REPORT

PUBLIC INVESTMENTS IN THE CARE ECONOMY

CHACO PROVINCE CASE STUDY

CHACO
Gobierno de todos

International Labour Organization

UN WOMEN

Public investments in the care economy: Chaco province case study.

This report was prepared between March and August 2022 in the framework of the joint UN Women-ILO project "Promoting decent employment for women through inclusive growth policies and inclusive investments in the care economy".

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INTRODUCTION

Care has become an increasingly prominent issue on the feminist agenda and in public policy in Argentina. Public debate established the need to transform the social organization of care. The issue was analysed and recommendations proposed. Numerous government bills on care emerged from the National Congress, from extending leave to the different dimensions of care systems. In 2022, the government submitted the 'Care in Equality' project[1], proposing reforms of the system of care leave to become more equal, and laying the groundwork for the creation of an Integrated National Care System. At the end of 2022, the 15th regional women's conference for Latin America and the Caribbean was held in Buenos Aires, with the central theme 'Towards the Society of Care'.

Promoting a care agenda is important for several reasons. First, because the current form of the social organization of care (SOC) is unjust and plays a critical role in reproducing gender and socioeconomic inequality. Second, because the distribution of care responsibilities is fundamental in explaining women's continued economic subordination and the way in which their life plans are limited. Third, because the COVID-19 pandemic has helped to highlight the essential nature of care, and the forms of exploitation so often rooted in domestic work and paid and unpaid care. Fourth, because care can be understood as a right of all people (to receive care, to provide care and to choose care arrangements) that should be guaranteed by the state. Fifth, because there is a growing consensus that the expansion of care services can, in itself, be a strategy for economic recovery based on equality. The care sector can function as an economic sector that generates employment, sustains incomes, boosts aggregate demand and, as a result, increases tax revenues.

It is clear that investing in public policies on care not only guarantees the right to care and reduces inequalities, but also generates economic benefits that can even be used to partially finance these policies.

This makes studies particularly relevant that identify what would be involved in comprehensively expanding and strengthening care policies. This report contributes to this field. It presents the case study of Chaco province in Argentina, including the results of an exercise that estimated the gaps in care demands (in terms of coverage, quality and infrastructure), the investments required to address them and the fiscal spending required, and the jobs that these investments could generate.

This paper is part of the joint UN Women–International Labour Organization (ILO) programme 'Promoting Decent Employment for Women through Inclusive Growth Policies and Investments in Care' and adapts the methodology developed jointly by the two agencies,[2] based on the targets set by the Sustainable Development Goals (SDGs) for the year 2030.

Completing this exercise at the provincial level is particularly useful, given that a large number of care services in Argentina are managed at this level. Chaco province was chosen for the costing exercise because of its progress on gender issues, such as the existence of a Directorate for the Economy, Equality and Gender, and a gender budget that has been in place for a few years.

The following report presents the methodology used, the care subsectors chosen for estimations, the scenarios determined for progress on reducing care deficits and, finally, the results in terms of fiscal spending and employment creation.

1 "Cuidar en Igualdad" project proposes the reform of the caregiving leave system towards a paradigm of equal leave and lays the groundwork for the creation of an Integrated National Care System. For more information see: https://www.argentina.gob.ar/generos/proyecto-de-ley-cuidar-en-igualdad.

2 ILO - UN Women (2021) available at https://www.ilo.org/employment/Whatwedo/Publications/WCMS_782877/lang--es/index.htm

METHODOLOGY

This paper uses the methodology developed by the UN Women and ILO programme (2021), which proposes estimating gaps in coverage, quality and infrastructure for each of the care subsectors: education, health and long-term care (LTC). Under different scenarios and with different maintenance or improvement targets, the paper estimates the fiscal spending required for public investment that addresses these gaps and determines the impact of this investment on employment creation and on other economic aggregates.[3]

When applied at the provincial level, the estimation of impacts is restricted to direct employment creation, given that without an input–output matrix at the provincial level, it is not possible to estimate indirect job creation or other economic impacts (on demand, tax revenue, etc.), as originally foreseen in the methodology.

The methodology follows four phases. The first seeks to estimate existing gaps for each care subsector selected. These were established in terms of coverage (number of people requesting care services in relation to the number of people who actually access the services), quality (determined by technical ratios of type or number of people cared for per caregiver and by salary level), and infrastructure (determined by square metres required in establishments that provide care services).

These gaps are estimated for a set of care subsectors that, in the case of Chaco province, includes the education subsector, the health subsector (including the care of people with mental health problems, problem drug users and those experiencing gender-based violence), and the long-term care subsector.

The baseline situation for estimating gaps was established for the year 2019, the last available year before the COVID-19 pandemic. It was decided that 2019 would be used to avoid the extraordinary circumstances experienced in the two subsequent years, which could create a biased comparison basis.

Once the gaps had been estimated, the second stage involved setting policy objectives for each of the subsectors that address current and future care needs. The year 2030 is taken as the future scenario, which is the Sustainable Development Goals (SDGs) target date.

Based on the methodology adopted (UN Women–ILO, 2021), two baseline scenarios are proposed:

- The *Status Quo* (SQ), where the current situation continues until 2030. In other words, the policy objective would be that the situation achieved in terms of care service coverage, quality of benefits and employment conditions in the care sectors does not deteriorate. In this instance, the care gap would be explained solely by growth of the population potentially in need of care.
- *High Road (HR)*, which aims to establish improvements in terms of coverage, service quality, quality of employment and infrastructure. The targets for the HR scenario are established as three types of scenarios:
  - √ Minimum scenario
  - √ Median scenario
  - √ Maximum scenario

3 The methodological tools can be found here: https://www.unwomen.org/es/digital-library/publications/2021/04/policy-tool-care-economy

These targets were set in dialogue with the provincial team, and took into account a balance between desirable targets (closer to those proposed by the SDGs) and the enabling conditions in the provincial context.

