New Trends In the Brazilian Healthcare Market

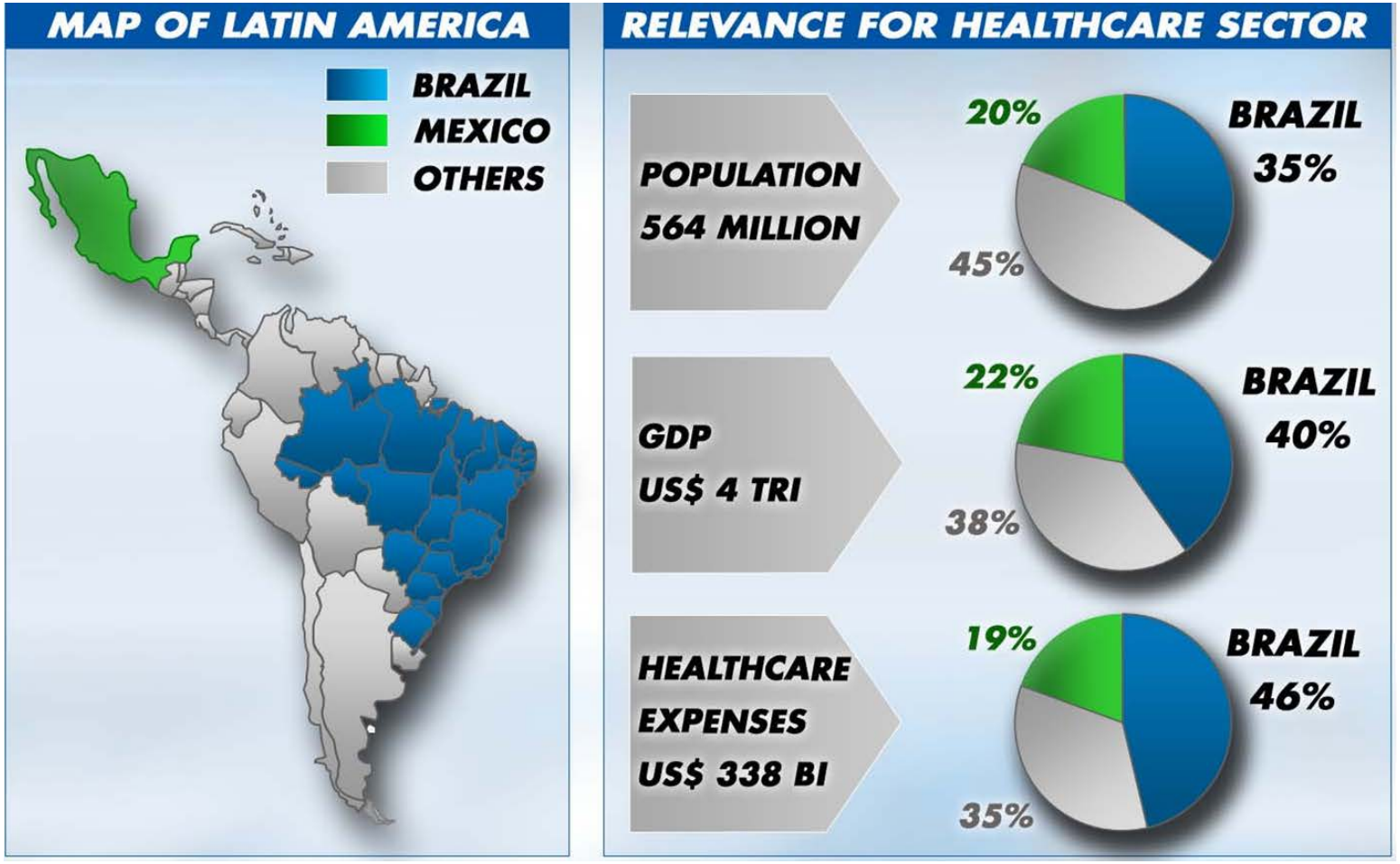
Rafael Vasconcellos,MD

UHG

Summary

- Overview Brazilian Healthcare Market
  - Numbers
  - Public System
  - Private System
  - Interaction Between Public X Private
- Innovations in the Brazilian Market
  - Payment Evolution
- What Amil is doing…
- How do new drugs get evaluated and approved

Overview Latin America Market



IMF 2013

Brazil Market

Mercado - Brasil

PIB R$: 4.840 TRILHÕES (2013)
PIB PER CAPITA R$: 24,1 MIL
POP: 203,3 MM (11/14)

