



# Brief Interventions for Problem Drinking in a General Hospital Setting

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# Effect of Brief Interventions for Problem Drinking in the Medical Setting

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- Primary health care setting:
    - A variety of intervention studies are performed
    - Positive results are reported in different reviews and meta-analyses (Poikolainen et al., 1999; Ballesteros et al., 2004)
  - General hospital setting
    - Less intervention studies are performed
    - No review or meta-analysis was available
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# Brief Alcohol Interventions Should Be Also Effective in the Hospital Setting

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- Excessive drinking highly prevalent (8-33%)
  - Medical specialists struggle with the detection and treatment of problem drinking
  - Patients, all referred to specialists, have mostly severe medical conditions or diseases:
    - Specialists can use stronger arguments when the medical conditions are related to alcohol
    - Patients can be more ready to change their drinking
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# Systematic Review

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- Research question:

Are opportunistic brief interventions for problem drinkers in a general hospital setting effective in reducing alcohol consumption? (Emmen et al, BMJ 2004;328:318-320)

- Literature search

- Search in Medline and PsychInfo databases, reference lists of relevant reviews and in the Cochrane library
  - Titles and abstract reviewed by single reviewer format
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## Inclusion Criteria

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- Randomised controlled trials and other well controlled trials
  - Opportunistic brief intervention for problem drinking
  - Including a control group receiving no intervention
  - Hospital setting or specialist outpatient clinic
  - Not medical but psychosocial intervention
  - Alcohol consumption was an outcome measure
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# Validity Assessment and Data Abstraction

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- Validity assessment
    - Randomisation status
    - Blinding of those assessing outcomes
    - Loss to follow up
  - Data abstraction
    - Study characteristics (number and type of patients, type of intervention and duration and outcome measures)
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# Methods

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- Mean differences (95% confidence interval) were calculated as the difference in outcome between intervention and control group
  - Outcome: the difference between consumption at baseline and follow up
  - The study designs and study outcomes were too heterogeneous to allow pooling of data
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# Inclusion of Studies

Retrieved reports (n=481)

Studies not relevant (n=352)

Studies retrieved for more detailed evaluation (n=129)

Intervention not opportunistic (n=75)

Intervention not psychosocial (n=2)

Intervention not conducted in hospital setting (n=36)

Data included in another article (n=1)

No empirical data available (n=7)

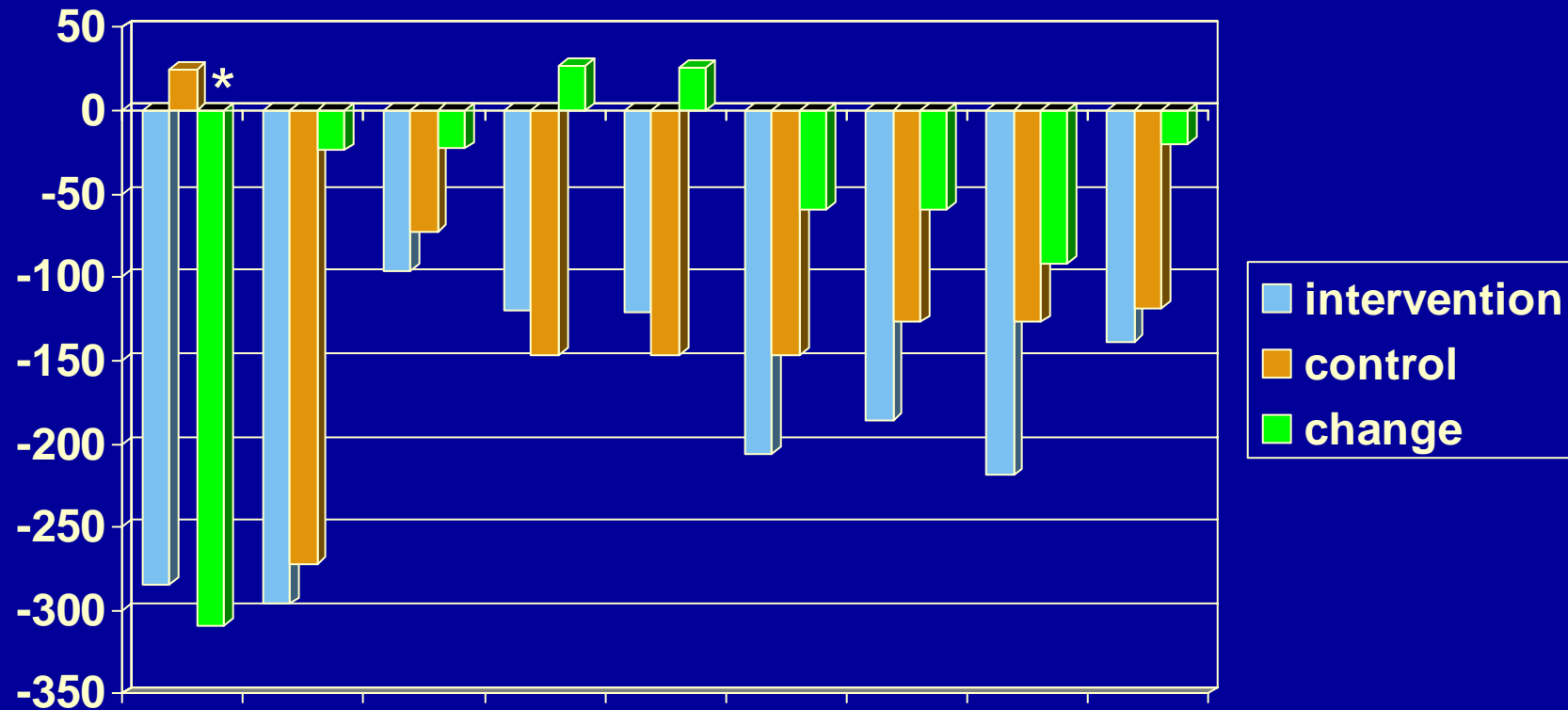
Studies included for systematic review (n=8)

