Direct access to AMU
Catriona Harkin
Nurse Practitioner
Altnagelvin Hospital
Who am I?

- Qualified Bsc (Hons) Adult Nursing 2008
- Permanent post AMU, Altnagelvin Hospital
- Post Graduate Diploma Specialist Nursing Practice-Nurse Practitioner 2012
- Acting Nurse Practitioner post AMUA 2012
- Post Graduate Diploma Non-Medical Prescribing 2015
Where do I work?

- Altnagelvin Hospital, Derry (WHSCT)
- Western Health and Social Care Trust has Population of 300,000.
- Teaching hospital
- Acute Medical Unit - 22 bed, 6 assessment trolley, 1 waiting area, ambulatory care area
- 3 Acute Medical Consultants, 4 medical SGs, 1 nursing manager, 4 NPs, 3 Srs, 27 SNs, 4 Acute Support nurses and 8 Nursing auxiliaries
Acute Medical Unit Assessment Area

- Opened in 2009 for GP referrals
- Staffed by 2 Nurse practitioners and 1 acute support nurse daily
- Consultant and SG cover 5 days, on-call team at weekends and BHs
- Accept all medical referrals from GPs and ED department using inclusion/exclusion criteria via bleep system
- Open 9am-9pm, 365 days
- Unique area-first of its kind in NI in 2009
Obstacles to service

- Physical space
- Equipment
- Managing throughput
- Access to investigations (xray, porters)
- Staffing - nursing skill mix
- Medical cover
- Lack of pathways and protocols
Service development

• Wide range of presentations from walking talking to acutely unwell
• Acuity of patients - some high on arrival and requiring level 2 care
• Some requiring NIV/Opti-flow
• NPs not SNs, highly skilled in patient assessment, early intervention and identifying patients who are unwell or are fit for discharge
Service development

• Meeting with radiology to improve communication
• Requisition of new ultrasound machine through business case
• Allocation of dedicated middle grade medical staff to hold bleep
• Plans to expand area for more physical space to improve flow and capacity
## Inclusion/exclusion criteria

<table>
<thead>
<tr>
<th>INCLUSION</th>
<th>EXCLUSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical referrals from GP practices</td>
<td>Surgical presentations to GP/ED</td>
</tr>
<tr>
<td>Medical referrals from other hospital specialities e.g Endocrine/Opthamology</td>
<td>Acute MI/Stroke</td>
</tr>
<tr>
<td>Clinically stable patients</td>
<td>Patients who are clinically unstable and may require resuscitation department</td>
</tr>
<tr>
<td>Patients from ED department who fit AMB score referral criteria</td>
<td>Oncology patients who are currently undergoing chemotherapy</td>
</tr>
</tbody>
</table>
# Amb scoring system

How to identify potential ambulatory care patients from the general medical emergency in-take (RCP acute care toolkit 10)

<table>
<thead>
<tr>
<th>FACTORS</th>
<th>1 IF APPLICABLE</th>
<th>0 IF NOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aged &lt;80 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has access to personal/public transport</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV treatment not anticipated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not acutely confused</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEWS score = 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not discharged from hospital within previous 30 days</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL Amb Score (Maximum 7)**
Amb scoring system

If Amb Score ≥ 5, it has a sensitivity of 92% in predicting discharge within 12 hours of assessment. Therefore consider direct admission to medical bed rather than AMUA assessment.

Advantages of the Amb Score

• Simple easy to use tool
• Can be calculated by triage nurse in ED
• Full clerking not required to calculate it
• Referral to AMUA to SG/NP on duty with short phone call
Using ambulatory care (AMB) score to identify patients suitable for ambulatory emergency care (AEC)

Richard Young, Conor Moran, Emer Teague, Catriona Harkin, Siddhesh Prabhavalkar
Altnagelvin Hospital, Western Health and Social Care Trust

Introduction

Key at College of Physicians' acute care tool is AMB score as one of the measures of identifying patients suitable for ambulatory emergency care (AEC).

Our project aimed to evaluate the effectiveness of the AMB scoring system by using it to identify patients from our acute medical admissions cohort who can be managed in our ambulatory care area.

AMB score ≥ 5, consider ambulatory care

<table>
<thead>
<tr>
<th>Gender</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1</td>
</tr>
<tr>
<td>Female</td>
<td>2</td>
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</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>AMB Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;65</td>
<td>1</td>
</tr>
<tr>
<td>65-80</td>
<td>2</td>
</tr>
<tr>
<td>&gt;81</td>
<td>3</td>
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</table>

<table>
<thead>
<tr>
<th>Assess to transport</th>
<th>AMB Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Likely to need IV/treatment</th>
<th>AMB Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stability charted</th>
<th>AMB Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NIV use</th>
<th>AMB Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Diagnosed within last 30 days</th>
<th>AMB Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOTAL SCORE</th>
<th>AMB Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Results

18 patients were included out of which 22 were males and 16 were females. Average age was 68.2 years, range 15 - 97 years.

