



Evidence Brief: Review of Reviews on Various Topics for August 2013 Specialty Care Mini SOTA

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PREFACE

Quality Enhancement Research Initiative's (QUERI) Evidence-based Synthesis Program (ESP) was established to provide timely and accurate syntheses of targeted healthcare topics of particular importance to Veterans Affairs (VA) managers and policymakers, as they work to improve the health and healthcare of Veterans. The ESP disseminates these reports throughout VA.

QUERI provides funding for four ESP Centers and each Center has an active VA affiliation. The ESP Centers generate evidence syntheses on important clinical practice topics, and these reports help:

- develop clinical policies informed by evidence,
- guide the implementation of effective services to improve patient outcomes and to support VA clinical practice guidelines and performance measures, and
- set the direction for future research to address gaps in clinical knowledge.

In 2009, the ESP Coordinating Center was created to expand the capacity of QUERI Central Office and the four ESP sites by developing and maintaining program processes. In addition, the Center established a Steering Committee comprised of QUERI field-based investigators, VA Patient Care Services, Office of Quality and Performance, and Veterans Integrated Service Networks (VISN) Clinical Management Officers. The Steering Committee provides program oversight, guides strategic planning, coordinates dissemination activities, and develops collaborations with VA leadership to identify new ESP topics of importance to Veterans and the VA healthcare system.

Comments on this evidence brief are welcome and can be sent to Nicole Floyd, ESP Coordinating Center Program Manager, at nicole.floyd@va.gov.

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INTRODUCTION

Patient Care Services is planning a Mini State-Of-The-Art (SOTA) conference for August 7 to 8, 2013 on the topic of specialty care. Patient Care Services plans to use the SOTA for strategic planning on how to move specialty care forward in a number of areas. To assist in these efforts, Patient Care Services requested that the VA ESP Coordinating Center (CC) conduct some “light” evidence syntheses of the following topics: shared decision making in palliative care, oncology, and nephrology; interventions that reduce hospitalizations/emergency room (ER) visits for heart failure and chronic obstructive pulmonary disease (COPD); and interdisciplinary specialty care platforms/teams/neighborhood approaches for reducing hospitalizations/ER visits.

METHODS

The present evidence brief is limited to systematic reviews of randomized controlled trials and/or observational studies with a concurrent control group published since 2008 that included comprehensive searches of at least two electronic databases, utilized adequate methods for assessing the internal validity of included studies, and addressed the following populations and interventions:

- 1) Shared decision making in palliative care
- 2) Shared decision making in oncology
- 3) Shared decision making in nephrology
- 4) Nonpharmacological interventions that reduce hospitalizations, readmissions, and/or ER visits in heart failure, including
- 5) Nonpharmacological interventions that reduce hospitalizations, readmissions, ER visits in COPD
- 6) Interdisciplinary specialty care platforms/teams/neighborhood approaches for reducing hospitalizations/ER visits. Eligible interventions included multi-component, interdisciplinary team-based care that was led by a medical specialist and involved primary care.

For the shared decision making topics, we focused on systematic reviews that evaluated shared decision making approaches as a whole, including the process of clinician and patient communication. We excluded reviews that focused on single components of a shared decision making approach, such as decision aids alone.

For heart failure, per feedback from the nominator, we focused on the most feasible interventions including telemonitoring, self-management, exercise training, care pathways, discharge planning, disease management, pharmacist collaborative care, and outpatient case management. Evidence exists on the effects of other nonpharmacological interventions for reducing hospitalizations, readmissions and ER visits for heart failure.

For COPD, per feedback from the nominator, we focused on the most feasible interventions including telehealth, disease management programs, case management, care pathways, and integrated use of disease management programs. Evidence exists on the effects of other nonpharmacological interventions for reducing hospitalizations, readmissions and ER visits for COPD.

To identify eligible systematic reviews published since 2008, we searched MEDLINE®, VA/HSR&D publications, Agency for Healthcare Research and Quality (AHRQ), Canadian Agency for Drugs & Technologies in Health (CADTH), The Cochrane Collaboration, National Institute for Health Research Health Technology Assessment Program, National Institute for Clinical Excellence (NICE), and University of York Center for Reviews and Dissemination. Medline search strategies are provided in Appendix A. Systematic review organization websites were searched using the same types of key words for population and intervention used in the MEDLINE® searches.

