

FRANCE VS SPAIN VS GERMANY

European comparison of spinal surgery hospitalizations from 2010 to 2013 according to patient profiles



OBJECTIVES

This study was performed to compare hospitalizations for spinal surgery development across France, Spain and Germany from 2010 to 2013 and to analyze patient’s characteristics.

METHODS

A retrospective analysis was conducted from hospital databases PMSI for France, CMBD for Spain and SHI for Germany between 2010 and 2013.

All spinal surgery hospitalizations were collected based on procedure codes according to the respective classification of each country (CCAM for France, ICD-9 for Spain and OPS for Germany). The mapping of ICD-9 and OPS codes was undertaken from the French procedures. Standardization of rates of spinal surgery patients were based on age from the EU population.

RESULTS

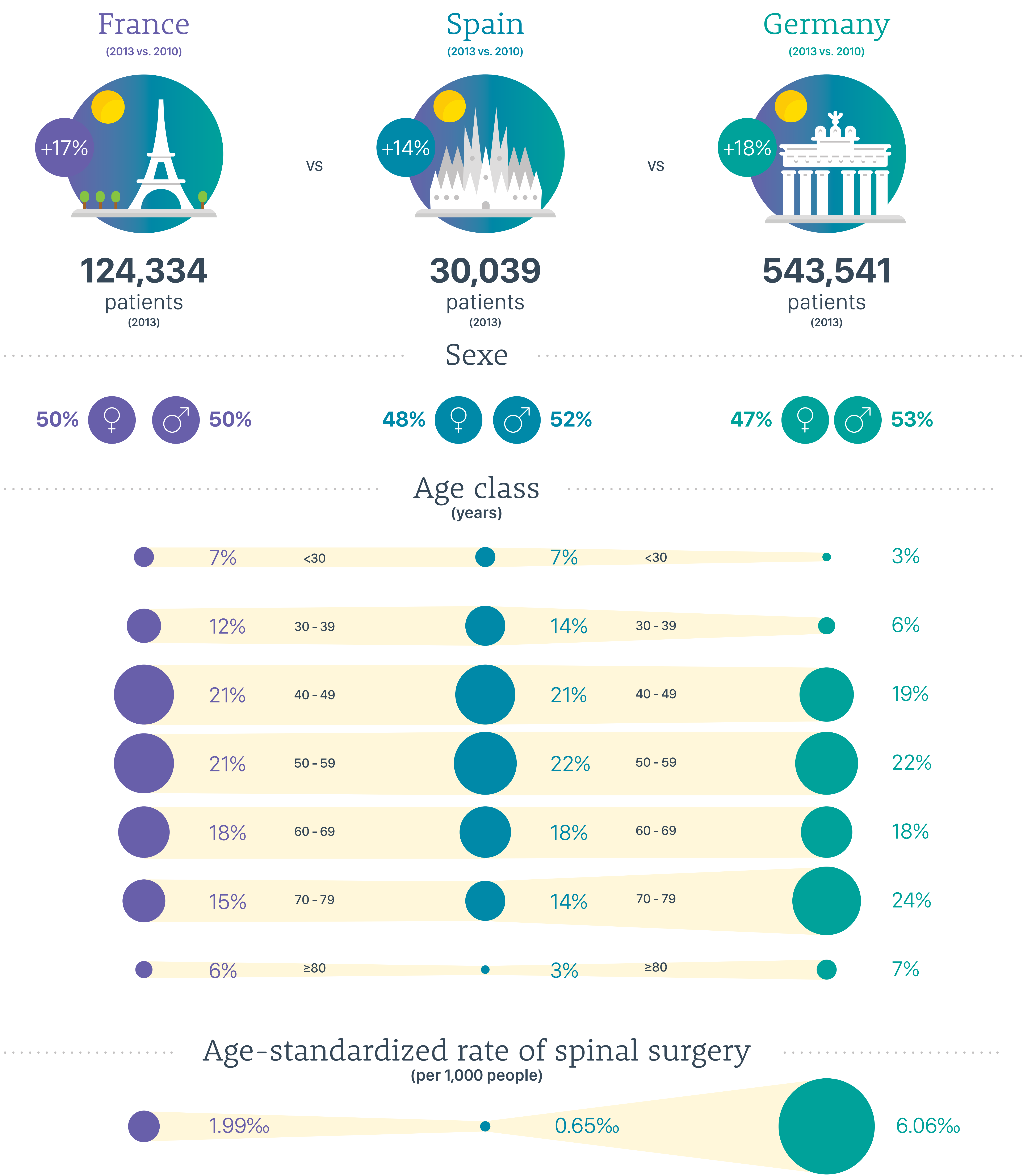
In 2013, crude rates of hospitalized patients with spinal surgery were 0.64 per 1,000 in Spain, 1.89 per 1,000 in France and 6.62 per 1,000 in Germany. All 3 countries experienced an increase of this number of patients from 2010 to 2013: +14% in Spain, +17% in France and +18% in Germany.

The gender distribution was similar between all countries, with slightly more men treated in Spain and Germany: 52% versus 50% in France.

