Interventions to reduce emergency department utilisation

Lessons from a review of reviews
Number of ED visits per 100 population

Average annual growth rate in ED visits

Cautionary note: ambulatory ED visits not included for Germany

OECD, 2015
Policy focus on particular groups

<table>
<thead>
<tr>
<th>Inappropriate ED visits</th>
<th>Older persons and children</th>
<th>Frequent ED users</th>
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</thead>
<tbody>
<tr>
<td>• Not requiring urgent attention or specialised input</td>
<td>• Very old: fastest growing group (e.g. multiple chronic conditions, falls, functional decline, ...)</td>
<td>• 1 to 5% of all ED population</td>
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<tr>
<td>• Debate about the concept ‘inappropriateness’</td>
<td>• Children: bypassing GP</td>
<td>• Complex healthcare needs: frail elderly, substance abusers, ..</td>
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<td>• Estimates vary between 20% and 40%</td>
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<td>• Not optimally managed within the context of an ED</td>
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Review of reviews

- Redirect ED visits towards alternative settings
- Alternatives (outside) the ED
- Targeted interventions
- Cost sharing
Telephone triage

- Internationally widespread to **divert non-urgent patients** away from ED but ....

- **Impact on ED use** insufficiently studied
  - May unmask latent demand that, if not available in alternative care settings, may increase ED workload
  - NHS 111: overall ED workload ↑
  - Increasing number of ambulance interventions (risk aversion)

- **Impact on patient safety**
  - 97% triage decisions are safe but risk of underuse increases when urgency level rises
  - Increased safety when call handlers are clinically trained

- **Compliance** is high: 56%-98%
  - Advice for self-care and ED attendance > primary care
Pre-hospital interventions

- Pre-hospital practitioners:
  - Providing care and **discharging patients at the scene or refer them to alternative care settings**
  - Significant decrease in ED use
  - But evidence less clear about:
    - Impact on subsequent ED use
  - Highly dependent on **educational level ambulance staff**
Review of reviews

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Primary care services

- **Increased supply of primary care services**
  - E.g. primary care centres ↑, GP density ↑
  - Evidence for decreased ED use in countries/regions with poor primary care coverage

- **Telephone consultations and follow-up calls post-discharge:** “*this system delays rather than solves the problem*”

- **Out-of-hours accessibility**
  - Mixed evidence when all studies are analysed together
  - Also evidence about co-locating primary care at ED is mixed
  - But design elements of the interventions are key to success
Co-locating GP posts and ED

- **Important design elements**
  - Common entrance
  - Triage nurses supervised by physicians
  - GP cooperatives remain an autonomous organisation

- **Highly relevant for systems with high self-referral rates** - 'the Belgian case'
  - 77% ambulatory ED visits
  - 71% self-referrals
Current organisational model
Recommended model
Review of reviews

- Redirect ED visits towards alternative settings
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Case-management frequent ED-users

- **Upstream the ED to prevent hospital admissions**
  - e.g. primary care management of chronic conditions

- **Downstream the ED**
  - Better care coordination with the community for patients identified as frequent ED user

- **Evidence for reduced ED use when**
  - Evidence-based
  - Inter-professional approach
  - Breadth of resources and intensity of the measure: e.g. frequency follow-up, availability psychosocial services, aggressiveness outreach
Redirect ED visits towards alternative settings

Alternatives (outside) the ED

Targeted interventions

Cost sharing
Cost sharing

- **US-based evidence**
  
  “Apparently, people who should go to the ED are not deterred by co-payments, whereas at least some of those who should not be using the ED are deterred.”

- **Impact on vulnerable populations (e.g. delaying care, limiting patient choice) understudied**
Concluding remarks

- No magic bullets
- Curbing the increasing ED use will require:
  - A broad approach that integrates several interventions adapted to the country’s healthcare system
  - Feedback mechanism to monitor outcomes and unintended consequences
  - Cost savings might be negated by the additional cost of providing new services