One reviewer (KP) screened all identified titles and abstracts, and excluded systematic reviews that obviously did not meet inclusion criteria. That same reviewer re-applied the eligibility criteria to the full text of the remaining publications to select the final set of included systematic reviews. In cases where multiple systematic reviews were identified on the same topic, we focused on findings from the most recent, comprehensive and best quality review.

From the included systematic reviews, one reviewer abstracted data on numbers of included studies and participants, proportions of studies conducted in the United States, results, and strength of evidence. When strength of evidence was not reported, we rated the strength of evidence using the guidance established for the Evidence-based Practice Center Program of AHRQ.¹ This approach incorporates four key domains: risk of bias (includes study design and aggregate quality), consistency, directness, and precision of the evidence. It also considers other optional domains that may be relevant for some scenarios, such as a dose-response association, plausible confounding that would decrease the observed effect, strength of association (magnitude of effect), and publication bias. Strength of evidence is graded for each key outcome measure and ratings range from high to insufficient, reflecting our confidence that the evidence reflects the true effect.

RESULTS

NONPHARMACOLOGICAL INTERVENTIONS THAT REDUCE HOSPITALIZATIONS, READMISSIONS AND/OR ER VISITS IN PATIENTS WITH HEART FAILURE

We included systematic reviews of telemonitoring,²⁻⁶ exercise training,⁷⁻⁹ disease management programs,¹⁰⁻¹³ outpatient case management,¹⁴ self-management interventions,¹⁵ pharmacist care,¹⁶ discharge planning,¹⁷ and care pathways.¹⁸ For the topics with multiple systematic reviews, we focused on the review by Inglis et al. (2010)⁴ for telemonitoring, the review by Davies et al. (2010)⁸ for exercise training and the review by Takeda et al. (2012)¹³ for disease management programs. We excluded systematic reviews of chronic care management,¹⁰ discharge management,¹⁹ advanced practice registered nurse assistance in patient management,²⁰ and care transitions²¹ because they did not assess the internal validity of their included studies.

All interventions were compared to usual care. Table 1 summarizes the findings from included systematic reviews on the effects of the studied interventions on risk of all-cause and heart failure-related hospitalization. The strongest evidence of significant reductions in heart

failure-related hospitalizations was for multidisciplinary disease management models, case management-type disease management models, exercise training and telemonitoring. The strongest evidence of significant reductions in all-cause hospitalizations was for multidisciplinary disease management models. There is also moderate-strength evidence for significant reductions in readmissions for care pathways and discharge planning, but the reviews did not specify whether the types of readmissions were all-cause, heart failure-related, or both.

No review reported effects on ER visits. These reviews did not provide sufficient detail about the original studies to properly judge the applicability of their findings to an integrated healthcare network setting, such as that of VAMC's.

Table 1. Summary of findings from systematic reviews for effects of nonpharmacological interventions on hospitalization

Intervention	Description	Magnitude of effect and strength of evidence
Telemonitoring ⁴	Structured interventions initiated by a healthcare professional and delivered to community-dwelling patients as the only aftercare intervention, without home visits or intensified clinic follow-up.	<p>Moderate-strength evidence¹ of ↓HF readmissions at and beyond 6 months. Low-strength evidence of ↓all-cause readmissions after 6 months.^{1,2}</p> <p>Greatest effects when involved ECG transmissions and when replacing infrequent usual care.</p> <p>All-cause: RR 0.91 (95% CI, 0.84 to 0.99); 47% vs 52%; 8 RCTs, N=2343</p> <p>HF-related: RR 0.79 (95% CI, 0.67 to 0.94); 22% vs 28%; 4 RCTs, N=1570</p>
Self-management ¹⁵	Interventions relying on the individual's ability to continuously monitor and manage the symptoms, treatment, physical and psychosocial consequences, and lifestyle changes inherent in living with heart failure; and effect the cognitive, behavioral and emotional responses necessary to maintain a satisfactory quality of life.	<p>Moderate-strength evidence¹ of ↓all-cause and HF-related hospitalizations.</p> <p>All-cause: 8 RCTs, N=2149; ↓ in all 8 RCTs, but only reached statistical significance in 3/5 with longest follow-up of 1 year; rates were 13% to 34% lower; no meta-analysis</p> <p>HF-related: 4 RCTs, N=1304; ↓ in all 4 RCTs, statistically significant ↓ 3/4; rates were 19% to 51% lower; no meta-analysis</p>
Exercise training ⁸	Exercise-based intervention received either alone or as part of a comprehensive cardiac rehabilitation program (defined as programs also including components such as health education and psychological treatment).	<p>Moderate-strength evidence¹ of ↓HF-related hospitalizations. Moderate-strength evidence¹ of = all-cause hospitalizations.</p> <p>All-cause:</p> <p>< 12 months: RR 0.79 (95% CI, 0.58 to 1.07); 14% vs 18%; 8 RCTs, N=659</p> <p>> 12 months: RR 0.96 (95% CI, 0.90 to 1.02); 56% vs 60%; 4 RCTs, N=2658</p> <p>HF-related: RR 0.72 (95% CI, 0.52 to 0.99); 15% vs 29%; 7 RCTs, N=569</p>