The third stage was to calculate the investment or fiscal spending required to address the gaps in the different care subsectors, according to the scenarios proposed.

The fourth and final stage consists of estimating direct employment creation resulting from these investments in care.

The estimates made and the results obtained are presented below for each subsector.

RESULTS

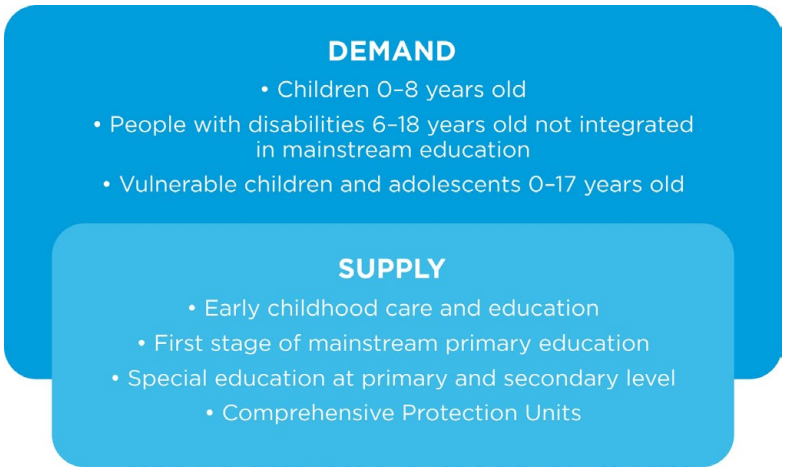
This paper estimates the gaps in financial resources for the provision care, in each care subsector selected. Figures in each section show the groups of people who demand care and how that care is supplied.

1. Education subsector

This paper establishes the group of people who demand care in the education subsector. This is made up of three groups (**Figure 1**):[4] children aged 0 to 8 years old, people with disabilities aged 6 to 18 not integrated in mainstream education, and vulnerable children and adolescents aged 0 to 17.

FIGURE 1

Education subsector care supply and demand



Source: Compiled by the authors.

The supply of care services in the education subsector is in the following forms:

- **Early Childhood Care and Education (ECCE):** ECCE includes care for children under the age of 5 (informal provisions – especially common in non-compulsory education between 45 days and 3 years old – through social care provision, and formal education. For this study, two types of services were considered: nurseries and kindergartens (0–5 years) within the formal education system, and Family Integration and Support Centres (CIFF) of the province's Ministry of Social Development, which provide care to children and adolescents from poor working families, prioritizing children under 5 years of age according to their socio-environmental risk.
- **First stage of mainstream primary education (first three grades):** Primary education is limited to formal education, managed publicly or privately. In Chaco province, this lasts seven years, until 7th grade, and in the public system is only provided on a half-day basis (four hours long). Given the almost universal coverage of primary schooling on a half-day basis (lasting four hours), this study considers the extension of the school day (on a full-day basis) in the first stage of primary school (1st, 2nd and 3rd grades).
- **Special education at primary and secondary level:** Special education is an education system category designed to guarantee the right to education for people with temporary or permanent disabilities, at all levels and modes in the education system, and according to the principle of inclusive education (Law 26.206, Article 42).

4 Both the definition of the groups to be included in the subsector and the identification of the devices that currently meet this demand were carried out jointly with the provincial team.

- **Alternative Co-education Spaces (ECAs) and Comprehensive Protection Units (UPI):** ECAs are social and educational institutions that provide transitional residence and personalized care to children and adolescents with no parental care. Through these institutions, young people in fragile situations receive shelter, food and personal care, together with psychological, physical and dental treatment, to ensure their full and healthy development. UPIs consist of interdisciplinary teams responsible for taking action against infringements of the rights of children and adolescents, as well as promoting the full enjoyment of those rights throughout the province. (SIEMPRO, 2021).

The characteristics of the current supply of care services for these population groups are summarized in **Table 1**. The main coverage gaps are observed at the nursery level, where less than 10 per cent of children aged between 0 and 3 attends kindergarten. Between the ages of 4 and 8, coverage is universal. However, there is very low coverage of a full day at primary school: just over 5 per cent of the population aged between 6 and 8 access a full day at school. In addition, one third of people with disabilities (PCDs) that require special education do not have access to it. Although UPIs do address a high proportion of reports received, coverage of ECAs is low in comparison with the estimated number of children under 18 with no parental care in the province, based on the national survey of children and adolescents (MICS) conducted in 2019–2020 by UNICEF–SIEMPRO (2021).

Quality is determined by the ratio of number of people cared for per direct care worker compared with staff wages. The average number of people that each worker cares for in the province exceeds the national average. Meanwhile, the wages of female workers in the sector is lower than the baseline used, consisting of the average remuneration of a registered wage-earning university graduate aged between 25 and 64, and is especially low in the case of staff at UPIs and ECAs,[5] which do not attain Argentina's sliding minimum living wage (SMVM[6]).

TABLE 1

Supply of Care Services in the Education Subsector (2019)

Provision	Coverage	Quality	
		Ratio Cared for/Caregiver	Pay (Chaco province)
Nursery	9.29% of the population aged 0–3	13 students per teacher	$37,978/month (21 hours per week)
Kindergarten	100% of the population aged 4 and 5	14 students per teacher	
1st stage of primary school (*1° Stage*)	100% of the population aged 6–8 *(of whom 5.3% attend an extended/full day)*	11 students per teacher	$34,398/month (21 hours per week)
Special education	64.3% of the population aged 6–18 with a disability *(not integrated into mainstream mode)*	2 students per teacher	$32,701/month (21 hours per week)
ECA	5.48% of the population aged under 18 with no parental care	0.6 children/adolescents per direct care worker	$9,460/month (33 hours per week)
UPI	87.24% of reports received on hotline	32 children/adolescents per direct care worker	

Note: All figures in this report refer to Argentinean pesos (ARS).

