribed minimum benefits" the schemes are mandated to cover. The core question for the future NHI's benefits policy is whether it will be implicit, similar to the public sector's current approach; explicit, similar to medical scheme benefits packages; or a hybrid approach. As detailed below, Chile's hybrid approach may hold useful lessons.

#### Benefits in Chile under AUGE

Since the adoption of AUGE, citizens are legally entitled to full treatment through Fonasa for covered health problems with the four guarantees of access, timeliness, financial protection, and quality. Before AUGE, Fonasa offered comprehensive coverage but implicit rationing impeded access and quality, and high copayments limited access to Isapres which covered most (AUGE) treatments. AUGE offered improved access for all, and although it could not eliminate all inequity overnight, it still constituted a feasible and immediate improvement. By 2013, both Fonasa and the Isapres must cover 80 high impact priority diseases that represent about 75 percent of Chile's burden of disease.

Conditions covered by AUGE are limited in scope<sup>1</sup> and explicitly defined on the basis of diagnosis to facilitate service delivery and budgeting. The package also includes an "appropriateness criteria" for services, procedures, and technologies to be used according to circumstances. For out-of-scope services, Fonasa beneficiaries can use public municipal health centers without any direct charge or obtain secondary and tertiary care in public hospitals for a copayment. The revitalization of the public sector system is thus a critical factor in developing a sustainable system based on public sector service provision. If public providers do not exist, are overwhelmed, or lack the capacity to treat an AUGE problem, Fonasa is forced to purchase private services (using vouchers) in order to provide timely care and meet AUGE's guarantees. Fonasa also offers co-financing for private ambulatory or in-patient services to patients through Free Choice Modality (FCM). Isapres, on the other hand, has set up contracts to deliver AUGE services with closed networks of preferred providers in order to contain the cost of AUGE. Beneficiaries can select these providers and pay small copayments to get treatment under AUGE, or they can forgo AUGE coverage and seek treatment with a private provider of their choice with the regular financial coverage of their health plan.

The gradual extension of AUGE interventions is conditional on the availability of funding. To that end, the Ministry of Finance calculates a maximum per capita value called the Universal Premium (UP) based on available funding, which must exceed the estimated cost per beneficiary of the benefits policy. There have been a total of five cost studies performed on AUGE so far to test for this condition. The incremental cost of this benefits package is financed with general taxes in the case of Fonasa<sup>2</sup> and additional premiums in the case of Isapres.

AUGE has helped to mitigate inequity in Chile's health system by granting enforceable equal access and guarantees for a subset of priority health problems. There is a wealth of information showing that AUGE has resulted in a substantial and gradual increase in the use of health services, and in improvement in access.<sup>3</sup> Since 2005, the progressive increase in the number of AUGE cases may have been the result of the public's increasing awareness of the guarantees and empowerment to demand these rights, thereby boosting demand for services. However, systematic

<sup>&</sup>lt;sup>1</sup>Increasing from 25 in 2005, to 40 in 2006, 56 in 2007, and 80 in 2012.

<sup>&</sup>lt;sup>2</sup>VAT increased from 18 percent to 19 percent; new tobacco tax and customs revenues but no new payroll taxes.

<sup>&</sup>lt;sup>3</sup>For example, improvements (detailed later) in public satisfaction and access to, care for, and mortality from chronic health problems, cancers, and heart disease.

investigations of AUGE's impact on the level and share of out-of-pocket spending, catastrophic or impoverishing health expenditures, and health status have so far not been carried out. This is likely because of problems with data, including the lack of a clearly established baseline and deficiencies in the information system for monitoring AUGE. Similarly, healthcare equity concerns are still present, relating to quality of care, health system barriers, and differential access for health conditions that are not covered by AUGE.

### Lessons for South Africa on Benefits Policy

The reform of benefits policy in Chile has a number of lessons for South Africa. The following are some key takeaways developed in more detail in this report on Chile's experience with devising, implementing, and governing its benefits policy reform:

- Chile's "algorithm" for defining the explicit benefits combined technical criteria (principles such as efficacy, efficiency, and affordability) and social preferences to show that public input and acceptance are important parts of managing expectations.
- The cost implications associated with implementing a comprehensive package of benefits is a key constraint.
- It appears that data collection during the period of incrementally expanding benefits under AUGE in Chile ensured that financial effects were managed. South Africa will also need better data and models for accurate costing given the shortage of information on public sector utilization.
- An incremental approach to expanding guaranteed benefits, like in Chile, would allow for data from pilot sites to inform initial costings. It will also allow for monitoring of utilization changes and contracting bases to feedback into an incrementally costed funding model.
- Keeping in mind Fonasa's continued reliance on the public sector for delivery, it will be important for South Africa to carefully develop plans regarding access to private sector providers. Revitalization of public facilities, including implementation of quality standards, will also be important.
- In South Africa, the credibility of the Office for Health Standards Compliance (OHSC) will be an important factor in the implementation of standards. Continued rationing challenges can affect credibility.
- The provision for higher income beneficiaries to top up their benefits through Isapres appears to have increased social acceptability for social health insurance reform in Chile. In South Africa, the role of private medical schemes under NHI has not been clarified in detail, but

it appears that such a "top up" role is being considered. Concerns around inequity in a two-tiered system need to be balanced against the opportunity to implement sustainable cross-subsidies through such a framework, as higher income earners are likely to value the opportunity to top up.

• Collaboration with medical schemes will be important over the transition period in South Africa to ensure that service gaps do not arise.

#### Active Purchasing: South Africa and Chile

Active Purchasing involves using payment systems to promote health system objectives—such as quality, efficiency, and efficacy—as opposed to more passive historical budgeting or reimbursing the cost of healthcare provision.

#### South Africa's Purchasing Challenges

South Africa's public health sector does not feature a purchaser-provider split and operates under a global budget model with little active purchasing. Public healthcare facilities are owned, operated, and staffed by the state, and there is little connection between their productivity or quality and financial compensation. While this system helps contain costs, it does not ensure optimal efficiency and quality of care. The private medical schemes mostly make payments on a fee-for-service basis, with occasional use of capitation-based payments to general practitioners and disease-based capitation models. There are also no market standards on alternative reimbursement models or up-to-date industry standards on tariff billing codes. Cost escalation in the private health sector is a major problem. To put NHI on a path toward success, South Africa can learn from other countries' experiences with purchasing from public and private providers. It will need to develop its own set of purchasing mechanisms that promote access, efficiency, quality, and equity in health care-all while adapting to the South African institutional landscape.

## Purchasing in Chile through Fonasa

As part of a series of major health system reforms in the late-1970s, Chile instituted a full purchaser-provider split: Fonasa was created in 1979 to cater to all Chileans (white and blue collar as well as independent workers, and the "indigent" population). Follow-up reforms in 1981 also created Isapres as competitors to Fonasa.

Fonasa currently has four regional offices outside of Santiago managing contracts with public and private providers and 103 customer service branches distributed along the national territory. Over the last five years, its financing structure has been fairly stable: in 2012, subsidies from central government general revenue and the 7 percent mandatory contributions made by non-indigent members comprised 57.8 percent and 37.3 percent of its revenue, respectively, with the remaining (about 4.8 percent) coming from other public clients. Nearly 96 percent of Fonasa's spending is devoted to purchasing health services for its beneficiaries, with less than 5 percent of total spending accounting for administration.

Before reforms starting in the 1990s linked payments to providers with outputs, Fonasa paid for primary health care (PHC) services through a per capita payment to municipalities, used a voucher system to co-finance private services delivered through the FCM, and transferred resources unconditionally to pay for public hospitals'

budgets. In the mid-1990s, however, Fonasa began to increasingly employ fee-for-service to pay Regional Health Services (RHSs) based on a series of costing studies in public hospitals to encourage output and efficiency. Currently, Fonasa has multiple provider payment mechanisms: nearly half of the resources that Fonasa pays to RHSs are in the form of fee-for-service while the rest are transferred as unconditional budget support. In 2012, on the whole, these budget transfers to public hospitals accounted for 27.6 percent of Fonasa's spending on health services, while feefor-service payments to public hospitals represented onefourth of the same. The next largest spending item (23.8 percent) was payment to municipal health centers for their delivery of PHC services. Fonasa's Free Choice Modality captured just over 10 percent of the insurer's spending and other purchases from private providers accounted for 8.9 percent of total spending. The figure shows the various payment systems Fonasa uses to purchase public and private healthcare for its beneficiaries.<sup>4</sup>



<sup>4</sup>A detailed description of each payment system has been included in section 6 of this case study.

Fonasa uses three forms of contracts with private providers: framework agreements for specific services through accredited providers, occasional public tenders, and direct deal agreements in case of lack of capacity in the public sector to deliver AUGE benefits. On the whole, however, the share of total Fonasa spending on private providers remains relatively small; combining Fonasa's FCM with other private purchases during the last four years, purchases from the private sector did not account for more than 15 percent of all Fonasa purchases.

## Active Purchasing Lessons for South Africa

Like Fonasa in Chile, South Africa's new public health fund would be the country's largest purchaser of health services and stands to benefit from Fonasa's cumulative experience in contracting with and establishing payment methods to providers. The following are some of the salient lessons for South Africa discussed in this report:

 Chile's experience with the AUGE voucher<sup>5</sup> shows that committing to explicit guarantees can make governments accountable for universal coverage but forces their compliance even in the absence of necessary resources to do so. This can significantly increase costs, particularly if the private sector is contracted to fill service gaps. Hence, benefits should be carefully laid out, costed, and evaluated in terms of the health system's capacity to honor service commitments and guarantees. Substantial investments by the public sector may also be needed to meet the objectives of the benefits policy.<sup>6</sup>

- As Chile's case shows, the global budget approach cannot serve as a one-size-fits-all active reimbursement strategy: a mixed model of some sort will be required and is advisable.
- The Chile example makes it clear that different payment mechanisms have incentives that affect behavior; providers may seek to change utilization in absolute (increased revenue) and relative terms (increased margin). South Africa will need to define its active purchasing objectives and decide on the right incentives that must be instituted to achieve those aims.
- Fee-for-service (FFS) may be a useful purchasing mechanism from both public and private providers for South Africa if the objective of the new health fund is to expand access to healthcare—particularly for those in lower socioeconomic groups—through the public sector. While FFS has posed inflationary problems for Fonasa, the insurer's budget caps have protected it from excessive cost escalation, and it is actively trying to switch to Diagnosis Related Groups (DRGs) as its main payment method in the public sector.
- In order to properly define the prices to be used under an active purchasing paradigm, the particular benefits that need to be purchased must be well defined.
- An active purchasing environment will require significantly more data than is currently being produced in South Africa's public (and even private) sector, such as credible and granular data on costs per facility, ward type, procedure, patient type, etc.

<sup>&</sup>lt;sup>5</sup>Used to purchase services from private providers, usually at a much higher price, when demand for AUGE services in the public sector exceeds capacity. <sup>6</sup>For instance, between 2004-2007, the Chilean government invested 99M Chilean pesos (approximately US \$1.9M) to improve equipment in public hospitals.

### 2. Introduction

In 2011, the South African cabinet approved a Green Paper on National Health Insurance (NHI), following a number of months of study and deliberation by a Department of Health (DOH) Ministerial Advisory Committee. A multi-year implementation plan is envisioned, including phases for strengthening government health services, improving regulation of providers, testing various forms of contracting and payment for services, and the development of a National Health Insurance Fund to act as a single, public sector purchaser of health services (i.e., the development of a "single payer" system) for the population. The government is working to turn the Green Paper into a White Paper, making the NHI policy an official position.

South Africa's National Treasury wishes to continue playing an active and constructive role in the further refinement and roll-out of NHI in the country. It wants to ensure that the design of NHI achieves high levels of population coverage, provides South Africans with a wide range of health services, reduces out of pocket payments, is efficiently operated and fiscally sound, and is built upon a sustainable financing foundation.

To assist the Treasury, the Results for Development Institute (R4D) has been requested to provide support on a number of technical issues that will arise in the development of NHI from 2012-2015. Treasury and R4D have agreed that R4D's work in 2013-14 can stimulate thinking on options for the approach to benefits policy and active purchasing in NHI.

To work towards this objective, it was considered useful to look at how other countries have dealt with the issue of benefits policy and active purchasing design. Therefore this case study analyzes the benefits package and active purchasing design under Chile's AUGE universal health coverage reform to produce insights for South Africa.

Chile's health system bears some important similarities with South Africa's current health system. In both countries a large public fund coexists with several smaller private insurers, configuring a two-tier health system that is segregated along socio-economic lines. The upper income minority mostly accesses private healthcare and is covered by private social health insurance companies, while the majority of the population relies mainly on public sector providers financed from a mix of general revenue and social health insurance contributions. South Africa's future health system will remain similar to Chile's in some respects. In particular, it is expected that in South Africa, a large public insurer will purchase health services on behalf of the population, a similar concept as in Chile where the National Health Fund purchases healthcare for over three quarters of the country's population.

While the countries differ in their employment rates and per capita income, and South Africa's large burden of poor will exacerbate the affordability challenges experienced by Chile. South Africa's efforts to design and implement healthcare reform may benefit from the general lessons learned in Chile about how to expand coverage of quality health services for all. Similarly, the specific lessons learned in Chile about how a large public fund can become an active purchaser of health services from public and private providers, and how an explicitly prioritized benefits policy may replace a comprehensive one with implicit rationing, may inform South Africa's creation of similar policies and practices.

The following table (Table 1) compares the socioeconomic and health contexts of the two countries with each other as well as with countries in the general upper middle-income category.

As the table shows, Chile is one of South America's top economic performers with an estimated GDP per capita of US\$9,440 (PPP). It has a population of about one-third the size of South Africa's, a higher per capita income, fewer people living in rural areas, and less inequity in the distribution of income. Both countries invest similar levels of GDP in health (both around 8 percent of GDP). Private health expenditures are also similar and represent a higher share of total health expenditure (around 53 percent) compared to UMIC countries on average. By contrast, results in health differ substantially. For example while Chile's maternal mortality rate (MMR) was brought down by 56 percent between 1990 and 2009-10 to 19.7 per 100,000 live births, it is still 300 in South Africa and actually increased between 1990 and 2000, mainly because of the country's AIDS epidemic.<sup>7</sup> Similarly, the under-five mortality rate is 9.1 in Chile and 44.6 in South Africa.

Meanwhile, HIV-AIDS prevalence is not an important challenge for the Chilean health system—as opposed to South Africa—with only 0.4 percent adult prevalence in Chile compared to 17.9 percent in South Africa which explains, at least in part, the important differences in mortality and morbidity rates.

<sup>&</sup>lt;sup>7</sup>World Health Organization, 2012

Table 1: Chile Context Compared to South Africa <sup>8</sup>					
	South Africa	Chile	Upper Middle Income Countries		
A. Socioeconomic					
Population (2012)	51.2 Mn	17.5 Mn	2.4 Bn		
Per capita income (PPP) (2012, constant 2005 USD)	\$6,003.5	\$9,440.20	\$4,300.0		
Tax revenue as % of GDP (2012)	26.5%	19.0%	≈ 25% (over 2005-09: IMF)		
GINI (2009, on a 0-100 scale)	63.1	52.1			
% living in rural areas (2012)	37.6%	10.7%	38%		
% poor (2010 headcount ratio at PPP US\$2/day)	31.3%	2.7%	19.5% (2010)		
B. Health expenditure data					
THE (% GDP) (2011)	8.5%	7.5%	6.1%		
THE per capita (PPP) (2012, constant 2005 USD)	\$982.3	\$1,606.1	\$602		
Public HE (% THE) (2011)	47.7%	47.0%	54.9%		
Public HE (PPP) (2011, percent of GDP)	4.1%	3.5%	3.3%		
C. Health status indicators					
U5MR (per 1000 live births, 2012)	44.6	9.1	20		
Maternal Mortality Rate (national estimate, per 100,000 live births)	300 (2012)	19.7 (2009)	64 (2010 modeled estimate)		
HIV AIDS prevalence (2012, adults aged 15-49)	17.9%	0.4%			
D. Service coverage					
Skilled Birth Attendance (2009, percent of total)	91.2% (2003 DHS)	99.8%	96%		
DPT (2011, % of children ages 12-23 months)	72.0%	94.0%	95%		
Hospital beds per 1,000 population	2.8 (total, 2005)	2 (total, 2010)	3.5 (2011)		
General Practitioners per 10 000 population	8	10			
# Rank Health System Performance, WHO 200 Report	175	33	N.A.		

Finally, Chile ranks much higher in terms of the overall performance of its health system as measured by the WHO 2010 report (Coustasse, 2005); Chile was ranked 33rd out of 191 countries with respect to overall performance of its healthcare system and 23rd with regard to performance on the health level. South Africa was ranked 175 out of 191 countries with respect to overall performance of its healthcare system and 182 with regard to performance on the health level.

The following sections of this paper detail Chile's efforts to design and implement an explicit benefits package while still providing services not included in the package but covered before the benefits policy was implemented. They also offer an in-depth review of the role that Fonasa plays as an active purchaser of public and private health services on behalf of more than three-fourths of the Chilean population. But first, the next two sections cover an overview of the healthcare system in Chile and describe the political and technical aspects of the process of health reform in that country.

<sup>&</sup>lt;sup>8</sup>Sources: The World Bank Databank, World Development Indicators ; World Health Organization, Global Health Observatory Data Repository ; CIA, The World Factbook. (Figures in constant 2005 USD unless otherwise indicated).

#### Health Insurance Coverage in Chile and South Africa

Chile's healthcare market is built on social health insurance (SHI). All workers, formal and informal, are mandated to contribute 7 percent of their salary to an approved health fund, and can choose between the national fund or private funds where additional top up cover can also be purchased. For the past 10 years only about 17 percent of the population has selected the private cover.

In South Africa—private health insurance cover—delivered through medical schemes, is voluntary and serves only the 16 percent of the population with higher incomes. Healthcare is delivered to these members predominantly in the private sector, which is well developed, resource intensive, and highly specialized. It is estimated that a further 21 percent of the population are not covered by health insurance but prefer to use private primary care doctors and pharmacies on an out-of-pocket basis. This group is almost entirely dependent on the public sector for specialist and hospital care. The remaining 63 percent of the population are dependent on the public sector for all their conventional healthcare services.

People who have access to medical scheme benefits are, in principle, not able to use the public sector at no cost. User fees are charged in the public system and those earning an income of R 6,000 per month or more are required to pay in full at a tariff similar to private rates. The full user fees apply to medical scheme members regardless of their income level. However the billing practices in the public sector have been lax.

Chile relies on SHI to deliver health services and insurance to its 17 million people. Structurally the SHI system has remained mostly unchanged for the past 30 years, although reform passed in 2005 and described in this report introduced significant changes in the responsibilities of insurers and beneficiaries, and created a national health regulatory agency. This section describes the key functions of stewardship, health insurance provision, financing, and health service delivery as a high-level summary of the Chilean health system. More detailed description of reforms and current features of benefits and purchasing is provided later.

### 3.1 Stewardship

Stewardship responsibility of Chile's health coverage system lies mainly within the Ministry of Health (MOH), which is a centralized entity organized functionally into two sub-secretariats: Public Health and Health Care Networks. The former is responsible both for health policymaking and for the provision of population-based public health services; while the latter coordinates a national network of public healthcare providers, including health centers and hospitals. This network is geographically decentralized into 29 Regional Health Services (RHSs). Additionally, public health governance is also decentralized, with 15 administrative regions each having a Regional Health Authority. A separate institution known as the Institute of Public Health is responsible for the regulation of the pharmaceutical sector and environmental and occupational health concerns. Additionally, a national health regulator set up in 2005, known as SDS (for its Spanish name *Superintendencia de Salud*), regulates both public and private healthcare providers and SHI health insurers.

