**Abstract – Rheumatology Outpatient Clinic Backlog**

**Title:**

*Using novel remote electronic monitoring to deal with the Rheumatology Clinic backlog generated by COVID-19*

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**Introduction**

During the COVID-19 pandemic we were unable to provide regular outpatient services for patients with chronic rheumatic diseases. A “backlog” of 6812 patients without an allocated follow-up appointment accrued by September 2021. We quantified this cohort and analysed attempts to deliver care remotely (using video, telephone, and electronic remote management forms (RMFs)).

**Methods:**

We selected a 12-month “window” May 2020-May 2021 and analysed the number of patients awaiting follow-up during this period. This was initially 3259 patients out of the total backlog 6812. We revisited the number of patients remaining in that cohort on four occasions between September 2021 and September 2022: at baseline, then at 1-, 2-, 6- and 12-month intervals. Each audit cycle was conducted using the same methodology.

**Results**

We observed the that the number of patients without allocated follow-up reduced from 3259 to 326 by September 2022. In total this is a 90% reduction in the size of the backlog over a 12-month period, with a 71% reduction achieved by 6 months. There was a significant, progressive reduction in the number of patients during all five assessments (p<0.001 – Chi-square test for trend).

Of the 1956 RMFs completed between September 2021-March 2022, only 261 recorded a previous appointment date. 154/261 (59%) were completed by patients waiting in the “window” of May 20 – May 21. This indicates a preferential use of RMFs targeting backlog patients. Between 2-8% of the total backlog patients were managed using RMFs.

**Conclusion**

We have significantly reduced the size of our backlog of outpatient follow-up due to COVID-19 over a 12-month period. Remote management forms make a sizeable contribution to this reduction, meaning some of this reduction was achieved without face-to-face encounters. These results likely underestimate the effect of RMFs due to this dataset being incomplete.

338 Words

**[FIGURES OVERLEAF]**

**Figures**

**Figure 1**

Chart

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**Figure 2**

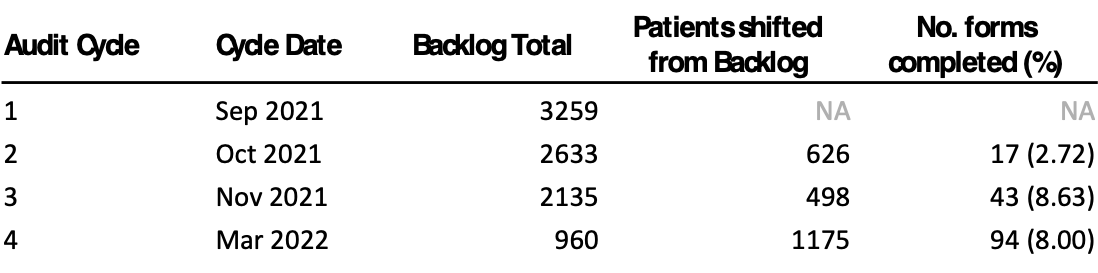
**Chart

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**Table 1**

**C1 C2 C3 C4 C5**

**3259 2633 2135 960 326**

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