

Optimizing Chronic Disease Management Mega-Analysis: Economic Evaluation

PATH-THETA Collaboration

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Health Quality Ontario (HQO) is an arms-length agency of the Ontario government. It is a partner and leader in transforming Ontario's health care system so that it can deliver a better experience of care, better outcomes for Ontarians and better value for money.

Health Quality Ontario strives to promote health care that is supported by the best available scientific evidence. HQO works with clinical experts, scientific collaborators and field evaluation partners to develop and publish research that evaluates the effectiveness and cost-effectiveness of health technologies and services in Ontario.

Based on the research conducted by HQO and its partners, the Ontario Health Technology Advisory Committee (OHTAC) — a standing advisory sub-committee of the HQO Board — makes recommendations about the uptake, diffusion, distribution or removal of health interventions to Ontario's Ministry of Health and Long-Term Care, clinicians, health system leaders and policy-makers.

This research is published as part of Ontario Health Technology Assessment Series, which is indexed in Cumulative Index to Nursing and Allied Health Literature (CINAHL), EMBASE, MEDLINE, and the Centre for Reviews and Dissemination. Corresponding OHTAC recommendations and other associated reports are also published on the HQO website. Visit <http://www.hqontario.ca> for more information.

About the *Ontario Health Technology Assessment Series*

To conduct its comprehensive analyses, HQO and/or its research partners reviews the available scientific literature, making every effort to consider all relevant national and international research; collaborates with partners across relevant government branches; consults with clinical and other external experts and developers of new health technologies; and solicits any necessary supplemental information.

In addition, HQO collects and analyzes information about how a health intervention fits within current practice and existing treatment alternatives. Details about the diffusion of the intervention into current health care practices in Ontario add an important dimension to the review. Information concerning the health benefits; economic and human resources; and ethical, regulatory, social, and legal issues relating to the intervention assist in making timely and relevant decisions to optimize patient outcomes.

The public consultation process is available to individuals and organizations wishing to comment on reports and recommendations prior to publication. For more information, please visit: http://www.hqontario.ca/en/mas/ohtac_public_engage_overview.html.

Disclaimer

This report was prepared by HQO or one of its research partners for the Ontario Health Technology Advisory Committee and developed from analysis, interpretation, and comparison of scientific research. It also incorporates, when available, Ontario data and information provided by experts and applicants to HQO. It is possible that relevant scientific findings may have been reported since completion of the review. This report is current to the date of the literature review specified in the methods section, if available. This analysis may be superseded by an updated publication on the same topic. Please check the HQO website for a list of all publications: http://www.hqontario.ca/en/mas/mas_ohtas_mn.html.

Abstract

Background

As Ontario's population ages, chronic diseases are becoming increasingly common. There is growing interest in services and care models designed to optimize the management of chronic disease.

Objective

To evaluate the cost-effectiveness and expected budget impact of interventions in chronic disease cohorts evaluated as part of the Optimizing Chronic Disease Management mega-analysis.

Data Sources

Sector-specific costs, disease incidence, and mortality were calculated for each condition using administrative databases from the Institute for Clinical Evaluative Sciences. Intervention outcomes were based on literature identified in the evidence-based analyses. Quality-of-life and disease prevalence data were obtained from the literature.

Methods

Analyses were restricted to interventions that showed significant benefit for resource use or mortality from the evidence-based analyses. An Ontario cohort of patients with each chronic disease was constructed and followed over 5 years (2006–2011). A phase-based approach was used to estimate costs across all sectors of the health care system. Utility values identified in the literature and effect estimates for resource use and mortality obtained from the evidence-based analyses were applied to calculate incremental costs and quality-adjusted life-years (QALYs). Given uncertainty about how many patients would benefit from each intervention, a system-wide budget impact was not determined. Instead, the difference in lifetime cost between an individual-administered intervention and no intervention was presented.

Results

Of 70 potential cost-effectiveness analyses, 8 met our inclusion criteria. All were found to result in QALY gains and cost savings compared with usual care. The models were robust to the majority of sensitivity analyses undertaken, but due to structural limitations and time constraints, few sensitivity analyses were conducted. Incremental cost savings per patient who received intervention ranged between \$15 per diabetic patient with specialized nursing to \$10,665 per patient with congestive heart failure receiving in-home care.

Limitations

Evidence used to inform estimates of effect was often limited to a single trial with limited generalizability across populations, interventions, and health care systems. Because of the low clinical fidelity of health administrative data sets, intermediate clinical outcomes could not be included. Cohort costs included an average of all health care costs and were not restricted to costs associated with the disease. Intervention costs were based on resource use specified in clinical trials.

Conclusions

Applying estimates of effect from the evidence-based analyses to real-world resource use resulted in cost savings for all interventions. On the basis of quality-of-life data identified in the literature, all interventions were found to result in a greater QALY gain than usual care would. Implementation of all interventions could offer significant cost reductions. However, this analysis was subject to important limitations.

Plain Language Summary

Chronic diseases are the leading cause of death and disability in Ontario. They account for a third of direct health care costs across the province. This study aims to evaluate the cost-effectiveness of health care interventions that might improve the management of chronic diseases. The evaluated interventions led to lower costs and better quality of life than usual care. Offering these options could reduce costs per patient. However, the studies used in this analysis were of medium to very low quality, and the methods had many limitations.

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List of Abbreviations

BP	Blood pressure
CAD	Coronary artery disease
CCAC	Community Care Access Centre
CHEPA	Centre for Health Economics and Policy Analysis
CHF	Congestive heart failure
CINAHL	Cumulative Index to Nursing and Allied Health Literature
COC	Continuity of care
COCI	Continuity of Care Index
COPD	Chronic obstructive pulmonary disease
CPWC	Cost per weighted case
DAD	Discharge Abstract Database
EBA	Evidence-based analysis
ED	Emergency department
EDS	Evidence Development and Standards
EQ-5D	European Quality of Life 5 Domain
eTool	Electronic tool
FY	Fiscal year
GH	General health
GP	General practitioner
HEED	Health Economic Evaluation Data Base
HQO	Health Quality Ontario
ICD-9	International Classification of Diseases, 9 th edition
ICER	Incremental cost-effectiveness ratio
ICES	Institute for Clinical Evaluative Sciences
MH	Mental health
NA	Not applicable
NACRS	National Ambulatory Care Reporting System
NR	Not reported
OHIP	Ontario Health Insurance Plan
OHTAC	Ontario Health Technology Advisory Committee
OSB	Ontario Schedule of Benefits for Physician Services
PATH	Programs for Assessment of Technology in Health
PF	Physical functioning
QALY	Quality-adjusted life-year
RD	Relative difference

RE	Role—emotional
RIW	Resource intensity weight
RP	Role—physical
RR	Relative risk
RUG	Resource utilization group
SF	Social functioning
SE	Standard error
SF-36	Short Form (36) Health Survey
THETA	Toronto Health Economics and Technology Assessment
UK PDS	United Kingdom Prospective Diabetes Study
VDIS	Vermont Diabetes Information System
VT	Vitality
WTP	Willingness to pay

Background

In July 2011, the Evidence Development and Standards (EDS) branch of Health Quality Ontario (HQO) began developing an evidentiary framework for avoidable hospitalizations. The focus was on adults with at least 1 of the following high-burden chronic conditions: chronic obstructive pulmonary disease (COPD), coronary artery disease (CAD), atrial fibrillation, heart failure, stroke, diabetes, and chronic wounds. This project emerged from a request by the Ministry of Health and Long-Term Care for an evidentiary platform on strategies to reduce avoidable hospitalizations.

After an initial review of research on chronic disease management and hospitalization rates, consultation with experts, and presentation to the Ontario Health Technology Advisory Committee (OHTAC), the review was refocused on optimizing chronic disease management in the outpatient (community) setting to reflect the reality that much of chronic disease management occurs in the community. Inadequate or ineffective care in the outpatient setting is an important factor in adverse outcomes (including hospitalizations) for these populations. While this did not substantially alter the scope or topics for the review, it did focus the reviews on outpatient care. HQO identified the following topics for analysis: discharge planning, in-home care, continuity of care, advanced access scheduling, screening for depression/anxiety, self-management support interventions, specialized nursing practice, and electronic tools for health information exchange. Evidence-based analyses were prepared for each of these topics. In addition, this synthesis incorporates previous EDS work, including *Aging in the Community* (2008) and a review of recent (within the previous 5 years) EDS health technology assessments, to identify technologies that can improve chronic disease management.

HQO partnered with the Programs for Assessment of Technology in Health (PATH) Research Institute and the Toronto Health Economics and Technology Assessment (THETA) Collaborative to evaluate the cost-effectiveness of the selected interventions in Ontario populations with at least 1 of the identified chronic conditions. The economic models used administrative data to identify disease cohorts, incorporate the effect of each intervention, and estimate costs and savings where costing data were available and estimates of effect were significant. For more information on the economic analysis, please contact either Murray Krahn at murray.krahn@theta.utoronto.ca or Ron Goeree at goereer@mcmaster.ca.

HQO also partnered with the Centre for Health Economics and Policy Analysis (CHEPA) to conduct a series of reviews of the qualitative literature on “patient centredness” and “vulnerability” as these concepts relate to the included chronic conditions and interventions under review. For more information on the qualitative reviews, please contact Mita Giacomini at giacomini@mcmaster.ca.

The Optimizing Chronic Disease Management in the Outpatient (Community) Setting mega-analysis series is made up of the following reports, which can be publicly accessed at <http://www.hqontario.ca/evidence/publications-and-ohtac-recommendations/ohtas-reports-and-ohtac-recommendations>.

- Optimizing Chronic Disease Management in the Outpatient (Community) Setting: An Evidentiary Framework
- Discharge Planning in Chronic Conditions: An Evidence-Based Analysis
- In-Home Care for Optimizing Chronic Disease Management in the Community: An Evidence-Based Analysis
- Continuity of Care: An Evidence-Based Analysis
- Advanced (Open) Access Scheduling for Patients With Chronic Diseases: An Evidence-Based Analysis
- Screening and Management of Depression for Adults With Chronic Diseases: An Evidence-Based Analysis
- Self-Management Support Interventions for Persons With Chronic Diseases: An Evidence-Based Analysis
- Specialized Nursing Practice for Chronic Disease Management in the Primary Care Setting: An Evidence-Based Analysis
- Electronic Tools for Health Information Exchange: An Evidence-Based Analysis
- Health Technologies for the Improvement of Chronic Disease Management: A Review of the Medical Advisory Secretariat Evidence-Based Analyses Between 2006 and 2011
- Optimizing Chronic Disease Management Mega-Analysis: Economic Evaluation
- How Diet Modification Challenges Are Magnified in Vulnerable or Marginalized People With Diabetes and Heart Disease: A Systematic Review and Qualitative Meta-Synthesis
- Chronic Disease Patients' Experiences With Accessing Health Care in Rural and Remote Areas: A Systematic Review and Qualitative Meta-Synthesis
- Patient Experiences of Depression and Anxiety With Chronic Disease: A Systematic Review and Qualitative Meta-Synthesis
- Experiences of Patient-Centredness With Specialized Community-Based Care: A Systematic Review and Qualitative Meta-Synthesis

Objective of Analysis

The objective of this study was to evaluate the cost-effectiveness and expected budget impact of interventions in the chronic disease cohorts evaluated as part of the Optimizing Chronic Disease Management mega-analysis. This objective was initially addressed by conducting a systematic review of the published literature. Where the literature failed to address the objective, original cost-effectiveness analyses were conducted from the perspective of the Ontario Ministry of Health and Long-Term Care.

