Federaal Kenniscentrum voor de Gezondheidszorg
Centre Fédéral d'Expertise des Soins de Santé
Belgian Health Care Knowledge Centre

# Interventions to reduce emergency department utilisation

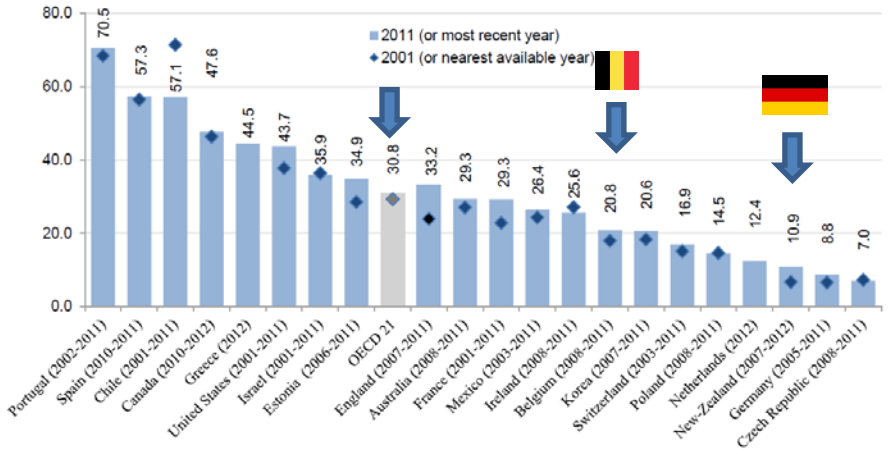
## Lessons from a review of reviews



Koen Van den Heede

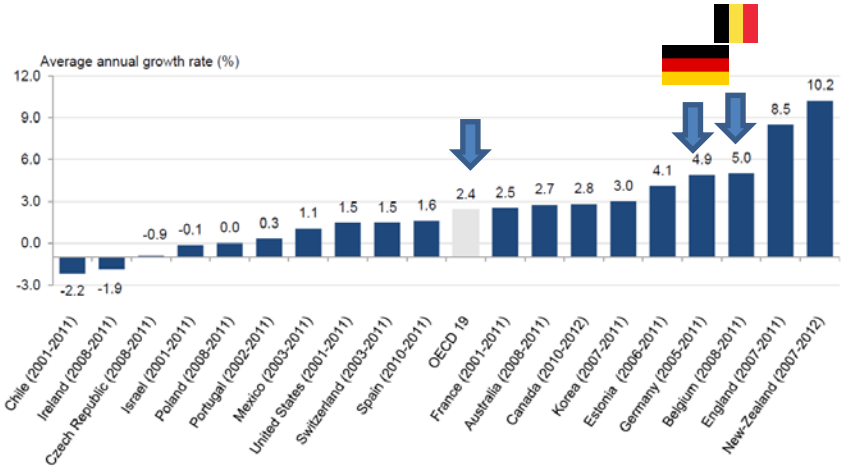
.be

# Number of ED visits per 100 population




Cautionary note: ambulatory ED visits not included for Germany

# Average annual growth rate in ED visits




OECD, 2015

# Policy focus on particular groups

**Inappropriate ED visits**

- Not requiring urgent attention or specialised input
- Debate about the concept 'inappropriateness'
- Estimates vary between 20% and 40%

