Retrospective Analysis of U-Turn Cases in Sengkang General Hospital Mobile Inpatient Care at Home (SKH@Home) Programme

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Objective

To identify U-turn contributing factors and propose improvement strategies.

Background

SKH@Home offers acute care in patients' homes instead of traditional hospitalisation. However, some patients require readmission to hospital ("U-turns"), representing potential programme limitations. Understanding U-turn patterns is crucial for programme optimisation.

Methodology

76 U-turn cases from **953** patient encounters between April 2024 and October 2025 were examined for U-turn diagnoses and avoidability factors. Qualitative thematic analysis was performed on insights discussed at the department's monthly Morbidity-and-Mortality meetings.

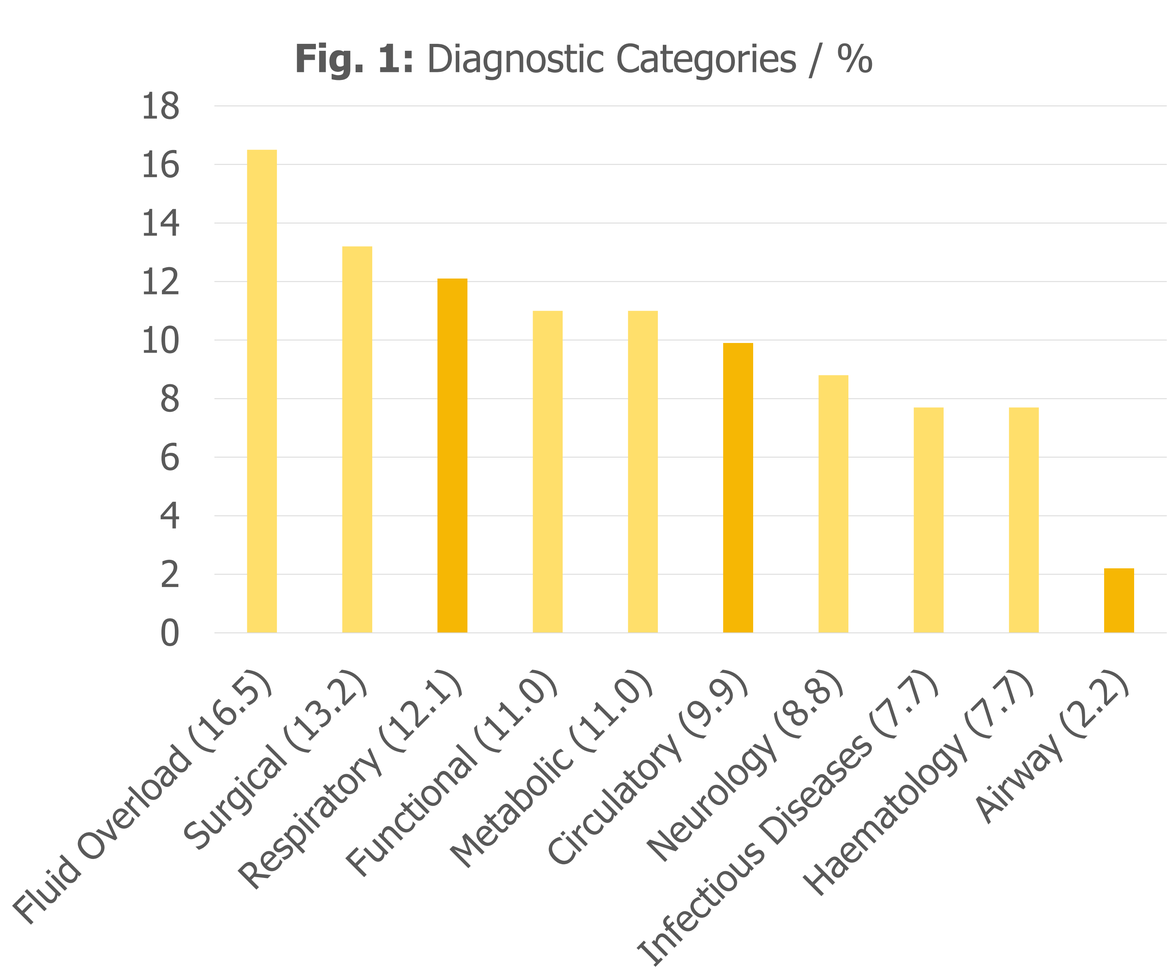
Results

U-turns had an average length-of-stay of **3.89** days.
U-turn reasons included:

- Clinical / biochemical deterioration / significant radiological findings (**50%**);
- New-onset undifferentiated presentations (**20.2%**);
- Patient / caregiver concerns (**23.4%**);
- Scheduled procedures (**6.4%**).

There was one abscondment and one expected demise.
Diagnoses are classified under **Fig. 1**.

Fig. 1: Diagnostic Categories / %



50 out of the **76** cases had potentially avoidable factors, as shown under **Table 1**. Among these 50 unique cases, **16** had **2** factors identified, while **1** had **3** factors.

Table 1: Avoidability Factors

Factor	Incidence	%
Communications among Healthcare Providers	9	**13.2**
Communications with / Limitations of Patient or Caregiver	21	**30.9**
Service Limitations	11	**16.2**
Functional Limitations	7	**10.3**
Preventable Patient Adverse Event	4	**5.9**
Clinical Decision Making	16	**23.5**

Results

Service limitations surfaced in the **11** identified cases include:

- Service workflows for in-flight liaison consults (**2** cases);
- Limited point-of-care diagnostics in the setting of acute clinical deterioration (**1** case);
- IV electrolyte administration (**2** cases);
- IV blood products / colloid administration (**4** cases);
- Service limitation eventually addressed (in **2** cases) by leveraging on a newly-created short-stay unit for physical in-person reviews, and utilising elastomeric pumps for continuous intravenous antibiotic infusions.

Among the **16** unique cases attributed to **clinical decision making**, **Table 2** provides a breakdown of actionable steps for clinicians.

Table 2: Identified Steps for Improved Clinical Decision Making

Steps	%
Lower threshold for frontloading investigations pre-transfer	**23.5**
Anticipatory supply of equipment and prescriptions	**23.5**
Fine-tuning home-based management of potential medical emergencies	**23.5**
More stringent case selection by clinical stability criteria	**11.8**
Closer interval clinical reviews / early involvement of relevant liaison expertise	**11.8**
Standardised clinical pathways for high risk U-turn conditions (e.g., fluid overload)	**5.9**

Discussion

Proposed Improvements:

Pre-Transfer

- Frontloading investigations
- Gauging expectations and competencies
- Providing standby medications / equipment

Communications

- Dedicated huddles for complex or palliative cases
- Improving after-hours escalation protocols
- Evaluation during acute deterioration
- Utilising transfer checklists

Enhanced Monitoring

- Fluid overload cases / ongoing oral drug titrations / at high-risk of deterioration
- Periodic functional assessments
- Anticipatory planning
- Post-discharge follow-up calls

External Supports

- Establishing a short-stay unit
- Early allied health / specialty nursing consults
- Addressing service limitations (intravenous electrolytes; subspecialist consultations)

Conclusion

U-turn analysis provides actionable insights for programme refinement, enabling better patient selection, clinical decision-making, and care delivery; improving programme effectiveness and patient outcomes.