Clinical Need and Target Population

The rising prevalence of chronic disease is of global concern. Longer life expectancy, public health initiatives, social development, demographic changes, and shifts in working environment have meant that noncommunicable diseases are expected to contribute to 57% of the global burden of disease by 2020. (1)

In 2005, 29% of Ontarians over age 25 reported having 1 or more chronic diseases; the proportion increased to 62% among those aged 65 and older. (2) Chronic disease is the leading cause of death and disability in Canada, (3) imposes a substantial financial burden on the health care system, (4) and can severely affect individuals' quality of life.

The Ministry of Health and Long-Term Care has called for the integration of health system organizations, health care providers, community partners, and family supports to improve patient outcomes in chronic disease and ease the burden on the health care system. As noted by Iron et al, (5) this initiative is consistent with a World Health Organization report suggesting the need for a paradigm shift so that “decision makers can take actions that will reduce the threats chronic conditions pose to the health of their citizens, their health care systems, and their economies.” (1)

The Ontario Health Technology Advisory Committee has proposed that hospitalization rates for chronic diseases be used as a surrogate marker of the quality of outpatient and community-based care. Assuming that appropriate care can lower costs and improve outcomes by reducing hospitalizations, the aim of this study was to evaluate the cost-effectiveness and budget impact of several interventions (discharge planning, in-home care, continuity of care, advanced [open] access scheduling, screening and management of depression, self-management support interventions, specialized nursing practice, electronic tools [eTools] for health information exchange, and health technologies) in the chronic disease populations included in the Optimizing Chronic Disease Management evidence-based analyses (EBAs) (diabetes, coronary artery disease [CAD], congestive heart failure [CHF], chronic obstructive pulmonary disease [COPD], stroke, atrial fibrillation, and chronic wounds).

Interventions Under Evaluation

Only interventions that led to statistically significant improvements in mortality or in health care use were evaluated in the economic analysis. These are defined below.

Discharge Planning

People with chronic diseases experience frequent changes in health status, accompanied by multiple transitions between care settings and care providers. During these transitions, mistakes frequently occur (e.g., information about medication that a patient was prescribed while in hospital might not be accurately communicated to the family physician). Transitions can also give rise to adverse clinical events and have been associated with increased rates of potentially avoidable hospitalizations. For the purpose of this analysis, *discharge planning* was defined as a care process or bundle of service designed to ensure

transition from inpatient to community (outpatient) care. This can include support services, follow-up activities, monitoring, or other interventions that span prehospital discharge and posthospital care. The discharge planning EBA aimed to determine whether discharge planning bundles are effective at reducing health resource use and improving patient outcomes compared with usual care alone.

In-Home Care

Much of the current focus on in-home care in Canada assumes that health costs can be lowered when care is provided in the community or in the home rather than in health care institutions. *In-home care* was defined as ongoing in-home assessment, case management, and coordination of a range of services provided in the home or in the community that are curative, preventive, or supportive in nature (including personal care, meal preparation, and homemaking) and that aim to enable patients to live at home, thus preventing or delaying the need for long-term care or acute care. Palliative care and rehabilitation were not included in this definition. The objective of the in-home care EBA was to determine the effectiveness of in-home care in optimizing chronic disease management in the community.

Continuity of Care

There are 3 defined areas of continuity of care: informational, management, and relational or interpersonal. The continuity of care EBA addressed management and relational continuity, but not informational continuity:

- *Management continuity* involves the use of standards and protocols to ensure that care is provided in an orderly, coherent, complementary, and timely way. Often this applies when care is being provided by multiple providers. This also includes accessibility (availability of appointments, medical tests), flexibility to adapt to care needs, and consistency of care and transitions of care (e.g., the coordination of home care by a family physician).
- *Relational continuity* (interpersonal) refers to the ongoing relationship between the care provider and the patient. It refers to the duration of the relationship as well as to the quality of the relationship, which is affected by the attentiveness, inspiration of confidence, and medical knowledge of the health professional.

Several indices have been developed to assess the 4 primary components of continuity of care: (6)

- duration—length of time with a particular provider,
- density—number of visits with the same provider over a defined period,
- dispersion—number of visits with distinct providers,
- sequence—order in which different providers are seen.

The Continuity of Care Index (COCI) is the most common index; it measures the number of providers seen and the number of visits with each primary care provider. The objective of the continuity of care EBA was to determine whether continuity of care was associated with health resource use and patient outcomes.

Specialized Nursing Practice

With increased demand for better chronic disease management and health care efficiency, there has been an expansion of nursing roles in primary health care in Ontario. The term *specialized nursing practice* was used to define nurses with enhanced training, experience, or scope of clinical practice or nurses with a primary clinical role in the care of patients with chronic disease. This can include registered nurses with specific knowledge and skills for chronic disease management or those providing disease-specific nurse-led interventions and nurse practitioners with advanced formal training for the care of patients in primary

health care. Specialized nurses can either substitute or supplement aspects of care provided by physicians in primary health care. For the purpose of this analysis, the former (specialized nurses providing the same services as physicians) was referred to as *Model 1*; the latter (specialized nurses providing services that extend or complement care provided by physicians) was referred to as *Model 2*. The specialized nursing practice EBA aimed to determine how effectively specialized nurses who have a clinical role in patient care optimize chronic disease management among adults in primary health care.

Electronic Tools for Health Information Exchange

Patients with chronic diseases experience many transitions in care (e.g., between primary care, specialists, and hospitalists), putting them at increased risk for adverse events as a result of errors in the transmission of information. Given the potential risks associated with poor care coordination, many institutions and health care systems are exploring methods of improving communication. Although there is currently a push toward electronic medical records and other electronic tools (eTools) to facilitate health information exchange, uncertainty remains about the effect of eTools as a form of communication. *eTools* were defined as tools and systems for electronic health information exchange that facilitate provider-provider communication about outpatients in the community setting (including but not limited to referrals, prescribing, computerized physician order entries, and intra-team communication). Excluded were patient health records and self-monitoring devices; database risk-assessment tools; eTools to facilitate communication between patient and provider; and eTools to facilitate improved management or care of patients within a single practice (e.g., decision support and data-management systems). The eTools EBA aimed to examine the effect of eTools on health information exchange in the context of care coordination for patients with chronic disease in the community.

Economic Literature Review

Economic Literature Review Methods

Literature Search

Search Strategy

To identify economic evaluations that included any of the interventions of interest, literature searches were performed between January 17, 2012, and August 15, 2012, using Ovid MEDLINE and EMBASE, Wiley's Cochrane Library and Health Economic Evaluation Database (HEED), the National Library of Medicine's PubMed (for non-MEDLINE records), and the Centre for Reviews and Dissemination database, for studies published from January 1, 2002, until the date each search was run. Abstracts were reviewed by a single reviewer and, for those studies meeting the eligibility criteria, full-text articles were obtained. Reference lists were also examined for any additional relevant studies not identified through the search.

Inclusion Criteria

- studies evaluating interventions that met the definitions applied in the EBAs;
- studies conducted in 1 of the 7 chronic disease cohorts explored in the EBAs (diabetes, CAD, CHF, COPD, stroke, atrial fibrillation, and chronic wounds);
- cost-utility analyses (studies comparing the costs and health consequences of alternative courses of action and reporting outcomes in terms of quality-adjusted life-years [QALYs]) were prioritized for inclusion; where cost-utility analyses were not available, cost-effectiveness, cost-benefit, and cost-consequence analyses were considered; costing studies were also considered.

Exclusion Criteria

- abstracts, posters, reviews, letters/editorials, non-English-language publications, and unpublished studies.

Economic Literature Review Results

Results of the economic literature review are summarized briefly below. Study characteristics are provided in Table 1.

Table 1: Studies Identified in the Economic Literature Review

Study	Population	Perspective	Cost per QALY
Discharge Planning			
Gohler et al, 2008 (7)	CHF	Germany, society	Discharge management programs cost €8,900 per QALY gained
In-Home Care			
No relevant economic studies were identified			
Continuity of Care			
Chen and Cheng, 2011 (8)	Diabetes	Korea, health care system	QALYs not reported; patients with a high level of continuity of care incurred lower annual expenses than those with medium and low levels of continuity of care
Specialized Nursing Practice (Model 1)^a			
Arts et al, 2012 (9)	Diabetes	Netherlands, health care system	Specialized nursing cost €431 more and resulted in a loss of 0.02 QALYs compared with care by a physician alone (i.e., specialized nursing was dominated by usual care)
Specialized Nursing Practice (Model 2)^a			
Raferty et al, 2005 (10)	CAD	United Kingdom, health care system	Specialized nursing cost £97 less and resulted in a gain of 0.124 QALYs compared with care by a physician alone, with an ICER of £782 per QALY gained (2003/2004 GBP)
Turner et al, 2008 (11)	CAD	United Kingdom, health care system, society	Specialized nursing cost £14,900 per QALY gained
eTools for Health Information Exchange			
Blanchfield et al, 2006 (12)	Diabetes	United States, health care system	Cost analysis; 1-time cost of \$200 (US) per patient and ongoing cost of \$90 (US) per patient

Abbreviations: CAD, coronary artery disease; CHF, congestive heart failure; eTool, electronic tool; GBP, British pounds; ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life-year.

^aModel 1 is specialized nursing practice alone; Model 2 is specialized nursing practice teamed with a physician.

Discharge Planning

A study by Gohler et al (7) evaluating a decision model populated with effectiveness data from a meta-analysis of 36 randomized controlled trials, cost data from the BEST trial, and utilities from the EPHESUS trial was included. The study found that “managed care programs” resulted in an increase in both costs and QALYs (2007 Euros) per QALY gained. The model was sensitive to age and sex; programs were more likely to be cost-effective when patients were younger and female.

In-Home Care

No relevant economic studies were identified.

Continuity of Care

A costing study by Chen and Cheng (8) met the inclusion criteria. The authors of this study developed a regression model to evaluate the cost associated with each COCI score in people with diabetes. The authors found that patients with high or medium COCI scores were less likely to be hospitalized or visit the emergency department (ED) for diabetes-related issues than those with a low COCI. However, a serious limitation of this analysis was that it was conducted in Taiwan, where patients do not have a primary health care provider; resource use might not be comparable to that in Ontario.

Specialized Nursing Practice

One cost-utility analysis by Arts et al (9) met the inclusion criteria for Model 1, and 2 cost-utility analyses by Raferty et al and by Turner et al (10;11) met the criteria for Model 2.

On the basis of results from a randomized controlled trial conducted in the Netherlands, Arts et al (9) found that, although nursing care itself was less costly, the intervention group incurred higher overall costs than the control group and had a lower quality of life at 2-year follow-up. As a result, specialized nursing was found to be both more expensive and less effective than usual care. However, this study did not control for baseline differences in health status (e.g., prevalence of diabetes-related complications and quality of life), which could account for much of the difference observed between groups.

