Opening the Door to The Triple Aim in Colombia's Healthcare System

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Content Table

Abstract

Colombia is making advances in developing their country, especially in trying to cover their entire population with universal healthcare insurance. Since the most recent Law100 of 1993, this country has been trying to distribute private and public health care insurance coverage to all of its residents**.** Colombia's health sector is clearly in a period of transition. Demographic change, new challenges in disease management and a lack of financing have led to a new way of thinking in regards of healthcare. Today Colombia has nearly universal coverage and improved health care indicators. According to World Bank figures, life expectancy has risen from 69 years in 1993 to 74 years in 2013. However, there is a lot room for improvement in the sector and this improvement could be made by exploring the Triple Aim and its three pillars based on population health, patient experience and per capita cost.

Background

At present, according to the World Health Organization (WHO), Colombia has an estimated population of 45,660,000 people whom inhabit a total geographic area of 1.2 million square kilometers, with a topography dominated by three branches of the Andes Mountains (Gomez, et al., 2009). Prior to the 1980s, Colombia was facing civil disputes which prohibited many people, especially the poor, from health care. Some of these disputes in the health care sector were challenges such as increased inequalities in health services, growth in the population without health care coverage, and misdistribution in underserved rural and urban zones (Alvarez, et al., 2011). In addition, Colombia's health care system was fragmented by financing through a national health system under the Ministry of Health, a social security system under the Ministry of Labor, and a loosely regulated private sector (Tsai, 2010). However, health standards and access to care have improved greatly since the 1980s. Improvement began with Colombia's public health care system reform, which is based on two constitutional pillars: (a) Article 10 The purpose of this law is to guarantee the right fundamental to health, regulate it and establish its protection mechanisms (Ley Estatutaria 1751). As a result, in 1993 Colombia approved a universal health insurance scheme, La ley 100 (Law 100), whereby all citizens, irrespective of their ability to pay, are entitled to a comprehensive health benefit package (Giedion and Uribe, 2009). To illustrate, before the reforms of 1993, only 25% of the population had insurance whereas of 2008, more than 85% of the population have health insurance, and access to and use of health care (Glassman, et al., 2009). This increase has been most dramatic for the poorest

20%, increasing from 6% covered by insurance in 1993, to over 70% by 2007" (Tsai, 2010). These statistics help place Colombia among the very few countries in the developing world reaching near universal health insurance coverage (Giedion and Uribe, 2009).

In 2015 some 95% of Colombians was registered under the General System of Social Security in Health (Sistema General de Seguridad Social en Salud, SGSSS). Of these, 43% were registered through the contributory system. Under this plan, a total of 12.5% of an individual's salary – 8.5% paid by the employee and 4% by the employer – is paid to the, Administradora de los recursos del Sistema general de seguridad social en salud (ADRES) (https//: www.minsalud.gov.co, 2017)

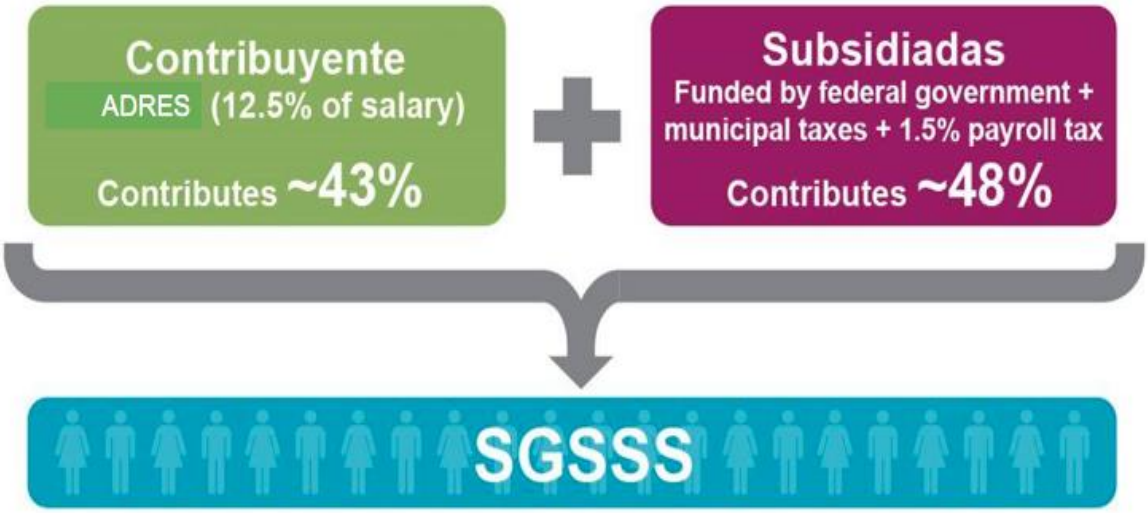
The current 1993 Law 100 reform entails the following four main fundamentals:

1. ***Privatization of the care delivery system***. The public hospitals and health centers in urban rural zones became private and public institutions, no longer directed by the public health planning function of the health ministry.
2. **Individual health insurance as the mechanism for receiving health care**. There are two branches of health insurance: a contributive system and a subsidized system. (See Figure # 1)
3. ***Development of a basic benefit plan***, including medical procedures, hospitalizations, and medicines that insurance companies must guarantee to their enrollees.
4. ***Public health no longer a coordinated group of programs provided by government institutions, but commoditized into a series of individual***

programs, such as vaccinations or health education sessions, which health insurance companies provide individually to their members. No longer are there targeted groups for community health interventions, so necessary for addressing a variety of health conditions that plague poorer population groups" (Alvarez, et al., 2011).