Mean age was lower in Spain (53 ± 16 years) and France (54 ± 17 years) than in Germany (59 ± 15 years); the [70-79] year group was overrepresented in Germany (24% of patients versus around 15% in France and Spain) to the detriment of the [30-39] year group (6% of patients in Germany versus 14% in France and 12% in Spain).

The age standardized rates of spinal surgery patients were higher in Germany (6.06 per 1,000) than in France (1.99 per 1,000) and Spain (0.65 per 1,000).

The top 3 spinal surgeries for each country are described in figure below.



France

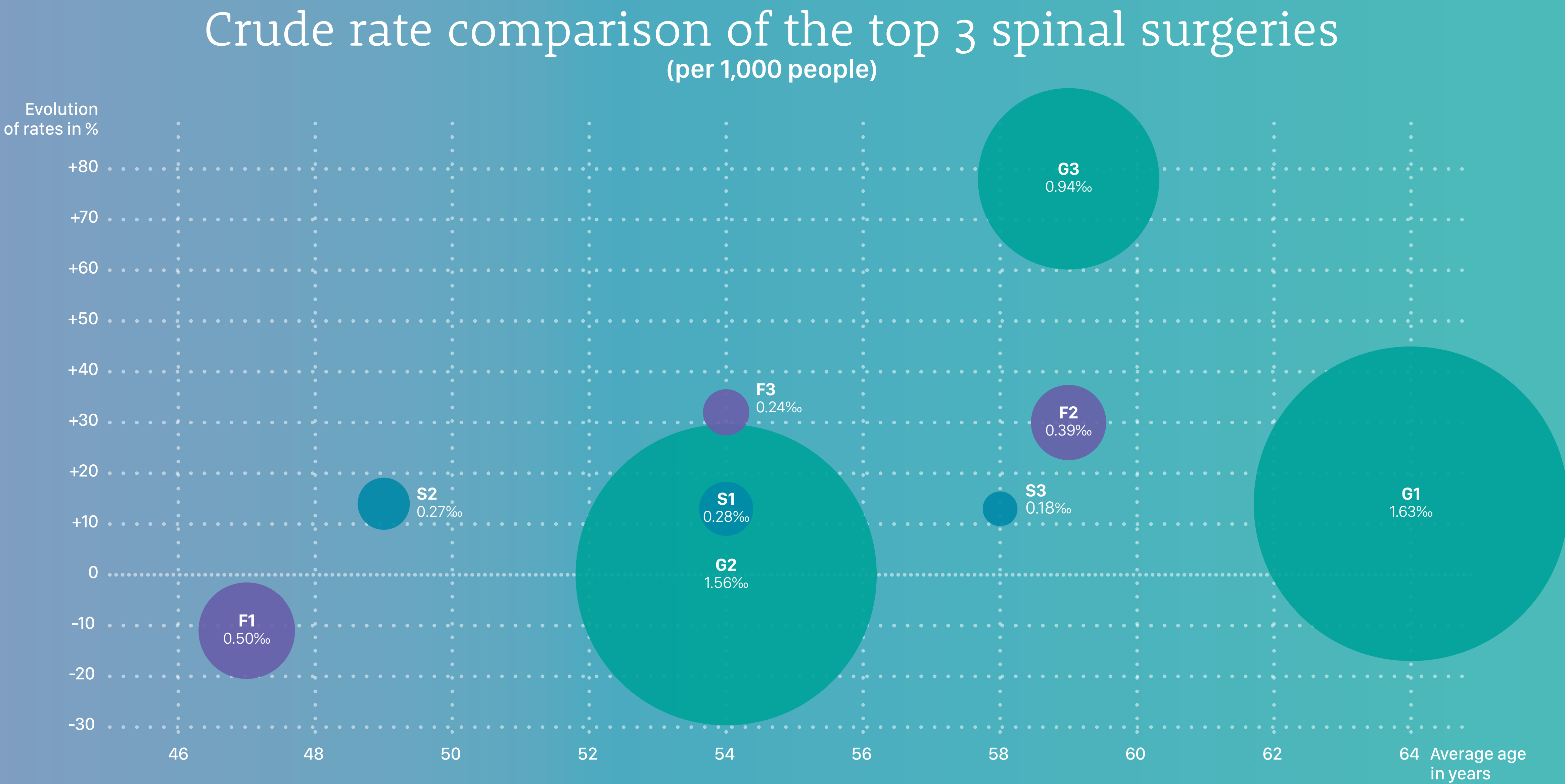
- F1** : Exérèse de hernie discale de la colonne vertébrale par abord postérieur
- F2** : Recalibrage de la colonne vertébrale par abord postérieur
- F3** : Ostéosynthèse et arthrodèse de la colonne vertébrale par voie postérieure ou postérolatérale

Spain

- S1** : Fusión espinal
- S2** : Escisión, destrucción y otra reparación de disco intervertebral
- S3** : Otra exploración y descompresión del conducto espinal

Germany

- G1** : Andere Operationen an der Wirbelsäule
- G2** : Exzision von erkranktem Bandscheibengewebe
- G3** : Exzision von erkranktem Knochen- und Gelenkgewebe der Wirbelsäule



CONCLUSION

Between 2010 and 2013, spinal surgery was marked by a progression of more than 14% in each country. The standardized rate of spinal surgery patients varied significantly between the 3 countries, Germany having the highest one.