#### 3.2 Insurance

Chile's social health insurance (SHI) system comprises a large government-run and nonprofit public health insurer, Fondo Nacional de Salud (Fonasa), and several for-profit private health insurers, known as Instituciones de Salud Provisional (Isapres), created in 1981. Fonasa dominates the system: at the end of 2012, it covered 13.4 million people, or about 77 percent of the country's population. Its beneficiaries are classified into four groups depending on their socioeconomic status and monthly income. Those that are formally classified as indigent through a means test belong to Group A, where the 7 percent SHI health contribution and copayments to public and private healthcare providers are waived. Groups B, C, and D are defined on the basis of the monthly income of the head of the family. At the end of 2012, Isapres covered about 3.1 million Chileans, or 17.5 percent of the population (Figure 2). The vast majority of these belonged to "open" Isapres, or SHI insurers that offer coverage to the entire population, irrespective of the place of employment. A minority of those covered by Isapres belonged to the so-called "closed" Isapres, or SHI insurers that belonged to large public or private firms and cover only the firms' employees and their dependents. Approximately 1 million Chileans were either insured through other welfare systems, such as that of the armed forces and the police, and only had commercial health insurance, or had no insurance at all.

Hence, as of 2012, Chile's SHI system, which consists of the beneficiaries of Fonasa and the Isapres, covered 16.7 million people, or 94 percent of the country's population (Figure 2). Only 6 percent of Chileans were outside of SHI. About half of them had separate coverage provided by the armed forces, the police, or other smaller welfare systems. Only a small number were uninsured, and it is presumed that most of those without any cover are middle- or uppermiddle income individuals. Chile is thus considered to have achieved universal health coverage but with fragmentation in the source of coverage.

In principle Chileans can select their SHI insurer. But in practice their choice is limited by their income. People with an income high enough tend to prefer an Isapre, because with their 7 percent mandatory contribution they can afford a better health plan than that offered by Fonasa. Moreover, in Isapres individuals can make additional, voluntary contributions to purchase better coverage, while in Fonasa no additional contributions are allowed. This feature of the Chilean SHI system has resulted in two segregated portfolios of beneficiaries, with Fonasa having the indigent and mostly lower and middle-income population and Isapres having mostly the upper-middle- and high-income population (Figure 1). Also, there are demographic and epidemiological differences between the beneficiaries of Fonasa and Isapres. Fonasa's beneficiaries have a greater proportion of people above the age of 65 years with a higher prevalence of chronic diseases.

Chile also has an active market for private commercial health insurance, which operates outside of the SHI system and provides top-up coverage, as the majority of those with commercial health insurance also have SHI coverage. By the end of 2012, private commercial insurers covered nearly 3.5 million people. About 91 percent of those covered by these insurers were employees of medium and large firms which purchased collective insurance for their employees and, sometimes, also for their dependents. Collective insurance is designed to pick up part of the medical bill that is uncovered by Fonasa or Isapres. Thus, this insurance reduces the beneficiaries' copayment. The remaining 9 percent of those with commercial health insurance were individually covered, mostly against catastrophic spending. While there are no studies about the profile of individuals with private commercial insurance, it is presumed that the majority are middle- and upper-income individuals covered by an Isapre, and who seek further financial protection through private insurance.



Source: Ministerio de Desarrollo Social and Ministerio de Salud (2012)

#### Figure 2: Health Insurance Coverage in Chile, 2012



Figure 2 masks how economic cycles and other factors have changed the market share of health insurers over time. In 1998 Isapres reached their peak market share of 26 percent. Between 1998 and 2003 their market share declined while Fonasa's increased. For the past 10 years Isapres' market participation has stagnated at over 17 percent. Growth in their beneficiary population has come from overall population growth.

#### 3.3 Financing

As has been mentioned before, the vast majority of Chile's population (13.4 million) receives care in public hospitals and is covered by Fonasa, the government health insurance program that provides coverage for people who cannot afford risk rated private insurance. Fonasa plays multiple roles in the Chilean health system. Besides providing health insurance coverage and buying services from the public and private provider network for its affiliates,<sup>9</sup> it also collects revenues (general taxes and payroll), and plays an important role as a supervisor of both payroll tax collection and medical bills (Fonasa, 2013b).

By law, all dependent and independent workers<sup>10</sup> with a salary equal or higher to one minimum wage must enroll with Fonasa or an Isapre and make a monthly contribution equal to 7 percent of their salary, up to a monthly salary ceiling of US\$2,700. Other individuals may join Fonasa or Isapres. These include independent workers, who can voluntarily enroll with Fonasa or an Isapre conditional on their 7 percent contribution; retired individuals, indigent citizens, and legally unemployed workers who are entitled to free coverage by Fonasa. In addition, Isapres beneficiaries may voluntarily make an extra contribution to cover the cost of their preferred health plan.<sup>11</sup>

The law also mandates that all workers in the country contribute 7 percent of their monthly income to the health component of social health insurance (SHI). Workers are legally entitled to select their SHI insurer between Fonasa and various Isapres but, as already mentioned, income is a

<sup>&</sup>lt;sup>9</sup>See http://www.jointlearningnetwork.org/programs/compare/payment/13 percent2C229 for a brief description of how Fonasa pays for hospital services and primary care.

<sup>&</sup>lt;sup>10</sup>Dependent workers have a full contractual relationship with an employer. This means they have social benefits (vacation, pension, etc.), whereas independent workers are either contractors or work on their own (e.g., physicians).

<sup>&</sup>lt;sup>11</sup>Previous paragraph taken from Bitran, 2013.





Source: Bitran, Debrott, and Arpon (2013)

strong determinant of their choice. The law allows Isapres (but not Fonasa) to charge voluntary premiums above the 7 percent minimum. Most of those covered by an Isapre make this additional voluntary contribution. On average, Isapres' revenue is equivalent to about 10 percent of the enrollees' income, of which 7 percent is mandatory and 3 percent is voluntary. Note that the 7 percent contribution for those affiliated with Fonasa buys the same coverage irrespective of an individual's risk or income, following the principle of "pay according to your capacity and receive according to your need."

In contrast, for those affiliated with Isapres, the 7 percent mandatory payroll tax contribution is used to pay for a risk-based premium, the amount of which depends on the individuals health risk; and the desired size of the benefits package following the principle of "pay according to your risk." High income/low risk individuals are therefore more likely to affiliate with Isapres while high risk/low income individuals tend to choose the public insurer (Fonasa). For example, while Fonasa covers 77 percent of the overall population it covers a more than proportional share of the elderly (91 percent) (Fonasa, 2013).

Given that Isapres cater to higher income individuals, the average per capita resources available to cover healthcare are much higher than in Fonasa. In 2008, the 17.5 percent of the population affiliated with Isapres spent around 2.4 percent of Chile's GDP while the remaining—about 82 percent (mainly affiliated with Fonasa)—spent about 4.5 percent of the GDP (Cid et al., 2011). Hence, Isapre affiliates spend about 2.3 times the amount being spent to provide health services for those affiliated with the public insurer (although Fonasa has been closing the gap in spending per beneficiary, as shown by the above chart on per capita spending by Fonasa and Isapres over 2002-2011).

The two-tiered nature of Chile's health system as well as the inequity associated with it has been one of the key debates about the health sector in that country and has been one of the key reasons for defining an explicit and enforceable set of benefits (discussed later) that should be available to all, irrespective of their affiliation status, income level, or health risk.

On the whole, Chile's SHI system is financed from four main sources (Source of Financing in Chile's Health System, 2011 Figure 4):

- Mandatory and voluntary SHI health contributions from formal and informal workers (28 percent of total financing in 2011),
- Central government general tax revenue (30 percent),

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- Direct out-of-pocket spending by households (38 percent), and
- Voluntary contributions to SHI and commercial insurers (4 percent).

Government financing of the health system pays for the administrative costs of the Ministry of Health (MOH) and several public agencies, such as the National Institute of Public Health (ISP), the Central Procurement Agency (Cenabast), and the national health regulatory agency (SDS). It also finances regional, decentralized public offices that represent the central MOH in the country's 15 Regional Ministerial Secretariats (SEREMIs). Public financing of the health system also pays for the provision of collective public goods such as mass education campaigns and vector control. Finally, public funds are used to pay healthcare providers who deliver services to the beneficiaries of Fonasa.

Fonasa purchases health services mostly from public providers, but in recent years it has been devoting a growing share of its budget to purchase healthcare from private providers. Fonasa's payment systems include capitation for primary healthcare (PHC) and historic budgets for public hospitals combined with fee-for-service (FFS) and prospective payment per case. The reasons behind Fonasa's preference for public providers and the rationale for its provider payment system are explained later in this document.

In contrast to Fonasa, Isapres purchase health services mostly from private providers and the main payment mechanism is FFS. A few Isapres have explored capitation for selective health services but their efforts in this area remain embryonic. The strong relative market power of private providers, especially high-end tertiary clinics and medical specialists, has limited Isapres' ability to adopt payment systems other than FFS.

### 3.4 Provision

The provision of healthcare services in Chile is mixed, with public and private providers operating at all levels, from primary healthcare (PHC) to complex tertiary care. In the public sector the provision of services occurs through 29 decentralized Regional Health Services (RHSs) that make up the National Health Services System (SNSS). Additionally, the public system comprises three experimental hospitals, which have a higher degree of managerial autonomy than the typical public hospital. The public network of healthcare providers is distributed along the national territory. It includes 192 hospitals, of which 63 are tertiary, 24 are of medium complexity, and 105 are of low complexity. Primary healthcare is decentralized down to the level of the municipality (there are 346 in total). In Chile, most hospital beds are public, and the public network also comprises 17 specialty care ambulatory centers. Delivery of PHC takes place in 1,870 health centers that are managed by the country's municipalities, with funding that comes mostly from the central government and is complemented by own municipal resources.

Fonasa is required to purchase most of its health services from public institutions, although it does provide a subsidy to its enrollees wishing to purchase services from private providers. Public healthcare providers must sell most of their services to Fonasa and have strict guidelines on the type and number of services they can make available to private patients or Isapre beneficiaries. Non-indigent Fonasa beneficiaries can elect to receive care outside of the public system for a higher copayment. Isapres beneficiaries are mainly attended in the private sector.

Private healthcare delivery has grown considerably since the creation of Isapres in 1981. In 2012 private hospital beds represented 28 percent of the approximately 44 thousand hospital beds in the country. In recent years the supply of private hospital beds has continued to expand along with economic development and the growth in employment and household income. In the capital city of Santiago, where half of the country's population lives, the supply of private hospital beds grew by 25 percent between 2008 and 2013, while the supply of public hospital beds fell by 11 percent.

#### 3.5 Key Takeaways

A two-tiered and highly segmented health system emerges from the above overviews of stewardship, insurance, financing, and delivery in the Chilean health system: The vast majority of the population is served by the public insurer, and about one-fifth chooses the private sector for insurance and health service coverage. There is no institutional integration between the two, and both operate with a different logic. Fonasa works as universal insurance would, but without the "universality" because some people choose not to participate. It does have basic pillars of "universality" in terms of risk and income solidarity and the inability to deny insurance (Paraje and Vasquez, 2012). On the other hand, private insurance runs on strict market logic by making sure the insured can afford the premium and have a relatively low expected risk (Paraje and Vasquez, 2012). However, the AUGE health reform law, discussed

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Figure 5: Architecture of the Chilean Health System

later, does represent a partial equalization of benefits across the two segments of health coverage, and perhaps a lever for further, progressive equalization over time.

Figure 5 illustrates the architecture of the health system in Chile as a single, public fund with the option for users to opt out and purchase the mandatory cover from a private insurer (and possibly also include top-up cover). It shows that the public insurer purchases services from public service providers and may also purchase from private providers in special circumstances.

Table 2 summarizes the above comparison of the health systems in Chile and South Africa.

#### Table 2: Comparison of Health Systems of Chile & South Africa

#### Similarities

In both countries, the vast majority of the population relies on the public system but a substantial part of total health resources is absorbed by a health insurance industry that caters mainly to the higher income groups of the population.

Both Chile and South Africa have two-tiered systems.

Both countries are undergoing health reforms meant to reduce inequity in access/resources.

Both countries have a strong primary care focus (at the municipal level in Chile).

#### Differences

Chile has an explicit and enforceable benefits package.	<ul> <li>Benefits in South Africa are not clearly defined; this has led to discrepancies across regions.</li> <li>Private medical schemes are required to offer a set of Prescribed Minimum Benefits, which are hospital focused.</li> <li>An enforceable benefits package will facilitate budgeting, monitoring, and the management of expectations.</li> </ul>
Chile has a strong financing structure, with mandatory payroll (for all those able to pay) and growing general taxes for healthcare.	The current funding of healthcare in South Africa is via general taxation for the public sector and voluntary (mainly after tax) private funding for the private sector. South Africa has a much narrower (income) tax base than Chile.
Chile has a fully functional public National Health Insurance fund.	South Africa's public system has a global budget mechanism without a purchaser/provider split.

Source: Authors (a graphic on the architecture of the South African health system has been included as Table A4 in the annex.)

#### 4.1 Background<sup>13</sup>

Isapres were created during the years of Chile's military dictatorship (1973-1990) and a two-tiered, inequitable health system emerged (Infante, 2007). Once democracy was reinstated in Chile in 1990, the reform of the health sector was a key concern. According to a poll carried out by a prominent think tank in 2000, Chileans thought that health was among the three top priorities for the incoming government, along with employment and poverty (Bitran, 2008). In 1995, first attempts to reform the health system failed.<sup>14</sup> Even though these early proposals never prospered it was the first time an explicit benefits package began to be discussed as part of health reform, an idea that was later taken up by the reform proposal of President Lagos (Lenz, 2007). It also paved the way for two studies that would be of great importance later on: a study on the burden of disease (Ministry of Health, 1996) and a first study of social preferences of Chilean citizens with regards to health (Ferreccio et al. 1996). These studies showed the limits of purely scientific approaches to priority setting as they evidenced that even the burden of disease studies required a substantial amount of subjective judgment and that, therefore, priority setting had to involve social participation and could not be designed in technical ivory towers (Infante, 2013).<sup>15</sup> This awareness later shaped the benefits policy and contributed to the importance of social participation and deliberation as integral parts of the priority setting process (see section 5.2).

# 4.2 The Emergence of the AUGE Reform Proposal<sup>16</sup>

During the presidential campaign of 1999, the presidential candidate Ricardo Lagos openly declared that health reform would be a key part of his policies during his presidency and that he would personally take charge of moving it forward on his agenda. It was the first time since the end of the dictatorship that a president explicitly included the reform of the health sector in his government

program (Lenz, 2007). Once elected president, his stated reform objectives were to improve health status, address the challenges associated with the aging of the population, reduce equity gaps in access to healthcare and in health outcomes, and set up a health system that would meet the population's expectations (Bitran, 2008).<sup>17</sup> President Lagos appointed Dr. Hernan Sandoval to head an interministerial health reform committee that included the Ministry of Health (MOH), the Ministry of Finance, and the Secretariat of the Presidency. Moving the design out of the MOH later proved to be a smart decision (Lenz, 2007). The cornerstone of the reform proposal submitted by Sandoval to the President was that citizens should have explicit guarantees to health services and be legally empowered to demand those guarantees (Bitran, 2008) as a means of improving equity, access, and quality in healthcare.

Reform stakeholders, both proponents and opponents, quickly surfaced to express their views. One of the fiercest opponents of AUGE was Colegio Medico, the Chilean medical association. Its leaders, reflecting a view shared by part of the medical profession, feared that AUGE would restrict the professional autonomy of medical doctors and also would weaken the doctors' bargaining power with Fonasa and Isapres, thus hurting their income. Also, the idea of covering only some and not all health problems made many physicians uncomfortable, especially those treating illnesses that were not included in the initial list of 56 health problems (Libertad y Desarrollo, 2002). Political parties belonging to the leftist ruling coalition (Concertación) had mixed views about the reform. Political parties in the rightist opposition as well as the private insurance sector disliked the reform because it threatened the profitability of Isapres.

On the other hand, citizens covered by Fonasa supported the reform, because having timely access to quality care in the public sector was often difficult for them. Similarly, citizens covered by Isapres were unhappy with its risk selection and exclusion policies, high annual increases in their premiums, and insufficient financial coverage against catastrophic medical expenses.

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<sup>&</sup>lt;sup>12</sup>Paragraph taken from UHC forward. http://uhcforward.org/reforms/compare/delivery/246,229,237

<sup>&</sup>lt;sup>13</sup>Mainly adapted from Infante, 2013.

<sup>&</sup>lt;sup>14</sup>See Lenz, 2007 for an analysis of these early failures.

<sup>&</sup>lt;sup>15</sup>For example, the calculation of the BOD requires the allocation of weights allocated to different diseases to determine the burden of disability. These weights are mainly subjective.

<sup>&</sup>lt;sup>16</sup>Mainly taken from Bitran, 2008 unless otherwise indicated.

<sup>&</sup>lt;sup>17</sup>The following stakeholder analysis of the AUGE reform is taken from Bitran, 2008.

# 4.3 Negotiating the AUGE Proposal<sup>18</sup>

During the first two years of Lagos' presidency, the reform discussions mainly took place within the government. Internal divisions as well as resistance from stakeholders who felt that they had not been sufficiently involved almost led to another failure of the reform proposals (Lenz, 2007). However, President Lagos was prepared to support the reform, face all political costs, and do what was required to get it approved by the congress in the shortest possible time (Bitran, 2008). In 2002, President Lagos appointed a new minister, Dr. Osvaldo Artaza, who was put in charge of moving the reform agenda forward, and soon announced the idea of AUGE, a legally enforceable benefits package covering 56 priority health problems. Importantly, the clinical practice guidelines and health baskets associated with each of the 56 health problems had been elaborated by the Ministry of Health in collaboration with the scientific medical societies, indicating that the government had been able to rally at least part of the medical profession to support the idea of an explicit benefits package.

The new political strategy consisted of moving the discussion out of the executive branch of government and into the Chilean Congress and the public arena. This strategy was strengthened by two additional actions that were meant to increase the credibility of reform efforts among Chileans; an aggressive public campaign showing the potential benefits of AUGE, and the implementation of a pilot AUGE project. These efforts were backed by opinion polls showing the population's sympathy with the AUGE proposals. The former strategies were soon countered by interest groups opposing the reform under the leadership of the powerful Colegio Medico. The dispute reached a peak in 2002 when a general strike was declared by the medical association and those opposing the reform. However, the government finally managed to have the concept of AUGE approved by Congress by 2003. The following years concentrated on negotiating other aspects of the reform proposals such as financing

reform. The explicit guarantees which represented the core of the reform proposal were however not affected by these negotiations and implementation of AUGE, which were officially started in July 2005.

### 4.4 Lessons<sup>19</sup>

Several lessons emerge from this brief historical description.

First, the president himself assumed the leadership of the AUGE reform. This helped to align the different sectors within the government and contributed to the legitimacy of the reform proposals. It also indicates that the health sector is extremely complex and should not be handed over exclusively to ministries of health. As expressed by a former auditor of the Superintendence Of Health, "Throughout the reform process, the steadfast support of former President Lagos—who was convinced of and committed to the idea of reform—was crucial, a fact made evident each time he personally intervened when internal conflicts arose; thanks to his political might, it did get passed..." (Escobar and Bitran, 2014).

Second, by introducing the principle of gradualism into the reform proposal, the support of the Ministry of Finance was secured. The scope of the benefits package was to be gradually increased and its cost would not exceed a per capita amount compatible with the available resources (see section 5.4 on the costing of AUGE benefits).

Third, an inter-ministerial committee, and not the Ministry of Health (MOH), was entrusted with the design of the health reform. This strategy helped to incorporate different viewpoints within the government from the very start even though it was met with opposition by the MOH. Last but not least, winning over the population by offering enforceable guarantees and launching massive public campaigns provided the government with sufficient support to push through its reform proposals.