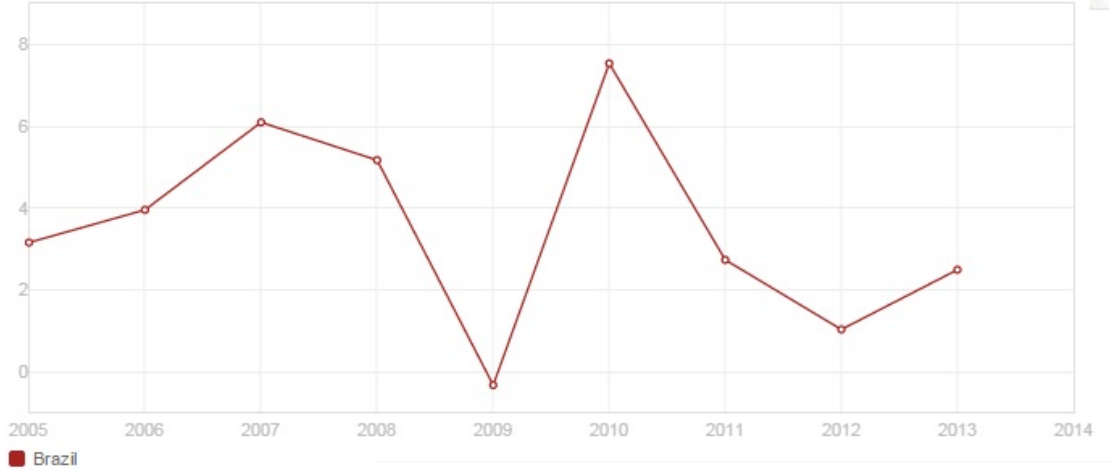
POPULAÇÃO PLANOS MÉDICOS: 50,9 MM (06/14)
OPERADORAS: 898
ADERÊNCIA: 26,1%

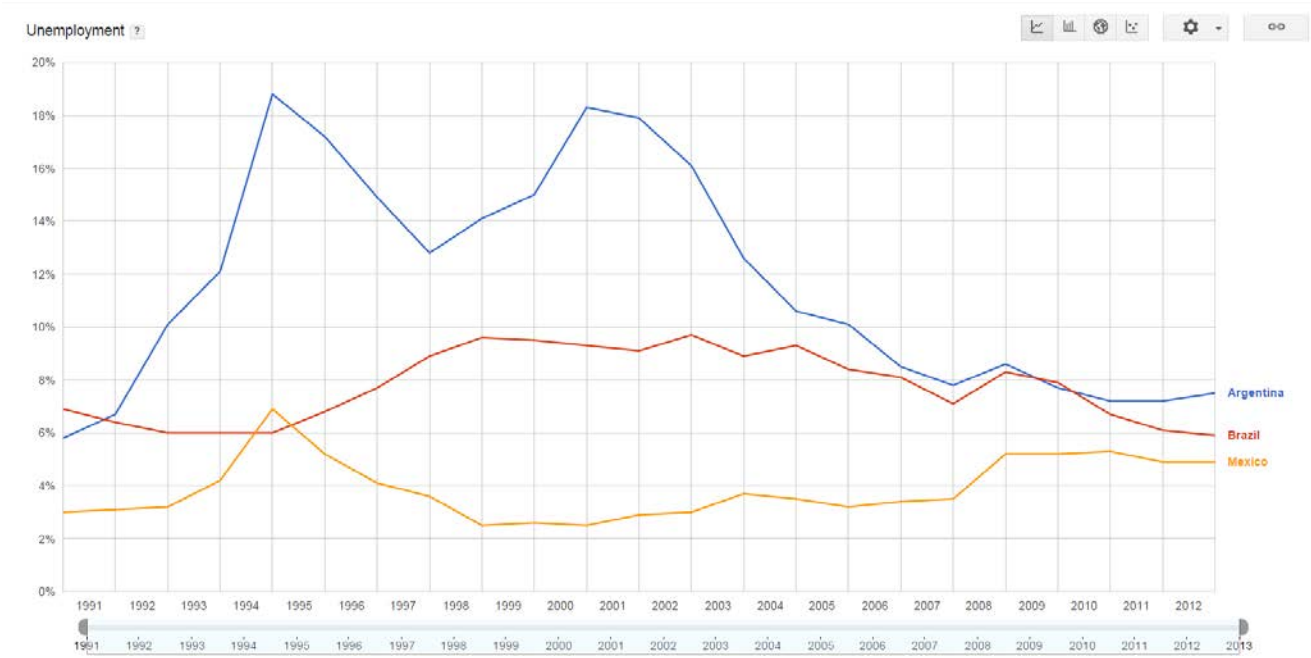
POPULAÇÃO PLANOS ODONTOLÓGICOS: 21,1 MM (06/14)
OPERADORAS: 350
ADERÊNCIA: 10,8%