Figure 1

Healthcare branches in Colombia



Source: https://www.xcenda.com/insights/htaq-summer-2017-colombia-a-unique-universal-healthcare-model-in-latin-america

Unlike the previous fragmented health system, this reform established a universal health insurance program overseen by the Ministry of Social Protection (MSP) comprised of two separate health insurance systems, the Contributory Regime (CR) and the Subsidized Regime (SR) (Tsai, 2010). In both the CR and SR, the insured individual chooses an insurer, the ownership of which may be public, private, or mixed, and which may be run for profit or not for profit (Glassman, et al., 2009).

Additionally, worth mentioning was the continuance of some privileged insurance schemes (Special Regimes), mostly guaranteed through union agreements or aimed at special groups, such as military personnel, petroleum industry workers, and school teachers who have different health packages, but all of them have at least the CR package coverage (Ruiz, et al., 2007).

The Contributory Regime (CR) covers workers and their families with monthly incomes above a minimum monthly amount (approximately $264USD per month) (Giedion and Uribe, 2009). This CR is financed by a compulsory joint payroll tax contribution from the employer and the employee. The joint contribution is approximately 12%, where the employee pays 4% of their individual salary, 8% from the employer, and where approximately 1.5% is given as a solidarity contribution for financing the SR, to purchase coverage for the poor in the subsidized regime (Glassman, et al., 2009). The CR benefit package is known as the POS (Plan Obligatorio de Salud), which includes all levels of care (Giedon and Uribe, 2009), i.e. the CR covers most outpatient and inpatient services, regardless of the complexity and a comprehensive medication list, composed mainly of generic drugs (Ruiz, et al., 2007). The choice of insurer for the CR is known as an Entidad Promotora de Salud (EPS, meaning health-promoting entity), where 21 health insurance entities are available; 82% of enrollees are affiliated with a private EPS, while 18% are affiliated with a public EPS (Giedon and Uribe, 2009). It is mandatory for all workers and their families to be affiliated by their employers to the contributive regime or to the special regime (Ruiz, et al., 2007).

The Subsidized Regime (SR) covers those identified as being poor through a proxy means test (Giedion and Uribe 2009). The proxy means test is organized and

distributed by a national system called SISBEN, System for the Selection of Beneficiaries of Social Programs (El Sistema de Selección de Beneficiarios para Programas Sociales). SISBEN is an instrument that identifies individual targeting households, families or individuals poorest and most vulnerable, as beneficiaries for social programs (www.SISBEN.gov.co). It classifies people according to their socio-economic level among 6 different strata's where, "1" is homeless and "6" is the highest level of affluence. For that reason, the subsidized plan is for the unemployed and for independent workers, and their affiliation with the SR depends on available resources to fund the subsidies and on a population focusing process in which municipality selects the beneficiaries from a population survey applied every three years (Ruiz, et al., 2007). Therefore, the non-affiliated group is mainly composed of families whose incomes are not sufficient to enable them to purchase private insurance – this non- affiliated group is covered by a public safety net maintained by a scheme of supply subsidies (Ruiz, et al., 2007).

The government uses national and local tax revenues and a payroll tax (1.5 %) as a "solidarity contribution," which is a subsidy from those who pay into the CR to help purchase coverage for those in the SR (Giedion and Uribe, 2009). The subsidized regime also receives financing from general and local taxes (Ruiz, et al., 2007). The SR benefit package, known as the POSS (Plan Obligatorio de Salud Subsidiado), covers most low complexity care and catastrophic illnesses but provides only limited coverage for most hospital care and provides no short-term disability coverage (Giedon and Uribe, 2009). The choice of insurer for the SR is known as an Administradora del Régimen Subsidiado, where 43 different health insurance entities operate in the SR; 44% of enrollees are affiliated with a private EPS, and

42% are affiliated with either a public community-based or indigenous health plan (Giedion and Uribe, 2009).

All affiliates of the CR and SR have access to a benefits package, but as one can see, the CR package includes all levels of care, while the plan operating in the subsidized regime (SR) has significantly less coverage than the CR benefits, thus creating a gap in health care coverage. To fill this gap, the POSS is complemented by services provided by public hospitals, financed through direct payments to insurance providers' independent of what services they supply and of patients' insurance status (Giedon and Uribe, 2009). For example, before the reforms, public hospitals received funds from central and local governments based on their historical budgets, without relationship to the level of services provided, the population's health needs, or health outcomes (Glassman, et al., 2009). Now, under the new system, public funds are directed to EPSs as subsidies that finance the health insurance of the poor and are subsequently transferred to public hospitals as remuneration for the services they provide (Glassman, et al., 2009).

However, despite this reform, a progressive decrease in the access to health care has been observed in the region between 1993 and 2004, where in 2004, the public health care system did not cover approximately 10% of the total population (Gomez, et al., 2009). Also, in spite of its novelty and promising results, the Colombian reform remains little studied or discussed (Glassman, et al, 2009).

For example, a recent study is the Americas Society, "Addressing Systemic Challenges to Social Inclusion in Health care: *Initiatives of the Private Sector*,"

with the support from the Ford Foundation, in addition to the leveraging of their partnership with the Council of the Americas (COA), conducted research to draw attention to a sample of select private organizational leaders, who demonstrate private programs or public policy efforts for health outreach to these marginalized populations within the health care gap (Marczak, et al, no date). However, this research is in its early stages, and explicitly states that it does not want their findings or conclusions to be reproduced.

Therefore, the researcher will honor their request and not comment more regarding this study, but the researcher thought it important to note there is ongoing research regarding this topic, just not as publicly willing to share.

Ultimately, the literature suggests that while progress has been made, there are still many barriers that need to be overcome within the private foundation community and public health sector. Governmental officials need to take into account the public health access barriers and needs of the marginalized population. While, private foundations need more publicly available research to enable better networking, communication, and exchange of best practices with one another.