Source: Compiled by the authors based on the province's population structure census by age alone (2010), INDEC population projections by province, 2019 education statistics yearbook (National Education Ministry), Chaco Province Ministry for Social Development and Chaco Province Ministry of Education, Culture, Science and Technology.

5 Remuneration refers to the stipend granted by the "More inclusion" scholarships for job training and coaching, which is compatible with other income, both labor and non-labor (decree 1411/20), and assumes a temporary employment relationship.

6 In October 2019 a SMVM was set at $16,875.

1.1 Setting deficit reduction targets in the education subsector

Taking into account the low coverage and the gaps in the supply of care in the education subsector, improvements are proposed for expanding coverage and improving the quality of service – by reducing the groups of people cared for by each worker and by improving working conditions in the sector. **Table 2** summarizes the targets for the minimum, median and maximum improvement scenarios.

TABLE 2

Minimum, median and maximum *High Road* objectives: education subsector (2030)

Provision	Minimum		Median		Maximum	
	Coverage (% of target population and infrastructure)	**Quality (cared for/ caregiver and pay ratio)**	**Coverage (% of target population and infrastructure)**	**Quality (cared for/ caregiver and pay ratio)**	**Coverage (% of target population and infrastructure)**	**Quality (cared for/ caregiver and pay ratio)**
Pre-school level *(0 to 5 years)*	**Coverage:** *Nursery:* Universalization of classroom time from age 3	**Ratio:** *Nursery:* 11 students per teacher	**Coverage:** *Nursery:* expand 50% between ages 0–3.	**Ratio:** *Nursery:* 7 students per teacher	**Coverage:** *Nursery:* Universalization of classroom time from age 3 + 50% between ages 0 and 2	**Ratio:** *Nursery:* 6 students per teacher
	Pre-school: 100% of those aged 4 and 5	*Kindergarten*: 13 students per teacher	*Pre-school:* 100% of those aged 4 and 5	*Kindergarten*: 9 students per teacher	*Pre-school:* 100% of those aged 4 and 5	*Kindergarten*: 8 students per teacher
	Infrastructure: + 20,848 m²	**Pay:** $38,822/month (21 hours per week)	**Infrastructure:** + 35,194 m²	**Pay:** $38,822/month (21 hours per week)	**Infrastructure:** + 44,289 m²	**Pay:** $38,822/month (21 hours per week)
Extension of school day at 1st stage of primary school *(6 to 8 years)*	**Coverage:** 100%, with extended school day observed	**Ratio:** 13 students per teacher	**Coverage:** Extension of the full day to cover 50% of the target population	**Ratio:** 10 students per teacher	**Coverage:** Universalization of Full Days	**Ratio:** 9 students per teacher
	Infrastructure: + 11,506 m²	**Pay:** $35,356/month (22 hours per week)	**Infrastructure:** + 68,436 m²	**Pay:** $43,751/month (30 hours per week)	**Infrastructure:** + 132,168 m²	**Pay:** $52,196/month (40 hours per week)
Special education *(PCDs aged 6–18 not integrated into main-stream education)*	**Coverage:** 64% of target population	**Ratio:** 2 students per teacher	**Coverage:** 86% of target population	**Ratio:** 2 students per teacher	**Coverage:** Universalization of special education	**Ratio:** 1 student per teacher
	Infrastructure: + 275 m²	**Pay:** $32,701/month (20 hours per week)	**Infrastructure:** + 1,873 m²	**Pay:** $32,701/month (20 hours per week)	**Infrastructure:** + 2,889 m²	**Pay:** $32,701/month (20 hours per week)
ECA and UPI *(Children and adolescents with vulnerable rights)*	**Coverage:** *ECA:* 25% of target population	**Ratio:** *ECA:* 5 people for each direct care worker	**Coverage:** *ECA:* 50% of target population	**Ratio:** *ECA:* 5 people for each direct care worker	**Coverage:** *ECA:* 100% of target population	**Ratio:** *ECA:* 5 people for each direct care worker
	UPI: 100% of reports received on 102 hotline	*UPI:* 32 cases per year handled by each professional	*UPI:* 100% of reports received on 102 hotline	*UPI:* 32 cases per year handled by each professional	*UPI:* 100% of reports received on 102 hotline	*UPI:* 32 cases per year handled by each professional
	Infrastructure: *ECA:* + 1,697 m²	**Pay:** $30,816/month (24 hours per week)	**Infrastructure:** *ECA:* + 3,829 m²	**Pay:** $33,898/month (24 hours per week)	**Infrastructure:** *ECA:* + 8,093 m²	**Pay:** $38,520/month (24 hours per week)

The scenarios for improving the observed parameters envisage that the additional care services required are government-funded and publicly provided. To propose the high road scenarios, the following points were taken into account:

- **Coverage**

In all subsectors, scenarios of gradually increasing coverage are proposed, until achieving universalization in the maximum scenario.

In early childhood care and education, increases in coverage prioritize universal formal education from the age of 3, fulfilling the commitments made by the provinces in the Federal Education Council. As a maximum, coverage between 0 and 2 years of age should be expanded to reach 50 per cent of the population in that age group.

For primary education, the improvements proposed relate to extending the school day to a full-day basis. According to Article 28 of the National Education Law (26.206), primary education should be provided on a full-day basis. To achieve this objective, scenarios were proposed that gradually increase the school day, reaching 50 per cent of children aged between 6 and 8 in the median scenario and with universal coverage of full school days in the maximum scenario.

