

Patient perception of safety of a virtual ward for the treatment of an Acute Exacerbation Chronic Obstructive Pulmonary Disease. A qualitative service evaluation. Clare Cook.

Purpose To explore if virtual ward is acceptable to patients during an acute exacerbation chronic obstructive pulmonary disease (AECOPD). To gain an understanding if patients ‘feel safe’ when enrolled on the service and to elicit what factors make a patient feel safe or unsafe and to explore the role of self-efficacy.

Method: Using semi-structured interviews, the retrospective perception of 10 service users was collected. Data was analysed using thematic analysis. Transcripts were read several times, and the codes were generated and recorded using Ni-vivo software version 11.1. Coding data was arranged by themes and subthemes to create a collective narrative from the participants.

Table 1 Summary of the 10 participant characteristics

Index of Multiple Deprivation (Decile 1-10)	Mean	3.7
	Range	1-7
Age (Whole Years)	Mean	67.9
	Range	51-78
Years since COPD diagnosis (Whole Years)	Mean	8.2
	Range	0-19
Self reported Annual exacerbation rate	Mean	3.9
	Range	0.7
Gender	Male	2
	Female	8
Novel care- 1 st episode of care on virtual ward.	Yes	9
	No	1 (previously on clinical service. Not technology-enabled)
Pathway to access service	Step Up	2
	Step Down	8

Context The virtual ward service aims to provide care and monitoring for acutely unwell respiratory patients, who would otherwise reside in hospital [1]. 1 in 8 ED admissions are attributed to acute exacerbation of chronic obstructive pulmonary disease (AECOPD) and attendance is increasing by 13% annually. [2]

The service had been operational for 18 months as a mixed module of digital submissions, telephone and home visits assessments.

Results. The Respiratory Virtual-ward service is an acceptable intervention and participants feel safe. A responsive service with direct contact to clinical staff, which ‘felt joined up’ to the healthcare system improved the sense of safety. Participants reported that a sense of safety was created with person-centred communication, routed in accessible language and clarity. Participants feel discouraged and frustrated when they perceive not to be believed or heard. Being treated with kindness and respect vastly improved the patient experience. Participants reported feeling like experts in their condition and sort greater involvement in decision making regarding their choices. Participants lived experience influences personal risk assessment of their safety. How breathlessness presented was central to the participants risk assessment.

Relation to existing evidence base.

This study shows how responsive care at home offered a similar sense of safety to hospital care. The importance that participants placed on a ‘a sense of safety’ and the need for responsiveness and predictability to provide reassurance echoes previous findings where reliability is central to safety [3-4]. Fear of being alone and concerns of delayed escalation are reasons people declined home-based care during an AECOPD [4.] The themes elicited from this study demonstrate the importance of self-efficacy to negotiate the health landscape and the importance of empowering patients with knowledge, confidence, and permission to enable interaction with services in a timely way. This supports previous studies concluding that ‘Health care Professionals ‘should integrate patient knowledge’ into the treatment of AECOPD [5]

Themes and subthemes which participants described aiding to a sense of safety. Theme 1 - The Respiratory virtual ward service is an acceptable intervention and participants feel safe.

- Timely responsiveness of the service and direct contact to clinical staff which ‘felt joined up’ the healthcare system.
- Knowledgeable staff who treated participants with kindness.
- Person-centred communication routed in accessible language and clarity.
- Participants feel safe when involved in care planning and have information to aid navigating the healthcare system, therefore feel disempowered when not involved in care planning.

Theme 2- Participants lived experience influences personal risk assessment of safety at home.

- Participants feel they are experts in their condition.
- Participants feel discouraged and frustrated when they perceive not to be believed or heard.
- Self-assessment of safety was most influenced by breathlessness, across a range of care planning decision points.

Reference [1] Wise, J. Virtual wards: NICE sets out guidance on managing acute respiratory infections at home. *British Medical Journal* 4: 382. 10.1136/bmj.p2030 (2023). [2] Stone, P. W. et al. Prevalence of Chronic Obstructive Pulmonary Disease in England from 2000 to 2019. *International Journal of Chronic obstructive pulmonary disease*.10.1080/15412555.2021.1971186 (2023). [3] Ram, FS., Wedzicha, J.A., Wright, J. & Greenstone, M. Hospital at home for acute exacerbations of chronic obstructive pulmonary disease. *The Cochrane Database of Systematic Reviews*. 10.1002/14651858. (2003). [4] Cook, R., Thomas, V., & Martin, R., "People with Chronic Obstructive Pulmonary Disease Exacerbations Prefer Early Discharge, Then Treatment at Home." *British Medical Journal* pp.5339 10.1136/bmj.k5339 (2019). [5] Simpson, E., & Jones, M. C. An exploration of self-efficacy and self-management in COPD patients. *British journal of nursing*. 22, 19, 1105–1109. 10.12968/bjon.2013.22.19.1105 (2013).