Healthcare Improvement Scotland

Scottish Health Technologies Group

Advice Statement 006/2016 — November 2016

What is the evidence for the clinical and cost effectiveness of single room only wards in hospitals compared with non-single room only wards?

This advice has been produced following completion of evidence note 63 by Healthcare Improvement Scotland, in response to an enquiry from NHS Lanarkshire.

Background
The most recent available data (2010) reported that the proportion of single rooms across Scotland was variable (25%-44%).

In new build hospitals, current Scottish Government policy is that there is a presumption for 100% single rooms for in-patient accommodation unless there are clinical reasons to deviate from that position (http://www.sehd.scot.nhs.uk/mels/CEL2010_27.pdf). This policy was based on a literature review, a public attitude survey, a nurse staffing report, a financial impact study and a Delphi consultation exercise. The evidence identified in the literature review supporting this policy was limited in quality and quantity.

An up-to-date review of the evidence related to the provision of single rooms was requested.

The evidence note on which this Advice Statement is based did not consider the following clinical specialties: critical care, maternity, acute mental health, infectious disease and paediatrics, in accordance with the requirements of the topic referrer.

Clinical effectiveness

- Assessing the impact of single room interventions is complex; the available research on this topic involves heterogeneous groups of patients, potential differences in single room configuration (such as provision of *en suite* facilities), potential differences in hospital design and policy, varying methods of study and multiple outcomes of interest.
- Two systematic reviews summarised evidence up to 2006. There was inconsistency in results across the studies due to variation in the patient populations and range of methodologies of included studies. The methodological quality of the primary studies was mixed and the single room interventions were not well defined. It was difficult to reach any conclusions from the findings of the reviews.

Patient and staff experience

- Across nine primary studies (published between 2008 and 2016) and two well conducted evaluations of a move to single rooms, studies examined both patient satisfaction and expressed patient preference. Results showed:
  - Patients were broadly more satisfied with single rooms than non-single rooms
  - In many studies patient preference favoured single rooms, although there was

variation by patient characteristics such as age and illness severity and according to previous inpatient experience.
  - One study examined staff preference and reported a preference for single rooms on most aspects of care. Findings of another study suggested a staff preference for a mix of single rooms and bays.

Safety

- The quantity and quality of the evidence is insufficient to determine whether single rooms compared with multi-bedded rooms have any effect on the frequency of falls, medication errors and infections.

Cost effectiveness

- No relevant cost effectiveness studies were identified.

Conclusion

The available evidence is limited in both quantity and quality and thus it was not possible to draw firm conclusions regarding the clinical effectiveness, safety and cost effectiveness of single rooms compared with multi-bedded rooms.

Further research

Evaluation, drawing upon the recent increased provision of single rooms in Scotland, provides an opportunity to determine the relative impact of single rooms on clinical, patient, safety and cost effectiveness outcomes and to define which patients groups would be most likely to benefit from single room accommodation.

Advice context:

The status of SHTG Advice Statements is 'required to consider'.

No part of this advice may be used without the whole of the advice being quoted in full. This advice represents the view of the SHTG at the date noted.

It is provided to inform NHS boards in Scotland when determining the place of health technologies for local use. The content of this Advice Statement was based upon the evidence and factors available at the time of publication. An international evidence base is reviewed and thus its generalisability to NHSScotland should be considered by those using this advice to plan services. It is acknowledged that the evidence constitutes only one of the sources needed for decision making and planning in NHSScotland. Readers are asked to consider that new trials and technologies may have emerged since first publication and the evidence presented may no longer be current. SHTG Advice Statements are considered for review on a 2-yearly basis. The evidence will be updated if requested by the clinical community, dependent on new published reports. This advice does not override the individual responsibility of health professionals to make decisions in the exercise of their clinical judgment in the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

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Chair
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