PATIENT SAFETY STRATEGY FOR THE NATIONAL HEALTH SYSTEM OF SPAIN

Main achievements: 2005- 2007

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SPANISH NATIONAL HEALTH SYSTEM

17 Health Regions

44,108,530 inhabitants

Professionals	2004
MD	194,668
Dentists	21,055
Pharmacists	57,945
Nurses	225,487

SPANISH NATIONAL HEALTH SYSTEM

GENERAL PRINCIPLES

- Social / interterritorial equity
- Integration of all health care networks under the NHS umbrella
- Oriented to the citizens: rights and duties

FUNDAMENTAL FEATURES

- Universal coverage
- Extensive benefits
- Descentralised management
- Public funding

STRATEGY DEVELOPMENT

Basic principles

2005

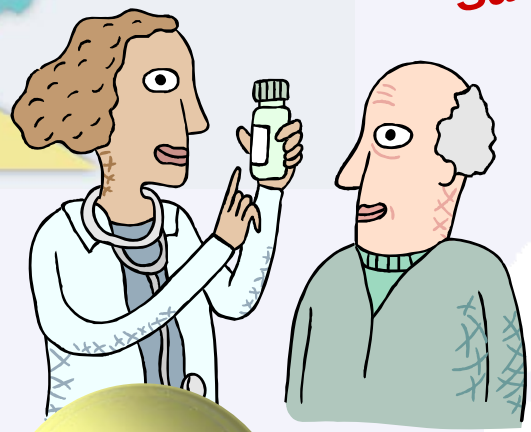
Consolidation

2006

2007

2008

Safe practices



Patients

Epidemiological studies

Country	AUTHOR & Year	Nº HOSPITALS	Nº Patients	% AE
USA (New York) (Harvard medical practice study)	Brennan 1984	51	30.195	**3,8**
USA (UTAH-COLORADO) (UTCOS)	Thomas 1992	28	14.565	**2,9**
AUSTRALIA (QAHCS)	Wilson 1992	28	14.179	**16,6**
FRANCE	Michel 2005	71	8.754	**5,1**
NEW ZELAND	Davis 1998	13	6.579	**11,3**
SPAIN (ENEAS Study)	**Aranaz (MoH) 2006**	**24**	**5.624**	**9,3**
CANADA	Baker 2002	20	3.720	**7,5**
DENMARK	Schioler 2002	17	1.097	**9**
UK	Vincent 1999	2	1.014	**11,7**

That means 450.000 adverse events/year in Spain

Spain's National Strategy for PS. Main Components

- Raising Awareness: Information-Sensibilization
- Education-Training: leaders, managers, clinicians, researchers, patients
- Infrastructures and human resources: risk management units
- Safe Practices implementation
- Establishing Networks and Alliances: Professionals, patients, organizations (national and international)
- Information systems / evaluation /measurement
- Research Promotion and capacity building

BUDGET 2005-2007 45 M €

International Conferences, workshops, seminars...