Intervention	Description	Magnitude of effect and strength of evidence
Care pathways ¹⁸	Explicit statement of the goals and key elements of care based on evidence, best practice, and patients' expectations and their characteristics; facilitation of communication among team members and with patients and families; coordination of the care process by coordinating the roles and sequencing the activities of the multidisciplinary care team, patients and their relatives; documentation, monitoring, and evaluation of variances and outcomes; and identification of the appropriate resources.	Moderate-strength evidence ¹ of ↓readmissions. Readmission: RR 0.81 (95% CI, 0.66 to 0.99); 16% vs 19%; 2 RCTs, 3 CCTs, N=3006
Discharge planning ¹⁷	Development of an individualized discharge plan for a patient prior to them leaving hospital for home.	Moderate-strength ¹ evidence of a small, but significant ↓ in readmission rates for elderly patients with a medical condition (usually heart failure). RR 0.85 (95% CI, 0.74 to 0.97); 23% vs 27%; 11 RCTs, N=2552
Case management models of disease management programs ¹³	Intense monitoring of the patients following discharge from hospital, usually done by a nurse and typically involves home visits and/or telephone calls.	Moderate-strength evidence ¹ of ↓HF readmissions at and beyond 6 months. Low-strength evidence of ↓all-cause readmissions after 6 months. ^{1,2} Readmissions for HF at 6 months follow-up: OR 0.64 (95% CI, 0.46 to 0.88); 3 RCTs, N=655 Readmissions for HF beyond 6 months follow-up: OR 0.47 (95% CI, 0.30 to 0.76; I ² =76%); 7 RCTs, N=1726 HF readmissions beyond 6 months in studies where allocation concealment confirmed: OR 0.42 (95% CI, 0.29 to 0.62; I ² =9%), N=604 All-cause readmissions 6 months follow-up: OR 0.77 (95% CI, 0.50 to 1.20; I ² =46%); 4 RCTs, N=694 All-cause readmissions more than 6 months follow up: OR 0.75 (95% CI, 0.57 to 0.99; I ² =58%); 7 RCTs, N=2199