 $<sup>^{\</sup>rm 18}{\rm The}$  analysis presented in this paragraph is based on Lenz, 2007.

<sup>&</sup>lt;sup>19</sup>Mainly based on Lenz, 2007. Lenz offers more lessons but only those considered most relevant for the South African context are mentioned here.

### 5. Benefits Policy in Chile: Explicit, Enforceable, and Sustainable Guarantees for Universal Coverage

The benefits policy associated with South Africa's National Health Insurance (NHI) coverage will outline the implicitly or explicitly defined set of goods and services that South Africans can expect to access.

The benefits policy proposed in the Green Paper suggests that all South Africans should have access to essential healthcare services with no copayment. This set of essential healthcare services and service delivery process needs to be defined to facilitate budgeting and an assessment of affordability. South Africa's salient challenges include:

- A quadruple burden of disease
- A health system primarily focused on hospital-based care
- An inequitable distribution of resources
- A diverse population where a majority face affordability challenges

In Chile these kinds of challenges have been addressed by implementing a benefit structure that is disease based, and has evolved in terms of affordability and delivery capacity. The focus has been on primary care facilities with a gatekeeper role, with coverage provided via a combination of public and private sector funds. There are still challenges of efficiency and accessibility even in the more mature stages of implementation.

#### 5.1 Overview and Challenges: Benefits Policy in South Africa

South Africa will need to develop clear policies regarding eligibility and benefits in order to ensure a reasonable level of access to healthcare. Defining the benefits policy in a health delivery framework—either implicitly or explicitly is also critical for resource planning and budgeting for adequate and high-quality delivery, ensuring equity; and managing the population's expectations about the nature of coverage.

## 5.1.1 South Africa's Benefits Policy Challenges

South Africa has a quadruple burden of disease, a health system focused on hospital-based care, inequitable distribution of resources, and a diverse and poor population. The public health sector serving most South Africans is funded from the national budget, while a parallel system of more expensive private sector "medical schemes" is funded by voluntary contributions from members and their employers as well as out-of-pocket payments.

South Africa faces numerous challenges related to benefits policy reform. Benefits offered in the public sector have historically been unclear. Their delivery tends to be driven more by available resources than by a clearly defined package, although treatment protocols do exist for higher cost/lower frequency cases such as dialysis, cancer treatment, and neo-natal care. Given this lack of a clearly defined benefit policy, there is widespread rationing through queuing and long waiting times. Such rationing is inefficient as it does not direct limited health resources to those most in need. In the private sector, however, benefits are defined according to the registered rules of medical schemes with clear exclusions, limitations, and specification of the service providers covered.

Similarly, the costing of health benefits in South Africa's public sector does not appear to have taken place on the basis of a package of services or access goal, but rather on a costing of resources allocated. In the private sector, the costing tends to be done on a year-by-year basis. But there have been adverse trends due to factors such as an aging population, burden of disease, and increasing

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cost of technology (particularly diagnostic)—which have led to annual increases in medical scheme contributions consistently exceeding consumer price inflation.

While many stakeholders in the South African market support the concept of universal access to quality healthcare through National Health Insurance (NHI), the affordability of its prospective package of services is a concern to many. The NHI Green Paper declares that all South Africans should benefit from essential healthcare services without copayments. However, this package of services has not yet been clearly defined-the role of medical schemes remains unclear, and the process for service delivery to facilitate budgeting and assess affordability has not been outlined. Additionally, accurately costing any proposed package of benefits will depend on the availability of adequate and reliable data. There are large discrepancies in South Africa between data that is available in the public and private sectors, and extensive debate about the relevance of each in the context of a revised universal access system.

South Africa's current system of limited access to private cover and poor service delivery in the public sector is not sustainable, and revitalization in the public delivery of healthcare along with expanded access is urgently required. The core question for the future NHI's benefits policy is whether it will be implicit, similar to the public sector's current approach; explicit, similar to medical scheme benefits packages; or a hybrid approach. As detailed below, Chile's hybrid approach may hold useful lessons.

#### 5.1.2 The Public Healthcare Mandate in South Africa

The preamble to South Africa's National Health Act of 2003 gives the rationale and constitutional requirements for the unified national healthcare system:

Recognizing - the socio-economic injustices, imbalances and inequities of health services of the past; the need to heal the divisions of the past and to establish a society based on democratic values, social justice and fundamental human rights; the need to improve the quality of life of all citizens and to free the potential of each person;

Bearing in mind that - the State must, in compliance with section 7(2) of the Constitution, respect, protect, promote and fulfill the rights enshrined in the Bill of Rights, which is a cornerstone of democracy in South Africa; in terms of section 27(2) of the Constitution the State must take reasonable legislative and other measures within its available resources to achieve the progressive realization of the right of the people of South Africa to have access to healthcare services, including reproductive healthcare; section 27(3) of the Constitution provides that no one may be refused emergency medical treatment; in terms of section 28(1)(c) every child has the right to basic healthcare services; in terms of section 24(a) everyone has the right to an environment that is not harmful to their health or well-being;

And in order to - unite the various elements of the national health system in a common goal to actively promote and improve the national health system in South Africa; provide for a system of co-operative governance and management of health services, within national guidelines, norms and standards in which each province, municipality and health district must address guestions of health policy and delivery of quality healthcare services; establish a health system based on decentralized management, principles of equity, efficiency, sound governance, internationally recognized standards of research and a spirit of enquiry and advocacy which encourages participation; promote a spirit of co-operation and shared responsibility among public and private health professionals and providers and other relevant sectors within the context of national, provincial and district health plans.

In March 2012, the minister of health announced that 10 pilot projects would be implemented with a focus on:

- Reduction of high maternal and child mortality through district-based health interventions;
- Strengthening the performance of the public health system in readiness for the full roll-out of National Health Insurance (NHI);
- Strengthening the functioning of the district health system;
- Assessing whether the health service package, the primary healthcare (PHC) teams, and a strengthened referral system will improve access to quality health services, particularly in the rural and previously disadvantaged areas of the country;
- Assessing the feasibility, acceptability, effectiveness, and affordability of innovative ways of engaging private sector resources for public purposes;
- Examining the extent to which communities are protected from financial risks of accessing needed care by introducing a district mechanism of funding for health services;
- Testing the ability of the districts to assume greater responsibilities associated with the purchaser-provider split required under NHI;
- Assessing the costs of introducing a fully-fledged District Health Authority as a contracting agency and the implications for scaling up such institutional and administrative arrangements throughout the country; and
- Assessing the utilization patterns, costs, and affordability of implementing a PHC service package.

#### 5.2 Benefits Policy under AUGE: Rationale, Criteria, Scope, and Institutional Framework

Benefits policy is a key factor driving the health delivery framework. The benefits policy will drive implementation, possibly in a phased way, in terms of the services covered and the delivery mechanism. This facilitates resource planning and budgeting. It also contributes to managing the population's expectations about the nature of coverage and ensures that there is equity. An inadequately defined benefits policy could lead to disparities in service deliveries in different regions and thus lead to equity issues.

In South Africa, benefits policy in the public sector has historically been unclear. The delivery of benefits tends to be driven more by available resources than by a clearly defined package, although treatment protocols do exist for higher cost, lower frequency cases such as dialysis, cancer treatment and neo-natal care. In the private sector benefits are defined according to the registered rules of medical schemes with clear exclusions, limitations, and specification of the service providers covered. In a system without a clearly defined benefits policy, rationing tends to take place by queuing and long waiting times. Such rationing is inefficient as it does not direct limited health resources to those most in need.

This section describes how the 2005 AUGE health reforms defined 56 priority health conditions and access to treatment for these conditions was guaranteed. This list had expanded to 80 by 2013 with the increase based on needs assessment as well as measurement of social preferences. The conditions are associated with treatment algorithms, and copayments apply for the use of service providers more expensive than the algorithms defined. A distinguishing feature of the system in Chile is that cover for conditions outside the priority list is still provided, but this may be subject to rationing as before. Since 2005, both Fonasa and the Isapres must guarantee the provision of AUGE, a benefits plan currently covering 80 high impact priority diseases representing about 75 percent of Chile's burden of disease (Escobar and Bitran, 2014). The incremental cost of the benefits package is financed with general taxes in the case of Fonasa and additional premiums in Isapres (Bitran, 2013). This AUGE premium is group rated, meaning everybody with the same Isapres pays the same premium irrespective of his or her specific individual risk. An individual's Isapre premium thus consists of two parts: an AUGE-based portion that is equal for everyone, and a variable risk-rated portion.

#### 5.2.1 Rationale for an Explicit Benefits Package

Prior to the AUGE reform of 2005, the public insurer Fonasa claimed to cover all medical needs of its affiliates. In practice, however, implicit rationing was common and beneficiaries had to face widespread rationing through long waiting times or sub-optimal levels of quality (Bitran, 2008). Isapres did cover most treatments for most health problems included in AUGE, but they required copayments that were sometimes significant and, thus, limited effective access to care (Bitran, 2008). Under the new universal benefits policy, all Chilean citizens affiliated with either Fonasa or one of the Isapres are legally entitled to full treatment for (by 2013) 80 priority health problems and empowered to receive the access, opportunity, quality, and financial protection guarantees established explicitly for each (discussed in section 5.3 on AUGE guarantees).

These guarantees also explain the acronym "AUGE", which stands for Universal Access with Explicit Guarantees (Ministry of Health Chile, 2013). The importance of these universal guarantees must be understood in the context of the inequitable, two-tiered health system that was created in the 1970s. Even though AUGE did not eliminate the dual nature of Chile's health system, it did mitigate the latter's inequity by granting enforceable equal access and guarantees for a subset of priority health problems to all irrespective of economic status and insurance affiliation (Infante and Paraje, 2010). Hence, the AUGE reform shows that in the context of a two-tiered health system with a dual insurance system, universality of access can promote fairness (Paraje and Vasquez, 2012).

## 5.2.2 The Chilean "Algorithm" to Choose Covered Health Services<sup>20</sup>

The departure point for the design of the prioritization plan included all interventions that were provided by the system at that time and that constituted the "default" health plan.<sup>21</sup> An algorithm to provide analytical support to the discussion on priorities was presented which can be summarized as follows:

- 1. Indicators measuring the burden of disease of different conditions: incidence, prevalence, and mortality rate;
- 2. Inequity measured by gaps in mortality across socioeconomic groups;
- Effectiveness of different treatments—health conditions were stratified into high, medium, and low treatment effectiveness, and those conditions with high or medium treatment effectiveness were preselected;
- Evaluation of the capacity of public and private systems to deliver the services—the group of conditions for which there were sufficient available resources was preselected;
- Estimation of cost-per-case and total cost-percondition based on treatment protocols suggested by experts and national scientific associations;

- 6. High cost conditions—identified as those with annual treatment costs greater than, or equal to the annual minimum wage (US\$2,697); and
- 7. Preferences elicited from people, such that reformers could use the information and prevent special-interest groups from defining the health plan.

Even before the AUGE proposal was launched, Chile had been interested in eliciting social preferences, seeking to counterbalance purely technical criteria and the power of special interest groups. Chile is probably one of the very few countries in the world that has not only explicitly defined a technical algorithm to prioritize its health benefits package but also explicitly incorporated social preferences into its process (Infante, 2013). From studies eliciting social preferences, it has become clear that the public cares more about the severity and cost impact of illness, or the frequency of adverse health events, than about abstract notions like cost effectiveness or burden of disease. For instance, social preference studies showed that underprivileged women compared their oral health with that of better off women and found the difference unacceptable: the latter typically retain healthier teeth, compared with the former, who lack the financial resources to buy artificial dentures. As a consequence, AUGE decided to cover artificial dentures in its benefits plan (Infante and Paraje, 2010). Hence, both technical criteria and social preferences were incorporated into the priority setting exercise as represented in Figure 6 below.



<sup>&</sup>lt;sup>20</sup>Taken from Vargas and Poblete, 2008 unless otherwise indicated

<sup>&</sup>lt;sup>21</sup>In the absence of an explicit description of benefits in the public sector, this benefits plan was "implicit". The public sector had no legal obligations to deliver any specific benefits and resorted to rationing when public providers were unable to deliver certain services demanded by beneficiaries, particularly at the secondary and tertiary levels. Rationing could include queues, demand deflection, and low quality. In contrast, Isapres did offer an explicit health plan, which was an integral part of the contract signed by the Isapre and the insured.

The application of these criteria did not obey strict formulas and no specific weights were assigned to them (Escobar and Bitran, 2014). Rather, they constituted a basis for discussion and deliberation (Escobar and Bitran, 2014). Several studies played a key role supporting the prioritization process and making it more evidence-based. Studies on the burden of disease, cost effectiveness, social preferences, capacity of the public provider network, and, importantly, the development of clinical practice guidelines with an evidence-based methodology were of particular importance (Vega, 2008).

Finally it is important to highlight that the need to periodically update the benefits package (every three years), and the production of studies (burden of disease, social preferences, and cost effectiveness) to support these processes was anchored in the law (Infante, 2013): the normative framework states that the benefits policy must be adjusted every three years, that these adjustments must be accompanied by costing studies (see section 5.4 on costing of AUGE benefits), and that social preference and other studies must be carried out periodically. The institutional framework for these periodic adjustments to AUGE benefits has been discussed separately in this case study (see sections 5.4, 5.6, and 5.7).

## 5.2.3 The Scope and Delivery of the Benefits Package

While the explicit benefits package set out in Plan AUGE is limited in scope, it has a significant level of detail (Rumbold et al. 2012) and includes an "appropriateness criteria" as to what services and/or procedures to use under which circumstances. AUGE mandated Fonasa and the Isapres to cover priority health problems by offering an explicit set of minimum benefits. Initially, the list comprised 56 priority problems which were expanded to 80 by 2013.<sup>22</sup> The imposition of this coverage floor sought to improve equity in health access in the country. Recent evaluations of AUGE have shown that equity has indeed improved (Bitran, Escobar, and Gassibe 2010, Ministerio de Salud 2012a).

Also, as the number of explicitly defined medical conditions covered by AUGE increased,<sup>23</sup> the set of activities, procedures, and technologies necessary for treating each medical condition were also explicitly established. In other countries such as Germany or France, the provision of certain procedures is neither limited to a certain disease, nor are they excluded from being used for another disease (Busse et al. 2005). Little attempt is made in those countries to describe the appropriateness criteria attached to the services included in their version of a social health insurance scheme. Rather, all services are funded, provided a doctor considers them medically necessary.

In Chile, however, the services that Fonasa covers are those included in a list containing several hundred healthcare interventions related to the 80 AUGE conditions. Fonasa updates the list annually and enters the public price of each service (more on the role of this price later in this document). The list encompasses most categories of services that modern medicine offers—from simple primary healthcare visits to complex procedures at the tertiary care level, laboratory and imaging diagnostic exams, and a broad set of preventive and therapeutic services. By law, Isapres must at least include all of these services in their health plans, and cover financially at least the amount that Fonasa covers.

For health services not contained in the AUGE benefits package, Fonasa beneficiaries can use public municipal health centers without any direct charge, or obtain secondary and tertiary care in public hospitals where they must make a copayment. They can also select a private ambulatory or in-patient provider through Fonasa's Free Choice Modality (FCM), but they must make a copayment under FCM as well, given Fonasa's limited coverage of private care (a description of Fonasa's FCM is provided in the box in section 6.6.2).

To the extent possible, Fonasa tries to deliver AUGE services through public providers in order to contain its AUGE costs. In some situations, however, particularly in the sparsely populated rural locations or in cities that are far away from large urban centers, public providers may not exist or may lack the capacity to treat an AUGE condition. In those settings Fonasa is, at times, forced to purchase private services in order to provide timely care and meet AUGE's opportunity guarantee (see Table 3).

Beneficiaries of Isapres almost exclusively use private healthcare providers, either because they prefer the better quality of ambulatory services offered in the private sector, or because public hospitals are subject to rules that limit their ability to sell inpatient services to Isapres patients. Isapres allow beneficiaries to select their providers; they cover a share of the provider's bill while beneficiaries cover the rest in the form of a copayment. Isapres offer multiple plans, with the more expensive ones offering unrestricted choice of providers (always with copayments and generally with annual limits) and the less expensive ones offering a set of preferred providers.

To deliver AUGE services, Isapres have set up contracts with closed networks of preferred providers, in order to contain the cost of AUGE. Beneficiaries can select these providers and get treatment under AUGE (with small copayments), or they can forgo AUGE coverage and seek treatment with a private provider of their choice, and with the regular financial coverage of their health plan.

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<sup>&</sup>lt;sup>22</sup>Annex 1 contains a complete list of AUGE's current priority health problems; a description of the AUGE reform is available in the box in section 5.3 <sup>23</sup>See Annex Table A.1 for a list of the 80 prioritized health problems.

### Figure 7: Chile: Hospitalization Rates by SHI Beneficiaries According to Insurer, 2001, 2008 and 2011 (per 100 beneficiaries)



The (perception of) quality of service providers is a key factor in determining the willingness of participants to use public sector providers. The revitalization of the public sector system is thus a critical factor in developing a sustainable system based on public-sector service provision. Another key factor is the use of the primary care clinics as a gatekeeper function.

The benefits offered under the system in Chile have been developed incrementally and are defined on the basis of diagnosis to facilitate service delivery and budgeting. This is an important feature of managing expectations for the level of care. Whereas Fonasa and Isapres beneficiaries use different providers for the most part (mostly public in Fonasa and mostly private in Isapres), the per capita utilization rates are not all that different between these two groups of beneficiaries, suggesting that access to healthcare may not vary significantly between the public and private insurers. This is illustrated in Figure 7 for the annual hospitalization and surgery rates.

In 2001, Fonasa beneficiaries had a higher hospitalization rate than Isapre beneficiaries, but by 2011 both hospitalization rates were very similar. Surgery rates were similar in 2001 for the two groups of beneficiaries yet by 2008 Isapres beneficiaries exhibited a considerably higher rate of surgeries than Fonasa's. No data are available for Fonasa for the year 2011, but the rate of surgeries in Isapres continued to grow to reach 14.5 per 100 beneficiaries.

#### 5.2.4 Consolidating the Institutional Framework for an Evidence-Based Benefits Policy<sup>24</sup>

The AUGE Advisory Council is the responsible entity for making adjustments to the plan, based on the material prepared periodically by the Technical Secretariat of the AUGE, a body of the ministry. This entity receives and analyzes requests from different sectors of society (organized community groups such as patient advocacy groups, scientific societies, pharmaceutical companies, and others) to incorporate new benefits within the AUGE benefits package.

The Advisory Council has considered diverse prioritization criteria similar to those initially adopted in the AUGE prioritization process. There are no explicit criteria or set rules governing the AUGE adjustment process. In this context, even though Chile has relied heavily on evidence both during the initial design of its benefits policy as well as during its later adjustments, no institutional

<sup>&</sup>lt;sup>24</sup>Taken from Escobar and Bitran, 2014 unless indicated otherwise.

framework is in place that would provide systematic and robust evidence to help the body in charge of making the decisions on the benefits included in AUGE (Castillo, 2013a). Also, a study by the Ministry of Health (MOH) reviewing the Advisory Council's process has found that it often lacked the necessary data and evidence to support its decisions on the incorporation of new health problems into the benefits policy (Castillo, 2013b). To respond to this situation, Chile has now embarked on a policy of institutionalizing the use of health technology evaluations to strengthen its evidence-based benefits policy. An HTA (Health Technology Assessment) commission has been established in 2012 with the mission of defining the institutional framework that will support the coverage decision process with evidence. Whether this framework will be an independent entity similar to the National Institute for Health and Clinical Excellence<sup>25</sup> or whether it will look more like a division within the MOH is just one of the many questions that still needs to be decided.

