A Patient Centered, Nurse Led Transfusion Program

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The Health Challenge

- Increasing population of patients with a myelodysplastic/myeloproliferative disorder
- Problematic management of haematology patients with progressive disease requiring chronic transfusion support
- A need to increase chair efficiency
- A need to reduce the frequency of hospital admissions
- Opportunity to ‘centre' the patient firmly within the team
Development of innovative practice

- Clinician expertise
- Observing patients
- Observing practice
- Literature review
- Best practice principles
- Gap analysis

- Discussion
- Brainstorming
- Negotiation, building a collaborative framework
- Being brave and focussed!
### What did we need?

<table>
<thead>
<tr>
<th>Care provision</th>
<th>Referral pathways</th>
<th>Individualised plan</th>
<th>Blood product management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair in a clinic</td>
<td>Referral pathway from haematologist</td>
<td>Pre Transfusion Hb target (subject to change)</td>
<td>Blood product ordering</td>
</tr>
<tr>
<td>Patient referrals</td>
<td>Referral pathway back to haematologist</td>
<td>Frequency of pathology checks</td>
<td>Access to blood products – different sites</td>
</tr>
<tr>
<td></td>
<td>Allied health referral pathway</td>
<td>Individual assessment criteria</td>
<td>Stewardship of the resource</td>
</tr>
<tr>
<td></td>
<td>Palliative care referral pathway</td>
<td>QOL parameters &amp; clinical</td>
<td></td>
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</tbody>
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**NSW Government**

**Health Central Coast Local Health District**
How would it look?

- Referral pathway
- Review pathway
- Individualised patient management plans
Chronic transfusion and MDS nurse led program

- Brief and proposal submitted and accepted
- Program commencement October 2009
- 11 chairs over 4 days in 3 clinics each week - 28 patients

<table>
<thead>
<tr>
<th></th>
<th>Tues</th>
<th>Weds</th>
<th>Thurs</th>
<th>Fri</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gosford Cancer care</td>
<td>8am-4.30pm</td>
<td>8am-4.30pm</td>
<td>8am-4.30pm</td>
<td>X</td>
</tr>
<tr>
<td>Gosford Ambulatory care</td>
<td>8.30am-4pm</td>
<td>8.30am-4pm</td>
<td>8.30am-4pm</td>
<td>8am-4pm</td>
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<tr>
<td>Wyong Cancer care</td>
<td>8am-4.30pm</td>
<td>8am-4.30pm</td>
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The Practical Steps

- 6 week process review:
  
  Chairs under utilised & reduced to 9. Admin and education issues

- 3 month review: No change required

- 12 month CT&MDS program evaluation: Estimated bed days saved (ED presentations) - 70 per annum*. 85% chair occupancy. 91% patient satisfaction (65% response rate)

- Mid 2011 (18 months into program) patient numbers at 40:
  
  Adverse effect on HCNC role. Consultation with haematologists/stakeholders/patients - patient referral criteria revised & numbers capped (20)

- Patient profile and focus of care shifted – more unstable group

*30 transfusions per month
Patient profile

- More unstable - deteriorating bone marrow function
- Monitoring for possible therapeutic intervention (demethylating agents, iron chelation, antifibrinolytics, EPO)
- Focus on avoidance of ED presentation and/or hospital admission
- Symptom management
- Progression towards palliation/end of life care
2012 Chronic transfusion program evaluation

- 44 patients over the last 12 months (37 transfusions per month)
- 86 admissions, 16 associated with anaemia
  - 6 symptomatic anaemia
  - 3 disease progression
  - 7 sepsis or PR bleeds with associated anaemia

*Only 6 admissions for transfusion over 12 month period in a group of 44 unstable patients*
# Patient satisfaction survey

<table>
<thead>
<tr>
<th>Survey questions</th>
<th>Response rate 65%</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Information</td>
<td>• 100% program &amp; HCNC info</td>
</tr>
<tr>
<td>• Transfusion scheduling</td>
<td>• 92.2% pathology &amp; clinic contact numbers</td>
</tr>
<tr>
<td>• Accessibility of coordinators</td>
<td>• 100% site, 84.6% timing</td>
</tr>
<tr>
<td>• Frequency of specialist follow up</td>
<td>• 92.2% face to face, 92.2% phone</td>
</tr>
<tr>
<td>• Service improvement</td>
<td>• 100% specialist f/up</td>
</tr>
<tr>
<td>• Overall satisfaction</td>
<td>• 84.6% no improvement, 15.4% more money for nurses/always room for improvement</td>
</tr>
<tr>
<td></td>
<td>• 92.2% 10/10, 7.8% 9/10</td>
</tr>
</tbody>
</table>
Clinician satisfaction survey

- Five question survey
  - Communication
  - Decision making
  - Referrals
  - Overall satisfaction
  - Suggestions for improvement

- 100% response rate
- 100% satisfaction score

Areas for improvement:
  - Staffing
  - Space
  - Results access
  - Specialised support in outpatient setting
Impact of change on unstable patients

- Improved quality of life for MDS and end stage patients/families
- Improved quality of end of life care
- Better communication and relationship with palliative care
- Reduction in ED presentations and hospital admissions
- Team approach to patient management - better AHS access

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Gems of wisdom

- Champion the cause – be clear and consistent
- Build yourself a good team...you’ll need it!
- Always ensure consumer involvement...we often talk different languages
- Become best friends with those that can help you with data...and collect it
- Tell everyone about what has been achieved – share the expertise and publish
What’s next...

- NSW Cancer Institute funding for the Outpatient Acute Myeloid Leukaemia Project

- Development of Nurse Led programs:
  - Early discharge programs (nursing triage & collaborative management) – development of the Nurse Practitioner role
  - Symptom management of oral therapies to improve compliance and reduce treatment related side effects
  - Collaborative approach to improving the QOL of those living with haematological cancers
Thankyou