2005

2006

2007

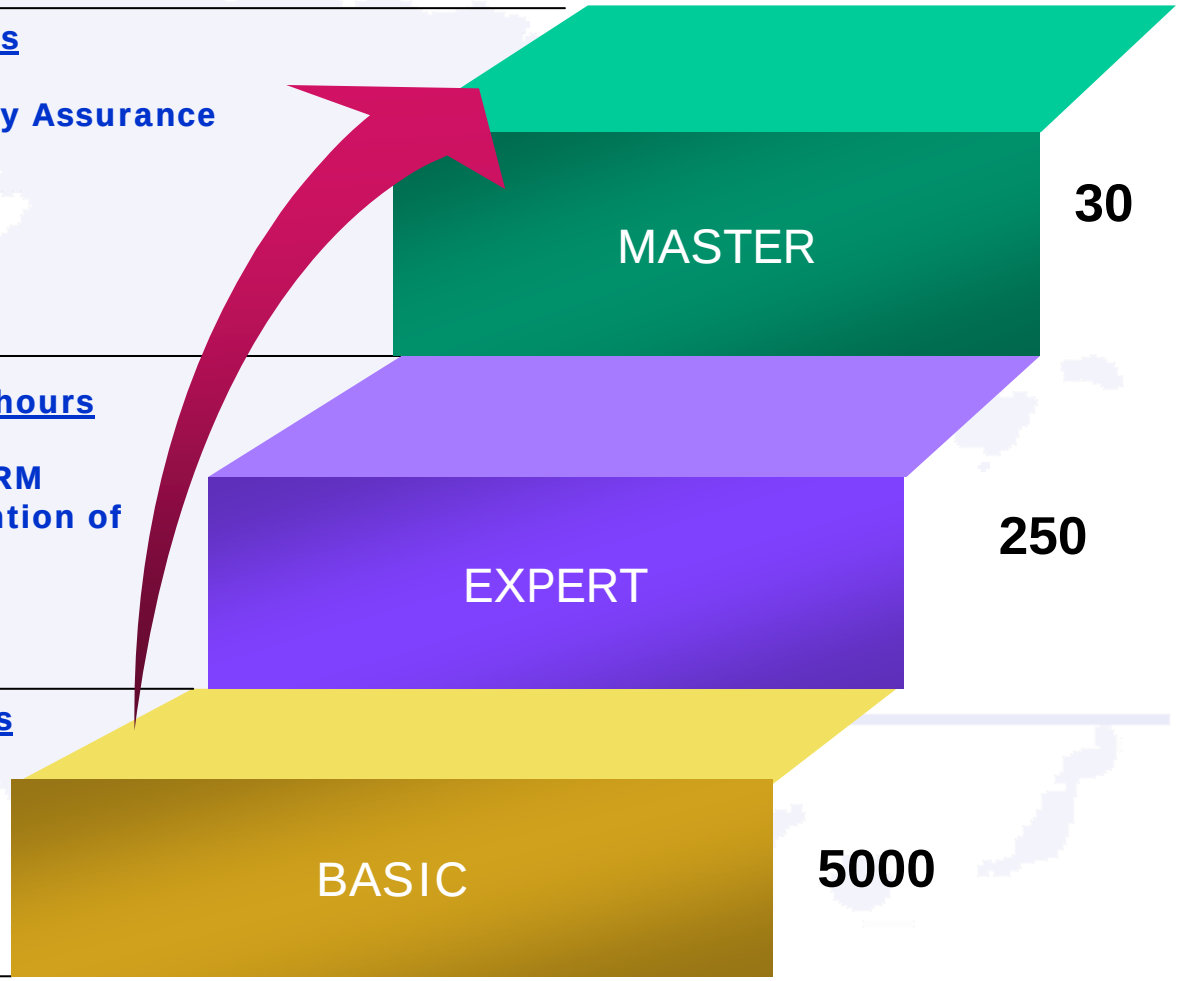
www.msc.es/conferencia-seguridaddelpaciente

Training in PS for professionals

MASTER IN PS: 1600 hours
- Concepts. Epidemiology
- Risk Management. Quality Assurance
- Clinical Practice and EBM
- Medication Errors
- AEs analysis
- Legal aspects
- Communication

RISK MANAGEMENT: 150 hours
- Risk Management tools
- Electronic resources for RM
- Epidemiology and Prevention of AE
- EBM

BASIC CONCEPTS: 30 hours
- AE, errors, etc.
- Risk Management.
- Notification systems
- Communication
- International Strategies



RESOURCES FOR TRAINING AND EDUCATION

1. e-room, didactic materials & documents
2. Newsletter, blog, interactive resources (WEB 2.0)
3. PS Online training resources

Web based integrated electronic platform

Self administred tutorial (12 hours)

In the WEB

To be downloaded

Spanish and English versions available

¡ Welcome!

Patient Safety & Adverse Event Prevention: Training materials for graduate and post-graduate levels

CD and downlable tutorial

- **Resources forTeachers & Students**
- **Powerpoints**
- **Case studies**
- **Quizes and tests**
- **Bibliographic references and links**

