

**00320 Safety and Efficacy of Digital Remote Triage for Patients With Acute Abdominal Pain Discharged From the Singapore General Hospital (SGH) Emergency Department: Interim Analysis of a Randomised-controlled Trial (RCT) Utilising the Novel Doctorbell Telehealth**

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**Aims:** Existing literature on telemedicine suggests that it safely enables cost savings and improved right-siting of patients with diverse illnesses <sup>1,2</sup>. Locally the same has been reported about telemedicine in the form of remote consultation services mediated by health professionals for specific applications such as poisoning <sup>3</sup> or maritime emergencies <sup>4</sup>. However, the use of telehealth modalities by patients directly for remote triage of acute ailments has yet to be definitively examined. This study aims to describe the efficacy and safety of digital teletriage in terms of service utilization and re-presentation within 2-weeks.

**Methodology:** This is a randomised-controlled trial comparing the efficacy of teletriage via a novel digital platform (intervention) against existing manual processes (control) in patients with acute abdominal pain discharged from the emergency department (ED) observation ward. Follow-up teletriage is conducted to promote self-efficacy and early detection of deteriorating patients for right siting of them. The control arm receives scheduled telephone teletriage with rescheduling of missed reviews actively coordinated by ED staff. Patients in the intervention arm have access to an automated digital platform for appointment scheduling based on individual preference.

**Result:** 45 patients were recruited with a survey response rate of 73.3% (33/45). Symptoms at initial presentation include bloating (54.5%, n=18/33), nausea/vomiting (63.6%, n=21/33), diarrhea (66.7%, n=22/33), giddiness (57.6%, n=19/33), dysorexia (75.8%, n=25/33), fever (24.2%, n=8/33), and bloody stools (6.1%, n=2/33). Symptoms persistent at discharge include abdominal pain (42.4%, n=14/33), diarrhea (33.3%, n=11/33), and nausea (6.1%, n=2/33). 22/45 patients were randomised to the intervention arm (48.9%). Overall utilization of teletriage was 75.6% (34/45), 13/22 patients in intervention (59.1%) and 21/23 patients in control (91.3%). Re-presentation rates for intervention (0%) and control (8.7%, n=2/23) were not significantly different (p=0.157).

**Conclusion:** Digital teletriage may safely re-design follow-up processes in selected patients from a “push-to-patient” form to a “pull-from-patient” form, with potential cost and manpower-time savings to the health system.