ORIGINAL RESEARCH

How do patients view Chile’s AUGE plan? A survey in a rural clinic.

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Abstract
Objectives: In order to improve the care provided at a rural consultorio, we obtained patients’ perspectives on the successes and failures of the Chilean healthcare system under the AUGE (Acceso Universal de Garantías Explicitas, Universal Access with Explicit Guarantees) plan.

Background: In 2000, Chile’s AUGE Plan established a set of guarantees for specific medical conditions. All citizens are now guaranteed access to appropriate treatment, quality care, and financial protection for what are currently 80 conditions. All registered members can access either public or private healthcare; insurance payments are based on income. However, while Chile has been successful in increasing access to care, the system still faces challenges.

Methods: In order to understand the patient perspective on access to healthcare, a survey was administered in a rural general medical clinic in the public sector. The questions covered general demographic information, measures of health, satisfaction with care, and access to care.

Results: Fifty patients responded to the survey. 64% of patients reported not being able to afford their preferred treatments for their illness(es) and only 59% reported knowing their rights under the national health plan. 61% reported having a doctor who knows them well. Patients reported not taking their prescribed medications due to forgetfulness (42%), not feeling sick (34%), or a belief that they were not necessary (22%). Wait times for non-urgent specialist care of up to two years were reported. 8.8% of women reported not feeling comfortable discussing domestic abuse with their physician and/or felt they would have problems finding resources elsewhere. 84% of women age 21-75 reported receiving their screening Papanicolaou smear and 80% of women between age 50-75 reported receiving their screening mammogram in accordance with government guidelines.

Discussion: The rural site studied has been successful at implementing women’s health screening, providing preventive care for chronic disease patients, and maintaining general patient satisfaction. However, despite explicit guarantees to quality medical care, many survey respondents indicated perceived deficiencies in the care they are receiving in the public sector clinic. Lack of patient education, preference for natural remedies, and long wait-times for specialist care appear to be challenges faced by this population. Work still remains in assuring the full delivery of AUGE’s promises and in increasing patient awareness of their rights under the national health plan.

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Submitted: February 3, 2014
Revised: May 30, 2014
Accepted: July 15, 2014
Financing: Financed by Albert Einstein College of Medicine, Department of Global Health and the Office of Medical Student Research
Conflict of interest: None
Peer-reviewed: Yes
Introduction

The Chilean healthcare system has been cited as a successful public healthcare system – one of the most successful in all of Latin America.¹ In the 1970s, Chile’s military regime made changes that created a structurally segmented healthcare system with low-income populations being served mainly by the public sector and higher-income populations being treated in the private sector. While the entire population technically had access to care, the quality of care provided in the private sector was substantially superior with regard to quality and outcomes.

With the return of democracy in 2000, a new set of reforms was developed to protect patients’ rights. The AUGE plan (Acceso Universal de Garantías Explicitas) initially established a set of guarantees for twenty-five medical conditions. Any patient carrying one of these diagnoses, in either the private (ISPARE) or public sector (FONASA), was guaranteed access to appropriate treatment, quality care, and financial protection. The covered conditions were determined using an algorithm based on criteria including the magnitude of the problem and the effectiveness of available medical treatment. Taxes were used to fund this program.² Since its creation, the program has expanded to include a total of eighty medical conditions. A current list of AUGE covered conditions can be found on the Chilean Ministry of Health website, including information regarding rights, restrictions, and timeframe of treatment.³ For example, a patient 15 years of age or older with hypothyroidism, a treatable and relatively common condition in Chile,⁴ is guaranteed initiation of pharmacological treatment within 7 days of the diagnosis and continued treatment for the duration of the illness. A patient with suspected gastric cancer, another prevalent condition in South America,⁵ is guaranteed evaluation by a specialist within 30 days, with a 30-day time frame also given for confirmatory testing and staging. Once the diagnostic work-up is complete, the patient is guaranteed surgical intervention within another 30 days. The rights and restrictions vary based on condition.