RESOURCES FOR TRAINING AND EDUCATION

ALLIANCES WITH STAKEHOLDERS

QUALITY AGENCY MoH

Agreements

17 Health Regions

Collaboration

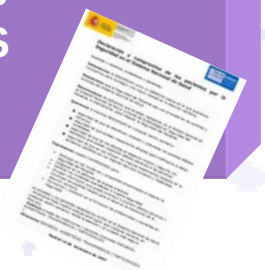
Agreements and contracts

PROFESSIONALS

140 Scientifical Societies supporting PSS.

PATIENTS/CONSUMERS

19 associations supporting PSS

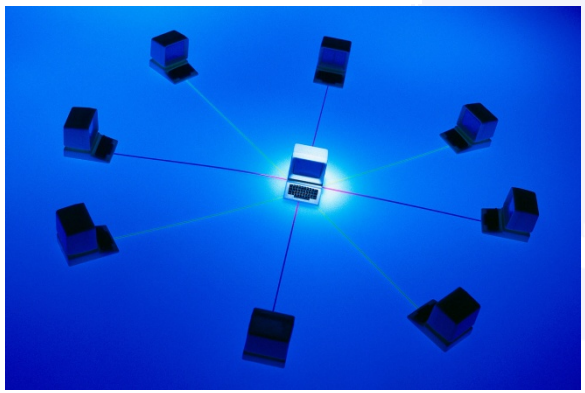


PUBLIC AND PRIVATE ORGANIZATIONS

- Academic and research Institutions and Agencies
- Public Health Schools
- Others

Strategic proyects included in the HR contracts with the MoH

Years :	2005	2006	2007
Studies of Aes in Hospitals (56%)			
Hand hygiene (94%)			
Identification Systems for hospitalised patients (89%)			
Safe clinical practices (83%)			
Information and Training in Patient Safety (89%)			
Creation of Risk Management Units (94%)			
Perception professionals (33%)			
Aes estudies in PC (89%)			
Safe Practices in PC (89%)			



PROMOTE SAFE CLINICAL PRACTICES

SAFE PRACTICES

- Anaesthesia-related complications
- Hip fractures in surgical patients
- Pressure ulcers in hospitalized patients
- PTE/ DVT in surgical patients
- Surgical wound infection
- Hand hygiene
- Wrong-site surgery
- Medication errors
- Chronic and palliative care
- Mother and baby care
- Ensure patients´ last wishes

INTERNATIONAL

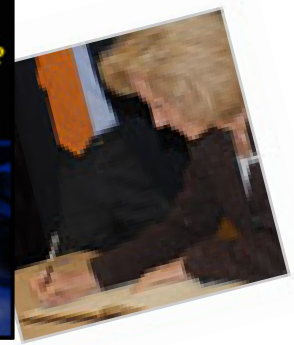
- IberoAmerican network in PS
- Involvement in WHO global alliance
- Participation in working groups
  - OECD:
  - European Commission

Committed to the WAPS

Research Advisory Council

IBEAS

Organización Panamericana de la Salud
Oficina Regional de la Organización Mundial de la Salud



PORTO 2007

Patient Safety Research
shaping the European agenda
24-26 September 2007: Porto, Portugal

Delphi Spanish validation

HR

SEMICYUC

RESEARCH

National Research Programme (Grants)

2006: 1,5 mill € (400 projects, 20 PS)
2007: 4,5 mill € (600 projects, 60 PS)
2008: 6 mill €

Cochrane Review Group in Patient Safety

Specific studies (Contracts)

- **ENEAS (Hospitals): 8,4% (CI, 95%: 7,7 - 9,1)**
- **APEAS (Primary Care): incident prevalence of 17.93 ‰ (CI 95%: 17.09‰ – 18.77‰) composed of near-misses (7.82‰) and AE (10.11‰).**
- **Nosocomial infection prevalence**
- **Medication system: ISMP Questionnaire**
- **Perception and quality of life studies (patients)**
- **Professionals perception (AHRQ)**
- **Complaints and suggestions**
- **Validation of the NQF indicators**
- **Cost studies**
- **Safe practices to prevent AEs**

International Studies

-IBEAS
-Blood stream infections
- EUNetPaS

PATIENT´S INVOLVEMENT

Perception | **Workshop** | **Workshop** | **Conference**

Nominal group

- Situation analysis
- Critical issues
- Main actions

22 patients and consumer associations

•8 Interviews associations and

•2 Focal groups
N & L system

•Proposal for a national declaration

Patient's **Patient for Patient Safety Declaration**

January **June** **November** **December**

2007

CONCLUSIONS

1. Our national health system is pretty safe **but** there is still room for further improvement

2. The improvement actions should be focused on: medicaments use, technical procedures, health care associated infection and effective communication

