Ambulatory Emergency Care.
What is it, why do we need it and how to do it.
Ambulatory Emergency Care

What is it?
• Primary Care?
• Community Care?
• Simplistic shift?
• Or a new way of integrated working?
• Akin to the development of Day Case Surgery
Acute medical care
The right person, in the right setting – first time

Report of the Acute Medicine Task Force

October 2007

Royal College of Physicians
What is Ambulatory Emergency Care?

RCP (L) Acute medicine taskforce: -

Ambulatory care is clinical care which may include diagnosis, observation, treatment, and rehabilitation, not provided within the traditional hospital bed base or within the traditional out-patient services that can be provided across the primary/secondary care interface.
Delivering Quality and Value
Directory of Ambulatory Emergency Care for Adults
Categories of Ambulatory Emergency Care

1. Diagnostic exclusion group
   - Eg chest pain rule outs etc (many already in place)

2. Low risk stratification group
   - Eg low Rockall score GI bleed

3. Specific procedural group
   - Eg effusion drainage

4. Infra-structural group
   - Eg care home admissions
Ambulatory Emergency Care

Why do we need it?

- Acute care activity
- Demographic shift
- Changing capacity
- Understanding bed swings
Emergency Admissions England 1998 to 2006

? Impact of 4 hour target
Actual and Predicted Age Distribution UK, 1981 to 2056
Average daily number of available beds England, 1987-88 to 2006-07

- Day only
- Maternity
- Learning disability
- Mental illness
- Geriatric
- Acute
Traditional Model for Acute Medicine

- GP referrals
- A&E referrals
- MAU - Decision to admit

Handover

- Short Stay Unit
- Specialist units
- Churn

?Handover

- Social care
- Home
- D+T - OPA
- IC
In-day variation mismatch admissions & discharges

Emergency admissions and discharges by hour of day for week beginning Monday 01/10/07 EKH

In-day Emergency bed swing = 33
Day to day emergency bed swing

Average daily emergency admissions = 160

Average daily emergency discharges = 160

= 190 bed swing
Consequences of admissions & discharges variation mismatch

Backlog guaranteed:
- Patients stored in ‘Assessment Units’
- A&E flow compromised
- Patients to the wrong wards
  • Outliers

Additional Cost:
- Overtime, locum, agency and opening wards

Quality
- HSMR and harm events
- Patient and staff experience
Total In-patients
Pareto: cumulative beds occupied by LOS

Cumulative beds occupied by all in-patients EKH 2007

5% of all patients who spent 24 + midnights in hospital occupy 38% of the bednights

80% of patients who spent up to 7 midnights occupy 32% of the bednights

50% of all patients who spend up to 2 nights occupied 11% of the bednights
Ambulatory Emergency Care

How to do it:

• Opportunities

• Implementation
  – Structure – physical and organisational
  – People and behaviours
  – Processes – bundles + safety

• Measurement
  – Process metrics
  – Outcome metrics
  – Balancing metrics
Critical Success Factors

- Engaging clinicians
- Focus on quality and safety
- Whole system planning
- Horizontal integration
- Joint clinical, managerial and financial governance framework
- Aligning financial incentives
## South East Coast Strategic Health Authority Opportunities Assessment