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	Fonasa (Public	Insurer of SHI)	Isapres (Private		
	The Indigent	The Indigent Other Beneficiaries		People Outside Of $SHI^{D}$	
Coverage (percent)		·			
Population	76.5%		17.0%	6.5%	
	27.3%	49.2%			
Contributions					
Mandatory 7% Contribution	No	Yes	Yes		
Separate AUGE Contribution	No No		Yes		
Additional Voluntary No No		Yes			
Benefits package					
Non-AUGE Health Services	Services offered without explicit guarantees and rationing resulting in queues.		Explicit benefits defined in Isapre insurance plan. Variable deductibles, copayments, ceilings and exclusions depending on plan.	Services offered more generously than in Fonasa.	
AUGE Benefits Package <sup>a</sup>	Mandatory, without copayments	Mandatory, with legally defined copayments	Mandatory, with legally defined copayments	Not mandatory. Coverage by Armed Forces and Police exceeds AUGE's.	
Provision					
Provision Of AUGE Health Services	Exclusively with public pr public supply is unavailab purchases services from p	le, in which case Fonasa	Exclusively with private, preferred providers.	Armed Forces and Policy have their own providers. People not covered by SHI must use public or private providers on an Fee- For-Service basis.	
Provision Of Non- AUGE Health Services	Exclusively with public providers	Mostly with public providers, but Fonasa offers small voucher for private care.	Exclusively with private, freely selected providers		

b. Includes people covered by the Armed Forces and Police, people without any health insurance, or those with private, commercial health insurance but not affiliated with SHI.

Source: Authors.

<sup>&</sup>lt;sup>25</sup>The National Institute for Health and Clinical Excellence (NICE) is the independent organization responsible for providing national guidance on public health, health technologies, interventional procedures, and clinical practice under the NHS in the UK.

#### 5.3 Overview of Legal Guarantees and Provisions under AUGE<sup>26</sup>

#### The AUGE Health Reform of 2005

In 2005 the reform known synonymously as AUGE or GES (Law No. 19.966) formulated an explicit benefit package for all Fonasa and Isapres beneficiaries. The AUGE reform defined the following four legal guarantees for beneficiaries:

- Access: The formulation of the right to healthcare for the priority problems in accordance with explicit treatment protocols set in the law.
- Quality: The accreditation of providers that deliver AUGE services by the national health regulator, SDS.
- Timing: The adoption of maximum waiting times for each treatment; and
- Financial protection: The adoption of limits to out-of-pocket spending (OOPS) for healthcare.

The significance of this reform stems in part from its definition of explicit and legal health rights for Fonasa beneficiaries, including the poor and the non-poor. It also results from the legal obligation for Isapres to adopt-at a minimum-the exact same legal guarantees as Fonasa. Although, since their inception, Isapres have had explicit and legally regulated health contracts with their beneficiaries, and a large share of beneficiaries obtained more coverage than what AUGE requires, the advent of AUGE has also defined minimum benefits for these insurers. Thus, no Isapres beneficiary can get less coverage than what AUGE requires. AUGE has therefore set up a coverage floor, or standard, that all social health insurance (SHI) insurers must abide by. By mid-2007, 56 AUGE priority health problems, with their respective guarantees, were in place; they increased to 69 by mid-2010 and to 80 by July 2013 (see list in Annex, Table A1).

#### 5.3.1 Overarching Legal Guarantees

Explicit guarantees foreseen by the law include: access, timeliness (opportunity), financial protection, and quality. These are established as follows:

- Access. The population has the right to receive coverage for the covered health problems and all associated care. The care covered for each health problem is determined by clinical practice guidelines and associated baskets of services.
- 2. Timeliness of care. The plan sets out a maximum waiting period for receiving services at each stage of a patient's interaction (the sub-guarantee of "opportunity"). This time is variable depending on diagnosis and settings defined for the condition. For example, for terminal renal chronic insufficiency, the initiation of haemodialysis must start 7 days at the latest from confirming the diagnosis while hip surgery must be performed 240 days at the latest from confirming diagnosis (Missoni and Solimano, 2010).
- **3. Financial protection** is defined by the maximum that a family can spend on health per year. Indigent and very low-income segments of the population are exempt from any payment.<sup>27</sup> For the rest, the copayment charged to the beneficiaries cannot exceed 20 percent of the reference price defined by Fonasa. Maximums differ depending on the family's income, thus protecting the principles of equity, inclusion, and redistribution (Bastias et al., 2008; World Bank, 2007)
- **4. Quality.** Services must be provided by registered and accredited providers and personnel. As further outlined in the section on supervision, this guarantee has only been implemented gradually.

## 5.3.2 Copayments for AUGE benefits<sup>28</sup>

The reform permits the adoption of copayments by Fonasa and Isapres for AUGE services. However, to prevent impoverishment and large financing shocks from health events, it sets a limit on the magnitude of these copayments (see above financial protection guarantee in section 5.3.1).

#### 5.3.3 Coverage of Health Problems Not Included in AUGE

In Chile, the law states that the benefits plan must not reduce in any way the medical benefits provided prior to

<sup>&</sup>lt;sup>26</sup>See section on supervision for further detail.

<sup>&</sup>lt;sup>27</sup>This process is facilitated by Chile's generally well-functioning tax system, making income relatively easy to determine; but "free-riders" do exist. <sup>28</sup>Taken from Bitran, 2013.

the reform for health conditions. This means that, while certain health problems are being prioritized within the Chilean health benefits policy, the rest of health problems are still being covered just as before the implementation of the health reform. This is one of the most noteworthy features of the Chilean benefits policy, which combines an explicit benefits package, including what matters most to the Chileans, with implicit rationing. Chile's health package is thus different from the one adopted by other countries or sub-jurisdictions adopting explicit benefits packages (for example Israel, Colombia, and the state of Oregon in the US) where anything not included in the benefits package is excluded from coverage. This attempt to describe everything provided by mandatory insurance by an explicit list has proven to be difficult and is being increasingly legally challenged (lunes et al., 2012). Note however that this approach has not come without difficulties as Chile has faced access problems with regards to health issues not covered by AUGE (Escobar and Bitran, 2014).

## 5.3.4 Population Coverage of the Benefits Package

Beneficiaries from the public insurance fund (Fonasa) as well from the private insurance companies (Isapres) are covered by the AUGE benefits policy. Together, they represent more than 94 percent of the population. The rest of the population tends to be covered by other insurance schemes (for example, the medical scheme for the military).

### 5.3.5 Annual Per Capita Cost of the Benefits Package

The per capita cost of the current AUGE-guaranteed benefits package is set at 3.47 UFs (Unidad de Fomento, an indexed unit of account created by the Chilean central bank), or around US\$ 152. According to recent estimates, providing coverage for the health problems covered by AUGE absorbs around 46 percent of total expenditure of the public insurer (Fonasa).

#### 5.3.6 Payment for AUGE Services<sup>29</sup>

Fonasa pays public hospitals with a combination of prospective payments per case and fee-for-service (FFS). It pays health centers via a combination of capitation, FFS, and annual payment per case treated (for example, for the ambulatory management of chronic conditions). Isapres pay private providers for AUGE health services mostly on an FFS basis for ambulatory care and through a combination of payment per case and FFS for hospital care. Payment mechanisms for public and private providers in Chile are discussed in greater detail in section 6.3.

#### 5.4 Costing AUGE's Explicit Benefits Plan

Costing the health benefits a government commits to is important for many reasons, the most important of which are: i) the resources available to finance the benefits policy must be at least as high as the cost of providing the benefits to all beneficiaries; and ii) estimating costs helps to establish the level of copayments in case these types of resources are meant to be one of the financing sources of the benefits policy.

In South Africa, costing health benefits in the public sector does not appear to have been done on the basis of a package of services or access goals, but rather on a costing of resources allocated. In the private sector the costing tends to be done on a yearby-year basis and there have been adverse trends due to factors such as an aging population, burden of disease, and increasing technology (particularly diagnostic) costs which have led to increases in medical scheme contributions consistently exceeding consumer price inflation annually. The accuracy of costing is dependent on the availability of adequate and reliable data. In South Africa there are large discrepancies between what data is available in the public sector and the private sector, and extensive debate about the relevance of each in the context of a revised, universal access system.

This section will consider the basis on which the Chilean benefits were costed and how this model developed over time (including the data sources). Chile has made substantial progress with regards to costing, mainly in two senses: a model has been systematically applied over time to cost and to cost adjustments, and the production of periodic costing studies is anchored in the legal framework. This highlights the importance of gaining access to as much information as possible about factors such as utilization and treatment costs. Pilot sites are crucial in this regard.

<sup>29</sup>lbid.

#### 5.4.1 Regulatory Framework<sup>30</sup>

The gradual extension of the AUGE interventions is conditional on the availability of funding. To that end, the Ministry of Finance calculates a maximum per capita value called the Universal Premium (UP) based on available funding. The estimated cost per beneficiary of the benefits policy cannot exceed the value of this premium. It was established that Explicit Guarantees would initially be applied to a maximum of 25 conditions, for which the total expected individual cost could not exceed the UP of 1.02 Unidad de Fomento (as explained in 5.3.5) or UF (approx. US\$ 46). The number of pathologies covered under the Explicit Guarantees was expanded to 40 in 2006 with a UP equivalent to 2.04 UF, and to 56 in July 2007 with the UP raised to 3.06 UF (Missoni et al, 2010). Since then, the value of the UP has been adjusted according to the real variation of the General Index of Hourly Remuneration (Indice General de Remuneraciones por Hora) calculated by the National Institute of Statistics (Instituto Nacional de Estadísticas or the INE). In 2012, the UP was set at 3.47 UF or approximately US\$ 152.4 (Escobar, 2013). As stated in the law, each time the government decides to increase the number of conditions included in the benefits package, the proposal has to go through a so-called verification

study, to make sure that adding the new item will not push the predicted AUGE costs over the pre-established UP amount in the following 12 months. In accordance with this requirement, there have been a total of five cost studies performed on the AUGE, such as by the Ministry of Health in 2006, 2007, and 2010, which are considered to be the best quality costing studies in the region. These studies are available in the public domain and can be accessed through the Ministry of Health's website.<sup>31</sup>

The legal framework just described is a unique way of guaranteeing the regular and systematic production of health benefits costing studies. More importantly, it is a way of assuring the fiscal sustainability of the benefits policy. It is also a way of introducing coherence between the benefits policy and the available sources of financing.

#### 5.4.2 Methods<sup>32</sup>

Figure 8 (below) summarizes the methodology that has been used in Chile to cost the initial benefits package as well as its subsequent updates. The cost of the benefits policy is calculated separately for the public (Fonasa, public insurance) and private sectors (Isapres, private insurance), given that:



<sup>&</sup>lt;sup>30</sup>Unless indicated otherwise, based on P4H, 2012; Escobar and Bitran, 2014; Missoni et al, 2010.

<sup>&</sup>lt;sup>31</sup>For the latest cost verification study see http://desal.minsal.cl/wp-content/uploads/2013/09/EVC\_web.pdf [available in Spanish only]. <sup>32</sup>Based on Erazo, 2012 and Bitran, 2012.

- i) Unit costs tend to be lower in the public sector compared to the private sector,
- ii) The beneficiaries of Fonasa tend to be older and sicker and therefore have a higher demand for services, and
- iii) Isapres beneficiaries tend to prefer using the open provider networks instead of the closed provider networks offered to receive AUGE benefits (Erazo, 2012).<sup>33</sup>

The methodology consisted of the following seven steps:<sup>34</sup>

- i. Estimation of the beneficiary population of the private and public sector.
- ii. Projection of the medical need and demand for each of the prioritized health problems. To that end, a team of epidemiologists, statisticians, mathematicians, and health economists carried out a thorough revision of existing information of prevalence and incidence of the health problems covered by the benefits policy and the expected and observed demand for their treatment.
- Revision of the specific services related to each health problem and its associated clinical practice guideline. (Note that clinical practice guidelines were of great help in this context as they describe the different services required for treating each of the health problems.)
- iv. Determination of costs for each of the services, medical devices, and drugs. As no systematic costing studies are available, the studies resort mainly to the tariff manuals available in the public sector and a registry of prices paid in the private sector for each health service. (Note that some adjustments were made to the pricing information to make them more similar to real costs. To that end, a small number of existing costing studies were used—for example, the unit cost of deliveries in the public sector.)
- v. Multiplication of the demand for the service by its cost for each health problem.
- vi. Determination of the total cost per beneficiary of the benefits policy in Fonasa and Isapres.
- vii. Determination of the average per capita cost of the benefits policy.

#### 5.4.3 Methodological Challenges

The two key challenges that have been identified in Chile with regards to costing are related to i) the difficulty of projecting the expected demand over time and, ii) the lack of information on the total and incremental cost of providing AUGE benefits. These problems are briefly outlined below.

Knowing the future demand for benefits is especially challenging when new policies will alter the behavior of beneficiaries. For example, a health system might have provided the same benefits regime in the past but without any explicit legal guarantees or ability to absorb the demand. Since demand is not static over time, a strengthening of the system and introduction of improvements for citizens may alter the observed demand. A policy change might, for example, generate an avalanche of initial demand for services that had previously only been available for some, and then flatten as this accumulated unmet demand is met. Also, demand will likely change as the epidemiological profile changes. Looking only at the current demand of services as a way of projecting future demand might introduce serious biases in the final costing exercise. Simulation exercises should therefore be an integral part of costing a benefits policy.

The Chilean benefits policy is centered on patients and citizens and provides each of them with explicit rights and guarantees. This focus on individual enforceability called for a new patient- or citizen-centered information system rather than a service-centered one (that is, reporting whether each person received what he or she needed instead of the overall quantity of services provided). To monitor compliance with AUGE guarantees in practice, a new information system was established in 2005 in the public sector called SIGGES (Sistema de Información de apoyo a la Gestión de las Garantías Explícitas de Salud, or Information System to Support the Management of Explicit Guarantees).<sup>35</sup> SIGGES registers all patients with an AUGE health problem and helps to monitor the compliance with guarantees as illustrated by Table 4.

#### 5.4.4 Incremental and Total Cost<sup>36</sup>

Successive cost studies on the AUGE benefits policy have sought to estimate the cost for Fonasa and the Isapres. However, the calculated cost matches neither the total cost nor the incremental cost of the benefits policy for those insurers. This is because the methodology defined

<sup>&</sup>lt;sup>33</sup>Isapres provide the option of either using a specific network of providers set up to provide AUGE benefits or resorting to an open provider network. In this later case, AUGE guarantees do not apply.

<sup>&</sup>lt;sup>34</sup>For further detail on the specific information sources, methodological steps etc. see Bitran, 2013.

<sup>&</sup>lt;sup>35</sup>http://www.sigges.cl/

<sup>&</sup>lt;sup>36</sup>Taken from Escobar and Bitran, 2014.

Table 4: Tracking Of Benefits Guarantees under Chile's Benefits Policy						
Government of Chile: Overall Behavior For Opportunity Guarantee						
	Number	Collected Opportunity (Timeliness) Guarantees				Total
Year	Of Legally Covered Health Problems	Fulfilled	%	Delayed	%	(Fulfilled & Delayed)
2005	25	1,263,254	91.3 %	119,836	8.7 %	1,383,090
2006	40	2,776,714	93.5 %	192,414	6.5 %	2,969,128
2007	56	4,434,328	93.8 %	293,578	6.2 %	4,727,906
2008	56	6,734,892	96.9 %	219,247	3.2 %	6,954,139
2009	56	8,964,065	97.1 %	272,278	3.0 %	9,236,343
Source: SIGGES.						

by the Ministry of Health (MOH) for the calculation of this cost states that the figure that must be calculated is the cost faced by the insurer when an insured person decides to address a health problem through the AUGE preferred provider network, regardless of whether the person is covered by Fonasa or an Isapre. In the case of Fonasa, it is estimated that a vast majority (see sections 6.3 and 6.4 on provision through Fonasa) of beneficiaries suffering from a health problem related to one of the 80 health problems covered by AUGE actually use AUGE services and their guarantees. Therefore, for Fonasa the calculated cost is similar to, but somewhat less than the total cost of providing medical benefits for the health problems included in the benefits policy. For Isapres, most affiliates prefer the free choice of provider option (see section on providers). Consequently, for Isapres, the cost studies commissioned by the MOH yield a result that represents a small fraction of the true cost of prevention and treatment of the benefits policy.

The MOH has however been interested in learning what fraction of Fonasa's total cost is allocated to the financing of the benefits policy, and what remaining portion finances the benefits not guaranteed by the regime. A recent study commissioned by the Ministry of Health estimated that financing health problems covered by AUGE represents 46 percent of total spending on benefits financed by Fonasa.

#### 5.5 Arranging Additional Financing for the AUGE Benefits Plan

Revenue mobilization for fiscal sustainability is an important consideration as population coverage for a prioritized (and increasing) set of health entitlements is expanded.

In South Africa, income, value-added and payroll taxes, excises (on fuel, alcohol, tobacco, carbon, etc.), and user charges have been proposed as the main options if additional revenue is required to finance National Health Insurance (NHI) costs. However, the amount and means of financing needed for NHI remain unclear due to continued debates over benefits policy. An incrementally developed benefits policy is one option for going forward for longer-term sustainability, because it facilitates management of expectations (from providers and patients), learning from experience, and monitoring the impact of coverage on experience.

This section discusses how Chile has introduced additional sources of general taxes to finance the incremental cost of AUGE for the public insurer, Fonasa, and granted private insurers the right to increase premiums to cover the additional cost of AUGE benefits. To assure fiscal sustainability, it has also established a gradually increasing ceiling on the cost of the package, which caps the number of benefits that can be added (from 25 in 2005 to 80 in 2013). Additional funding for the AUGE benefits policy was secured through different mechanisms in the public and the private sectors.<sup>37</sup> Adequate funding for financing the incremental cost of AUGE in Fonasa was obtained through an increase in taxation that was to be derived from: i) increase in the consumer tax (VAT) from 18 to 19 percent which initially was meant to be temporary but later became permanent; ii) a tobacco tax; and, iii) customs revenues. No provision was made to increase the mandatory payroll tax contributions of those affiliated with Fonasa. With regard to the private sector insurers, Isapres, the law made a provision that allowed private insurers to increase their premiums to cover any incremental cost resulting from the adoption of the AUGE, but this adjustment had to be community-rated (applied to all affiliates of an Isapre) instead of individually risk-rated. The various Isapres have adopted different premiums and have followed a variety of policies for their annual update. It has been argued that the premiums charged for AUGE by certain Isapres exceed the actual incremental cost imposed on these insurers by the HBP-however, only a systematic study could shed light on this issue (Escobar and Bitran, 2014).

To mitigate fiscal pressure, the reform was implemented in stages and the legal framework limited the yearly per capita cost of the benefits policy, establishing the so-called Universal Premium (UP). This UP is calculated based on availability of resources and the economic performance of the country. As discussed before, this policy led to a progressive addition of medical conditions to the list of priority diseases (from 25 conditions to 80 in 2013). However, the increase in the number of conditions covered by AUGE and the fact that the public sector has been forced to purchase services from the private sector in order to meet its service guarantees (Bitran and Urcullo, 2008) have increased costs significantly, and public providers' costs are currently controlled by budget ceilings (Cottarelli, 2010).

#### 5.6 AUGE Benefits: Supervision and Accountability

Defining an explicit set of priority health services helps to increase the accountability of the health system by explicitly stating what the government is committing to. Whether this commitment serves as a tool to help materialize the population's right to health depends on many factors, including the capacity of governments to check whether those in charge of insuring and providing the health benefits are complying with their responsibilities. It also involves an effort to monitor what is happening with the services included in the benefits policy, and to evaluate whether it is leading to the expected results.

In South Africa, the establishment of the Office for Health Standards Compliance (OHSC) has been a key development in promoting quality assurance in the public sector. This entity has a mandate to develop and monitor regulated norms and standards regarding health services at public facilities across various domains including governance and management, practices and services, and patient rights.