3. Patients are demanding: information, training , participation and empowerment

4. Main obstacles: lack of safety culture, training, communication skills and resistance to change.

5. Cultural change must reach managers, clinicians, patients and citizens.

NEXT STEPS

- Consolidation of the actions already undertaken
- Implementation of new actions
- Impact measurement
- Communication of results
- Dissemination of the Patient Safety Culture

SETTING PATIENT SAFETY AS AXIS OF :

Health Policy
Clinical practice

Patient Safety Information System

Assessing AHRQ and OCDE PSI in Spain

Terol E.Deputy Director. Quality Agency. SMoH

Objective:

To analyze, at national level, the feasibility and validity of the patient safety indicators (PSI) according to the recommendations of the AHRQ and OECD

AHRQ Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

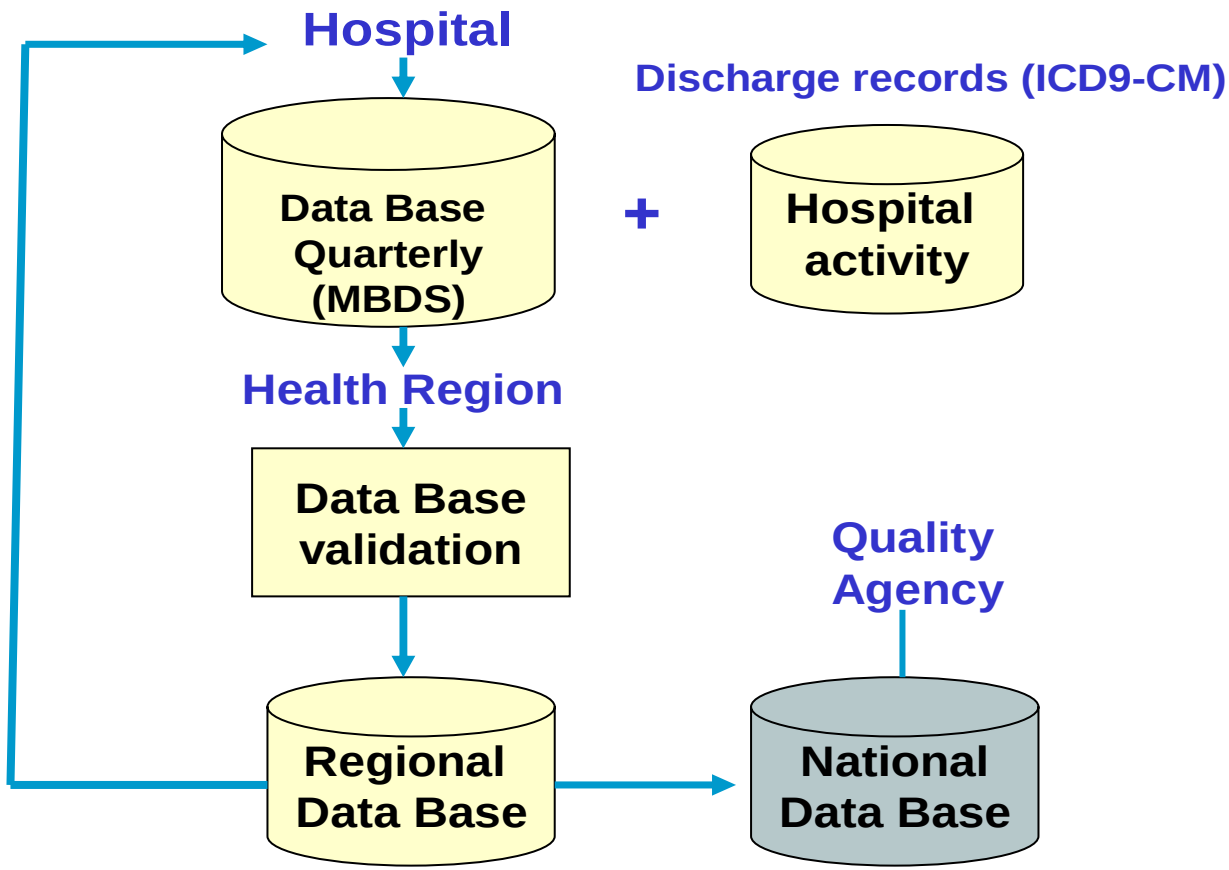
OECD

Methods:

- ✓ In Spain, data for indicators calculation are obtained from the National Minimum Basic Data Set (MBDS) that uses the ICD-9-MC codification system. (Is mandatory for all the public hospitals)
- ✓ MBDS and population data were analyzed in order to calculate the indicators according to inclusion and exclusion criteria and feasibility.
- ✓ Other secondary sources of data were used for comparability.
- ✓ A **validity study** was carried out based on the CMBD data of 12 HRs in the period 2003 -04. In addition, the variability of the indicators was also assessed.

