Surgical wound or surgical site infections (SSI) are a common postoperative complication that cause significant morbidity and increased healthcare costs. Wound infections are estimated to occur in up to 15% of elective surgical admissions, although rates vary by operative procedure, length of follow-up and methods used for detection.

In 2001, a comprehensive systematic review searched for evidence for the validity and reliability of definitions of wound infection (Bruce et al, 2001). Bibliographic databases were searched and strict inclusion and exclusion criteria were applied to studies retrieved for appraisal. Of 121 studies fully appraised, 90 were eligible for inclusion. Only 8 studies had formally assessed validity and/or reliability of the definition of wound infection. Forty-one different definitions of surgical wound or SSI were identified; some were ‘standard’ definitions used by national surveillance programmes. ‘Presence of pus’ was the most frequently used single component; the CDC definitions were the most commonly used standard definition. There was no evidence on the impact that variation of rates based on definition used.

Subsequent research, using a large prospective surgical wound database, found that mean percentage of wounds classified as infected differed markedly by definition used. Infection rates ranged from 6.8% using the ‘ASEPSIS’ scoring system to 19.2%, when using the CDC definition (Wilson et al, 2004). Several national surveillance programmes have modified the standard CDC definition.

This session will review the challenges associated with the accurate measurement of wound infection and highlight the limitations of performance monitoring and institutional comparison.