RECEITAS R$: 110,8 BI (2013)
SINISTRALIDADE: 83,7%

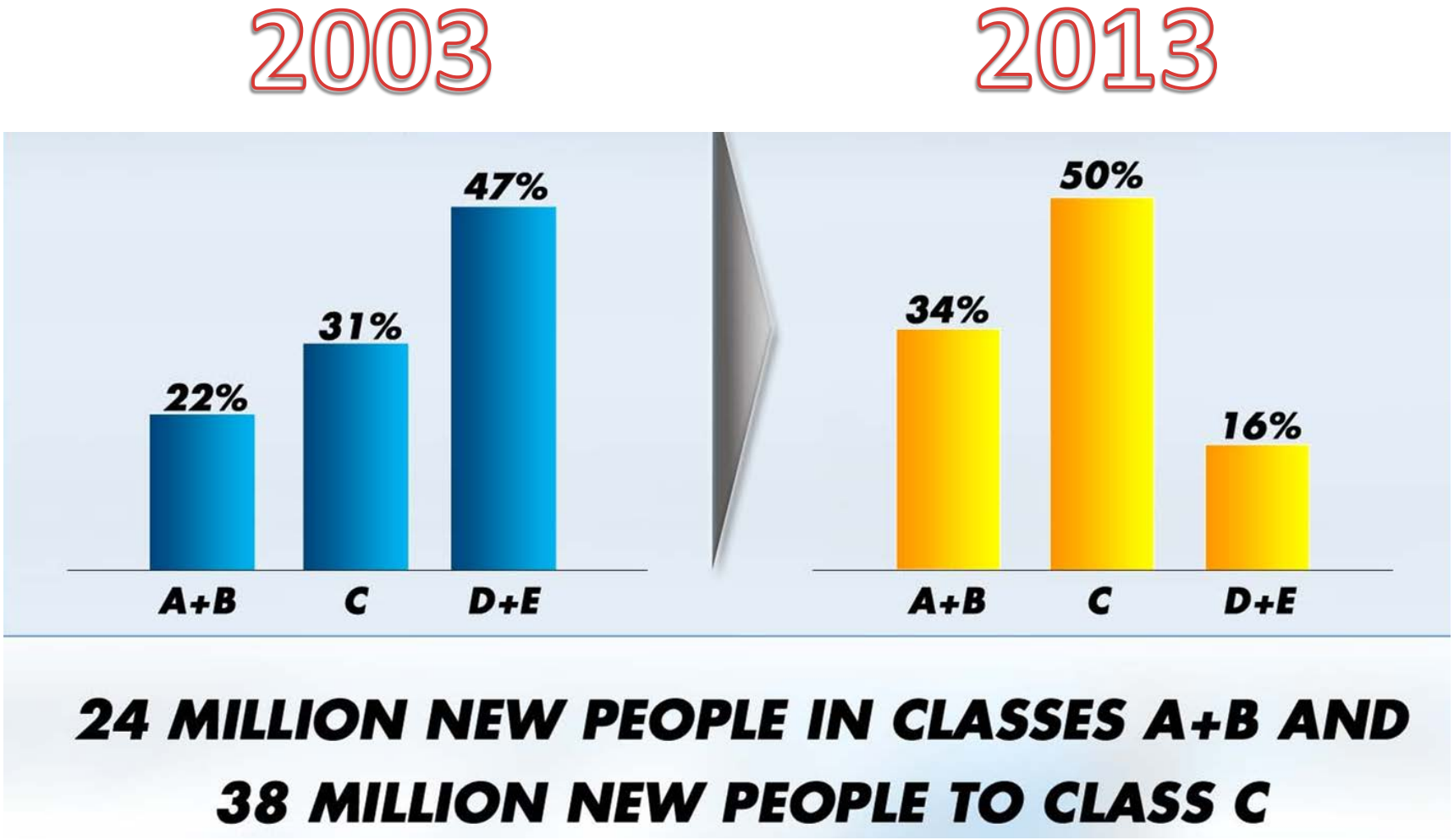
Fonte : IBGE 2014, ANS (DIOPS)