PSI main source: MBDS

Minimum Basic Data Set



PSI secondary sources:

- **ICU - ENVIN**: Incidence of HCAI in intensive Care Units
- **EPINE** : National Prevalence Study of HCAI in Hospitals
- **GNEAUPP** : Research Group for the study of pressure ulcers at national level
- **NTSP** : National Transfusion Surveillance Programme

Patient Safety Indicators Tested 2005

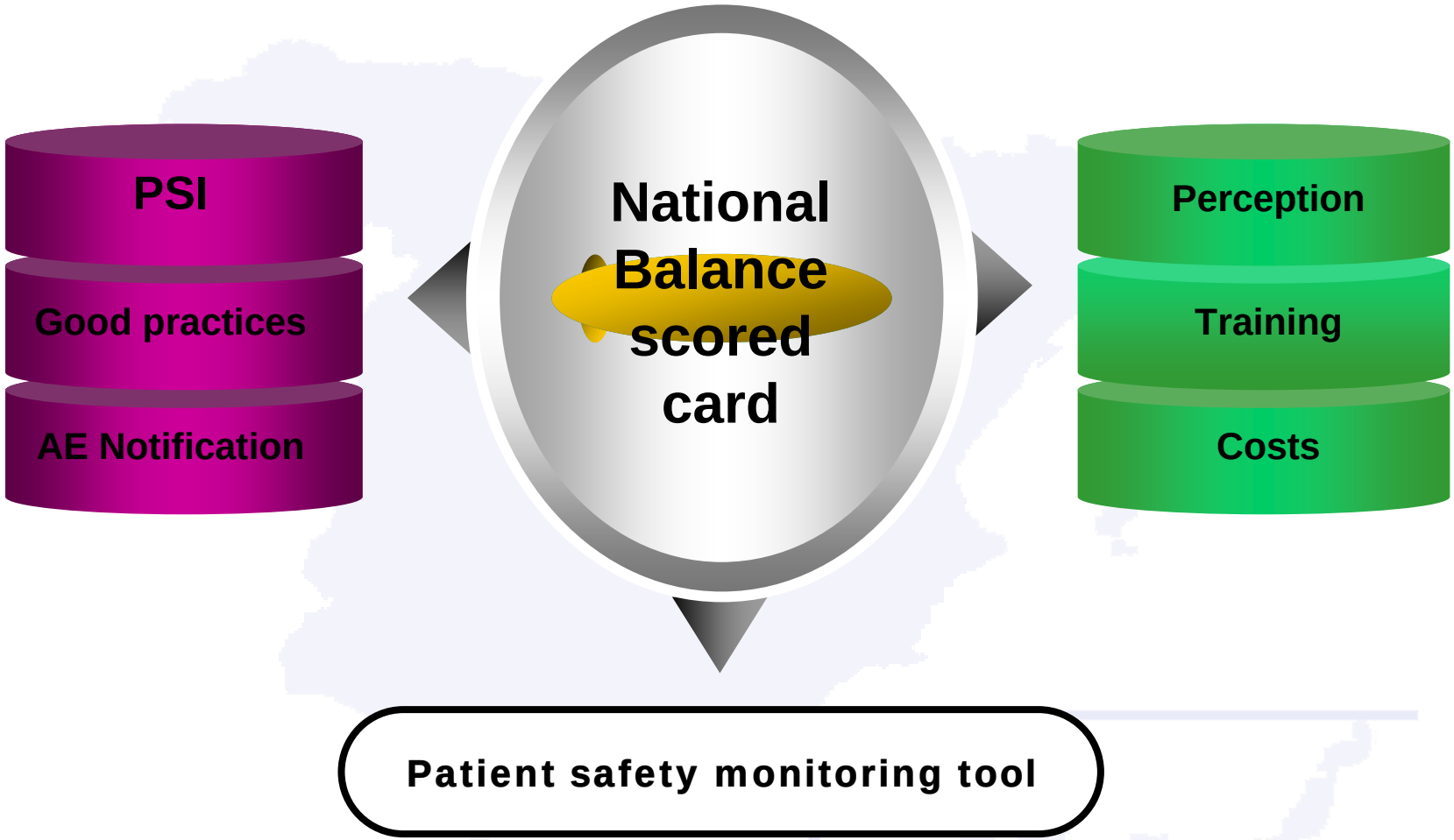
Infection due to medical care
Decubitus ulcer
Complications of anesthesia
Postoperative hip fracture
Postoperative PE or DVT
Postoperative sepsis
Technical difficulty with procedure
Transfusion reaction
Foreign body left in during procedure
Birth trauma - injury to neonate
Obstetric trauma – vaginal delivery
Obstetric trauma - caesarean section