Chile has gone a long way in monitoring and supervising the delivery of benefits by creating a Superintendence of Health which is in charge of systematically monitoring and checking the compliance of the guarantees associated with AUGE, and of penalizing those not complying. The newly established OHSC and Chile's Superintendence of Health may be able to learn from each other's experience.

When the AUGE plan was adopted in Chile, reformers decided that a new institution would be created, known as the Superintendence of Health, to license both public and private health providers, oversee both Fonasa and Isapres, and check insurers' compliance with the AUGE guarantees. According to the legal framework (law 19.966 - Art. 24), the person affected by non-compliance of any of the guarantees of AUGE can complain before the Superintendence and ask for the restoration of his or her rights. Fonasa has established a parallel mechanism as well whereby its affiliates can complain and demand the rights established under AUGE directly of Fonasa (Vega, 2008).

<sup>&</sup>lt;sup>37</sup>Based on Missoni et al, 2010 unless indicated otherwise.

Table 5 shows which aspects of each of the four key guarantees associated with AUGE are being supervised by the Superintendence (Superintendence of Health, 2013). As can be seen, the supervision of the quality guarantee has only started to be implemented very recently. External observers (see for example Sánchez, 2009 and Bitran, 2013) consider that this entity has focused its efforts on monitoring the private insurers Isapres, rather than Fonasa, even though the latter covers most of the population.

Fonasa seems to have resisted oversight by the Superintendence of Health, arguing that given the public nature of Fonasa, the General Comptroller of the Republic serves as its oversight body (Bitran, 2013). Audits have not identified serious compliance problems among the private insurers, although there is evidence of non-compliance, particularly on the part of Fonasa in terms of the timeliness guarantee (Sánchez, 2009). Supply deficits in the public sector have resulted in many cases of non-compliance with AUGE provision guarantees. This situation has helped Fonasa to contain the cost of the AUGE, but it has affected compliance with the law.

Fonasa has remained in this irregular situation by way of legal maneuvering, thus managing to avoid an audit by the Superintendency of Health and the application of fines or penalties (Bitran, 2013).

# 5.7 Assuring Quality in AUGE Benefits

Traditionally, governments rely on certification and accreditation processes as well as clinical practice guidelines to guarantee a minimum quality of the health services being provided. The implementation of quality standards also requires an understanding of the expectations of patients and the wider population.

In South Africa, in addition to instituting the Office for Health Standards Compliance (OHSC), the Department of Health (DOH) has also published a Patient Charter, which aims to educate patients on their rights in the healthcare system (including aspects such as informed consent). This is a reference point for patients and health practitioners.

This section describes the role of treatment protocols, and certification and accreditation processes in Chile's benefit policy. Chile has put patients at the center of quality control by constantly updating and making public the clinical practice guidelines associated with health problems covered under AUGE.

	Supervised by the Chilean Health Superintendence					
	Guarantee	Who is being supervised	What is being supervised/inspected			
Access guarantee	General access guarantee	Fonasa & Isapres	Ensure that Fonasa $\boldsymbol{\vartheta}$ Isapres beneficiaries are receiving all the health services covered by AUGE.			
	Guaranteed notification of diagnosis of AUGE health problems	Public/private health providers	Ensure that Fonasa & Isapres beneficiaries are receiving a notification from the provider if they have been diagnosed with a health problem covered by AUGE.			
	Guaranteed drugs and medical devices	Fonasa & Isapres	Ensure that Fonasa & Isapres beneficiaries are receiving all the drugs and medical devices covered by AUGE.			
Opportunity of care guarantee		Fonasa & Isapres	Ensure that Fonasa & Isapres beneficiaries are receiving AUGE services with opportunity and whether maximum waiting times are being respected.			
Financial protection guarantee		Fonasa & Isapres	Ensure that Fonasa & Isapres beneficiaries are not paying more for services covered by AUGE than what is established under the current normative framework.			
Quality of care guarantee		Public/private health provider	<ul> <li>Stage I (since July 2013) Check that AUGE services are only delivered by providers that have previously registered at the Superintendency.</li> <li>Stage II (starting July 2014): hospitals delivering high complexity AUGE related to 24 priority health problems can only be delivered by certified providers.</li> <li>Stage III (starting July 2015): hospitals delivering any of the AUGE problems need to be certified.</li> </ul>			

Table 5: Enforcing the AUGE Benefits Package, Who and What is Being

Source: Adapted from Chile Health Superintendency http://www.supersalud.gob.cl/568/w3-printer-5933.html and http://www.supersalud.gob.cl/568/w3-article-8364.html.
### 5.7.1 Enforceable Quality Guarantees and Accreditation Processes

As shown in Table 5, the implementation of the AUGE quality guarantees has been gradual and is meant to assure that, in the long run, only providers that are registered formally and have been fully accredited will be allowed to offer AUGE benefits. The Superintendence of Health is in charge of registering and accrediting providers and a special office was created to that end. However, this process is still in its infancy and has been especially hard to move forward in the public sector as only a few institutions meet the pre-established accreditation criteria. By the end of 2012, out of an estimated total 2409 institutions providing health services (Velásquez, 2012), only 18 had been accredited: 7 high-complexity hospitals (only 1 public) and 11 ambulatory care facilities (all private) (Escobar and Bitran, 2014).

## 5.7.2 Treatment Protocols

Treatment protocols have played a key role in the formulation and implementation of Chile's benefits policy. In the design stage, they helped to define treatment guality standards and baskets of services for each of the 56 health problems that had been initially prioritized. Treatment protocols and practice guidelines were developed in collaboration between staff from the Ministry of Health and representatives of the scientific societies, thereby rallying the support of part of the medical community during the negotiation stage of AUGE. The gradual increase of the number of health problems covered by benefits package ever since has always been accompanied by new clinical practice guidelines. These are directly connected to the benefits package and are available in the public domain. But the role of treatment protocols and clinical practice guidelines does not stop there: Clinical practice guidelines were also the starting point for the costing of the benefits packages (see section 5.4 on costing of AUGE benefits) and were the basis for designing the opportunity of care and the access guarantees.

## 5.8 Equity, Access, and Participation Outcomes under AUGE

The legitimacy and efficacy of a health benefits policy and the possibility to adjust it along the way depends, among other things, on the capacity of the government to evaluate its results.

In South Africa, it will be important to set measurable incremental goals for factors such as equity, access, quality of care, and outcomes so that progress can be measured and quantified. The key challenge will be to realize these goals at an affordable cost. An incrementally implemented benefit package may be helpful in this regard. A useful case study in the South African context is the implementation of the National Strategic Plan (NSP) for the treatment of HIV/AIDS. There, data collected through anonymous testing at antenatal clinics was used to model national prevalence and this facilitated accurate costing, which was used to provide treatment on an incremental basis. (Anti-retroviral treatment was initially offered for patients with a CD4 count of less than 200 and this was increased to 350 in December 2012.)

This section shows how the Chilean health benefits policy seems to have produced positive results in terms of health service use, access, equity, and health status indicators for some health problems—even though much more information is needed to reach an integral view of the benefits policy's impact on Chile's health system.

The AUGE process has emphasized the evaluation of its benefits policy. In agreement with a recently passed law on transparency, the Chilean minister of health is pursuing the adoption of a system to regularly monitor and evaluate the implementation and development of the reform concerning equity, access, and participation (Missoni and Solimano, 2010). According to a recent article the weakness of the baseline data and the insufficient coordination among interested public institutions constitute obstacles for a serious evaluation effort (Infante and Orellana, 2009).

Notwithstanding the former, there is a wealth of information showing that AUGE has resulted in a substantial and gradual increase in the use of health services and in improved access. Use of AUGE services has increased gradually over the years: after the initial implementation of AUGE in 2005, demand for many of the services far outstripped expectations and generated additional budgetary pressures, possibly overloading the system (Román and Muñoz, 2008 quoted in Missoni and Solimano, 2010). The progressive increase in the number of AUGE cases may have been

the result of the public's increasing awareness of the guarantees and empowerment to demand these rights, thereby boosting demand for services. As for results regarding access, a recent study using secondary sources showed that access to care for six chronic health problems increased, along with the coverage for that care (Bitrán, Escobar and Gassibe, 2010). Out-of-pocket spending does not seem to have decreased in either absolute terms or as a share of total expenditure.

It is important to note, however, that no studies have been carried out to determine whether catastrophic or impoverishing health expenditures (which are the real concern when trying to assure financial protection) have changed as a consequence of AUGE. Similarly, no systematic studies have been conducted on the impact of AUGE on health status. This shortage of studies may be attributable to problems with the data, including the lack of a clearly established baseline and the deficient information system that was designed to monitor AUGE (Escobar, 2014).

Several studies looking at specific health problems have, however, generated evidence about the positive impact of AUGE. For example, Bitrán, Escobar, and Gassibe (2010) demonstrated that in-hospital mortality declined for six chronic health problems. In 2009, the Ministry of Health also published a study that revealed that the mortality rate for various cancers (testicular, breast, and gall bladder) fell from 125.8 per 100,000 inhabitants in 2005, before AUGE, to 114.5 per 100,000 inhabitants in 2007, two years after the introduction of the reform. Another report from that institution showed that there was an increase in the early detection of cervical and uterine cancers, as well as breast cancer (Ministry of Health, 2012a). A study by the Chilean Society for Cardiology and Cardiovascular Surgery revealed that AUGE led to a substantial and statistically significant drop in mortality from acute myocardial infarction, falling from 12 percent in 2004 to 8.6 percent in 2008, thanks to the guarantee of timely diagnosis and access to medical treatment. Finally, several surveys and opinion polls indicate high levels of satisfaction with the AUGE guarantees. This is important given that health satisfaction surveys prior to the reform consistently revealed dissatisfaction among beneficiaries, particularly in terms of access for Fonasa beneficiaries and financial coverage for Isapre beneficiaries. A study commissioned by the Superintendence of Health, showed that about half of the population gave the AUGE a top score, based on their own or their close relatives' experiences (2011 Adimark survey).

Several studies evaluating AUGE also find that the Chilean health system has become more equitable and responsive to need. While these changes cannot be directly attributed to AUGE, they were coincident with the AUGE reforms. However, healthcare equity concerns are still present, relating to quality of care, health system barriers, and differential access for health conditions that are not covered by AUGE. (Frenz, 2013).

## 5.9 Benefits in Chile: Salient Issue for South Africa

As discussed in the introduction to this case study, Chile's socioeconomic and health context has some relevant parallels to that of South Africa. However, while per capita income in South Africa is only about two-thirds of that in Chile, South Africa has a population that is bigger, poorer, and more rural. It also has lower health expenditure per capita and the biggest and most high profile HIV epidemic in the world.<sup>38</sup> Moreover, while the current system in Chile emerged from a pre-existing framework for universal coverage, South Africa lacks a similarly developed foundation for its National Health Insurance (NHI). This suggests that the various challenges experienced in planning and implementing social health insurance (SHI) in Chile may be more acute with NHI in South Africa. An application of the case study to key challenges for South Africa highlights the following concerns:

# 5.9.1 Data and Models for Accurate Costing

The Chile case study demonstrates an incremental approach to implementing benefits as a way to contain spending, manage patient expectations, and collect data to ensure accurate costing. In South Africa there is the challenge of a shortage of data on public sector utilisation and so costing models have been based on private sector data with adjustments for utilisation and price differences under an NHI framework. Using an incremental approach will allow for data from the pilot sites to inform initial costings and for monitoring of utilisation changes and contracting bases to feedback into an incrementally costed funding model. This approach should lead to a more sustainable framework in the medium to longer term.

### 5.9.2 Fiscal Implications

The cost implications associated with implementing a comprehensive package of benefits is a key constraint. The model proposed for the 14-year implementation period in the Green Paper on NHI policy in August 2011 requires an increase in funding from the National Treasury

<sup>&</sup>lt;sup>38</sup>UNAIDS Global Report, 2013.

from R125 billion in 2012 to R214 billion in 2020 and R255 billion in 2025. It is important that a financially sustainable costing framework is established and the results of costing studies are crucial in this regard. The accuracy of the costing studies is dependent on the data as noted above. Additionally, one of the key assumptions underpinning the Green Paper's funding proposals is that the money currently paid by medical scheme members as voluntary, largely post-tax contributions, can be available to be diverted to taxes to pay for NHI. In Chile, the incrementally implemented benefit package was financed from a variety of tax sources (especially VAT because of its broader base than personal tax). Although no new payroll tax was implemented, the pre-existing mandatory 7 percent of salary contribution is an important revenue source. South Africa will also need to consider challenges in adopting both these sources of finance for meeting the costs of benefits.

# 5.9.3 Monitoring Information Systems: SIGGES

A key current concern in South Africa is the lack of data emanating from the pilot sites. The problem with an implementation exercise that is not preceded by design and implementation of a data collection framework is that analysis is reliant on retrospective data, and if affordability constraints have been breached, expectations may not be realized. A key aspect of data required is utilisation of monitoring for various services. An effective monitoring system will be helpful in ensuring resources are used efficiently and in identifying adverse trends in experience before they affect financial sustainability. It appears that data collection during the period of incremental benefit implementation in Chile ensured that financial effects were managed. A system which includes a patient register will also contribute to combatting fraud and abuse in the system.

### 5.9.4 Public Sector Capacity/Constraints

A key challenge for South Africa is the unequal levels of access to health services in different regions of the country, especially in rural areas. The Green Paper proposes contracting mechanisms with private sector service providers. The experience in Chile suggests that the majority of services in Fonasa are provided by public sector providers, while private sector providers tend to be mainly involved in service delivery in Isapres. Fonasa does, however, make payments to private providers for services to the public in rural or underserved areas. It will be important that plans regarding access to private sector providers are developed carefully. Revitalization of public facilities, including implementation of quality standards, will also be important.

# 5.9.5 Political Pressure to Include Benefits

Access to healthcare services is a very emotional issue for South Africans, and politically sensitive as a social policy. The concern around policy-setting that is reactive to social and political pressure, is that it can interfere with priority-setting done on the basis of principles such as efficacy, efficiency, and affordability; and affect the financial sustainability of benefits. It is important to recognize that the appropriateness of benefits needs to be continuously assessed as factors—such as changing demographics, disease burden, medical technology and medical practice—affect the priorities and costs for medical services.

### 5.9.6 Medical Autonomy versus Evidence-Based Standardization of Care

In Chile medical practitioners need to comply with defined accreditation requirements set by a quasi-independent entity. This may help to alleviate the resistance from at least part of the medical community against implementing benefits package-related policy procedures, protocols, and limits. In South Africa, the credibility of the OHSC will be an important factor in the implementation of standards. This includes the credibility of the process through which such standards are defined, and the credibility of the monitoring process associated with the implementation thereof. The contractual framework will also need to address this issue, and the pilot site process will contribute to identifying the key requirements of this contracting framework.

# 5.9.7 Balancing Concerns for Equity and Quality

South Africa's health sector is marked by fundamental socio-economic inequities, with two virtually separate healthcare systems and continued rationing in the public sector in contrast to superior access and services in the private sector. In Chile, it appears that part of the reason for the social acceptability of the system is the provision for higher income earners to top up their benefits through Isapres. The role of private medical schemes under NHI has not been clarified in detail. However, it appears that such a top-up role is being considered. There are legitimate concerns around a two-tier system. But this needs to be balanced against the opportunity to implement sustainable cross-subsidies through such a framework because higher income earners are likely to value the opportunity to top up. The quality assurance framework will need to ensure that access to essential care is universal.

### 5.9.8 Addressing Problems not Explicitly Covered as Benefits

Rationing mechanisms are an ongoing challenge for healthcare systems and rational rationing through needs assessment is more efficient and socially acceptable (rather than irrational rationing through queuing). In South Africa, it will be important that the process for defining benefits and protocols has credibility, and that reasonable levels of urgent essential care are included. The experience in Chile indicates that this is an ongoing challenge and that the credibility of the AUGE process is affected by the ability to balance financial responsibility and medical necessity based on scientific research.

### 5.9.9 Incorporating South Africa's Private Medical Schemes and Healthcare Delivery Sector

South Africa's medical schemes cover almost one-fifth of the population and primarily purchase services from the country's private healthcare sector. Work done by Econex South Africa indicates that:

- i) In 2012 the private healthcare sector provided primary healthcare services for an estimated 28 to 38 percent of the country's population.
- South Africa's private sector accounted for an estimated 37 percent of the country's general practitioners, 59 percent of specialists, and 38 percent of nurses.
- iii) In 2013, an estimated 35 percent of hospitals and 28 percent of hospital beds were located in the private healthcare sector.
- iv) Between 2007-08 and 2011-12, an average of 47 percent, 50 percent, and 3 percent of total health expenditure in South Africa was apportioned to the public sector, private sector, and donors/NGOs, respectively.

These figures all indicate the size and importance of private healthcare in providing access to healthcare in South Africa. The future NHI regime must find ways of incorporating this extensive insurance and delivery network within its framework, and lessons from Chile's experience can be useful.

Chile's social health insurance (SHI) features Fonasa as a single payer in the public healthcare sector. However, in the country's two-tiered system, Fonasa's Free Choice Modality (FCM) also allows for co-financing for private ambulatory or inpatient services for patients. This—and other provisions presented in this case study for the private sector's role in Chile, such as purchasing services through Fonasa's AUGE voucher—could be considered for South Africa either as a transitional or ultimate model of incorporating the existing framework and experience of medical schemes, and the private sector for delivery of healthcare within the NHI development process. For instance, the opportunity to top-up any mandatory cover under NHI through coverage from the medical schemes may make the programme more acceptable to the population as a whole.

## 5.10 Conclusion and Recommendations on Benefits Policy

### 5.10.1 Conclusions

- a. It is clear that the private providers have power in affecting service delivery, so their buy-in is critical. One of the areas of resistance in Chile was to poorly defined benefit objectives. This was addressed by identifying priority areas, taking account of the objectives of access, timeliness, quality, and financial protection.
- b. It appears that although the system in Chile operates on a two-tiered basis, there is overall improvement in equity in access to essential care.
- c. Priority setting is critical for defining benefits, and the independence of the benefit definition process from political influence has been a critical success factor in Chile. The "service based benefit" definition facilitates budgeting at the per-life level with some additional provision with cover rationed by queuing.
- d. The experience in Chile has also indicated that systems for monitoring delivery and quality of care are an important component of implementation, and need to be provided for at the beginning of the process.
- e. Patients' rights need to be clearly defined and monitored. In Chile the consideration of public sentiments in defining priority areas appears to have assisted with public acceptance of the system. Also, promoting awareness of benefits is also an important part of managing expectations.
- f. Fonasa's operations in Chile also incur very low nonhealthcare costs (under 5 percent).

### 5.10.2 Recommendations

- a. Chile's case shows that defining benefits aids planning and budgeting, and thereby the sustainability of the system. Benefit guarantees can be implemented on an incremental basis with reference to certain guarantees about provision. A mixed approach can still be applied for delivery of a wider range of services but rationing may apply outside of the priority areas.
- b. A clear definition of benefits is also helpful in managing the risk of unmet expectations and inequitable service delivery (such as by region). Since a caseby-case assessment is unlikely to be practical or equitable (there is a significant risk of equity issues due to inconsistencies), a framework for incrementally developing benefits may be a reasonable approach.
- c. The population's expectations about benefits also need to be understood and managed. An important component of this is to understand public perception of quality healthcare.
- d. South Africa will need better data and models for accurate costing given the shortage of information on public sector utilization; including sensitivity analysis of cost projections to test for the effect of various assumptions (especially GDP growth).
- e. An incremental approach to expanding guaranteed benefits, like in Chile, would allow for data from pilot

sites to inform initial costings. It will also allow for monitoring of utilisation changes and contracting bases to feedback into an incrementally costed funding model.