Raferty et al (10) (evaluating a 1998 randomized controlled trial by Campbell and colleagues [13]) found that the cost of a nurse-led clinic was greater than that of general practitioners' (GPs') care. However, when primary care and hospital costs were combined, the nurse-led intervention was slightly less expensive than usual care, largely because of a decrease in hospitalizations in the nursing care group. Given that the nurse-led intervention also resulted in better quality of life, it was the dominant strategy. Turner et al (11) also found that the nurse-led intervention improved quality of life, but at a greater cost. The resulting incremental cost-effectiveness ratio (ICER) was cost-effective in 90% of simulations, at a threshold of £30,000 per QALY gained. Both analyses were conducted from the perspective of the United Kingdom's health system.

Electronic Tools for Health Information Exchange

One costing study that reported on an eTool similar to the intervention definition met the inclusion criteria. The eTool was a web-based program used to manage patients with type 2 diabetes in primary care. (12) The software (POPMAN) served as an electronic platform for organizing and continuously updating clinical information for a registry of 1,250 patients with type 2 diabetes, and the costs incurred to develop and implement the program were reported. The annual cost per patient to run POPMAN included both clinical and information technology support costs.

Economic Analysis

Economic Analysis Methods

Framework

The first step was to develop a framework to determine whether a model would add value to the evidence summarized in each EBA. When an intervention is less effective and more costly than an alternative, it is clearly not an efficient use of resources. In other cases—such as when an intervention produces greater benefit at a higher cost—further assessment is needed to determine whether the benefits are worth the cost.

In this analysis, only interventions that led to statistically significant improvements in mortality or health care use were evaluated (this does not mean that only statistically significant *outcomes* were included; as in the EBAs, the entire body of evidence must be represented in the cost-effectiveness analysis to avoid introducing bias). On the basis of these inclusion criteria, 5 interventions (discharge planning, in-home care, continuity of care, specialized nursing practice, and eTools for health information exchange) were assessed in 4 chronic disease populations (diabetes, CAD, CHF, and COPD). Atrial fibrillation, stroke, and chronic wounds were excluded, because the EBAs did not find interventions with a significant effect on health resource use or mortality in these populations.

Perspective

The analysis was conducted from the perspective of the Ontario Ministry of Health and Long-Term Care.

Discounting and Time Horizon

An annual discount rate of 5% was applied to both costs and QALYs. A 5-year time horizon was used in all analyses.

Populations

Chronic disease cohorts were constructed using administrative data. The diabetes, CHF, and COPD cohorts were identified using predefined Institute for Clinical Evaluative Sciences (ICES) algorithms (Appendix 2). The CAD cohort was identified using a validation study of International Classification of Diseases, 10th edition, coding algorithms in an acute myocardial infarction population (Appendix 2). (14)

- diabetes cohort: adults with 2 Ontario Health Insurance Plan (OHIP) Dx code 250 claims; 1 OHIP Fee code of a Q040, K029, or K030 claim; or 1 Discharge Abstract Database (DAD) admission within 2 years;
- CAD cohort: adults with a DAD admission Dx10 code of I09.9, I11.0, I13.0, I25.5, I42.0, I42.5–I42.9, I43.x, or I50.x;
- CHF cohort: adults with 1 hospital admission with a CHF diagnosis or an OHIP claim/National Ambulatory Care Reporting System (NACRS) ED record with a CHF diagnosis, followed within 2 years by either a second OHIP claim/NACRS record or a hospital admission with a CHF diagnosis;
- COPD cohort: adults with a COPD diagnosis in OHIP or DAD, or same-day surgery.

Patients were followed from their date of first hospitalization or physician visit (index event) after a diagnosis of 1 of the 4 chronic diseases between 2006 and 2011. The index event was hospitalization for the CAD, CHF, and COPD cohorts and a physician visit for the diabetes cohort. The observation window terminated at death or March 3, 2011—whichever occurred first. The index event was defined as all

people in the Registered Persons Database alive as of April 1, 2006, aged 19 or older (or ICES disease cohort algorithm specific age cutoff), with a new (incident) case of diabetes, CAD, CHF, or COPD between April 1, 2006, and March 31, 2011. (The Registered Persons Database houses information on all Ontarians alive at any time since 1990 who have ever received an Ontario health card number. [15])

Cohort Costs

For every individual in each cohort, resource use and mean 90-day total costs by sector were estimated. These included ED visits, acute inpatient and same-day surgery costs, other hospital costs (rehabilitation, complex continuing care), long-term care, home care, physician visits (general physician and specialist), laboratory costs, and drug costs. Costs were inflated to 2012 prices using the consumer price index for health care. All costs in the analysis are presented in 2012 Canadian dollars.

Ontario databases were used to identify data for the cohorts investigated. The number of inpatient hospitalizations was obtained from the DAD (2006–2010), and hospitalization costs were estimated using resource intensity weights (RIWs). The RIW associated with the case-mix group for each hospitalization was multiplied by the average provincial cost per weighted case (CPWC) for all Ontario hospitals. Using this method, a mean cost per hospitalization was obtained for cases assigned to a particular case mix group. (15)

A similar RIW method was applied to ED visits and inpatient rehabilitation. The number of visits was obtained from NACRS (2006–2010), and the RIW was again multiplied by the provincial CPWC. The length of stay in inpatient rehabilitation was obtained from the National Rehabilitation Reporting System (2006–2010), and a rehabilitation cost weight was calculated and multiplied by the provincial average CPWC. (15)

Hospitalizations in complex continuing care were obtained from the Continuing Care Reporting System (2006–2010). To determine cost, patients were classified into 44 resource utilization groups (RUG-IIIs) based on their treatment, clinical condition, and physical and cognitive functioning. Each RUG-III is associated with a case-mix index that provides an estimate of the costs for a patient in that group.

Home care visit costs were obtained from the Home Care Database (2006–2010). The number of home care visits was multiplied by the provincial average to obtain a cost. For some services, such as nursing and homemaking, the number of hours of service was multiplied by the provincial average cost per hour.

Drug costs were obtained from the Ontario Drug Beneficiary database (2006–2010), and physician costs were obtained from the OHIP claims database (2006–2010).

Survival

The ICES was asked to calculate Kaplan-Meier survival curves for each chronic disease cohort using information in the Registered Persons Database. Survival for each cohort over the 5-year observation window is reported in Table 2.

Table 2: 5-Year Survival in People With Diabetes, CAD, CHF, and COPD in Ontario

Disease	1 Year	2 Years	3 Years	4 Years	5 Years
Diabetes, %	97	95	94	92	90
COPD, %	92	89	86	83	80
CHF, %	76	68	61	55	49
CAD, %	65	55	47	41	35

Abbreviations: CAD, coronary artery disease; CHF, congestive heart failure; COPD, chronic obstructive pulmonary disease.

Source: Data provided by ICES, December 17, 2012.

The original intent was to extrapolate survival over the lifetime of each cohort by applying a Weibull distribution; this would have allowed lifetime costs per patient to be estimated. However, because survival at 5 years was approximately 50% or greater in 3 of the 4 populations, it was decided not to make assumptions about the shape of these functions, and the analysis was confined to a 5-year observation period.

Quality of Life

In cost-utility analyses, measures of health benefit are valued in terms of QALYs. The QALY is a measure of a person's length of life weighted by a valuation of quality of life over that period. The weighting comprises 2 elements: the description of changes in quality of life and an overall valuation of that description.

Utility values derived from generic preference-based utility measures such as the European Quality of Life 5 Domain (EQ-5D) were obtained from the EBAs. Studies using the Short Form (36) Health Survey (SF-36) were also included¹; although this instrument does not contain preference weights, algorithms can be used to map generic descriptions of quality of life to preference-based utility indexes. All quality-of-life data and mapped EQ-5D data from studies in the EBAs are reported in Appendix 3.

In 2008, Ara and Brazier (16) published a method of predicting the mean EQ-5D preference-based utility index score using published mean cohort statistics from the 8 dimensions of the SF-36 health profile. To use these equations, values for all 8 dimensions of the questionnaire are required. Four studies of specialized nursing practice (9;17-19) included in the EBAs published mean scores for all 8 dimensions of the SF-36.

Studies from the economic literature search were also reviewed for applicable quality-of-life data. One study of patients with chronic disease and different levels of continuity of care (20) was identified in this way.

For the 3 remaining interventions (discharge planning, in-home care, and eTools), the Tufts Cost Effectiveness Analysis Registry was searched for published utility weights for people with diabetes and CHF. The objective of this search was to identify a "baseline" and a hospital-associated utility value for each population. Studies were evaluated for inclusion on the basis of their similarity to the populations in the studies included in the EBAs.

¹Studies using disease-specific instruments were excluded. Although these questionnaires can be more responsive to changes associated with a certain condition, they cannot be used to compare quality of life across different illnesses. Although mapping techniques could theoretically be extended to disease-specific instruments, the use of mapping functions beyond the Short Form questionnaires is currently limited.

Sources and assumptions used to calculate utility values for each intervention and disease cohort are described below.

Discharge Planning and In-Home Care: Congestive Heart Failure

Significant outcomes for people undergoing discharge planning and in-home care interventions were observed only in the CHF population. By definition, all patients for these interventions were initially hospitalized. Gohler et al (7) reported mean EQ-5D utility scores collected as part of the EPHESUS trial; EQ-5D data were collected from a subsample of 1,628 patients at baseline and 3, 6, 12, and 18 months. Using these data, the utility at index hospitalization and the effect of rehospitalization on health-related quality of life were calculated (Table 3).

Table 3: Health-Related Utility Values, Discharge Planning, and In-Home Care

Hospitalization Status	EQ-5D Value
Index hospitalization	0.840
First rehospitalization	0.816
Second rehospitalization	0.799
Third or more rehospitalization	0.755

Abbreviation: EQ-5D, European Quality of Life 5 Domain.

Source: Gohler et al, 2008. (7)

In the absence of data regarding number of rehospitalization episodes, only the decrement between the index hospitalization and first rehospitalization was applied. Reductions in rehospitalization were applied by multiplying the observed risk ratio associated with the intervention to the proportion of people experiencing rehospitalization.

Continuity of Care: Diabetes and COPD

None of the studies in the continuity of care EBA included utility values, but 1 study identified in the economic literature review (20) included the SF-36 as a measure of health-related quality of life. This study calculated continuity of care based on the number of family physicians visited by each patient; a minimum of 2 regular encounters with a family physician during the 2-year study was used as a threshold for inclusion in the analysis. The population had a mean age of 69 years, and 56% had more than 1 chronic disease; the incidence of specific diseases was not reported. Results were reported in 2 groups: 1 with observed continuity (1 family physician) and 1 without continuity (more than 1 family physician). The utility observed in each group was applied to the relevant groups from the economic review; increasing the proportion of the population with high continuity was assumed to increase the baseline utility of this group (Table 4).

Table 4: Health-Related Utility Values, Continuity of Care

Population	Study	Measure	Domain ^a	Quality of Life	
Adults > 45 years old	De Maeseneer et al, 2003 (20)	SF-36		1 Family Physician	>1 Family Physician
				N = 2,285	N = 1,849
				Mean (SE)	Mean (SE)
			PF	65 (30)	60 (33)
			RP	67 (42)	62 (43)
			BP	68 (28)	62 (30)
			GH	58 (20)	54 (23)
			VT	58 (23)	53 (24)
			SF	80 (26)	75 (28)
			RE	79 (37)	74 (40)
		MH	69 (21)	64 (22)	
		Mapped EQ-5D	0.73	0.68	

Abbreviations: EQ-5D, European Quality of Life 5 Domain; SE, standard error; SF-36, Short Form (36) Health Survey.