AHRQ - OCDE national PSI results

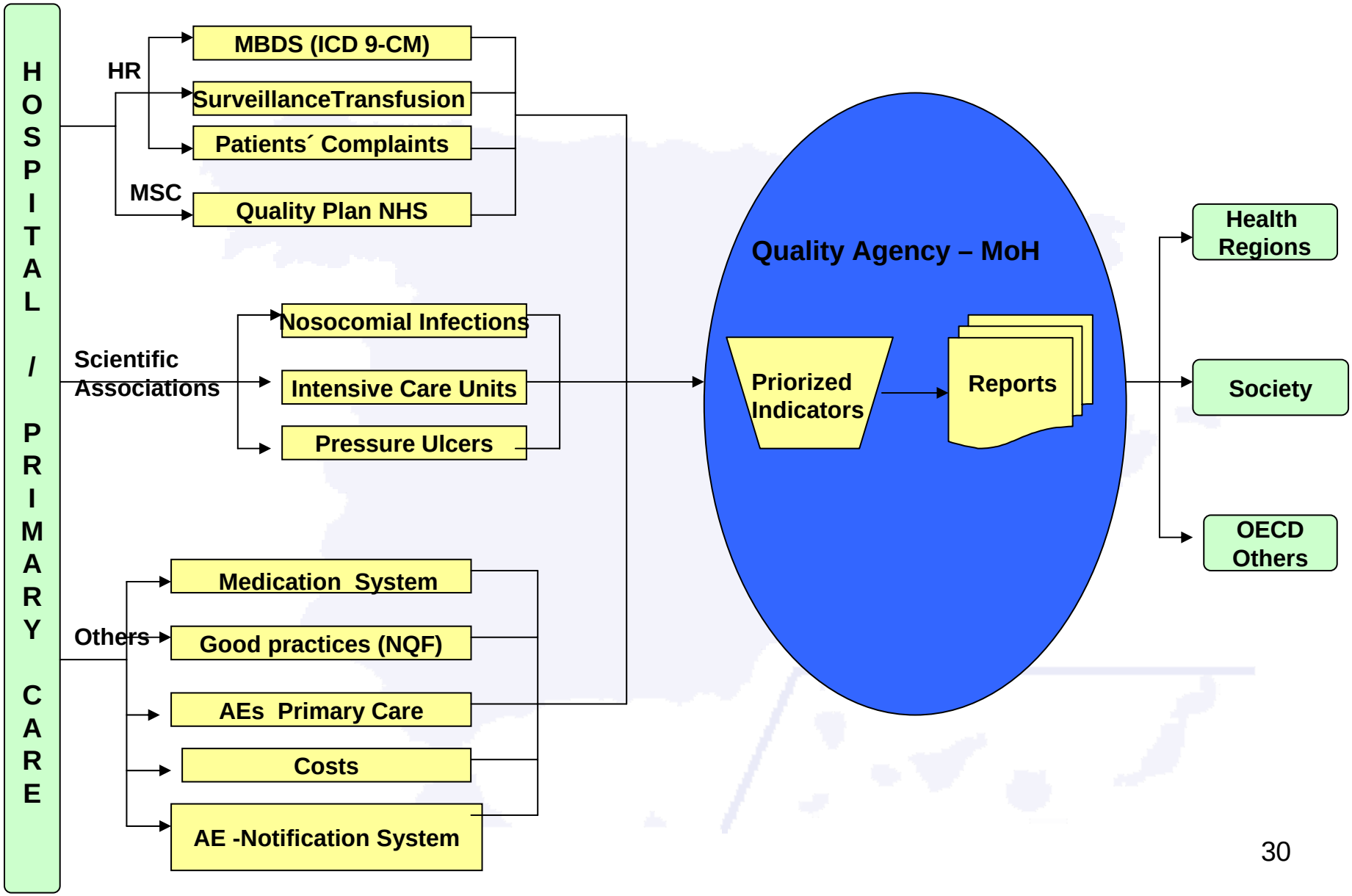
Indicators 2005	MBDS National Rate	VC (providers)	Other Sources	Remarks
Infection due to medical care	**0.1463 %**	0,54	NCI (EPINE): **8.1 %** ICU (ENVIN): 14.20 %	**MBDS**: Underreporting **ICU**: Specific study of incidence in 105 Units (97 Hospitals, 11,684 patients) **EPINE:** Specific study of prevalence
Decubitus ulcer	**0.7956 %**	0,46	GNEAUPP: **8.24 %** (95% CI: 7.67-8.85)	**MBDS**: Underreporting. High inter-hospital variability **GNEAUPP:** specific study of prevalence. Different exclusion and inclusion criteria
Complications of anaesthesia	0.0089 %	0,33		Difficulty reporting E codes
Postoperative hip fracture	0.0048 %	0,23		Adequate data
Postoperative PE or DVT	0.2614 %	0,54		Underreporting. High inter-hospital variability
Postoperative sepsis	**0.4181 %**	0,54	Bacteraemia (EPINE): **5.56 %**	**MBDS**: Underreporting. High inter-hospital variability **EPINE:** Different inclusion criteria
Technical difficulty with procedure	0.1655 %	1,05		Underreporting.
Transfusion reaction	**0.0003 %**	0.17	NTSP: **0.067 %**	**MBDS**: High inter-hospital variability **NTSP:** Specific programme. Different denominator (175 Hospitals)
Foreign body left in during procedure	0.0049 %	0,51		Possible underreporting
Birth trauma - injury to neonate	0.5209 %	0,80		Possible underreporting
Obstetric trauma – vaginal delivery	1.1985 %	0,44		Possible underreporting High inter-hospital variability
Obstetric trauma - caesarean section	0.2806 %	0,49		Possible underreporting