Purpose

The goal of this paper is to explore how the triple aim could affect in a positive way Colombia's health care sector. The Institute for Healthcare Improvement (IHI) developed the Triple Aim as a statement of purpose for fundamentally new health systems that contribute to the overall health of populations while reducing costs. It has since become the framework for different organizations that want to improve in three main areas: Population health, patient experience and per capita cost. This evaluation highlights the areas of improvement, identifies the barriers for implementing the triple aim and best management practices. There are different barriers that can determine the incorrect implementation of the triple aim in an IPS in Colombia, not knowing the population, not listening to the patient experience and ignoring the per capita cost. These findings can help clinics, hospitals, and other health-care providers in Colombia, as well as other developing countries, meet their goals in health care to the communities and neighborhoods they service.

The timing of this research is important because the primary focus of the health care sector in Colombia is to provide all of their population with the best quality of care. However, what happens to the patients who are unable to access the best quality of care? The escalating costs to supply and deliver health care in developing countries, as well as increased competition among private health care providers has significantly increased the pressure on clinic managers and hospital administrators to operate more cost efficiently without compromising access to health care facilities and high patient care standards. While the health care sector in Colombia has made some major improvements, in spite of their legislative efforts, opportunities for improvements are plentiful.

Problem at hand

The Institute for Healthcare Improvement (IHI) developed the Triple Aim as a statement of purpose for fundamentally new health systems that contribute to the overall health of populations while reducing costs. It has since become the framework for different organizations that want to improve in three main areas: Population health, patient experience and per capita cost. In order to best implement the framework that the triple aim describe is necessary to understand the issues at hand are in the healthcare system in Colombia.

Theory

As stated in the constitution of the World Health Organization WHO “Health is a state of complete physical, mental and social well-being, and not only the absence of conditions or diseases” (Definition of WHO.). According to the 2017 report *global perspective of the health care sector* (Deloitte, 2017), for 2020 the average growth of the sector will be 4.56%, where the economies in transition will have the highest percentage (7.5%), followed by Asia and Australia (5%) and North America (4.3%), with Latin America having the lowest growth (2.4%). The percentage of expenditure with respect to the gross domestic product will slightly increase from 10.4% in 2015 to 10.5%, reaching in 2020 the 8.7 trillion dollars. 50% of the expenses will be dedicated to cardiovascular diseases, cancer and respiratory diseases. At the same time expenses will be focused on Infectious diseases (for example, HIV-AIDS, ZIKA), diabetes and Neurodegenerative diseases.

Health care expenditures in Colombia have been growing during the last years. While in 2000 they represented 5.9% of the Gross Domestic Product (GDP), in 2011 they reached a participation of 6.5% which 1.6% corresponds to financing by the private sector and the remaining 4.9% to the public sector. The largest increase during the last decade, was for payments out of pocket, which went from representing 0.8% of GDP in 2004 to 1.0% in 2011, with a near increase of 33%.

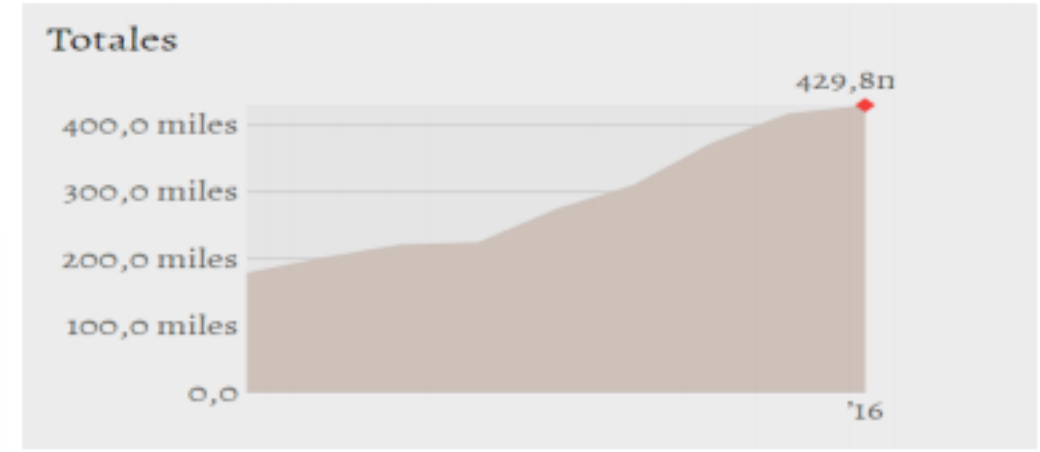
According to the sector analysis report of (FINDETER, 2015) in the bases of the National Development Plan 2014-2018 (Presidencia de la Republica, 2015), within the transversal strategy of social mobility, the Social Protection System is introduced as an "instrument to promote equality of opportunities using the tools for the risk management to which the population is exposed ", listing the following objectives:

- Increase access to healthcare and improve the quality of healthcare services provided to the citizen.
- Reduce gaps and improve healthcare conditions.
- The recovery of legitimacy and trust in the Colombian health system
- Guarantee financial sustainability of an efficient health system.

According to the classification of national accounts of DANE, the health sector is integrated by the following economic activities: Social and health market services the budget for public investment in the health sector for 2017 was COP 22.2 billion. (Ministerio de Salud y Proteccion Social, 2018), and according to the results report of the health sector, number 2 of July 2017, of the Superintencia Nacional de Salud, in 2016 there were 6,114 entities that were functioning as institutions health providers (Instituciones Prestadoras de Salud or IPS) (both public and private) with a total income of $ 49,002 billion COP.

According to the data of the sector analysis platform Datlas of Bancoldex, the sector Health has shown a growth in the generation of employment in the last decade, reached the figure of 429,800 jobs in 2016.

