

# Readability of Patient Information Leaflets; Do our patients understand them?



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## Background

Informed patient consent is essential to everyday practice. Consent is a legal prerequisite, and recommended by institutions such as the Royal College of Surgeons and General Medical Council. Given the recent Montgomery trial, there is increased awareness of the need for surgeons to ensure patients understand treatment options and potential implications.

Patient Information Leaflets (PILs) empower patients', improve compliance and increase the overall patient experience. As such many of our leading orthopaedic societies and national bodies have produce multiple PILs.

The Department of Health (DoH) guidelines on the provision of written information in the form of PILs is integral to this process. It is estimated that the national reading age in the UK is less than that of an eleven year old, with 5.1 million adults lacking functional literacy. Therefore, the DoH recommend that the content of PILs must be suitable for the average adult written at a readability level up to twelve years old.

We aim to assess the readability of PILs currently provided by UK orthopaedic institutions.

## Methods

We analysed the readability of PILs on 49 common conditions provided by six leading orthopaedic associations in January 2017 including The British Society for Surgery of the Hand (BSSH), British Hip Society (BHS), British Orthopaedic Foot and Ankle Society (BOFAS), British Scoliosis Society (BSS), British Orthopaedic Association (BOA) and The British Orthopaedic Sports Trauma & Arthroscopy Association (BOSTAA).

All text in each PIL was analysed using the Flesch-Kincaid Grade Level (FKGL), Flesch-Kincaid Reading Ease (FKRE) formulae and the Simple Measure of Gobbledygook (SMOG) test, these test have previously been validated for use in the assessment of medical literature.

## Results

49 PILs were analysed and the mean reading age was 10.2 (range 6.7- 17) with a mean SMOG index of 12.2 (range 9.3-17.2).

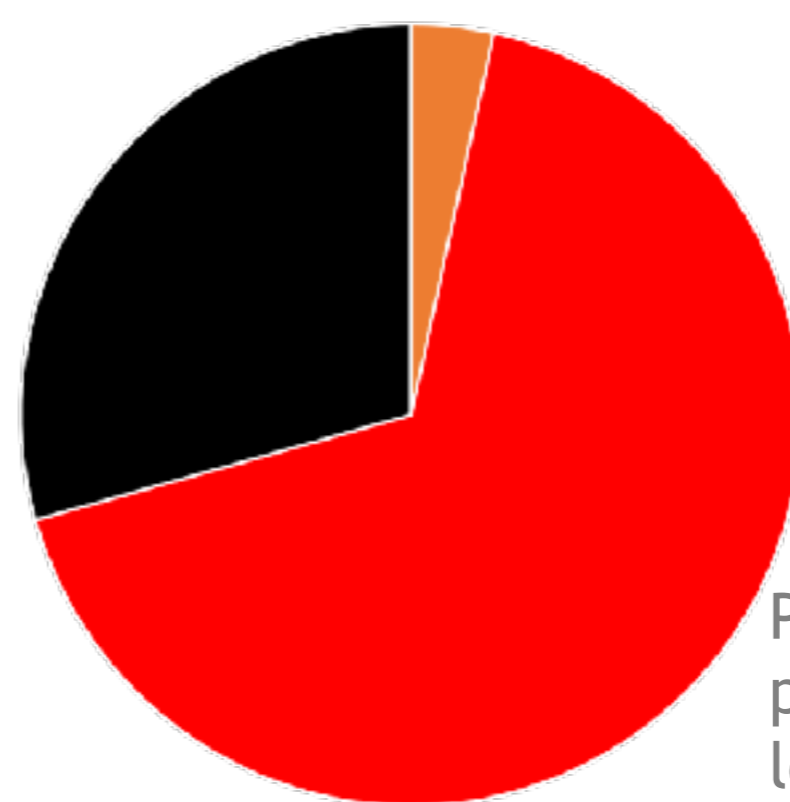
### Reading Ease by FKGL score



USDHHS classification*	Reading Age	Flesch-Kincaid Grade Level (% articles)
Easy	9-11 years	0
Average	12-14 years	46.6%
Difficult	15-17 years	31.0%
Very Difficult	≥18 years	22.4%

\*United States Department of Health and Human Services classification of Reading Ease

