DGS desde 1899
Direção-Geral da Saúde

New insights into an interactive health mapping tool

GEOSAÚDE , a Portuguese example

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Introduction

DGS desde 1899
Direção-Geral da Saúde

Context:

- Portuguese National Health Plan aims to promote health equity

- Monitoring indicators developed to assess progress.

- Web based GIS is an excellent way to illustrate national and regional differences in these indicators

Objective: Describe the development of GeoSaúde in terms of its content, features and usability
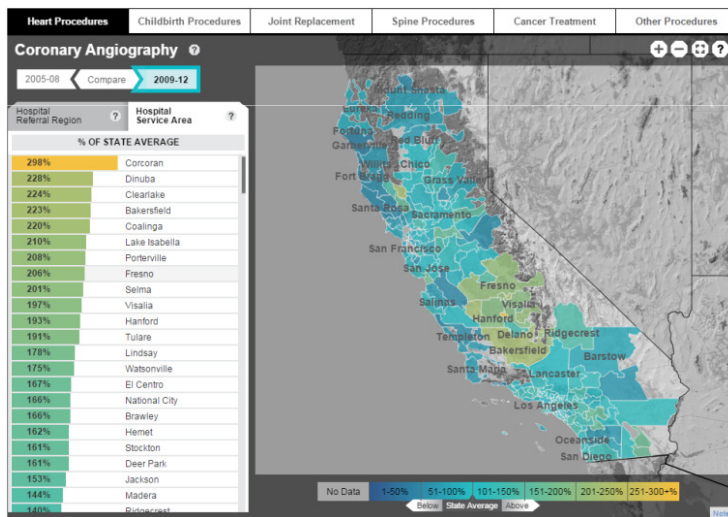
Methods

- The Directorate-General of Health formed a working group

- Meetings and brainstorming with stakeholders, to choose indicators and identify information to gather

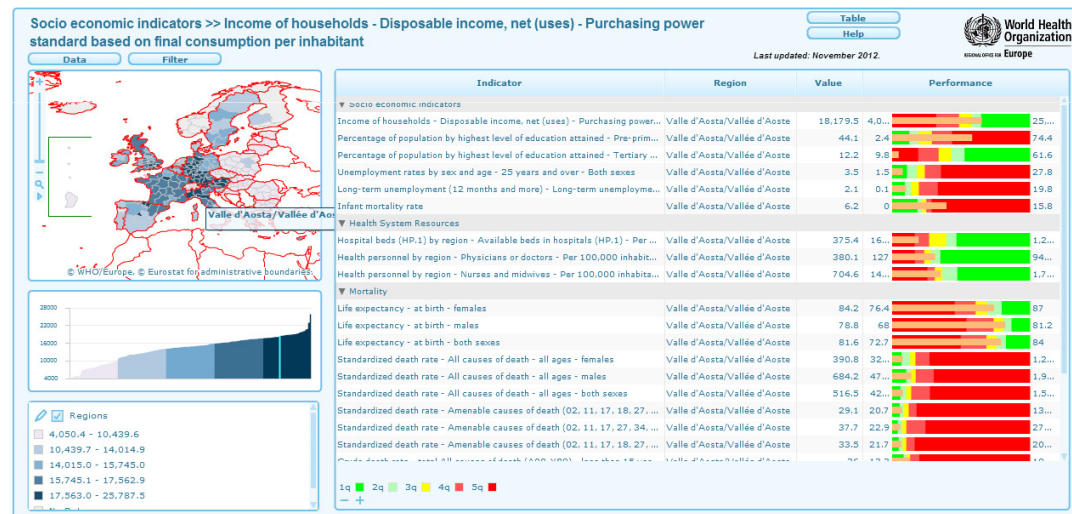- Research on web design, regarding usability and colour mapping

