Case study 2: Chile⁷⁸

Name: Registro Social de Hogares (translated as Social Registry of Households; formerly known as Sistema Integrado de Información Social)

Overall classification: social registry that builds on a virtual registry

Data collection approach: combination of virtual data sharing from existing databases and on-demand registration (with periodic census surveys organised on an ad hoc basis)

Breadth of integration: integrates data collection and eligibility determination across all social assistance programs (with data flows in both directions); integrates with other sectors (health and education primarily); full integration with national ID database; some integration with social insurance

Depth of integration: key objective is sharing data (two-way flow) to integrate service delivery across sectors and increase citizen focus

Number of individuals registered: 12.4 million (72 per cent of population)

Chile's Registro Social de Hogares (RSH, translated as Social Registry of Households; previously, before January 2016, Sistema Integrado de Información Social (SIIS), or Integrated System for Social Information) is often cited as one of the most advanced examples of integrated data management across the social protection sector and beyond. This case study explores the key characteristics of this well-established yet continuously evolving social registry, which incorporates data on 12.4 million people, equivalent to 71.7 per cent of Chile's population (March 2016).

Background

Social policy in Chile has been in constant development since the 1980s.⁷⁹ Economic prosperity in the 1990s led the government to reach out to the country's poor in a more systemic way, leading in 2006 to the development of the Ficha de Protección Social (FPS),⁸⁰ a survey used to identify poor households to be targeted for social assistance. This approach evolved further in 2016, with a shifting focus from citizen 'vulnerability' to 'rights'. In addition to the survey administered at municipal level to collect data on potential beneficiaries, the new system now incorporates large amounts of data from existing administrative databases.⁸¹ This recent shift was endorsed by supreme decree (Decreto Supremo No. 22, 2015).

The system's framework and technical architecture is a consequence of a concept of poverty and vulnerability encompassing all risks associated with poverty across a life cycle, including unemployment, precarious jobs, bad health and low levels of education. In this context, social protection is defined as encompassing policies and actions that help tackle these risks (Ministerio de Planificación y Cooperación (MIDEPLAN)⁸² 2008). Integration (within a sector and cross-sector) is at the heart of the system.

⁷⁸ Much of the information used for this case study is based on discussions with Luis Alejandro Díaz and Verónica Achá from the Ministerio de Desarrollo Social and on a phone interview with Ignacio Irarrázaval, Head of the Public Policy Centre at the Pontifical Catholic University of Chile. Other resources include a book chapter co-authored by Irarrázaval with Francisco Covarrubias and M. de los Angeles Morande, 'La efectividad de las redes de protección social: El rol de los sistemas integrados de información social en Chile'; a presentation by Chile's ministry in April 2016 (see below); and the ministry website 'documents' section.

⁷⁹ The first version of the CAS was already developed in the 1980s.

⁸⁰ Translated, the first is 'Form for Socio-economic Characterisation' and the current version is 'Social Protection Form'.

⁸¹ See April 2016 ministry presentation from Brazil conference on integrated data and information management for the social sector.

⁸² Planning ministry of the Government of Chile.

Programs supported by the RSH

Chile's social protection intervention is supported by two main pillars, designed to tackle poverty and vulnerability in an integrated way at two life-cycle stages (Taieb Bono de Egreso 2012; Covarrubias et al. 2011):

- Chile Solidario (under the umbrella of the Seguridades y Oportunidades program), established in 2002, is aimed at households in extreme poverty. Other than more traditional monetary support through cash transfers,⁸³ this program is innovative and personalised. Each household has a social worker assigned to it for 24 months⁸⁴ who provides information, referrals and assistance so household members can access complementary services⁸⁵ and link to employment and income-generating programs.
- 2. Chile Crece Contigo, developed in 2006, follows children from pregnancy to four years of age. This program is coordinated by a committee of members from different ministries. It is presided over by MIDEPLAN and involves education, health, work, social security and justice ministries that implement it at local level.

Beyond these two pillars, other programs are integrated into the overall social protection strategy through the RSH. These include one that guarantees access to health services for key illnesses,⁸⁶ universal access to education for children under 12 years of age,⁸⁷ a system of social pensions,⁸⁸ and other small programs for improving health conditions and employment opportunities and providing housing and judicial support (see Covarrubias et al. 2011 for more details). In 2016, over 80 social programs in Chile were using RSH to select their beneficiaries.⁸⁹

The RSH is an essential part of Chile's social protection strategy because it contains all information on the state's provisions to beneficiary households and coordinates across ministries and levels of government. The following sections analyse how this is achieved.