# Study Characteristics

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- Trials varied in population, intervention, people performing the intervention and follow up periods
  - Methodological quality:
    - 3 trials were individually randomised, 4 cluster randomised and 1 trial non-randomised
    - 3 trial reported blind assessment of outcome
    - Loss to follow up ranged from 9-50%; all trials excluded these patients from analysis
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# Alcohol Consumption Difference Scores in the Hospital Setting Studies (grams alcohol/week)



\* significant difference

## Discussion

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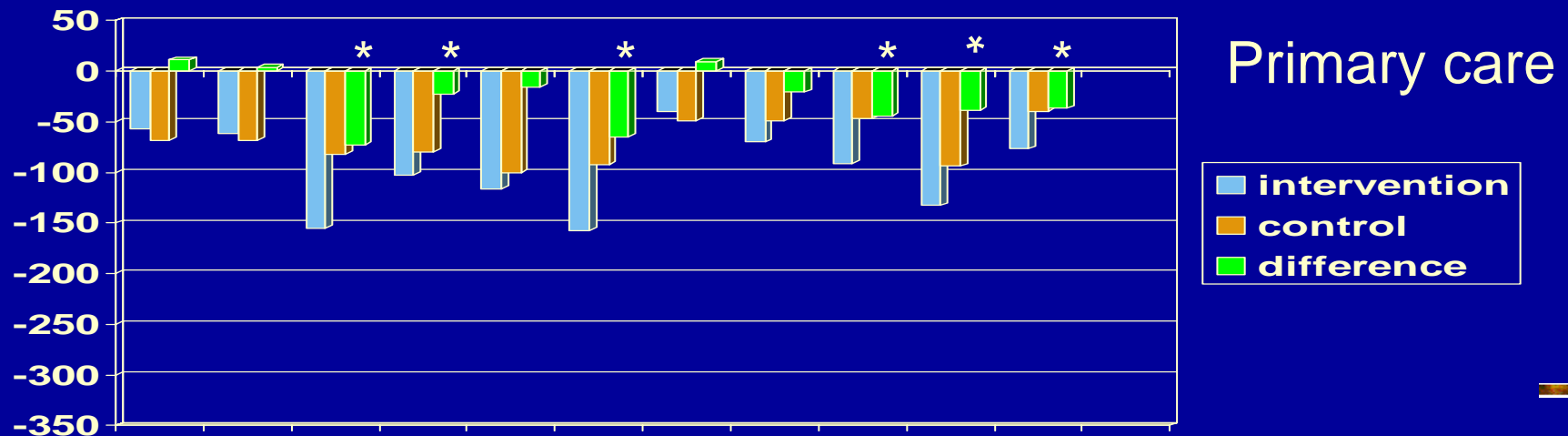
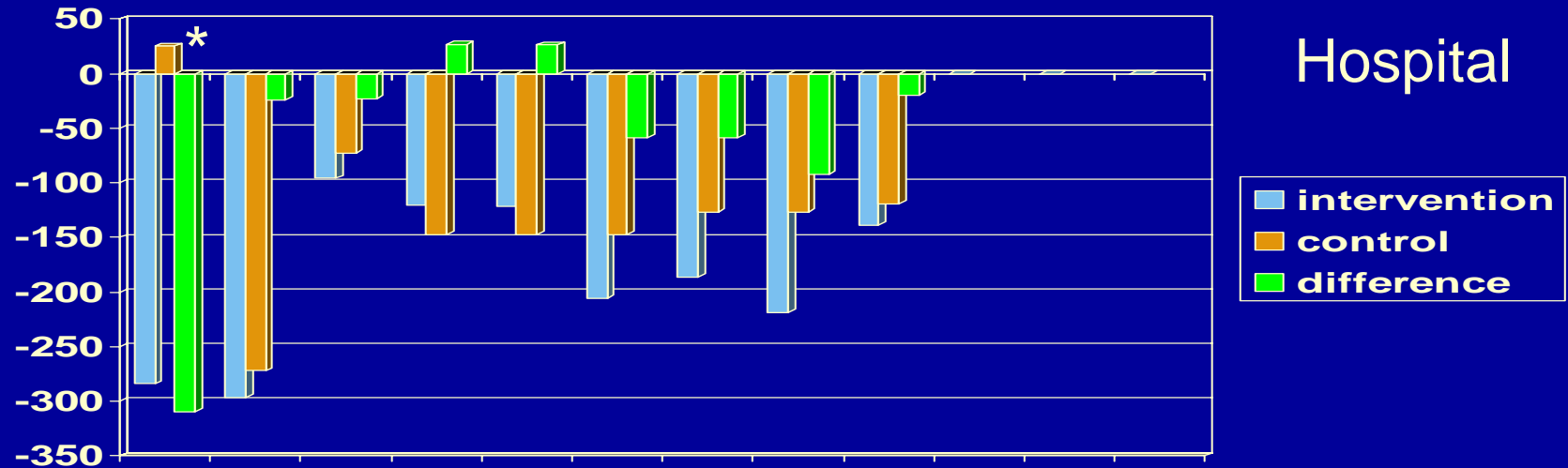
- Evidence for the effectiveness of opportunistic brief interventions for problem drinking in a general hospital setting is still inconclusive
  - Only one study found a significant effect (maheswaran et al, 1992)
    - A relatively intensive intervention (4 follow ups)
    - Outpatients with hypertension
    - Intervener: highly motivated medical specialist
    - A short follow up period (2 months)
    - Control group was told not to reduce
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## Discussion

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- All other trials found a significant reduction in alcohol consumption for the control group
    - Reactive effect of the research assessment may make patients more aware of the potentially harmful effects of alcohol consumption
    - Regression to the mean
  - Strength: only one outcome measure: change in alcohol consumption
  - Limitations: small number of studies and most had methodological weaknesses
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# Alcohol Consumption Difference Scores in Hospital and Primary Care Setting Studies



