3 SUMMARY

Context: There is little evidence about healthcare-associated infections (HAIs) in outpatient settings and no systematic review has been performed on the subject. The Swiss Federal Office for Public Health commissioned two systematic reviews about the burden and prevention of HAIs in outpatient care, with the aim to inform strategic planning and decision making of the “Strategie NOSO Ambulant”.

Objective: The objectives were 1) to estimate the epidemiologic burden of HAI in outpatient care (outpatient settings) based on the currently available evidence in the literature; and 2) to summarize and, if possible, assess the scope and impact of reported HAI-prevention strategies in outpatient care.

Data sources: Medline, the Cochrane Controlled Trials Register, Embase, and the Outbreak Database.

Study selection: Reports had to refer directly or indirectly to any HAI or transmission of viruses or multidrug-resistant organisms (MDRO) in any patient undergoing at least one medical visit or care in an outpatient setting or at home, irrespective of the applied medical procedure.

Data extraction: All identified titles and abstracts were assessed by two reviewers. Disagreements were resolved by consensus and a third reviewer was consulted if agreement could not be reached. Extraction of full text reports was done by using extraction tables.

Data synthesis: Reports and studies were grouped into the following topics: Surgical site infection (SSI), endoscopy, haemodialysis, homecare, outpatient parenteral nutrition (PN), dental care, outbreaks, bloodstream infection (BSI) without PN, urinary tract infection (UTI), and other topics.

Results: Our search yielded 7830 titles and abstracts; 564 were eligible for fulltext sift, of which 413 were accessible. One-hundred-fifty-six reports fulfilled the inclusion criteria, 127 for burden and 53 for prevention, with a number of reports serving both outcomes. A total of 35 intervention studies were quality-assessed. The other 17 prevention studies were either outbreak reports (6) or laboratory studies (11).

Discussion: The identified reports and studies were overall quite heterogeneous and generally of low quality. Most information comes from haemodialysis, home parenteral nutrition, and home intravenous therapy for the outcome (catheter-related [-associated]) bloodstream infection. The incidence of bloodstream infections among patients undergoing haemodialysis is high, but also important in parenteral nutrition and home care. The frequency of surgical site infections seems relatively low, but comparison to inpatients is not possible due to different surgical procedures (or the same procedures are performed as outpatient procedures also in acute care hospitals). The one report looking at SSI in general practice, found astonishingly high numbers.