Objective and institutional arrangements for RSH

SIIS (RSH's predecessor) was established in 2008 through Decreto Supremo No. 160, which covers how the personal data of potential and actual beneficiaries should be protected and how inter-institutional agreements should be regulated. Specifically, the decree dictates that institutions should exchange data with the:

... objective of assigning and rationalising social benefits distributed by the State, as well as researching and designing policies, plans, programs ... based on the needs of those who administer such benefits, so as to promote a correct targeting of resources and the incorporation of beneficiaries in existing Social Safety Nets and ensuring access to better life conditions. (MIDEPLAN 2007, article 4)

⁸³ The program also offers conditional cash transfers (Bono de Protección Familiar) for up to two years, an unconditional exit transfer (Bono de Egreso) for an additional three years, and more subsidies for particular categories of people within the household (for example, those under 18 years of age, those over 65 years of age and those with disability).

⁸⁴ Twenty-one home visit sessions are organised, with decreasing intensity after the first six months. The social worker and family members develop a strategy ('contract') based on a methodology that requires the family to meet 53 minimum conditions. These are grouped into seven pillars — health, work, education, family dynamics, housing, identification documentation and income (Taieb and Schmitt 2012).

⁸⁵ Social assistance, health, education, housing, family support services, drug prevention and rehabilitation, technical help for people with disability, and support for violent situations.

⁸⁶ The prioritised list includes 56 pathologies (see Covarrubias et al. 2011 for more details).

⁸⁷ This includes a system of scholarships and other support, such as for buying school materials and school meals.

⁸⁸ Created in 2008, these pensions are for those who are without a formal pension and belong to the poorest 40 per cent of the population. They cover both citizens 65 years of age and older and invalid citizens between the ages of 18 and 65 years.

⁸⁹ See ministry presentation from Brazil conference on integrated data and information management for the social sector.

Overall responsibility for the registry used to be with MIDEPLAN, which was then replaced by the Ministry of Social Development (MDS) through Law No. 20.530 (2011). MDS performs key management and coordination of the RSH. It determines the standards for data collection, storage, security and transmission and is responsible for coordination, control, supervision and evaluation of RSH. It underwrites legal agreements with 43 other state agencies and their multiple databases, formalising the exchange of data (including rights and obligations for use of and access to data).⁹⁰ Each institution is responsible for correct and accurate data. MDS also signs agreements with Chile's 345 municipalities, which are primarily responsible for collecting data.

How RSH is structured in practice

RSH is a social registry⁹¹ that, thanks to a tailored software application (and using the national ID RUN number as a unique identifier), is linked to many databases belonging to public entities through the internet, providing up-to-date information on 12.4 million people, equivalent to 71.7 per cent of Chile's population (April 2016). This section analyses how it is structured.

Data sources

The key databases feeding into the RSH are:

- » Data from 43 state agencies and their multiple databases, including the National Corporation for Indigenous Development, and ministries such as education, labour and social security, housing and urban development ⁹²
- » Data collected by municipalities or collected online (using a specific form, available publicly on the Ministerio de Desarrollo Social website)
- » Data from Chile Solidario and Chile Crece Contigo MISs, linked through municipalities, including information on payments
- » Data from 345 municipalities
- » Data from Chile's civil registry.

RSH also keeps records of some sensitive data, such as income and taxes, which may be used only under very specific circumstances.

90 Includes methods for access and data transferral, level of access, obligations on how data is used, content and schedule of reporting.

⁹¹ The definition of RSH provided by the ministry is: 'RSH is a 4-part system consisting of (1) a functional data base and its platform, (2) support for the selection of beneficiaries of social benefits created by law, (3) technical assistance to the programmatic supply, and (4) control and monitoring processes'.

⁹² Each of these institutions integrates multiple databases to the SIIS, depending on the key services they provide. For example, the National Corporation for Indigenous Development integrates nine databases and the National Agency for Schooling Support and Scholarships integrates 12 databases. For further details see pp. 27–28 in Covarrubias et al 2011. See also Oxford Policy Management's poster from its 2015 Indonesia workshop (OPM 2015a).

Figure 12 Chile's RSH: overall structure



Source: Developed by author based on Covarrubias et al. (2011) and Irarrázaval (2004).