There are four income-based payment brackets for the public insurance system. Patients in the two lowest income brackets (earning less than 210,000 CLP or approximately 420 USD per month) have no co-payment, while those in the two highest pay a maximum co-payment of 10% or 20% for AUGE covered services, with maximum costs potentially reduced based on household income and number of dependents. Patients enrolled in private health insurance pay up to a 20% co-payment.⁶

Chile currently spends 7.2% of its GDP on healthcare. It has an infant mortality rate of 8 per 1000 live births and an average life expectancy of 80 years. National statistics also indicate that 90% of the population is vaccinated against childhood illnesses such as measles and that childhood malnutrition is less than 0.5%. The system in the United States achieves similar outcomes (life expectancy 79 years and infant mortality 6/1000), but at a cost of 17.9% of the GDP.⁷

While AUGE mandates certain guarantees, there has been very little research done to determine what barriers to the realization of these guarantees exist. One review done in 2008 determined that the most frequent challenges included administrative burdens associated with recording diagnoses, public confusion about extent of coverage, and health professional distrust of the reform.⁸ Although preventive services such as mammography and Papanicolaou screening are available under the reform, these services are under-utilized. The Ministry of Health reports that only 40% of women are receiving indicated screening mammography and only 60% are receiving appropriate Papanicolaou screening nationwide.⁹,¹⁰ Access to care in rural areas may be a potential issue. Chile suffers from one of the most severe physician shortages in South America (1 doctor per 1,000 people).¹¹ Even in countries with a high number of physicians per capita, such as the United States, ensuring access to care in rural areas can be problematic.¹²

We conducted a survey of access to care, with an emphasis on women’s health, in a rural area of central Chile. The primary goal of the study was to assess access to healthcare services under the AUGE plan with the purpose of aiding the local consultorio (primary care clinic) in better serving its patients.
Methods

Survey design

With the help of local medical and public health officials in Chile, a four-page survey was designed to assess access to healthcare. The survey contained open-ended and multiple choice questions covering general demographic information, measures of health, satisfaction with care, and access to care. Women were also asked several questions about access to women’s health services. (A copy of the survey is presented at the end of this article.) A pilot survey was administered to ensure appropriate reading level and vocabulary before the survey was finalized. The study proposal and survey were reviewed and considered exempt by the Institutional Review Board at Albert Einstein College of Medicine and approved by an ethics committee at La Universidad Autonoma.

Population

The survey was available to all patients over the age of 18 receiving medical care in a health center served by the local medical team during a six-week period. The total population served by this regional network is 6,414 (53% male). A little more than half of the population lives in more urban areas close to town and the remainder lives in more rural areas. The majority of the population works in either agriculture or sales. Patients who could not read were excluded from this study due to the method of survey administration.

Method of distribution

The survey was distributed by clinic receptionists who offered it to patients as they registered for medial visits. Patients were instructed to fill out the survey only if they had not done so previously. They were informed that the survey was confidential, voluntary, and that their healthcare would not be impacted by whether or not they chose to complete the survey or by their answers. Oral consent was obtained. Patients were given privacy to complete the survey.

Analysis of data

Fifty surveys were collected within a six-week period. Two surveys were excluded from analysis because the patients completed only the demographic information. The data was analyzed using Microsoft Excel 2010.

Results

Population

Forty-eight patients completed the survey. The respondents were overwhelmingly female (87.5%) with an average age of 36.2 years. Few participants had more than a high school education (18%) and half of respondents completed only primary education. The average monthly income of respondents was 198,000 CLP (~396 USD), with a large standard deviation (183,000 CLP or ~366 USD). All but one of the 48 participants were enrolled in the public health insurance system.

The survey was distributed over a six-week period and an estimated average of 120 patients are scheduled every week. Conservatively assuming that all patients signing in for a medical appointment were offered the survey and that 88.3% of the patients offered the survey were literate, the response rate was 7% (50/636), although we estimate this figure to be much higher as explained in the discussion.

