Does Delivery of Care in Virtual Wards Have Implications for NICE Guidelines?

Pinho-Gomes AC[1], Bird C[1], Patrick H[1], McFall S [1], Harris K[1]

[1] National Institute for Health and Care Excellence

Background

Health systems around the world are innovating to meet the challenges of delivering high quality care in a resource-constrained environment whilst tackling significant backlogs caused by COVID-19. New models of care are being introduced which bring care closer to home and may alleviate pressure on overstretched hospitals. One model is a 'virtual ward' - a system of monitored care at home for a short duration as an alternative to in-patient care with the aim of avoidable admission prevention or supporting early discharge from hospital.
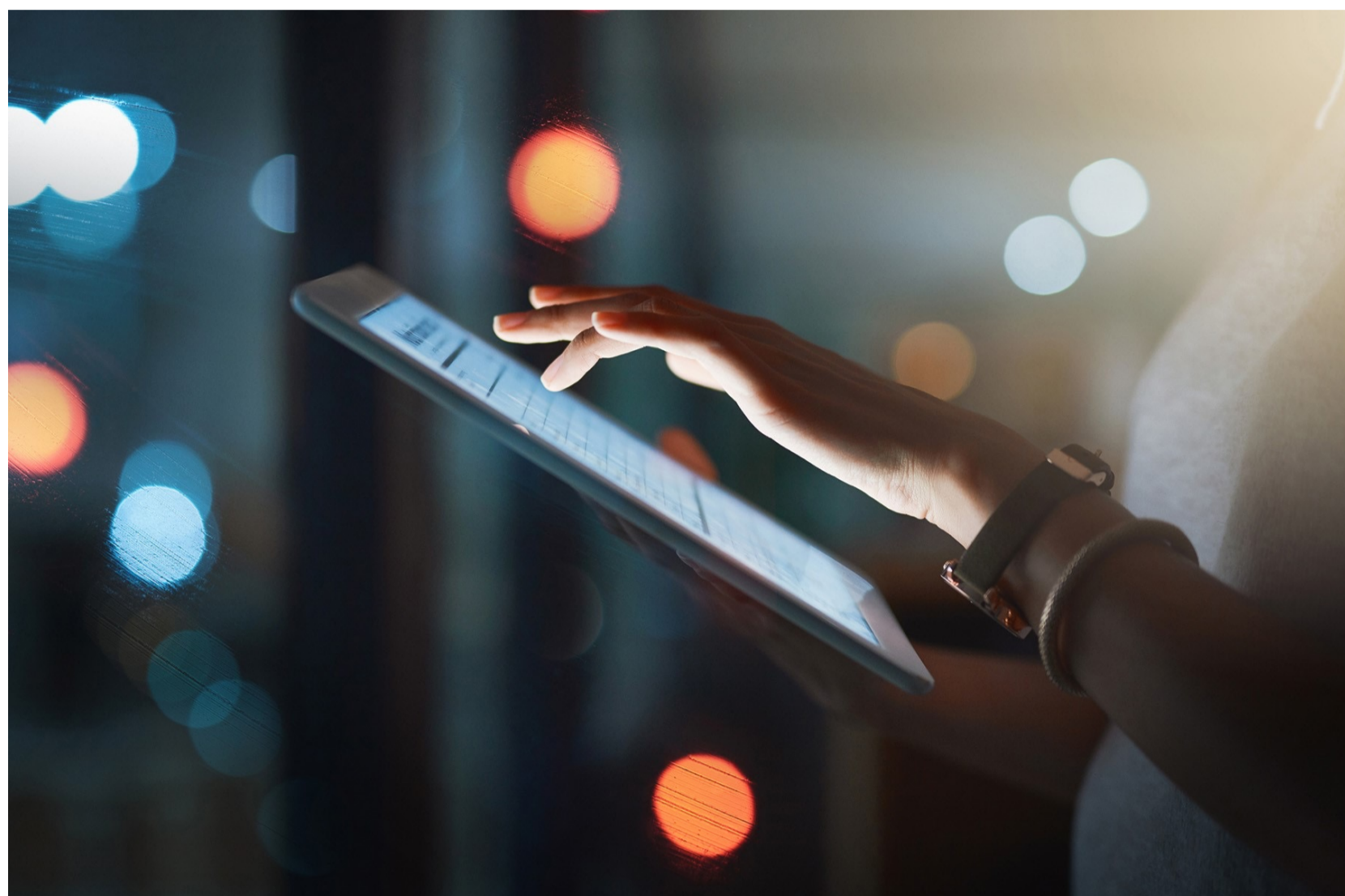
What we did and why

