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Overview of Automation in the Brazilian Hospitals ANAHP

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Global GS1 Healthcare Conference

March 16-18, 2010, São Paulo, Brazil

Demographics and Health System in Brazil

Population

- 192 million inhabitants

Active Health Facilities

- 77,000 institutions

Hospital Facilities

- 7,600 institutions

SUS – Single Health System

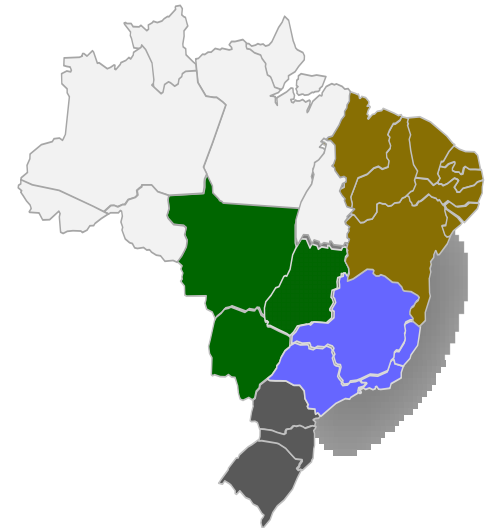
- Universal public financing
- Comprises 80% of the population

Supplementary Health

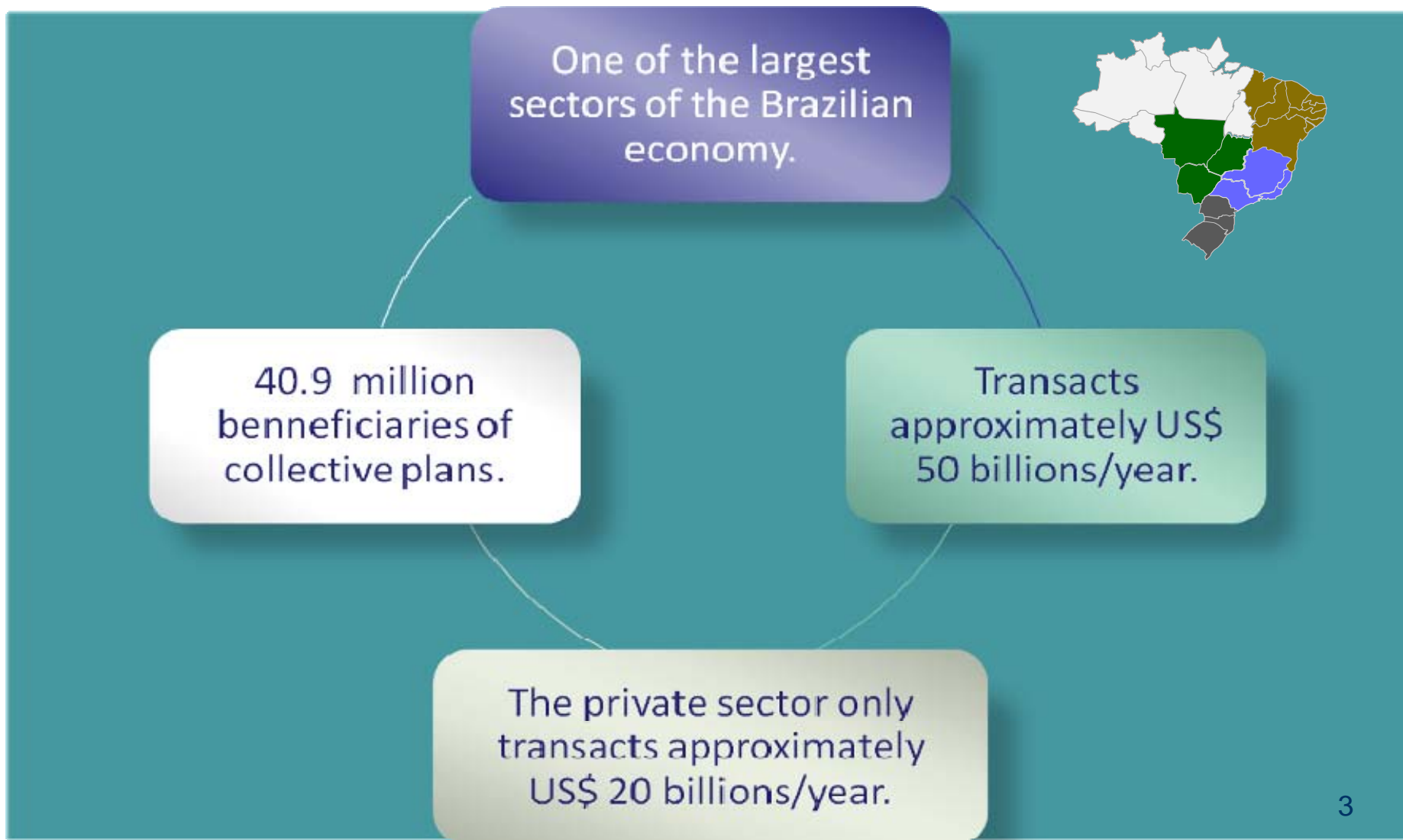
- Private agreements
- Comprises 20% of the population