Intervention	Description	Magnitude of effect and strength of evidence
Clinic-based disease management model ¹³	Outpatient HF clinics run by cardiologists with special interest in HF or by specialist nurses using agreed protocols to manage medication.	Moderate-strength evidence ¹ of = HF readmissions. Low-strength evidence of = all-cause readmissions ≥ 12 months. ^{1,2} HF readmissions: OR 1.02 (95% CI, 0.75 to 1.38); 2 RCTs, N=869 All-cause readmissions: (OR 0.78; 95% CI, 0.48 to 1.26; $I^2=65\%$); 4 RCTs, N=1129
Multidisciplinary disease management model ¹³	Holistic approach to the individual's medical, psychosocial, behavioural and financial circumstances; and typically involves several different professions working in collaboration to reduce gaps in delivery systems.	Moderate-strength evidence ¹ of \downarrow all-cause and HF-related hospitalizations. HF readmissions: OR 0.45 (95% CI, 0.28 to 0.72); 2 RCTs, N=403 All-cause readmissions: OR 0.46 (95% CI, 0.30 to 0.69); 2 RCTs, N=403
Pharmacist collaborative care with HF Team ¹⁶	Multidisciplinary interventions that incorporated a pharmacist	Low-strength evidence ¹ of \downarrow all-cause and HF-related hospitalizations. All-cause: OR 0.60 (95% CI, 0.38 to 0.95); 39% vs 49%; 4 RCTs, N=566 HF-related: OR 0.42 (95% CI, 0.24 to 0.74); 19% vs 32%; 5 RCTs, N=600
Outpatient case management ¹⁴	Defining feature is <i>coordination</i> of patient care, including helping patients navigate healthcare systems, connecting them with community resources, orchestrating multiple facets of healthcare delivery, and assisting with administrative and logistical tasks. Distinct from <i>clinical</i> functions, including disease-oriented assessment and monitoring, medication adjustment, health education, and self-care instructions.	Insufficient to draw conclusions. ² Mixed results for all-cause hospitalizations: 4 RCTs showed reductions (range of relative rates, 0.56 to 0.79). 5 RCTs showed no difference (range of relative rates, 1.02 to 1.12). No meta-analysis 9 RCTs, N=3211

¹=Methodological limitations, ²=Inconsistency

NONPHARMACOLOGICAL INTERVENTIONS THAT REDUCE HOSPITALIZATIONS, READMISSIONS AND/OR ER VISITS IN PATIENTS WITH COPD

We included systematic reviews of telehealthcare,²² outpatient case management,²³ care pathways for in-hospital management of COPD exacerbations,²⁴ and disease management programs.²⁵ All interventions were compared to usual care.

Telehealthcare has the strongest evidence of significantly reducing hospital admissions over 12 months in adults with COPD (Table 2).²² The evidence was comprised of four randomized controlled trials, all conducted in either Southern European countries or Canada. Methodological quality was fair to good in three trials and poor in the fourth trial. Approximately 29% of patients were recruited on discharge. The interventions were heterogeneous in terms of the type of technology used, including telephone, video or internet. In three of four trials, the telehealthcare intervention was part of a multi-component treatment approach that was comprised of additional interventions including case management, education, access to multidisciplinary care teams, and home visits. Since none of the trials were conducted in a VAMC or even in the United States and typically included telehealthcare as part of a multi-component treatment approach, further research is needed to determine the applicability of the findings to the VAMC healthcare system and the unique contribution of the telehealthcare interventions.

Outpatient case management has also shown some promise in significantly reducing all-cause and COPD-related ER visits over one year in one good-quality trial of 743 Veterans with severe COPD treated at five VAMC's (Table 2).²³ Care was coordinated by a respiratory therapist case manager and included a group education session, an individualized written action plan and monthly phone calls to patients for disease management.

Disease management programs have also shown some promise in significantly reducing rates of 12-month hospitalizations or readmissions in two fair-good quality randomized controlled trials.²⁵ The two programs varied in terms of their components and intensity. Both included telehealthcare and case management components, and both were previously included in the systematic reviews of telehealthcare and case management.^{22,23} As previously mentioned, future research should be designed to better evaluate the specific elements of these multi-component care approaches that bring the greatest benefit.

There is very little evidence available for evaluation of the effectiveness of care pathways for in-hospital management of COPD exacerbations. So far, they have not been found to reduce readmission rates in patients with COPD.²⁴

Table 2. Summary of findings from systematic reviews for effects of nonpharmacological interventions on hospitalization outcomes in patients with COPD

