Patterns of High Utilization of Emergency Services: National Patterns and Initiatives Relevant for Michigan

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Michigan Department of Community Health
Utilization of Emergency Services
Utilization of Emergency Services

GROWING QUESTIONS:

What happens to/for the patients in the ED?

How is ED utilization related to care in other sites of healthcare?

What causes overutilization of the ED?

How can overutilization of the ED be addressed?
Today’s Symposium: High-Utilizers of ED Services

Centered on 2 fundamental questions:
What causes overutilization of the ED?
How can overutilization of the ED be addressed?

HIGH-UTILIZERS

Challenging medical needs requiring care in multiple settings

Non-urgent concerns that can be addressed in ED but do not merit ED
Today’s Symposium: High-Utilizers of ED Services

Centered on 2 fundamental questions:
What causes overutilization of the ED?
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HIGH-UTILIZERS

PATIENTS WITH COMPLEX ILLNESSES & COMORBIDITIES

PATIENTS WITH MINOR COMPLAINTS
Today’s Symposium: High-Utilizers of ED Services

Centered on 2 fundamental questions:
What causes overutilization of the ED?

How can overutilization of the ED be addressed?
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GOALS of this presentation:
1 – What are national patterns of high-utilizers in ED setting?
2 – What are existing examples of efforts to address high-utilizers in ED setting in the US?
High-Utilizers of the ED – Confusing Terminology

Frequent fliers

Frequent utilizers

High-utilizers

Super-utilizers

Hot-spotters
High-Utilizers of the ED – Growing Attention

Reforming Camden’s Health Care System – One Patient at a Time
By Jeffrey Brenner, MD

SPECIAL CONTRIBUTION

Frequent Users of Emergency Department Services: Gaps in Knowledge
Research Agenda

Jesse M. Pines, MD, MBA, MSCE, Brent R. A MD, MPH, David J. Magid, MD, Maria Raven

Abstract
Frequent use of emergency department (ED) services is associated with increased costs and utilization. However, the underlying assumptions about these patients have been questioned. This review aims to identify factors that contribute to frequent ED use and to develop strategies to reduce such use.

ORIGINAL ARTICLE

Defining frequent use of an urban emergency department

Thomas E Locker, Simon Baston, Suzanne M Mason, Jon Nicholl


HEALTH POLICY/REVIEW ARTICLE

Effectiveness of Interventions Targeting Frequent Users of Emergency Departments: A Systematic Review

Fabrice Althaus, MD, Sophie Paroz, MA, Olivier Hugli, MD, MPH, William A. Ghali, MD, MPH, Jean-Bernard Daeppen, MD, Isabelle Peyrelevre, MD, MPH, DSc, Patrick Bodenmann, MD, MSc

From the Vulnerable Population Unit, Department of Ambulatory Care and Community Medicine, University of Lausanne, Lausanne, Switzerland, (Althaus, Bodenmann); the Department of Community Medicine and Health (Paroz), and Emergency Department (Hugli), Lausanne University Hospital, Lausanne, Switzerland (Daeppen); the Institute of Social and Preventive Medicine, Lausanne University Hospital and University of Lausanne, Lausanne, Switzerland (Peyrelevre); and the Departments of Medicine and Community Health Sciences, University of Calgary, Calgary, Canada (Ghali).

Study objective: Frequent users of emergency departments (EDs) are a relatively small group of vulnerable patients accounting for a disproportionately high number of ED visits. Our objective is to perform a systematic review of the type and effectiveness of interventions to reduce the number of ED visits by frequent users.

Methods: We searched MEDLINE, EMBASE, CINAHL, PsychINFO, the Cochrane Library, and ISI Web of Science for randomized controlled trials, nonrandomized controlled trials, interrupted time series, and controlled and
Who Are High-Utilizers of the ED?

Compared with lower utilizers of the ED, high-utilizers ...

• Are generally older

• Are less likely to have adequate financial resources

• Are more likely to be insured with a public program

• Have higher severity of illness

• Are more likely to have chronic illness

• Are more likely to have a pain-related visit to the ED

• Have higher healthcare costs
What Are National Patterns for High-Utilizers of the ED?