Direct Disbursement

- Population with higher purchase power
- Purchase of medications



Summarizing the Health Sector



MISION

Represent the legitimate interests of its associates, developing a value adding image and, through innovative initiatives and excellence models, promote the quality of health-hospital assistance in Brazil.

VISION

Be recognized as an institution that represents the excellence hospitals in the private sector, leading the health system strengthening process.

VALUES

- Associative spirit
- Entrepreneurship
- Ethics
- Social Responsibility
- Excellence management



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ANAHP in numbers

Currently gathers 40 Hospitals, in 10 States and in the Federal District

According to ANS there were in Brazil 140,478 beds for hospitalization

Non-SUS, in the end of 2008.

Therefore, the 9,375 Beds of ANAHP in 2008,

Represented 6.7% of the total Beds available for the

Beneficiaries of the supplementary Health sector.

Source: Caderno de Informações da ANS 03/09

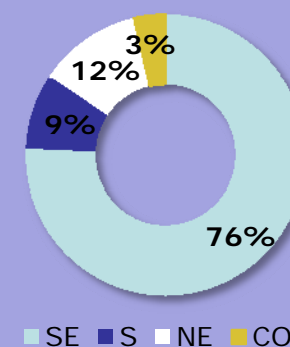
The total income of the ANAHP hospitals reached in 2008

R\$ 5.98 billions

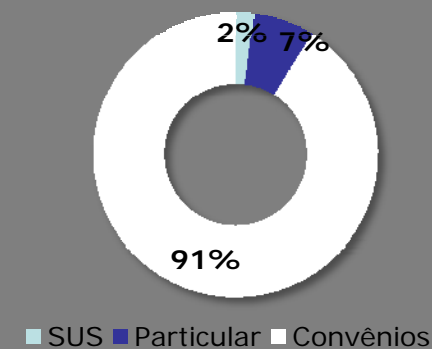
This means an increase Of **15,1%** over 2007 and that these hospitals already respond for **13,3%** of the total Assistential expense of the Health Insurance Operators

Source: Caderno de Informações da ANS 03/09

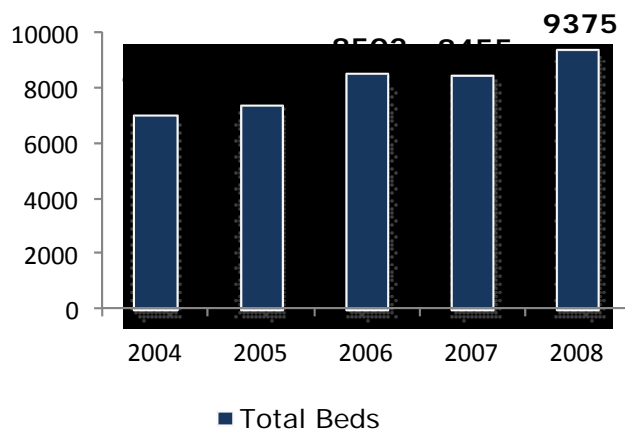
Income per region, 2008



Income per type of Paying Source, 2008



Total Beds





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Incentive to Accreditation

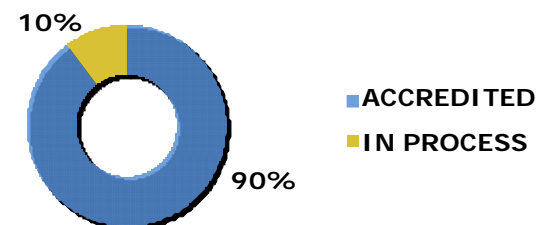
Accreditation: method to stimulate, evaluate and certification of quality of the health services.

- CNES: Brazil has 7,606 facilities with hospitalization type service (Mar/2009).
 - Only 126 hospitals (1.7%) had ONA or JCI Accreditation.

ANAHP Hospitals: represent 28% of all the hospital services accredited by the two organizations in the country.

ANAHP defends and stimulates the Accreditation and this is one of its eligibility criteria.

