

Patient Blood Management: Challenges of Providing a State-wide Service

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Introduction/Background

Sir Charles Gairdner Hospital is a 600-bed specialist tertiary hospital in Perth, recruiting patients State-wide. Patient Blood Management (PBM) is a proactive approach to medicine and aims to reduce the incidence of blood transfusion by optimising haemoglobin and iron stores prior to elective primary joint replacement surgery. This builds in capacity for patients to recover their own haemoglobin post-operatively. Patients receive oral or intravenous (IV) iron according to an algorithm, medical history and time until surgery. Treatment is distributed evenly between oral and IV iron.

Aim/Purpose of the project

PBM aims to optimise all patients prior to joint replacement surgery. Accessing IV iron outside the metropolitan area was unpredictable. PBM introduced strategies to address this potential inequality in healthcare.

Methods/Process/Who

Historically iron infusions have been associated with significant adverse reaction including anaphylaxis. Although this iron type has been replaced by a much safer product, reluctance to provide iron infusion in General Practice (GP) was common. An extensive re-education campaign led by the Department of Health, GP groups and PBM nurses changed this, resulting in increased GP participation. Non-metropolitan healthcare areas agreed to accept PBM referrals for infusions and this combined effort improved accessibility to IV iron across the State.

Results/Outcome

Significant achievements include:

- Provision of equitable care regardless of geography. 2 audits of joint replacement surgical cases (6-month periods) showed that 99% and 100% of patients received PBM
- Traditional tertiary care was devolved to GPs and other healthcare sites
- Transfusion rates fell resulting in:
 - significant healthcare cost savings
 - reduced demand on donor blood supply
 - decreased risk/exposure of blood products to patients

Recommendations/Conclusion

Providing equitable care to patients underpins the values of the PBM program and has been achieved by seeking flexible solutions to provide healthcare. Building relationships between primary and tertiary providers, patients and families has been integral in the success and sustainability of the PBM program. It ensures that all patients are medically prepared for surgery and reduces the risk of cancellation/patient frustration.