Figure 2
Employment growing in the healthcare sector for the period 2006-2016



Source: Datlas Bancoldex (2016)

Colombia is experiencing a second phase of demographic transition with the declining of birth rates and mortality rates that remain in the lows 23. For 2005, for every 100 women of childbearing age (15 to 49 years) there were 38 children between 0 and 4 years old; for 2018 this figure dropped to 34 and it is projected that by 2020 it will go to 33. In 2018 the younger population of 15 years old corresponds to the 26% (12,892,596) of the entire population, this is 4.9 percentage points lower than in 2005 and it is projected that by 2020 it will continue to decrease until it represents 25.4% of the population. Meanwhile the population over 65 years of age represents 7.9% of the entire population, showing an increase of 1.6 percentage points with respect to 2005 and it is projected that by 2020 the proportion will continue to increase until it reaches 8.50% (Ministerio de Salud y Proteccion Social, 2018).

Figure 3
Demographic Indicators for Colombia 2005, 2108 y 2020

Índice Demográfico	Año		
	2005	2018	2020
Población total	42'888'592	49'834'240	50'911'747
Población Masculina	21'169'835	24'605'796	25'138'964
Población femenina	21'718'757	25'228'444	25'772'783
Relación hombres:mujer	97.47	97.53	97.54
Razón ninos:mujer	38.03	33.85	33.51
Índice de infancia	31.01	25.87	25.39
Índice de juventud	26.28	25.52	25.04
Índice de vejez	6.25	8.06	8.50
Índice de envejecimiento	20.17	31.15	33.48
Índice demográfico de dependencia	59.41	51.36	51.27
Índice de dependencia infantil	49.44	39.16	38.41
Índice de dependencia mayores	9.97	12.20	12.86
Índice de Friz	156.97	132.27	128.50

In the case of Cali, 26% of the population residing in the municipality is considered black, mulatto or Afro-Colombian, 0.5% indigenous and none of them 73% according to the census. (DANE).

The institute of Healthcare Improvement (IHM) designed the Triple Aim with the purpose to help new healthcare systems that contribute to the overall health of populations while reducing the cost. The triple aim has helped as an organizational framework for the US Department of Health and Human Services (HHS) and for strategies of other public and private health organizations. In order to improve the health of a population the Triple Aim requires the involvement of different sectors to achieve its goal. The sectors that the Triple Aim requires are: The healthcare sector, public health departments, social services entities, school systems and employers need to work together. Fostering this cooperation requires an integrator that has the appropriate governance structure that is able to lead in the pursuit of

the Triple Aim, identifying the portfolio of projects and investments to support that pursuit. A set of measures should define each dimension of the Tripe Aim, these measures will help fuel a learning system that will help improve population health, experience of care and per capita cost of health care.

It is important that the organizations choose the correct measures by exploring the data that they have access in order to execute the Triple Aim in an efficient way. There are principles that organizations should have on mind when applying measures to implement the Triple Aim, these are: importance, scientific acceptability, usability and feasibility. Authors Billheimer and Pestrock provide considerations for the use of the correct measurements.

Key measurements principles

1. **Define Population**
    - Total population
        - All the residents of a geopolitical area.
    - Sub Populations
        - Includes the income, race/ethnicity, disease burden or those serve by a particular health care system or in a particular work force.
2. **Data over time**
    - To better understand time lags between cause and effects.
    - To better distinguish between common cause and special cause variation.
3. **Value of benchmarking**
    - Comparisons with other systems

Billheimer has articulated several questions about the structure and function of metrics that apply to Triple Aim measurement.

• Are the measures actionable?

• Are the measures sensitive to interventions?

• Are the measures affected by population migration?

• Are the measures easily understood by collaborating organizations, policy makers, and the public?

Pestronk (2010) provides a related set of characteristics of ideal measures applicable to the Triple Aim.

• Simple, sensitive, robust, credible, impartial, actionable, and reflective of community values

• Valid and reliable, easily understood, and accepted by those using them and being measured by them

• Useful over time and for specific geographic, membership, or demographically defined populations

• Verifiable independently from the entity being measured

• Politically acceptable

• Sensitive to change in response to factors that may influence population health during the time that inducement is offered

• Sensitive to the level and distribution of health in a population

• Responsive to demands for evidence of population health improvement by measuring large sample sizes

General Objective

Exploring how the triple aim could improve the healthcare sector in Colombia.

Specific Objectives

1. Reduce the cost per capita: Review the optimization of the financial resources in order to offer an excellent service.
2. Improve the experience of individuals: Identify that when the patient is looking for attention this one is offered in a timely, safe, effective and efficient way. Focused on person and provided with equity.
3. Improve the health of the population: Identify a situation that is affecting the patient's health in order to improve it.

Methodology

Type of study: Explorative, descriptive, qualitative, from secondary information with data and indicators available in ACEMI (Asociación Colombiana De Empresas de Medicina Integral)

Based on the proposal of the Triple Aim, some indicators were selected for the evaluation and understanding of the following factors:

1. Reduce the cost per capita
2. Improve experience of individuals
3. Improve the health of the population

Each of the factors is assigned at least one "thematic" category to define the indicators and identify the source of the data.

Methods of measuring the cost

- Health care spending per capita growth: Valued Based Care efforts seek cost savings for a target population, making per capita spending important. Total spending growth can reflect in policy and economic trends (Table 1).
- Changes in inpatient hospital utilization: The push for preventive health and fewer ER visits (a common source of hospital admissions) is likely to cause a corresponding reduction in inpatient utilization.
- Changes in emergency Room (ER) utilization: Preventive health efforts are anticipated to reduce ER visits.
- Changes in outpatient utilization: A reduction in inpatient and ER visits is likely to drive an increase in outpatient visits.