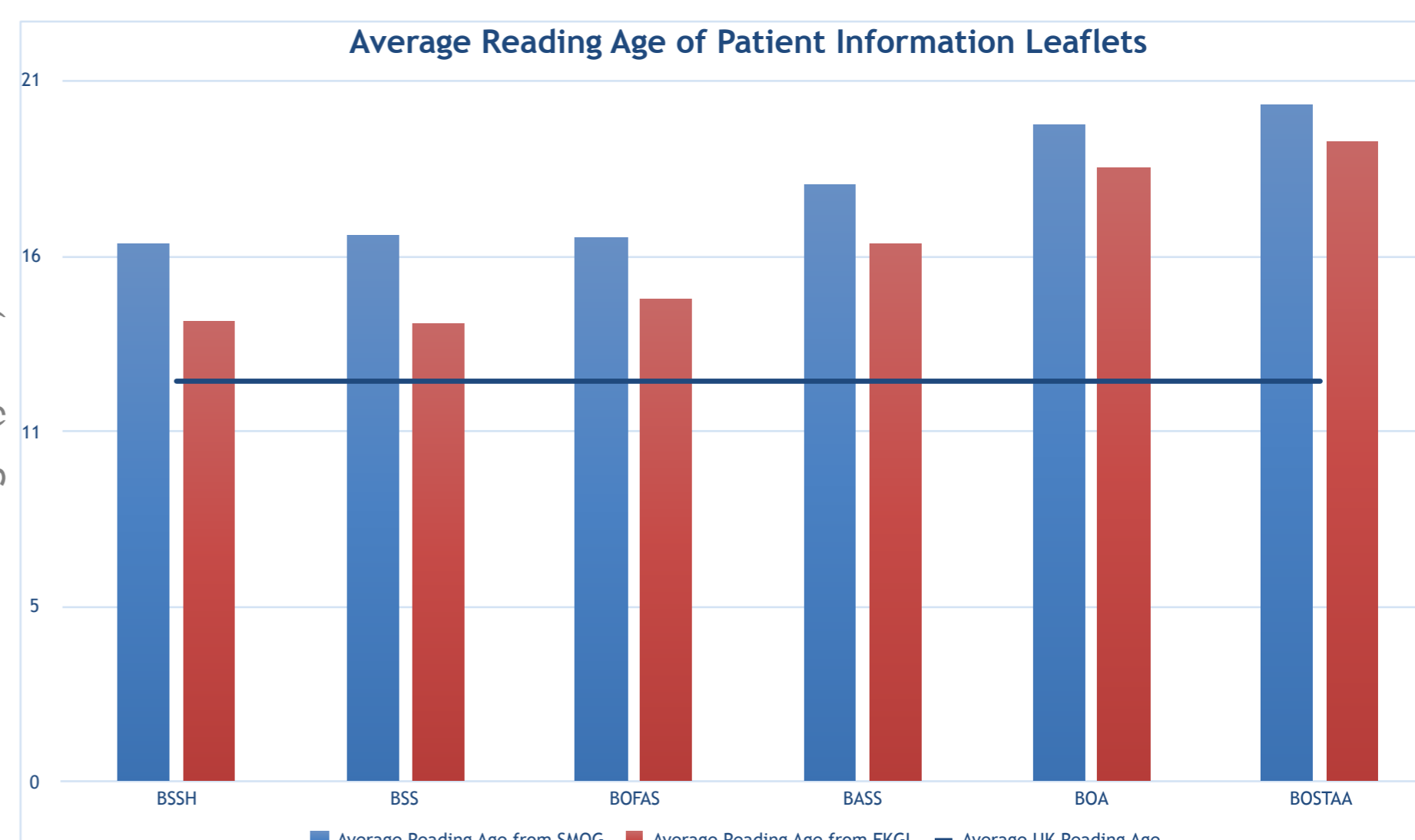
### Reading Ease by SMOG score



USDHHS classification*	Reading Age	SMOG Score (% articles)
Easy	9-11 years	0
Average	12-14 years	3.4%
Difficult	15-17 years	67.2%
Very Difficult	≥18 years	29.3%

\*United States Department of Health and Human Services classification of Reading Ease

Pie charts and tables demonstrating the percentage of PILs at each readability level.