Accreditation - ANAHP Hospitals



		ANAHP HOSPITALS	TOTAL HOSPITAL SERVICES ACCREDITED (BRAZIL)	
ACCREDITED				
ONA	I	5	31	16%
	II	6	46	13%
	III	18	38	47%
JCI		6	11	55%
TOTAL		35	126	28%
IN PROCESS		4	6	

CNES: National Health Facilities Registry

Sources ANAHP - Pesquisa com hospitais Associados, 2009; ONA on www.ona.org.br ; JCI on www.cbacred.org.br

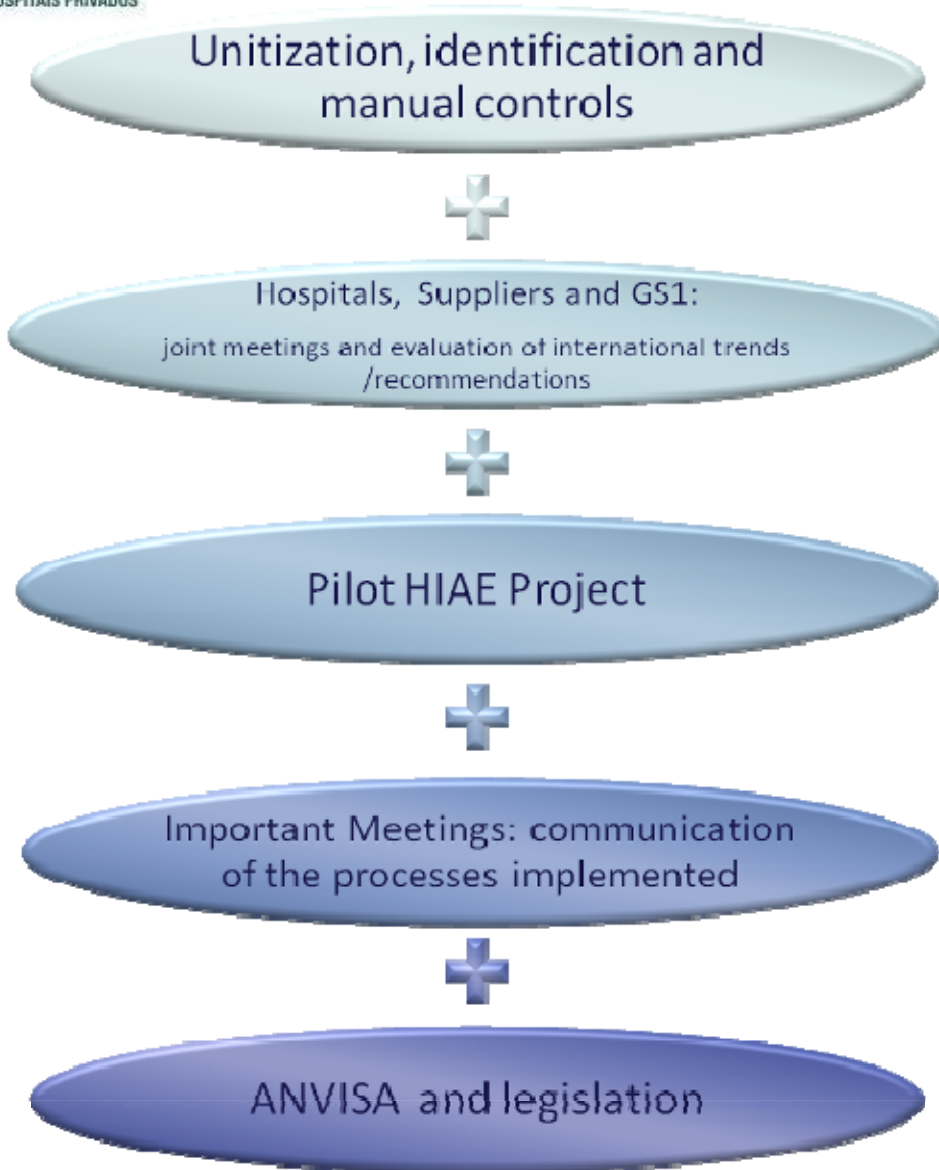


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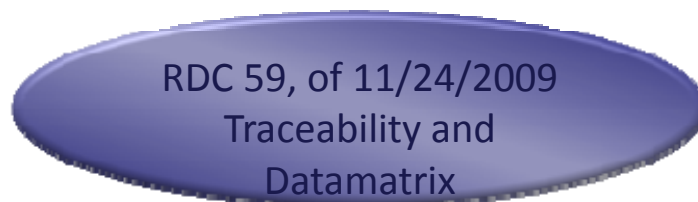
Evolution until Automation and Traceability