In special education, targets were set with the aim that gaps compared with the other provinces could be closed. Coverage in the minimum scenario comes close to that observed in the national average, and in the median scenario to that observed in the three provinces with the highest provincial sustainable development index (IDSP), according to UNDP (2017). In the maximum scenario, the parameter observed for the jurisdiction with the highest sustainable development is reached.[7]

For children and adolescents whose rights are at risk of violation, the aim was, based on the minimum scenario, for the UPIs to handle all of the reports received, and for the ECAs to increase their coverage gradually in each scenario to 25 per cent, 50 per cent and 100 per cent respectively.

- **Infrastructure**

For formal education, the construction of new classrooms was envisaged, based on the spatial parameters observed in the most recent school infrastructure census (CENIE) conducted in 2008–2009, i.e. 0.8 m^2 per student per classroom at pre-school level and 1.5 m2 per pupil per classroom at the other levels. For the ECAs, the spatial parameters used by the Ministry for Social Development were considered.

- **Cared-for/caregiver ratio**

This parameter was used to aim to close gaps between the different provinces. A minimum scenario was proposed in which Chaco province achieved the same values observed in the national average; a median scenario in which it achieves the same ratios that, on average, are observed in the three provinces with the highest provincial sustainable development index (PSDI), according to the UNDP (2017); and, as a maximum scenario, reaching the same ratio observed for the province with the highest PSDI.

For the ECAs, the recommendations of the province's Ministry of Social Development (MDS) were followed for setting the criteria. According to these, each interdisciplinary team serves between 15 and 20 people. It is proposed that the minimum workforce operating in these spaces should consist of a team of three professionals: a lawyer, a psychologist and a social worker. Assuming the optimal scenario of 15 people served by the team, the cared-for/caregiver ratio is equal to 5 people per professional. In terms of the UPIs, the observed parameter remains constant in all scenarios because it is lower than the maximum recommended by the MDS (50 cases per year).

7 The ratios were based on the national education ministry's education statistics yearbook for 2019 for the national average and for the provinces with the highest provincial sustainable development index (CABA, Chubut and Mendoza, in that order).

- **Pay and employment conditions**

Gross hourly teacher pay[8] is projected to be at least equal to the gross hourly income of a registered wage earner aged between 24 and 65 having fully completed university study.[9] Because in the province there are some teachers who work in rural areas, an additional 20 per cent was envisaged in these cases. When the observed hourly teacher pay exceeds these minimum parameters, the observed pay is maintained.

As regards working conditions at ECAs and UPIs, the aim was for female workers to enjoy the same conditions as workers in the health subsector – detailed in the next section – in other words a reduced working day (24 hours a week) owing to the psychosocial risks associated with the sector, which involves working with children who are vulnerable. As a minimum, their gross hourly pay was to be equal to that of a registered wage earner aged between 24 and 65 having completed university study. For the average scenario, an hourly wage 10 per cent higher than that of the minimum is proposed, and in the maximum scenario this is 25 per cent higher.

1.2. Estimation of fiscal spending required and care jobs generated in the education subsector

Based on the situation observed and the targets set, the necessary investments in the subsector and the benefits that would be obtained were estimated. These include: (i) direct employment generation, i.e. jobs created; (ii) the number of additional beneficiaries who would access the coverage; and (iii) the increase in installed capacity in terms of additional infrastructure built.

As regards the necessary fiscal spending, this is broken down into: (i) ordinary expenditure to sustain benefits, including payroll and the general expenses associated with provision of the service, and (ii) the necessary investment in infrastructure.

Table 3 summarizes the results for the different scenarios proposed up until 2030. The calculations of fiscal costs were made at 2019 prices, and are expressed in terms of the Gross Regional Product (GRP) for that year, assuming that the sector's relative weight in the economy would remain stable over time.[10]

8 The gross pay of each level results from the weighted average per day and per area of the total teacher pay.

9 To establish the value of this target, the information collected by the permanent household survey (EPH) in the fourth quarter of 2019 was used as a reference. The data obtained indicate that the average working day of teachers is shorter than that of employed university graduates used as a comparison, since the majority of teachers work part days. However, work was done to equate the hourly wage. To determine gross income, net income is increased by 40% to take into account social security contributions: 17% of staff contributions (retirement, healthcare and public health insurance payments (PAMI)) and 23% of employer contributions (retirement, healthcare, PAMI, social security (ANSES), family allowances and the national employment fund).

10 The large inflation rate in Argentina (which was 120 per cent annually by October 2023) made this calculation very difficult.

TABLE 3

Fiscal spending required to address gaps in the education subsector in each scenario by 2030 and estimated benefits

Results		Status quo	Minimum	Median	Maximum
Benefits	Direct job creation *(additional jobs created in the care subsector)*	1,348	3,908	17,840	30,211
	New beneficiaries *(additional people covered by the service provision)*	13,743	35,337	92,646	147,897
	Installed capacity *(m^2 of additional infrastructure)*	16,184	34,327	109,332	187,440
Fiscal cost *(% of GRP)*	Ordinary *(pay + overheads)*	0.22%	0.76%	3.61%	6.66%
	Infrastructure	0.24%	0.51%	1.64%	2.81%
	Total	0.46%	1.28%	5.24%	9.47%

Source: Compiled by the authors.

As shown, maintaining the current situation in the education subsector until 2030 would require fiscal spending equivalent to 0.46 per cent of GRP. Over half of that spending would be used to construct infrastructure.

However, achieving the minimum progress scenario, in which education at age of 3 years old becomes universal and the working conditions of the female teachers are improved, requires an ongoing investment of 0.76 per cent of GRP. In this scenario, addressing building requirements would require an investment of 1 percentage point of GRP. The spending invested in this scenario would allow the creation of almost three times as many jobs (compared with the status quo) and the incorporation of more than 21,000 children into the provision, in addition to doubling the social infrastructure for care in the province.