- f. It will be important in South Africa that plans regarding access to private sector providers are developed carefully so that service gaps do not arise. Revitalization of public facilities, including implementation of quality standards, will also be important.
- g. The role of private medical schemes under National Health Insurance should be better defined to balance concerns about inequity in a two-tiered system against the opportunity to implement sustainable cross subsidies through a framework which preserves quality, and elicits acceptance by allowing higher income earners the opportunity to top up.
- h. The credibility of South Africa's Office for Health Standards Compliance (OHSC) will be an important factor in the implementation of standards. Continued rationing challenges can affect credibility, so assessment of needs and capacity should inform the development of NHI benefits.
- i. Copayments for specific services can play an important role in risk management and cost containment.

Active Purchasing refers to an approach to paying for healthcare that promotes the quality, efficiency, and efficacy of service provision. This is in contrast to passive funding which carries the cost of healthcare provision (through whichever reimbursement mechanisms is chosen) without due consideration of quality, efficiency, and efficacy. Passive approaches to funding result in numerous inefficiencies, and provider incentives are not aligned with those of the purchaser.

Service provision in South Africa's public sector operates under a global budget model with very limited active purchasing, if any. The Chile and South African systems are contrasted below to identify lessons from the Chile case that might benefit South Africa's planned health system reforms.

## 6.1 Overview and Challenges: Active Purchasing in South Africa

Adopting an active purchasing approach under South Africa's National Health Insurance (NHI) will be an important contributor towards ensuring optimal quality of care, sustainability, and affordability of the system. Unlike Chile, South Africa's public health sector is not split between purchaser and provider. Funds are allocated from general tax revenue to the National Department of Health, which in turn allocates funds to each of the nine provinces on a per capita basis (called the Equitable Share), taking into account high level demographics and "estimations of the needs of healthcare service users."<sup>39</sup> Funds are passed to public facilities within each province on a discretionary basis by each province, but in keeping with national health priorities. Certain other earmarked funds flow to specific facilities through grant frameworks, such as the National Tertiary Services Grant which serves to supplement the income of teaching hospitals.

### 6.1.1 Fund Collection and Payment in the Public Sector: The Global Budget Mechanism

Public healthcare facilities are owned and operated by the state, and healthcare workers are all on the state payroll. There is no distinction between fund collection and payment for services. This is commonly referred to as the "global budget" approach to healthcare funding. While this approach has the advantage of keeping overall costs in check, such a system does not promote efficiency or improved quality of care.

Once provinces have been allocated their equitable share, they fund each of the facilities within the province according to the budgets for each facility. The budgets are generally based on historical expenditure with some recognition of activity through the metric known as "patient day equivalents" or PDEs.

PDE's are a blend of in-patient days and a third of outpatient visits to each facility. It is a blunt measure of activity and likely causes distortions when comparing costs and care delivery across facilities. Given the constraints on funds, negotiations for funds take place between the facilities and the province. Certain other items such as medicines, equipment, and consumables are procured on a competitive tender basis. While the global budget mechanism has the advantage of cost containment, it can create poor incentives for output optimisation. While there is some tracking of activity at a facility level, this is done rather crudely and there is no direct link between activity or output, and financial compensation.

## 6.1.2 Private Sector in South Africa

The private sector is financed through after-tax contributions to medical schemes, supported by a tax credit. These medical schemes must provide a minimum set of benefits on all options, and must abide by open enrolment and community rating regulations. The majority of healthcare goods and services in South Africa are paid for on a fee-for-service basis. There are small pockets

<sup>&</sup>lt;sup>39</sup>Explanatory memorandum to the division of revenue: annexure to the 2012 Budget Review.

of capitation models with general practitioners and disease-based capitation models (e.g., diabetes and HIV). There is reasonably wide spread use of hospital based alternative reimbursement including per diem and fixed fee structures, some of which are based on Diagnosis Related Groups (DRGs). There are no market standards on alternative reimbursement models. There are some industry standards on tariff billing codes, but these are becoming increasingly out of date with faltering attempts by the Council for Medical Schemes and the South African Department of Health (DOH) to revive reference price lists after the competition commission ruling in 2003.

South Africa faces some challenges on its planned reform pathway, including strained resources in the public sector, considerations for service provision from the private sector, departures from global budgets for at least part of the system, a lack of credible information, consideration for reimbursement models, and the bases for contracting. The purchaser provider split envisaged is a significant change that will have to be carefully planned. Since Chile has gone through some of these reforms and challenges in recent years, its case is considered here to identify potential lessons for South Africa.

## 6.2 The Creation of a Public Purchaser in Chile: Fonasa

Moving from a global budget with no distinction between purchaser and provider to a system with explicit prices for services (to implement purchasing mechanisms such as "fee for service" and improving data collection for budgeting and planning) will pose many challenges for South Africa. But it will allow a more flexible and responsive system. Chile has passed through this reform by setting up a purchasing agency for healthcare services—and this has allowed the country's healthcare system to procure services from both public and private providers more effectively.

Chile's healthcare system has evolved to give its citizens more choice between public and private provision, while at the same time providing guarantees for quality access to specified health services. Having split the purchasing of health services from the provision of health services allows Chile more flexibility to consider various models of reimbursement, incentives, and contracting with the private sector. These mechanisms allow Chile to structure the health system in a flexible and optimal way for its circumstances.

### 6.2.1 The Old System

Until 1979, Chile's social health insurance (SHI) consisted of a single insurer, the National Medical Service (SERMENA)-a public institution that covered only white collar, formal sector workers and their families (see Figure 11 for a diagram of the old SHI system). Financing for SERMENA came mostly from mandatory health contributions made by workers and their employers, and marginally from copayments made by beneficiaries. Beneficiaries could obtain healthcare from public providers operating under the large, governmentrun National Health Services System (SNSS), in exchange for a modest copayment. They could also receive services from private providers through the so-called Free Choice Modality (FCM). In such cases, beneficiaries would have to make a relatively higher copayment. To obtain private services not covered by the FCM, SERMENA beneficiaries had to pay the entire bill out of pocket.

Formal sector, blue-collar workers received coverage from the SNSS, and financing for the SNSS also came from mandatory health contributions made by workers and their employers, as well as from copayments. The SNSS system also offered health services to informal sector workers and their families, who paid a mandatory health contribution and copayments. Indigents were entitled to free healthcare from the SNSS.

Under the old system, there were key differences between the roles of SERMENA and the SNSS. With regards to SERMENA, there was a purchaser-provider split. Provident institutions collected the mandatory health contributions, and SERMENA pooled these resources, while the actual production of health services was not in SERMENA's hands. SERMENA purchased both public and private health services, which were outside of its control. In contrast, no such separation existed in the SNSS, where the functions of revenue collection, risk pooling, purchasing, and actual production of services were in its hands.

### 6.2.2 The New System

The National Health Fund (Fonasa) was created in 1979 and replaced SERMENA as part of a series of major health system reforms carried out by the government of General Augusto Pinochet. Fonasa's target population covered all Chileans. Blue-collar and independent workers no longer had to send their contributions directly to the National Health Service System (SNSS), and instead, redirected them to the new public insurer. Fonasa also became responsible for the provision of health insurance to the indigent (see Figure 12 for a diagram of the Fonasa system). In 1981, follow-up reforms created the Instituciones de Salud Provisional, or Isapres, (networks of private insurers) and allowed individuals to decide whether to send their mandatory contribution (4 percent of income at the time) to Fonasa or to an Isapre. Thus, Fonasa and Isapres

### Figure 9: Financing of Fonasa's FCM healthcare

#### Fonasa's FCM

Fonasa, like its predecessor SERMENA, offers beneficiaries the possibility to obtain health services from private providers through the so-called Free Choice Modality (FCM). It does so by co-financing private services, including ambulatory healthcare with specialists, ambulatory medical procedures, and inpatient services. Fonasa co-finances the service but the beneficiary must pay the difference out-of-pocket, unless he/she is covered by a complementary private insurer that picks up part of the bill not paid by Fonasa.

FCM allows beneficiaries to select private providers who have registered with Fonasa in one of three different levels. The higher the level, the higher the provider's fee. Younger medical doctors may register in levels 1 or 2, while more senior ones generally register in Level 3. The proportion of the provider's bill that Fonasa covers is highest for Level 1 and lowest for Level 3. Thus Fonasa's co-insurance rate drops as the level increases, while the beneficiary's copayment goes up.



Fonasa's FCM is currently available only for its beneficiaries in Groups B, C, and D. Those in Group

A, known as the "indigent," are excluded from this benefit, although a policy proposal by the country's current president aims at extending the FCM to Group A.

Source: Authors.

became competitors in Chile's new social health insurance (SHI) system, although income was—and remains—a strong determinant of people's choice of insurer.

Over the years Fonasa has expanded the realm of its coverage, adding additional health services. It has also expedited the administration of its benefits, thus reducing the burden of its bureaucracy on beneficiaries. Further, the 2005 AUGE reform forced Fonasa to improve its accountability toward the insured. A national survey conducted in early 2012 (Chile 3D) to assess knowledge and perception of brands and lifestyles of Chileans, found that Fonasa was the only public service that appeared in the top 20 brands of the country. Another study carried out by the GfK Group in 2012 showed that 93 percent of Fonasa beneficiaries felt protected by their health insurer.

### 6.2.3 Financing of Fonasa

As Figure 10 shows, Fonasa's financing comes from two main sources:

i) Subsidies from central government general revenue (57.8 percent in 2012), and

ii) The 7 percent mandatory contributions made by nonindigent members (37.3 percent).

It also draws a relatively modest amount of revenue (4.8 percent) from other public institutions to which it sells health services.

Fonasa's revenue structure has remained stable over the past five years. In 2009, government general revenue financing represented 58.9 percent of Fonasa's revenue, a share that was similar in 2012.

Nearly 96 percent of Fonasa's spending is allocated to the purchasing of health services for its beneficiaries (Figure 13). Consequently, Fonasa's administrative costs represent less than 5 percent of the insurer's total spending. Currently, Fonasa has 1,140 employees working across its central offices in Santiago, its 4 regional offices that manage contracts with public and private providers, and the 103 customer service branches distributed along the national territory.





### Figure 12: Organization of Chile's Current Health System



Source: Authors.

## 6.3 Overview of Fonasa's Payment Mechanisms: Management and Operational Details

The structure of the healthcare service purchasing agent is important to consider. The relationship between the purchaser, revenue collection through taxes, private health insurers, and healthcare providers all impact the structure and functioning of the health system.

South Africa will have to consider the institutional and governance relationships required to allow the effective operation of an independent purchaser of health services. These considerations will include the role of private funding and provision of care as a means of increasing access.

Chile offers its citizens two options to access the benefits included in its benefits package: with guarantees (access, opportunity of care, financial protection, quality) through prearranged provider networks, or without guarantees but with more freedom of provider election. These options exist both for those affiliated with the public insurer (Fonasa) and those affiliated with the private insurers (Isapres). When the demand of services exceeds the capacity of the public sector, affiliates can resort to the private sector for services covered by the benefits policy. This policy has reduced waiting times but substantially increased costs.

### 6.3.1 Fonasa's Health Purchasing

The universal health plan AUGE is delivered by pre-arranged provider networks established by both the public and private sectors (Bastías, 2008). For those insured by Fonasa, this network consists mainly of public providers. This is in accordance with an explicit policy adopted by Fonasa to minimize spending on AUGE; however, beneficiaries of both Fonasa and Isapres have a choice of addressing their health problems through either the AUGE preferred provider network or freely choosing their provider (Escobar and Bitran, 2014). Affiliates covered by the AUGE benefits plan have the option of either using the preferred provider network to attend AUGE health problems, or resorting to the open network of providers related to Fonasa and Isapres. The AUGE guarantees are only granted in the case of Fonasa. It is estimated that over 80 percent of those insured under Fonasa choose to receive care through the AUGE option rather than the open choice option for Fonasa.<sup>40</sup> For Isapres, the opposite is true and it is estimated that only 20 percent of those insured opt to receive care from Isapres' preferred AUGE provider network, with the remaining 80 percent preferring to do so through their open choice coverage, where they pay higher copayments and have no explicit opportunity guarantees.

When the demand for AUGE services in the public sector exceeds capacity, Fonasa is forced to purchase services from a private provider, usually at a much higher price. This is not a minor issue in the context of the Chilean benefits policy. For example, 80 percent of all dialyses are being remitted to the private provider network given the restrictions within the public sector.<sup>41</sup>

This situation was further institutionalized in 2010 when Fonasa created the AUGE voucher-a response to increasing waiting times in the public sector for AUGE problems. This policy offers a voucher to obtain AUGE services from private providers when such services are not available among local public providers. The policy involved an initial investment of 3 billion pesos for 36 months and a 75 percent increase in the resources the government allocates to the purchase of health services from the private provider network. The cost effectiveness of this policy has been questioned, given the higher cost of providing services in the private sector. An analysis by Salud un Derecho, a Chilean NGO working on human rights evaluates five conditions in order to compare how many services could be provided with the same money in the public sector with its much lower tariffs. It finds, for example, that with the same money and a larger supply of public resources, 6.5 times more women with cervical cancer could be treated (Escobar and Bitran, 2014). Overall, it finds that the transfer to the private sector of the AUGE patients, who are not treated in a timely manner in the public sector, more than doubles costs or halves the number of services that could be provided.

Chile's experience with the AUGE voucher seems to show that committing to explicit guarantees is a double edged sword. On the one hand, committing makes governments accountable for their promises of universal coverage. On the other hand, however, it forces governments to comply with what they have promised, even if they do not have the necessary resources to do so. This has the potential to significantly increase costs especially if the private sector is needed to fill any service gaps. It also shows that promises of universal coverage or benefits should be carefully laid out, costed, and evaluated in terms of the health system's capacity to convert these promises into real services and

<sup>&</sup>lt;sup>40</sup>This open network has much higher copayments.

<sup>&</sup>lt;sup>41</sup>http://www.latercera.com/noticia/nacional/2013/05/680-524853-9-mas-del-80-de-dialisis-auge--se-derivan-al-sistema-privado.shtml

guarantees. Finally, it indicates that substantial investments by the public sector are needed to meet the objectives of the benefits policy. For instance, over 2004-2007, the Chilean government invested 99 million Chilean pesos (approximately US\$ 1.9M) to improve equipment in public hospitals (Vega, 2008).

### 6.3.2 Fonasa's Current Payment Mechanisms

In its early years, Fonasa had three mechanisms for transferring financing to providers:

- i) A per capita payment to municipalities for the provision of primary healthcare (PHC) services,
- ii) A voucher system to co-finance private services delivered through the Free Choice Modality (FCM), and
- iii) A transfer of resources, not linked to output, to pay for public hospital budgets.

Starting in the 1990s, Fonasa underwent financial reforms that were aimed at linking payments to providers with outputs. The initial mechanism used was the so-called management contract. Under this mechanism, the Ministry of Health (MOH) and each of the 29 Regional Health Services (RHSs) negotiated healthcare delivery objectives, and Fonasa's payment to the RHSs was conditional on meeting those objectives.

In the mid-1990s, Fonasa began to pay RHSs a growing share of their revenue on a fee-for-service (FFS) basis. The

price paid was determined by Fonasa and published in its public price list. To construct the price list, Fonasa carried out a series of costing studies in public hospitals. To encourage RHSs to improve the efficiency at their public hospitals, Fonasa periodically disseminated an analysis that compared the amount of revenue each RHS was receiving from the public insurer with the amount the RHS would have received if it had been paid exclusively on a FFS basis. Those RHSs that received more than the FFS equivalent revenue were encouraged to improve hospital efficiency.

Today Fonasa has multiple provider payment mechanisms. They are described in detail in this section. Nearly half the resources that Fonasa pays to RHSs are in the form of FFS, the other half being transferred as a budget support not linked to output. In 2012, budget transfers to public hospitals represented Fonasa's single largest spending item, accounting for 27.6 percent of all of spending on health services (see right-hand side pie chart in Figure 13). As explained below in greater detail, these are payments that Fonasa makes to public hospitals that are not linked to any specific output. FFS payments to public hospitals were similar in magnitude, representing one-fourth of Fonasa's outlays on healthcare. The next largest spending item (23.8 percent) was payment to municipal health centers for their delivery of PHC services. Fonasa's FCM captured just over 10 percent of the insurer's budget execution, while other purchases from private providers (depicted as 'purchases from private providers' and 'other services' in Figure 13) accounted for 8.9 percent of total spending. Since most of the services delivered through the FCM are private as explained above, overall, nearly 20 percent of Fonasa's spending on health services went to the private sector, while just over 80 percent went to public providers.



The following figure depicts Fonasa's various payment systems in place to purchase public and private healthcare for its beneficiaries. A detailed description of each payment system follows.

## 6.3.2.1 Payment Methods to Public Providers

### 6.3.2.1.1 Per capita payment system for Primary Health Care delivered in municipal health centers

Until 1994, Fonasa used fee-for-service (FFS) to purchase primary health care (PHC) services, using a mechanism termed FAPEM.<sup>42</sup> As is well documented internationally, FFS confers perverse incentives to providers, leading them to over-provide healthcare in order to increase their revenue or profit (Ellis and Miller 2007). This happened to Fonasa as

well, and to contain PHC spending in the early 1990s, the insurer set up spending ceilings for its FAPEM system. But while these ceilings contained PHC spending, municipal health centers began to over-provide curative health services that had relatively high margins while they underprovided preventive care (Ministerio de Salud 2012b).

In 1994, Fonasa adopted capitation to pay for a benefits package of PHC interventions known as the Family Health Program (PSF, or *Programa de Salud Familiar*). As of 2002, the PSF benefits package contained the services listed in Annex A2. The capitation payment uses the number of Fonasa beneficiaries registered with each municipal health center as key input. To determine the capitation amount, Fonasa carried out a cost study, which considered direct and indirect costs of service provision. It then expressed all costs in relation to the direct labor costs. The resulting unit cost for each Fonasa beneficiary registered with a municipal health center is referred to as the "base



<sup>42</sup>FAPEM, which stood for Billing for Services Rendered in Municipal Facilities (*Facturación por atención Prestada en Establecimientos Municipalizados*).

## Table 6: Calculation of Fonasa's Base Capitation Amount for PHC in municipal health centers (in Chilean Pesos)

Cost component	Calculation	Amount					
A Direct labor costs	Human resources costs involved in the provision of services	\$1,516					
B Management of health center	A x 36.2 percent	\$548					
C Management costs of PHC in municipality	(A+B) x 7.84 percent	\$161					
D Pharmacy	(A+B+C) x 17.43 percent	\$388					
E Other operation costs	(A+B+C) x 22.9 percent	\$510					
F Total base per capita	A + B + C + D + E	\$3,123					

Source: Ministerio de Salud (2012b).

capitation amount" (BCA). As of June 2012, this estimated cost was Ch. $$^{3}$ ,123 per month (US\$ 6.12).

Fonasa makes four adjustments to the BCA to determine the final capitation payment it will make to each municipal health center. These adjustments are based on:

- The socioeconomic characteristics of the population registered with each municipal health center (poverty and age distribution);
- (2) Rurality;
- (3) Transportation; and
- (4) Work hardships (known as ADD).

In 2011, these four adjustments, when combined, increased the BCA by 30 percent, resulting in an average monthly capitation amount of Ch.\$ 4,077 (US\$ 8.00).

Municipalities have repeatedly objected to Fonasa's calculation method and there are several proposals for its revision (Ministerio de Salud 2012b, Álvarez 2011).

