

Evaluating patient parameters that contribute to unplanned presentations within an emergency department for iron infusions

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BACKGROUND

In recent years, rising iron deficiency cases have increased Emergency Department (ED) visits and demand for intravenous (IV) iron infusions, worsening overcrowding and delays. To address this, Northern Health opened an outpatient iron infusion clinic in February 2025 to triage referrals, streamline care, and reduce ED pressure. This retrospective audit examined patients admitted to Short Stay Unit (SSU) with iron deficiency and their suitability for outpatient management.

AIM

To examine factors driving SSU iron deficiency presentations, evaluate early intervention opportunities, and explore potential pharmacist involvements in triage and management.

METHOD

A retrospective audit examined adult SSU patients with iron deficiency at Northern Hospital from April 2024 to March 2025, excluding those with heart failure, chronic kidney disease, or pregnancy. Data from EMR and CPF were recorded in Excel and analysed graphically.

Table 1, Patients presenting to SSU for iron infusion between April 2024 to March 2025

Total number of patients	146	
Included	108	
	Female	Male
	91 (84.2%)	17 (15.7%)
Excluded	38	
	HF, Pregnancy, CKD	Incomplete pathology reports
	17	21

RESULTS

- Total patients included: 108
- Female patients: 84% (Table 1)
- Main reason for admission: GP-referred iron deficiency anaemia 41.7% (Graph 1)
- Suitable for outpatient management based on pathology: 17.6% (Table 2)
- Prior iron supplementation documented: 21% (Table 3)
- Received iron deficiency management advice on discharge: 24% (Table 3)

Table 2. Outpatient priority based on patient's pathology results

Patient Priority if managed as an outpatient instead of direct presentation to SSU		
Emergency		17 patients (15.7%)
Urgent	1 week	45 patients (41.6%)
	2 weeks	20 patients (18.5%)
	4-6 weeks	7 patients (6.5%)
Routine (>6 weeks)		19 patients (17.6%)

Graph 1. Reasons of presenting to the SSU for iron infusion

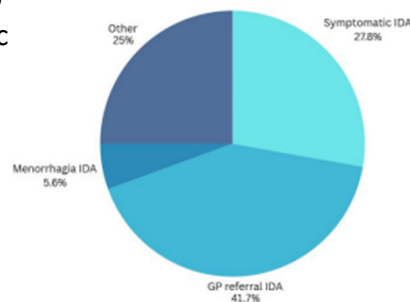


Table 3. Patients and iron supplementation

Number of patients taking iron supplementation at home (prior to iron infusion)	
Diet	9 (8%)
Oral iron supplements	12 (11%)
Both	2 (1.8%)
Total	23 of 108 (21%) patients
Number of patients with documented iron supplementation advice (on discharge)	
Diet	2 (1.8%)
Oral Iron supplements	17 (15%)
Both	7 (6.4%)
Total	26 of 108 (24%) patients

DISCUSSION

Most SSU patients were female 84%, reflecting higher prevalence in women of reproductive age. GP referrals accounted for 41.7% of admissions, suggesting recognition in primary care but limited use of outpatient services. 17.6% of patients were suitable for outpatient management, indicating possible overuse of SSU resources.

Low rates of prior iron supplementation (21%) and discharge advice (24%) suggest missed opportunities for earlier intervention and improved follow-up care.

A pharmacist could play a key role in this space, by reviewing pathology results, initiating oral therapy where appropriate, and providing patient education. This involvement could help reduce unnecessary SSU presentations and ease pressure on acute care services.

CONCLUSION

Many SSU iron deficiency cases could be managed in the outpatient setting. Enhanced triage processes and pharmacist-led screening could facilitate earlier intervention, optimise resource utilisation, and reduce demand on acute services.