Institute for Healthcare Improvement – USA

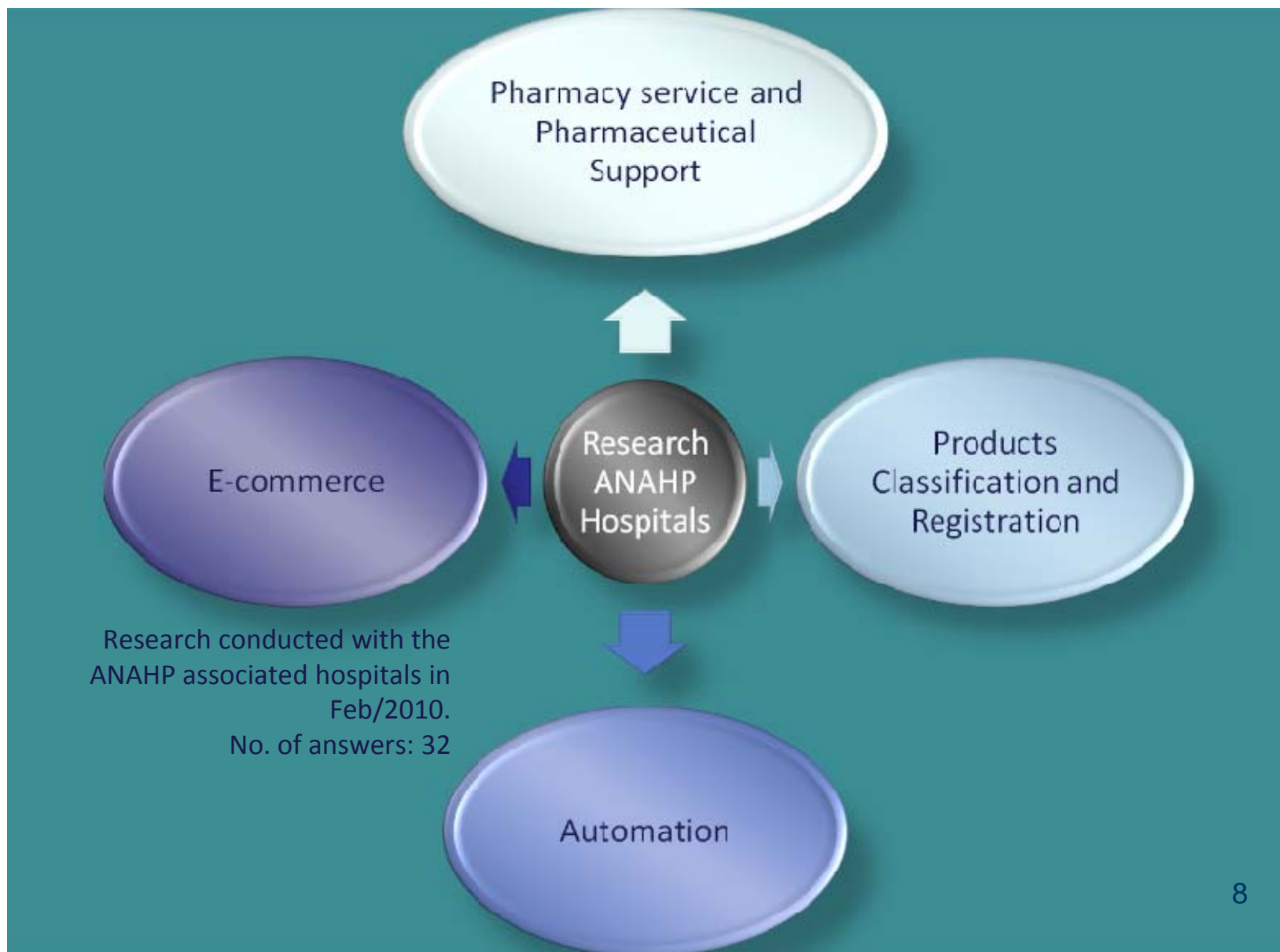
IHI is a non-profit independent entity, with sole focus in the conduction of the improvement in health care throughout the world. Founded in 1991 and with headquarters in Cambridge, Massachusetts, develops promising concepts for the improvement of patient care, through campaigns and information to volunteer registered Health Institutions.



Worldwide



TODAY: a hard work to ensure safety in patient care



Structure of the Supplies and Pharmacy Sectors

Pharmacy Sector

- All the hospitals develop Pharmaceutical Assistance activities.
- 95% of the Hospitals monitor errors with medications, drug interactions and adverse effects, among others.
- Hospitals have an average of 4 to 10 active Pharmacists.

