

Development and validation of a surgical site infection (SSI) outcome measure for patient self-report and observer completion

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Why is a new outcome measure needed?





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Research article

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Open Acces

Methods for identifying surgical wound infection after discharge from hospital: a systematic review

Emily S Petherick*1, Jane E Dalton2, Peter J Moore3 and Nicky Cullum1

 CDC definition (1988, 1992)



Health Technology Assessment 2001; Vol. 5: No. 22

Methodology

The measurement and monitoring of surgical adverse events

J Bruce
EM Russell
J Mollison
ZH Krukowski

ASEPSIS grading scale (Wilson 1986)

Aim

- To develop and validate an SSI outcome measure
 - > for identifying and assessing SSI post-discharge
 - > suitable for patient and professional use





Study design

- 1. Identify content
- 2. Design new measure
- 3. Pre-test with patients and professionals
- 4. Validate

What should we be measuring?

Existing measures

Patient questionnaires

Clinical measures

SSI domains

Interviews

Patients' views and experiences (n=9)

Professionals'
views and
knowledge
(n=10)

Designing the measure

Was there redness spreading away from the wound? (erythema/cellulitis)



Pre-testing

- Cognitive interviews
 - 28 patients after recent abdominal surgery
 - 14 professionals surgical teams, GPs, nurses
- Explored lay language & inclusion of medical terms
- Iterative process of improvements & interviews

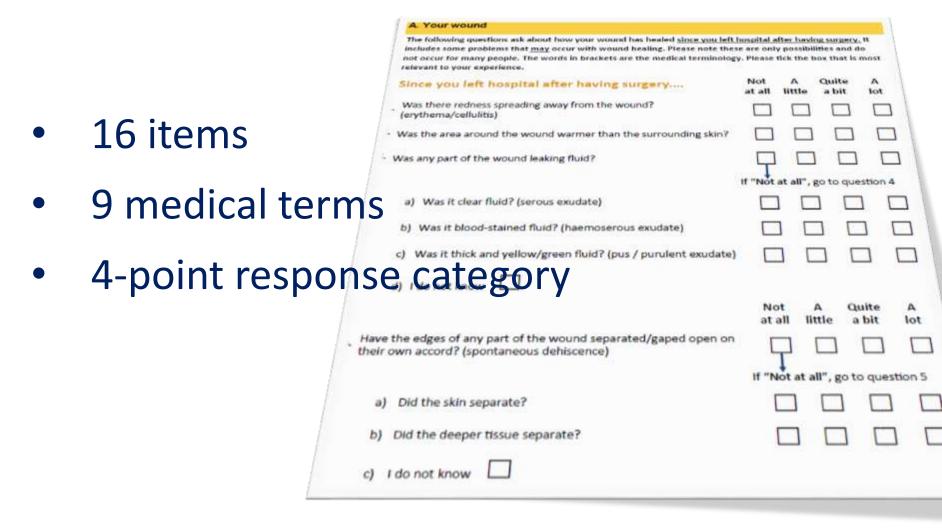


What did we find...?



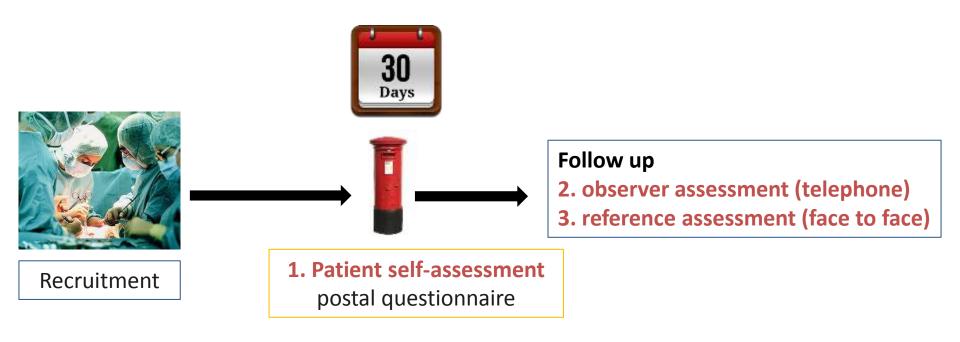
- 19 SSI domains
- Confusing terminology
- Infection vs wound healing

The measure



Easy to complete for patients & professionals

Validation study design



Validation study findings...so far

- 416 patients recruited in 6 months
- 300 (72%) postal questionnaire response rate
- minimal missing data
- unproblematic feedback
- 305 telephone observer assessments
- 115 face to face reference assessments

Considerations

- Developed and tested in abdominal surgery
- Multiple wounds



Summary

- Developed a post-discharge outcome measure for SSI
- Single measure for patients and professionals using lay language & medical terms
- Streamline for collecting trial outcome data

Next steps

- Further data collection within pilot trial; more face to face reference SSI assessments
- Explore validity and reliability
- Examine scale structure and scoring system

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