



***Mapping and evaluating quality, equity and
efficiency of nursing homes in Italy:
evidences from Tuscany Region***



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Regional project started in 2012



Residential care

*Measuring performance
between Nursing Homes*

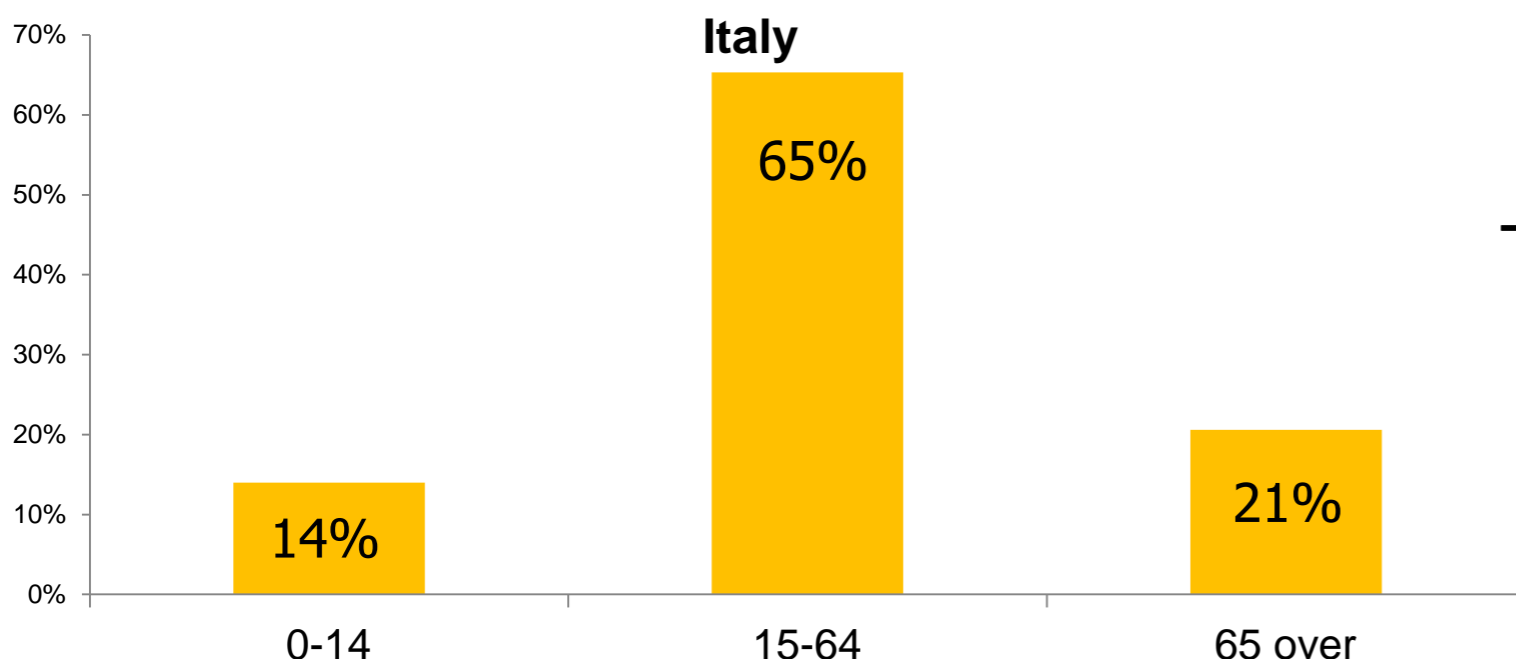
1. Short overview of Italian and Tuscan context (the starting points)
2. Mapping characteristics of NHs
3. Performance evaluation system of NHs





Starting point: demographic and costs data

Italian (about 60 mln residents) and Tuscan population (about 3,7 mln residents)



Life expectancy for women: 22.9 yy

Life expectancy for men: 18.4 yy

On 1 January 2009, there were approximately 12 million Italian residents aged over 65, of whom about 3.4 million aged over 80. The prevalence of over-65 year-olds has increased over time, from 6.2% in 1901 to 20.1% in 2009. Given the increase in the over-80s, which has risen from 0.7% in 1901 to 5.6% in 2009, it is estimated that by 2030 they will account for 9% of the total population.

The multipurpose survey conducted by ISTAT in 2008 indicates that the conditions that most frequently affected the over-65 population are osteoarthritis and arthritis, followed by arterial hypertension and, for the female sex alone, osteoporosis. The percentage weight increases with age and is significantly higher than the corresponding values for the general population.

In 2010 there were 4,1 mln residents with a disability due to aging and chronic degenerative diseases.

Public expenditure for elderly care was 1,5% of GDP distributed as

- ✓ 0.24% Home care
- ✓ 0.66% Allowance accompaniment
- ✓ 0.40% Residential care

Data source: National health profile 2009-2010

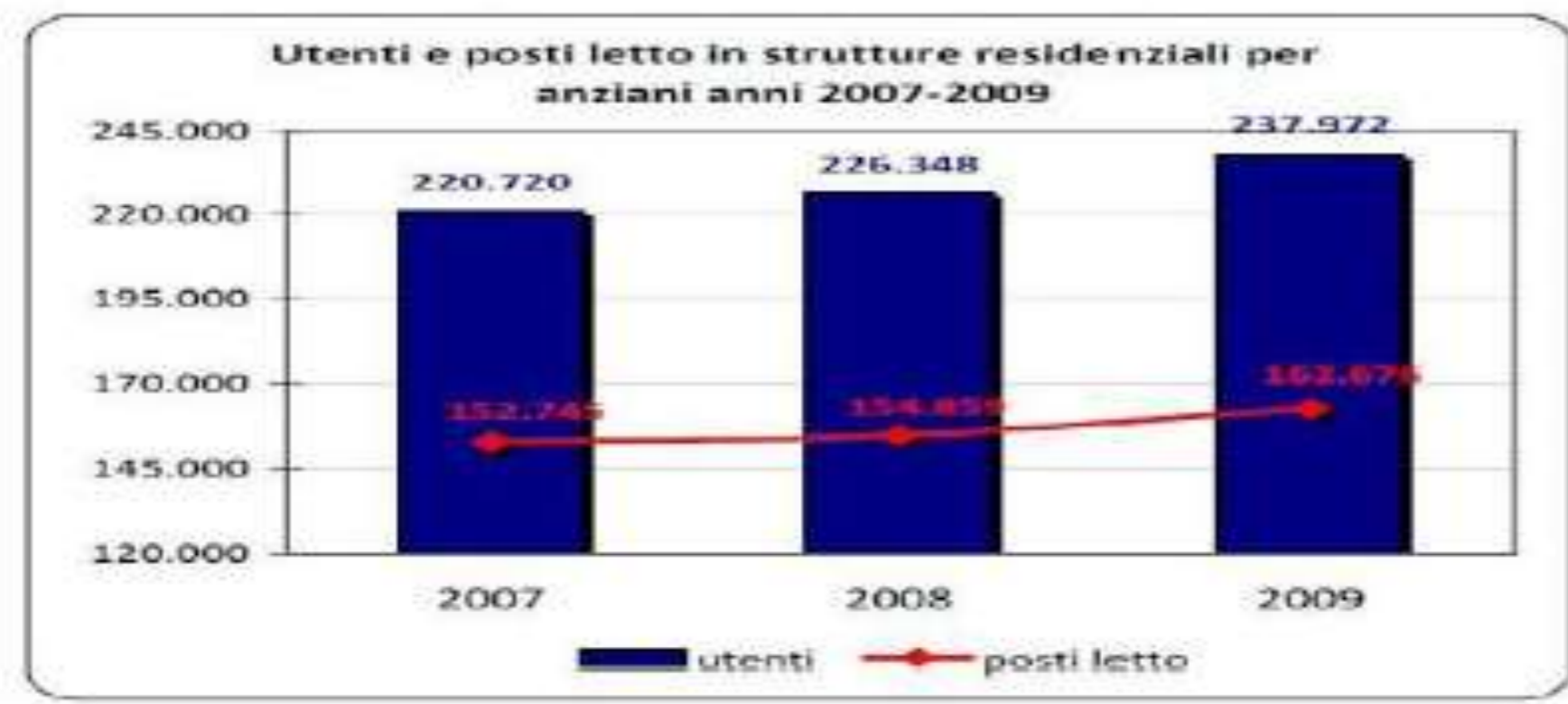




Starting point: health needs for older people

Nursing Homes in Italy (trends 2007-2008-2009)

Years	NHS Residents (rate 100.000)	Beds
2007	1871,7	152.745
2008	1894,8	154.859
2009	1969,1	162.676



