

CoolStick vs. Ethyl Chloride Spray: A Cool Idea, But Why the Tepid Adoption for Neuraxial Block Testing?

Alberto Vitores¹, Shiny Sivanandan¹

¹Peterborough City Hospital, North West Anglia NHS Foundation Trust, Peterborough

Background

- *CoolSticks* are a Class I medical device, with a steel part providing cold sensation. It is used for sensory neuraxial block assessment.
- Introduced at Peterborough City Hospital (PCH) in December 2023 as a benign, economical, and environmentally superior alternative to ethyl chloride spray.
- Estimated carbon footprint of an ethyl chloride can stands at 0.01 kgCO₂e emissions/use, as compared to 0.00022 for *CoolSticks* (1).
- Despite some initial reduction in use of ethyl chloride spray, ordering remained high for PCH main theatre department.

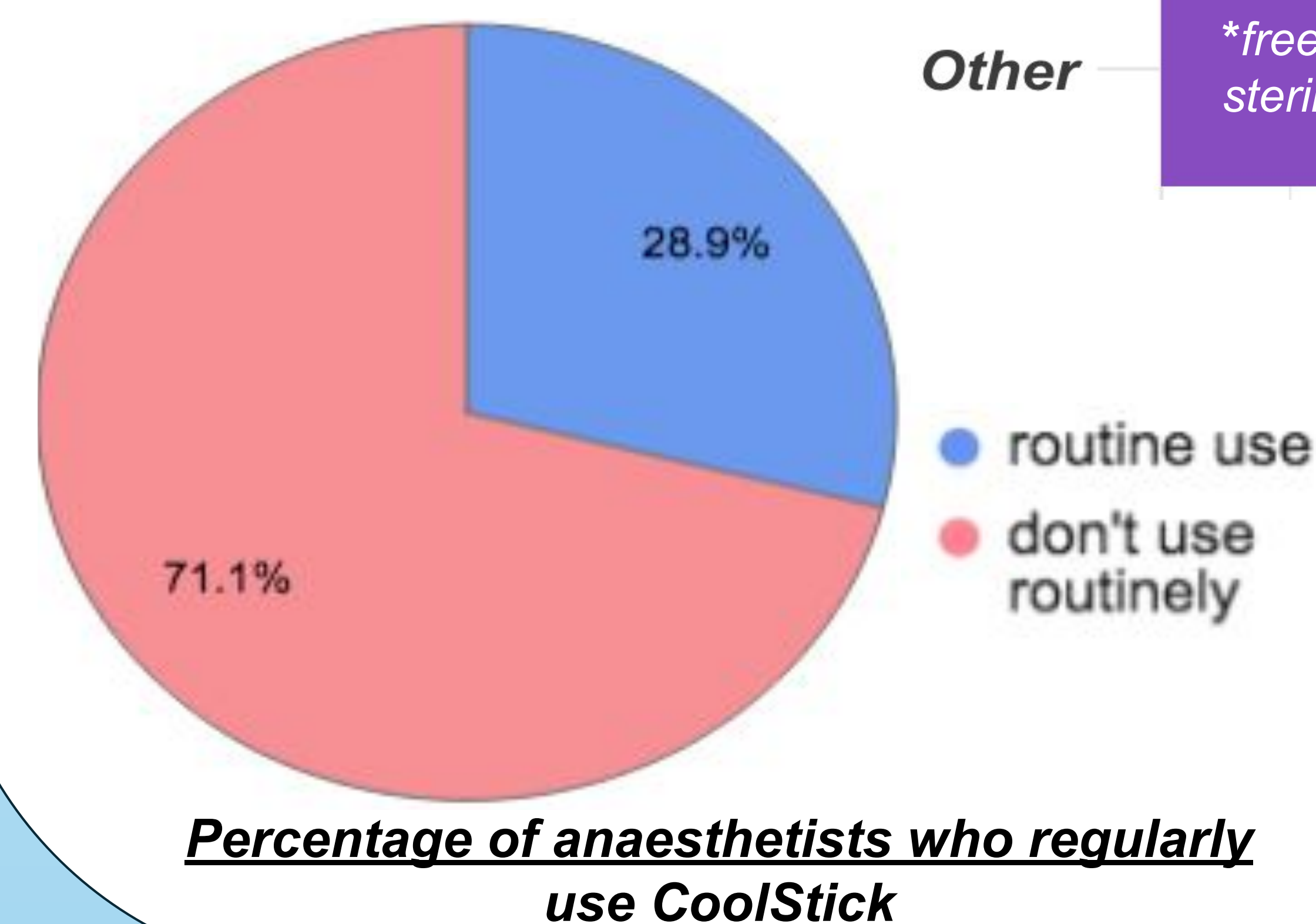
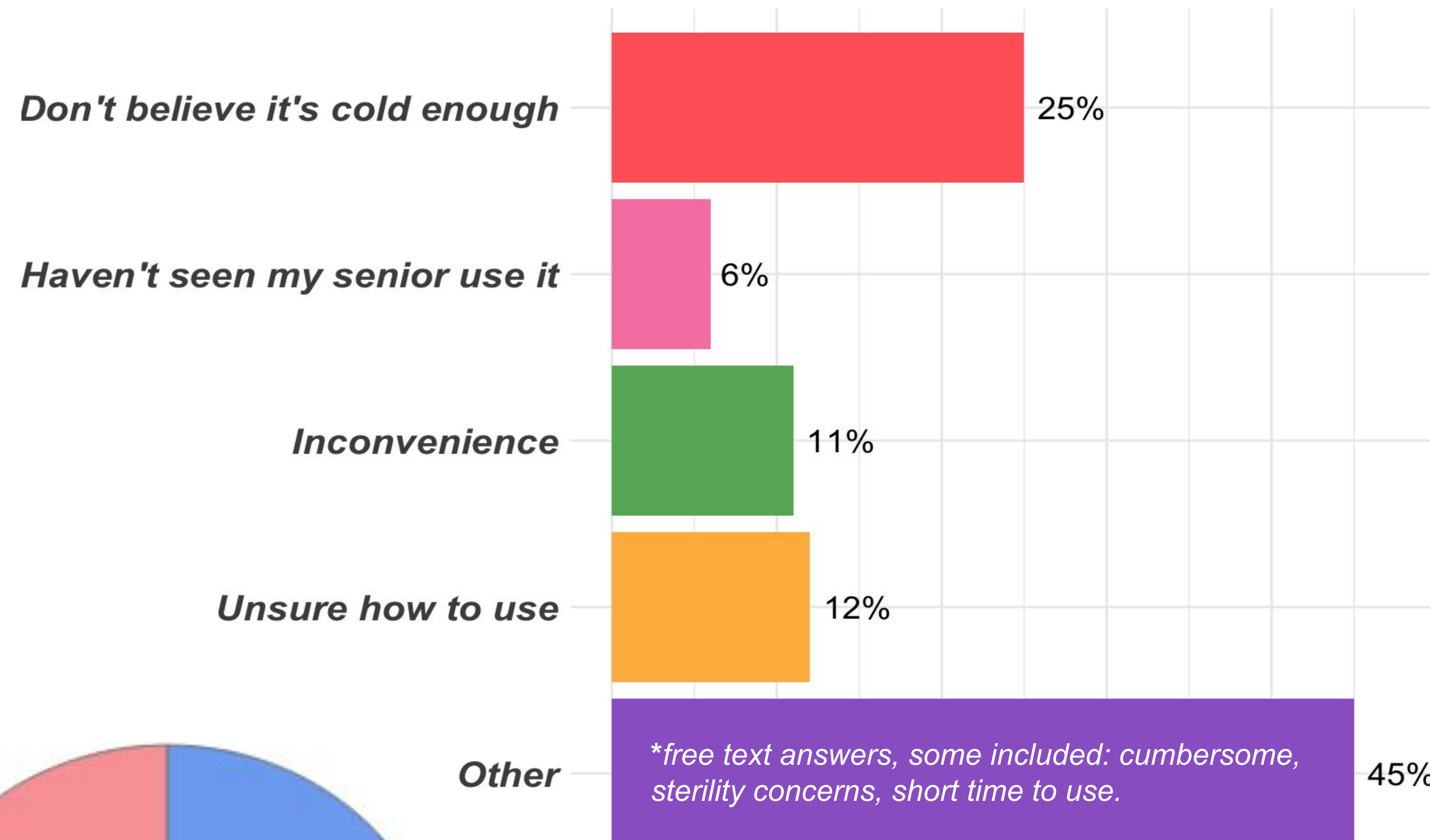


Objectives

- 1) Survey current awareness and opinions on *CoolSticks* within the Trust across all Anaesthetists after one year since introduction
- 2) Identify perceived barriers to a more widespread use of *CoolSticks* by Anaesthetists

