
POSTER ABSTRACT**Accuracy of THINK Center telephone triage in post-discharge patients: an observational study in real patients.**23rd International Conference on Integrated Care, Antwerp, Flanders, 22-24 May 2023Ching Yee Chia¹, Shu Fen Ong, Lydia Liu Huan, Biinte Shahri Nurul Ashikin,
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Objective: Tele-health & Integrated Network (THINK) Centre is a telehealth centre which offers 24/7 urgent care hotline with telephone triage capabilities for post-discharge care and community support for patients discharged from Khoo Teck Puat Hospital (KTPH), Singapore. This study aims to assess the accuracy of THINK telephone triage in identifying the need for emergency care and also identify factors which affect triage accuracy.**Methods:** A retrospective observational cohort study. 195 inbound calls to KTPH THINK Center teleservice between 1 January to 30 June 2022 were included. These calls were handled by THINK telephone triage nurses who were trained in THINK workflow and tele-triage protocols adapted for post discharge patients. Accuracy of triage disposition was assessed by matching the nurse telephone triage tier compared to the gold standard triage tier (a consensus by a panel of doctor and nurses after reviewing of medical records, triaging symptoms and health service utilization within 1 week of triage call).**Outcome:** THINK telephone triage had an overall accuracy of 89.74%. With regards to identifying the need for emergency care, THINK telephone triage had an overall 90.00% sensitivity (95% CI: 80.48% to 95.88%) and 98.40% specificity (95% CI: 94.34% to 99.81%). Multivariable analysis suggested cardiovascular complains (OR 7.605, 95% CI 1.118 to 51.722) and telephone triage nurses having community nursing experience (OR 18.606, 95% CI 1.279 to 270.77) are positive predictors of accurate triage. Non-emergency triage disposition (OR 0.143 95% CI 0.024 to 0.838) was associated with inaccurate triage - predominantly under-triage.**Conclusion:** This study shows that THINK telephone triage has a good accuracy rates of 89.74%. While this suggest that the current triage protocols used is safe and effective, refinement can be explored to enhance its accuracy of distinguishing non-emergency triage dispositions. The findings of this study will guide triaging quality improvement as well as future scaling and replication of the service.