6.715 Nursing Homes (public and private) for elderly in 2010





Starting point: fragmentation

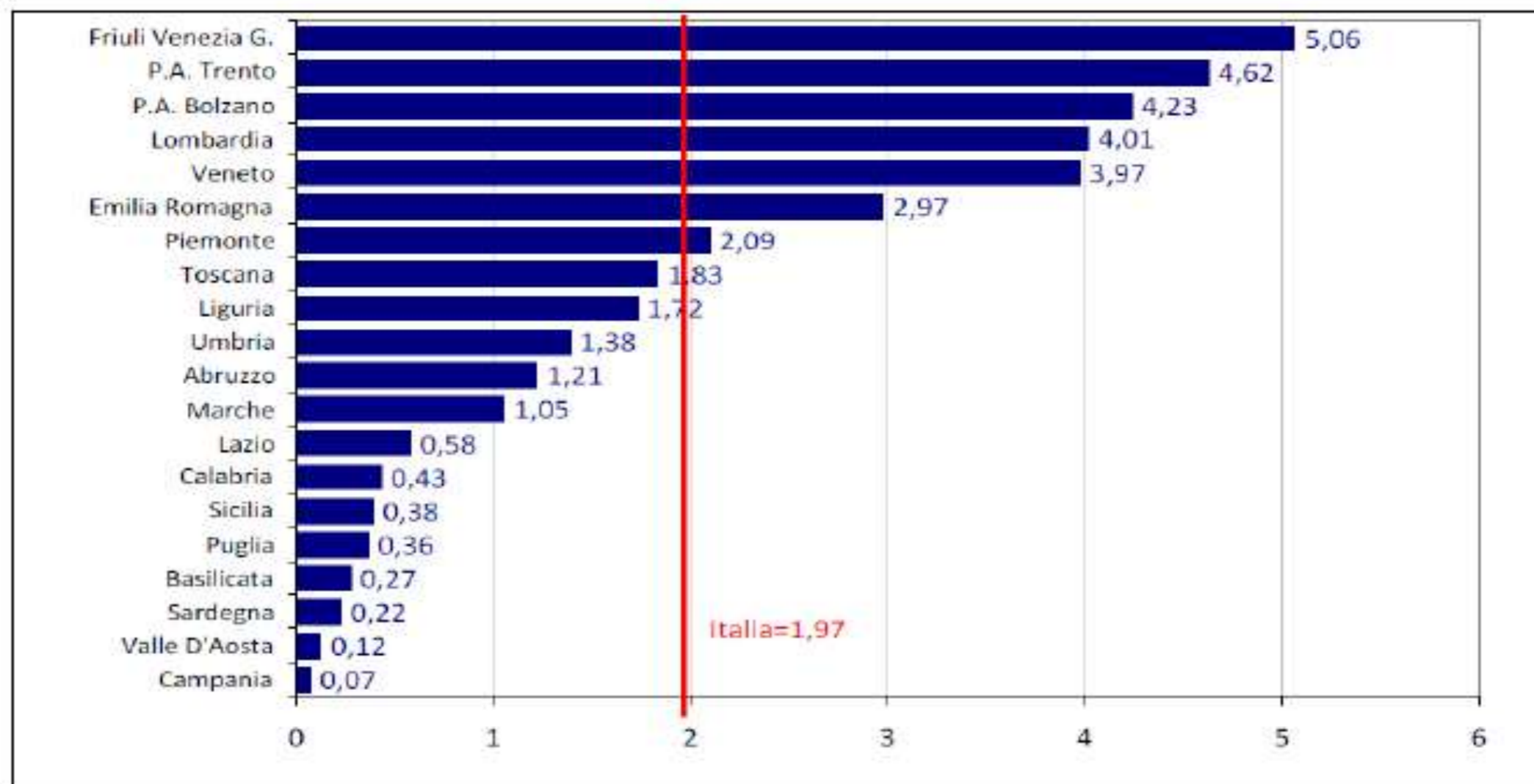
- a great fragmentation and lack of homogeneity as regards the institutional, organizational and financial aspects as well as the offer of services both between regions and within regions;





Starting point: fragmentation between regions

Italian regions NHS residents (%) in 2009



Fonte: Ministero della Salute - SIS (Sistema Informativo Sanitario)





Starting point: no monitoring and evaluation system

- lack of formal data flow and monitoring system;
lack of performance evaluation tools;
- an accreditation system based only on a first authorization (structures)
and on a formal check-list for standards;
- a good quality in LTC is associated with high levels of population
coverage for HC and NH but this doesn't give us informations about
quality of life in NH or about quality and equity of the services provided.





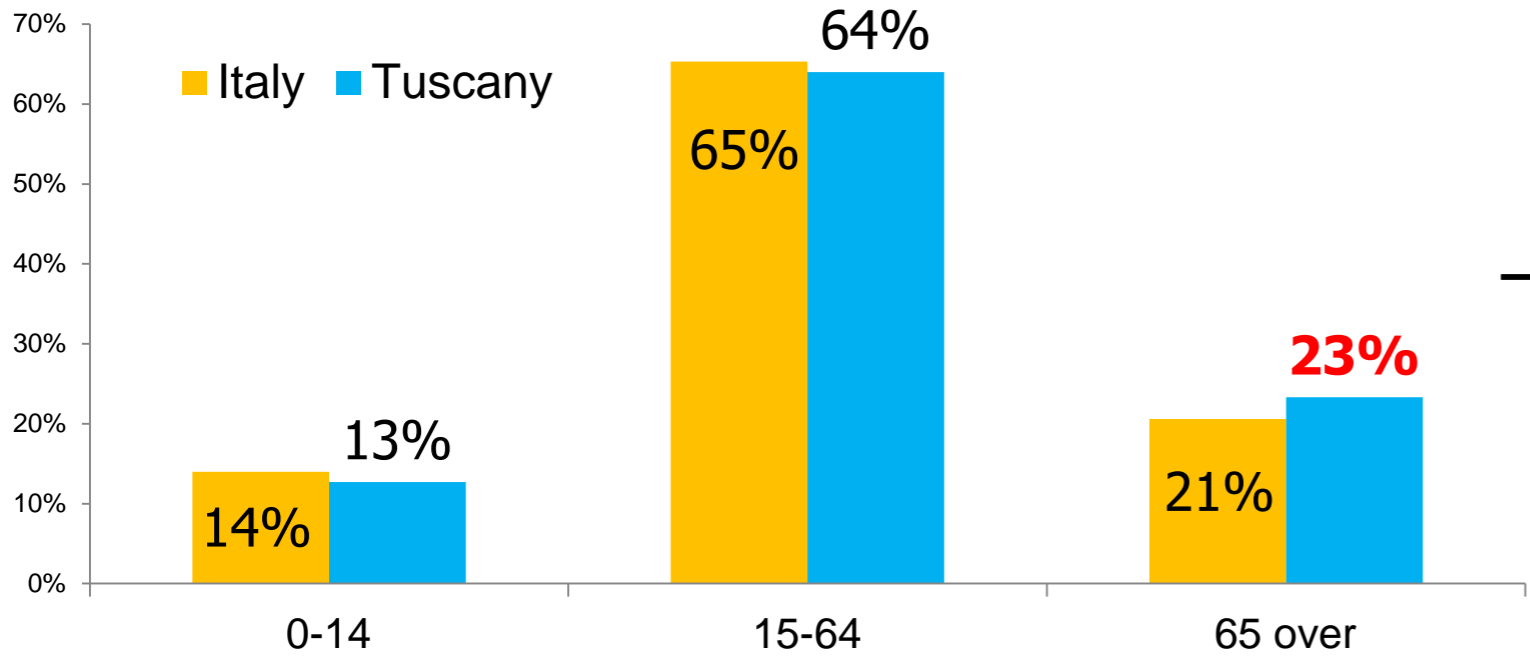
What about Regions?

Focus on Tuscany Region...