Intervention	Description	Magnitude of effect and strength of evidence
Telehealthcare ²²	Electronic transfer of information from the patient whether voice, video, other audio, oxygen saturation, breath sounds or other; electronic transfer of such information. Patients are given personalized feedback from a healthcare professional who exercises their skills and judgment in the giving of tailored advice to the patient.	<p>Moderate-strength evidence¹ of ↓hospital admissions in 12 months; low-strength evidence^{1,2} of ↓ED attendances in 12 months</p> <p>≥ 1 hospital admissions in 12 months: OR 0.46 (95% CI, 0.33 to 0.65; I²=0%); 4 RCTs, N=604</p> <p>≥ 1 ED attendances in 12 months: OR 0.27 (95% CI, 0.11 to 0.66; I²=77%); 3 RCTs, N=449</p> <p><u>Subgroup analyses:</u></p> <ul style="list-style-type: none"> • Telehealthcare alone: OR 0.19 (95% CI, 0.03 to 1.27; I²=88%); 2 RCTs, N=258 • Telehealthcare as part of a complex management program: OR 0.40 (95% CI, 0.22 to 0.71); 1 RCT, N=191
Outpatient case management ²³	Defining feature is <i>coordination</i> of patient care, including helping patients navigate healthcare systems, connecting them with community resources, orchestrating multiple facets of healthcare delivery, and assisting with administrative and logistical tasks. Distinct from <i>clinical</i> functions, including disease-oriented assessment and monitoring, medication adjustment, health education, and self-care instructions.	<p>Low-strength evidence^{1,3} of ↓all-cause and COPD-related ED visits in 12 months. Insufficient evidence to draw conclusions about all-cause and COPD-related hospitalizations.</p> <p>All-cause hospitalizations in 2 VAMC RCTs: HR 1.05 (95% CI, 0.72 to 1.53; N=426); RR 0.72 (95% CI, 0.54 to 0.94; N=743)</p> <p>COPD-related hospitalizations in 2 VAMC RCTs and RCT in Quebec: HR 1.13 (95% CI, 0.70 to 1.80; N=426 Veterans); RR 0.69 (95% CI, 0.47 to 1.01; N=743 Veterans); OR 0.47 (95% CI, 0.26 to 0.84)</p> <p>All-cause ER visits: RR 0.73 (95% CI, 0.56 to 0.96; 1 RCT, N=743 Veterans)</p> <p>COPD-related ER visits in 1 VAMC RCT and 1 RCT in Quebec: RR 0.49 (95% CI, 0.33 to 0.72; N=743 Veterans); OR 0.40 (95% CI, 0.22 to 0.71; N=191)</p>
Disease management ²⁵	Interventions included 2 or more different components (e.g., physical exercise, self-management, structured follow-up), ≥ 2 healthcare professionals were actively involved in patient care, patient education was considered, ≥ 1 component of the intervention lasted ≥ 12 months.	<p>Low-strength evidence of significant reductions in rates of 12-month hospitalizations/readmissions.^{1,2,3}</p> <p>Hospital admission: 2 of 2 RCTs showed significant reductions in rate of hospitalizations/readmissions; 1 of 2 RCTs showed significant reductions in number of admissions/hospitalizations; no quantitative results or meta-analysis provided.</p>
Care pathways for in-hospital management of COPD exacerbations ²⁴	Multidisciplinary structured care plans that outline time-specific clinical interventions and responsibilities by discipline.	<p>Low-strength evidence of no significant effect on readmission rates.^{1,2,3}</p> <p>12-month readmission rate: Nonsignificant trend toward higher risk 1 RCT (N=162): 45.6% vs 35.1%, <i>P</i>>0.05</p> <p>30-day readmission rates: Nonsignificant trend toward lower risk in 2 pre-post studies</p>

¹=Methodological limitations, ²=Inconsistency or unknown consistency, ³=Imprecision or unknown precision

INTERDISCIPLINARY SPECIALTY CARE PLATFORMS/ TEAMS/NEIGHBORHOOD APPROACHES FOR REDUCING HOSPITALIZATIONS, READMISSIONS, AND/OR ER VISITS

We did not identify any systematic reviews that included studies of interdisciplinary specialty care platforms/teams/neighborhood care approaches involving multi-component, interdisciplinary team-based care that was led by a medical specialist and involved primary care. We found a few reviews that broadly addressed related concepts, such as disease management or chronic care models²⁶ or general multidisciplinary strategies,²⁷ that could have conceivably encompassed interdisciplinary specialty care platforms/teams/neighborhood care approaches; but the types of interventions included were telehealthcare, outpatient case management, disease management and others for heart failure or COPD, which overlapped with topics already addressed in this report.