## 6.3.2.1.2 Prospective payment by program for Primary Healthcare delivered in municipal health centers

Fonasa and the Ministry of Health (MOH) have limited ability to monitor outputs at municipal health centers, and therefore worry that once health services are folded into the benefits package and paid on a per capita basis, municipalities may have few financial incentives to provide the services contained in the package. This has led the MOH and Fonasa to leave some municipal health services, collectively known as primary healthcare (PHC) Strengthening Programs, outside of the benefits package, and to pay for them separately using prospective payment (see figure 14 on Fonasa's purchasing mechanisms). In 2011 a fifth of all Fonasa payments to municipal health centers were in the form of prospective payments per program (Figure 15). The actual per capita transfers accounted for two-thirds of total PHC payments. Incentives given to municipal health staff plus the hardship bonus (ADD) represented the remaining 12 percent that Fonasa paid to municipalities. The staff and managers in municipal health centers complain about the administrative burden that is imposed by these programs because of the obligation to fill out a separate monthly report for each program, addressed to Fonasa and the MOH, with information about the execution of the budget and the degree to which delivery objectives were achieved.

### 6.3.2.1.3 Payment Methods for Secondary and Tertiary Care Delivered by National Health Service System Hospitals: Historic Budgets (PPI) and Fee-For-Services (PPV) Payment

As was noted at the beginning of this section, in the mid-1990s, in an effort to promote efficiency in the production of hospital services in the public sector, Fonasa began linking the financing it transferred to public hospitals with output. In 1995, all of the financing that Fonasa transferred to National Health Service System (SNSS) hospitals was in the form of historic budgets. Six years into this reform, the amount paid in the form of fee-for-service (FFS) had only reached 5 percent (Figure 16). In subsequent years Fonasa progressively included new hospital services among the outputs to be paid FFS. By 2003, 41.7 percent of all the resources that public hospitals received from Fonasa were in the form of FFS; in 2012 almost half of Fonasa's spending on public hospital services was in the form of FFS.

The existence of high fixed costs, management rigidities, differences in layout, and other characteristics of SNSS hospitals are all factors that have conspired against a further increase in the share of FFS financing.

While Fonasa has a price schedule for all the services it finances, and the prices are updated yearly and are publicly

<sup>&</sup>lt;sup>43</sup>Exchange rate on June 29, 2012: 1 US\$ = Ch.\$509.73) http://www.sii.cl/pagina/valores/dolar/dolar2012.htm







Sources: Authors from various sources including Lenz Consultores, 2010 and several Fonasa reports.

disclosed, the public insurer does not pay public providers using those prices. The said prices may serve only as reference amount in an annual negotiation process that takes place each year between Fonasa and each of the public system's 29 Regional Health Services (RHSs). The main reason behind this seemingly odd procedure seems to be cost containment. If Fonasa used its published prices as the basis for its FFS payment to public providers, it could find itself having to pay a total amount exceeding its available budget for a specific RHS. Keeping prices flexible thus protects Fonasa against default. At the same time, this sends confusing signals to RHSs and to their respective public hospitals, which are therefore subject to unstable and at times unknown prices.

Fonasa's price list plays a more direct role in the establishment of copayments that beneficiaries in groups B, C, and D must make when obtaining secondary and tertiary care from a public provider.

To motivate public providers to deliver AUGE services, Fonasa pays all such services with FFS; non-AUGE services are financed through a mix of FFS and historic budgets.

## 6.3.2.1.4 Prospective payment and the future establishment of Diagnosis Related Groups

During the government of President Piñera (2010-2014) the Ministry Of Health promoted the adoption of a system of Diagnosis Related Groups (DRGs) as the main payment mechanism for public hospitals. International evidence has shown that DRGs can help contain hospital health spending while preserving the quality of healthcare services (European Hospital and Healthcare Federation, 2006). Yet as long as National Health Service System hospitals continue to have limited managerial autonomy, and staffing remains protected by rigid civil service rules, it is unlikely these public providers will be fully subject to a financing system that links payment to performance. Thus, in the near future, Fonasa will likely continue to pay public hospitals through a mix of historic budgets and fee-forservice or, eventually, prospective payment (e.g., DRGs).

To summarize the information presented above in this section, the following figure depicts the various payment methods that Fonasa uses to pay public providers.



### Figure 17: Financing and Service Delivery Flows in Public Health System

Table 7: Fonasa's Contracting Forms with Private Providers				
Contracting Forms	Details			
Framework Agreements	Dialysis treatments, AUGE Benefits, and Radiotherapy. A total of 260 providers are involved.			
Public Tenders	Integral bed days. A total of 27 providers were involved. 1 Public Tender was performed.			
Direct Deal Agreements	Typically used when public providers lack local capacity to deliver AUGE services and Fonasa is forced to purchase private care to meet the AUGE guarantees.			
Source: Fonasa (2013).				

## 6.3.2.2 Payment Methods to Private Providers

While Fonasa has not innovated how it pays public providers in two decades, it has introduced a number of changes to the way it pays private providers. This section describes the various approaches that Fonasa uses to purchase private health services.

Fonasa's Free Choice Modality (FCM) payment method (explained in Figure 9) has been in place for years and has been discussed below. The main innovation that Fonasa has introduced under FCM is the growing adoption of prospective payment to purchase the entire solution to a given health problem, in a way that is similar to the Diagnosis Related Groups (DRGs) payment.

Aside from FCM, Fonasa has adopted several contracting and payment methods. They are shown in Table 7. The

so-called framework agreements are contracts that Fonasa calibrates with specialized private providers for a period of a year or longer, which specify a total price for the provision of a pre-defined quantity of specific services that meet explicit quality standards. For example, Fonasa uses framework agreements to purchase dialysis services. Public tenders are competitive bids that Fonasa issues to purchase certain services, such as bed days for long-term hospitalized patients. In addition, Fonasa engages in direct deal agreements on short notice, often to meet an AUGE guarantee which public providers are unable to fulfill.

## 6.3.2.2.1 Free Choice Modality for the purchase of private health services

Fonasa's Free Choice Modality (FCM) is highly valued by beneficiaries, since it allows them to receive a partial government subsidy, or voucher, to obtain private health services—ambulatory, diagnostic, and inpatient. Private





### Figure 19: Financing of Fonasa's FCM, 1995-2012 (percent)



providers deliver the vast majority of FCM services, although Fonasa beneficiaries can also use the FCM to get hospital care in the private wards of public hospitals. In the 15-year period between 1997-2012, the volume of services that Fonasa beneficiaries consumed through this modality nearly tripled overall, as can be seen in Figure 18, whereas Fonasa's population increased by only 50 percent. Thus, the per capita utilization of private services has grown in an important way.

Two factors seem to account for the growth in the use of the FCM by Fonasa beneficiaries. First, Fonasa has been picking up an increasing share of the bill, as is shown in Figure 19. But this phenomenon has been mild, with the average co-insurance rate increasing from 63 percent in 1997 to 73 percent in 2012. Second, and more importantly, the real (i.e., inflation adjusted) average expenditure per beneficiary on the FCM reached a maximum in 2002 and has been falling since then. Given that output per beneficiary has increased, this implies that the prices of private healthcare have been falling under this modality.

### Prospective case payment under Free Choice Modality for the purchase of packages of health services from private providers

Fee-for-Service (FFS) is the predominant but not the only payment mechanism that Fonasa uses under its Free Choice Modality (FCM); about one-fourth of Fonasa's spending under FCM is in the form of a prospective payment per case. As of December 2012, Fonasa had defined 32 packages, which it pays prospectively to private health providers at prices that Fonasa establishes. Fonasa pays equally to all providers participating in this regime (see list of packages in annex).

### 6.3.2.2.2 Emergency Services

A specific law deals with the situation of Fonasa beneficiaries who require emergency medical services. Emergencies may occur in places where no public provider is available nearby and the only immediate option for emergency care is a private provider. The law states that the Fonasa beneficiary in need of emergency care has the right to be admitted in a private clinic for emergency care and can remain there until he or she is stabilized. The private provider must notify the Regional Health Service (RHS) where the patient resides of this emergency admission. The RHS then becomes responsible for monitoring the patient's status. As soon as he or she is stabilized, the RHS must send an ambulance to pick up the patient and transfer him or her to a public hospital in its jurisdiction. The RHS must then pay the private clinic's bill for emergency care services.

To contain spending, Fonasa uses a unique set of predefined prices to pay private providers for emergency services. These prices apply only during the period in which the patient is being stabilized. If the corresponding RHS fails to pick up the patient afterwards, private clinic prices begin to apply.

## 6.4 Fonasa's Purchasing: Spending on Public vs. Private Providers

Chile offers choices to its citizens-guaranteed access through approved networks with no copayments, or more choice and flexibility with copayments. The establishment of this network-based foundation becomes a critical component of the health system, and is not entirely dissimilar (for its part) from the work to be undertaken by the Office for Health Standards Compliance (OHSC). The OHSC is the responsible agency for ensuring that healthcare facilities meet prescribed quality standards. Should the National Health Insurance (NHI) fund procure services from private facilities, it is expected that they will have to meet the same minimum standards. It is not yet clear whether South Africa's NHI will procure such services from the private sector with or without any copayments. Assuming affordability constraints require some copayments from patients, South Africa would have to consider whether it will offer a similar choice architecture. Similarly, assuming patients perceive a difference in quality between public and private provision and demand for private facilities exists, should patients be allowed the choice of going to these facilities with a copayment?

Making use of the private sector for capacity expansion increases choice and fills gaps in access but has the potential to increase costs as it has in Chile. A similar situation may arise in South Africa as the NHI may seek to expand access through the procurement of services from private providers. It is unclear at this stage what the cost impact of this strategy would be. The perception is that private provision is more expensive, which is borne out in the Chile case. More inquiry into cost comparisons between the public and private sectors in South Africa will be necessary.

The AUGE voucher system also has some interesting applications that could be explored in South Africa. The mechanism improves accountability to provide services with real cost penalties. However, there could be sustainability challenges. Should the provision of services not be readily available or of a suitable quality standard, vouchers can be issued for patients to obtain the necessary services in the private sector, albeit at a higher cost. Thus the public system has a strong incentive to operate efficiently and effectively. If, however, the public system slips materially, the cost impact of the vouchers could make it difficult to recover. The methods to be used within South Africa's planned NHI to ensure and incentivize efficiency and effectiveness have not been proposed. It is not clear yet whether there will be an appetite within the NHI fund for such a strong incentive or penalty structure.

Fonasa was born in an environment where the health delivery system was dominated by public providers at all levels, particularly in the market for hospital services. The creation of Isapres in 1981 changed this scenario and gave rise to a growing and dynamic market for private services. In its beginnings, Fonasa delivered mostly public services to its beneficiaries, with the exception of the Free Choice Modality (FCM), which it inherited from its predecessor, SERMENA.

Over time the market for private healthcare has developed with a large number of new private actors. Some of these have positioned themselves in market niches with the express purpose of becoming Fonasa providers. These are clinics of all sizes that have adopted cost containment delivery models (e.g., ones based on the extensive use of nurses and telemedicine) in order to offer Fonasa low-cost services that can compete with the cost of the public system.

At the same time the public system is struggling with a growing deficit of medical specialists, many of whom have decided to migrate to the private sector, where they

can earn higher incomes. This has forced Fonasa and the Chilean Ministry Of Health to progressively increase the salaries of public doctors and nurses, resulting in public costs increasing.

These factors combined have progressively narrowed the cost differential between public and private providers and have made the option of purchasing private services more convenient to Fonasa. Fonasa's need to purchase private care has been exacerbated by the adoption of the AUGE reform, whose explicit beneficiary rights and stringent time limit guarantees often force it to purchase private services.

Despite these trends, the share of total Fonasa spending going to private providers remains relatively small, combining Fonasa's FCM with other private purchases, as is shown in Figure 21. In the past 4 years, no more than 15 percent of all Fonasa purchases have been with the private sector, while the remaining 85 percent goes to public providers.



Figure 21: Fonasa's Structure of Spending on Public and Private Healthcare Services, 1995-2012 (percent)

## 6.5 Purchasing in Chile: Salient Issues for South Africa

Different payment mechanisms can have incentives that affect behavior as providers may seek to change utilization in absolute (increased revenue) and relative terms (increased margin).

South Africa will need to decide its active purchasing aims and carefully choose which incentives to put in place to achieve them. The proposed payments systems within the country's National Health Insurance (NHI) include Diagnosis Related Groups (DRGs) for hospital services and capitation for primary services, but the detail behind how these systems are expected to operate and integrate has not been published for comment. Payment models for outpatient specialist consultations, dentistry, optometry, and other interventions and types of services have also not been proposed as yet.

The key consideration will be changes to management in the public system towards a purchaser-provider split and the appropriate structuring of the various reimbursement models to ensure a cohesive and comprehensive reimbursement structure which will meet the stated aims of the system. So far, NHI documentation in the public domain indicates no fee for service payment structures, which may be difficult to achieve for all lines of provision. The loss of information under alternative forms of reimbursement can hamper efforts to improve efficiency. This is evident in the public system in South Africa where little reliable information is available on the public system as it operates under a global budget framework.

Determining prices for services for better budgeting and making decisions about copayments will also be important. Whether services are paid for using DRGs, capitation, or fee-for-service, the prices for these services will be subject to negotiation between the funder (the NHIF) and (public and private) providers. The NHIF will be subject to the overall budgetary constraint imposed by available funds collected through taxes and earmarked for health, so it will need to determine prices at which it can procure services within that budget. This will introduce a new dynamic in the South African system, which will put increased pressure on health budget allocations. Overall, the balance between accurate information for management and the incentives under a fee-forservice system will need to be carefully considered as part of implementing a purchaser-provider split in South Africa.

This section discusses some salient purchasing issues in light of the experience in Chile, which has already gone through such a transition. One lesson is that reimbursement must be carefully crafted to get the balance of incentives and management correct. For primary healthcare (PHC), capitation for a positively defined set of benefits is one option. In Chile, amounts are based on detailed cost studies for direct and indirect costs of provision. Total cost seems to be around R70 per capita per month, and is adjusted for socioeconomics, age, rurality, transportation, and work hardships. Chile has left some benefits to be paid as fee for service in order to allow monitoring. For hospital services, Chile has moved increasingly to fee for service reimbursement. The rationale seems to be to motivate providers to deliver AUGE services. There is an annual negotiation process between Fonasa and the regional health services to determine the prices that will be paid with reference to a published price list (actual prices are well below the reference prices). This price list plays a role in determining copayments.

Like Fonasa in Chile, South Africa's new public health fund would be the country's largest purchaser of health services. As illustrated by Chile's experience, the particular reimbursement structure chosen by the purchaser for contracting and payment to providers does not on its own imply active purchasing. It is the method used in wielding the chosen reimbursement structures that changes the paradigm to one of active purchasing. For instance, rewards or penalties through incentives or deductions can be applied to facilities based on the quality of care provided in both fee for service and global budget payment paradigms (assuming that quality of care is measured). The following points in this subsection address some prominent issues which need to be considered in light of Chile's experience for developing an active purchasing approach in South Africa.

### 6.5.1 Contracting with Private Providers

South Africa, like Chile, has a sizable and dynamic private health services sector that may have attractive providers. A new national health fund in South Africa may therefore benefit from Fonasa's cumulative experience in contracting and the establishment of payment methods to private providers. One area of learning is around outsourcing clinical work to private providers. Currently public health clinical work is not outsourced to private providers in South Africa. Private providers in both South Africa and Chile have similar emergency obligations: to take in and treat emergencies until stabilization, at which point patients are transferred to public facilities.

Under current reforms, the South African Department of Health (DOH) is attempting to contract private general practitioners to deliver care to patients not covered by medical schemes. Early indications are that adoption is very low, because of the gap between doctors' income expectations and budgetary constraints from the DOH.

Expansion of this regime under the National Health Insurance (NHI) reform may experience further complications in light of the experience in Chile. Chile seems to have experienced pressures similar to South Africa with regard to medical personnel migrating to the private sector to earn higher salaries. This causes the public sector to increases salaries, which increases costs and places strain on available resources, access, and quality of provision. It also results in a progressively narrowing cost differential between public and private providers. This remains a challenge in the South African system, and while the NHI reforms may not necessarily on their own affect the trend and incentive, the issue should be dealt with by broader health reforms aimed at an equitable distribution of resources between the public and private sectors, as well as the spread of those resources between urban and rural areas.

### 6.5.2 Purchases from Public Providers

While it may not enact an entirely similar purchaserprovider split, South Africa may still benefit from Fonasa's experience of purchasing healthcare from public providers in Chile. Fonasa has been trying for two decades to expand the share of its purchases paid through fee-forservice (FFS). It has been partly successful and currently spends about half of its budget in the form of FFS services. At the same time, Fonasa has found it hard to link its purchases from public providers with their output. As a result half of all Fonasa spending in the public sector remains in the form of historic budgets.

The service provision system in Chile is also similar to South Africa in that there is limited hospital autonomy, and staff rights are protected by rigid civil service rules, which make it difficult to link payment to performance in any meaningful way. For instance, in order for hospital managers to respond to incentives and penalties, there will have to be increased autonomy (without compromising governance and oversight) so that they are not crippled by the bureaucracy of a national or provincial system which slows decision making, and does not have exposure to service delivery in the hospital.

# 6.5.3 Learning from Fee For Service and Capitation

Paying fee-for-service (FFS) has been the chief mechanism that Fonasa has found useful to encourage output by public providers. While FFS poses inflationary problems to Fonasa, the insurer's budget caps have protected it from excessive cost escalation, and it is actively trying to switch to DRGs as its main payment method in the public sector.<sup>44</sup>

FFS may be a useful purchasing mechanism for South Africa if the objective of the new health fund is to expand access to healthcare—particularly for those in lower socioeconomic groups—through the public sector. However, FFS is generally accepted to be a driver of cost, and while its use can increase access, the potential budgetary impact is unlikely to be acceptable. It may be that such a model is required in some cases where the National Health Insurance Fund cannot live up to its benefits promise to its members through public providers alone, and the particular treatments required do not lend themselves to being easily grouped according to one of the other models. In these cases, it will be important that an acceptable price basis be developed. Capitation may also be a useful payment mechanism to promote primary health care, according to Fonasa's experience. However, Fonasa has split reimbursement models with per capita and per program models for primary healthcare and historic budget and fee for service models for secondary and tertiary care. The basis for the split is not entirely clear. South Africa will have to think and plan carefully on the partitioning and integration of payment models for the range of services to be offered.

## 6.5.4 A Mixed Reimbursement Model?

As we have seen in Chile's case, other than the global budget approach, it is not possible to have a one size fits all active reimbursement strategy: a mixed model of some sort will be required, and this is indeed advisable. Each healthcare role player has to be incentivized according to their role in the supply chain. The downside of a mixed model is that it makes coordination of these incentives more difficult, and places an increased load on information and analytical requirements in the system to keep tabs on all the "moving parts" in order to avoid any cracks forming between demarcated payment structures.

The goal for active purchasing is to improve access, efficiency, quality, and efficacy. In order to know whether these aims are being achieved, it is necessary to measure them. The measurement of efficiency with

<sup>&</sup>lt;sup>44</sup>It remains to be seen whether the large DRG implementation project in Chile over the past four years will be successful. Although the majority of public hospitals today have the technology and knowledge to bill their services through DRGs, the actual shift to DRG payment is another, much larger challenge, and has not yet begun.

respect to purchasing is typically referred to as technical efficiency<sup>45</sup>—a minimum price for a specific output. The National Health Insurance Fund envisages procuring services from both public and private providers on a "level playing" field basis. Therefore, a significant amount of investigative work will have to be undertaken into the costs of service provision in the public and private sectors in order to understand the reasons behind any technical cost differences. South Africa can then, without going into any detail on the benefits to be provided through National Health Insurance, structurally consider the healthcare access process and delineate the possible reimbursement models at each step of the process.

In Chile, there seems to be more innovation arising from Fonasa contracting with the private sector—which can increase both utilization as well as costs. Although Chile has defined packages of prospective payment with private providers, the majority of payments are still fee-for-service. South Africa's policy documents are clear on the desire to avoid a fee-for-service system. This will have to be explored in detail as the payment for service provision is considered under the purchaser-provider split and (at least a partial) departure from global budgets.