Starting point: fragmentation within regions...Tuscany Region

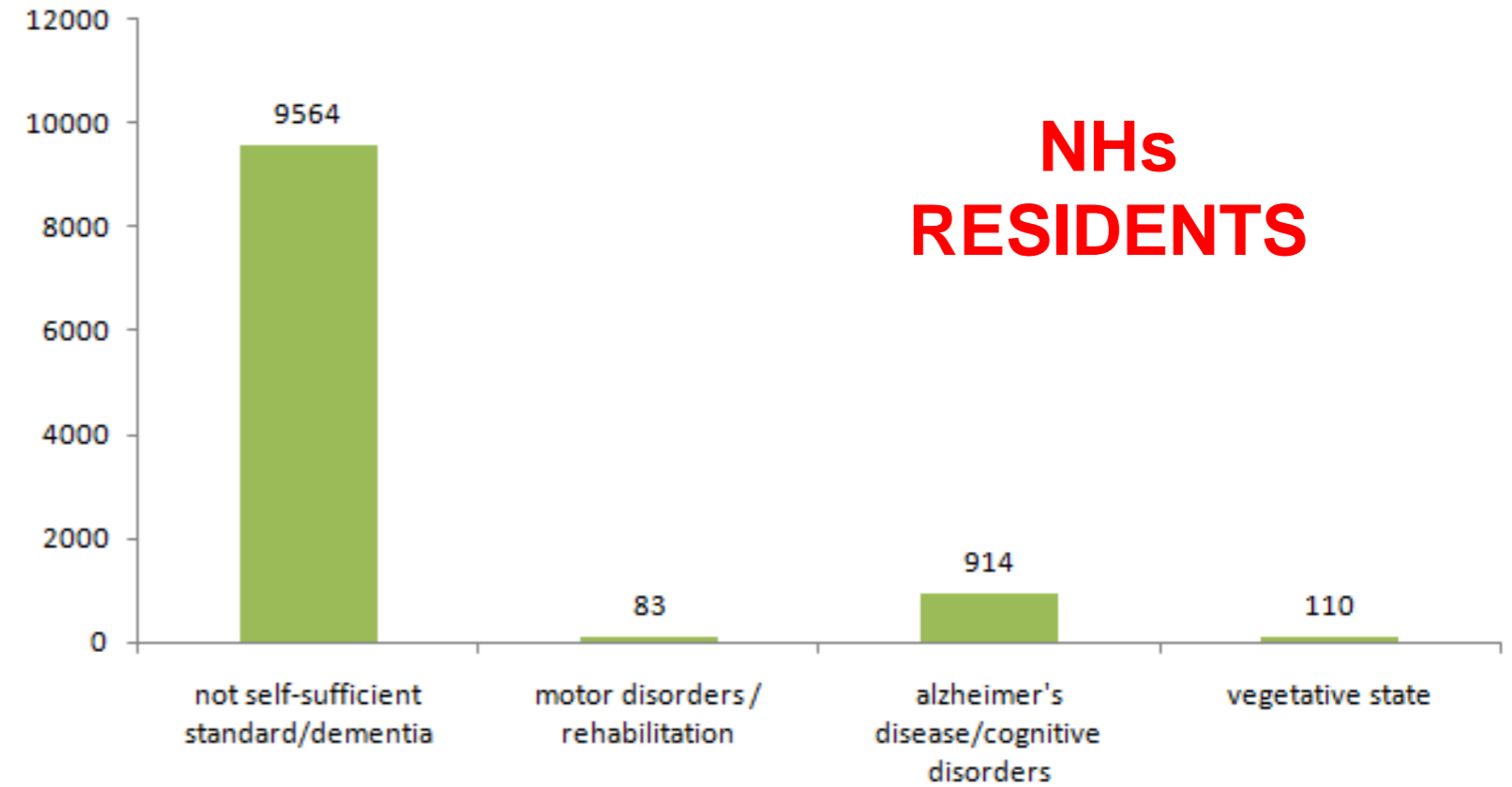


Life expectancy for women: 23 yy
 Life expectancy for men: 19 yy

NHs BEDS

Total Beds Tuscan Region NHs:
13.769
 Beds for not self sufficient people:
11.696
 Beds for self sufficient people:
2.073

Update 31/12/2011



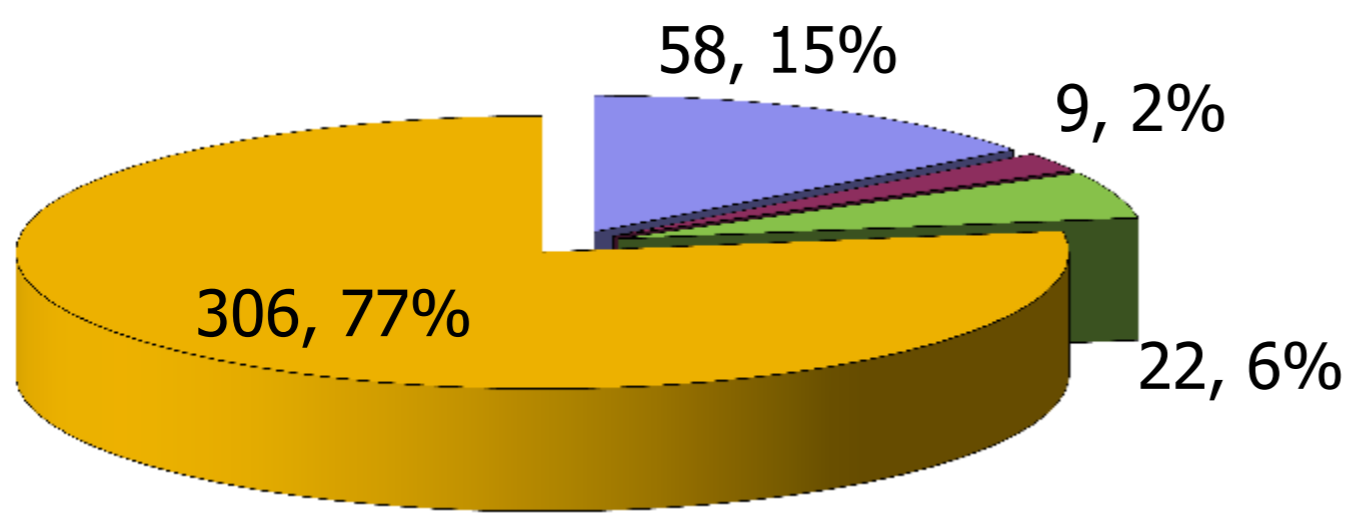
NHs RESIDENTS





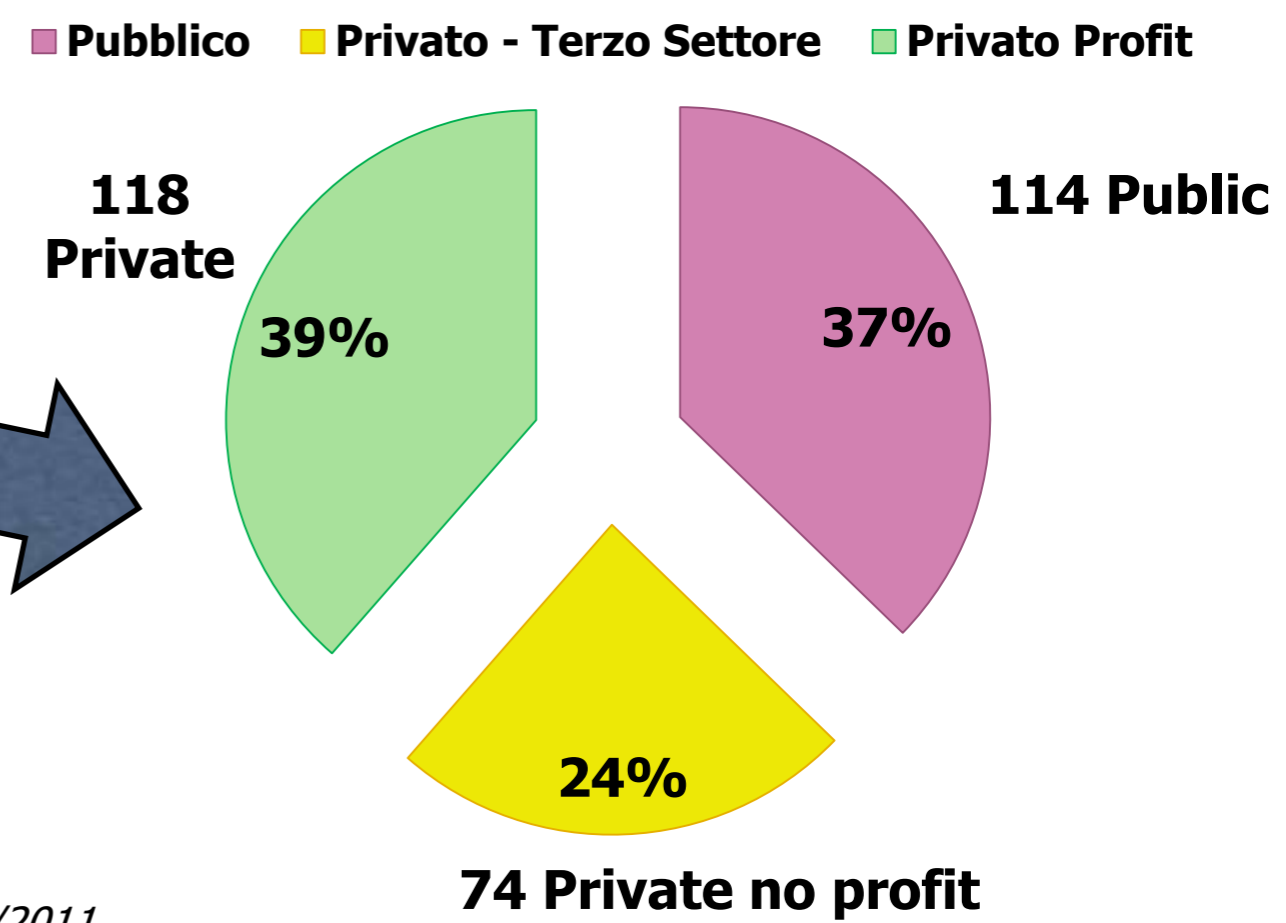
Starting point: fragmentation within regions... Tuscany Region

Long term residential care services



- Social housing
- House with community support services
- Group home
- Nursing Home

Legal form of NHs Tuscan Region



Update 31/12/2011





Research question

Does the Tuscan Residential care system guarantee equity for the elderly population?

