

Evidence-based Synthesis Program (ESP)

Educational Group Visits for the Management of Chronic Health Conditions

A Systematic Review

Portland VA Medical Center

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Acknowledgements

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Disclosure

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VA Evidence-based Synthesis (ESP) Program Overview

- **Sponsored by VA Quality Enhancement Research Initiative (QUERI) Program.**
- **Established to provide timely and accurate syntheses/reviews of healthcare topics identified by VA clinicians, managers and policy-makers, as they work to improve the health and healthcare of Veterans.**
- **Builds on staff and expertise already in place at the Evidence-based Practice Centers (EPC) designated by AHRQ. Four of these EPCs are also ESP Centers:**
 - Durham VA Medical Center; VA Greater Los Angeles Health Care System; Portland VA Medical Center; and Minneapolis VA Medical Center.

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- **Provides evidence syntheses on important clinical practice topics relevant to Veterans, and these reports help:**
 - develop clinical policies informed by evidence,
 - the implementation of effective services to improve patient outcomes and to support VA clinical practice guidelines and performance measures, and
 - guide the direction for future research to address gaps in clinical knowledge.
- **Broad topic nomination process – e.g. VACO, VISNs, field – facilitated by ESP Coordinating Center (Portland) through online process:**

<http://www.hsrd.research.va.gov/publications/esp/TopicNomination.cfm>

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- **Steering Committee** representing research and operations (PCS, OQP, ONS, and VISN) provides oversight and guides program direction.
- **Technical Advisory Panel (TAP)**
 - Recruited for each topic to provide content expertise.
 - Guides topic development; refines the key questions.
 - Reviews data/draft report.
- **External Peer Reviewers & Policy Partners**
 - Reviews and comments on draft report
- **Final reports posted on VA HSR&D website and disseminated widely through the VA.**

<http://www.hsrd.research.va.gov/publications/esp/reports.cfm>

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Current Report

Educational Group Visits or the Management of Chronic Health Conditions: A Systematic Review (December 2012)

Full-length report available on the ESP website:

<http://vaww.hsrd.research.va.gov/publications/esp/group-visits.cfm>

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Questions for the Audience

(Respond in your "Q&A" tab, upper left corner)

- **Question 1: What is your reason for joining us on the cyberseminar today?**
 - General interest in group visits
 - I am involved with a group visit at my clinic
 - I conduct research on group visits
 - None of the above

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Questions for the Audience

(Respond in your “Q&A” tab, upper left corner)

- **Question 2: Does your clinic currently conduct group visits for chronic disease management?**
- **Question 3: If so, in what area?**
 - Obesity
 - CHF/hypertension
 - Diabetes
 - Arthritis/falls prevention
 - Other—specify

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Overview of Today's Presentation

- **Background**
- **Scope of the review**
- **Results (87 publications of 81 studies)**
 - **Description of included studies**
 - **Summary of results by clinical area**
- **Implications for VA**
- **Future research**

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Background

- **The goal of group-based visits led by non-prescribing facilitators is to reinforce chronic disease education and provide training in order to improve self-management skills for the large numbers of patients coping with chronic illness.**
- **The Veterans Administration (VA) has prioritized group visit implementation as part a new primary care model that focuses on patient centeredness, The Patient Aligned Care Team (PACT).**

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Background (2)

- **Vast differences in group visit program structure, content, length of intervention, and follow-up time points.**
- **Given the heterogeneity among interventions and chronic conditions in which group visits are tested, the objectives of this review are to:**
 1. **Summarize the characteristics of GV interventions**
 2. **Assess the effects of these interventions on outcomes**
 3. **Examine patient characteristics associated with effectiveness**
 4. **Examine which components of GV structure and delivery are effective**

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Scope of the Review

- **Key Question 1: In adults with chronic medical conditions, how do group visits compared to usual care affect the following:**
 - medication adherence, biophysical markers
 - symptom status, functional status, mortality, patient satisfaction
 - utilization of medical resources, health care costs
 - adverse outcomes?

