Western Innovation

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In the Beginning Or We have a situation in ED

• Problem: Patients languishing in ED awaiting review by various specialties.

• SOLUTION

• A pioneer role of an advanced practice nurse to assess patients in ED, and get the patient seen and sorted in a timely manner.
Enter the ASU

Adapted from the POW hospital (September 2006).
Adjusted and tweaked to suit our local needs.
Consultant led service.
Protocol driven service.

As an enhancement within the ASU team, a Nurse Practitioner position was created. Enter two middle aged APN`s sent back to school to become NPs.
The ASU

• Why a consultant led service?

1  Senior surgeon = more experience in decision making.

2  “fresh eyes“.

3  Patient’s see, and are seen by, a qualified and senior surgeon and occasionally, a Professor.
The Team:

- 1 x Director
- 1x Consultant
- 1 x ASU fellow.
- 2 x Registrars.
- 3 x Residents / interns
- 2 x Nurse Practitioners
In the early days. Is Everyone on the same page?

- Different surgeons, different specialties, different ideas.

10 surgeons, ten different plans
Antibiotics Vs No antibiotics
To operate or not
Watch and wait or act
MEANWHILE ..........

The slippery slope.
Solution : Protocols.

• All aspects of ASU patient care.

• Protocol for all presentations.

• 2008 Lion Bite

• Special protocols designed for antibiotic cover, DVT prophylaxis, Bridging therapy, Use of new oral anticoagulants.
Nepean ASU Protocol

Appendicitis

MEDICAL INITIAL ASSESSMENT
Clinical history & assessment
- Abdominal pain; periumbilical shifts to right iliac fossa
- Anorexia, nausea, vomiting, fever, altered bowel function
- Duration of symptoms, menstrual history, sexual history, infectious contacts, recent viral illness
- Examination: temperature, tachycardia, hydration status, peritonism, tenderness McBurney’s point, rebound tenderness, guarding, Rovsing’s sign, PR exam

Investigations:
- Urinalysis, B/ECG, FBC, EUC, BSL
- If Diagnostic unclear: CRP, CXR, LFT, RFT
- Consider US in females if gynaecological cause suspected and consult O&G

Management
Unclear diagnosis, Not unwell:
- Admit for observation
- NBM
- Simple analgesia
- SC Heparin and TEDS
- IV fluids
- Review: discharge if improved, if no improvement consider further imaging or laparoscopy

Suspected Appendicitis
- NBM, IV fluids, Heparin/TEDS
- IV Abs: Cefazolin, Flagyl (check allergies, broaden Ab cover if unwell or generalised peritonitis)
- Consent
- Book theatres, inform anaesthetics
- Appendectomy:
  - Gangrenous, or perforated: 5 days IV Abs
  - Free pus: 48hrs IV Abs
- Inflamed/normal: perioperative Abs only

Note: Operative lavage is recommended, but fluid needs to be adequately removed at time of operation

Discharge Criteria:
- Tolerating diet, mobilising, course of IV antibiotics complete, afebrile >24hrs

NURSING INITIAL MANAGEMENT
- Complete nursing admission
- Check consent done
- Assess level of pain and document
- Give analgesia as required
- Ensure antibiotics administered if appendicitis suspected/confirmed
- TEDS and Heparin as charted
- Encourage mobilisation post operatively

Nursing Discharge
- Provide D/C paperwork
- Check if F/U appointments are made
- Check if medical certificate is needed
- Check if script or medication required

Accepted: October 2012, Reviewed: 
Next Review Date: September 2015
ASU Data base

• All patients admitted under ASU.

• Updated daily.

• Pass word protected. ASU members only.
In the good old days

• One consultant on site to:

• Operate or supervise operations

• Make decisions about not only in-patients, but also ED presentations.

Solution ……
Innovation in Nepean ASU

• A 2\textsuperscript{nd} surgeon.

• As a team with patient numbers ranging from 20 to 55 needing to be rounded on every morning, the starting time for our surgery was often delayed until mid morning or later.

  The ramifications of this delay were many.
Statistics

**ASU - NEPEAN HOSPITAL**

<table>
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<tr>
<th></th>
<th>No of Cases Completed</th>
<th>Minutes Avail</th>
<th>Minutes Used</th>
<th>Utilisation%</th>
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<tr>
<td><strong>10 AM START</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May June July 2015</td>
<td>332</td>
<td>37,800</td>
<td>33,480</td>
<td>88.50%</td>
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<tr>
<td><strong>8 AM START</strong></td>
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<tr>
<td>Aug Sept to include 23 Oct 2015</td>
<td>310</td>
<td>48,680</td>
<td>33,780</td>
<td>70.30%</td>
</tr>
</tbody>
</table>

**Contributing Factors**

* More complex cases

* Use of additional surgeon being available from 8am

* Being able to commence at the start of the Theatre Day

* ASU Theatre is open to being utilised by other specialties with other cases
In the good old days, presentations to ED post discharge.

SOLUTION

• A means of direct contact
Innovation In Nepean ASU: A contact card given to all discharged patients from the ASU.

• Aim: To prevent patient representations to Ed post D/C from the ASU

• SOLUTION:
The ASU Card

ACUTE SURGICAL UNIT (ASU) Information for ASU patients ONLY

If you have any concerns regarding your stay please phone 0427 318 895 between 7am and 4pm. If you are worried or the phone is unanswered please attend your nearest Emergency Department or call 000.
In Conclusion

- The ASU team at Nepean Hospital is a continuing evolution of patient care design. Sometimes we get it right, sometimes not.

Thank you on behalf of the hard working team at the Royal Nepean Penrith, in the wild, wild west.