

# The impact of Short Bowel Syndrome in Adult Patients in Portugal

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## Background

Short bowel syndrome (SBS) is one of the most common types of intestinal failure, usually secondary to extensive bowel resection and traditionally associated with high patient complexity and high mortality rates. However, with proper management, including nutritional support and close monitoring, the outcomes of SBS patients can be improved<sup>1,2</sup>.

## Objective

This study aims to understand the impact of adult SBS patients in Portuguese NHS hospitals and to identify potential sub-diagnosis in order to promote better disease awareness and treatment in a cost-effective way.

## Methods

- A retrospective study from 2017-2019 was conducted with data from 100% of the Portuguese NHS hospitals (55 hospitals).
- 54 potential SBS adult patients were selected** according to their ICD-10 diagnosis and procedures:
  - Short Bowel Syndrome: K91.2 - Postsurgical malabsorption (this code was used by clinical coders in lack of a specific SBS code)
  - Parenteral Feeding: 3E0336Z, 3E0436Z
  - Small Intestine Procedures: ODB8\*\*Z → ODBC\*\*Z, ODT8\*\*Z → ODTC\*\*Z

## Results

67% of the patients were male and 74% of the patients were over 60 years old (Figure 1).

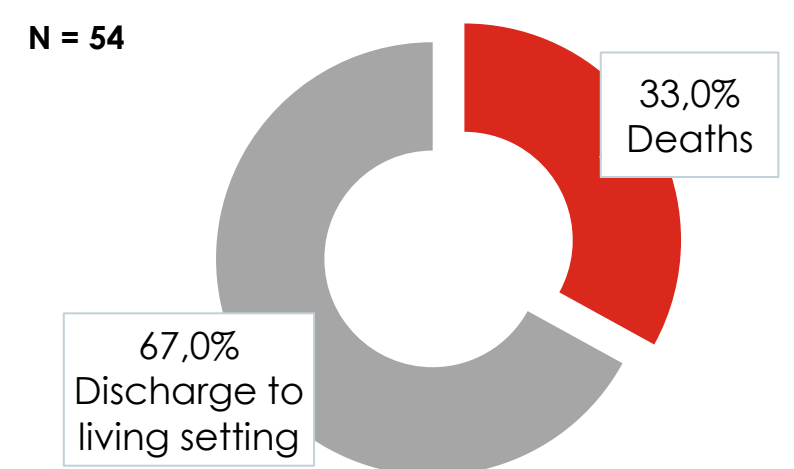
- On average, each patient had 4 hospital episodes, including both inpatient and ambulatory.
- The majority of hospital episodes (84%) were inpatient and 85% of them were admitted by the emergency departments.
- 35 of the 54 patients had a data record of parenteral feeding.
- 48% of the hospitalized patients stayed in the hospital for 15 or more days.
- The average length of stay of the patients was 28 days (Table 1).
- According to their casemix, the 54 patients were 2,4x more complex than the average national patient, presenting high levels of severity and risk of mortality (Figure 2).

67% of all patients were discharged to a living setting and 33% of the patients died in the period of analysis (Figure 3).

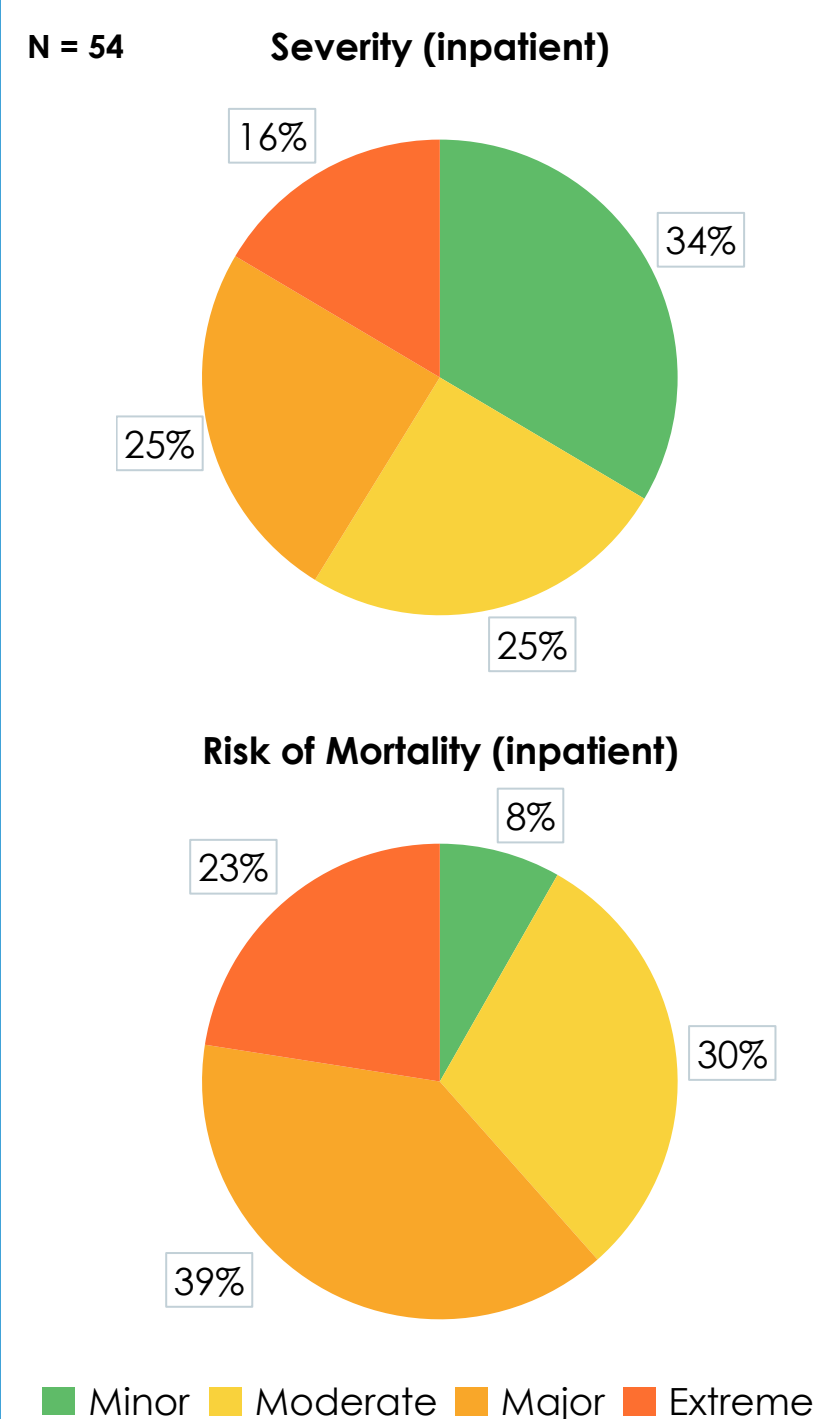
**Table 1. Length of stay (inpatient days)**