The median scenario, in which coverage of all provisions is expanded, would require an additional investment of 4.2 per cent of GRP compared with the minimum, but it has the potential to create four times more direct jobs, potentially employing almost half of the province's unemployed people.

Finally, the universalization of benefits in the subsector would require, in just over a decade, the allocation of 9.47 percentage points of GRP and would result in the generation of more than 30,000 jobs in the sector.

2. Health subsector

This paper establishes the group of people who demand care in the health subsector: vulnerable people with mental health problems, substance use problems or exposed to gender-based violence (**Figure 2**).

FIGURE 2

Health subsector care supply and demand

Source: Compiled by the authors.

However, accurately estimating the number of people to be reached based on the available information presented some challenges. The population with mental health problems and/or substance use problems cannot be observed directly from the sources consulted,[11] since only hospitalization cases are counted. This means that the target population is underestimated, particularly since the new paradigm used in mental healthcare (Law 26.657) seeks to de-institutionalise treatment. Therefore, the number of professionals working in mental health and/or substance use problems settings per 100,000 inhabitants was used as a parameter for coverage, assuming an underestimation of the beneficiaries and the additional costs (associated with infrastructure) that the sector requires,[12] since these professionals can work in private practice or in outpatient care, and/or with hospitalization.

Promoted by the Ministry of Women, Gender and Diversity of the Nation and the Spotlight Initiative, the Violence Against Women Prevalence Survey reveals that almost half of the women interviewed (45%) have experienced gender-based violence at least once in their lifetime (MMGyD, 2021). However, only 21% of the women who experienced some type of violence during their lives reported it; the majority, 77.3%, did not report it and 1.6% went to an institutional mechanism but did not report it.[13] To estimate the cases that

11 The national census of persons admitted on mental health grounds, conducted by Argentina's Ministry for Health and Social Development in 2019, and the 4th national census of treatment centres, conducted by the Secretariat for comprehensive drug policies in 2018.

12 In the absence of accurate data on demand, it is not possible to calculate the number of people who will benefit from expanding the policy for each new mental health professional, or the infrastructure associated with the service provision for those professionals. This results in an underestimation of the benefits of pursuing the policy (in terms of new beneficiaries and installed capacity) and of the costs (associated with the necessary infrastructure). Producing that information at local and national level could, in the future, produce more accurate estimates of the fiscal spending associated with this subsector and the benefits of that investment.

13 This figure reflects the national average but was adopted for the provincial scenario because there is a lack of geographically disaggregated figures.

were reported, complaints received by the province's Secretariat for Human Rights and Gender and by the women's multisectoral office (legislative branch) were taken into account.

For the care of people experiencing gender-based violence, provisions for in-person and telephone-based care are available. Personal care centres include Victim Care Centres (CAV) under the remit of the Secretariat for Human Rights and Gender, and a shelter for transitional shelter under the Directorate for Gender Policies (the province's Ministry of Social Development). Hotlines include Line 137 (provincial) and Line 144 (national, which is linked with the provincial hotline).

Regarding the supply of care for this subsector, high levels of coverage are observed (**Table 4**). The number of professionals working in mental health and substance use problems is not far removed from the international baseline of 14.7 health professionals per 100,000 inhabitants.[14] Moreover, 75 per cent of reported gender-based violence cases were handled and followed up. However, the percentage of cases reported in the province, out of the estimated total[15] (16 per cent) is low compared with the national average (which is as high as 22.6 per cent).[16]

If analysing working conditions and pay in these professions, the income does not equate to the basic basket of goods required for a family of four to stay out of poverty.[17] Moreover, working days are long. The occupations are highly exposed to occupational risks and burnout syndrome.

TABLE 4

Supply of Care Services in the Health Subsector (2019)

Provision	Coverage	Quality	
		Ratio cared for/caregiver	Pay
Mental Health Professionals	13.6 mental health and substance abuse workers per 100,000 inhabitants	-	$25,654/month (38 hours per week)
Telephone and in-person care of people who experience gender-based violence	75% of *cases reported* were handled in person or with telephone follow-up, representing 16% of the *total number of people* who were experiencing a violent situation (with or without being reported)	*Telephone:* 88 people cared for per worker per year *In-person:* 68 people cared for per worker per year	$30,277/month (30 hours per week)

Source: Compiled by the authors based on the province's population structure census by age alone (2010), INDEC population projections by province, Prevalence of violence against women survey, Ministry for Public Health and Secretariat for Human Rights and Gender, Chaco Province.

14 This indicator reflects the average for upper-middle income countries (a category to which Argentina belongs) according to the World Health Organization's (WHO) 2020 Mental Health Atlas.

15 The estimated total refers to people who have experienced some form of violence during their lives.

16 The national average refers to the percentage of people (of the total who have experienced some form of gender-based violence) who made a complaint or were seen via an institutional provision.

17 Which in December 2019 amounted to some $39,000.

2.1 Setting deficit reduction targets in the health subsector

The scenarios for improving the observed parameters envisage that the additional care services required are government-funded and publicly provided. To propose the high-road scenarios, the following points were taken into account:

For **coverage**, the proposed improvement in terms of professionals working in mental health and substance use, in all scenarios, is to reach 14.7 workers per 100,000 inhabitants.

In terms of those who experience gender-based violence, as a minimum scenario, it is proposed that all reported cases be dealt with. In the median scenario, meanwhile, the proportion of reports is extended, and care is guaranteed for the 50 per cent of women in Chaco who have experienced gender-based violence during the year. And in the maximum scenario, there is coverage for 100 per cent of the population experiencing gender-based violence.

For **infrastructure**, the improvement proposed relates to the construction of in-person care centres for people experiencing gender-based violence, bearing in mind that, based on the spatial parameters observed by the provincial ministry of public health, 3 m^2 is required per person receiving care. The square metres value was defined according to information from the province's professional council for architecture and town planning.