Regional context is characterized by a great diversity

Lack of formal and systematic quality monitoring system and data flow

Since 2004 Tuscany Region has been adopting a performance system (PES) for the whole health care system (12 Local health Authorities and 4 Teaching Hospitals)



In 2012 Tuscan Region decided to started a process to monitor and evaluate Regional NHs performances.





PES process methodology

The PES process is composed by two main steps and take into account a sample of voluntary (representative statistically) regional NHs (about 70 NHs).



The map of NH organizations and services in order to monitoring

Feb. - June 2012
Mapping of NHs (staff, beds, services)

Main results

The development of a systematic PES in order to develop a benchmarking context and indicators to compare equity and efficiency of NHs

July - Nov. 2012

Structures and method

Testing the method on the sample;
Extending the method to the all regional NHs





Mapping main results

The NHs regional sample (about 70 NHs) has been completed via web a questionnaire form to collect data and information on several items as...

Residents
staff and
beds

Typology
and legal
form

Informati
on
system

Costs
and
daily
rate

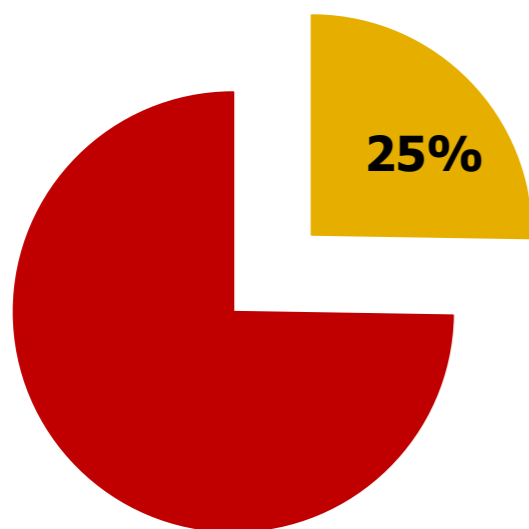




Sample NHs Beds

Voluntary NH: **3.478**

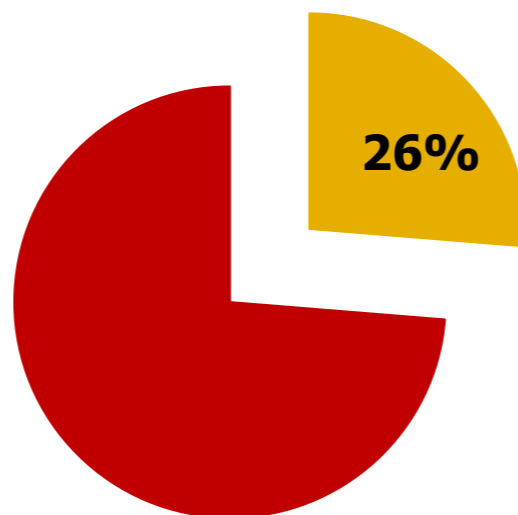
Tuscan Region NH update
31/12/2011: **13.769**



Beds for not self sufficient people

Voluntary NH: **3.062**

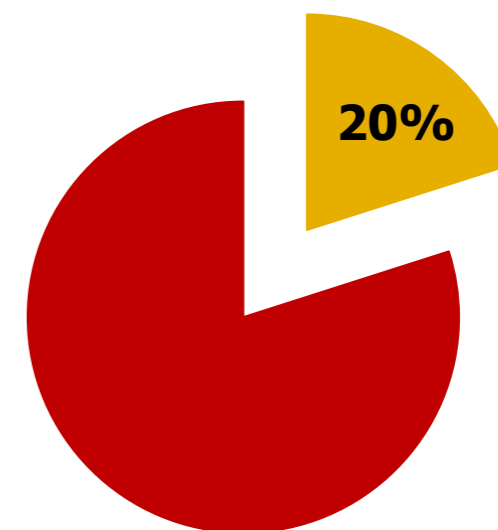
Tuscan Region
update 31/12/2011: **11.696**