Brazil GDP Growth / Unemployment

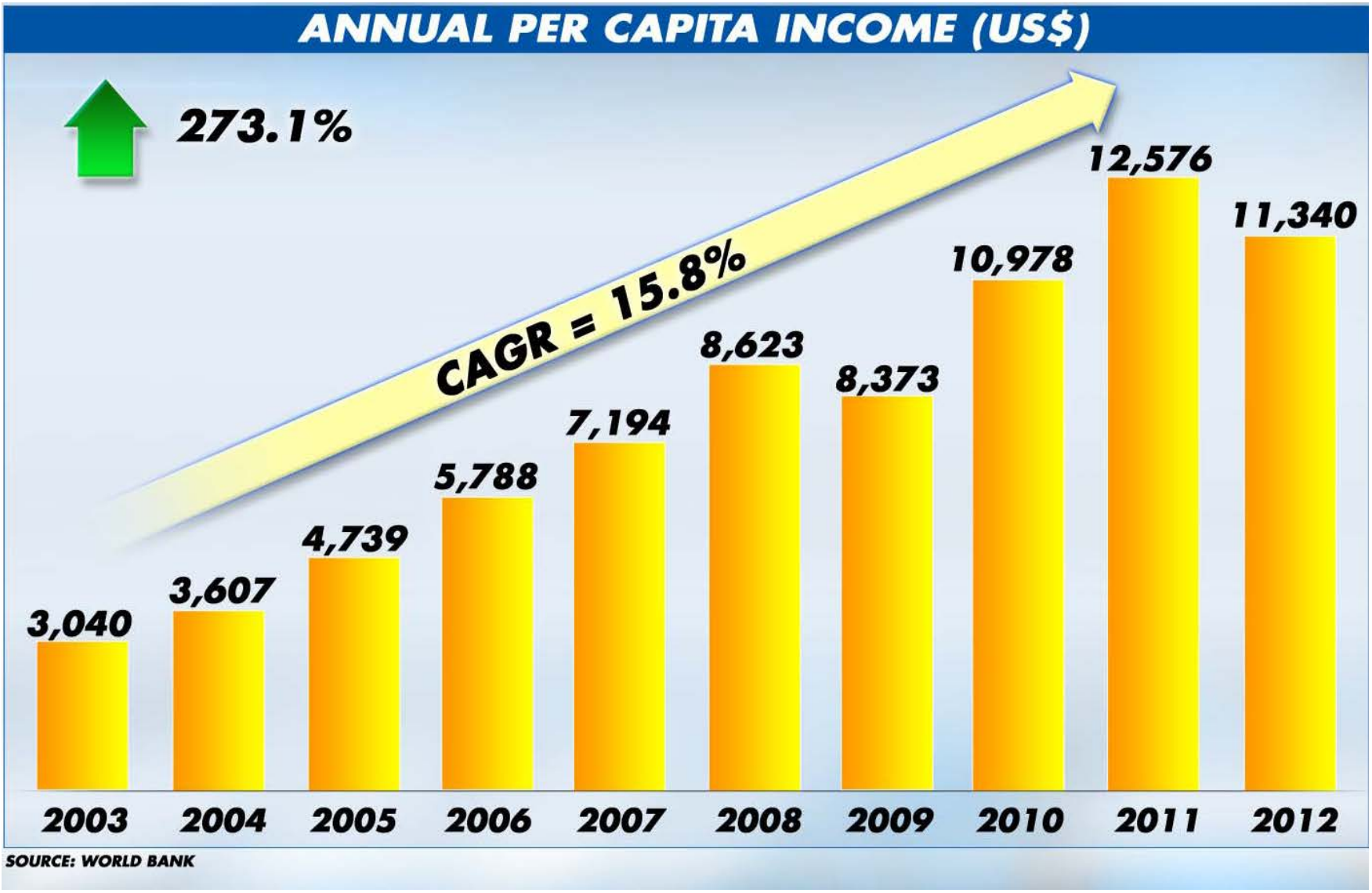




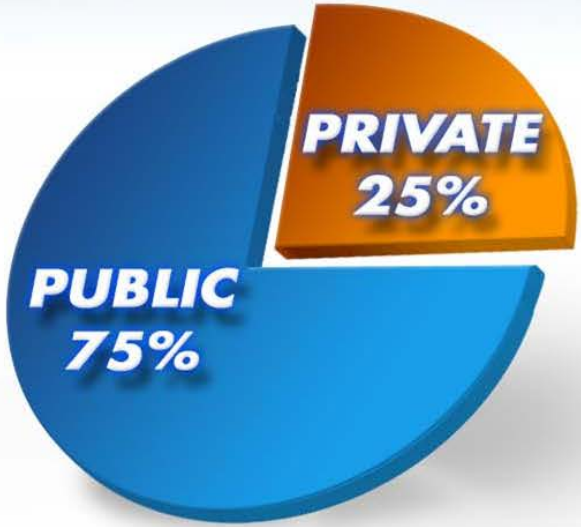
Population Economic Shift

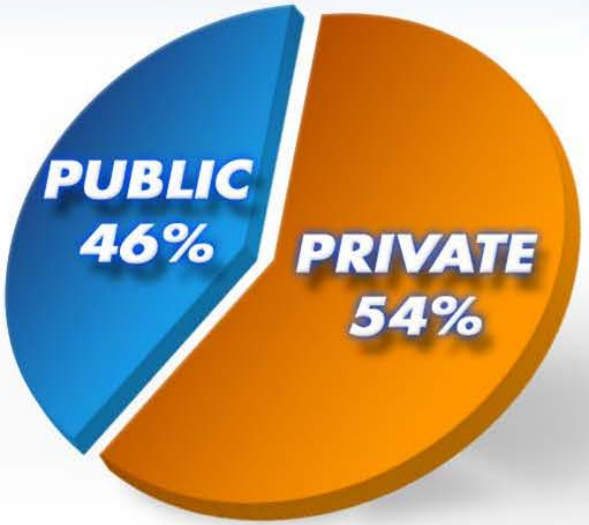


Population Economic Shift



Healthcare Investments Brazil





Population:	200 million
Urban Population:	86%
Literacy:	88%
Health spending per capita:	US$1.120

Infant Mortality Rate:	12 / 1,000 births
Life expectancy at birth:	74
Obesity Prevalence (M / F):	16% / 22%
Diabetes Prevalence:	7.5%

Public Healthcare System

- Sistema Único de Saúde – SUS
  - Universal Access.
  - Funded by Taxes → mainly Federal funds.
  - Decentralized → City runs the system.

- Approximately 150 million people (75% of the Brazilian population) rely solely on the public system.
- The system was designed to be decentralized with operations and management pushed out to the States and local Municipalities.
- The SUS is funded through taxation and accounts for approximately 46% of total health care expenditures in Brazil.
- The system comprises all health care and related medical support services provided by public and private institutions (not-for-profit and commercial entities) at the three levels of government (federal, state and local).
- Care is delivered through primary care facilities, Posto de Saúde, public hospitals.
- The public system has approximately 335,000 hospital beds, accounting for 72% of the total beds in Brazil.

Challenges:

- Poor level of service, mainly due to lack of investment
- Overcrowding and long wait times in public facilities
- Lack of access – especially in poorer, rural areas
- Inefficiency and regional disparities due to decentralized model

Success in:

- Continues to provide a basic level of care for majority of Brazilian population.
- Promotes and strengthens disease prevention programs with country-wide impact e.g. vaccines, infant mortality, hygiene.
- Establishment of centers of excellence in some areas - mainly Public University Hospitals.
- Worldwide benchmark programs in AIDS prevention and treatment.

Private Healthcare System

- Regulation of the managed care industry began in 1998 with the enactment of the Private Health Care plan laws. In 2000, the regulatory agency for the managed care sector, ANS, was formed.
- There are currently around 50 million Brazilians who are covered by private group and individual medical insurance, representing 25% of the total Brazilian population.
- There are also an additional 15.3 million members of exclusively dental plans which accounts for 7.9% of the total population (compared to 60% penetration in the US).
- Private health care membership varies substantially across different regions of Brazil. For example, over 42% of the total population in the state of Sao Paulo has private health care coverage, compared to only 5% of the population in the state of Maranhão.
- Almost 70% of the total private health care membership in Brazil is located in the Southeastern region, which includes the two main cities of São Paulo and Rio de Janeiro.
- Private health care plans may be individual plans (17% of the market), when contracted directly between the patient and the payers, or corporate plans (83% of the market), when the patients are covered by plans contracted and paid for by their employers.
- Coverage varies but most plans are purchased to gain access to certain private facilities, have coverage for procedures not covered under the national system, have access to certain specialists and in some cases, have coverage for dental emergencies. Drugs are not typically covered but certain plans can provide coverage.