^aDomains are as follows: physical functioning (PF), role—physical (RP), bodily pain (BP), general health (GH), vitality (VT), social functioning (SF), role—emotional (RE), and mental health (MH).

Specialized Nursing Practice: Diabetes and Coronary Artery Disease

Model 1: Diabetes

One study (19) included in the EBA on specialized nursing practice reported full SF-36 results at baseline and 6-month follow-up for people with chronic disease treated by either a nurse or a GP (Table 5).

Because no other estimates of quality of life were identified for diabetes-specific cohorts, these values were used to provide estimates of quality of life at baseline and at 6 months after introduction of specialized nursing.

One additional study (9) identified in the economic literature review elicited EQ-5D values from people with diabetes at baseline and 2 years (Table 5). The effect of using these values on the results of the economic model was explored in a sensitivity analysis.

Table 5: Health-Related Utility Values, Specialized Nursing Practice Model 1

Population	Study	Measure	Domain ^a	Quality of Life			
				Control Physician Group N = 806 Mean		Intervention Nurse Practitioner Group N = 510 Mean	
				Baseline	6 Months	Baseline	6 Months
Chronic disease	Munding et al, 2000 (19)	SF-36					
			PF	59.2	63.8	61.4	64.9
			RP	34.5	53.4	38.0	53.7
			BP	43.2	52.7	44.0	53.7
			GH	43.4	49.0	43.7	48.8
			VT	46.7	53.4	47.8	53.9
			SF	57.8	70.7	59.3	70.4
			RE	42.3	56.3	46.9	56.7
			MH	53.7	59.6	54.6	60.8
		Mapped EQ-5D	0.57	0.64	0.57	0.66	
Diabetes	Arts et al, 2011 (9)	EQ-5D		Control General Practitioner N = 145 Mean (SE)		Intervention Specialized Nurse N = 149 Mean (SE)	
				Baseline	2 Years	Baseline	2 Years
				0.82 (0.22)	0.82 (NR)	0.86 (0.22)	0.80 (NR)

Abbreviations: EQ-5D, European Quality of Life 5 Domain; NR, not reported; SE, standard error; SF-36, Short Form (36) Health Survey.

^aDomains are as follows: physical functioning (PF), role—physical (RP), bodily pain (BP), general health (GH), vitality (VT), social functioning (SF), role—emotional (RE), and mental health (MH).

Model 2: Diabetes

One study (17) included in the EBA on specialized nursing practice reported full SF-36 results at baseline and 14-month follow-up for patients with diabetes (Table 6). In the model, values were applied at baseline and 14 months for each arm (control and intervention), assuming a constant rate of change between time points (i.e., in the control group, the mapped EQ-5D value at 7 months was $[0.78 + 0.75]/2 = 0.765$).

Table 6: Health-Related Utility Values, Specialized Nursing Practice Model 2, Diabetes

Population	Study	Measure	Domain ^a	Quality of Life				
				Control General Practitioner N = 93 Mean (SE)		Intervention Practice Nurse N = 85 Mean (SE)		
				Baseline	14 Months	Baseline	14 Months	
Diabetes	Houweling et al, 2011 (17)	SF-36		PF	69.0 (23.5)	65.2 (27.9)	71.8 (25.8)	64.9 (28.9)
				RP	64.0 (43.8)	64.7 (42.0)	69.3 (40.0)	56.8 (43.3)
				BP	74.5 (24.2)	72.1 (22.9)	72.9 (26.4)	71.6 (25.3)
				GH	62.7 (16.4)	63.5 (16.6)	61.7 (19.7)	60.2 (18.5)
				VT	67.9 (18.8)	64.8 (20.9)	67.6 (19.9)	62.8 (21.8)
				SF	80.1 (22.6)	77.6 (21.2)	81.6 (24.0)	81.8 (20.5)
				RE	77.7 (37.4)	73.3 (39.9)	78.9 (35.9)	72.1 (41.6)
				MH	77.6 (16.9)	75.6 (18.7)	79.3 (16.6)	77.7 (17.6)
			Mapped EQ-5D		0.78	0.75	0.79	0.76

Abbreviations: EQ-5D, European Quality of Life 5 Domain; SE, standard error; SF-36, Short Form (36) Health Survey.

^aDomains are as follows: physical functioning (PF), role—physical (RP), bodily pain (BP), general health (GH), vitality (VT), social functioning (SF), role—emotional (RE), and mental health (MH).

Model 2: Coronary Artery Disease

One study (18) included in the specialized nursing practice EBA reported full SF-36 results at baseline and 1-year follow-up for patients with CAD (Table 7). In the model, values were applied at baseline and 1 year for each arm (control and intervention), assuming a constant rate of change between time points (i.e., in the control group, the mapped EQ-5D value at 6 months was $[0.60 + 0.61]/2 = 0.605$).

Table 7: Health-Related Utility Values, Specialized Nursing Practice Model 2, Coronary Artery Disease

Population	Study	Measure	Domain ^a	Quality of Life					
				Control Group Mean (SE)		Intervention Group Mean (SE)			
				Baseline	1 Year ^b	Baseline	1 Year ^b		
CAD	Khunti et al, 2007 (18)	SF-36	PF	47.69 (30.04)	50.79	51.04 (29.09)	45.46		
			RP	40.98 (44.90)	40.16	39.01 (42.89)	36.13		
			BP	55.78 (29.25)	58.60	59.66 (28.44)	55.59		
			GH	45.34 (24.09)	49.22	49.14 (23.76)	46.66		
			VT	44.18 (23.50)	48.54	46.91 (21.99)	43.01		
			SF	66.11 (30.89)	70.27	68.42 (29.91)	62.51		
			RE	54.13 (45.47)	56.75	54.70 (44.51)	51.11		
			MH	67.65 (20.77)	71.63	70.82 (20.48)	67.14		
			Mapped EQ-5D			0.61	0.60	0.65	0.65

Abbreviations: CAD, coronary artery disease; EQ-5D, European Quality of Life 5 Domain; SE, standard error; SF-36, Short Form (36) Health Survey.

^aDomains are as follows: physical functioning (PF), role—physical (RP), bodily pain (BP), general health (GH), vitality (VT), social functioning (SF), role—emotional (RE), and mental health (MH).

^bSE not reported for 1-year follow-up.

Electronic Tools for Health Information Exchange: Diabetes

Baseline utility weights for people with diabetes were obtained from the Ontario Diabetes Economic Model, which used EQ-5D values elicited from 3,192 patients in the United Kingdom Prospective Diabetes Study (UKPDS). (21) The UKPDS population had a mean age of 62.3 years, similar to the diabetes population in the studies included in the eTools EBA, but the ratio of males to females was not reported. (21) The mean EQ-5D value reported in the UKPDS (0.77 [standard deviation = 0.27]) was applied to the proportion of people alive at each phase of the economic model.

Utility estimates for quality of life experienced by people hospitalized for diabetes were not identified. Severe hypoglycemia is an event during which the patient requires the assistance of others, and is a common cause of hospitalization in the diabetes population. A study by Davis et al (22) evaluated the effect of severe hypoglycemia on quality of life in United Kingdom patients with type 1 and 2 diabetes. The authors reported that during the most severe episode of hypoglycemia, patients reported a utility of 0.54 as measured by the EQ-5D. Those with only nocturnal episodes of hypoglycemia reported an average utility of 0.77. These categories were associated with the highest and lowest levels of resource use as reported by the UKPDS, and it was assumed that the nocturnal hypoglycemia utility was equivalent to a baseline utility in otherwise healthy individuals (Table 8).

In the absence of evidence to the contrary, it was assumed that the mean baseline utility remained constant over time, with the exception of decrements experienced by patients undergoing hospitalization. Therefore, a baseline utility of 0.77 was applied over the entirety of the model to patients who did not undergo hospitalization. For the proportion of patients who were hospitalized, a utility of 0.54 was applied over the average length of stay. The same method was applied to patients in the intervention group, except that the relative risk (RR) of hospitalization was also applied, thereby improving quality of life in this group by reducing the proportion of hospitalized patients.

Table 8: Health-Related Utility Values, Electronic Tools for Health Information Exchange

Health State of People With Diabetes	EQ-5D Value	Source
Baseline	0.77	Clarke et al, 2002, (21) and assumption based on Davis et al, 2005 (22)
Hospitalization	0.54	Assumption based on Davis et al, 2005 (22)

Abbreviation: EQ-5D, European Quality of Life 5 Domain.

Intervention Costs

The cost-effectiveness analyses paralleled the EBAs in that they evaluated specific interventions considered in the context of specific clinical studies. They differed in that not all clinical studies reported outcomes that could be included in the cost-effectiveness analysis. To maintain consistency within each cost-effectiveness analysis, estimates of resource use for each intervention were based on the study or studies from which the included estimate of clinical effect was derived. Unit costs were assigned to reported resource use according to publicly available reimbursement schedules, expert opinion from Community Care Access Centres (CCACs), and consultation with relevant stakeholders. All costs were inflated to 2012 Canadian dollars using the consumer price index for health care services.

Discharge Planning

Resource items for discharge planning were taken from studies in the discharge planning EBA (which included the cost of pre-discharge plus post-discharge planning) and are presented in Table 9. The base case cost per patient for pre-discharge plus post-discharge planning was \$128.70. On the more conservative side, 1 study reported nurse counselling, an education booklet, and telephone outreach from a nurse within 24 hours (no physician visit); the per-patient cost for this approach was \$80. (23) As part of the sensitivity analysis for each intervention, costs were varied between their estimated extremes.

Table 9: Intervention Costs per Patient: Discharge Planning

Resource	Unit Cost per Patient ^a	Assumptions	Source
Predischarge formal education by nurse	\$56.00	1 hour of a nurse's time	CCACs ^b
Primary care physician visit	\$33.70	Intermediate assessment (fee code A007)	OSB (24)
	\$25.00	Postdischarge office assessment (fee code E080)	
24/7 telephone outreach line with nurse	\$14.00	Call will take 15 minutes of a nurse's time (\$56/4)	CCACs ^b
Education booklet	\$10.00	—	Clinical expert ^c

Abbreviations: CCAC, Community Care Access Centre; OSB, Ontario Schedule of Benefits for Physician Services.

^aAll costs in 2012 Canadian dollars.

^bPersonal communication, CCACs, November 26, 2012.

^cPersonal communication, Clinical Expert, November 12, 2012.

In-Home Care

Resource use for in-home care was determined on the basis of the intervention described by Aguado et al (25) and in conversation with CCACs (November 26, 2012) (Table 10). In the study, (25) the intervention was described as follows:

A visit by a trained nurse to patients in their homes 1 week after discharge. In this visit, which lasted 2 hours, the nurse investigated patients' habits and their understanding of the pharmacologic treatment, with the purpose of detecting behaviours susceptible to modification. The nurse then used a guideline to deliver an educational session to instruct patients and caregivers in relevant aspects of the disease and self-management, centred on medication management, diet, fluid intake, smoking cessation, and physical activity.