Table 1

Indicator to measure the goal as a function of the cost

Triple Aim	Category	Measure	Methodology Notes/Sources
Cost	Healthcare Spending	Healthcare spending per capita growth	Historic spending from 2011-2015: [data.oecd.org/healthres/health-spending.htm
	Utilization	Inpatient utilization	As of 2014 (2010-2014): [*Cifras e Indicadores del Sistema de Salud* , 2017]
		ER utilization	As of 2014 (2010-2014): [*Cifras e Indicadores del Sistema de Salud* , 2017]
		Outpatient utilization	As of 2014 (2010-2014): [*Cifras e Indicadores del Sistema de Salud* , 2017]
		Clinical Lab utilization	As of 2014 (2010-2014): [*Cifras e Indicadores del Sistema de Salud* , 2017]

Source: Table made by Carlos Andres Campo

Methods of measuring patient experience

Patient experience and satisfaction measures: Valued Based Care efforts are expected to either maintain or improve current levels of consumer health care ratings. Coordinated care, increased transparency, and improved health outcomes from Valued Based Care may improve patient experience as well.

Table 2
Indicator to measure patient experience

Triple Aim	Category	Measure	Methodology Notes/Sources
Patient Experience	Overall Healthcare Satisfaction	Patient Satisfaction	As of 2015 (2012-2015): [*Cifras e Indicadores del Sistema de Salud* , 2017]
		Complaints Resolved within 15 days	As of 2015 (2012-2015): [*Cifras e Indicadores del Sistema de Salud* , 2017]

Source: Table made by Carlos Andres Campo

Population Health

Population health measures: Valued Based Care is expected to impact population health because of its focus on managing and preventing chronic conditions, general preventive care, and reducing hospital readmissions. If these three areas improve, consumers' self- perception of health is likely to improve too.

Table 3
Indicator to measure Population Health

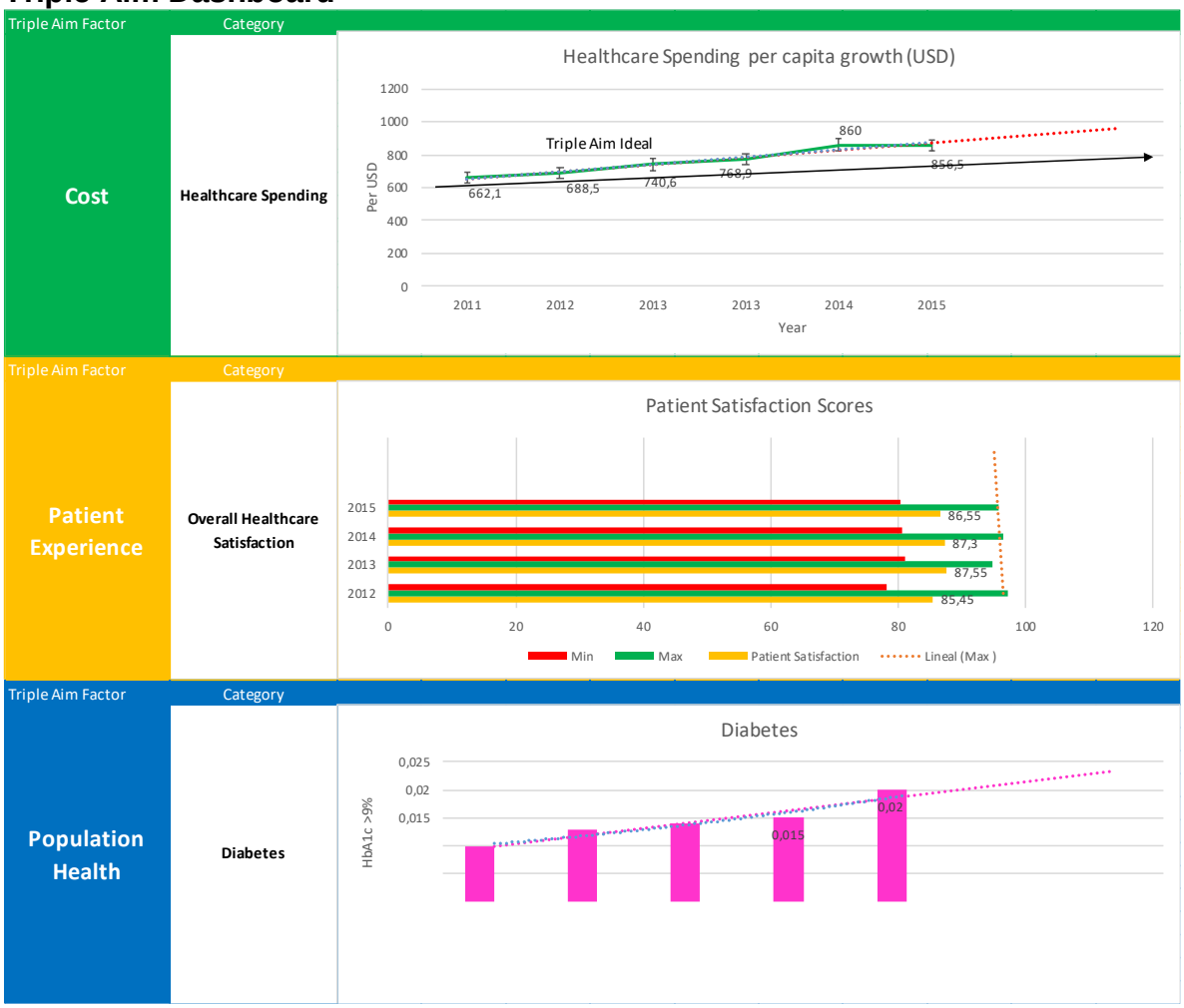
Triple Aim	Category	Measure	Methodology Notes/Sources
Population Health	Diabetes	Hemoglobin A1C >9% (among those diagnosed	As of 2013 (2009-2013): [*Analisis de Situación de*

Source: Author, data from ASIS 2017

Findings

According to the methodology used in this paper the indicators are found for each one of the categories of the Triple Aim in order to explore how they are impacting the healthcare sector in Colombia.