Challenges:

- Increase in membership
- Economy
- ANS
- High utilization
- Medical Inflation
- Lack of Providers

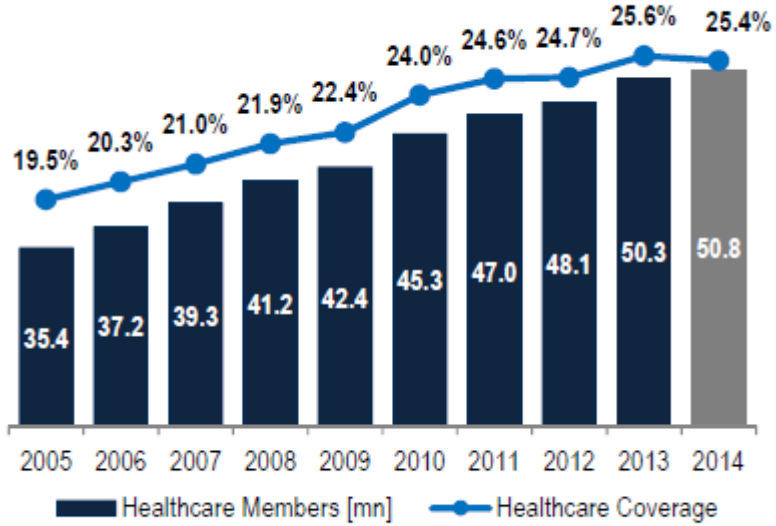
Individual Policies → Heavily regulated by Government.

Employer / Group → Less regulated by Government.

* Most employers don't adopt co-participation.
* Medical Cost is changing that reality.

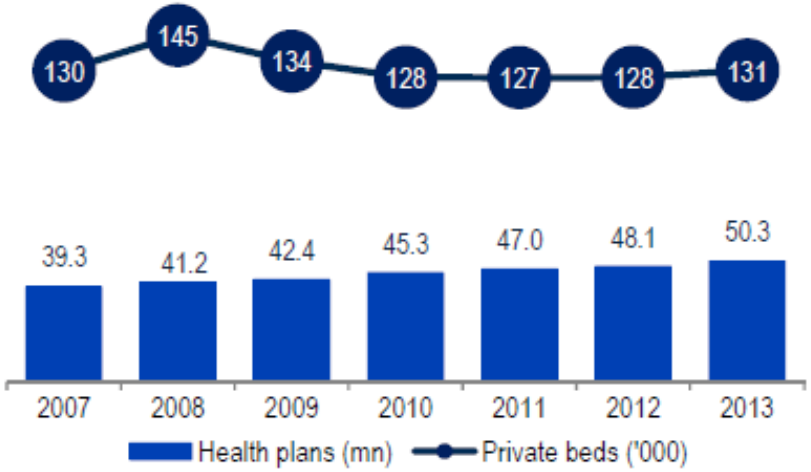
Private Healthcare System

Chart 21: Health plan members (mn) and coverage ratios



Source: ANS and BTG Pactual

Chart 5: Since 2007, the number of private beds has remained flattish...



