Virtual monitoring in COVID-19

P18 SAFETY AND EFFECTIVENESS OF AN INTEGRATED, TELEHEALTH-LED SUPPORTED DISCHARGE SERVICE FOR COVID-19

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Introduction and Objectives The Covid-19 pandemic has driven forward a number of remote monitoring schemes (virtual wards) across the country to support the early discharge of patients with covid-19. Technology can assist clinical teams to deliver comprehensive care in the community. In this study we aim to evaluate the safety and effectiveness of an innovative, telehealth-led virtual ward for Covid-19.

Methods Patients discharged from hospital respiratory wards with a diagnosis of Covid-19 and deemed at risk of readmission (or requiring home oxygen weaning) were eligible for referral. Monitoring equipment (thermometers and digital pulse oximeters) was provided and patients were on-boarded into a telehealth platform prior to discharge. Smartphones and tablets were supplied by the service if required. A Covid-19 digital clinical question set and triaging algorithm was developed locally. Patients were instructed to complete it daily remotely during follow-up and to enter their observations three times daily. Clinical data fed into a dashboard reviewed daily by the community respiratory specialist team who would contact and assess patients submitting symptoms of concern. Monitoring lasted for up to 14 days, and escalation processes to the acute Trust were in place for those patients showing evidence of deterioration.

Results 218 patients were monitored between December 2020 and May 2021, 29 for oxygen weaning. 41% were female, mean age 57 years old (minimum 21, maximum 89). Average oxygen weaning time was 11 days, with 319 days of hospital bed days saved by the oxygen weaning service and an estimated £127,600 cost saving to the system. Only 10 patients (4.9%) were readmitted after 14 days (versus 9% in usual care from hospital Covid-19 wards). Four patients (1.8%) died in hospital after a readmission. 83% of patients felt 'very supported' by the service and 73% expressed that it had 'fully' improved their confidence. Average score of satisfaction with the service, measured by a self-reported questionnaire, was 9.9/10.

Conclusions A telehealth-assisted remote monitoring service for Covid-19 is a safe way to provide specialist care at home and can reduce hospital readmissions whilst improving patient experience.

P19 COVID VIRTUAL WARD AND EMERGENCY DEPARTMENT DISCHARGES: CLINICAL OUTCOMES AND RECOMMENDATIONS FOLLOWING COVID PANDEMIC PHASE 2

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Introduction In wave 2 of the pandemic, the Virtual COVID Ward (VCW) was expanded to include Emergency Department (ED) as well as ward discharges with COVID pneumonitis. Outcomes of ED COVID patients have been reviewed and key recommendations drawn to inform practice in endemic phase COVID.

Methods A retrospective review of persons attending ED who were not admitted with COVID illness (COVNA) was undertaken to assess safety and clinical effectiveness of the VCW between 01/10/2020–01/04/21. Demographic data was collected as well as clinical outcomes including mortality and admission rates.

Results 119 COVNA patients identified (female 65 (55%); 77 (66%) BAME; median age 51 years, IQR 38–62, range 16–88). Over half (55%) were between the ages 40 and 69. COVNA patients were relatively free from co-morbidity: 104 (87%) had low or intermediate risk ISARIC 4C scores; all had Charlson co-morbidity score of less than 9 representing low 10 year mortality.

Median length of stay on VCW was 3 days (IQR 3–8, range 0–15); median number of calls undertaken was 3 (IQR 2–5, range 0–9).

32 (27%) COVNA patients returned to ED, 8 of whom were discharged home with an overall admission rate 20%. Re-presentations within 5/7 were predominantly COVID related (20/23; 87%). After 5 days, there were no attendances with worsening pneumonitis (figure 1). The commonest route for re-attendance was self-referral (17/32; 53%) of whom 14 were admitted; all 10 persons referred to ED from VCW were admitted.

COVNA patients issued with a saturation probe (48%) were more likely to re-present and be admitted (RR 2.2; 95% CI 1.03–4.74; p0.0425).

2 (1.7%) sustained pulmonary emboli; 1 intensive care admission; 4 patients died (3% unadjusted mortality).

Re-presentation and admission within days of initial presentation

Abstract P19 Figure 1

Conclusions COVNA patients have low mortality and morbidity from COVID. The VCW model has safely and successfully supported COVNA patients who are deemed fit enough to not require admission (clinical judgment and no oxygen requirement). Ideally, all COVNA patients should be issued with a saturation probe. COVNA patients should be warned that re-presentation and admission may be required. Worsening of symptoms and/or a drop in oxygen saturation should warrant return to ED. This pathway should be continued in COVID endemic phase.