Are AUGE guarantees of access to appropriate, timely, affordable, and quality care respected?

Access to primary care: 14.6% of the respondents reported a problem with access to care over the last year. Of these, the majority (71.4%) reported problems with long wait times to see a doctor, ranging from 1-6 hours. Two participants reported physical problems with accessing care and one reported scheduling difficulties. The majority of patients walk to the consultorio (60%) with an average commute of thirty minutes and a maximum commute of an hour.

Patients with chronic conditions report that they are able to see the doctor often for preventive care. Hypertensive patients who participated in the survey visited the consultorio, on average, six times in the last year just for check-ups, with asthmatics visiting
five times a year, and patients with lipid disorders visiting once a year for a check-up.

Access to specialist care: Patients reported long waits for appointments with specialists. 22.9% of respondents saw a specialist in the last year. The average reported wait time for an internal medicine appointment was two months. Appointments with other specialists required even longer waits. Respondents reported 2-year waits for appointments with a hematologist, an otolaryngologist, and a general surgeon (for a non-urgent hernia repair) and a 1 year wait for neurology and ophthalmology appointments.

Quality of care: The majority of patients (88%) agree that their doctor spends enough time with them and listens to their concerns. 61% of patients reported having a doctor who knows them well. 22% of patients report not taking their medications because they do not think they need them and 34% (33% of which are patients with a chronic condition) report not taking their medications because they do not feel sick. Of the patients who do not believe they need their medications, 67% prefer natural or home remedies. 43% of respondents report not understanding their rights under the national health system.

Financial protection: 64% of respondents reported that they could not afford the treatment(s) that they desired for their illness(es); in some cases these treatments were not part of the AUGE program. The average income of patients responding that they could not afford their desired treatment did not significantly differ from that of patients indicating that they could afford their desired treatment, at 212,000 CLP per month and 235,000 CLP per month, respectively (p = 0.77). The average age of patients responding that they could not afford their preferred treatment(s) did not significantly differ from patients indicating that they could (36.9 years vs. 34.4 years, p = 0.60). 100% (n = 6) of hypertensive patients and 50% of patients with asthma and hypothyroidism (n = 2 for both conditions) reported that they could not afford the treatments they wanted for their illness.

Women’s health

80% of respondents reported receiving appropriate mammographic screening for breast cancer and 84% reported receiving Papanicolaou screening as recommended by the national clinical practice guidelines. Additionally, 67.5% of female respondents are using some form of contraception and all but one respondent indicated that they were happy with the form they were using. 74.2% of respondents primarily received their contraceptive information from a healthcare provider, with the remaining receiving information from the Internet (16.1%), their partner (6.4%), or other sources (3.3%). 73.5% of respondents said that they would feel comfortable speaking with their doctor about domestic violence and 85.3% said that they could find resources if they were to experience violence at home. However, 8.8% reported that they could neither talk to their doctor nor find appropriate resources if necessary. These women all reported the lowest level of education (grade 1-8).

Discussion

Our data suggests that the consultorio is adequately serving its population in many respects. A small but significant percentage of respondents reported a problem with access to care. Most patients have appropriate access to generalist and preventive care, with chronic disease patients visiting the consultorio frequently for check-ups. The majority of respondents reported receiving appropriate screening mammograms and Papanicolaou tests, surpassing the national average screening rates of 40% and 60% respectively.