Although an exact replica of this model is not currently in practice in Ontario, contacts at CCACs confirmed that this type of care sometimes is performed during a nurse visit, which carries a charge of \$91, regardless of the amount of time spent with each patient. These CCACs are currently recruiting nurses who would perform care similar to that described by Aguado and colleagues. (25) However, CCACs were unable to provide information on the expected salary and workload for such nurses. In the absence of such information, the cost of a nurse visit could be a reasonable estimate of the per-patient cost associated with these positions in future.

Table 10: Intervention Costs per Patient: In-Home Care

Resource	Unit Cost per Patient^a	Assumptions	Source
Approximately 1 hour of nurse time, delivered in home	\$91	Based on current reimbursement rates and expected nurse salaries associated with future models of care; cost was assumed to represent a reasonable estimate of the cost of delivering this type of care	CCACs ^b

Abbreviations: CCAC, Community Care Access Centre.

^aAll costs in 2012 Canadian dollars.

^bPersonal communication, CCACs, November 26, 2012.

Continuity of Care

The aim of the continuity of care EBA was to establish the relationship between continuity of care and patient outcomes. The EBA did not include studies that employed an intervention designed to improve continuity of care. Rather, the studies applied an algorithm to administrative databases to identify cohorts of patients belonging to high, medium, and low continuity of care indices. Because this EBA did not evaluate the effectiveness of an intervention, it represents an anomaly among our analyses. To estimate the potential cost-effectiveness of interventions designed to improve continuity of care, a sensitivity analysis was conducted in which the proportion of patients moving from low and medium continuity to high continuity was varied between 0% and 100%, while simultaneously increasing the hypothetical cost of the intervention. Given the range of other interventions evaluated in this analysis, the cost was varied from \$0 to \$1,000 in increments of \$50.

Continuity of Care Indices were calculated for each cohort using the following equation developed by Brice and Boxerman: (26)

$$COCI = \frac{\sum_{j=1}^M n_j^2 - N}{N(N-1)}$$

where M is the number of primary care providers seen by the patient, j represents a given primary care provider, n_j represents the number of visits to the same primary care provider, and N is the total of primary care visits. Because the COCI is not applicable to patients with very few visits, we excluded patients with fewer than 3 primary care consultations in each of the years between 2006 and 2011. A primary care provider was defined as a family physician, a GP, a nurse practitioner, or a general internist. The number of patients in each of the following scoring groups was obtained: 0.00–0.47 (low continuity), 0.48–0.86 (medium continuity), 0.87–1.00 (high continuity).

The clinically significant effects obtained from the continuity of care EBA were applied to the outcomes and costs. The primary outcome measures were resource use, costs, and mortality. Where quality of life was reported in the clinical literature (preintervention and postintervention), incremental difference was used to estimate incremental cost per QALY gained. Where quality of life was not reported, incremental costs were estimated.

Variability and Uncertainty

One-way and 2-way sensitivity analyses were conducted to assess the robustness of the results to variations in clinical estimates and costs. Resource use and intervention costs were varied in 1-way sensitivity analyses. Clinical estimates were varied in 1-way or 2-way sensitivity analyses.

The net benefit of each intervention was also assessed over a 5-year time horizon. The net benefit approach combines the incremental cost and the incremental clinical benefit into a single measure and includes an estimate of the amount decision-makers are willing to pay per QALY gained. The net benefit (NB) can be defined as:

$$NB = (\lambda \times E) - C$$

where λ is the willingness to pay (WTP) threshold, E is the incremental clinical benefit, and C is the health care cost. The net benefit per patient was calculated for different values of λ , ranging from \$25,000 to \$100,000. The intervention with the highest net benefit was the most cost-effective strategy according to the WTP threshold.

Specialized Nursing Practice

Model 1

Studies that directly compared nurses providing autonomous patient care (intervention) to physicians performing the same tasks (usual care) were classified as Model 1. Nurses working in this model are generally nurse practitioners who have the legislative authority to perform tasks similar to those performed by physicians.

The study used to inform estimates of effect was also used to determine resource use. Lenz et al (27) reported that patients in both arms visited their care providers an average of 3.1 times (no statistical difference between groups). The unit cost of usual care was assumed to equal the cost of a physician visit (\$33.70) as determined by the OSB. (24) Multiplying the cost of a visit by the average number of visits resulted in an average cost of \$105 per patient for the usual care arm. Given that the hourly cost of a nurse practitioner is \$36 (personal communication, CCAC, November 26, 2012), and assuming the nurse visit would last an average of 21 minutes as reported in Model 2 (see below), the average per-patient cost of the intervention arm was \$39. As a result, specialized nursing practice (Model 1) cost approximately \$66 less than usual care (Table 11).

Model 2

Studies that compared nurses and physicians working in a partnership or the addition of a nursing intervention to a primary health care practice in comparison with physicians working alone (or usual care) were classified as Model 2. The cost of specialized nursing in Model 2 was calculated as the difference between care by a physician alone (usual care) and care by a physician and nurse practitioner team (intervention).

None of the studies included in the specialized nursing EBA reported outcomes of health care use or mortality. However, 1 study by Houweling et al (17) reported quality of life, which was used to inform the model. To maintain internal consistency, this study was also used to estimate resource use. The authors of this study reported that patients in the control arm had an average of 2.8 GP visits over a total of 0.48 hours. Given that the cost of an intermediate GP assessment is \$33.70, (24) we estimated a total average per-patient cost of \$94 for the usual-care arm. Patients in the intervention arm were in contact with the nurse-physician team for an average of 2.13 hours over a mean of 6.1 visits. As well, the protocol followed by the nurses in the trial indicated that in some cases, consultation with the GP would be necessary. The median number of consultations with a GP was 1.4 per patient, with a median time of 1.0 minutes. This cost was not included in the base-case analysis, but increased costs associated with the intervention were explored as part of the sensitivity analysis. Given that the hourly cost of a registered nurse is \$35 (personal communication, CCAC, November 26, 2012), the average per-patient cost of the intervention arm was \$75. As a result, specialized nursing practice (Model 2) cost approximately \$20 less than usual care (Table 11).

Table 11: Intervention Costs per Patient: Specialized Nursing Practice

Resource	Unit Cost per Patient ^a	Assumptions	Source
Model 1			
GP consultation	\$33.70/visit	As reported by the clinical study used to inform estimates of effect, it was assumed that patients in each strategy saw the practitioner an average of 3.1 times. Nurse consultations were assumed to last a mean of 21 minutes each (based on study by Houweling et al [17])	OSB (24)
Nurse practitioner	\$36/hour		CCAC ^b
Total cost per patient receiving usual care = \$105			
Total cost per patient receiving intervention = \$39			
Model 2			
GP consultation	\$33.70/visit	Data regarding resource use was obtained from the study used to inform quality of life (Houweling et al [17]); health care use and mortality outcomes were not reported; the total number of reported visits to the GP was used to calculate the cost of usual care, while total average hours of patient contact was used to inform the cost of the intervention	OSB (24)
Registered nurse	\$35/hour		CCAC ^b
Total cost per patient receiving usual care = \$94			
Total cost per patient receiving intervention = \$75			

Abbreviations: CCAC, Community Care Access Centre; GP, general practitioner; OSB, Ontario Schedule of Benefits for Physician Services.

^aAll costs in 2012 Canadian dollars. Any minor mathematical differences are due to rounding.

^bPersonal communication, Community Care Access Centre, November 26, 2012.

All intervention costs were based on fee-for-service models (OHIP). It is likely that the intervention costs represent an overestimate of the cost to the Ministry of Health and Long-Term Care, as some interventions would not trigger additional billings. If such costs were included, the marginal cost of the intervention would be reduced; the effect of these assumptions on the outcome of the model was explored in sensitivity analyses.

Electronic Tools for Health Information Exchange

Resource items for an eTool for diabetes care were identified from studies included in the eTools EBA and included the costs of software, maintenance, and sending results to physicians and patients. The eTool identified was the Vermont Diabetes Information System (VDIS). The VDIS is a laboratory-based registry and decision-support system that sends results and alerts to primary care providers and their patients with diabetes. (28) The primary function of the system is to collect clinical information on hemoglobin A1c, cholesterol, serum creatinine, and urine protein to generate 5 types of reports: flow sheets with laboratory results (to providers); reminders of overdue laboratory tests (to providers); overdue reminders (to patients); alerts with elevated test results (to patients); and summary population reports (to providers). The system requires no data entry, additional staff, office space, or capital investment by participating practices. (28) Reports are sent electronically or by fax to providers and mailed to patients.

The cost of the VDIS was obtained from the software manufacturer (personal communication, VDIS developer, November 15, 2012) (all costs in Canadian dollars). There is a 1-time software cost of \$5,000 per laboratory and an annual maintenance cost of \$2,500 per laboratory. The cost per physician to receive results and alerts is \$6,000 per year. The cost to mail results to patients or send alerts is \$48 a year.

Per-patient costs are presented in Table 12. Costs were calculated by obtaining an estimate of the number of patients with diabetes to be serviced by this eTool. There are 11,902 family physicians practising in Ontario. (29) Assuming an average physician roster size of 1,300 (personal communication, Clinical Expert, January 14, 2012) and a percentage of patients with diabetes in each roster of 6.5% (personal communication, Clinical Expert, November 5, 2012), there are approximately 85 patients with diabetes per roster and approximately 1,013,455 patients with diabetes being serviced in Ontario. There are also 211 central community laboratory and hospital sites in Ontario that would need the software.

Table 12: Intervention Costs per Patient: Electronic Tools for Health Information Exchange

Resource	Unit Cost per Patient^a	Assumptions	Source
Software purchase (1-time cost)	\$1.04	Cost per laboratory is \$5,000, and there are 211 central laboratories in Ontario	Correspondence with the VDIS software developer ^b
Software maintenance (ongoing)	\$0.52	Cost per laboratory is \$2,500, and there are 211 central laboratories in Ontario	
Physician cost to receive results (ongoing)	\$70.46	There are 11,902 family physicians in Ontario and 85 patients with diabetes per physician. Cost per physician to receive alerts and results is \$6,000	
Patient cost to receive results (ongoing)	\$48.00	—	

Abbreviation: VDIS, Vermont Diabetes Information System.

^aAll costs in 2012 Canadian dollars.

^bPersonal communication, VDIS developer, November 15, 2012.

Given that a family physician's roster varies from 1,200 to 1,400 patients, the roster size was varied to produce high and low estimates of cost. For a roster of 1,200, the 1-time cost per patient would be \$0.39 and the ongoing cost per patient would be \$74.37. For a roster of 1,400, the 1-time cost per patient would be \$2.71 and the ongoing cost per patient would be \$232.56.

Our data were based on the assumption that approximately 6% of patients on the average physician's roster currently have diabetes. If prevalence were to increase, the per-patient cost of the intervention

would decrease, resulting in greater cost savings than estimated by the model. Because this would not alter the conclusion of the analysis, it was not included as a sensitivity analysis.

Proportion to Benefit

The interventions included in the EBAs evaluated models of care specific to certain health care settings, but the cohorts used to calculate costs and mortality for each chronic disease included all patients in the province. As a result, it was necessary to estimate the proportion of the cohort eligible to benefit from each intervention. Where available, these estimates were informed by data provided by ICES; otherwise, estimates were inferred on the basis of published literature.

Only patients who are hospitalized for their index event are eligible to receive discharge planning and in-home care. Data from ICES were used to determine that 62% of the CHF cohort had an index event that took place in hospital; this proportion of patients was assumed to be able to benefit from discharge planning and in-home care.