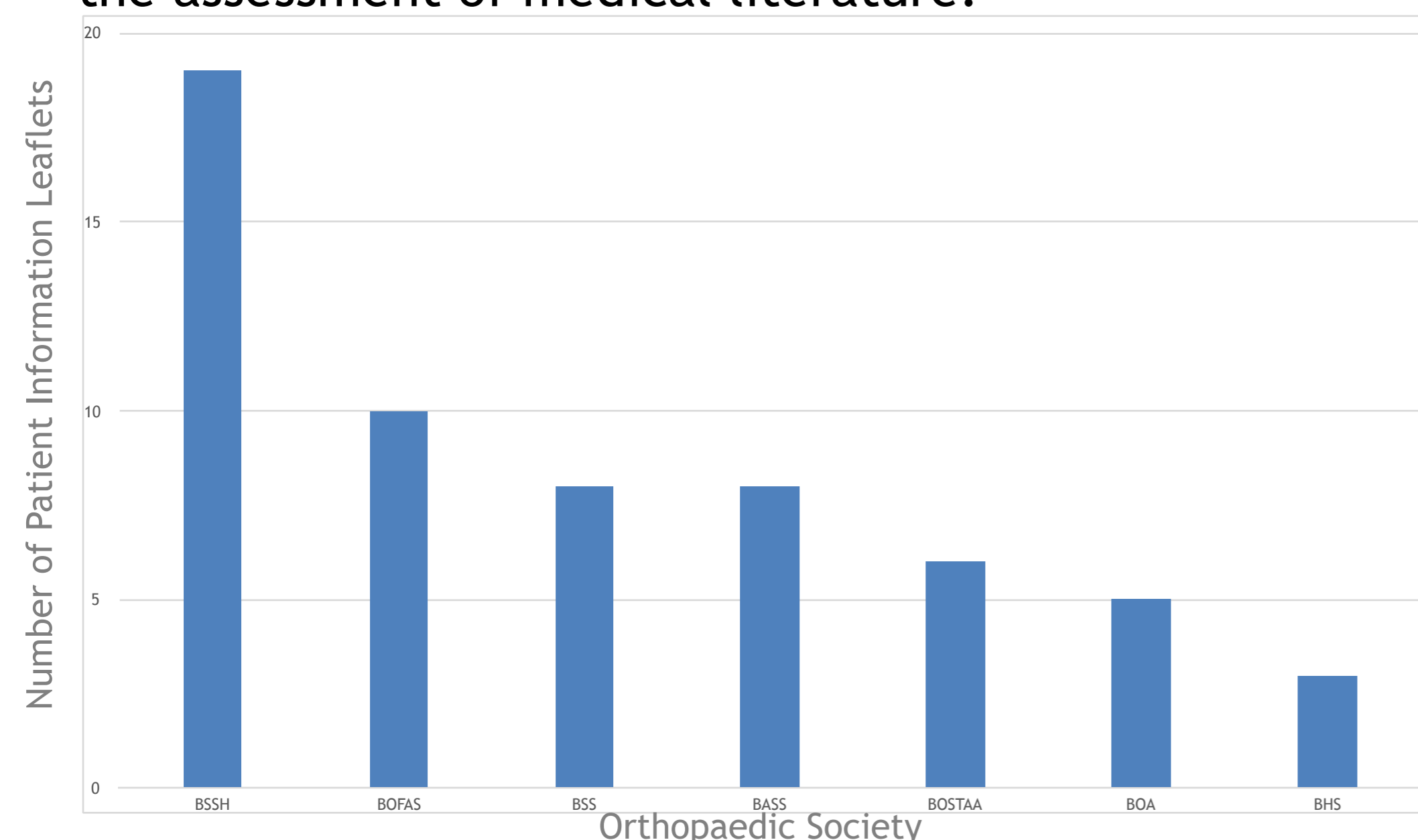
Graph showing the mean reading age of PILs per orthopaedic society

## Conclusion

Orthopaedic related patient information leaflets do not comply with the recommended reading age, making it difficult for the average adult to understand the content.

## Implications

Patients do not have access to appropriate orthopaedic-related PILs and may require further review to promote patient education and informed consent.



A graph showing the number of PILs per orthopaedic society.