SHARED DECISION MAKING IN PALLIATIVE CARE

We identified one systematic review that evaluated the impact of participation in shared decision making on outcomes in patients being cared for in a palliative care setting.²⁸ Only five uncontrolled before-after or cross-sectional studies provided evidence on anxiety, depression, patient satisfaction and life expectancy outcomes for 551 patients. Patients had advanced cancer in three studies and were not described in the remaining two studies. All but one study was conducted outside of the United States. Decisions focused on preferences for antimicrobial use, palliative chemotherapy and advance directives in three studies, respectively, and were unspecified in the remaining studies. Types of shared decision making interventions were not described. These studies found mixed results regarding effects on anxiety and depression, and no changes in patient satisfaction or life expectancy. These results have a high risk of bias, however, because without a control group, it is impossible to know what would have happened in patients who did not participate in shared decision making. Also, these types of study designs are susceptible to problems with confounding and regression to the mean. For these reasons, these studies provide insufficient evidence to draw conclusions about the effects of shared decision making in palliative care. There are clear challenges to conducting interventional research in palliative care populations, including practical limitations and ethical concerns; but use of more rigorously designed studies is feasible without compromising this vulnerable population and is essential for furthering knowledge about the effects of shared decision making interventions.

SHARED DECISION MAKING IN ONCOLOGY

We identified one systematic review that evaluated the effectiveness of shared decision making in various patient populations, including three randomized controlled trials in oncology.²⁹ Two trials involved patients with unspecified types of cancer. The third trial included BRCA 1 or 2 mutation carriers. Details were not provided about what types of treatment decisions were being made. The control groups received usual care. One trial was conducted in an unspecified clinic setting in the United States. The other trials were conducted in Australia and the Netherlands, respectively. Methodological quality was fair, with limitations including lack of concealed treatment allocation and patient blinding. In the patients with unspecified types of cancer, both

trials found no differences in patient satisfaction after single sessions of shared decision making involving either a question sheet or a computerized support system with assessment summaries. The trial in the Netherlands of 88 female BRCA 1 or 2 mutation carriers found a positive effect on well-being after three and nine months (data not reported) following multiple sessions of shared decision making using a time-trade-off method regarding the choice of prophylactic surgery or continued screening. These trials provide low-strength evidence that a single session of shared decision making with patients with cancer does not improve patient satisfaction, but that multiple shared decision making sessions using a time-trade-off method in women who are BRCA 1 or 2 mutation carriers may be effective in improving well-being.

SHARED DECISION MAKING IN NEPHROLOGY

We found no systematic reviews of shared decision making interventions that involved treatment of kidney diseases.

SUMMARY

The strength of the evidence and conclusions of this brief review are summarized in Table 3.

Table 3. Summary of the evidence

Population	Intervention	Strength of evidence	Conclusions
Heart failure	Telemonitoring	Moderate	↓HF readmissions at and beyond 6 months
		Low	↓all-cause readmissions after 6 months
	Self-management	Moderate	↓all-cause and HF-related hospitalizations
	Exercise training	Moderate	↓HF-related hospitalizations=all-cause hospitalizations
	Care pathways	Moderate	↓readmissions
	Discharge planning	Moderate	↓ in readmission rates for elderly patients with a medical condition (usually heart failure)
	Case management	Moderate	↓HF readmissions at and beyond 6 months
		Low	↓all-cause readmissions after 6 months
	Clinic-based disease management	Moderate	=HF readmissions
		Low	=all-cause readmissions ≥ 12 months
	Multidisciplinary disease management	Moderate	↓all-cause and HF-related hospitalizations
	Pharmacist collaborative care with HF Team	Low	↓all-cause and HF-related hospitalizations
Outpatient case management	Insufficient	Mixed results for all-cause hospitalizations	
COPD	Telehealthcare	Moderate	↓hospital admissions in 12 months
		Low	↓ED attendances in 12 months
	Outpatient case management	Low	↓all-cause and COPD-related ED visits in 12 months.
		Insufficient	Uncertain effects on all-cause and COPD-related hospitalizations
	Disease management	Low	↓rates of 12-month hospitalizations/readmissions
In-hospital care pathways	Low	=readmission rates	
Any	Interdisciplinary specialty care platforms, teams, neighborhood care approaches	Insufficient	No evidence
Palliative care of advanced cancer	Various shared decision making interventions	Insufficient	Effects on anxiety, depression, patient satisfaction and life expectancy outcomes are uncertain.
Women with BRCA 1 or 2 mutation	Multiple sessions of shared decision making using time-trade-off method	Low	↑well being
Unspecified cancer	Single session shared decision making using a question sheet or a computerized support system	Low	=patient satisfaction
Kidney diseases	Shared decision making	Insufficient	No evidence