Beds for self sufficient people

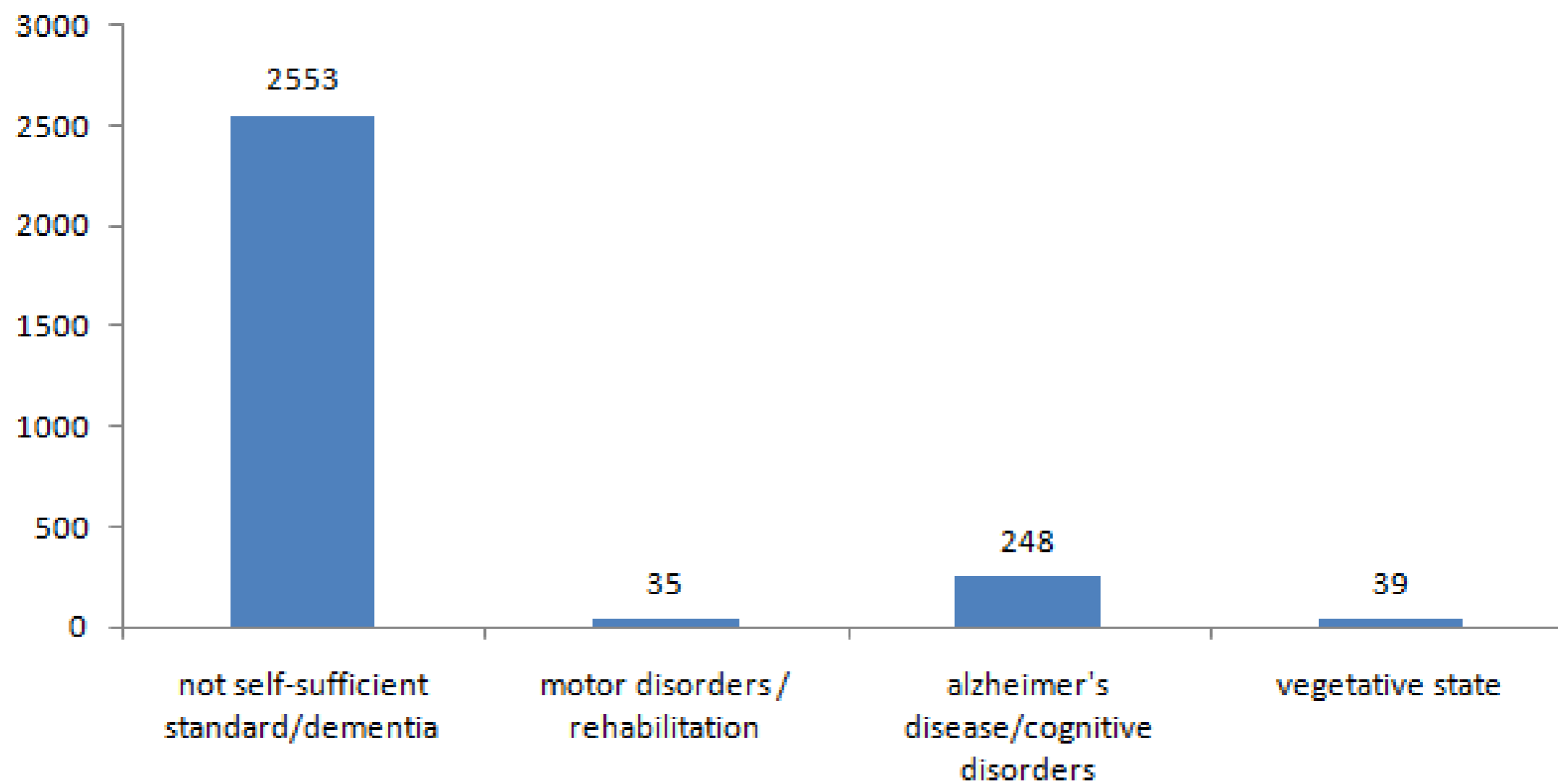
Voluntary NH: **416**

Tuscan Region update
31/12/2011: **2.073**





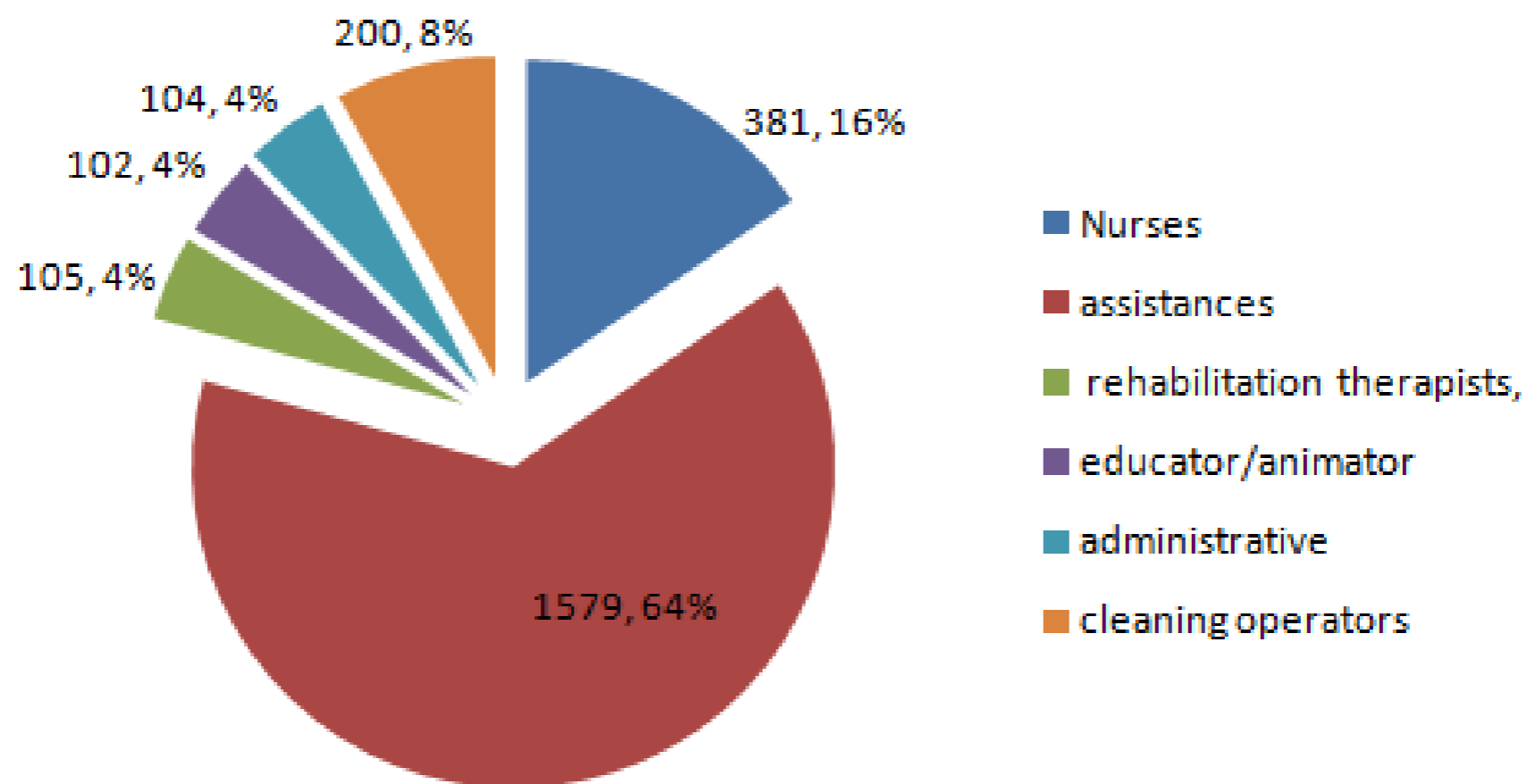
Sample NHs Residents





Staff

Total operators: 2471

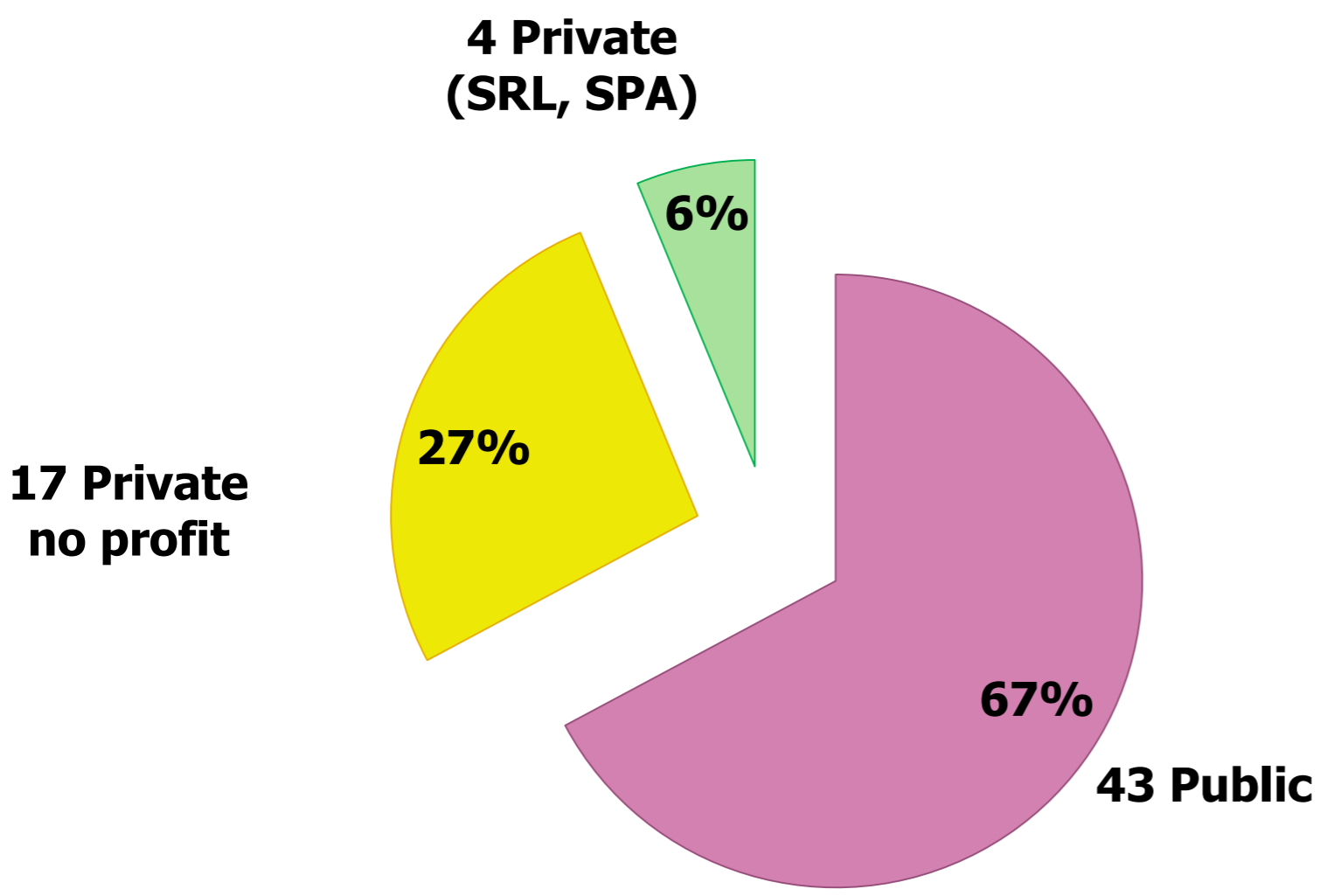


Each resident keeps
his/her GP





Legal form and services provided of sample NHs

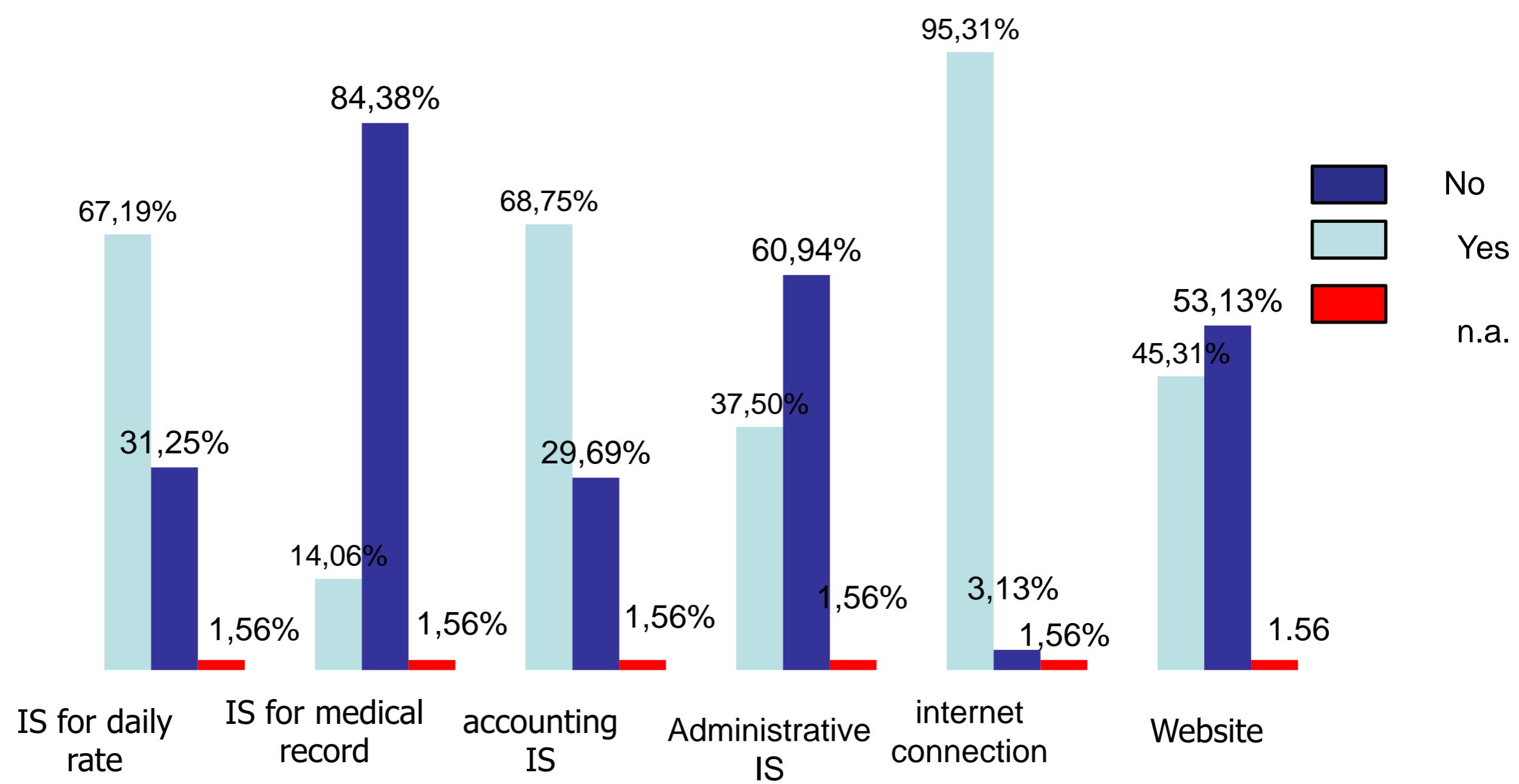


28 only NHs
36 others services too
(day center; day
Alzheimer center; home
care; home catering)





Information System





NHs daily rate costs system in Tuscan

Daily rate costs composed by:

A “health daily rate” which is determined by the Region and included nursing and basic care, physiotherapy and others health services.

It is paid by Region if the nursing home has an agreement with the regional health service. Today health basic rate is about 53€ /pd.

