

Characteristics and predictors of adult frequent emergency departments users in the United States: a systematic literature review

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Review question

The objective of this review is to identify the characteristics and the factors associated with adult frequent emergency department (FED) users in the United States, how these serve as predictors of frequent use and how these are unique to this specific group of ED users compared non-FED users.

Searches

The search was conducted in three major biomedical electronic databases (MEDLINE, CINAHL, EMBASE) from May 2018 to July 2018. Limits included only English language studies and studies published after 2010. The terms "emergency department" and "frequent visits" were the 2 main search concepts used with the collaboration of an information specialist (MF).

MEDLINE search strategy
1. Emergency department or department).ti, ab.) or exp Emergency Service, Hospital/

2. (((heavy or frequen*) adj2 (use* or visit*)) or recidivis*).ti, ab.

3. 1 and 2

4. limit 3 to yr="2010 -Current"

5. limit 4 to english language

6. (animals not humans).sh.

7. 5 not 6

Types of study to be included

Studies using primary or secondary data will be included, as long as they provide information on FED users. Purely qualitative/exploratory studies will be excluded.

Condition or domain being studied

Frequent Emergency Department (FED) users are small subgroup of all emergency departments (ED) users but are responsible for a disproportionate number of ED visits (Hunt et al, 2006). Unnecessary ED utilization has been linked to increasing ED costs and ED crowding, with important negative outcomes for patients (Hoot et al, 2008). Although it is assumed that FED users uninsured and old people, who lack access to primary care services and use the ED for non-urgent reasons (Blank et al, 2005, Fuda et al, 2006), the majority of the current literature has identified commonalities among FED users related to public insurance, multiple chronic conditions, mental health and substance abuse disorders (LaCalle et, 2010, Soril et al, 2016). We attempt to explore the characteristics and contextual factors that are more prevalent among FED users compared to non-FED users.

Participants/population

US Studies after 2010, including adults or at least all ages and in English language are going to be included. Studies focused on specific ED users subgroups (eg only Medicaid patients, ED users for a specific condition), children and purely qualitative studies are going to be excluded.

Intervention(s), exposure(s)

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All studies that provide descriptive information about FED users and use any methodology that compared FED users with non-FED users will be taken into account.

Comparator(s)/control

Control patients are going to be infrequent ED users.

Context

Primary outcome(s)

The presentation of the characteristics and factors that describe who the FED users are, how these differentiate them from infrequent users and how these serve as predictors of FED use.

Secondary outcome(s)

None.

Data extraction (selection and coding)

A three step process will be used to identify the studies that are going to be included in this review; by title, by abstract and by full-text. Two researchers will separately be involved in this procedure. Conversation and consensus for resolving any potential diverging opinions will be facilitated. Data will be extracted using a survey, which will be pre- and pilot tested for its validity with studies that fit all the inclusion criteria except for the year of publication (e.g. studies prior to 2010). We will extract demographic information (e.g. age, race, gender, socioeconomic status, education, employment status), clinical information (e.g. specific clinical conditions, abuse disorders, tobacco use, number of chronic conditions), and information regarding access and use of the healthcare system (e.g. usual source of care, hospitalization, admission rates, number or provider and ED visits).

Risk of bias (quality) assessment

Studies will be evaluated using the Joanna Briggs Institute Appraisal Checklist tool (Moola et al, 2017), which will be slightly modified to fit the scope of this study.

Two reviewers will independently assess the quality of the studies and Gwet's AC1 statistic will be calculated to present inter-rater reliability. Risk of bias will be summarized for specific outcomes within a study and specific outcomes across studies.

Strategy for data synthesis

Results will be presented as aggregates of the number of studies that these were found in. Percentages of single or bivariate outcomes related to FED use and adjusted margins. Odds Ratios in multivariable models will be synthesized by presenting the lowest and highest results found in all of the studies. This review will try to present such results and will not combine the studies' findings using quantitative methodology.

Analysis of subgroups or subsets

FED users will be compared with non-FED users to identify potential differences among these two groups.

Contact details for further information

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Anticipated or actual start date

18 May 2018

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31 August 2018

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None

Conflicts of interest

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English

Country

United States of America

Stage of review

Review_Completed_not_published

Subject index terms status

Subject indexing assigned by CRD

Subject index terms

Adult; Emergency Service, Hospital; Humans; Publications; United States

Date of registration in PROSPERO

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Date of publication of this version

26 September 2018

Details of any existing review of the same topic by the same authors

Stage of review at time of this submission

Stage	Started	Completed
Preliminary searches	Yes	Yes
Piloting of the study selection process	Yes	Yes
Formal screening of search results against eligibility criteria	Yes	Yes
Data extraction	Yes	Yes
Risk of bias (quality) assessment	Yes	Yes
Data analysis	Yes	Yes

Versions

13 August 2018

26 September 2018

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