Source: ANAHP, ANS and BTG Pactual

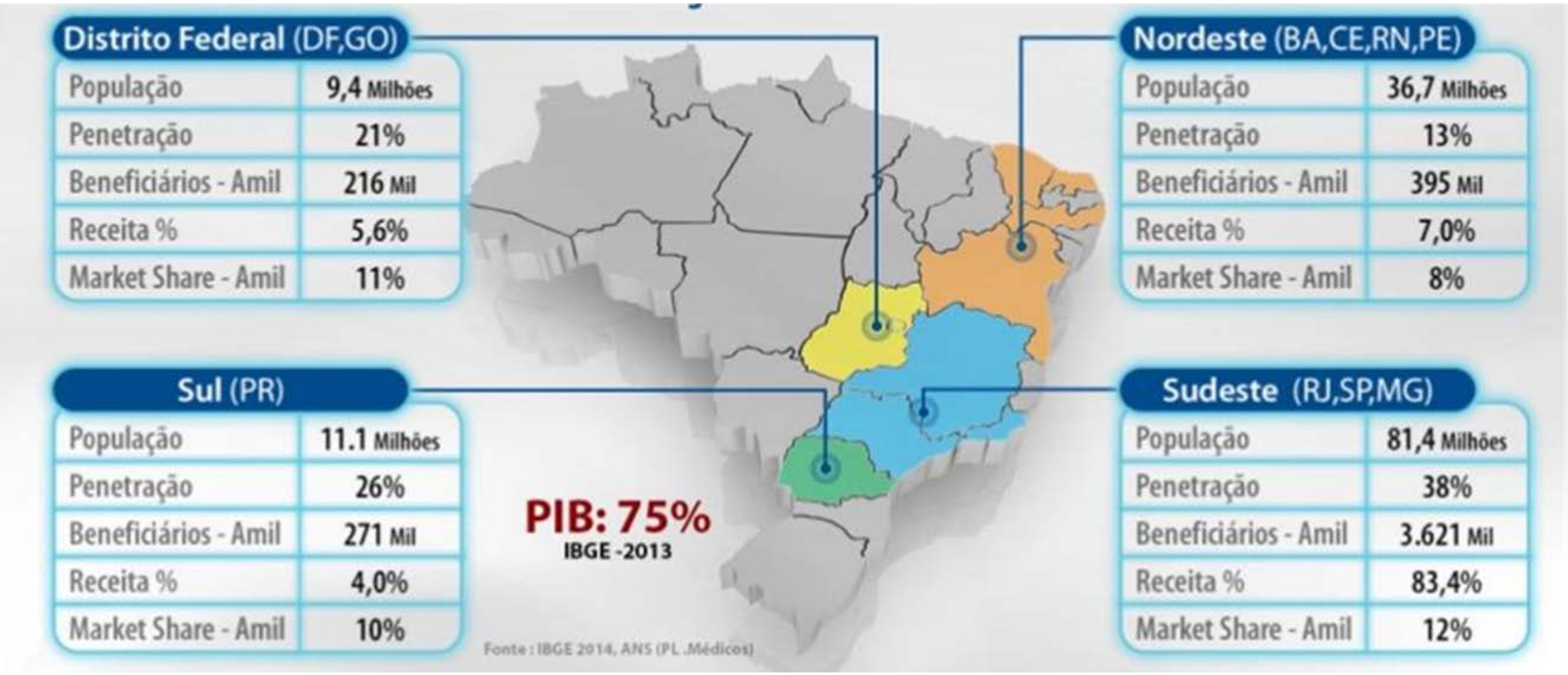
Amil History

Amil Numbers in Brazil

	Hospitals	Clinics	Hospital Beds
São Paulo	**18**	**25**	**2381**
Rio de Janeiro	9	8	878
Brasília	2	3	163
Paraná	1	2	106
Nordeste	1	5	95
Total	**31**	**43**	**3623**

Owned Network as of 12/31/2014

Amil Footprint



Amil Affordability Projects

Clinical

Projects:

- **Hospital Supervisor Transformation**
- **Bed Day Management**
- **Medical Protocols**
- **Elective Surgery Utilization**

Medical Inflation
Over Utilization
Good Clinical Results
Member Satisfaction
ANS - Interaction

Network

Projects:

- **Hospital Negotiations**
- **Redirection**

Innovations at Amil

Medical Protocols – Basics FAQ's

- What are Medical Protocols?
  - Guidelines based on Brazilian Medical Societies that are decision support tools to the physicians.
- How do they work?
  - Decision tree algorithms integrated to the EMR that advices physicians and other health professionals about which are the most indicated treatment and exams (image and labs).
- What are the advantages of using them?
  - To standardize medical conducts improving quality of treatment and clinical outcomes.

Medical Protocols

Sistema Integrado de Saúde

Protocol Production

- SisMed
  - 636 Protocols
    - Urgent Care
    - Scheduled Appointments
- SisHosp
  - 308 Protocols
    - Urgent Care / Emergency Room