Average	28
Median	14
Std. Deviation	33
Minimum	1
Maximum	169

**Figure 3. Overall mortality**



**Figure 2. Inpatient severity / mortality risk**



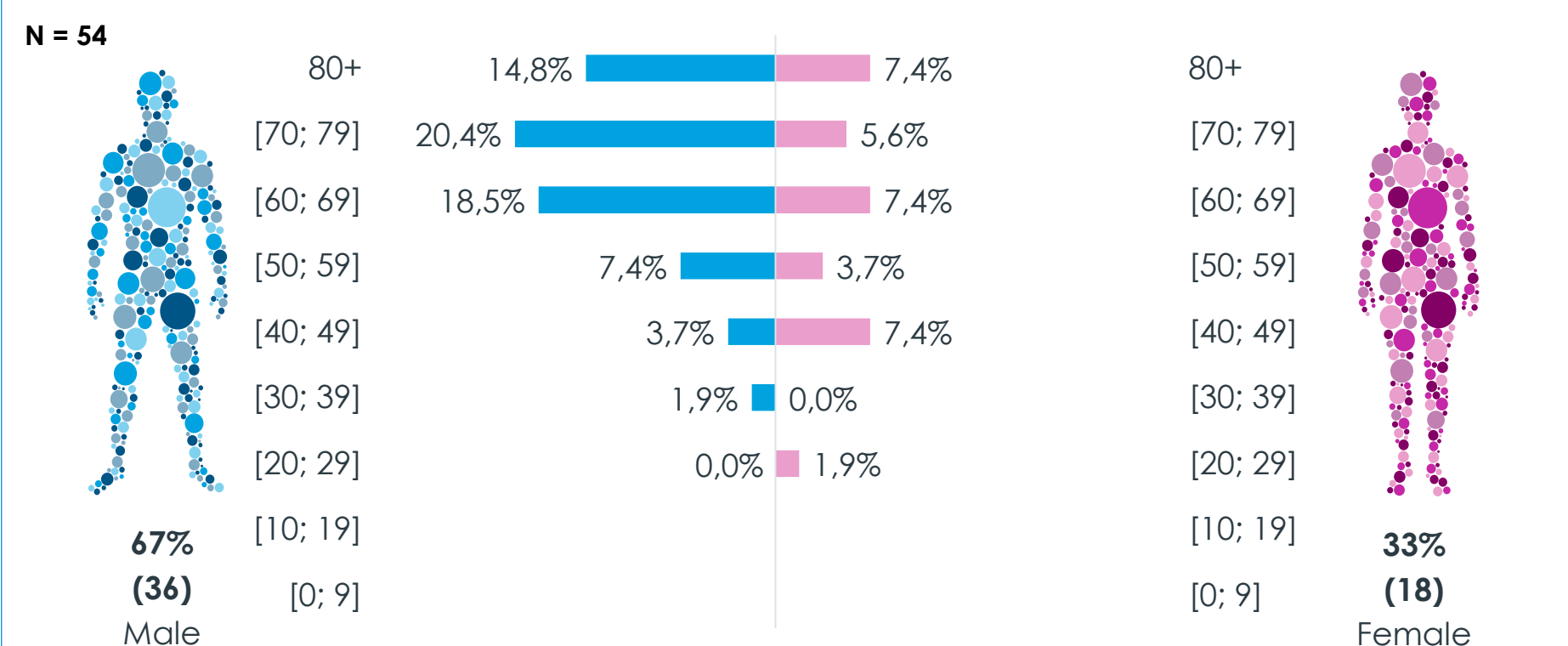
## Limitations

- To the date of the study there was no specific ICD-10 code for SBS and there was an apparent lack of parenteral feeding records.
- Despite the inexistence of a specific code for SBS, the combination of other ICD codes allows a high specificity.

## Conclusions

The study shows the higher complexity of adult SBS patients (2,4x more complex than the average patient) with long lengths of stay (28 days on average and 48% of the patients hospitalized for at least 15 days) and a very high patient mortality rate (33% died). The low parenteral feeding records suggest the potential sub-diagnosis of SBS patients. The study highlights the need for stronger awareness for more adequate SBS patient diagnosis and treatment.

**Figure 1. Age-sex pyramid**



## References

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## Disclosures

The study was supported by Takeda and conducted by IASIST (IQVIA). Miguel Faria is a Takeda employee.