One weakness of this study was its low response rate. Many patients offered the survey could not complete it because they had already done so during a previous visit. We also suspect that the distributors were not offering the survey to every patient. Local literacy rates may have played a role. While the illiteracy rate of rural populations in this region is 11.7%, 71.9% of illiterate people work in agriculture, which was the most common profession in the particular area studied. The literacy rate in the region correlates with income level, and was likely significantly lower than 88.3% given the low-
The survey respondents are different from the general population the consultorio serves in several important ways. While the population served by the consultorio is roughly evenly distributed between men and women, the respondents of our survey were overwhelmingly female. The unbalanced response between genders could be explained in part by differences in level of motivation to seek care, by collection of data during working hours, or by differences in desire to participate in the study. Illiterate patients and children were excluded. Patients with a serious condition not covered by AUGE were likely underrepresented in our sample as they are more likely to seek care elsewhere, as are patients with an aversion to medical therapy due to a bad experience, inability to physically reach the clinic, or a strong preference for natural remedies. The patients not captured in our survey sample may be more likely to have experienced barriers to care, and this may have biased our results in a way that makes the consultorio appear to be serving its patients better than it is in reality.

Although a report from 2010 cited concerns that the AUGE plan ignored women’s sexual and reproductive health issues and health problems related to domestic violence, we found that women were generally well-served in several key indicators. The majority of patients feel that their generalist physician spends enough time with them and knows them well. A potential advantage of this small, rural community is that despite high consultorio physician turnover rates, the remaining members of the healthcare team are generally long-term community residents, including the midwife who is responsible for the women’s health screening services. This may enable the team to form strong, long-term bonds with patients, improving the women’s health screening rates, patient trust, and patient satisfaction in general.

While AUGE has been largely successful, this rural health system is still experiencing some important challenges. An important access barrier is excessive wait times for non-urgent specialist appointments. The government incentivizes young doctors to work as generalists in the public system, but many specialize after a year or two of service and often choose to work in the private sector.

Additionally, the results suggest that there is room for improvement with regard to the quality of patient education. Many patients are not taking their medications because they don’t think they need them or because they don’t feel sick. Many of these patients have a chronic disease and an even greater percentage prefer natural or home remedies. This suggests that more time needs to be spent educating patients about medication use with or without home remedies, especially for chronic conditions such as hypertension.

Interestingly, 64% of respondents reported that they could not afford the treatment(s) that they desired for their illness(es). All of these patients have the right to appropriate care under AUGE. No respondents indicated that they had a chronic illness not covered by AUGE, and all care under AUGE is free of charge for the two lowest income brackets, to which most (60%) of these patients belong. Additionally, the average income of those who said they could not afford treatments is not significantly different from those who said that they could afford treatments. It is possible that this response stems from a lack of patient education about their illness and available effective evidence-based treatment. Many patients prefer alternative medicine which is not covered by the public system. However, it is also possible that for those who earn over 210,000 CLP monthly (420 USD), the co-payments are high enough that these patients feel like they cannot afford their prescribed treatments.

43% of respondents do not understand their rights under the AUGE system, a problem previously acknowledged by the WHO. In fact, one survey-based study suggested that only 40% of AUGE enrolled patients in the public system were aware of the system and its enforceable guarantees, while 98% of patients in the private system were aware of their rights under the AUGE plan. Other studies have shown low levels of understanding in both the private and public sector. Lack of awareness prevents patients from appealing denied claims and adequately accessing their rights. We are unable to
say definitively what specific factors lead to a lack of understanding of AUGE rights. Although we did not collect any data on potential barriers to this, patient disinterest or discomfort in requesting full explanations and healthcare team disinterest in educating patients may be factors. Patients are given a written explanation of their AUGE rights at the time of diagnosis, but this is not useful to at least 11.7% of patients due to illiteracy, and due to time constraints placed on physicians it is likely that a full explanation is not always given. Finally, while the patients tend to feel comfortable with their doctors, even with regards to discussing domestic violence, a small but noteworthy percentage neither feel comfortable speaking with their doctor about abuse nor finding other resources, suggesting a need to provide women with greater ease of access to such support services.