Methods

- International health web based GIS platforms consulted

Clean interface type

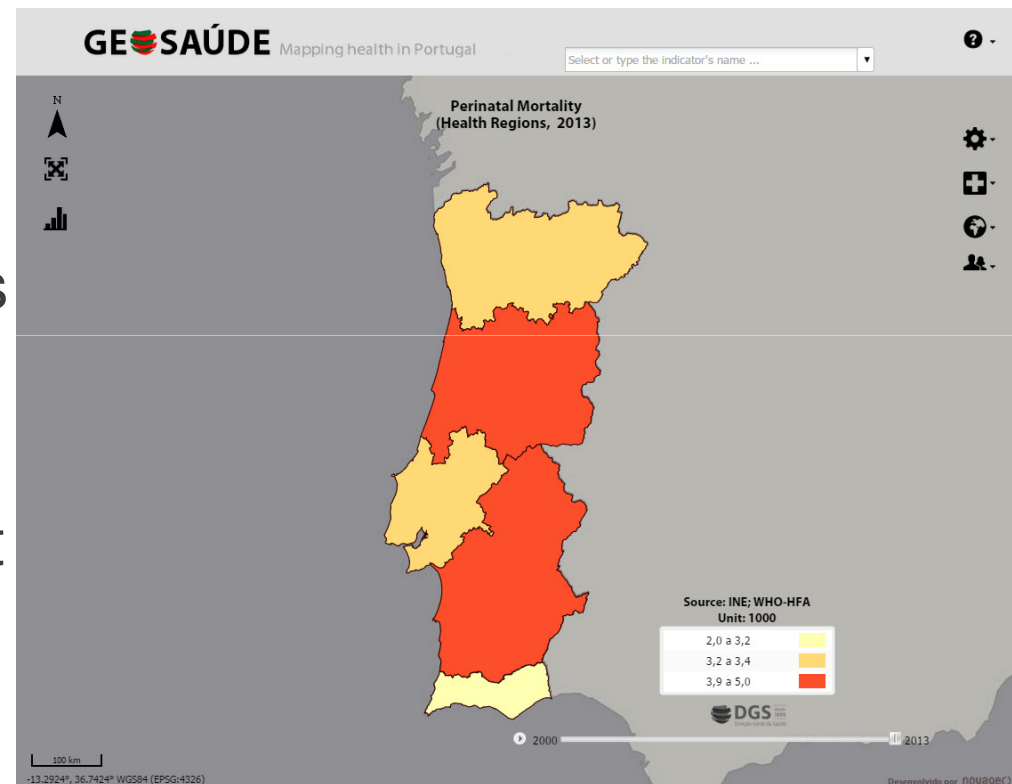Source: California HealthCare Foundation

Dashboard type

Source: World Health Organization

Methods

- Built up the requirements to hire web GIS developers

- Compiled the health indicators and targets of the National Health Plan (NHP) and Priority Health Programs (PHP)

- Reviewed available sources of data

- Extracted, transformed and uploaded (ETL) data from the identified sources to GeoSaúde database
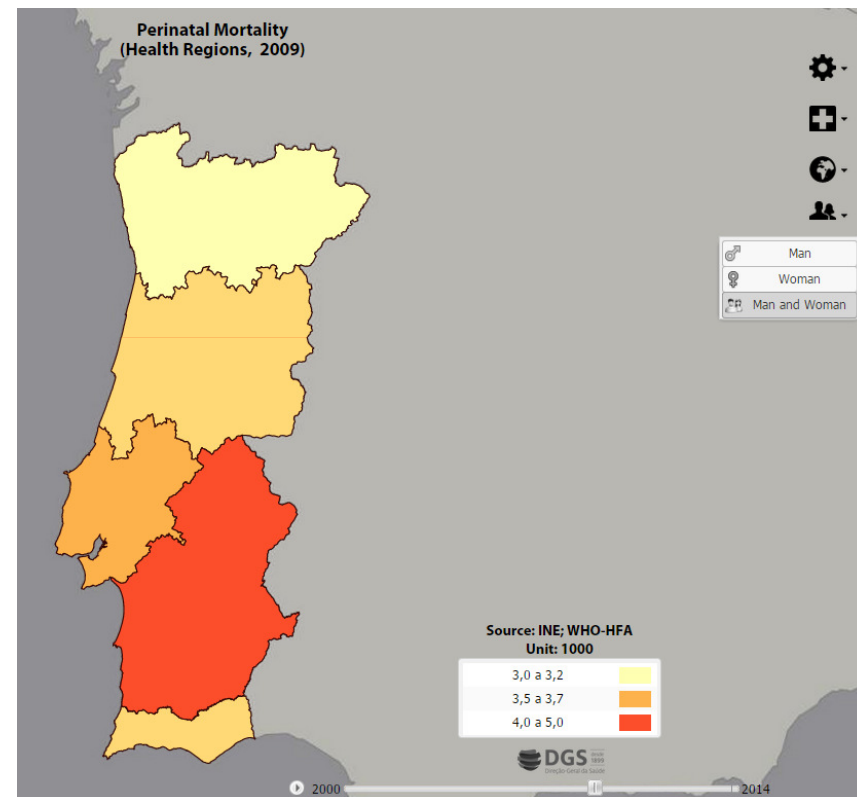
Results – web design

