

Northern Sydney Local Health District, in partnership with General Practitioners and Medical Specialists

Pumping Iron

overview

Acute/Post-Acute Care (APAC) is a Northern Sydney Local Health District Hospital in the Home service that provides the community with a safe alternative to hospitalisation.

APAC facilitates 'the right care in the right place at the right time' to improve patient outcomes, and ease pressure on acute hospital bed occupancy.

APAC introduced a new way to deliver iron to anaemic patients in-home or in-clinic, reducing ED visits for iron deficient anaemia patients and associated costs.

background

A review was undertaken to address the issue of patients going to hospital with iron deficiency anaemia. The review followed consultation with medical specialists and general practitioners, and covered the existing guidelines and best practice evidence.

The review found that administering Ferric Carboxymaltose to anaemic patients in a primary care setting, could be a safe alternative to traditional intravenous iron delivered in hospital.

the journey to change

Planning for the project began in 2012, with implementation in 2013. APAC Management was consulted and supported the project development and implementation.

Significant benefits arose as a result of the program, including:

- Transport to and from hospital by ambulance was no longer required for patients in aged care settings.
- Resourcing pressures were eased, allowing emergency departments to focus on managing true emergencies.
- Outpatient and clinic resources were relieved of pressures.
- Patients no longer required admission to hospital. An estimated saving of \$31,200 was achieved,

based on the cost of acute beds at \$650 per bed per day.

- Referrals for iron deficiency anaemia steadily increased from 5-10 a month to 25-30 a month, in part due to promotion by GP Liaison Registered Nurses.
- APAC increased the capacity in primary care to manage iron deficiency anaemia more effectively by providing both home treatment and resources to selected GP clinics to provide this infusion in their practice treatment room.

In terms of integration with strategic business planning, APAC responded to iron deficiency anaemia by providing in-home or clinic treatment for patients, avoiding the need for hospital visitation.

results

How did the project improve organisational performance?

- APAC could absorb an increasing rate of referrals over the lifetime of the project.
- APAC could service patients in their aged care facilities and were resourced to cater for fully mobile, younger patients at the clinic.
- Referral to APAC saved 30-50 patient hospital visits each month, with a further 400+ patients provided treatment in new general practice clinics.
- General practice clinic numbers have steadily grown over the life of the project, indicating a strong willingness amongst GPs to participate.
- All APAC staff undertook further education to learn the Ferric Carboxymaltose Clinical Guideline, which largely fell within current scope of practice for APAC Community Registered Nurses.

**435 patients
residing in an aged
care facility avoided
hospital
presentation**

APAC diligently and carefully managed the two incidences of 'skin-staining' (where the infusate leaks and moves into surrounding tissues, staining the skin)

ensuring that patients were referred for specialist medical advice and treatment to correct the condition. Certain aspects of clinical practice were also reviewed and work instructions tightened to ensure that the risk of 'skin-staining' was effectively managed.

challenges

The major challenges included:

- Referral volume.
- A significant change in demographic of patients referred for the condition.
- People are living at home for longer and are often healthier and more independent.

APAC initially became involved to provide a pathway for residential care patients to obtain treatment in their homes. With Ferric Carboxymaltose being more accessible, patient referrals have been primarily ambulant people who are able to access clinic-based care. Alternative pathways have been identified and further development is in progress for this cohort of patients, to ensure they receive 'the right care in the right place at the right time'.

future strategies

APAC has fostered relationships and resourced suitable general practices to operate their own Ferric Carboxymaltose clinics on a regular basis without impacting the cost to the patient.

In future, this could be expanded to provide point-of-care referral and treatment for iron deficiency anaemia.

A GP who is not suitably resourced to provide this treatment themselves could access other local practices in a 'clustering-model' to arrange infusions for their patients.

Increasing identification of patients with iron deficiency anaemia pre-elective surgery, and subsequent implementation of a blood management protocol would provide substantial additional benefits. Patients would be less likely to experience complications post-operatively and significant cost savings could be achieved, further extending the sustainability of healthcare.