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Scope of the Review (2)

- **Key Question 2: For adults with chronic medical conditions, do the effects of group visits vary by patient characteristics?**
- **Key Question 3: Which components of group visits are associated with greater intervention effects?**

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Scope of the Review (3)

- **Criteria:**
 - **Patients**: DM, HTN, CHF, COPD, asthma, arthritis, chronic pain, history of falls, multiple chronic conditions.
 - **Intervention**: educational GV led by individuals who are non-prescribing health professionals as well as lay facilitators.
 - **Comparator**: Usual care, non-GV care
 - **Outcome**: Biophysical/physiological, health care utilization, functional status, patient satisfaction, participation, attrition
 - **Timing**: Any
 - **Setting**: Any

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Methods

- Searched MEDLINE (PubMed), Cochrane Database of Systematic Reviews (Ovid), Embase, CINAHL (EBSCO), and PsycINFO (Ovid) through February 2012 (update search January 2013)
- Additional articles and reviews considered for inclusion were obtained from reference lists and reviewer suggestions
- **Excluded:**
 - Non-English language
 - Non-adult study population
 - Support group only; group exercise classes only
 - Individual-level medication management
 - DM studies published prior to 1998

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Methods (2)

- **Data extraction**

- Study design, objectives, setting, population, demographics, findings, structure of GV, comparator(s), participation, and attrition

- **Content delivered**

1. **Self-management education (SME)**—disease-specific education **and** self-management skills to cope with symptoms
2. **Didactic education (DE)**—informational only (lectures)
3. **Experiential education (EE)**—instruction via demonstrations

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Methods (3)

- **Focused on distal health outcomes measuring quality of life and functional status—likely to be important to patients and could conceivably be impacted by the interventions examined**
- **Also focused on intermediate outcomes such as self-efficacy**
 - **Self-efficacy**: personal beliefs in one's ability to succeed in self-managing illness
- **Quality assessment (good, fair, poor)**

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Results

- **Search yielded 3,450 citations; 599 were selected for full-text review**
- **87 publications reporting on 81 group visit trials**
 - **Diabetes interventions (29)**
 - **Arthritis/falls interventions (22)**
 - **Asthma/COPD (10)**
 - **Hypertension/CHF (12)**
 - **Chronic pain (4)**
 - **Multiple chronic conditions (4)**

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Results (2)

By Key Question

- **Key Question 1:**

- Short- and medium-term improvements in self-efficacy
- Little evidence that interventions improved quality of life, functional status, or utilization outcomes
- Modest short-term improvements in HbA1c

- **Key Question 2:**

- Little difference according to patient demographic and SES

- **Key Question 3:**

- In 5 studies, SME group visits may be more effective than DE
- Mixed results for individual vs. group visits

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Results (3)

By Clinical Area

- *Arthritis*
 - 18 studies from the US, Europe, and Australia
 - Wide variation in intervention structure, content, and duration
 - Moderately strong body of evidence for short and medium term self efficacy improvements
 - Little effect on quality of life or utilization
- *Falls*
 - 4 studies from the US, Canada, and Australia
 - Didactic falls prevention + experiential exercise training may improve self-efficacy and reduce the risk of falls
 - Strength of evidence is low

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Results (4)

By Clinical Area

- *Asthma*
 - 5 studies from the US, and Australia
 - Little effect on quality of life or utilization
- *COPD*
 - 5 studies from Northern Ireland, the UK, the Netherlands, France, and a VA Medical Center in the US
 - Small body of fair-to-good quality evidence suggests didactic + experiential training may be associated with small improvements exercise capacity and symptoms
 - Clinical significance of these findings is unclear

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Results (5)

