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Methods and measures of safety events in primary care settings


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Work commissioned by WHO: Patient Safety research working group
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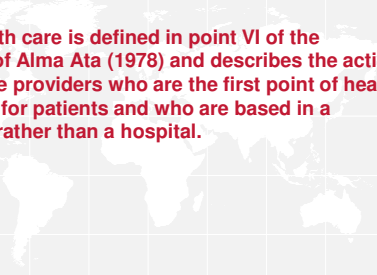
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Summary

- Why research about primary care is important
- What we know about patient harms in primary care
- How we know about patient harms in primary care
- What's left to know

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Primary health care is defined in point VI of the Declaration of Alma Ata (1978) and describes the activity of health care providers who are the first point of health care contact for patients and who are based in a community, rather than a hospital.

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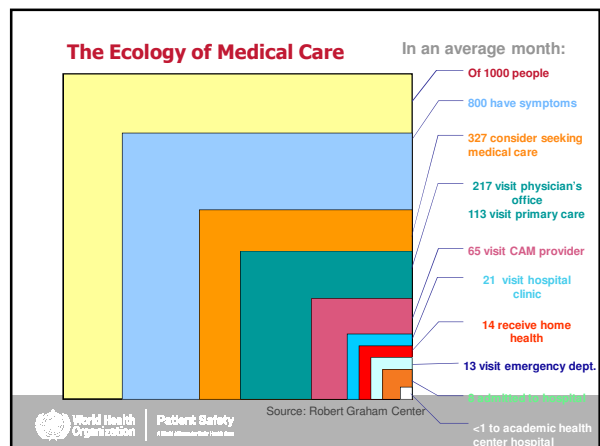
Why research about primary care is important

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Important implications for primary care patient safety

Most health care is delivered outside hospitals, in primary care settings

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Important implications for primary care patient safety

Many safety incidents identified in hospitals originate in primary care

Most burden of patient safety incidents arises from frequently repeated incidents and exposure of a large number of people

Things about primary health care that are different from hospital care

Less control over care management and delivery

Episodes of care may extend over very long periods

Patients with undifferentiated problems, uncertain diagnoses and multiple co-morbidities

Idiosyncratic delivery systems that are sometimes poorly designed for safety

What we did - Methods



Inclusions and Exclusions

OID Medline 1966 – December 2007

Included:

- Original research reports
- Research using both primary care and hospital data
- Research about complementary and alternative medicine

Excluded:

- Research examining only one type of patient safety incident or one primary care process
- Research based on hospital data only

Search Results

1057 titles and abstracts

773 potentially relevant papers

126 papers read

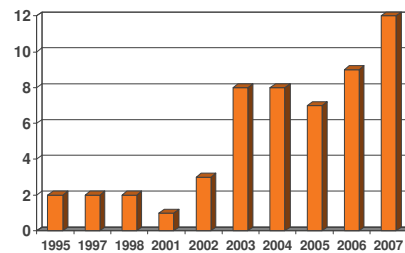
- 49 papers directly related to the topic
- 29 papers peripherally related

Hospital only data (8 papers)

Patient safety not the main topic (8 papers)

Examined only one type of patient safety incident or one primary care process (13 papers)


Number of reviewed papers by publication year





What we found we know about patient harms

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No common language

"Quality" or "safety"?

- Error
- Medical error
- Avoidable error
- Preventable adverse event
- Negligent adverse event
- Sentinel event
- Mishap
- Critical incident
- Safety incident
- Problematic incident
- Patient safety problem
- Near miss

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What we know about the rate of safety incidents occurring in primary care settings

- 0.004-240.0 per 1000 consultations
- Denominators were:
 - *Estimated, measured, and observed consultations*
 - *Numbers of patients*
 - *Numbers of randomly selected doctors*
 - *Audited deaths in general practices.*
- Estimates highest where both numerator and denominator data were collected during consulting sessions with a researcher on site
- Estimates lowest where numerators = doctor reports to a risk management database and denominators = estimated patient visits
- A study over a short time frame without on-site researcher oversight delivered an intermediary incidence estimate

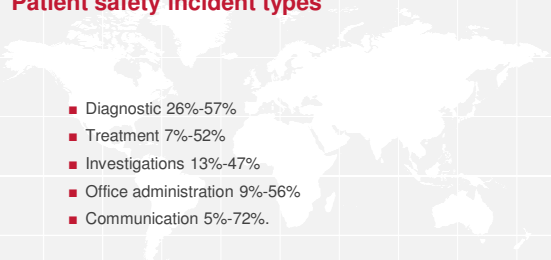
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Preventability and Harm

- 45%-76% of incidents considered preventable
- Harm:
 - *ranged from 1.3 significant minor incidents per 1000 treatments to 4% of incidents resulting in death*
 - *17%–39% of incidents resulting in harm*
 - *70%–76% with potential for harm.*


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Patient safety incident types

- Diagnostic 26%-57%
- Treatment 7%-52%
- Investigations 13%-47%
- Office administration 9%-56%
- Communication 5%-72%.


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People involved in primary care patient safety incidents

- Academics
- Acupuncturists
- Computer suppliers
- Managers
- Nurses
- Optometrists
- Other general practice staff
- Paramedics
- Patients
- Pharmacists
- Primary care doctors and trainee doctors

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What's left to know about patient harms



Health burden

Estimates of patient safety incidence varied from 0.005 to >240 per 1000 consultations

Denominators varied

- Estimated, measured, observed consultations
- Patients
- Doctors
- Deaths in a practice

Estimates highest where both numerator and denominator data collected with a researcher on site

About 5 patient harm incidents recalled



What we did - Methods



What we found - Results



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