Conclusions

All 18 patients who had an AMB score ≤ 3 were deemed suitable for AEC, which indicated a good predictability for patients requiring admission.

Only 50% of patients with an AMB score ≥ 5 were deemed suitable for AEC, indicating the need for additional criteria to help make this decision.

The findings of this project have potential to identify patients with ambulatory sensitive conditions who were currently being admitted, and also enabled us to create additional criteria for admitting these patients (see below). These have been successfully introduced in our Emergency Department, and we plan to review them to evaluate their potential for effectively identifying patients for AEC.

Materials and methods

All acute medical admissions over one week and were prospectively assessed using a predefined, daily, presenting complaint, provisional diagnosis, and purpose of admission. The admitting medical physicians used their clinical judgment in establishing the suitability for ambulatory care. AMB score was then calculated on all of these patients to check its effectiveness.

Criteria for AEC

All 18 patients with an AMB score ≤ 5 were suitable for AEC.

Only 6 (30%) of the 20 patients with an AMB score ≥ 5 were suitable for AEC.

Literature cited

1. Royal College of Physicians' Acute Care Tool Kit number 10.
   https://www.rcp london.ac.uk/acute_care_tool_kit_10_ambulatory_emergency_care.pdf
Ambulatory PE pathway

**Ambulatory Pathway for Management of Suspected PE**

- **Patient Addressograph Label**
- **Patient with symptoms consistent with PE**
- **History and examination (including age and weight)**
  - Investigations: FBC, ESR, LFT, CRP, Coag, Troponin, BNP, D-dimer, ABG, ECG, CXR

**PE suspected:**
- Likely low probability Wells score
- Unlikely two-level Wells score but positive D-dimer

**Two-Level Wells Score**
- **Criteria**
  - Clinical signs/symptoms of DVT
  - Alternative diagnosis less likely
  - Heart rate >100 beats per minute
  - Immobilization for over 3 days/surgery in previous 6 weeks
  - Previous DVT/PE
  - Hemostasis
  - Malignancy (on treatment/ treated in past 6 months/palliative)

- **Points**
  - Clinical signs/symptoms of DVT 3
  - Alternative diagnosis less likely 1.5
  - Heart rate >100 beats per minute 1.5
  - Immobilization for over 3 days/surgery in previous 6 weeks 1
  - Previous DVT/PE 1
  - Hemostasis 1
  - Malignancy (on treatment/treated in past 6 months/palliative) 1

- **No consideration of alternative diagnosis**
- **PE unlikely:** over 4 points
- **PE unlikely:** 4 points or less

**CRITERIA FOR AMBULATORY CARE**
- Haemodynamically stable
- O2 satur <94% on room air
- No history of cardiorespiratory disease (including PE)
- Troponin negative
- No co-existing major DVT
- Pain managed by oral analgesia
- No severe renal dysfunction
- No active malignancy
- Not pregnant
- No bleeding risk
- No allergy to warfarin/heparin/history of heparin-induced thrombocytopenia

**Outpatient therapy feasible**
- Mobile
- Likely to comply
- Able to self-administer/relative able to administer enoxaparin
- Can travel to/from hospital
- Telephone access
- Aware of adverse symptoms/how to obtain help

**AMBULATORY MANAGEMENT**
- Prescribe medication as required
- Teach patient/relative how to inject Enoxaparin if Rivaroxaban contra-indicated
- Provide information sheet to patient
- GP letter
- Discharge patient
- AMU/MASU Consultant review - in 1-2 weeks for investigations and follow up
- Refer to respiratory outpatient clinic

**NICE TA207:** Rivaroxaban for treating PE and preventing recurrent VTE

www.nice.org.uk/TA207
Iron deficiency protocol

### DHEC Western Health and Social Care Trust

#### Iron Deficiency Anaemia Guideline

**Version:** 06/01/15

<table>
<thead>
<tr>
<th>Name</th>
<th>DOB</th>
<th>N/S/C</th>
<th>Address</th>
<th>Most Recent Blood/Urine</th>
<th>Result</th>
<th>Date</th>
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</thead>
</table>

**Presentation**

<table>
<thead>
<tr>
<th>Presentation</th>
<th>Please Specify</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms (Dyspnoea, anaemia)</td>
<td></td>
</tr>
<tr>
<td>obvious/known bleeding source</td>
<td></td>
</tr>
<tr>
<td>Previous Medical History</td>
<td></td>
</tr>
<tr>
<td>Carola/Carotid/vascular arteries or veins (Haem)</td>
<td></td>
</tr>
<tr>
<td>Medication (NSAIDs/anticoagulants)</td>
<td></td>
</tr>
<tr>
<td>Social (Diet, alcohol, smoking)</td>
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</tr>
</tbody>
</table>

