SMART: Surgical Modification Reporting Tool

A stakeholder-informed checklist for reporting modifications in surgical innovation

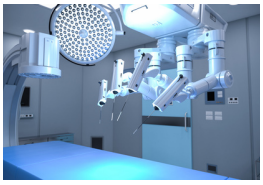
Why use SMART?

- Improves patient safety
- Increases transparency
- Supports shared learning
- Reduces research waste



How SMART works - 7 item checklist:

Describe the starting point



Describe (items 1-4):

- The innovative procedure or device in its current form
- The initial patient cohort
- The IDEAL/IDEAL-D stage
- Contextual information:
  - Timeframe
  - Hospitals/centres
  - Surgeons/operator(s)
  - Number of procedures / patients

Report modifications



Report (item 5):

- All modifications
  - Technical changes to procedure / device
  - Patient inclusion / exclusion criteria changes
  - Whether innovation was abandoned, stopped or converted
  - Absence of modifications, if relevant

Summarise modifications



Provide views on (items 6-7):

- Stability of innovation
- Learning points

Read the full paper:

Download the checklist:

How SMART was developed:

- Systematic review: 104 IDEAL and IDEAL-D studies
- In-depth interviews: 20 stakeholders
- Iterative refinement Stakeholder feedback

Developed by:

Bristol Centre for Surgical Research

NIHR BRC: Bristol Surgical and Orthopaedic Innovation Theme

Paper:

James B Olivier, Rhiannon C Macefield, Maeve Coyle, Kerry N L Avery, Natalie S Blencowe, Daisy Elliott, Concise stakeholder-informed tool for reporting modifications to innovative surgical procedures and devices: Surgical ModificAtion Reporting Tool (SMART) checklist, BJS, Volume 113, Issue 10, October 2026, znag117, https://doi.org/10.1093/bjs/znag117

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