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ACUTE PERSPECTIVE

David Oliver: Should single rooms be the default for NHS inpatients?

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The national medical director for NHS England, Stephen Powis, recently told the House of Commons health and social care committee that, after the pandemic, "single rooms should be the default" for patients in NHS hospitals, to "improve infection control, privacy, dignity, and patient flow issues."[1] Most NHS hospital wards have a mixture of open bays, with multiple beds, and single or double side rooms. With the exception of some recent new builds, the beds in open bays still predominate.

Many of our hospitals are decades old and subject to a major maintenance backlog. Insufficient capital has been made available for new builds, upgrades, and redesign. The government has repeatedly promised "40 new hospitals" (sometimes 48), but the *Health Service Journal* has reported that NHS England's "communications playbook" states that new facilities on existing sites should be described as new builds.[2] We saw this in action recently when the secretary of state for health and social care, Sajid Javid, opened a new hospital wing in Carlisle and spun it as a new build.

On 19 October Emma-Jane Houghton, the senior civil servant leading the "new hospitals" programme, revealed that limitations in capability and capacity in the construction centre were major obstacles to the government programme.[3]

Of the 233 hospital trusts in England, some have hospitals on multiple sites. So even if Powis's vision comes true, it will be long after his retirement. If we refit existing hospital buildings, bed capacity will inevitably reduce. England already has the fewest beds per 1000 people among countries in the Organisation for Economic Cooperation and Development, and hospitals are running close to full capacity all year round.

For covid-19 and other respiratory infections, the main cause of hospital acquired infection is close contact or shared air in poorly ventilated spaces with infectious patients. For gastrointestinal bacterial or viral infections or multidrug resistant organisms such as MRSA, isolation is a key component of good infection control policy. Some infections also require negative pressure ventilation.

Reports on nosocomial covid transmission, notably from the Healthcare Safety Investigation Branch,[4] have made it clear that failings in infection control practice include failings in the built physical environment and the ability to isolate patients, although ventilation, protective equipment, testing, staff behaviour, and streaming of patients into different areas also count. Powis also has a point in that single rooms could aid patient flow through beds, if this meant that entire wards didn't have to be closed to admissions or discharges during an outbreak and could continue to function.

Although this may all seem like common sense, we need some caution. Surveys show that many older inpatients prefer open bays to side rooms, where they can feel isolated, neglected, and lonely. Falls among patients are the most commonly reported safety incident in NHS hospitals, and wards designed for visibility of several patients have been shown to reduce the incidence of falls.[5]

A recent evaluation found that two thirds of adult patients preferred side rooms because of privacy, dignity, confidentiality, and flexibility for visitors.[6] Ward staff also perceived improvements in those domains. However, staff also reported more problems with visibility, surveillance, teamwork, monitoring, and patient safety. Walking distances increased after the move to single rooms. And we have very serious workforce shortages just now.[7]

I understand Powis's reasoning, not least when around one in four of all covid-19 cases in the UK have been categorised as hospital acquired.[8] But the capital programme to replace, refurbish, or reconfigure NHS hospitals will take many parliaments, so we have a good opportunity to think about how best to solve the problem. Should our goal perhaps be a greater proportion of single rooms, rather than these exclusively?

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