Figure 4
Triple Aim Dashboard

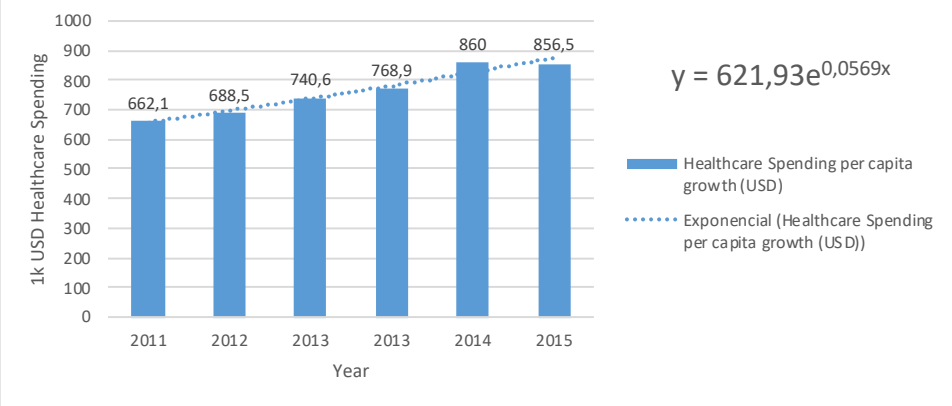


Source: Author, data from ACEMI and ASIS 2017

Reduction of the cost per capita

In relation to the findings in the cost area an increment can be seen in the healthcare spending from the year 2011 to the year 2015 where the equation Y=621,93e^0.0569x represents a rate of increase of the healthcare spending per capita (HCSPC) of 5.69% yearly (Figure #.).

Figure 5
Healthcare Spending per capita growth (USD)

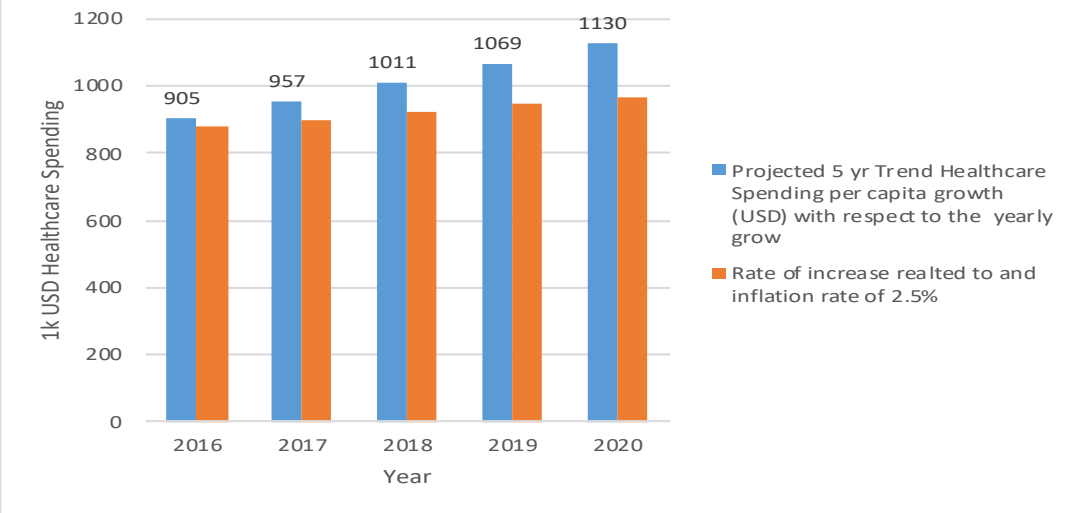


Source: Author, data from ACEMI 2017

When a projected five-year trend is built there are two scenarios: (Figure 5)

- When the rate of increasement is 5.69% yearly and is applied the current trend after five years in the year 2020 the healthcare spending increases 31.87%
- If the inflation rate of 2.5% is applied to the trend for the same five-year period, the increasement is 13.14%

Figure 6
Projected Five-year trend



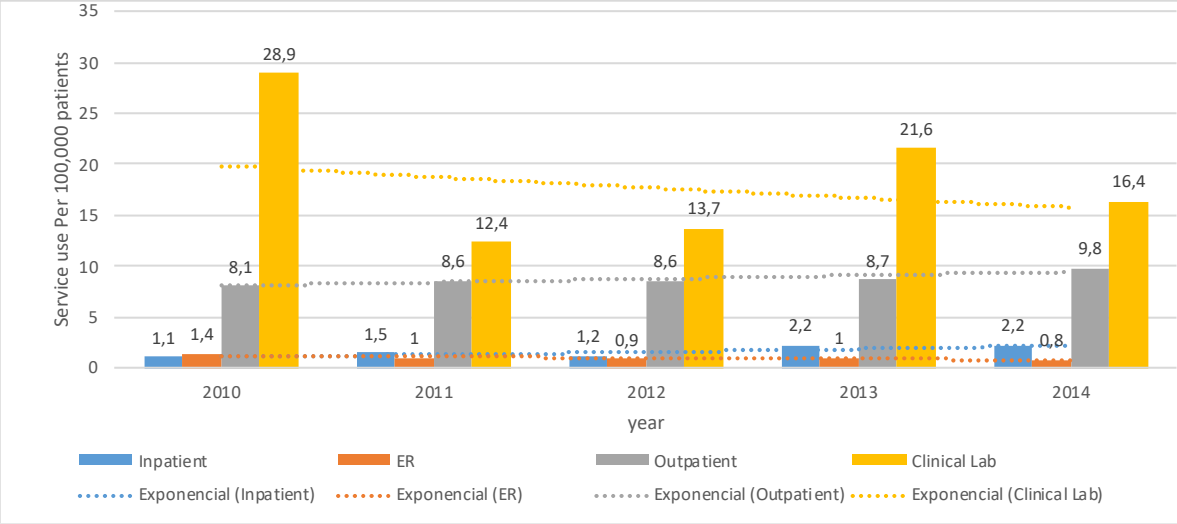
Source: Author, data from ACEMI 2017

The utilization service per 100,000 patients in the period from 2010 to 2014 shows the following results:

- The inpatient trend line went from 1.1 to 2.2
- The ER trend line decrease from 1.4 to 0.8
- The outpatient trend line increase from 8.1 to 9.8
- The Clinical Lab trend line decrease from 28.9 to 16.4

Figure 7

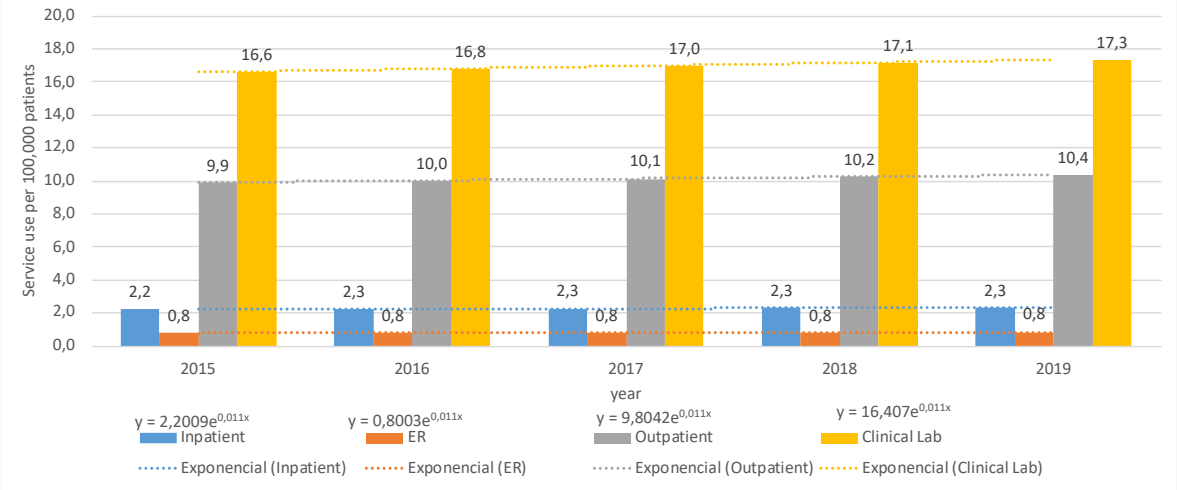
Current Utilization



Source: Author, data from ACEMI 2017

Due to the clinical lab variations the tendency of utilization rate remains constant during the period.

Figure 8
Five year trend projection (Using exponential formulas)

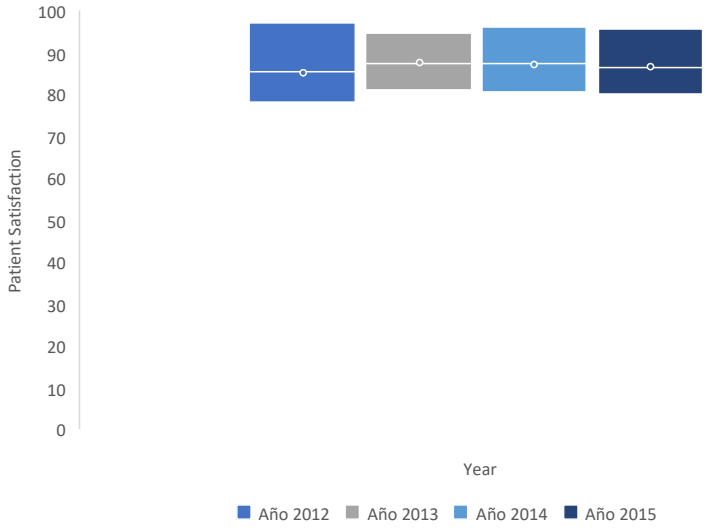


Source: Author, data from ACEMI 2017

Improving the experience of individuals

The overall patient satisfaction with the healthcare service is good and is closer to the max score

Figure 8
Patient Satisfaction

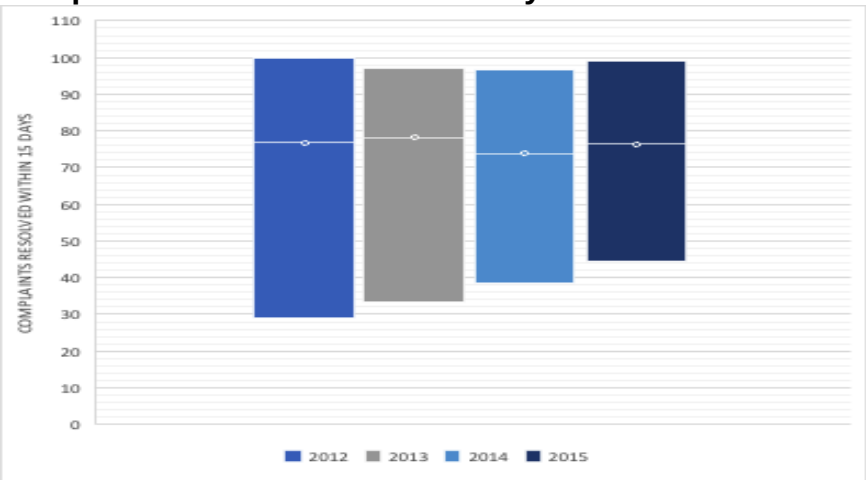


Year - Current	Año 2012	Año 2013	Año 2014	Año 2015
Patient Satisfaction	85,45	87,55	87,3	86,55
Max	97,1	94,8	96,55	95,65
Min	78,3	81,15	80,65	80,4

Source: Author, data from ACEMI 2017

The tendency to resolve complains between 15 days has shown a good score among the healthcare sector (Figure 9.).