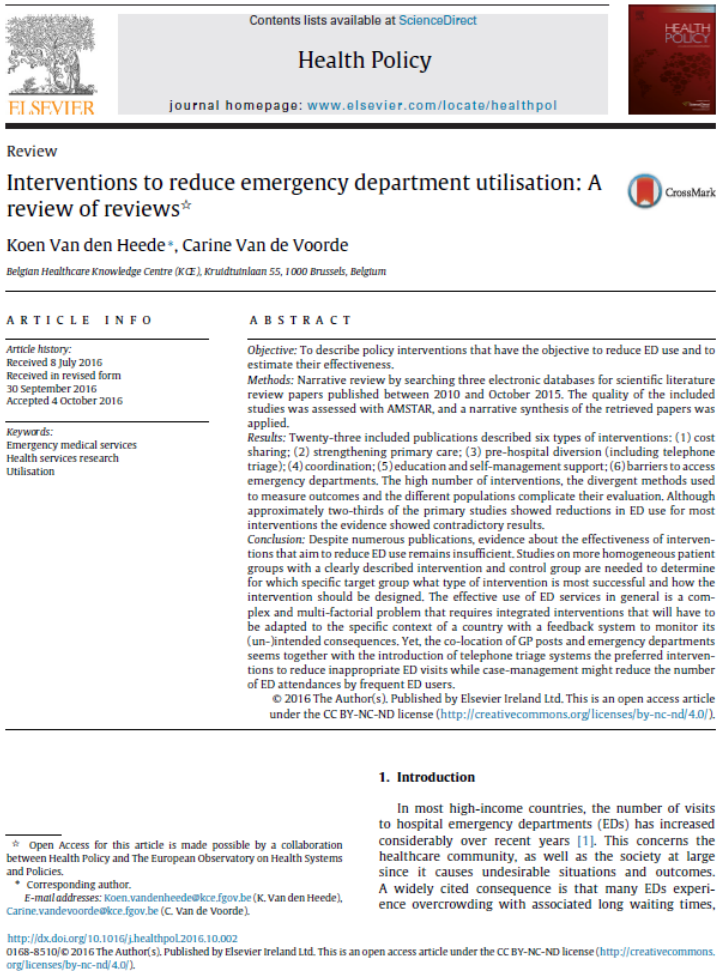
**Older persons and children**

- Very old: fastest growing group (e.g. multiple chronic conditions, falls, functional decline, …)
- Children: bypassing GP

**Frequent ED users**

- 1 to 5% of all ED population
- Complex healthcare needs: frail elderly, substance abusers,..
- Not optimally managed within the context of an ED

# Review of reviews



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- **Redirect ED visits towards alternative settings**
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# 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**

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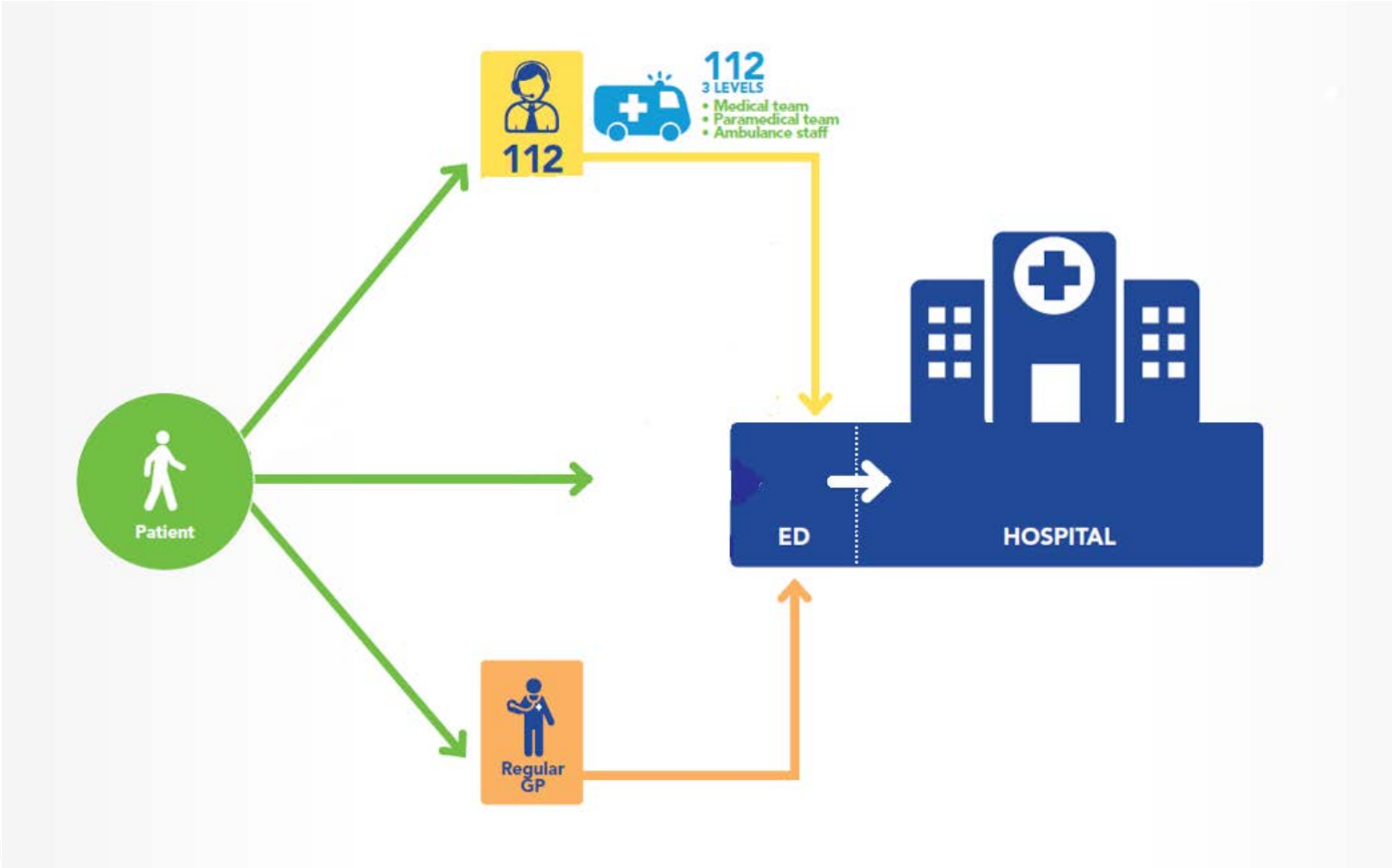
# Primary care services