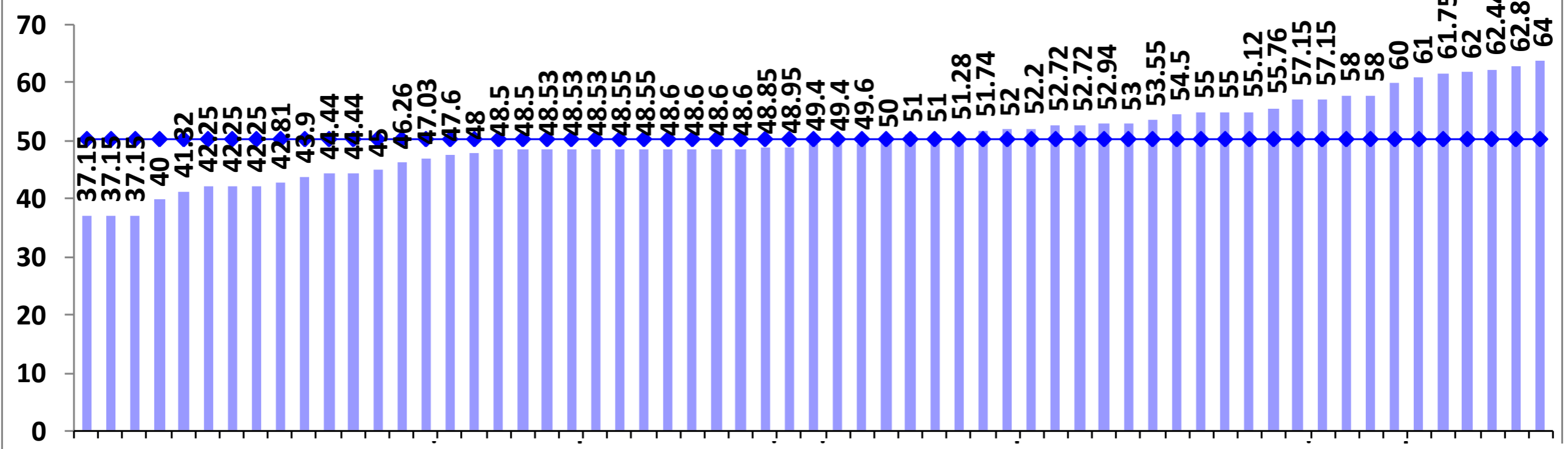
If not self sufficient people have Alzheimer the health rate is about 64€/pd.

A “Social daily rate” , that can include services such as catering, laundry, assistance, supervision, cleanliness of the rooms and common areas, utilities, animation and social program. It financed by municipalities depending on SES (income) of the users.





Social Daily rate for not self sufficient 2011



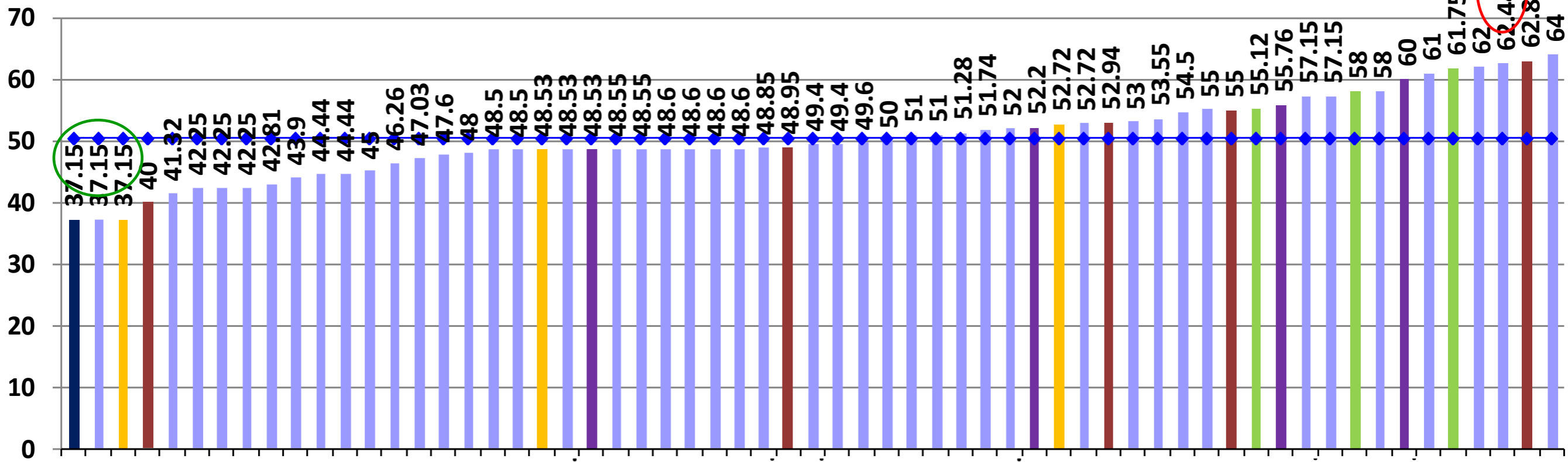
min: 37,15 €/GG
max: 64 €/GG

**Average 2011: 50,38
€/GG**

**MEDIAN 2011:
49,04 €/GG**



Social Daily rate for not self sufficient 2011: Services not included



Min.: 37,15 €/GG

Max.: 64 €/GG

AVERAGE 50,38 €/day

MEDIAN 49,04 €/day

Altro ■ Parrucchiere ■

Lavaggio ind pers ■ Podolog ■

Do different prices correspond to different quality?

Do different prices guarantee equity?





