Surgical site infection (SSI) is one of the Healthcare Associated Infections (HCAI). The others are urinary tract infection; ventilator associated pneumonia; and bacteraemia, as well as the current virtual epidemic of Clostridium difficile enteritis. SSIs make up approximately a fifth of the total of HCAIs and affect 15-20% of hospitalised patients. There is a drive to make the reporting of SSIs mandatory for inter-hospital comparisons, but if this happens then it will need to be accompanied by accurate definitions and adequate post discharge surveillance (PDS). Most SSIs are now seen in the community where treatment may be sub-optimal and risk overuse of antibiotics and further antimicrobial resistance. Wounds are classified as superficial, deep or organ/space; or in relationship to the degree of contamination. The CDC definition in which wounds are assessed for 30 days (a year after prosthetic surgery) is the most widely used; but for interval data which distinguishes trivial from life-threatening SSIs the ASEPSIS score is most appropriate. All definitions need unbiased, trained observers for accurate PDS.

If “care bundles” of proven methods to reduce the risk of SSIs are to be introduced, such as antibiotic prophylaxis, warming, supplemental oxygenation and tight blood glucose control, then the diagnosis and measurement of SSI is pivotal. As an example it is still not entirely clear whether antibiotic prophylaxis is effective in clean wound surgery. Equally the cost of SSIs, which should be largely preventable, could be costing the European Healthcare budget between €2-20b annually depending on accuracy of diagnosis.