- **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**

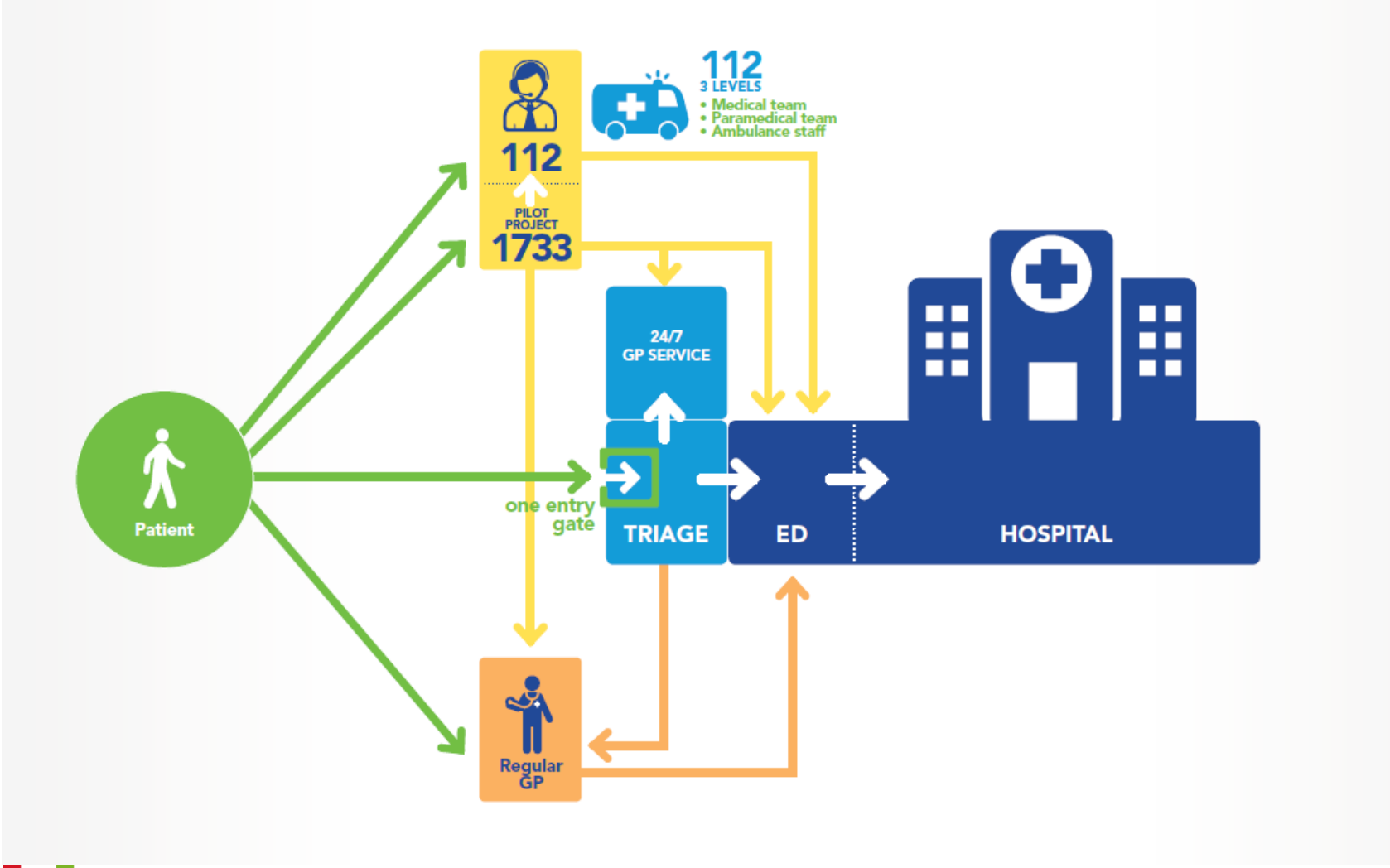
# Co-locating GP posts and ED

- **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



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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**

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# 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**