Performance evaluation system





Laboratory with managers

A training and research laboratory with NHs managers

27 classroom days; 3 groups of managers



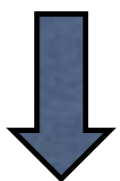
- Share a common vocabulary
- Stimulate a good debate between NH operators
- Improve overall quality
- Make NH responsible for use of public resources
- Propose an evaluation system
- Consensus on indicators for evaluation

In Tuscany NH managers are very different; there are doctors, lawyers, social workers, nurses, graduate in political science, philosophy, law, economics and business





3 groups of NHs managers during training lesson discussing about possible evaluation dimensions and relative indicators, starting from the regional health care PES (taking into account LHAs with hospital care and primary care)



In order to describe the performance evaluation system, six areas have been identified to highlight the core results of the regional healthcare system.
It aims to support governance system at regional level

250 indicators, of which 130 concern performance evaluation.

Data is available since 2006 at the following website:
www.performance.sssup.it/tošana

3 different groups propose possible structure of PES and relative indicators



Plenary session to have consensus



PES and list of indicators



Collecting data





Results of Managers Laboratory

Construction a PES characterized by:

- Public reporting system
- Multidimensionality
- Benchmarking performance
- Accountability





Methodology of PES

Overview : population over 65 health status in the area where is NH (A)

Evaluation
dimensions

**B quality of
integration and
daily activities**

**C quality of
clinical care**

**D users and
family
satisfaction**

E staff

**F financial
efficiency**

Area of
evaluation

9 areas with
21 indicators

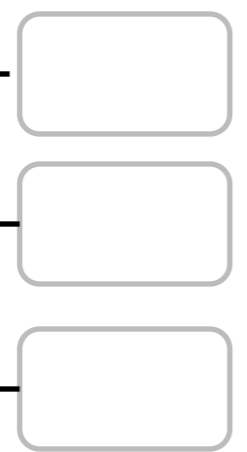
2 areas

4 areas with
10 indicators

3 areas with
13 indicators

Indicators

5 areas with
19 indicators



The data are referring to a "period index",
since the lack of data flow and IS.





Indicator XX

Definition:	Percentuale di ospiti che partecipano alle attività di animazione quotidiane
Numerator:	Numero Ospiti che partecipano ad almeno 2 attività di animazione quotidiane nella settimana indice
Denominator:	Numero Ospiti presenti in struttura nella settimana indice
Type (%;yy;...)	x 100
Notes:	Per attività quotidiane si intendono quelle ordinarie previste dal programma di animazione. Si contano le singole attività (es. gioco della tombola vale uno anche se la faccio 3 volte a settimana). Per settimana si intende dal Lunedì al Venerdì.
Data source:	Registro attività animazione e registro presenze ospiti





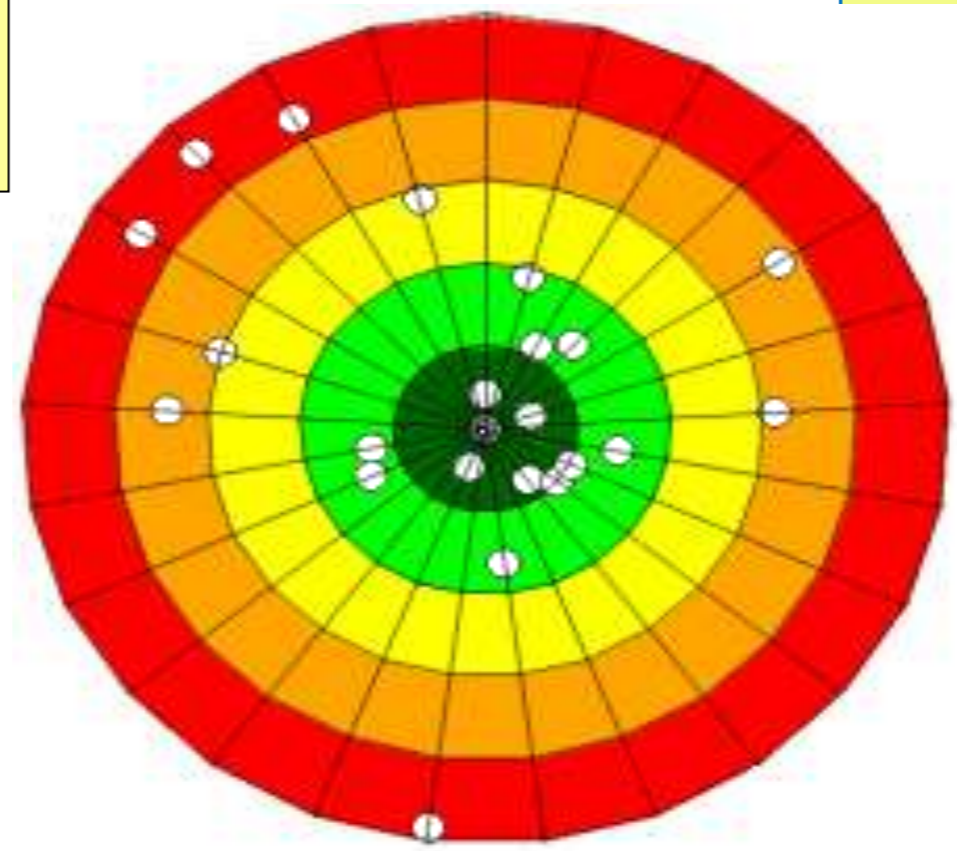
Tuscan NH evaluation system: reporting system

Quality of integration and daily activities (B)

Financial efficiency (F)

Quality of clinical care (C)

Staff (E)



Users and family satisfaction (D)





Quality of integration and daily activities (B)

Areas





Indicators

Personal care plan

Percentage residents with personal care plan



Average time of preparation of personal care plan



People involved in the preparation of plan (GP, specialists, residents relatives, social worker)



Quality and timeliness (achievement, rivaluetion)

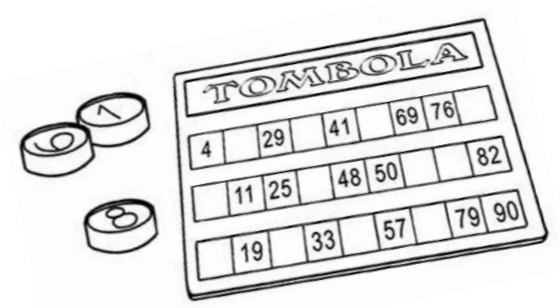




Indicators

Entertainment

Quality of activities
(nm outdoors, extra)



Integration with outside
(involvement of external parties)





Indicators

Partecipazione

Percentage residents who participate daily recreation activities (daily and in weekend)

Committee residents and relatives meetings (number)





Indicators

Personal care

Assisted bathing

...