VC: Variation Coefficient; **ICU**: Intensive Care Unit ; **NCI**: Nosocomial Infection; **EPINE** : National Prevalence Study of nosocomial Infection;.**GNEAUPP** : Research Group for the study of pressure ulcers at national level; **NTSP** : National Transfusion Surveillance Programme

Indicators 2005	Recommendations
Infection due to medical care	Use of other source of data in parallel
Decubitus ulcer	Inclusion of the nursing report for codification
Complications of anesthesia	Inclusion of the anaesthesia report for codification
Postoperative hip fracture	No problems with the codification. There are problems with the date of the surgery
Postoperative PE or DVT	It should be necessary to review the clinical record
Postoperative sepsis	Use of other source of data in parallel
Technical difficulty with procedure	Inclusion of the surgical report for codification
Transfusion reaction	Use of other source of data in parallel
Foreign body left in during procedure	Inclusion of the surgical report for codification
Birth trauma - injury to neonate	Only clinical records for neonates in some Hospitals. It is necessary to improve clinical records for neonates
Obstetric trauma – vaginal delivery	Most women deliver in private Hospitals. It is necessary to improve codification in private Hospitals
Obstetric trauma - caesarean section	Most women deliver in private Hospitals. It is necessary to improve codification in private Hospitals


PSI
Good practices
AE Notification
National Balance scored card
Perception
Training
Costs
Patient safety monitoring tool

BALANCE SCORED CARD FOR PATIENT SAFETY



Main conclusions:

- The hospital MBDS allows construction of PS indicators through agreement of standards at national level.
- Common ICD-9-CM codification: high coverage and high expertise in codification in public hospitals are clear advantages of the data set
- Underreporting and High inter-hospital variability are a common problem (Discharge records and clinical records are frecuently incomplet)
- Promotion of use of secondary records (nurses, lab,surgery records etc.) not now used as a source for codification.
- Discharge and clinical records do not usually include adverse events or near misses.
- Complementary sources are necessary in order to achieve more accurate data to assess PS.
- PSI have to be validated and adapted locally.


Patient safety:
a long but beautiful road
to clinical excellence
Thank You