As regards **pay and working conditions**, the aim was for female workers to have a reduced working day (24 hours a week) because of the psychosocial risks associated with the sector (burnout syndrome[18]) and, as a minimum, for their gross hourly income to be equal to that of a registered wage earner aged between 24 and 65 having completed university study.[19] For the median scenario, an hourly wage 10 per cent higher than that of the minimum is proposed, and in the maximum scenario, this is 25 per cent higher.

Finally, in relation to the technical component of quality relating to the **cared-for/caregiver ratio**, this parameter is only available for care provisions that address gender-based violence. In view of the recommendations to shorten the observed working day by 25 per cent (from 30 to 24 hours per week), a proportional reduction in the number of cases dealt with by care workers, in all scenarios, is envisaged.

Table 5 summarizes the targets for the minimum, median and maximum improvement scenarios.

18 Regarding the incidence of burnout syndrome, see Vissicchio and Diez. Undated. Condiciones y medio ambiente de trabajo y burnout: la salud de los trabajadores del primer nivel de atención en salud que se desempeñan en el ámbito de la Ciudad de Buenos Aires [Working conditions and environment and burnout: primary healthcare worker health who work within Buenos Aires city]. The study considers the incidence of this condition in teams of health workers (psychologists, doctors, social workers, addiction workers, etc.). It argues that overemployment, the amount of time in contact with the people they care for and lack of resources, combined with a precarious institutional framework of work responsibilities and peer dynamics, are all factors that lead to the emergence of burnout symptoms. The ILO has recognized burnout syndrome since 2010 as part of the paradigm of psychosocial risk factors. Although it is an occupational illness that is still not recognized in Argentina, recently a court decision established case law by determining that the treatment of this occupational condition should be covered by occupational risk insurance (ART). For these reasons, suggesting a higher hourly wage than in other occupations for this sector, and a shorter working day, is considered justified.

19 To establish the value of this target, the information collected by the permanent household survey (EPH) in the fourth quarter of 2019 was used as a reference. To determine gross income, net income is increased by 40 per cent to take into account social security contributions: 17 per cent of staff contributions (retirement, healthcare and public health insurance payments [PAMI]) and 23 per cent of employer contributions (retirement, healthcare, PAMI, social security [ANSES], family allowances and the national employment fund).

TABLE 5

Minimum, median and maximum *High Road* objectives for the Health Subsector (2030)

Provision	Minimum		Median		Maximum	
	Coverage (% of target population and infrastructure)	Quality (cared for/ caregiver and pay ratio)	Coverage (% of target population and infrastructure)	Quality (cared for/ caregiver and pay ratio)	Coverage (% of target population and infrastructure)	Quality (cared for/ caregiver and pay ratio)
Mental Health Professionals	**Coverage:** 14.7 mental health workers per 100,000 inhabitants	**Pay:** $30,816/ month (24 hours per week)	**Coverage:** 14.7 mental health workers per 100,000 inhabitants	**Pay:** $30,816/ month (24 hours per week)	**Coverage:** 14.7 mental health workers per 100,000 inhabitants	**Pay:** $38,520/ month (24 hours per week)
Telephone and in-person care for people experiencing gender-based violence	**Coverage:** 100% of cases of violence reported	**Ratio:** *Telephone:* 70 cases per year handled by each professional *In-person:* 54 cases per year handled by each professional	**Coverage:** 50% of people experiencing gender-based violence (with or without being reported)	**Ratio:** *Telephone:* 70 cases per year handled by each professional *In-person:* 54 cases per year handled by each professional	**Coverage:** 100% of people experiencing gender-based violence (with or without being reported)	**Ratio:** *Telephone:* 70 cases per year handled by each professional *In-person:* 54 cases per year handled by each professional
	Infrastructure: + 812 m²	**Pay:** $30,816/ month (24 hours per week)	**Infrastructure:** + 20,426 m²	**Pay:** $30,816/ month (24 hours per week)	**Infrastructure:** + 48,867 m²	**Pay:** $38,520/ month (24 hours per week)

Source: Compiled by the authors.

2.2 Estimation of fiscal spending required and care jobs created in the health subsector

Table 6 summarizes the results of estimating fiscal spending and job creation in the health subsector. As observed, the spending required is not very high across all scenarios, at 0.01 per cent of GRP if coverage were to grow, influenced only by a population increase (status quo), and 0.87 per cent of GRP in the maximum scenario, in which the working conditions of professionals improve and infrastructure for dealing with gender-based violence is expanded to be able to respond to all cases.

However, it is observed that in improvement scenarios, spending on construction of infrastructure explains most of the cost; improvements in working conditions in the sector are, therefore, more attainable.

TABLE 6

Job creation and fiscal spending needed to address gaps in the health subsector in each scenario by 2030

Results		Status Quo	Minimum	Median	Maximum
Benefits	Direct job creation *(additional jobs created in the care subsector)*	25	63	328	711
	Installed capacity* (m^2 *of additional infrastructure)*	813	813	20,426	48,867
Fiscal cost *(% of GRP)*	Ordinary *(Pay + overhead)*	0%	0.01%	0.06%	0.14%
	Infrastructure	0.01%	0.01%	0.31%	0.73%
	Total	0.01%	0.02%	0.37%	0.87%

*Only includes infrastructure intended for in-person handling of gender-based violence situations.

Source: Compiled by the authors

3. The long-term care subsector

Long-term care (LTC) refers to the provision of a wide range of services to support people 'who are limited in their ability to function independently on a daily basis over an extended period of time, due to mental and/or physical disability' (Ilkkaracan and Kim, 2019).