**Investigations**

<table>
<thead>
<tr>
<th>Investigations to date</th>
<th>Please Specify</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previously Diagnosed/ Newly Confirmed IDA</td>
<td></td>
</tr>
<tr>
<td>Coeliac Serology</td>
<td></td>
</tr>
<tr>
<td>Urinalysis</td>
<td>If RBC/ Hb &gt; 70 mg/dl microscopic haematuria. Refer to local haematuria guidelines.</td>
</tr>
<tr>
<td>Previous OGD/Colonoscopy</td>
<td></td>
</tr>
<tr>
<td>Gynaecological Investigation</td>
<td></td>
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</tbody>
</table>

**Diagnosis**

**Confirming IDA**

- Ferritin most powerful marker for iron deficiency in the absence of an underlying inflammatory condition.
- Anaemia with ferritin <300mg/L or <70mg/L in the presence of an elevated CRP > 20.
- TSAT <20% or high TIBC

**First presentation of confirmed IDA**

- Referral to named GI consultant with booked OGD and Colonoscopy.
- If recent OGD/Colonoscopy (within 6 months) refer to GI Clinic.
- Female with Menorrhagia or Post menopausal bleeding - refer to Gynaecology.
- Female with no Menorrhagia or Gynaec causes for IDA - refer to GI clinic.
- Haematological condition identified - refer to Haematology.

**NICAN Red Flag Criteria for GI Referral**

- Urgent OGD/Colonoscopy
- Males with unexplained IDA and Hb < 110g/dl
- Non-menstruating females Hb < 100g/dl where iron deficiency is confirmed and no evidence of obvious non-ID bleeding identified.
Patient Satisfaction Survey

What do our patients say?
Using patient feedback to improve quality of care.

Amlan Bhattacharya, Chiara Byrne, Catriona Horner, Siddhesh Prabhavalkar
Acute Medical Unit, Altnagelvin Area Hospital, Western HSC Trust, Londonderry, UK

AIM

Patient satisfaction is an important quality indicator of service standard [1,2].

We undertook 2 patient satisfaction surveys 8 months apart that allowed us to gain valuable insight into our patient’s needs and make important changes to our practice.

We would like to share our findings that led to quality improvement within our ambulatory area.

METHOD

A validated patient satisfaction questionnaire was used covering various aspects of patient care mainly focusing on patient experience and their understanding of ambulatory care.

A total of 140 responses were obtained anonymously in both surveys and data was processed by our Trust’s Audit and Governance team.

OBSERVATIONS

The initial survey revealed poor understanding among patients of the function of the unit and the reason for referral. We introduced “Patient information leaflets” and “Meet the team” board and subsequent survey showed more positive responses in these areas (81% vs. 95%).

Less satisfaction was noted regarding general cleanliness and waiting facilities. We subsequently re-structured the waiting area and introduced information booklets. More emphasis was given on cleanliness. The successive survey showed a positive improvement in this aspect (70% vs. 90%).

Interestingly, we also found an increase in positive responses towards staff attitude and overall satisfaction (85% vs. 92%).

More patients preferred the direct referral process from primary care to the ambulatory facility over the Emergency department visit (86% vs. 85%).

ANALYSIS

Do you understand why you were referred to the unit today?

Were you happy with the general appearance and cleanliness of the unit?

How do you feel staff responded to your arrival at the unit today?

Did you find attendance at the unit a suitable alternative to attendance at the Emergency Department?

CONCLUSIONS

By undertaking these surveys we were not only able to understand our patient’s needs but also make the necessary changes to provide better quality care.

We also found that such surveys help to build team morale and improve attitude of staff by providing encouragement from the positive feedback.

We recommend that all units should undertake such surveys to provide a high quality cost effective care that is tailored toward patient needs.

REFERENCES


Dr Amlan Bhattacharya
Acute Medicine
dr.amlan2006@yahoo.co.uk
Patient Satisfaction Survey

• Fantastic feedback on area and staff
• Patients who had been referred from ED felt that AMUA was their preferred destination for treatment
• Implementation of “Meet the Team” board and information leaflets increased satisfaction in re-audit about the function of the unit and patients reasons for referral there.
Thoughts of other specialities..

• Ease of access—bleep system
• Direct feedback—discharge letters (ECR)
• Email referrals
• Means of advice via phone as alternative to admission
• Has enabled the development of a good relationship between all specialities
• Fantastic team work
Conclusion

- Change is good!!
- Quality improvement is an ongoing process
- National guidelines, quality indicators and patient satisfaction all very useful tools
- Vital tips and information gained at SAM Manchester to develop our service more
Team of the year 2014
Questions?