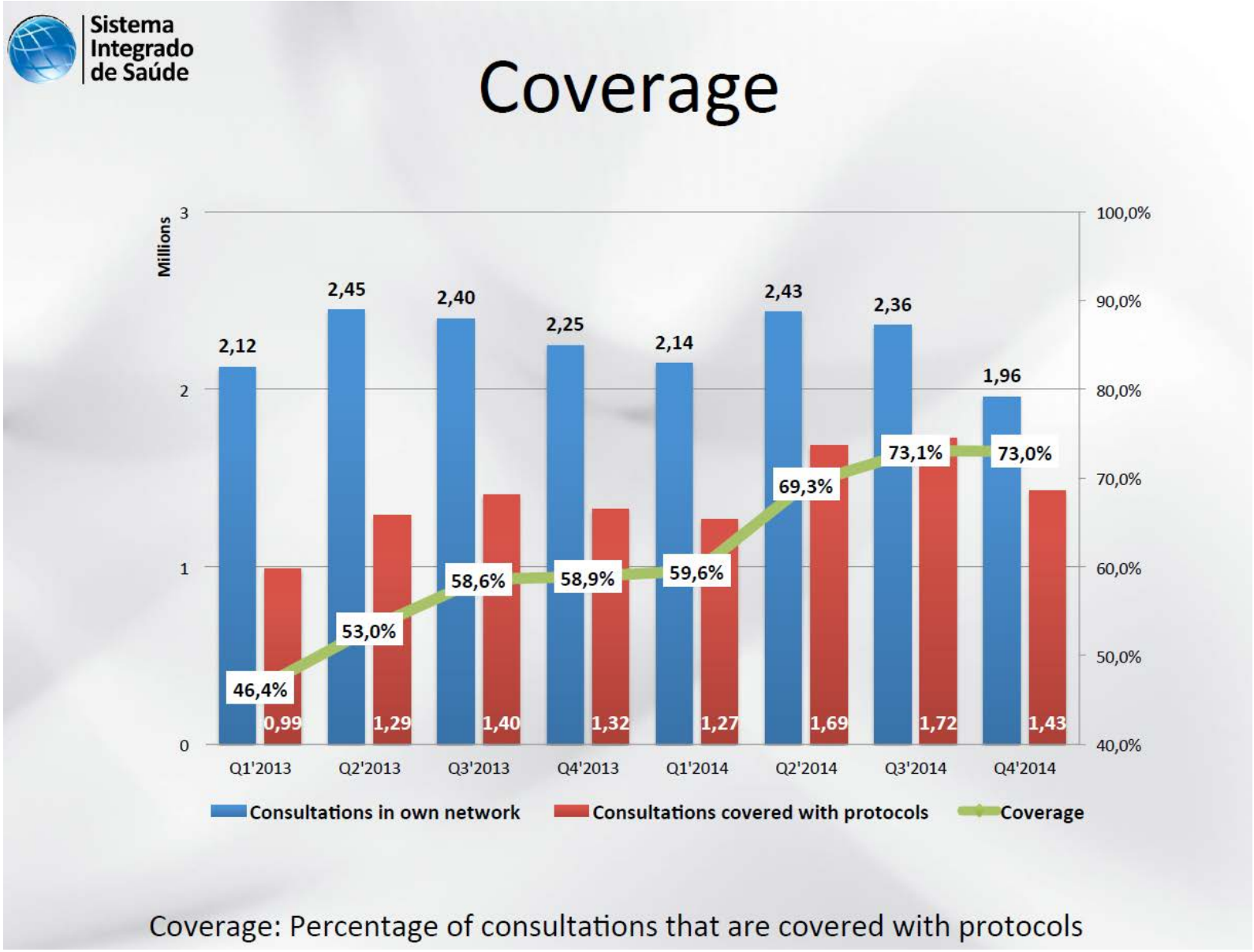
Medical Protocols

Sistema Integrado de Saúde

Where is it Running?

- Contracted Network
  - Pilot with 60 Offices
- Owned Network
  - Hospitals
    - Emergency Room
    - ICUs / Wards
      *in development
  - Medical Centers
  - Satellite Offices

Medical Protocols



Sistema Integrado de Saúde

SisMed Protocol – Pre-op Exams

SOLICITAÇÃO DE EXAMES PARA CIRURGIAS ELETIVAS

Caro(a) Cirurgião(ã) este protocolo prevê a solicitação de exames para a avaliação pré-operatória. Todos os pacientes passarão por uma consulta com um especialista em preparo pré-operatório. Caso esse profissional julgue necessário, serão solicitados exames adicionais para garantir a segurança da cirurgia. SELECIONE AS OPÇÕES ABAIXO QUE SE APLICAM AO SEU PACIENTE. O PROTOCOLO INDICARÁ AUTOMATICAMENTE EXAMES, QUANDO NECESSÁRIOS. SERÃO GERADOS TAMBÉM O ENCAMINHAMENTO PARA A CLÍNICA DE PRÉ-OPERATÓRIO E O TERMO DE CONSENTIMENTO ESCLARECIDO.

SEXO

- MASCULINO
- FEMININO

IDADE

- < 40 anos → < 50 anos
- 40 a 50 anos → > 50 anos
- > 50 anos → Qualquer idade Obstetrícia N3

DADOS DA ANAMNESE

- Há sintomas sugestivos de infecção
- Há histórico de sangramentos
- Há sintomas respiratórios
- Exposição a drogas indutoras de leucopenia e/ou trombocitopenia como quimioterápicos
- Exposição a drogas que alteram os fatores de coagulação
- Exposição a drogas que alteram função renal como IECA ou AINE
- Uso recente de diuréticos, digoxina ou IECA

DADOS DA CIRURGIA

Porte

- Pequeno
- Médio
- Grande

Tipo

- Intracraniana
- Intra-Torácica
- Vascular
- Abdominal Intraperitonial
- Aparelho Urinário
- Bariátrica
- Ortopédica
- Hérnia Incis.Gigante

- Cirurgia c/ risco potencial de sangramento
- Anestesia geral ou bloqueio

DADOS DO EXAME FÍSICO

- Há sinais de anemia
- Há sinais de doença pulmonar
- Há sinais de infecção
- Há alterações no exame físico cardiológico
- Há alterações no exame físico pulmonar

GESTAÇÃO

Suspeita de gravidez? → NAO / SIM

COMORBIDADES

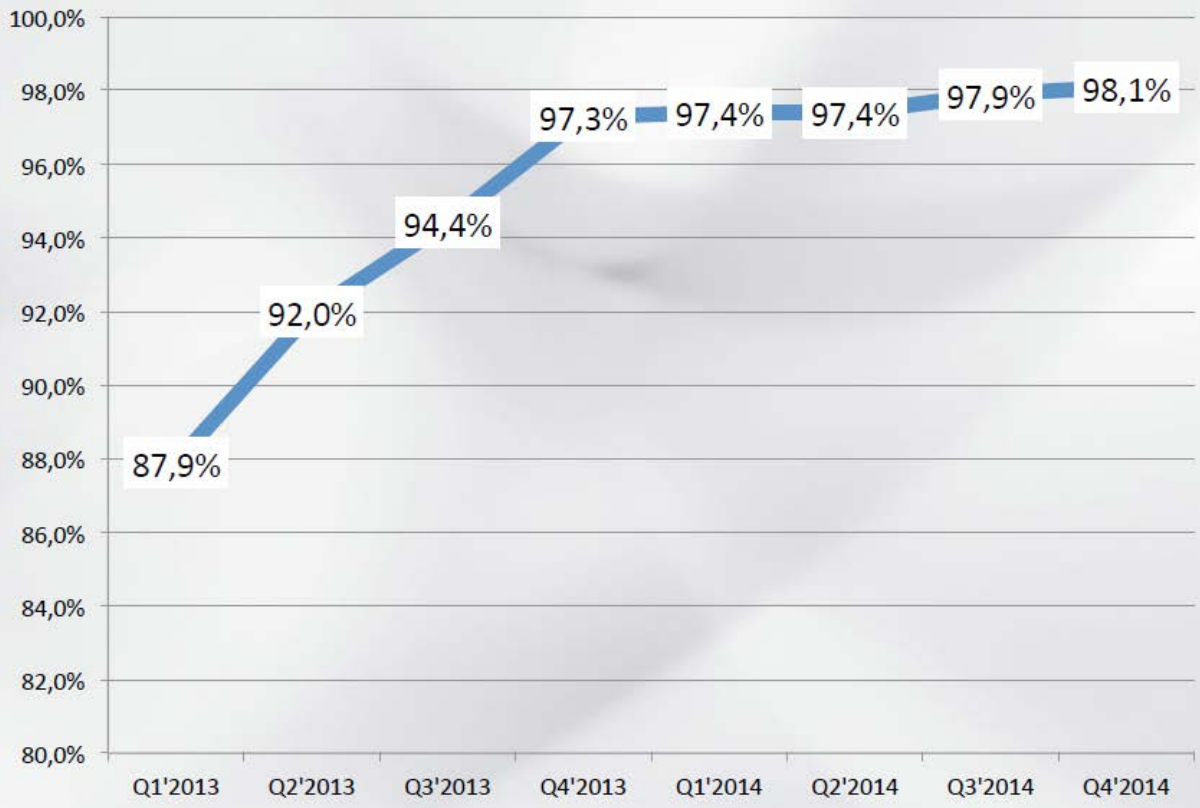
- HAS
- DM
- DAC
- Insuf Renal
- Insuf Cardíaca
- Insuf Hepática
- Desnutrição
- Obesidade
- Tabagista idade >40 anos
- Doença Mieloproliferativa e/ou Hematológica
- DPOC e/ou Asma
- Apnéia Obst. Sono