In terms of continuity of care in the Ontario population, data from ICES (data provided by ICES, December 17, 2012) using COCI (26) showed that in 2010, 90% of patients with diabetes had low continuity of care and 8% had medium continuity of care. For individuals with COPD, 91% had low continuity of care and 7% had medium continuity of care.

Specialized nursing practice (Model 1) is intended to provide an alternative method of care for people with chronic diseases who do not currently have a primary care physician. Using ICES data, Glazier et al (30) reported that 5% of patients with chronic diseases in Ontario do not have a primary care physician. In contrast, specialized nursing practice (Model 2) applies to patients who do have a primary care provider; the inverse proportion (i.e., 95%) was applied to patients with diabetes and CAD in this model.

It was assumed that because eTools are currently not used to manage people with diabetes in Ontario, all patients in the diabetes cohort would be eligible to benefit from this intervention.

Estimates Used in the Economic Models: Summary

Table 13 summarizes the clinical estimates and costs used in the economic model for each intervention and disease cohort. Clinical estimates and duration of benefit came from the EBAs. Utility values were also obtained from the EBAs; if utilities were not reported, other published sources were consulted to obtain a utility value. Intervention costs were informed by the EBAs, and Ontario costs were applied. The proportion of patients to benefit from the intervention were informed by ICES data or published literature.

Table 13: Estimates Used in the Economic Models

Intervention and Disease Cohort	Point Estimate ^a	Range	Source
Discharge Planning (Predischarge and Postdischarge) in CHF			
RR of rehospitalization	Control: 1.00 Intervention: 0.74	NA 0.67–0.81	Phillips et al, 2004 (31)
RR of ED visits	NR	NA	NA
RR of mortality	0.87	0.73–1.04	Phillips et al, 2004 (31)
Baseline utility in CHF	0.84	0.80–0.88	Gohler et al, 2008 (7)
Utility for hospitalization	0.82	0.77–0.92	Gohler et al, 2008 (7)
Intervention cost	\$128.70	\$80.00– \$75.007	CCAC ^b and OSB (24)
Duration of benefit	12 months	NA	Phillips et al, 2004 (31)
Proportion to benefit	62%	52%–72%	ICES ^c
In-Home Care in CHF			
RD in hospitalization	Control: 1.00 Intervention: 0.40	NA 0.38–0.42	Based on a mean difference of –1.03 (–1.53 to –0.53) reported by Aguado et al, 2010 (25)
RD in ED visits	Control: 1.00 Intervention: 0.34	NA 0.23–0.45	Based on a mean difference of –1.32 (–1.87 to –0.77) reported by Aguado et al, 2010 (25)
RR of mortality	Control: 1.00 Intervention: 0.92	NA 0.81–1.04	Brotans et al, 2009 (32); Aldamiz-Echevarría Iraurgi et al, 2007 (33)
Baseline utility in CHF	0.84	0.80–0.88	Gohler et al, 2008 (7)
Utility for hospitalization	0.82	0.77–0.92	Gohler et al, 2008 (7)
Intervention cost	\$91.00	\$82.00– \$100.00	CCAC ^b
Duration of benefit	24 months	NA	Aguado et al, 2010 (25)
Proportion to benefit	62%	NA	ICES ^c
Continuity of Care in Diabetes			
RR of hospitalization	Low COC: 1.00 Medium COC: 0.75 High COC: 0.82	NA 0.61–0.91 0.68–0.98	Knight et al, 2009 (34)
RR of ED visits	Low COC: 1.00 High COC: 0.87	NA 0.83–0.92	Lin et al, 2010 (35)
RR of mortality	NR	NA	NA
Utility for people with high COC	0.73	0.68–0.76	De Maeseneer et al, 2003 (20)
Utility for people with medium COC	0.71	0.68–0.74	Assumption based on De Maeseneer et al, 2003 (20)
Utility for people with low COC	0.68	0.65–0.71	De Maeseneer et al, 2003 (20)
Intervention cost	NA	NA	Hypothetical intervention costs explored in sensitivity analysis

Duration of benefit	Ongoing	NA	Effect assumed to apply over a lifetime
Proportion to benefit	Medium COC: 8% Low COC: 90%	NA	ICES ^c
Continuity of Care in COPD			
RR of hospitalization	Low COC: 1.00 Medium COC: 0.67 High COC: 0.50	NA 0.62–0.71 0.47–0.69	Hong et al, 2010 (36)
RR of ED visits	Low COC: 1.00 Medium COC: 0.77 High COC: 0.56	NA 0.63–0.94 0.46–0.69	Hong et al, 2010 (36)
RR of mortality	NR	NA	NA
Utility for people with high COC	0.73	0.68–0.76	De Maeseneer, et al 2003 (20)
Utility for people with medium COC	0.71	0.68–0.74	Assumption based on De Maeseneer et al, 2003 (20)
Utility for people with low COC	0.68	0.65–0.71	De Maeseneer et al, 2003 (20)
Intervention cost	NA	NA	Hypothetical intervention costs explored in sensitivity analysis
Duration of benefit	Ongoing	NA	Effect assumed to apply over a lifetime
Proportion to benefit	Medium COC: 7% Low COC: 91%	NA	ICES ^c
Specialized Nursing Practice (Model 1) in Diabetes			
RR of hospitalization	Control: 1.00 Intervention: 0.80	NA 0.28–2.26	Lenz et al, 2002 (27)
RR of ED visits	Control: 1.00 Intervention 0.84	NA 0.49–1.46	Lenz et al, 2002 (27)
RR of mortality	NR	NA	NA
Control baseline utility	0.57	0.54–0.60	Mundinger et al, 2000 (19)
Control 6-month utility	0.64	0.61–0.67	Mundinger et al, 2000 (19)
Intervention baseline utility	0.57	0.54–0.60	Mundinger et al, 2000 (19)
Intervention 6-month utility	0.66	0.63–0.69	Mundinger et al, 2000 (19)
Intervention cost (incremental)	–\$66.00	–\$72.00 to –\$59.00	CCAC ^b and Lenz et al, 2002 (27)
Duration of benefit	12 months	NA	Mundinger et al, 2000 (19)
Proportion to benefit	5%	3%–7%	Glazier et al, 2008 (30)
Specialized Nursing Practice (Model 2) in Diabetes			
RR of hospitalization	NR	NA	NA
RR of ED visits	NR	NA	NA
RR of mortality	NR	NA	NA
Control baseline utility	0.78	0.75–0.81	Houweling et al, 2011 (17)
Control 6-month utility	0.75	0.72–0.81	Houweling et al, 2011 (17)
Intervention baseline utility	0.79	0.76–0.82	Houweling et al, 2011 (17)
Intervention 6-month utility	0.76	0.73–0.79	Houweling et al, 2011 (17)
Intervention cost (incremental)	–\$20.00	–\$22.00 to –\$18.00	CCAC ^b and OSB (24)
Duration of benefit	12 months	NA	Houweling et al, 2011 (17)
Proportion to benefit	95%	NA	Glazier et al, 2008 (30)

Specialized Nursing Practice (Model 2) in CAD			
RR of hospitalization	Control: 1.00 Intervention: 0.64	NA 0.48–0.86	Campbell et al, 1998 (37)
RR of ED visits	NR	NA	NA
RR of mortality	NR	NA	NA
Control baseline utility	0.61	0.58–0.64	Khunti et al, 2007 (18)
Control 1-year utility	0.60	0.57–0.63	Khunti et al, 2007 (18)
Intervention baseline utility	0.65	0.62–0.68	Khunti et al, 2007 (18)
Intervention 1-year utility	0.65	0.62–0.68	Khunti et al, 2007 (18)
Intervention cost (incremental)	–\$19.00	–\$24.00 to –\$19.00	CCAC ^b and OSB (24)
Duration of benefit	12 months	NA	Campbell et al, 1998 (37)
Proportion to benefit	95%	NA	Glazier et al, 2008 (30)
eTools in Diabetes			
RD in hospitalization	Control: 1.00 Intervention: 0.85	NA 0.75–0.95	Based on a mean difference of –0.03 (–0.05 to –0.01) reported by Kahn et al, 2010 (38)
RD in ED visits	Control: 1.00 Intervention: 0.75	NA 0.61–0.89	Based on a mean difference of –0.09 (–0.14 to –0.04) reported by Kahn et al, 2010 (38)
RR of mortality	NR	NA	NA
Baseline utility in diabetes	0.77	0.74–0.80	Clarke et al, 2002 (21)
Utility for hospitalization	0.54	0.51–0.57	Assumption based on Davis et al, 2005 (22)
Intervention cost			
1-time cost	\$1.04	\$0.39–\$2.71	VDIS software developer ^d
Ongoing cost	\$119.00	\$74.00– \$233.00	
Duration of benefit	32 months	NA	Kahn et al, 2010 (38)
Proportion to benefit	100%	NA	Assumption

Abbreviations: CAD, coronary artery disease; CCAC, Community Care Access Centre; CHF, congestive heart failure; COC, continuity of care; COPD, chronic obstructive pulmonary disease; ED, emergency department; eTool, electronic tool; ICES, Institute for Clinical Evaluative Sciences; NA, not applicable; NR, not reported; OSB, Ontario Schedule of Benefits for Physician Services; RD, relative difference; RR, relative risk; VDIS, Vermont Diabetes Information System.

^aAll costs in 2012 Canadian dollars. Any minor mathematical differences are due to rounding.

^bPersonal communication, CCACs, November 26, 2012.

^cData provided by ICES, December 17, 2012.

^dPersonal communication from VDIS developer, November 15, 2012.

Individual estimates were compared with different control groups—assumed to be usual care—depending on the inclusion criteria of each EBA. For further details and full descriptions of comparisons, please see the individual EBAs.

Cost Curves and Phase Costs

A phase-based costing approach was used to estimate cumulative costs associated with each condition. Cohorts were subgrouped according to patient survival post-index event (355–360, 715–720, 1,075–1,080, 1,435–1,440, and 1,795–1,800 days). A 5-day window was used to allow for an increase in sample size. All health-related resources and costs incurred in the study period from the perspective of the Ministry of Health and Long-Term Care were identified and described by 90-day interval. These cost curves represent average costs for patients with varying lengths of lifespan after diagnosis. The intent was to employ a phase-based costing method as described by Wijeyesundera et al. (39)

The aim was to examine cost curves for inflection points separating post-index (high costs), maintenance (stable costs), and pre-death (high costs) phases. However, because of delays in data acquisition, we chose to define the length of each phase a priori on the basis of experience. For the diabetes cohort, inflection points were 90 days post-index and 270 days pre-death. For the CAD, CHF, and COPD cohorts, inflection points were 90 days post-index and 180 days pre-death.

Individual patient costs were then assigned to each 90-day costing block in the 3 phases. A hierarchical design was used: costs were assigned beginning with the post-index phase, then pre-death, then maintenance. For example, if a CAD patient survived to 12 months post-discharge, the mean costs for the first 3 months were assigned to the corresponding 90-day post-index phase; the mean costs for the last 6 months were assigned to the corresponding 2 cost blocks in the pre-death phase; and mean costs for the remaining 3 months were assigned to the maintenance phase.