Limitations
The population sampled was limited to those who sought and successfully accessed the healthcare system. For this reason the results have more value in aiding the consultorio in understanding and better treating their existing patients than those who are not accessing care. While theoretically the survey was to be administered to every patient over the age of 18, the low response rate suggests that it was not successfully offered to every registered patient. Additionally, the results must be interpreted in the setting of volunteer bias; as those who chose to fill out the survey may have a different experience than those who did not (e.g., more likely to have encountered issues or alternatively more likely to personally like their doctor).

Future research
This study was limited to a small sample in one region in Chile. In order to better understand the impact of health reform and remaining challenges in Chile, more studies need to be conducted. Specifically, government-sponsored surveys could be distributed to a random sample of households throughout an area served by a consultorio. The results could be compared to those of other areas with different demographics. If this data were combined with prevention and disease outcome data (e.g., immunization, screening rates, chronic disease outcomes, etc.) each consultorio would have a better idea of the challenges faced in their community and in the public system nationwide. This data is necessary for improving and expanding the AUGE program.

Conclusions
AUGE attempts to increase access to care by identifying prevalent and treatable conditions and guaranteeing access to appropriate treatment. Under AUGE, Chile has achieved good health indicators at a modest cost. Part of this success is likely due to AUGE’s inclusion of women’s health screening services and chronic treatable conditions such as arterial hypertension and hyperlipidemia, whose treatment is cost-effective and prevents catastrophic outcomes.

With regard to our specific population, keeping in mind the biases introduced into our study by the small convenience sample and the greater likelihood that sampled patients frequently access the healthcare system, survey respondents indicated that the public system under AUGE is providing primary care with high rates of women’s health screening services, availability of frequent primary care appointments for patients with chronic diseases and that patients perceived their doctors to be sufficiently attentive during the visit. Transit times to care were not excessive. The biggest apparent problems suggested by the survey’s results are long wait times for specialist care and medication non-compliance, a problem possibly exacerbated in this population by a preference for alternative medicine. A small yet important percentage of female respondents reported potential difficulty in seeking help in cases of domestic abuse. It is possible that the issues with access discovered here are worse in the total population served by the clinic, as the patients incapable of answering our survey due to illiteracy or physical lack of access to a healthcare facility are potentially a more vulnerable group.

Clinicians could begin to address medication non-compliance with educational handouts or group appointments, as well as taking the time to ask about home remedies during visits. Healthcare profession-
als should take a minute or two to ask about domestic violence during the clinical interview, while posters in private areas (e.g., the women’s bathroom) could help women find resources when needed. In addition, the system would benefit from increased retention of specialist physicians in the public sector, a goal that could be achieved via financial incentives or otherwise.

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Appendix A: Access Survey

This study is voluntary and confidential. Please be honest. We would like know how your health system is working.

Part 1: General Information

1. How old are you __________

2. Gender
   Masculine   Feminine

3. What is your monthly income? _________________________________________________

4. What is your civil status (circle the answer)
   Married      Single      Separated      Widow/Widower      Common-Law

5. How much schooling have you had? (Indicate the answer with an X
   ___ No schooling
   ___ Primary School
      ___ completed
      ___ not completed
   ___ Middle School
      ___ completed
      ___ not completed
   ___ Technical or vocational schooling
      ___ completed
      ___ not completed
   ___ University studies
      ___ completed
      ___ not completed
   ___ Professional education
      ___ completed
      ___ not completed

6. What is your health insurance?
   ___ FONASA¹
   ___ ISAPRES²
   ___ Other

Part 2: Access to Care

1. How would you rate your health?
   ___ Excellent
   ___ Very good

¹ FONASA is the Chilean public healthcare insurance system.
² ISAPRES is the Chilean private healthcare insurance system.
2. ¿Has your health improved or worsened in the past 12 months?
   ___Improved
   ___Worsened
   ___No change

3. When you need medical care where do you usually go? (choose only one answer)
   ___CESFAM/Clinic
   ___Clinic
   ___Emergency Room/SAPU
   ___I go to a family member
   ___I use complementary or alternative medicines.