### Clinical Scenario

<table>
<thead>
<tr>
<th>Clinical Scenario</th>
<th>No. of Adj. Ad. - Low</th>
<th>No. of Adj. Ad. - Upper</th>
<th>% of total admissions (low)</th>
<th>% of total admissions (upper)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total admissions</td>
<td>267,712</td>
<td>267,712</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GM11 Chest Pain</td>
<td>3,146</td>
<td>6,292</td>
<td>1.2%</td>
<td>2.4%</td>
</tr>
<tr>
<td>GS01 Acute abdominal pain not requiring operative intervention</td>
<td>2,894</td>
<td>5,787</td>
<td>1.1%</td>
<td>2.2%</td>
</tr>
<tr>
<td>TO02 Appendicular fractures not requiring immediate internal fixation</td>
<td>2,739</td>
<td>4,109</td>
<td>1.0%</td>
<td>1.5%</td>
</tr>
<tr>
<td>GM31 Falls including syncope or collapse</td>
<td>2,274</td>
<td>3,411</td>
<td>0.8%</td>
<td>1.3%</td>
</tr>
<tr>
<td>GM24 Cellulitis</td>
<td>1,865</td>
<td>2,798</td>
<td>0.7%</td>
<td>1.0%</td>
</tr>
<tr>
<td>GM29 Deliberate self harm</td>
<td>1,731</td>
<td>2,597</td>
<td>0.6%</td>
<td>1.0%</td>
</tr>
<tr>
<td>GM08 Lower respiratory tract infections without COPD</td>
<td>1,527</td>
<td>3,055</td>
<td>0.6%</td>
<td>1.1%</td>
</tr>
<tr>
<td>GM10 Supraventricular tachycardias</td>
<td>1,518</td>
<td>3,037</td>
<td>0.6%</td>
<td>1.1%</td>
</tr>
<tr>
<td>GM15 Seizure in known epileptic</td>
<td>1,375</td>
<td>2,063</td>
<td>0.5%</td>
<td>0.8%</td>
</tr>
<tr>
<td>GM14 First seizure</td>
<td>1,361</td>
<td>2,041</td>
<td>0.5%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Etc etc</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Emergency Care Admissions</strong></td>
<td><strong>34,469</strong></td>
<td><strong>59,423</strong></td>
<td><strong>12.9%</strong></td>
<td><strong>22.2%</strong></td>
</tr>
</tbody>
</table>
South East Coast Strategic Health Authority Opportunities Assessment

Institute for Innovation and Improvement

Crude rate per 100,000 resident population

Primary Care Trust

Brighton & Hove City
East Sussex
Eastern & Coastal & Rother
Hastings
Medway
Surrey
West Kent
West Sussex
SEC SHA Area Total
RCP Acute Medical Care
‘Emergency Floor’

Diagnostic support

Ambulance services

Critical care

Acute surgical unit

Therapy teams*

Major trauma

Mental health team

Paediatrics

Emergency department

Acute medical unit

GP urgent care/ walk-in centre

Acute stroke

Acute myocardial infarction

Ambulatory care
Kent and Canterbury Hospital – Emergency Care Centre

“Life - Threatening”

“Emergency” (Specialty)

“Emergency” (for Admit.)

“Emergency” (For assessment)

“Minor”

ENP

Emergency Needs Assessment

Emergency Care Centre

1st Line Treatment and algorithmic assessment

1st Line Treatment and algorithmic assessment

1st Line Treatment and algorithmic assessment

1st Line Treatment and algorithmic assessment

1st Line Treatment and algorithmic assessment

Level of Need Assessment

Rapid Diagnostics & Further Treatment

Home +/- Support (Usually)

Home (Always)

FAST - TRACK

Level of CARE Streamed by LOS Short Stay, GIM Speciality unit

Theatre, Critical Care, Tertiary

SPEC. UNIT CCU Stroke Vascular.

LEVEL OF CARE Streamed by LOS Short Stay, GIM Speciality unit

Home +/- Support (Usually)

Home (Always)

ENP
Behaviours

Effective clinical decision at point of entry - competency and seniority – being there!