By Clinical Area

- *Hypertension, CHF, CAD*
 - 3 fair-quality studies in 4 publications from the US and the Netherlands for patients with CHF or CAD
 - 7 studies in patients with hypertension from the US and other international settings
 - Few studies among CHF patients—findings on self-efficacy, quality of life, and biophysical measures were largely neutral
 - Improvements in blood pressure control for patients with hypertension in short-term and long-term studies

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Results (6)

By Clinical Area

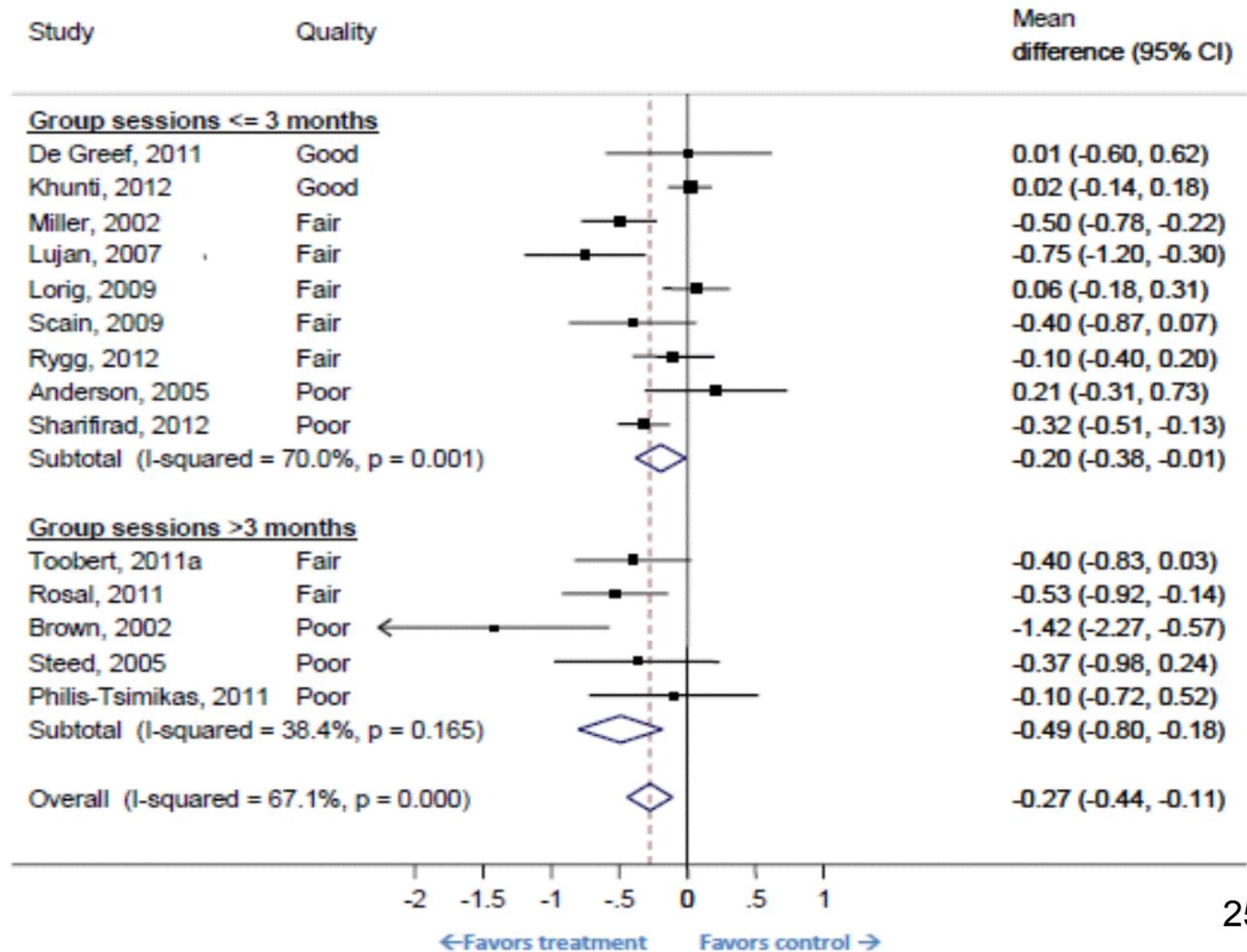
- *Diabetes Mellitus*

- 30 studies from the US, Europe, and other international settings
- 5 studies found improvements in self-efficacy
- Little evidence of improved quality of life over short- or long-term
- 11 studies compared a group visit intervention to one or more active intervention arms
 - 3 found greater improvements in HbA1c control for self-management vs than didactic (additional differences between intervention arms)
 - 2 studies compared group to individual education: 1 fair-quality study found a telephone-based self-management program performed similarly to an in-person self-management group visit

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Results (7)

Figure 1.
 Effect of group visits compared to usual care on HbA1C at ≤ 6 month follow-up, by duration of intervention



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Results (8)