EXAMES	PRAZOS
Hb + Ht	7 dias
LEUCOGRAMA	7 dias
CONTAGEM DE PLAQUETAS	7 dias
GLICEMIA DE JEJUM	7 dias
URÉIA + CREATININA	7 dias
SÓDIO + POTÁSSIO	7 dias
ALBUMINA	7 dias
TAP + TTPA	7 dias
TGO + TGP + GAMA GT	7 dias
ECG	7 dias
RX DE TÓRAX	7 dia
PROVA DE FUNÇÃO PULMONAR COMPLETA	7 dias
URINA TIPO1 / EAS	7 dias
BETA HCG SÉRICO	7 dias

Medical Protocol

Sistema Integrado de Saúde

Adherence



Payment Evolution

Fee for Service → **Bundles of Services** → **P4P**

Is the reality in the most hospitals / clinics / practices

Stimulates over usage of resources.

Does not reward quality.

Adopted in some hospitals / MCO / Insurance

Inhibits some over usage of resources.

Does not reward quality.

New in Brazil.

Amil is implementing.

Racional usage of resources.

Rewards Quality.

Amil par

LEVEL 3 TEAMS MEDICAL GOALS ACHIEVEMENT

CARDIOLOGY

CRITERIA	RESULTS	COMMERCIAL (HEDIS)	MEDICARE (HEDIS)
SYSTOLIC PRESSURE ≤ 140 mmHg	80%	64%	60%
DIASTOLIC PRESSURE ≤ 90 mmHg	93%	64%	60%
LDL-CHOLESTEROL ≤ 130 mg/dL	87%	59%	64%

ENDOCRINOLOGY

CRITERIA	RESULTS	COMMERCIAL (HEDIS)	MEDICARE (HEDIS)
SYSTOLIC PRESSURE ≤ 140 mmHg	79%	-	-
DIASTOLIC PRESSURE ≤ 90 mmHg	94%	-	-
HbA1c ≤ 7,0%	73%	42%	34%
CHOLESTEROL ≤ 100 mg/dL	60%	47%	50%

Amil par

VIVA PROGRAM - LEVEL 3

PATIENTS WITH COMPLEX CHRONIC DISEASES*

AVERAGE HOSPITALIZATION COST

R$ 6,990 x R$ 8,917

VIVA (LEVEL 3) CONTROL

-22%

ER VISITS/YEAR

3.2 x 5.3

VIVA (LEVEL 3) CONTROL

-40%

OUTPATIENT CLINICS COSTS (CONSULTATIONS + EXAMS)

R$ 149.60 x R$ 127.10

VIVA (LEVEL 3) CONTROL

+15%

COSTS PER MEMBER PER MONTH**

R$ 364.86 x R$ 634.09

VIVA (LEVEL 3) CONTROL

-42%

*CONTROL GROUP: SAME PATIENTS, 6 MONTHS BEFORE PROGRAM INCLUSION.

**ER VISITS COSTS, HOSPITAL COSTS AND OUTPATIENT CLINICS COSTS WERE ALL INCLUDED.

Pharmaceutical Mkt Brazil

Anvisa is responsible for **drug registration** and licenses to pharmaceutical laboratories and to other companies inside the pharmaceutical production flow. The agency is also responsible for **establishing regulations** applicable to **clinical trials and drug pricing**, which is carried out by the Chamber of Drug Market Regulation (CMED).

Agência Nacional de Vigilância Sanitária

CONITEC
COMISSÃO NACIONAL DE INCORPORAÇÃO DE TECNOLOGIAS NO SUS

- Inpatient drugs are covered by public and private medical insurance
- Brazil's government has two universal programs
  - Farmácia Popular: Chronic drugs
  - Medicamentos Especiais
- Remaining outpatient drugs are paid out-of-pocket by consumers
- A significant issue with drug therapies in Brazil is affordability