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APPENDIX A: SEARCH STRATEGIES

Heart Failure

Database: Ovid MEDLINE® without Revisions <1996 to June Week 3 2013>

Search Strategy:

-
- 1 heart failure.mp. or exp Heart Failure/ (80770)
 - 2 exp Hospitalization/ or hospitalization.mp. (125930)
 - 3 8 and 9 (7255)
 - 4 search.tw. (114909)
 - 5 meta-analysis.mp.pt. (55629)
 - 6 meta-analysis.pt. (37028)
 - 7 systematic review.tw. (32067)
 - 8 Medline.tw. (43475)
 - 9 11 or 12 or 13 or 14 or 15 (181179)
 - 10 10 and 16 (244)
 - 11 limit 17 to (english language and humans and yr="2008 -Current") (120)
 - 12 exp Patient Readmission/ or readmission.mp. (8166)
 - 13 exp Emergency Service, Hospital/ or emergency room visit.mp. (33514)
 - 14 9 or 19 or 20 (154071)
 - 15 8 and 21 (7843)
 - 16 16 and 22 (261)
 - 17 limit 23 to (english language and humans and yr="2008 -Current") (127)

Chronic Obstructive Pulmonary Disease (COPD)

Database: Ovid MEDLINE® without Revisions <1996 to July Week 3 2013>

Search Strategy:

-
- 1 chronic obstructive pulmonary disease.mp. or exp Pulmonary Disease, Chronic Obstructive/ (27350)
 - 2 search.tw. (115766)
 - 3 meta-analysis.mp.pt. (56328)
 - 4 meta-analysis.pt. (37558)
 - 5 systematic review.tw. (32559)
 - 6 Medline.tw. (43866)
 - 7 2 or 3 or 4 or 5 or 6 (182778)
 - 8 1 and 7 (900)
 - 9 limit 8 to (english language and humans) (828)
 - 10 limit 9 to yr="2008 -Current" (458)
 - 11 exp Hospitalization/ or hospitalization.mp. (126802)
 - 12 10 and 11 (47)

Shared Decision Making

Database: Ovid MEDLINE® without Revisions <1996 to June Week 3 2013>

Search Strategy:

- 1 search.tw. (114909)
- 2 meta-analysis.mp.pt. (55629)
- 3 meta-analysis.pt. (37028)
- 4 systematic review.tw. (32067)
- 5 medline.tw. (43475)
- 6 1 or 2 or 3 or 4 or 5 (181179)
- 7 shared decision making.mp. (1570)
- 8 decision aids.mp. or exp Decision Support Techniques/ (48533)
- 9 7 or 8 (49891)
- 10 6 and 9 (2637)
- 11 limit 10 to (english language and humans and yr="2008 -Current") (1038)

Interdisciplinary Specialty Care Platforms/Teams/Neighborhood Care Approaches

Database: Ovid MEDLINE® without Revisions <1996 to July Week 3 2013>

Search Strategy:

- 1 exp Patient Care Team/ or multidisciplinary.mp. (58389)
- 2 interdisciplinary.mp. (21096)
- 3 platform.mp. (32146)
- 4 neighborhood.mp. (6506)
- 5 specialty care.mp. (936)
- 6 1 or 2 or 3 or 4 or 5 (112858)
- 7 exp Hospitalization/ or hospitalization.mp. (126802)
- 8 exp Patient Readmission/ or readmission.mp. (8267)
- 9 exp Emergency Service, Hospital/ or emergency department.mp. (48613)
- 10 7 or 8 or 9 (167784)
- 11 6 and 10 (6208)
- 12 search.tw. (115766)
- 13 meta-analysis.pt. (37558)
- 14 meta-analysis.mp.pt. (56328)
- 15 systematic review.tw. (32559)
- 16 Medline.tw. (43866)
- 17 12 or 13 or 14 or 15 or 16 (182778)
- 18 11 and 17 (154)
- 19 limit 18 to (english language and humans) (130)