Two population groups noted as requiring this type of service are people with disabilities (PCD) and severe dependency,[20] aged between 6 and 64 and, due to the high prevalence of disability in older ages, elderly people (PAM) – aged 65 or over – with basic dependency.[21] Although LTC requires some medical care, this care also has a non-medical component – the provision of support for day-to-day living activities.

20 Although there is no exhaustive definition of severe dependency, this is viewed as when people have more than one disorder or, if they have only one disorder, it is mental or cognitive, according to the 2018 national study on the profile of people with disabilities conducted by INDEC.

21 The incidence of severe dependency was calculated by following the national elderly persons' quality of life survey conducted by INDEC in 2012, in which basic dependency is considered to be a limitation or limitations that make it difficult to perform essential activities, such as: eating in a reasonable time, including cutting food, filling glasses, etc.; dressing or undressing, including tying laces; bathing, including entering or exiting the shower or bath; lying down in or getting out of bed; walking from one side of the house to another; and going up and down stairs.

FIGURE 3

Long-term care subsector supply and demand

Source: Compiled by the authors.

Within the supply of care services in this subsector, described in **Table 7**, two types of care are identified: in-home and institutional care, and the provision can be public, private or through prepaid healthcare.[22] Paid domestic care can be provided by workers in the home or by specialist caregivers. Institutional care refers to care provided outside the home, with or without hospitalization or residency. Within the first group, for example, there are Long Stay Residences in which elderly people stay and, in the second, day centres, which provide outpatient care for people with disabilities.

TABLE 7

Supply of care services in the long-term care subsector (2019)

Provision		Coverage	Quality	
			Ratio cared for/caregiver	Pay
In-home care		19% of PAMs with basic dependency 8.1% of PCDs with severe dependency	3 people cared for per state-subsidized worker	$7,335/month (24 hours per week)
Institutional care	Outpatient care	4% of PAMs with basic dependency 10% of PCDs with severe dependency	14 people cared for per worker	$26,064/month (29 hours per week)
	Residential care	8% of PAMs with basic dependency	0.6 of people in public residences per public sector worker	

Source: Compiled by the authors based on the provincial population structure census per age alone (2010), INDEC population projections by province, the National Survey on Elderly Quality of Life (INDEC, 2014), the first provincial Census of People with Disabilities (Chaco, 2010), the province's Ministry of Social Development, EPH-INDEC, INSSEP, PAMI and IPRODICH.

22 In Argentina, prepaid healthcare (*obras sociales*) refers to contributory health insurance.

It was found that less than one in five PAMs with basic dependency have a state-supported in-home caregiver (either through ISSEP or public health insurance payments (PAMI)). At an institutional level, the public supply covers 4 per cent through outpatient care and 8 per cent through residential care.

In addition, according to 2010's first provincial census of people with disabilities, 8.1 per cent have an in-home caregiver, while outpatient care services cover 10 per cent of that population.

In terms of working conditions in the sector, it is observed that the average pay of in-home female workers does not reach even half the level of the sliding minimum living wage, while the income of people employed in institutional care services does not even reach the basic basket of goods for a family.[23]

3.1 Setting deficit reduction targets in the long-term care subsector

Table 8 shows a summary of targets set in different scenarios for the long-term care sector. In all cases, it is envisaged that the additional provision of care services is public.

TABLE 8

Minimum, median and maximum *High Road* objectives for the Long-term Care Subsector (2030)

Provision	Minimum		Median		Maximum	
	Coverage (% of target population and infrastructure)	Quality (cared for/ caregiver and pay ratio)	Coverage (% of target population and infrastructure)	Quality (cared for/ caregiver and pay ratio)	Coverage (% of target population and infrastructure)	Quality (cared for/ caregiver and pay ratio)
In-home care	**Coverage:** 50% of PAMs with basic dependency 25% of PCDs with severe dependency **Infrastructure:** *Outpatient*: + 13,195 m² *Residential*: + 6,841 m²	**Ratio:** 1 caregiver per person cared for	**Coverage:** 75% of PAMs with basic dependency 50% of PCDs with severe dependency **Infrastructure:** *Outpatient*: + 48,283 m² *Residential*: + 14,373 m²	**Ratio:** 1 caregiver per person cared for	**Coverage:** 100% of PAMs with basic dependency 75% of PCDs with severe dependency **Infrastructure:** *Outpatient*: + 83,372 m² *Residential*: + 21,904 m²	**Ratio:** 1 caregiver per person cared for
		Pay: $20,465/ month (20 hours per week)		**Pay:** $20,465/ month (20 hours per week)		**Pay:** $20,465/ month (20 hours per week)
Institutional care		**Ratio:** *Outpatient:* 3 people cared for per direct care worker *Residential:* 24 beds cared for per direct care worker		**Ratio:** *Outpatient:* 3 people cared for per direct care worker *Residential:* 18 beds cared for per direct care worker		**Ratio:** *Outpatient:* 3 people cared for per direct care worker *Residential:* 12 beds cared for per direct care worker
		Pay: $30,229/month (29 hours per week)		**Pay:** $30,229/month (29 hours per week)		**Pay:** $30,229/ month (29 hours per week)

Source: Compiled by the authors.

23 Corresponding to a household with two adults and two children that, in the month of December 2019, needed a minimum income level of some $39,000 to stay out of poverty.

3.2 Estimation of fiscal spending required and care jobs created in the long-term care subsector

In terms of **coverage**, a gradual increase is proposed, assuming that the observed distribution between in-home and institutional care remains constant:

- For PAMs with basic dependency, minimum, median and maximum scenarios are proposed, where coverage reaches 50 per cent, 75 per cent and 100 per cent of the target population respectively, and where 62 per cent of people cared for receive in-home care and the remaining 38 per cent receive institutional care, with 26 per cent being cared for in residences and 12 per cent in outpatient facilities.
- For PCDs with severe dependency, the increases in coverage range from 25 per cent to 50 per cent and 75 per cent respectively, and it is envisaged that 45 per cent of people cared for will receive in-home care and the remaining 55 per cent institutional care; these all being outpatient provision.

