Emergency Department Visit Reduction Programs

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Research Questions and Approach

- What is the scope of ED visit reduction programs and what is known about their effectiveness?
- Methods
 - Environmental scan
 - Literature review
 - Effectiveness evaluation



Environmental Scan

Total of 197 programs nationwide since 2003

Programs for high risk populations

- Target high utilizers who are medically and socially complicated
- Small population with large volume of visits

Programs to reduce low acuity ED visits

 Target visits for conditions that could be safely managed in non ED settings



Environmental Scan: High Risk Populations

Program Type	Programs Identifie d
Case management	34
Health and social services navigation/care coordination	16
Acute disease management and education	15
Permanent supportive housing	14
Sobering centers	8
Ambulatory Intensive Care Units (AICUs)	7
Medical respite	6
ED diversion	5
Chronic non-cancer pain	4
Health technology/information sharing	4
Patient education	2
Total	115



Environmental Scan: Low Acuity Visits

Program Type	Programs Identified
Linkage to primary care/care coordination	19
Alternative site expansion	15
ED diversion	10
Financial incentives	8
Patient education	8
Health technology/information sharing	3
Retail clinics	3
Telemedicine	2
Total	68



Literature Review

- 91 programs qualified
- 32 of high/moderate quality
 - 19 High Risk Populations
 - 13 Low Acuity ED visits
- 59 of low/very low quality
- Only 13 programs had any financial evaluation



Effectiveness Evaluation

- 32 high and moderate quality studies
- Evaluation criteria
 - Impact on ED and other health services use
 - Cost-effectiveness
 - Quality
 - Unintended consequences
 - Patient and provide reported outcomes, health outcomes



Effectiveness: High risk populations

- Many programs reported reductions in ED use
 - Little evidence to support program effectiveness based on program costs, quality, and overall health services use
- Permanent supportive housing and intensive case management most promising
 - Reported savings from annual ED visit reductions: \$4-\$704
 - Generally insufficient to cover program costs
- Savings from reduced hospitalizations not ED visits



Effectiveness: Low Acuity ED visits

- Little evidence to support effectiveness of primary care/alternative site expansion or patient education
- Co-pays over \$50 shown to reduce both necessary and unnecessary ED use in Medicaid
- Lack of data regarding retail clinics and health technology/information sharing



Limitations of ED Visit Reduction Program Literature

- Inadequate selection of comparison groups
- Lack of data regarding impact on other health services
- No or incomplete capture of costs and savings
- Rarely assessed impact of ED use outside of program site
- Few studies focused entirely on Medicaid populations



Challenges in Implementing ED Visit Reduction Programs in Medicaid

- No off-the-shelf formula for success
- Successful "high risk" programs can be very costly
- Primary care key for low acuity but limited capacity
- Program staff burnout, difficulty recruiting providers



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