Of 39 million ED visits in 2010 for patients in the US ...

• 77% of patients visited the ED 1 time
• 16% of patients visited the ED 2 times
• 5% of patients visited the ED 3 times
• 1% of patients visited the ED 4 times
• 1% of patients visited the ED 5 times or more
What Are National Patterns for High-Utilizers of the ED?

Of 39 million ED visits in 2010 for patients in the US ... 

- 77% of patients visited the ED 1 time 71%
- 16% of patients visited the ED 2 times 20%
- 5% of patients visited the ED 3 times 6%
- 1% of patients visited the ED 4 times 2%
- 1% of patients visited the ED 5 times or more 1%
What Are National Patterns for High-Utilizers of the ED?

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- 1% of patients visited the ED 5 times or more

**Residents of nursing homes:** Account for 2% of ED visits annually, much higher rates of hospital admission than avg
Examples of Programs Focused on High-Utilizers

- CareOregon
- Maine Community Care Teams
- Hennepin County Coordinated Care Clinic
- Camden, NJ
- Community Care of North Carolina
Examples of Programs Focused on High-Utilizers

Camden, NJ

Focuses on urban disadvantaged and poor by connecting claims data from local hospitals to identify high utilizers; top 1% visited ED 24-324 times per year

Staffed by family physician, nurse practitioner, community health worker, social worker; they monitor and help patients through multiple settings (ED, nursing home, street corner, homeless shelter)

Decline in ED visits: 33% in month
Examples of Programs Focused on High-Utilizers

CareOregon

160,000 members (incl. children, pregnant women, aged/blind/disabled, dual-eligibles); invited to join if >1 hosp admission and/or 6+ ED visits in past year

Global budget from state to provide integrated physical, mental, and dental care across 3-county region

Embeds community outreach workers ("engagement specialists") into high-performing primary care and clinically relevant specialty practices
Examples of Programs Focused on High-Utilizers

Community Care of North Carolina

Approx 50,000 Medicaid beneficiaries, served thru 14 community networks – each with care managers, pharmacist, psychiatrist, social worker; hospitals provide data care manager coordination while inpatient

Provides a fixed PMPM fee to primary care to serve as medical homes (24/7 availability and coordination with network staff)

Focuses on patients with spending>expected, unmet chronic pain, recent hospitalizations transitioning to primary care; 15% decrease in ED visits for those enrolled
**Examples of Programs Focused on High-Utilizers**

Hennepin County Coordinated Care Clinic

Focuses on 5 percent of Medicaid managed care beneficiaries with highest spending, in 3 tiers:
- **Tier 1** – no admissions or ED visits; but have social risks
- **Tier 2** – 1-2 admissions in past yr, any chronic disease, >3 meds
- **Tier 3** – 3 or more admissions, or 5+ ED/detox visits

Tiers 2 and 3 are assigned care coordinators

Aligned with Hennepin County Medical Center to operate ‘ambulatory ICU’ to provide comprehensive care for >300 pts

Achieved 35% decrease in ED visits over first 10 months
Examples of Programs Focused on High-Utilizers

Maine Community Care Teams

Builds on prior multi-payer ‘advanced primary care practice’ demonstration project; utilizes Web portal to provide practices and community care teams with patient data re: hospitalizations, ED visits, & costs; focus on patients with chronic medical disease, serious mental illness

Community care teams (CCTs) are fielded by organizations of multiple different types (FQHCs, large hospital systems, home health agencies, mental health organizations, phys practices)

PMPM payment split between CCTs and primary care
## Comparison of High-Utilizer Programs

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High-Utilizers in the ED - SUMMARY

• A multifaceted phenomenon – with many terms
  • Defining high-utilizers as those with 5+ ED visits in 1 year
  • Will address preventable ED visits in future efforts

• At national level, high-utilization of the ED associated with:
  • Older age, public insurance, multiple chronic conditions, mental health comorbidities
  • Link to nursing home residence

• Examples of existing programs in states outside Michigan highlight benefits of different approaches
  • Common themes: patient selection, care management
  • Key variables: local program strengths, system preferences, innovative financing models
Acknowledgments

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Allison Marlatt