Results

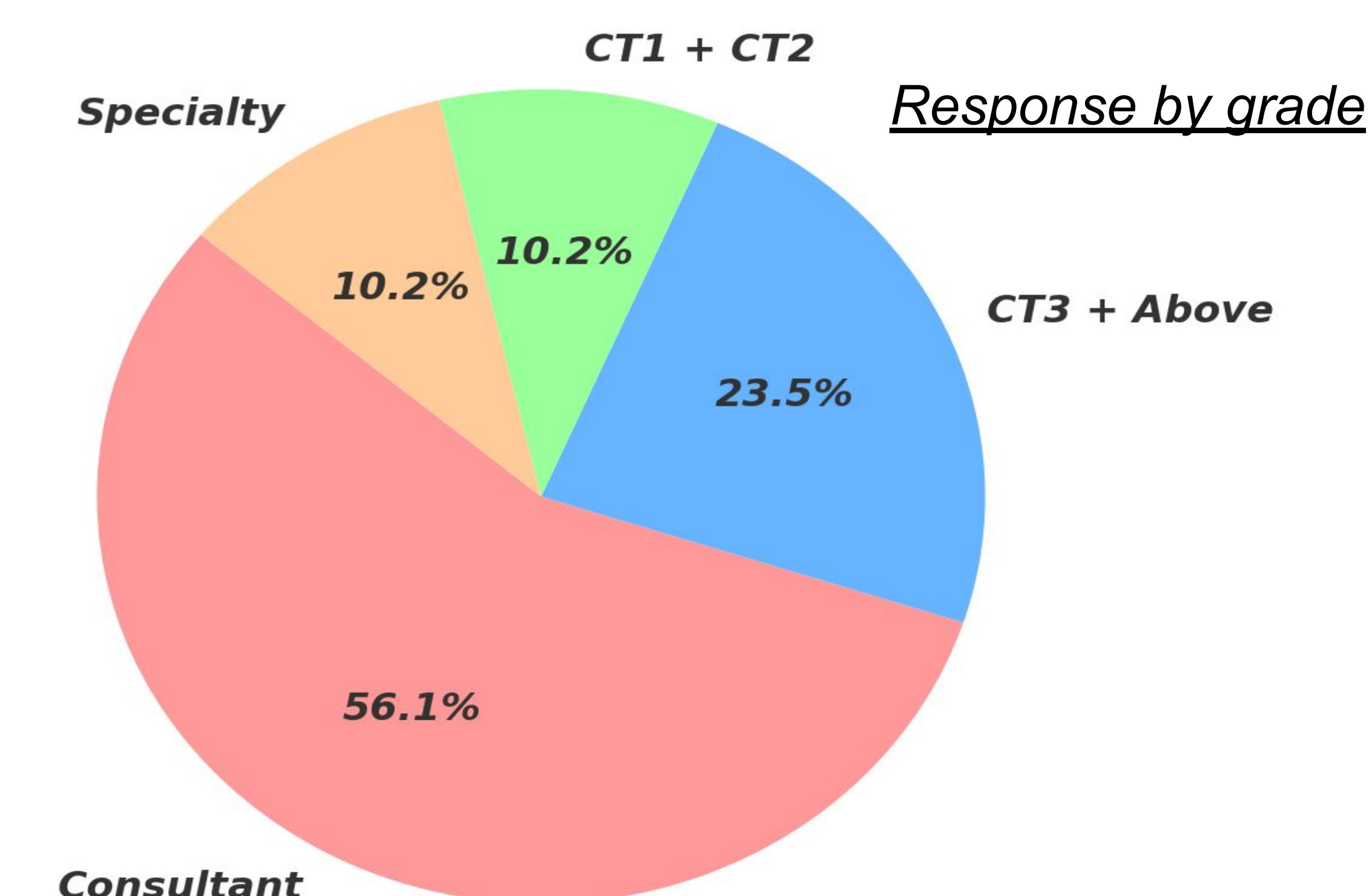
Anaesthetists reasons against the regular use of CoolStick:



Methodology

A survey was sent to anaesthetists of all grades at PCH (excluding novices).

Questions were designed to measure staff's perception of common barriers to using *CoolSticks*, as well as to identify new barriers.



Conclusion & Discussion

- Despite the clear published safety, environmental and cost benefits (1) of *CoolSticks*, their regular use at PCH remains limited (29%). Reasons given involved concerns about effectiveness, convenience, and knowledge of correct technique. Some juniors expressed lack of support from senior staff to trying this new alternative.
- Addressing these issues through education, standardization of practices, and tackling staff concerns may improve *CoolStick* use by anaesthetists. Efforts are already underway at PCH.
- Some trusts have published high levels of *CoolStick* use satisfaction, but we are unaware of any publishing uptake rates by anaesthetists.

References:

(1) Reducing the Use of Ethyl Chloride Spray in Testing Sensory Level for Neuraxial and Regional Blocks. December 2023. National Green Theatres Programme Action for Adoption. Centre for Sustainable Delivery. NHS Scotland.