Decision Support-Tools for early detection of infection in older people (aged> 65 years): A scoping review

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Background
Infection is more frequent, and serious in people aged >65 as they experience non-specific signs and symptoms delaying diagnosis and prompt treatment. Monitoring signs and symptoms using decision support tools (DST) is one approach that could help improve early detection ensuring timely treatment and effective care.

Aim of the study
To identify and analyse decision support tools available to support detection of infection in older people (>65 years).

Methods

A scoping review of the literature 2010-2021 following Arksey and O'Malley (2005) framework and PRISMA-ScR guidelines. A search of MEDLINE, Cochrane, EMBASE, PubMed, CINAHL, Scopus and PsycINFO using terms to identify decision support tools for detection of infection in people >65 years was conducted, supplemented with manual searches.

Results

Seventeen papers, reporting varying stages of development of different DSTs were analysed. DSTs largely focused on specific types of infection i.e. urine, respiratory, sepsis and were frequently hospital based (n=9) for use by physicians. Four DSTs had been developed in nursing homes and one a care home, two of which explored detection of non-specific infection.

Conclusions and implications

DSTs provide an opportunity to ensure a consistent approach to early detection of infection supporting prompt action and treatment, thus avoiding emergency hospital admissions. A lack of consideration regarding their implementation in practice means that any attempt to create an optimal validated and tested DST for infection detection will be impeded. This absence may ultimately affect the ability of the workforce to provide more effective and timely care, particularly during the current covid-19 pandemic.