1º Diagnosis (or differential)
Co-morbidity diagnoses + functional/social problems

Case management plan:

• ZLOS - 1º care/IC/SC/OPA/Joint care (Teams 끼 walls)
• Non ZLOS:
  – Why ‘admission’ required – monitoring/interventions
  – Investigations/interventions – not just what but when and make it happen!
  – Clinical criteria for discharge + Expected LOS – date and time
  – Stream by LOS
  – What to expect post-discharge – recovery + follow up
Processes

Remove redundant steps
- Point of entry – decision making team at front of house
- Handover = delayed decisions = increased LOS

Reduce variation in emergency discharges
- Reduce internal batching and carve-out
  - Eg Batch ward rounds on-call
  - Eg Twice weekly Ward rounds
  - 24/7 + 7/7 demand and 7.5/24 + 5/7 capacity
  - Standardisation of processes

Segmentation of patient by LOS
- Principle of lanes on a motorway
  - Different process speed and variation
  - Standardise case management processes where possible
Managing Length of Stay

Maximise ambulatory care

Green bed days vs red bed days - flow management - making it happen!

Complex support needs - but how much is hospital based decompensation?
Segmentation by LOS - 1

**Short Stay - Locus of control = Internal:**

- Zero LOS and Short Stay (2 days or less) – up to 65% of all admissions - never hand over – EDD to the minute/hour!
- Left shift to ambulatory care
- Big impact on within day and day to day variation in demand – hourly drum beat
- **Generalist skills + standardisation (decision making and case management)**
  - Senior decision making and diagnostics available 8 a.m. to 10 p.m.
Ambulatory Bundles

• Common assessments
• Linked diagnostics
• ‘Shared’ pathways of care
• Provide ‘bite sizes’ of the elephant!
Ambulatory Bundles

• ‘Respiratory/leg bundle’
  – DVT
  – Cellulitis
  – Pulmonary embolism
  – Pleural effusion
  – Pneumothorax
  – Community acquired pneumonia
  – COPD
Ambulatory Bundles

• Frail Older People Bundle
  – UTI in older people
  – Fractures not requiring surgery
  – Falls
  – Care Home Admissions
  – End of life care
Building a Cascading System of Measures

Adapted from Lloyd & Caldwell
Combined Medicine Admissions (Excl ZLOS)
Zero LOS Admissions
Combined Medicine LOS (Excl zero LOS)
28 Day Mortality Rate
In or out of hospital

Month

Apr-06 May-06 Jun-06 Jul-06 Aug-06 Sep-06 Oct-06 Nov-06 Dec-06 Jan-07 Feb-07 Mar-07 Apr-07 May-07 Jun-07 Jul-07 Aug-07 Sep-07 Oct-07 Nov-07 Dec-07 Jan-08

Individual Value

5.6%  5.8%  6.0%  6.2%  6.4%  6.6%  6.8%

NHS
Institute for Innovation and Improvement
Acute Care
Institutionalisation Rate

Month

Apr-06
May-06
Jun-06
Jul-06
Aug-06
Sep-06
Oct-06
Nov-06
Dec-06
Jan-07
Feb-07
Mar-07
Apr-07
May-07
Jun-07
Jul-07
Aug-07
Sep-07
Oct-07
Nov-07
Dec-07
Jan-08

Individual Value

1.40%
1.60%
1.80%
2.00%
2.20%
2.40%
2.60%
Directory of Ambulatory Emergency Care for Adults

Summary

• An enabling document
• Focussing on the patient’s outcome, safety and experience
• Evaluate current opportunities
• Select a small ‘set’ and build on success
• Horizontal integration – true joint working
• Joint clinical, managerial and financial governance

• **NOT** – a demand management tool
• **NOT** – a performance management tool
• **NOT** – a simplistic shift tool
And finally:

We hereby acknowledge significant contributions from the following organisations to the development of the directory:

Royal College of Physicians – Acute Medicine Task Force
College of Emergency Medicine
Academy of the Royal Medical Colleges
Society for Acute Medicine
British Association of Day Surgery
Urgent Care Team – Department of Health

Care Services Improvement Partnership – Department of Health
Emergency Access Team – Department of Health
South Tees Hospitals NHS Trust
Milton Keynes General NHS Trust
Homerton University Hospital NHS Foundation Trust
North Tees and Hartlepool NHS Trust
Ealing Hospital NHS Trust
East Kent Hospitals NHS Trust
Improvement Foundation