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## Guarantor

The correspondign author, Michael Allen, is the gaurantor of the paper (PI on the NIHR project funding).

## Data access and ethics

The NHS Health Research Authority decision tool was used to confirm that ethical approval was not required to access the data. No identifiable patient or hospital information were provided in the data, and anonymised hospital names were provided. Governance of the data and access to SSNAP was authorised by the Healthcare Quality Improvement Partnership (HQIP, reference HQIP303).

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## Author approval

All authors have seen and approved this manuscript.

## Conflict of interest statement

All authors declare no conflicts of interest.

## Links to source code, and online Jupyter book

1. GitHub repository: <https://github.com/samuel-book/samuel_shap_paper_1>
2. Jupyter book: <https://samuel-book.github.io/samuel_shap_paper_1/>