4. Do you have a chronic disease? (For example COPD, hypertension, or diabetes)
   Yes  No (circle the correct answer)

   If the answer is “yes”
   What chronic diseases do you have?  _______________________

   How often have you seen a doctor or other health care professional in the past 12 months for a well check-up?  ____________

   How often have you seen a doctor or other health care professional in the past 12 months because you were acutely sick (e.g. cold, infection, acute pain)  _________________

   If the answer is no...

   How often have you seen a doctor or other health care professional in the past 12 months for a well check-up?  ____________

   How often have you seen a doctor or other health care professional in the past 12 months because you were acutely sick (e.g. cold, infection, acute pain)  _________________

5. When was your last doctor’s visit?  _________________

6. Have you been hospitalized in the past year?
   Yes  No  (circle the right answer)

   Why were you hospitalized?  _______________________
   How many times were you hospitalized?  _______________

7. In the past 12 months have you had problems accessing health care?
Yes   No   (circle the right answer)

If the answer is year, please explain what problems you had. You can chose as many answers as you need to.

___I had a physical barrier to coming to the clinic and no-one could come to my home

___The waiting time was too long.

   How long was it in hours? ______

___My problem was not covered by AUGE.

   What problem was it? ________________________________

___I have a chronic problem and could not afford my treatment.

   What was the problem? ________________________________

8. How do you usually travel for health care?
   ___on foot
   ___by car
   ___public transportation or commercial bus
   ___other

9. How long do you have to wait for health services? ________ hours

10. If you needed an appointment to see a specialist…
    ___I had to wait too long for the appointment
    Which specialist? ________________________________
    How long was the wait? ________________________________

11. If you needed an operation
    ___I had to wait too long to see the surgeon
    Why did you need the surgery? ________________________________
    What kind of surgery? ________________________________
    How long did you have to wait? ________________________________

Put an X next to the correct answer

12. I feel my doctor spends enough time with me, listens to me, and takes care of me.
    ___I agree
    ___I disagree

13. I have a primary care doctor who knows me well.
    ___I agree
    ___I disagree
14. I prefer complementary medicine (such as herbs or homeopathy) to traditional doctors.
   ___I agree
   ___I disagree

15. I don’t take my medicines, since I don’t think I need them.
   ___I agree
   ___I disagree

16. I don’t take my medicines, since I forget
   ___I agree
   ___I disagree

17. I don’t take my medicines, because I already feel fine.
   ___I agree
   ___I disagree

18. I know the right I have under AUGE
   ___I agree
   ___I disagree

19. My doctor suggested I apply for the AUGE plan
   ___I agree
   ___I disagree

20. I can’t afford to pay for the treatments I need
   ___I agree
   ___I disagree

Part 3: Women’s Health

Please answer this section only if you are a woman This survey is voluntary and confidential

1. How many partners have you had in the last 12 months? ________

2. Do you use contraception?
   ___Yes
   ___No

If you answered yes....

   What method are you using?
   ___Condom
   ___Pill
   ___Patch
   ___IUD
   ___Withdrawal
   ___Rhythm Method
Sterilization

Partner sterilized (eg. Vasectomy)

Other method

I like the contraception method I use now

I agree

I disagree

Who decides what method you use?

I do

My partner

We both decide

A professional (for example, a nurse practitioner)

If you answered no...

Why don’t you use contraception? (You can choose more than one answer)

I want to get pregnant

My partner doesn’t want me to use them.

I don’t like the side effects

I can’t pay for the method I want

I am afraid of what my family will think

I have gone through menopause.

3. How do you get information on birth control?

Doctors, nurse practitioners, nurses

Partner

Family

Friends

Internet

Others

4. I feel comfortable discussing physical or sexual abuse with my doctor.

I agree

I disagree

5. I would not have problems getting help in cases of physical or sexual abuse.

I agree

I disagree