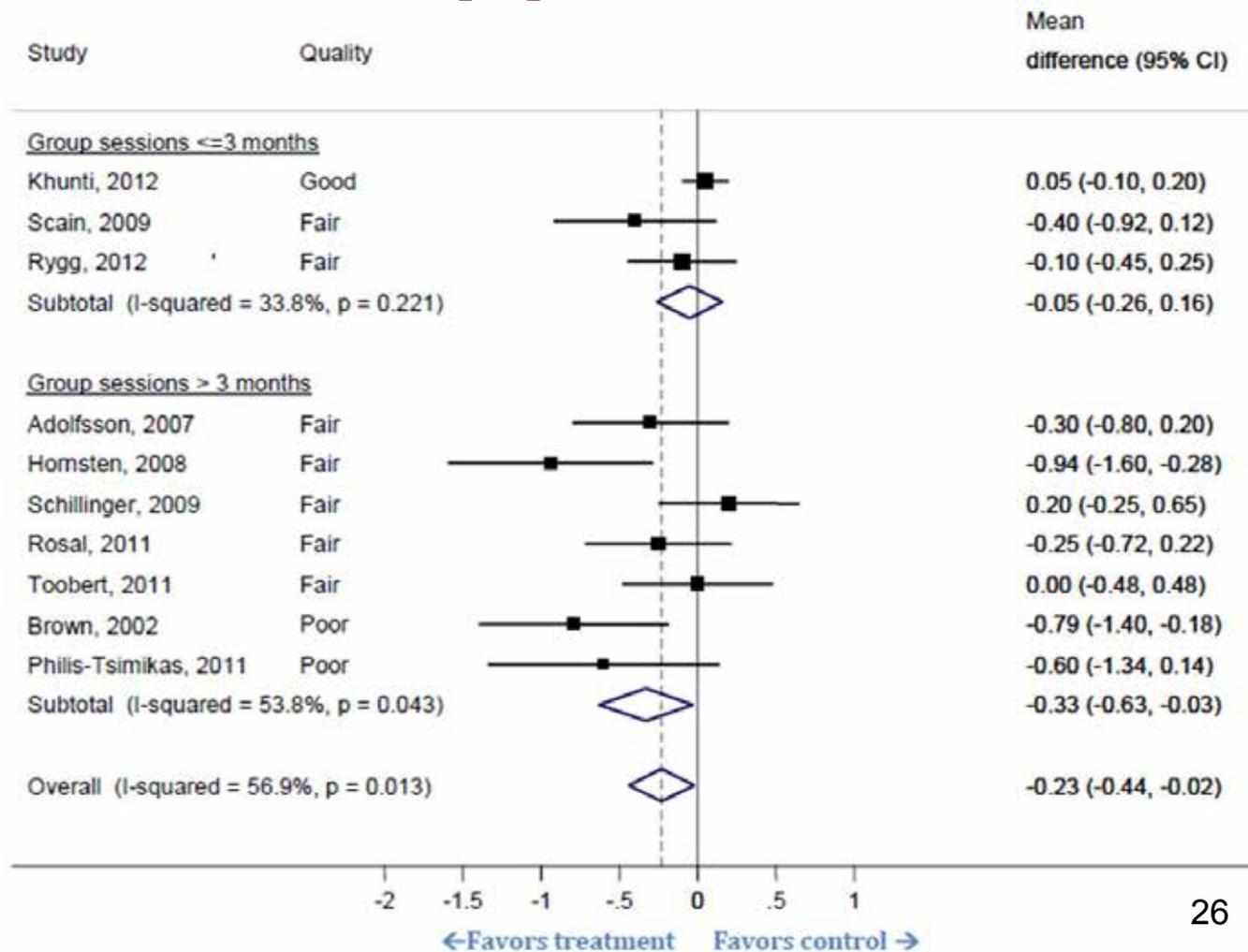


Figure 2.
 Effect of group visits compared to usual care on HbA1C at 7-12 month follow-up, by duration of intervention

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Results (9)

By Clinical Area

- *Chronic Pain*
 - 4 studies from the US, and Europe
 - Very small body of literature suggests group-based self-management education interventions may improve pain coping skills over the short-term
 - Strength of this evidence is low
 - Few small and moderately sized trials
 - Methodological quality of one of the studies finding benefit was poor

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Results (10)

By Clinical Area

- *Multiple chronic conditions*
 - 4 studies evaluating the Chronic Disease Self-Management Program in the US, China, and the Netherlands
 - The peer-led, community-based program is associated with medium-term improvements in self-efficacy, health status, and health care utilization which may persist long-term
 - Moderately strong evidence from two large US trials, though findings were not replicated in other countries
 - Findings likely apply most to patients engaged enough in care to agree to attend a multi-week course.

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Discussion

- **Group visits can improve short-term self-efficacy**
- **Little effect on quality of life, functional status**
- **Peer-led community-based self-management program may improve health and utilization among patients with multiple chronic illnesses**
- **No evidence of harms**
 - **Group visits may be a reasonable alternative for educating patients with chronic illness**
 - **Low overall participation and retention rates suggest they may not be a viable option for many patients and should not be the sole alternative**

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Limitations

- **Comparability of studies**
- **Participation rates, ranged from 13-100 percent**
- **Relatively few comparative intervention studies**