- Easy to use

- Clean interface look

- Grey coloured map canvas background

- Maps in a smooth yellow-red colour ramp, by default
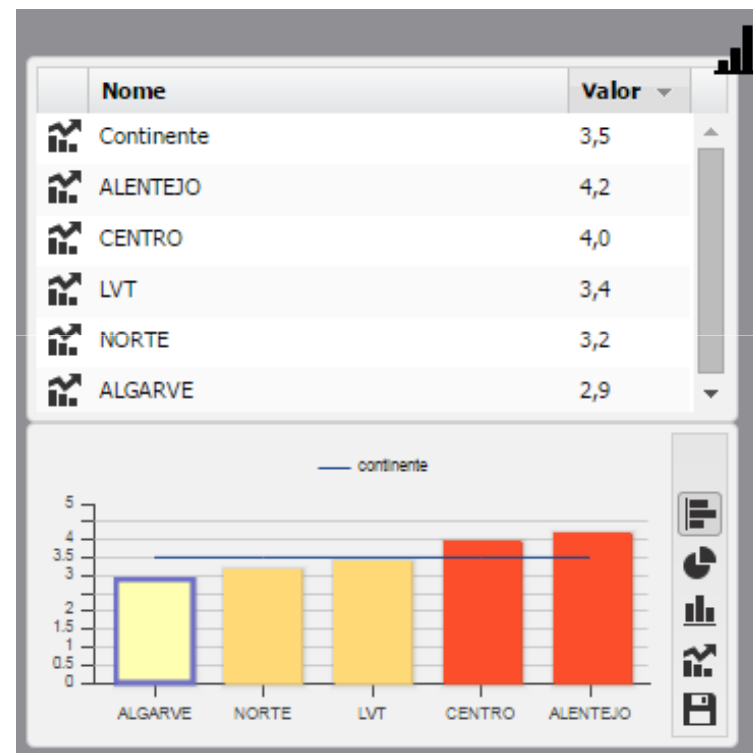
- Monochromatic intuitive icons

Results – features

- 3 dimensions:
  - ❖ time
  - ❖ gender
  - ❖ administrative units

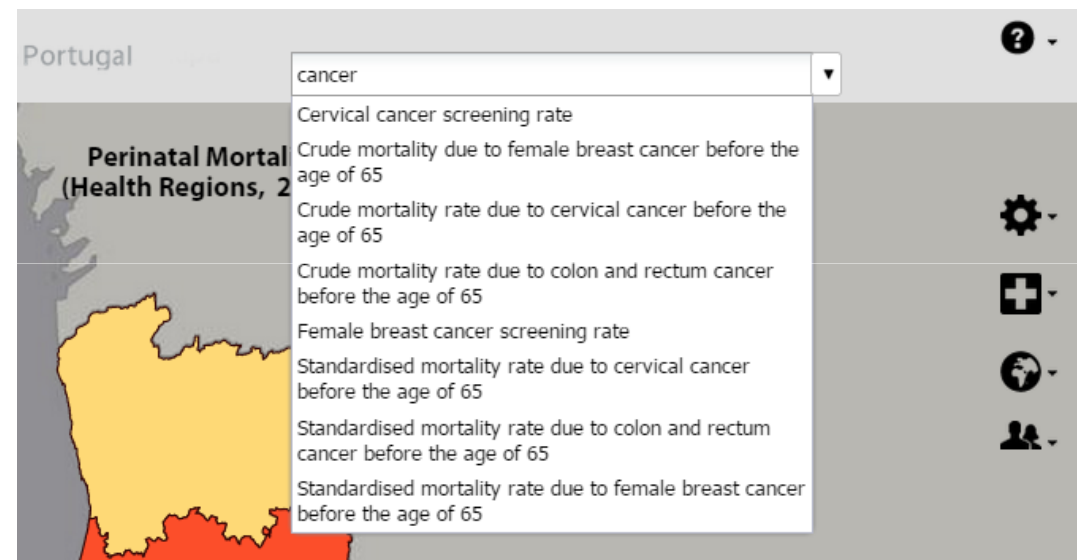- Perceive time evolution of geographic differences

