## Comparing the 'Urgent Community Care Team' Clinical Referrals in the Community with Suggestions from the Clinical Decision Support Software Dem DX

Authors: R. Tariq, R. Lee

Abstract: Background: Additional demands placed on senior clinical teams with ongoing COVID-19 management has accelerated the need to harness the wider healthcare professional resources and upskill them to take on greater clinical responsibility safely. The UK NHS Long Term Plan (2019)<sup>1</sup> emphasises the importance of expanding Advanced Practitioners' (APs) roles to take on more clinical diagnostic responsibilities to cope with increased demand. In acute settings, APs are often the first point of care for patients and require training to take on initial triage responsibilities efficiently and safely. Critically, their roles include determining which onward services the patients may require, and assessing whether they can be treated at home, avoiding unnecessary admissions to the hospital. Dem Dx is a Clinical Reasoning Platform (CRP) that claims to help frontline healthcare professionals independently assess and triage patients. It guides the clinician from presenting complaints through associated symptoms to a running list of differential diagnoses, media, national and institutional guidelines. The objective of this study was to compare the clinical referral rates and guidelines adherence registered by the HMR Urgent Community Care Team (UCCT)<sup>2</sup> and Dem Dx recommendations using retrospective cases. Methodology: 192 cases seen by the UCCT were anonymised and reassessed using Dem Dx clinical pathways. We compared the UCCT's performance with Dem Dx regarding the appropriateness of onward referrals. We also compared the clinical assessment regarding adherence to NICE quidelines recorded on the clinical notes and the presence of suitable quidance in each case. The cases were audited by two medical doctors. Results: Dem Dx demonstrated appropriate referrals in 85% of cases, compared to 47% in the UCCT team (p<0.001). Of particular note, Dem Dx demonstrated an almost 65% (p<0.001) improvement in the efficacy and appropriateness of referrals in a highly experienced clinical team. The effectiveness of Dem Dx is in part attributable to the relevant NICE and local guidelines found within the platform's pathways and was found to be suitable in 86% of cases. Conclusion: This study highlights the potential of clinical decision support, as Dem Dx, to improve the quality of onward clinical referrals delivered by a multidisciplinary team in primary care. It demonstrated that it could support healthcare professionals in making appropriate referrals, especially those that may be overlooked by providing suitable clinical guidelines directly embedded into cases and clear referral pathways. Further evaluation in the clinical setting has been planned to confirm those assumptions in a prospective study.

**Keywords:** advanced practitioner, clinical reasoning, clinical decision-making, management, multidisciplinary team, referrals, triage

Conference Title: ICACNPI 2022: International Conference on Acute Care Nursing and Patient Interaction

**Conference Location :** London, United Kingdom

Conference Dates: January 21-22, 2022