Figure 9
Complaints resolve between 15 days



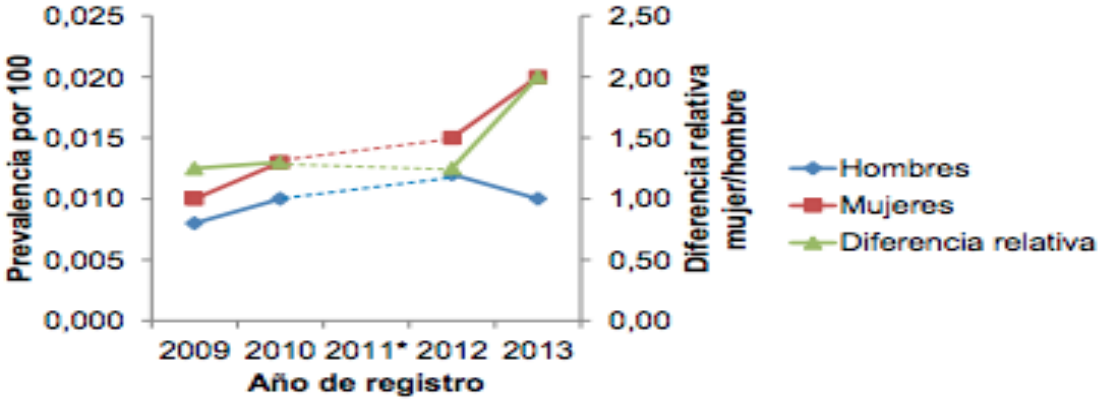
Year	2012	2013	2014	2015
Complaints Resolved within 15 days	76.9	78.15	73.8	76.35
Max	99.7	97.05	96.6	99.15
Min	28.91	33.2	38.4	44.55

Source: Author, data from ACEMI 2017

Improving the health of the population

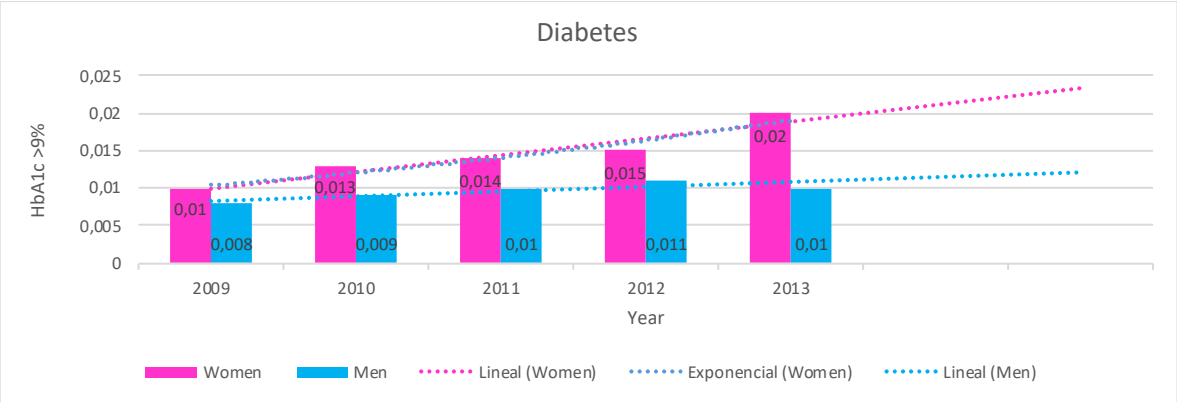
The prevalence is an important factor in determining how much an illness has increased or decreased in a population. There is an increase of the prevalence in diabetes in Colombia from the period 2009 to 2013.

Figure 10
Prevalence of diabetes



Source: ASIS 2017

Figure 11
Diabetes increased



Source: Author, data from ASIS 2017

Conclusion

The Triple Aim is an important tool that can help improve healthcare in Colombia. The data needed for the Triple Aim is available but its access needs to be made available in an easier way. Organizing the data in tables is the best way to make clear all the information and navigate the system in order to achieve good results. In order to positive affect the cost will require to significantly reduce inpatient utilization, the creation of payment models that reward value and offer incentives to keep patients out of the institutions. Therefore, inpatient utilization and the spending that is associated with this will decrease and by also focusing in patient satisfaction will help to decrease spending. An organization that assumes responsibility for the patient's health, has transparency will get more satisfied patients and this will translate in higher ratings. Population health improvement is the key for healthcare organizations in order to have an effective Valued Based Care method that will help improve the three pillars of the Triple Aim. Based in the indicators analyzed

previously the implementation of the Triple Aim in the healthcare sector in Colombia has made improvements towards patient experience this is important because it helps make the perception better among the users and in the long run it creates trust between the users and the system.

Recommendations

'To build a sustainable health system, it is first necessary to identify the major sources of income and expenditure' Alejandro Gaviria (Oxford Business Group, 2016).

Colombia should increase its healthcare investment by incorporating new technologies improving the pricing structure of the system, raising salaries in the healthcare sector and formalizing the jobs that are not contributing to the healthcare system.

There should also be more indicators added to the area in which the Triple Aim is analyzing the population health in order to get better picture. The indicators that could be used are behavioral and physiological factors, infant mortality and life expectancy.

Education is an important factor in healthcare, the community should learn how their healthcare systems works in order to use it the best way possible. The population of a country should be taught how their healthcare system works in its different areas. There should be a class in early stages of school where the students learn how their healthcare system is financed and what are the user's decisions that are affect the system in a negative way.

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