# Possible Explanations (Differences between Hospital and Primary Care Setting)

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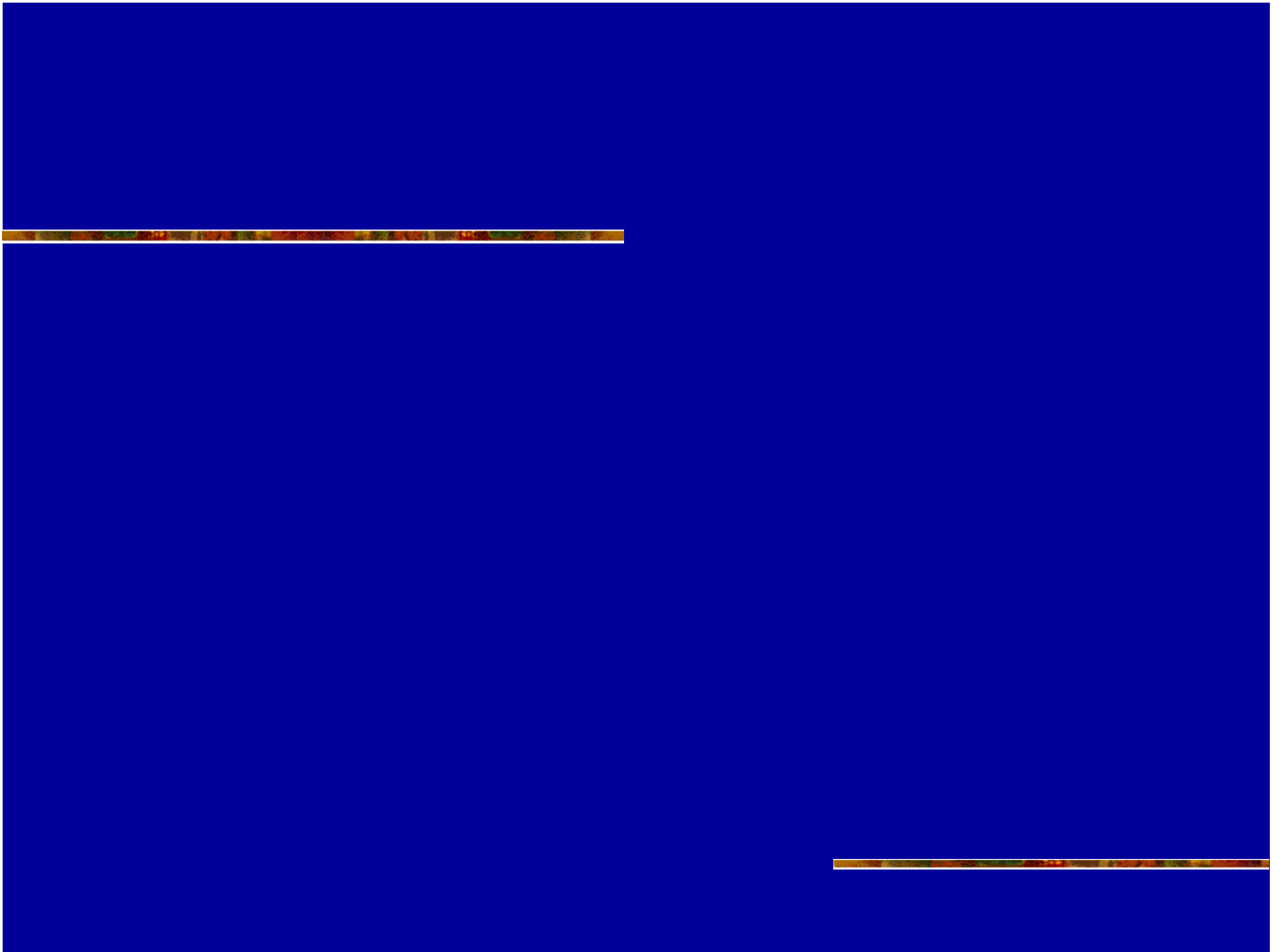
- In the hospital setting
    - Patient have mostly more severe medical conditions
      - Larger reactive effect of research assessment
      - If the conditions are alcohol related, alcohol reduction is more urgent
    - Interventions are often not performed by a medical doctor
    - Continuity of care is less than in general practice
    - Personnel is less used to early recognition and treatment of problem drinking
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# Suggestions for Future Research on Brief Alcohol Interventions in the Hospital

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- The large alcohol reduction for the control group, seems to indicate that a small intervention can be enough in the hospital setting
  - What are the effects if the medical specialist does the intervention (eventually with involvement of a nurse practitioner)
    - The intervention has to be integrated in usual practice
    - Education and training are needed
  - Are effects stronger if interventions are directed only to patients with alcohol related diseases?
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- Although evidence for the effects of brief interventions for problem drinking in the hospital setting is still inconclusive, the hospital setting still need to be considered as a valuable setting for brief alcohol interventions.
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# RCT to examine effect of a brief motivational intervention (DCU) among hospital outpatients