NICE's patient safety team scoped potential safety implications of using National Institute for Health and Care Excellence (NICE) guidelines in the context of virtual wards. This is because guideline recommendations may have been written on the assumption that care would have been delivered exclusively in a hospital-based setting.

All clinical guidelines published by NICE over the past 5 years were reviewed to identify those with recommendations that could have patient safety implications if used in the context of virtual wards.

A total of 208 guidelines were reviewed, of which 33 were considered to be potentially affected by implementation of virtual wards.

Of those 33 guidelines, 11 included recommendations based on the setting where care was to be delivered (i.e., recommendations were specific for inpatients or outpatients).

These guidelines covered a wide variety of topics, such as sepsis, nutrition support for adults, diabetic foot problems.

Safety considerations

Seven guidelines mentioned criteria that would warrant hospital admission, which could change if remote monitoring in virtual wards was available (e.g., antenatal care, bronchiolitis in children).

Some guidelines already recommended delivery of hospital-level care in the community (e.g., hip fracture guidelines, chronic obstructive pulmonary disease, and COVID-19).

Potential safety implications

Whenever it is unclear whether recommendations written for hospital inpatients are directly transferrable to virtual wards, this could lead to non-evidence-based care.

Guidelines specifying criteria for hospital admission:
The speed at which care can be escalated in a deteriorating patient is unlikely to be as efficient on a virtual ward compared to inpatient ward.

Current guidelines specifying criteria for hospital admission will likely need criteria on which patients are suitable for virtual ward admission to capture those least likely to deteriorate.

Example: Reducing the risk of deep vein thrombosis and pulmonary embolism (guideline NG89). Safety concern on whether it is adequate to assess VTE risk virtually. Consideration needed about how, when and if VTE risk should be assessed and re-assessed for patients on a virtual ward. Patients on a virtual ward may be more mobile than in hospital, but still less mobile and more unwell compared to their baseline.

Example: Bronchiolitis in children: diagnosis and management (NICE guideline NG9). Offers criteria for hospital admission, which would likely need updating if virtual wards are considered appropriate for bronchiolitis. It would be vital to give adequate safety netting advice to parents/guardians.

Recommendations

- Be flexible and agile in guidance development to the pace of innovation and emerging new models of healthcare, particularly in the post-pandemic recovery environment

- Ensure guidance development needs are covered in research and evaluation systems for new care models such as virtual wards, so that evidence generated can inform future care guideline review/development.

- Technology solutions to remote monitoring should be built with evidence-based recommendations in mind.

- In a climate of sometimes untested innovation, have effective regulatory and local oversight systems to ensure risks to safe care are managed and mitigated.

"The ambition for virtual wards is to expand the capacity of the acute care sector by managing patients, who would otherwise be in hospital, remotely in their homes, enabling staffing efficiencies whilst ensuring safe and more convenient care for patients. Health Technology Assessment is vital to their planning and delivery".

Mark Salmon – NICE Programme Director, Information Resources

Chris Bird
Programme Manager: Patient Safety
National Institute for Health and Care Excellence
Email: Chris.Bird@nice.org.uk
Telephone: 0161 219 3812

nice.org.uk