### 6.5.5 Price Setting

An important part of active purchasing will be the processes of price setting for fees paid to providers. This is expected to be a highly contested area of policy. The history of price setting in the private sector in South Africa is complex and is expected to be reviewed by the upcoming competition commission market enquiry. Price setting in the public sector has revolved around budget setting rather than component price setting and so this process will also need to mature significantly. There will likely be a large gap between what the National Health Insurance Fund (NHIF) is prepared to pay and what providers (especially private providers) are prepared to sell services at, particularly at the start of the process. A robust, well governed, transparent process will be necessary for setting up existing prices and the annual process of price negotiations.

In order to properly define the prices to be used under an active purchasing paradigm, the particular benefits that need to be funded will need to be well-defined and articulated. It will be important to delineate the particular benefits envisaged by service line or provider type—whoever will be receiving payment for the defined services. For capitation arrangements it will be important to define where the receiving providers' benefits obligations begin and end. This also applies for any episode-based payments and casebased payments. One of the key risks in the mixed payment model being suggested is cost shifting. The incentive for each separate provider of services is to optimize margins, and hence to maximize income and minimize expense. Expenses can be minimized by cost shifting up or down the supply chain through referrals. Risk mitigating rules will have to be put in place in line with detailed clinical protocols to minimize and manage the incentive and risk associated with cost shifting.

In Chile, the private market has also adapted and innovated around Fonasa with some providers developing cost containment based models in order to compete effectively, which would be a useful outcome in South Africa. Should the South African National Health Insurance Fund be willing to procure services from the private sector, they may be at prices lower than those currently charged by the private sector. Given the potential volume, there will likely be an incentive for providers to innovate delivery models so as to profitably offer services to the NHI fund within the prices offered, which will yield gains for the private and public sectors. A key concern, however, is that providers may simply lower prices for public sector reimbursement and make up the difference through higher prices in the private health insurance or the out-of-pocket market.

### 6.5.6 Budgetary Implications of Activity-Based Reimbursement Models

Activity based purchasing tools, like fee-for-service, are used as predominant basis of reimbursement in the private sector. However, consideration should also be given to the possible deficit scenarios that may arise for the public purchaser. What happens if South Africa's National Health Insurance Fund (NHIF) runs out? Or providers cannot make ends meet with the income they are receiving from the NHIF? Certain provinces have run out of budget in the past, resulting in shortages of medicine supply, etc., which is also possible, and perhaps riskier, under an NHIF framework. This is separate from the long term risk that the increase in the cost of NHIF claims exceeds budgeted income allowances ,which are driven by other external forces (such as growth in the tax base). Since at least some of the payment models for providers are activity based, it is possible that activity levels will be underestimated and actual activity levels will exceed those expected and budgeted for, resulting in an obligation for the NHIF. Contingencies should be put in place to prevent the potential for bad debt by the NHIF.

<sup>&</sup>lt;sup>45</sup>There are many dimensions to efficiency – technical effiency and allocative efficiency being two of the dominant considerations. Allocative efficiency relates to the mix of resources spread through the system, for instance in the context of NHI – is the mix of expenditure and service provision between preventative, primary care, specialized care and hospital based care optimal.

## 6.5.7 Purchasing Responsibilities

It will be important to clarify—in great detail—the purchasing responsibilities of the NHIF at the national and regional (provincial and district) levels. One of the rationales behind one large fund is that a single fund would be able to use buying power to secure low prices from providers. The implication is that prices will be set at a national level. Local (province or district) discussions on service provision and the process of securing services for patients will be complex and will have to be carefully defined. The institutional capacity that will be required nationally, provincially, and at a district level—on both the funding and procurement, and the service provision sides should not be underestimated. The paradigm shift from the current budget-driven system is significant.

Active purchasing will tie in closely to the accreditation standards to be developed by the South African Office of Health Standards and Compliance. Only accredited providers should be used to provide services to patients. This restriction could present potential difficulties for the NHIF as it is plausible that a situation could arise where no facilities in a particular area meet the standards required—in which case there would have to be a policy to keep from compromising constitutional obligations. It is conceivable that active purchasing strategies could be used to incentivize providers to improve their standards.

### 6.5.8 Data Demands

An active purchasing environment will require significantly more data than the current public (and even private) environments. Private sector providers have excellent, extremely granular data on the costs per facility, per ward type, per procedure, per patient type etc. But this information is not in the public domain. Public facility data is recorded at a much higher level, also with very little in the public domain. It will be important to invest in projects, systems, and ongoing processes that capture, record, and analyze more detailed costing data for public facilities. In addition, another key factor underpinning active purchasing is clinical data, which is used particularly in Diagnosis Related Groups, but also in other payment methods. The current state of information and communications technology (ICT) for data on cost, clinical services, and outcomes in the public sector is generally extremely derelict, with only a few facilities having decent IT systems. Templates for data outputs related to costing information, coding information, and quality and outcomes information should be developed and rolled out nationally, across the public and private sectors, to form a foundation for improved information in the sector.

## 6.6 Conclusion and Recommendations on Active Purchasing

### 6.6.1 Conclusions

- a. Mixed models of reimbursement seem an ideal way to balance the conflicting requirements of a health system. They can be achieved as in Chile's case, but are challenging to implement and balance out.
- b. Chile has been on a health reform path for a number of decades, and has a lot to offer in terms of an evidencebased approach. However, the Chile case study's applicability to South Africa is limited by the extent to which various elements of the initiatives, models, and outcomes associated with reform in Chile's health system mitigated concerns important to South Africa—such as, a two-tier health system, unreasonably high out-of-pocket payments, etc.
- c. The purchaser-provider split away from a single funderprovider model is a significant structural change in any health system. It would be very useful to understand the process that Chile went through at the time of its purchaser-provider split. South Africa could undoubtedly learn some lessons from Chile, including how to deal with unions, human resource planning and deployment, reskilling, the impact on administrative staff numbers in the system, the institutions (nationally and regionally) that are required for effective administration, roles and responsibilities of the parties, the processes for procurement, governance related matters, and insights into matters related to ICT and systems. There is a broad range of detailed policy that will have to be developed to support the transition and final stages of reform.
- d. Some other key components that require further consideration include dealing with overflow from the public sector and dealing more explicitly with emergencies, etc.

### 6.6.2 Recommendations

- a. Chile is an example of a system using mixed payment models for services to meet the conflicting needs of a health system—optimal access within budgetary constraints. The South African National Health Insurance (NHI) reforms should consider such a mixed payment model, perhaps without fee for service. Studies should be undertaken to determine ideal models of reimbursement for different types of services, and to determine the cost of providing those services in the public and private domains. It will not be possible to structure and price healthcare services without the appropriate information in hand.
- b. This could start immediately within the NHI pilot sites through deeper data collection from public sector participants and analysis of the varying treatment. One key obstacle is the inability to recreate a purchaserprovider split structure within the pilot sites, and so the impact of such a change cannot be tested. However it should be possible to create a reimbursement structure within each pilot site that approximates the structure of a purchaser provider split. This could involve for instance, primary care clinics being reimbursed according to a capitation based model.
- c. The current global budgets per facility will not provide sufficient insight to allow a move towards active purchasing. The South African Department of Health

should invest in a greater information repository on the costs of delivering services. With this repository in place, analysis and modelling can be done to structure reimbursement arrangements that optimize the necessary trade-offs.

- d. It is interesting to note that Chile is contemplating Diagnosis Related Groups as a basis for hospital reimbursement since they are also mentioned in the Green Paper for this purpose. Chile's experience in this area, so far, could be useful.
- e. In order for the South African NHI to function properly, in accordance with the standards being promised by the South African Office of Health Services Compliance, and to meet the benefit expectations of the public, it will be important to raise the level of care being provided at public facilities. This is in accordance with the South African Department Of Health's ten point plan and is a critical success factor for the NHI. Chile has done a lot to improve citizen's perception of the health system through the enhanced service delivery promise in the AUGE reform, which involves contracting private providers where public providers cannot meet their obligations. This overflow model should be considered as a way to ensure delivery of citizen expectations, bearing in mind the potential budgetary impact.

### Table A.1: Priority diseases in AUGE's benefits package

#### Health problem

#### Year of adoption: 2005

- 1. End-stage chronic renal failure
- 2. Operable congenital heart disease (under 15 years of age)
- 3. Cancer of the uterus or cervix
- 4. Cancer pain relief and palliative care
- 5. Acute Myocardial Infarction
- 6. Diabetes Mellitus Type I
- 7. Diabetes Mellitus Type II
- 8. Breast cancer (15 years of age or more)
- 9. Spinal Dysraphia
- 10. Scoliosis surgery (under 25 years of age)
- 11. Cataract surgery
- 12. Total hip replacement in people with severe osteoarthritis of the hip (65 years of age or more)
- 13. Cleft palate
- 14. Cancer (under 15 years of age)
- 15. Schizophrenia
- 16. Testicular cancer (15 years of age or more)
- 17. Lymphoma (15 years of age or more)
- 18. HIV/AIDS
- 19. Ambulatory care lower ARI (under 5 years of age)
- 20. Ambulatory pneumonia (65 years of age or more)
- 21. Primary or essential arterial hypertension
- 22. Epilepsy (non-refractory) (1 to 15 years of age)
- 23. Prevention and education for oral health (6 years old)
- 24. Prematurity-Retinopathy of prematurity-Deafness of prematurity
- 25. Conduction disturbance for those with pacemakers (15 years of age or more)

### Year of adoption: 2006

- 26. Bladder cancer preventive cholecystectomy
- 27. Gastric cancer
- 28. Prostate cancer
- 29. Adult leukemia
- 30. Strabismus (under 9 years of age)
- 31. Diabetic retinopathy
- 32. Retinal detachment
- 33. Hemophilia
- 34. Depression (15 years of age or more)
- 35. Benign prostatic hyperplasia
- 36. Acute stroke
- 37. Chronic obstructive pulmonary disease
- 38. Bronchial asthma
- 39. Newborn respiratory distress syndrome
- 40. Orthesis and aids (65 years of age or more)

Year of adoption: 2007

Health problem

- 41. Deafness (65 years of age or more)
- 42. Ametropia (65 years of age or more)
- 43. Eye trauma Cystic fibrosis
- 44. Severe burns
- 45. Alcohol and drug dependency (10 to 19 years of age)
- 46. Pregnancy and delivery integral care
- 47. Rheumatoid arthritis
- Knee arthrosis (55 years of age or more) and hip arthrosis (60 years of age or more)
- 49. Intracranial aneurysm and venous malformation rupture
- 50. Central nervous system tumors
- 51. Herniated nucleus pulposus
- 52. Dental emergencies
- 53. Dental care (65 years of age or more)
- 54. Politrauma
- 55. Traumatic brain injury
- 56. Retinopathy of Prematurity
- Year of adoption: 2010
- 57. Bronchopulmonary dysplasia of prematurity
- 58. Bilateral sensorineural hearing loss of prematurity
- 59. Epilepsy in patients over 15 year
- 60. Bronchial asthma in patients over 15 year
- 61. Parkinson
- 62. Juvenile idiopathic arthritis
- 63. Secondary prevention of chronic renal failure
- 64. Hip dysplasia
- 65. Integral oral health in pregnant women
- 66. Multiple Sclerosis
- 67. Hepatitis B
- 68. Hepatitis C

#### Year of adoption: 2013

- 69. Colorectal cancer in people aged 15 years and over
- 70. Epithelial ovarian cancer
- 71. Bladder cancer in persons 15 years and over
- 72. Osteosarcoma in persons 15 years and over
- 73. Surgical treatment of chronic lesions of the aortic valve in people aged 15 years and more
- 74. Bipolar disorder in persons 15 years and over
- 75. Hypothyroidism in persons 15 years and over
- 76. Treatment of moderate hearing loss in children under 2 years (1)
- 77. Note: Applies to a hearing deficit at or above 40 decibels secondary to a histological damage to the inner ear
- 78. Systemic lupus erythematosus
- 79. Surgical treatment of chronic lesions of the mitral and tricuspid valves in people 15 years and over
- 80. Treatment to eradicate helicobacter pylori

Table A.2: Contents of family health benefits package for primary healthcare							
I. Programa De Salud Del Niño	II. Programa De Salud Del Adolescente						
<ol> <li>Control de salud del niño sano</li> <li>Evaluación del desarrollo psicomotor</li> <li>Control de malnutrición</li> <li>Control de lactancia materna</li> <li>Educación a grupos de riesgo</li> <li>Consulta nutricional</li> <li>Consulta de morbilidad</li> <li>Control de enfermedades crónicas</li> <li>Consulta por déficit del desarrollo Psicomotor</li> <li>Consulta kinésica</li> <li>Consulta de salud mental</li> <li>Vacunación</li> <li>Programa Nacional de Alimentación Complementaria</li> <li>Atención a domicilio</li> </ol>	<ol> <li>15. Control de salud</li> <li>16. Consulta morbilidad</li> <li>17. Control crónico</li> <li>18. Control prenatal</li> <li>19. Control de puerperio</li> <li>20. Control de regulación de fecundidad</li> <li>21. Consejería en salud sexual y reproductiva</li> <li>22. Control ginecológico preventivo</li> <li>23. Educación grupal</li> <li>24. Consulta morbilidad obstétrica</li> <li>25. Consulta morbilidad ginecológica</li> <li>26. Intervención Psicosocial</li> <li>27. Consulta y/o consejería en salud mental</li> <li>28. Programa Nacional de Alimentación Complementaria</li> <li>29. Atención a domicilio</li> </ol>						
III. Programa de la Mujer	IV. Programa del Adulto						
<ul> <li>30. Control prenatal</li> <li>31. Control de puerperio</li> <li>32. Control de regulación de fecundidad</li> <li>33. Consejería en salud sexual y reproductiva</li> <li>34. Control ginecológico preventivo</li> <li>35. Educación grupal</li> <li>36. Consulta morbilidad obstétrica</li> <li>37. Consulta morbilidad ginecológica</li> <li>38. Consulta nutricional</li> <li>39. Programa Nacional de Alimentación Complementaria</li> <li>40. Eco Obstétrica del 1er Trimestre</li> </ul>	<ul> <li>41. Consulta de morbilidad</li> <li>42. Consulta y control de enfermedades Crónicas</li> <li>43. Consulta nutricional</li> <li>44. Control de salud</li> <li>45. Intervención psicosocial</li> <li>46. Consulta y/o consejería de salud mental</li> <li>47. Educación grupal</li> <li>48. Atención a domicilio</li> <li>49. Atención podología a pacientes con pie diabético</li> <li>50. Curación de Pie diabético</li> <li>51. Intervención Grupal de Actividad Física</li> </ul>						
V. Programa del Adulto Mayor	VI. Programa de Salud Oral						
<ul> <li>52. Consulta de morbilidad</li> <li>53. Consulta y control de enfermedades crónicas</li> <li>54. Consulta nutricional</li> <li>55. Control de salud</li> <li>56. Intervención psicosocial</li> <li>57. Consulta de salud mental</li> <li>58. Educación grupal</li> <li>59. Consulta kinésica</li> <li>60. Vacunación antiinfluenza</li> <li>61. Atención a domicilio</li> <li>62. Programa de Alimentación Complementaria del Adulto Mayor</li> <li>63. Atención podología a pacientes con pie diabético</li> <li>64. Curación de Pie Diabético</li> </ul>	<ul> <li>65. Examen de salud</li> <li>66. Educación grupal</li> <li>67. Urgencias</li> <li>68. Exodoncias</li> <li>69. Destartraje y pulido coronario</li> <li>70. Obturaciones temporales y definitivas</li> <li>71. Aplicación sellantes</li> <li>72. Pulpotomías</li> <li>73. Barniz de Fluor</li> <li>74. Endodoncia</li> <li>75. Rayos X dental</li> </ul>						

### Table A.2: Contents of family health benefits package for primary healthcare (continued)

#### VII. Actividades Con Garantías Explícitas En Salud Asociadas A Programas

#### 76. Diagnóstico y tratamiento de hipertensión arterial primaria o esencial: consultas de morbilidad y controles de crónicos para personas de 15 años y más, en programas de adolescente, adulto y adulto mayor.

- 77. Diagnóstico y tratamiento de Diabetes Mellitus tipo 2: Consultas de morbilidad y controles de crónicos en programas del niño, adolescente, adulto y adulto mayor.
- Acceso a evaluación y alta odontológica integral a niños y niñas de 6 años: prestaciones del programa odontológico.
- 79. Acceso a tratamiento de epilepsia no refractaria para los beneficiarios desde un año a menores de 15 años: consultas de morbilidad y controles de crónicos en programas del niño y adolescente.
- Acceso a tratamiento de IRA baja de manejo ambulatorio en menores de 5 años: consultas de morbilidad y kinésica en programa del niño.
- Acceso a diagnóstico y tratamiento de Neumonía adquirida en la comunidad de manejo ambulatorio en personas de 65 años y más: consultas de morbilidad y kinésica en programa del adulto mayor.
- 82. Acceso a diagnóstico y tratamiento de la Depresión de manejo ambulatorio en personas de 15 años y más: consulta de salud mental, consejería de salud mental, intervención psicosocial y tratamiento farmacológico.
- 83. Acceso a diagnóstico y tratamiento de la enfermedad pulmonar obstructiva crónica: consultas de morbilidad y controles de crónicos; atención kinésica en programa de adulto mayor.
- 84. Acceso a diagnóstico y tratamiento del asma bronquial moderada en menores de 15 años: consultas de morbilidad y controles de crónicos en programas del niño y del adolescente; atención kinésica en programa del niño.
- 85. Acceso a diagnóstico y tratamiento de presbicia en personas de 65 y más años: consultas de morbilidad, controles de salud y control de crónicos en programa del adulto mayor.
- 86. Acceso a tratamiento médico en personas de 55 años y más, con artrosis de cadera y/o rodilla, leve o moderada
- 87. Acceso a Diagnóstico y tratamiento de la Urgencia odontológica Ambulatoria

### VIII. Actividades Generales Asociadas A Todos Los Programas

- 88. Educación grupal ambiental
- 89. Consejería familiar
- 90. Visita domiciliaria integral
- 91. Consulta social
- 92. Tratamiento y curaciones
- 93. Extensión Horaria
- 94. Intervención Familiar Psicosocial
- 95. Diagnóstico y control de la TB

### Table A.3: List of packages included in Fonasa's prospective payment system under FCM

- Parto
- Colelitiasis
- Apendicitis
- Peritonitis
- Hernia Abdominal Simple
- Hernia Abdominal Complicada
- Tumor Maligno de Estómago
- Ulcera Gástrica Complicada
- Ulcera Duodenal Complicada
- Embarazo Ectópico
- Enfermedad Crónica de las Amígdalas
- Vegetaciones Adenoides
- Hiperplasia de la Próstata
- Fimosis
- Criptorquidia
- Ictericia del Recién Nacido
- Cataratas (No Incluye lente Intraocular)

- Trasplante Renal
- Prolapso Anterior o Posterior
- Tumores y/o Quistes Intra-Craneanos
- Aneurismas
- Disrafia
- Hernia del Núcleo Pulposo (Cervical, Dorsal , Lumbar)
- Acceso vascular simple (mediante FAV) para hemodiálisis
- Acceso vascular complejo (mediante FAV) para hemodiálisis
- Queratectomia Fotorreactiva
- Histerectomia
- Menisectomia
- Litotripsia extracorporea
- Diagnóstico Infección Tracto Urinario (I.T.U.)
- Várices
- Varicocele

Table A.4: Structure of the South African Health System										
Sector	Public				Private			Other		
Financing sources	General tax revenue						Employer funding			
	Personal income tax	Corporate Tax	VAT	Other duties	Medical scheme contributions	Copayments	OOP			
Health services	Public sector									
	Clinics	Hospitals	Academic h	ospitals	Private service providers	Private facilities		Mining hospitals		
Beneficiaries	Everyone else				Tend to be formally employed high income			Employees		

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