Note: Boxes indicate databases; circles indicate MISs; bold lines indicate direct link (e.g. web service access); dotted lines indicate indirect link (batch process, CDs etc.). In the case of Chile, information from the 80+ programs listed is shared on an ad hoc basis (some direct and some indirect links; some one-way and some two-way flows).

How data is collected and updated

RSH data is collected and updated in three different ways:

- 1. From existing administrative databases (see above this is why Chile's social registry shares the characteristics of a virtual social registry)
- 2. Continuous access to benefits or updated information is handled on request (on demand) at municipality offices (officers are trained on this)
- 3. Information can be accessed and modified by citizens online.

Overall, municipalities are responsible for data collection.

Data processing and targeting

After data is entered and validated (including cross-checks with the civil registry), it is used to target at central level. It is analysed using a targeting formula (dotted rectangle in Figure 10) that calculates an overall score for each household, based on preset criteria (see more details, in Spanish, on the Registro Social website). This score, recorded in the RSH with all relevant household information, determines program eligibility. Unlike other countries in Latin America, Chile's programs apply thresholds to eligibility based on specific objectives (for example, some focus on the most vulnerable 40 per cent and some on aspects of vulnerability such as housing).

How data is transferred

RSH information is accessed in two ways:

- » Web service⁹³ enables remote access by institutions with legal agreements with SIIS,⁹⁴ without the need for common software. Data is transferred using XML language and HTTP protocol. Institutions can consult integrated data, and RSH can access institution databases to update data.⁹⁵
- » Batch processes involve contacting MDS through an ad hoc website and sharing information.

Institutions are given an access key — an identifier so that information and functionalities can be shared.

Because both methods depend on the internet, about 40 per cent of the 345 municipalities have faced significant access problems, despite efforts to upgrade overall infrastructure (Covarrubias et al. 2011). In fact, the lack of modernisation of many of the municipalities was listed by the ministry as one of the key challenges they faced.

How RSH information is used

The best indicator of how well a system functions is actual use. In 2011, on average, the RSH predecessor SIIS was consulted 9800 times a day (online). Detailed reporting is available to policymakers, including geo-referenced maps (see for example Figure 10).

The RSH also has potential uses for beneficiaries. For example, municipalities can generate a document showing a household's targeting score (including a barcode for security), which can be used to request public services. Beneficiaries can also ask for assistance from the 15 institutions that have specific legal arrangements with the RSH without further proving eligibility. RSH personal data is also available online.



Figure 13 Chile's RSH, available online

- 94 Only nine of the 15 institutions access the SIIS through the internet.
- 95 Covarrubias et al. (2011) note that 'definition and design of the software and hardware components that are needed to implement and fully exploit such a system is not a minor task, not only because of the size of the system in terms of number of databases linked, number of users and types of transactions, but also because of the strategic importance of this information'.

⁹³ A web service is a method of communication between two electronic devices over the Internet. It is a software system designed to support interoperable machine-to-machine interaction over a network.

Data security and privacy

The information integrated by Chile's RSH social registry is mainly personal and is regulated by Chile's Law No.19.628 on data privacy. This means, for example, that individuals must authorise state institutions to use their personal data or transfer it to third parties. Data is also regulated based on Chile's 2008 Transparency Law (No. 20.285), which enforces the publication of certain types of information on selected themes.

Main challenges and lessons learned

Keeping information updated

The main criticism around RSH's predecessor, SIIS, was that it was more static than intended (Covarrubias et al. 2011). RSH has partly addressed this by regularly updating data from a wide range of data sources, acting as a virtual registry.

Stock data is actualised monthly by comparing it to the civil registry, and online for new users. Variables used to calculate eligibility scores (for example, administrative income and pensions) are updated monthly too. Households are asked to inform the system, through any of the existing channels (municipalities or the website), of any updates regarding self-reported data. Since the targeting score is mainly based on administrative data, incentives to update information have changed, compared to the previous instrument (FPS).

Risk of excluding categories of individuals

The risk of excluding categories of individuals pertains to the targeting algorithm applied, not to the RSH, but an integrated system can lead to integrated exclusion. However, some specific policies are now being designed to reach people who are out of the formal system or in special living conditions, such as homeless or institutionalised children.

Insufficient capacity at municipal level

While an online system has many advantages for facilitating instantaneous data exchange, municipalities are often not modern enough to fully integrate. The only solution is to buy adequate equipment, improve internet access in remote areas and build staff capacity.

Not enough focus on research and monitoring and evaluation

Overall, the RSH's full potential to become a databank for social researchers and institutions wanting to plan social interventions is still not fully realised.