Using a survival curve for each disease cohort, the proportion of patients in each phase was determined for every 90-day interval. The average total cost for each 90-day interval was then calculated by multiplying the mean cost per phase by the proportion of patients in each phase. These costs were reported by consecutive 90-day intervals according to the health care sector in which they were accrued: hospital, emergency, same-day surgery, inpatient rehabilitation, home care, long-term care, complex care, drugs, and physician visits. The cumulative cost over the 5-year period was calculated for each cohort by summing costs across all 90-day intervals.

The clinical benefit of each intervention was incorporated into phase costs by reducing the costs in specific health care sectors according to the reductions in health care use observed in the EBAs. The result was the average phase cost for patients for each intervention.

Diabetes

Figure 1 shows mean cost as a function of time from the index date for each of the 5 diabetes survival subgroups. The cost curve for those surviving 1,795 to 1,800 days did not follow the expected trend, because this subgroup comprised only 2 individuals. Inflection points were 3 months post-index and 9 months pre-death. The post-index, maintenance, and pre-death costs for hospital, emergency, and medical visits per patient per 90 days are reported in Table 14.

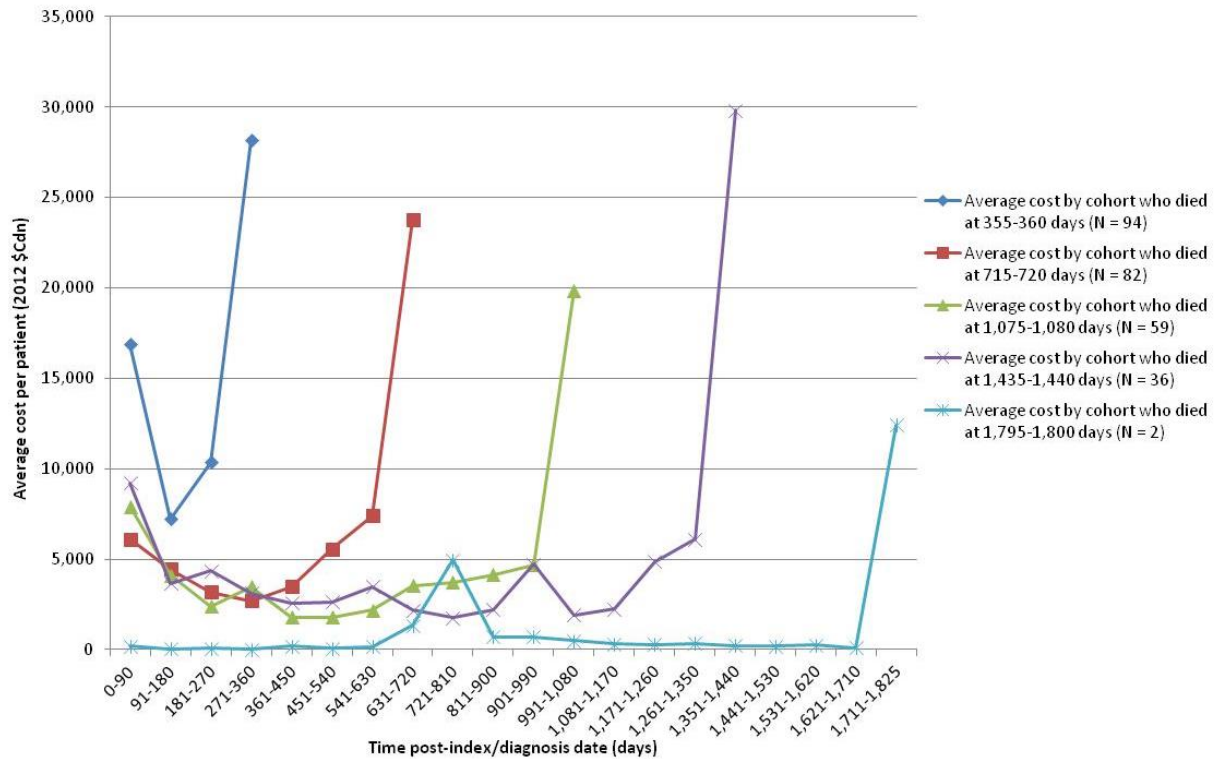


Figure 1: Diabetes Cost Curves for 5 Patient Subgroups (FY 2006–2010)^a

Abbreviation: FY, fiscal year.

^aAverage cost per patient during each 90-day period from index date to maximum follow-up. All costs in 2012 Canadian dollars.

Table 14: Sector-Specific 90-Day Phase Costs per Person With Diabetes

	Mean Cost per 90 Days per Patient, \$ ^a	95% Upper Confidence Limit, \$ ^a	95% Lower Confidence Limit, \$ ^a
Post-Index Phase (90 days)			
Hospital	1,638	1,662	1,615
Emergency	91	93	90
Inpatient rehabilitation	111	115	107
Home care	127	129	125
Long-term care	33	34	32
Complex care	36	38	35
Drugs	202	204	201
Physician visits	647	653	642
Maintenance Phase (1,440 Days Over 5 Years)			
Hospital	338	344	331
Emergency	42	42	42
Inpatient rehabilitation	25	27	24
Home care	89	91	88
Long-term care	83	84	81
Complex care	47	50	44
Drugs	196	198	194
Physician visits	286	288	285
Pre-Death Phase (270 Days)			
Hospital	38,464	39,479	37,448
Emergency	1,934	2,029	1,838
Inpatient rehabilitation	430	480	379
Home care	1,208	1,240	1,176
Long-term care	720	735	704
Complex care	1,394	1,447	1,340
Drugs	612	627	596
Physician visits	6,351	6,632	6,069

^aAll costs in 2012 Canadian dollars.

Coronary Artery Disease

Figure 2 shows mean cost as a function of time from the index date for each of the 5 CAD survival subgroups. The cost curve for those surviving 1,795 to 1,800 days did not follow the expected trend, because this subgroup comprised only 3 persons. Inflection points were 3 months post-index and 6 months pre-death. The post-index, maintenance, and pre-death costs for hospital, emergency, and medical visits per patient per 90 days are reported in Table 15.

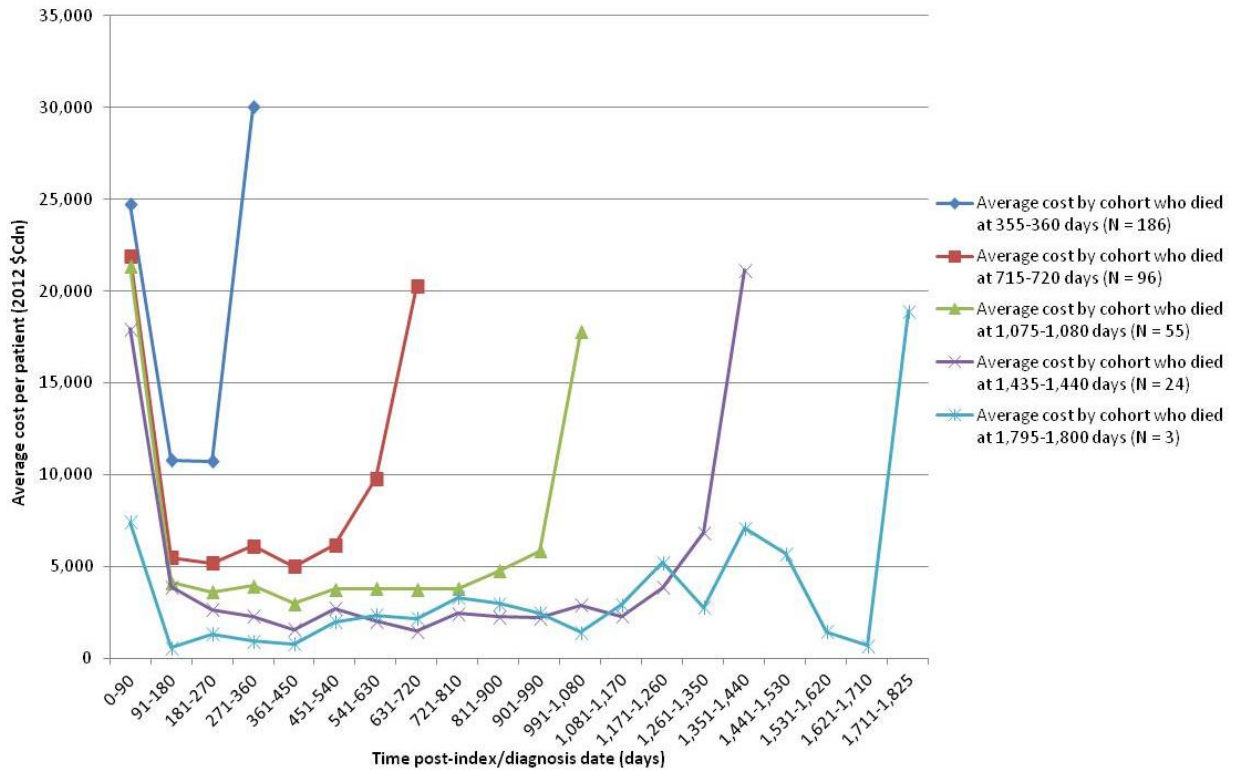


Figure 2: Coronary Artery Disease Cost Curves for 5 Patient Subgroups (FY 2006–2010)^a

Abbreviation: FY, fiscal year.

^aAverage cost per patient during each 90-day period from index date to maximum follow-up. All costs in 2012 Canadian dollars.

Table 15: Sector-Specific 90-Day Phase Costs per Person With Coronary Artery Disease

Sector	Mean Cost per 90 Days per Patient, \$^a	95% Upper Confidence Limit, \$^a	95% Lower Confidence Limit, \$^a
Post-Index Phase (90 Days)			
Hospital	20,397	20,599	20,194
Emergency	940	953	927
Same-day surgery	450	465	435
Inpatient rehabilitation	669	693	645
Home care	968	978	958
Long-term care	232	237	228
Complex care	387	398	375
Drugs	560	566	554
Physician visits	3,357	3,391	3,323
Maintenance Phase (1,530 Days over 5 Years)			
Hospital	2,428	2,485	2,371
Emergency	184	187	181
Same-day surgery	128	134	122
Inpatient rehabilitation	141	151	131
Home care	645	657	634
Long-term care	594	603	585
Complex care	366	385	348
Drugs	533	539	527
Physician visits	761	773	749
Pre-Death Phase (180 Days)			
Hospital	64,635	65,449	63,821
Emergency	4,076	4,174	3,978
Same-day surgery	265	303	228
Inpatient rehabilitation	452	483	421
Home care	1,333	1,360	1,306
Long-term care	732	743	721
Complex care	1,318	1,352	1,284
Drugs	505	519	491
Physician visits	9,327	9,526	9,129

^aAll costs in 2012 Canadian dollars.

Congestive Heart Failure

Figure 3 shows mean cost as a function of time from the index date for each of the 5 CHF survival subgroups. Inflection points were 3 months post-index and 6 months pre-death. The post-index, maintenance, and pre-death costs for hospital, emergency, and medical visits per patient per 90 days are reported in Table 16.