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Future Research

Patients/populations:

- **Few good quality studies in patients with asthma, COPD, CHF, chronic pain, and multiple chronic conditions**
 - More trials in these populations

Interventions:

- **Lack of clarity about intervention components associated with improvements**
 - More head-to-head comparative trials

Comparator:

- **Relatively few studies with active comparison groups**
 - Comparative effectiveness trials

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Future Research (2)

Outcomes:

- **Heterogeneity in outcomes (uncertain validity)**
 - Standardized approach to outcome measurement/validated scales

Timing:

- **Lack of studies examining long-term outcomes**
 - Trials with longer follow-up
- **Few trials assessed booster session effects**
 - Trials evaluating booster sessions

Setting:

- **Few trials in community and rural settings**
 - Test telehealth trials located in community settings

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Discussants:

Sharon Watts, DNP, RN-BC, CDE (Cleveland VA)

1. From a practitioner's perspective, are there any outstanding gaps that you think would be valuable to day-to-day practice?
2. Are these findings surprising?
3. Does the group visits report convey any information that would influence your teamlet practice?

Susan Kirsch, MD (PACT Coordinating Center)

1. Are there any implications for VA PACT-level rollout decisions?
2. Implications for funding research to better inform PACT rollout decisions?
3. Are there implications for collaboration between HSR&D/QUERI and ONS in future work on this topic?

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Questions?

**If you have further questions,
feel free to contact:**

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The full report and cyberseminar presentation is available on the ESP website:

<http://www.hsrd.research.va.gov/publications/esp/>