In terms of **infrastructure**, building construction was envisaged only for institutional care, taking into account the parameter of 7.6 m^2 per person cared for in the case of outpatient care (according to the parameters set by Resolution 858/2021 INSSJP), and of 11.5 m^2 per person in the case of residential care (according to the parameters observed in publicly managed elderly persons' residences under the remit of the province's Ministry for Social Development). The square metre value was defined according to the province's professional council for architecture and town planning.

As regards the technical relationship of quality in the **cared-for/caregiver ratio,** different parameters were established according to the type of service provided:

- **In-home care:** Due to the nature of the task, it was assumed that one care worker would only be able to care for one person in their home in all scenarios.
- **Outpatient institutional care:** The baseline parameter used for all scenarios was the relationship between the minimum staff levels and the number of people cared for, as results from Resolution 858/2021 INSSJP (PAMI) concerning the Agreement on Parameters for Day Centre Contracts concluded with the Ministry for Regional Development and Housing.
- **Institutional care with hospitalization:** The trade union standards established by the Federation of Argentine Healthcare Worker Associations were referred to for senior citizen care workers. According to collective agreement No. 122/75, a senior citizen carer can care for up to 24 beds during the day. To propose a minimum scenario, it was assumed that these workers would perform at the upper limit of their maximum capacity (caring for up to 24 people), in the median scenario that they work at 75 per cent of the maximum established by regulations (caring for 18 people) and in the maximum scenario that they would work at 50 per cent (caring for 12 people).

Finally, in relation to **pay and employment conditions**, different criteria were established according to the working arrangements of each type of care:

- **In-home care:** For all scenarios, it is envisaged that the workers' pay reach the level established by collective agreement on the special scheme for private homes, for care workers in the fourth category (care of persons), and a working time of 30 hours per week was assumed.
- **Institutional care (outpatient and with hospitalization):** In all cases, pay is foreseen equivalent to the basic pay for a senior citizen carer working 29 hours a week, as stipulated by collective agreement No. 122/75 of the Argentine Federation of Healthcare Worker Associations.

Table 9 summarizes the results obtained for the different scenarios.

TABLE 9

Job creation and fiscal spending required to address gaps in the long-term care subsector in each scenario by 2030

Results		Status quo	Minimum	Median	Maximum
Benefits	Direct job creation *(additional jobs created in the care subsector)*	194	9,099	18,128	27,243
	New beneficiaries *(additional people covered by the service provision)*	785	4,968	15,331	25,695
	Installed capacity (m^2 *of additional infrastructure)*	3,216	20,036	62,656	105,276
Fiscal cost *(% of GRP)*	Ordinary *(Pay + overhead)*	0.01%	1.11%	2.13%	3.16%
	Infrastructure	0.06%	0.36%	1.13%	1.89%
	Total	0.07%	1.47%	3.26%	5.05%

Source: Compiled by the authors.

As shown, continuing the same situation until 2030 requires quite low fiscal spending (0.07 per cent of GRP). Investments to achieve the improvement scenarios are very cost-effective, since they have a very positive impact on employment creation. In the minimum scenario, investing almost 1.5 percentage points of GRP would mean creating more than 9,000 direct jobs, while mostly achieving the universalization of public in-home and institutional care services (maximum scenario) would require an investment of just over 5 percentage points by 2030, generating more than 27,000 jobs with better working conditions. In addition, the construction of additional infrastructure would boost job creation in the construction sector, increasing the catalyst effect of investment in the care economy.

CONCLUSION

This paper shows that it is possible to use a policy tool to determine the opportunities for and challenges of expanding access and improving the quality of care provision, including in sectors where the relevant information is lacking. This includes estimating the amount of resources needed.

The investigation shows that the fiscal spending required to maintain the current situation is almost negligible, but that achieving improvements will require significant investments. However, it also shows that these investments will bring benefits, some of which are concrete, including generating quality jobs and closing gender equality gaps in women´s access to decent and quality employment, and some which may be harder to perceive but are valuable and necessary, including improving the lives of people who require care and the lives of their families.

The methodology used and exercises proposed indicate that a strategy can be designed for gradual progress towards set targets for determining short, medium and long-term priorities for substantive or more partial improvements.

Overall, it seems that the care agenda can be advanced at the provincial level. The paper provides the basis for dialogue on care provision between institutions. Some of the investments envisioned could be national government initiatives or shared between the state and provinces.

When there is political will and commitment, work that is coordinated between different government departments, and between governments and international bodies, can be very beneficial. This can ultimately lead to progress in public policies that enhance the enjoyment of rights, reduce inequality gaps and improve people's daily lives.

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Care is an economic sector that creates jobs, sustains income and fuels aggregate demand. and fuels aggregate demand and, as a consequence, tax revenues. In this context, studies that approximate concrete dimensions of the of what it would mean to expand and strengthen care policies in a comprehensive way.

This report presents the results of the estimation of the fiscal effort required to invest in public necessary to invest in public policies to reduce the deficits in the provision of care in the province of Chaco in terms of coverage, quality and infrastructure.

In addition, it calculates the employment that would be generated as a result of this investment based on three possible scenarios (minimum, average and maximum), depending on the coverage that the Provincial State intends to achieve.

This paper is part of the joint project of UN Women and the International Labour Organization (ILO) "Promoting Decent Employment for Women through Inclusive Growth Policies and Investments in the Care Economy" and uses a methodology developed jointly by ILO and UN Women, which is based on the targets set in the Sustainable Development Goals (SDGs) for the year 2030.

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