Results – features

- Several types of graphs and charts are possible

- Upload and download data by the users
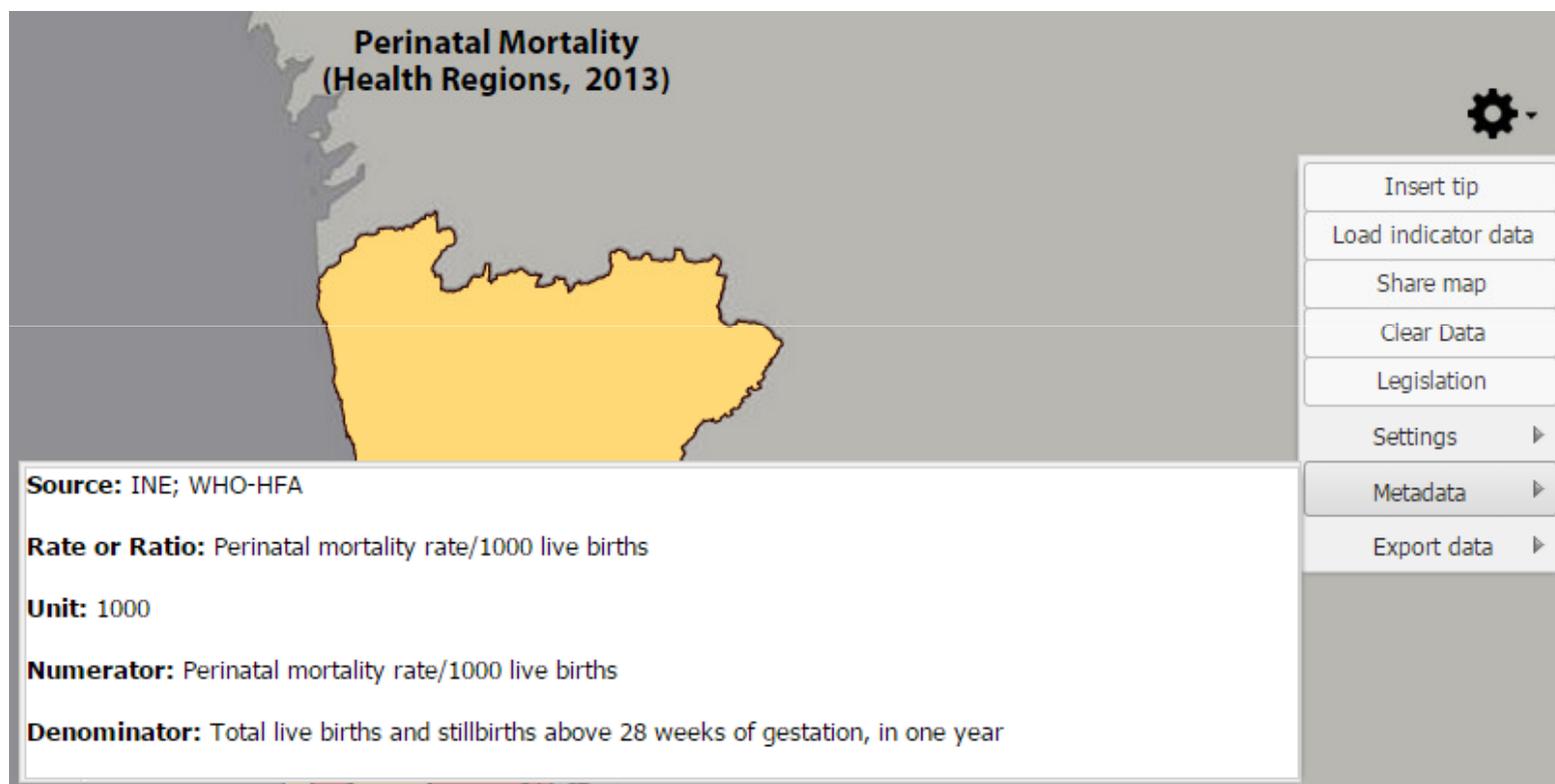
- Share maps among users

Results – indicators

- 204 indicators

- 97 (48%) updated to 2010

- 86 (42%) have a minimum temporal series of 10 years

Results – indicators

Discussion

- A clean interface look was preferred to dashboard type

- Customized GeoSaúde for each Priority Health Program

- Balance GeoSaúde features and stakeholders demands

- The challenge of keeping health indicators up to date

Conclusions

- Easy to use and broad appeal

- Keep up to date
    - ❖ with information
    - ❖ with technology
    - ❖ with stakeholders needs

http://www.geosaude.dgs.pt/

www.dgs.pt