Supplies sector

- 65% of the Hospitals have pharmacists acting in this area.
- Main activities: Standardization of medications and health products, qualification of suppliers and inventory management.

Management system for internal traceability of the institution

- Among those researched, 95% have medications traceability and 50% have traceability for health products.

80% of the Hospitals perform doses unitization.

These institutions process an average of 50,000 unit doses/month, manually and the codification /identification is made internally.

All the Hospitals have a dedicated area and team for the doses unitization.

All the Hospitals unitize solid pharmaceutical forms, 50% fraction oral liquids and 32% fraction injectables.

Most unitization processes are performed manually and the Hospitals refer to losses of up to 1% in these processes.

The main reasons for losses are breakages, damages and expiration.

Products Classification and Registration

All the Hospitals have a management system for the registration of products.

In most cases it is na internal database with manual update.

Medications

- 78% of the Hospitals follow a classification system.
- The most adopted classification is the **ATC** (Anatomical Therapeutic Chemical), in 64% of the cases.

Health Products

- The most adopted materials classification is **UNSPSC** (United Nations Standard Products and Services Code), in 40% of the responses, followed by the classification per products families and categories.

All the Hospitals evaluate and qualify their suppliers, having their own methodologies or common methodologies as is the case of **GAFO** (Suppliers Evaluation and Qualification Group).

Automation in the Receipt

Until now, 6 ANAHP Hospitals located in the State of São Paulo are technically prepared for the products receipt with the GS1 Datamatrix code.

RECEIPT

50% of the Hospitals use bar code readers or data collectors for the products receipt.

Upon receipt, the bar code reading is performed mainly in the secondary packages, both in medications and health products, being the GS1-128 code, the most prevalent.

GS1 Datamatrix Safety and Traceability



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ANAHP Hospitals using the GS1 Datamatrix in the Pharmacy Sector



ALBERT EINSTEIN

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Hospital Alemão
OSWALDO CRUZ

Aqui, tecnologia e carinho
trabalham juntos.



SANTA JOANA
HOSPITAL E MATERNIDADE



97% of the Hospitals have automation for the Management of Inventories using bar code reader or data collector.

Fractioned medications are controlled and dispensed through bar code readers, in 90% of the Hospitals .

Secondary medication packages and health products are also mentioned as the most common in the Inventories Management by 77% of the Hospitals.

Even today the codes EAN-13 and GS1-128 are the most found in the market, even considering that they do not contemplate the expiration and manufacturing batch of the products.

87.5% of the researched Hospitals use electronic commerce tools for the acquisition of medications and health products.

84% use a Purchase Portal focused in hospital business both for medications and health products.

The Purchase Portals are also the source of information regarding the suppliers documentation.

The Hospitals refer that in average 60% of their purchases of medications and health products are performed through electronic commerce.

Traceability

Reduction of the operation cost

Reduction of the time of the several steps of the process

Reduction of loss due to expiration

Resources optimization

Guarantee of the registrations performed

Reduction on errors generating greater safety in the processes

Possibility to follow up the process until the administration of the medication to the patient.

An important data to reflect on

Six to 13% of the hospitalized patients suffer at least one side effect, and 11 to 39% are caused by medications.

Table 1: Main results of national multi-centre studies on adverse effects

Studies	Year of data collection	No of patients	Stays with at least one serious adverse event	Adverse drug events		
				Part of adverse events	preventable	death
Harvard Medical Practice Study (HMPS) ³⁴	1984	30,195	3.7%	19.4%	17.7%	
Quality Australian Health Care Study (QAHCS) ⁵	1992	14,179	16.6%	10.8%	43.0%	8.0%
Thomas et al. (UCMPS) ⁶	1992	14,732	2.9%	19.3%	35.0%	
Schioler et al. (Denmark) ⁷	1998	1,097	9.0%			
Davis et al. (New Zealand) ⁸	1998	6,579	12.9%	15.4%		
Vincent et al. (United Kingdom) ⁹	1999	1,014	10.8%			
Canadian Adverse Events Study (CAES) ¹⁰	2000	3,745	7.5%	23.6%		
French Adverse Event Study (ENEIS) ¹¹ - prospective study in hospitalised patients - cause of hospitalisation	2004	8,574	6.6% 4.0%	19.5% 38.7%	31.0% 47.0%	
Spanish Adverse Event Study (ENEAS) ¹²	2005	5,624	9.3%	37.4%	34.8%	





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THANK YOU!

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