Indicators

End of life

Hours of training

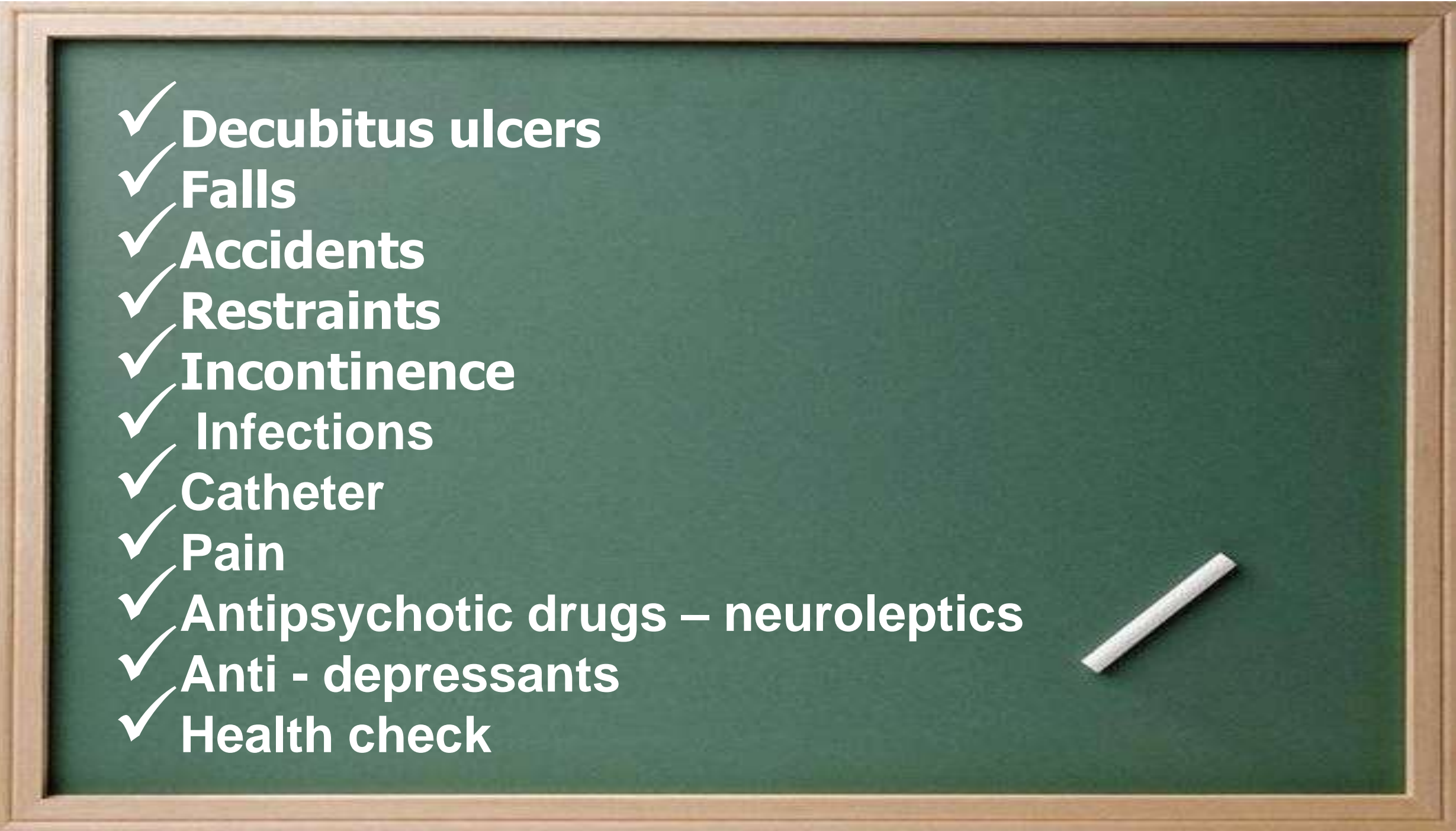
Support for the end of life





Quality of clinical care (C)

Areas

- 
- ✓ Decubitus ulcers
 - ✓ Falls
 - ✓ Accidents
 - ✓ Restraints
 - ✓ Incontinence
 - ✓ Infections
 - ✓ Catheter
 - ✓ Pain
 - ✓ Antipsychotic drugs – neuroleptics
 - ✓ Anti - depressants
 - ✓ Health check





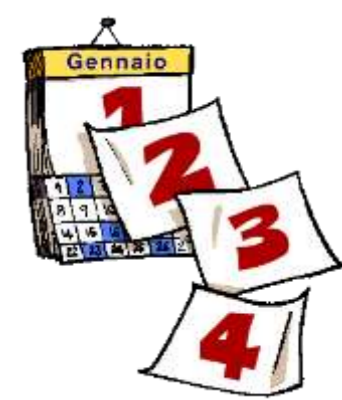
Indicators

Decubitus ulceres

Prevalence of residents who suffer from decubitus ulcers

Incidence of residents who suffer from decubitus ulcers stage 2-4 that began in the NH

Improvement of decubitus ulcers





Indicators

Falls

Incidence of falls



Percentage of residents
who have fallen more
than once





Indicators

Accidents

Percentage of accidents
(fractures, burns,
bruises)





Indicators

Restraints

Percentage of residents who are physically restrained



Percentage of residents with restraints different from sides of bed





Indicators

Incontinence

Percentage of residents who are incontinence of urine



Percentage of residents with fecal incontinence





Indicators

Pain

Percentage of
residents with pain
management





Indicators

Health check

Percentage of residents who had a health check by a specialist





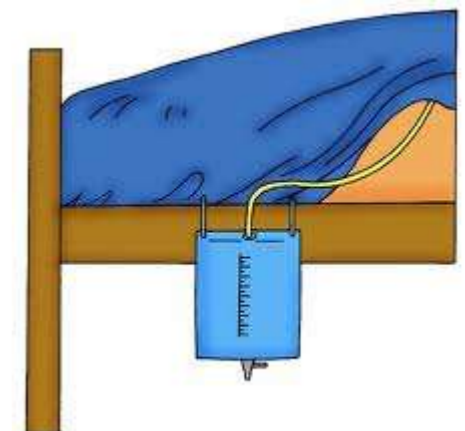
Indicators

Infections and catheter

Incidence of urinary tract infections

Percentage of residents with catheter

Improvement of urinary tract infections





Indicators

**Anti depressants and
antipsychotic drugs**

Percentage of
residents who use
antipsychotic drugs

Consumption
trends

Percentage of
residents who use
anti depressants





Residents and family satisfaction (D)

The sample

The questionnaire

The method

The indicators





The sample

Residents

The
sample

>60 beds: 30
45-60 beds: 20
36- 45 beds: 15
<35 beds: 10

Relatives

The
sample

>60 beds: 30
45-60 beds: 20
36- 45 beds: 15
<35 beds: 10



The questionnaire

10 dimensions
64 items

Welcome and orientation

Relationship with outside

Activities

Environment and comfort

The method

Residents

Interview face to face

Relatives

Telephone Interview

The indicators

Residents and relatives indicators
will be defined on the basis of the dimensions of the questionnaire





Staff (E)

Indicators on
staff

The
questionnaire on
organizational
climate





Indicators on staff

Injury rate
(nurses, assistances,
phisioterapists)

Training
(nm op who have attended
at least one)

Turnover





Staff satisfaction (E)



All operators of 64 NH: about 2470

The questionnaire

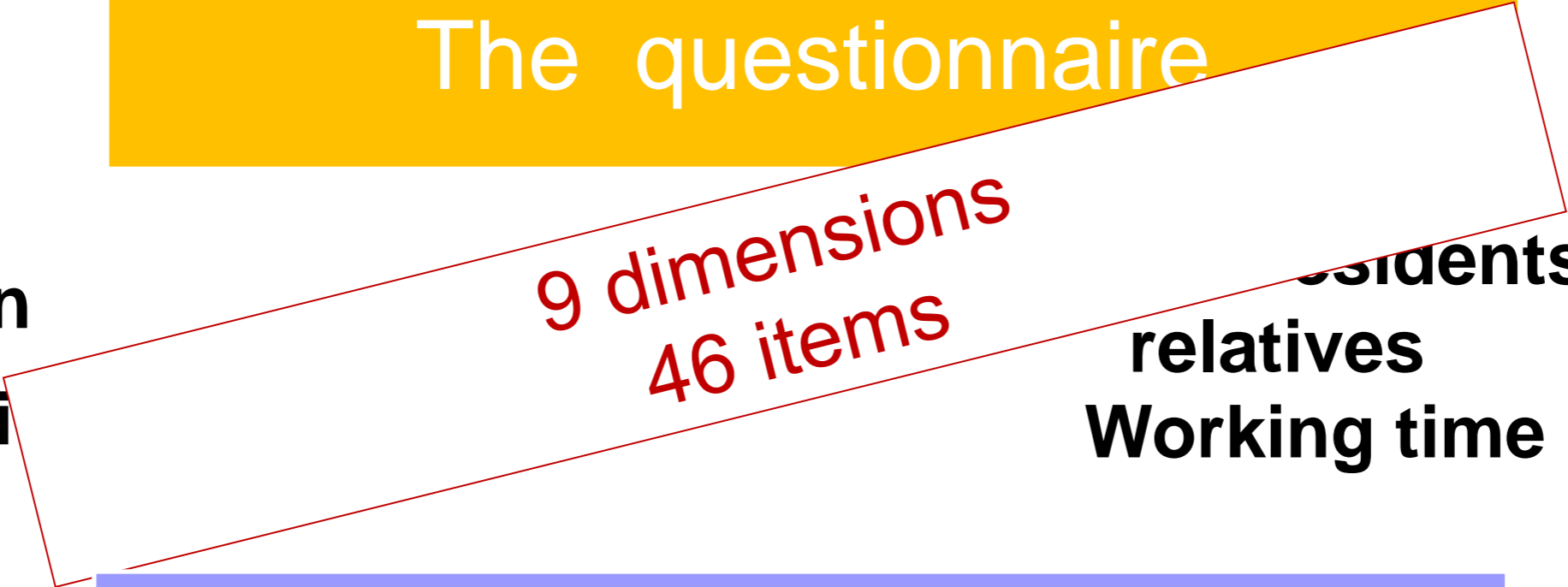
The method

The indicators





The questionnaire



9 dimensions
46 items

Motivation

Activi

**Residents and their
relatives
Working time**

The method

On line – website

PC in place with
assistance

The indicators

Residents and relatives indicators
will be defined on the basis of the items of the questionnaire





Financial efficiency (F)

Indicators

Drivers

- authorized bed
- days of care provided

Social-health care cost

Social care
cost

Health care
cost

Personnell costs

Nurses, assistences, rehabilitation therapists, administrative

Data source: accounting system NHs





Some results update 31.08.2012

NHs visited: 30

Residents interviewed: 605

Relatives interviewed: 100

**Adhesion of others 60 public NHs
owned by Municipalities (about
100% coverage of public NHs)**





Next steps

Research

Collecting data for sample (up to november)

Testing indicators with eventual adjustment

Benchmarking 2011 performance (december)

Involving all the NHs in PES

Policy implications

Implementing and Information System

Accountability on quality and equity of the residential care

Possible reform on financing system

Creating a network between NHs





Thanks!