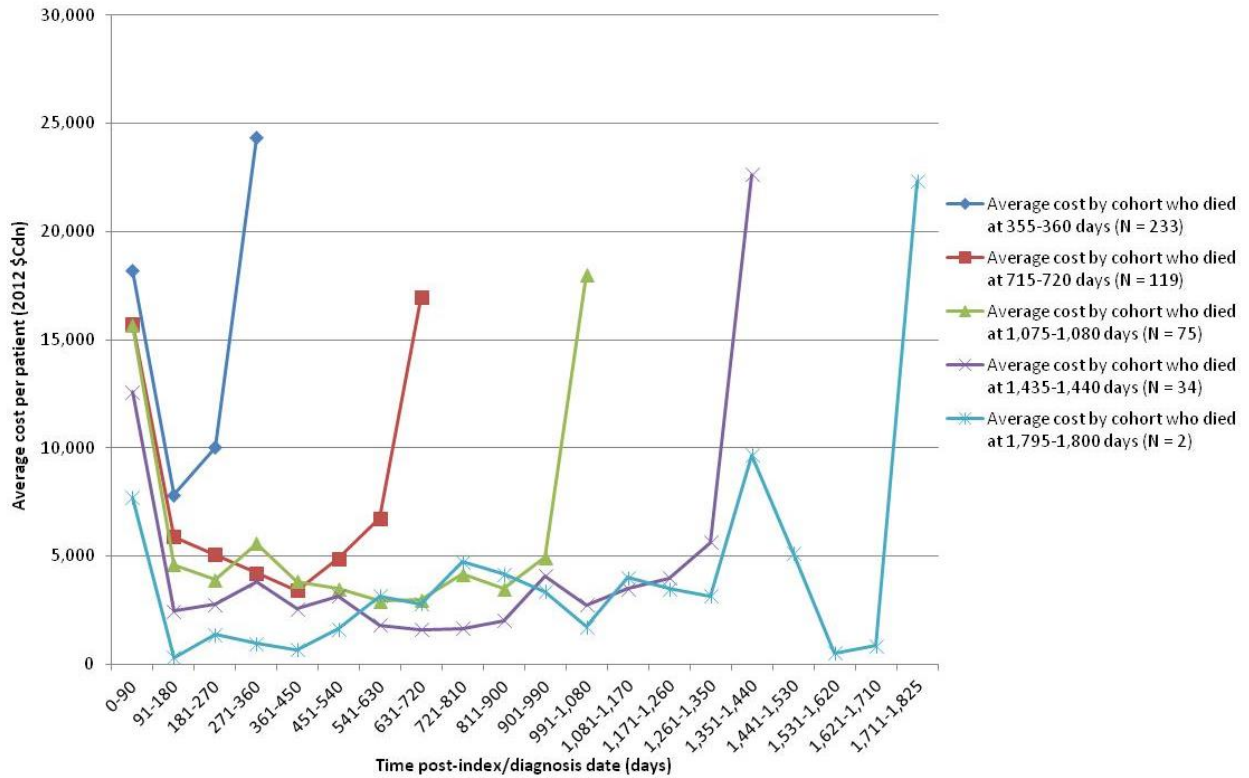


Figure 3: Congestive Heart Failure Cost Curves for 5 Patient Subgroups (FY 2006–2010)^a

Abbreviation: FY, fiscal year.

^aAverage cost per patient during each 90-day period from index date to maximum follow-up. All costs in 2012 Canadian dollars.

Table 16: Sector-Specific 90-Day Phase Costs per Person With Congestive Heart Failure

Sector	Mean Cost per 90 Days per Patient, \$^a	95% Upper Confidence Limit, \$^a	95% Lower Confidence Limit, \$^a
Post-Index Phase (90 Days)			
Hospital	12,735	12,853	12,618
Emergency	597	605	589
Inpatient rehabilitation	594	613	576
Home care	696	703	690
Long-term care	181	184	178
Complex care	296	304	288
Drugs	505	510	499
Physician visits	2,648	2,675	2,621
Maintenance Phase (1,530 Days Over 5 Years)			
Hospital	1,827	1,865	1,790
Emergency	139	141	137
Inpatient rehabilitation	129	136	122
Home care	474	481	466
Long-term care	483	489	477
Complex care	304	316	291
Drugs	485	490	479
Physician visits	668	676	660
Pre-Death Phase (180 Days)			
Hospital	58,997	59,779	58,214
Emergency	3,273	3,353	3,192
Inpatient rehabilitation	463	497	430
Home care	1,258	1,283	1,234
Long-term care	811	822	801
Complex care	1,384	1,417	1,350
Drugs	517	526	507
Physician visits	9,155	9,382	8,929

^aAll costs in 2012 Canadian dollars.

Chronic Obstructive Pulmonary Disease

Figure 4 shows mean cost as a function of time from the index date for each of the 5 COPD survival subgroups. The cost curve for those surviving 1,795 to 1,800 days did not follow the expected trend, because this subgroup comprised only 4 persons. Inflection points were 3 months post-index and 6 months pre-death. The post-index, maintenance, and pre-death costs for hospital, emergency, and medical visits per patient per 90 days are reported in Table 17.

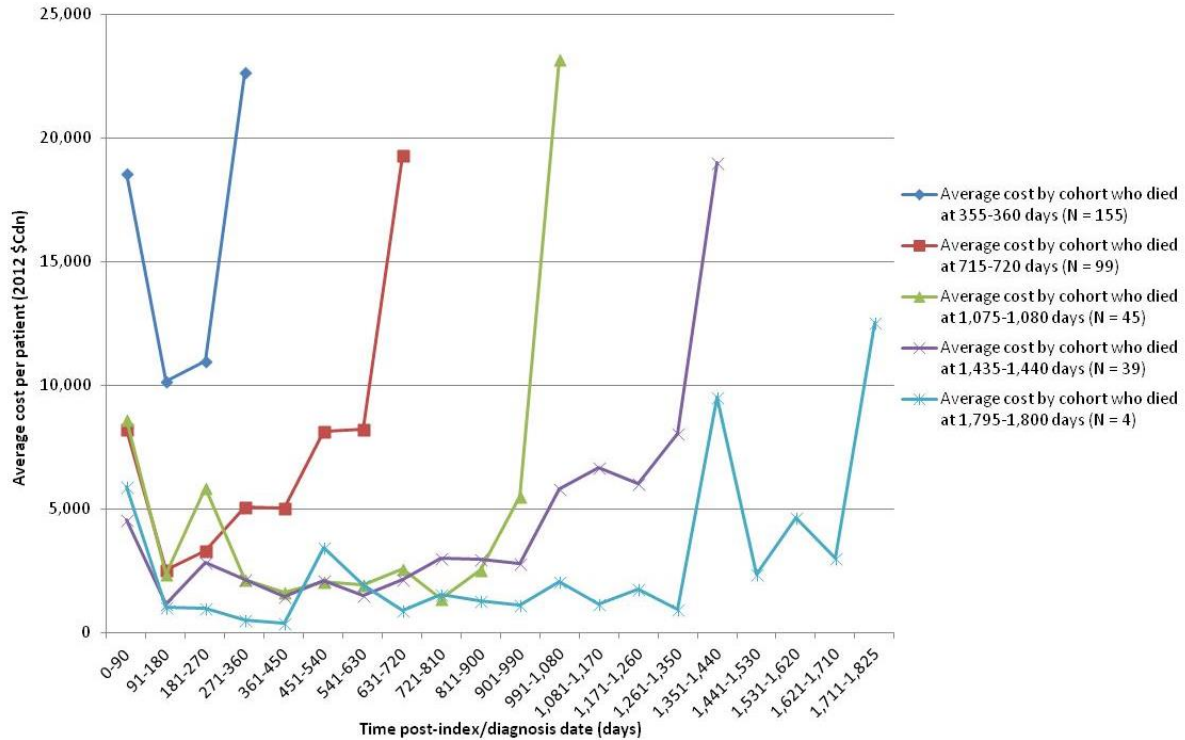


Figure 4: Chronic Obstructive Pulmonary Disease Cost Curves for 5 Patient Subgroups (FY 2006–2010)^a

Abbreviation: FY, fiscal year.

^aAverage cost per patient during each 90-day period from index date to maximum follow-up. All costs in 2012 Canadian dollars.

Table 17: Sector-Specific 90-Day Phase Costs per Person With Chronic Obstructive Pulmonary Disease

Sector	Mean Cost per 90 Days per Patient, \$^a	95% Upper Confidence Limit, \$^a	95% Lower Confidence Limit, \$^a
Post-Index Phase (90 Days)			
Hospital	2,879	2,920	2,839
Emergency	180	182	177
Inpatient rehabilitation	161	168	153
Home care	216	219	213
Long-term care	67	68	65
Complex care	71	74	68
Drugs	272	274	270
Physician visits	883	892	874
Maintenance Phase (1,530 Days Over 5 Years)			
Hospital	607	622	592
Emergency	67	68	67
Inpatient rehabilitation	45	48	42
Home care	157	160	154
Long-term care	155	158	153
Complex care	99	104	94
Drugs	261	264	259
Physician visits	355	358	352
Pre-Death Phase (180 Days)			
Hospital	40,206	40,990	39,421
Emergency	2,105	2,182	2,028
Inpatient rehabilitation	380	418	341
Home care	1,345	1,376	1,314
Long-term care	751	764	738
Complex care	1,420	1,465	1,374
Drugs	627	653	601
Physician visits	5,982	6,173	5,791

^aAll costs in 2012 Canadian dollars.

Economic Analysis Results

Diabetes

Continuity of Care

Table 18 presents the incremental cost per QALY gained for various hypothetical intervention costs and levels of intervention effectiveness (i.e., percent increase of patients to the high continuity of care cohort). The results suggested that the intervention was dominant across all variations of intervention costs when the level of effectiveness increased to 90% or 100%. The intervention was largely dominant for different variations of intervention effectiveness and intervention costs.

A sensitivity analysis was undertaken to explore the effect of various baseline levels of continuity of care. According to an ICES report published in 2008, (30) most (56.5%) people in Ontario with at least 1 chronic disease had high continuity of care (28.2% had medium continuity of care, and 10.5% had low continuity of care). When these values were used to inform the baseline distribution for patients with diabetes, interventions were not likely to be cost-saving. However, they were likely to lead to greater quality of life, and were associated with varying costs per QALY on the basis of the intervention cost and the effectiveness of achieving high continuity of care (Table 19).

Table 18: Continuity of Care for People With Diabetes: Exploratory Analysis

	Intervention Effectiveness (% Increase of Patients in High-Continuity Cohort) ^a											
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	
\$ 0	Dominated	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$50	Dominated	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$100	Dominated	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$150	Dominated	\$1,732	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$200	Dominated	\$4,305	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$250	Dominated	\$6,877	\$446	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$300	Dominated	\$9,450	\$1,732	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$350	Dominated	\$12,023	\$3,018	\$17	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$400	Dominated	\$14,595	\$4,305	\$874	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$450	Dominated	\$17,168	\$5,591	\$1,732	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$500	Dominated	\$19,741	\$6,877	\$2,590	\$446	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$550	Dominated	\$22,313	\$8,164	\$3,447	\$1,089	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$600	Dominated	\$24,886	\$9,450	\$4,305	\$1,732	\$188	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$650	Dominated	\$27,459	\$10,736	\$5,162	\$2,375	\$703	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$700	Dominated	\$30,031	\$12,023	\$6,020	\$3,018	\$1,218	\$17	Dominant	Dominant	Dominant	Dominant	Dominant
\$750	Dominated	\$32,604	\$13,309	\$6,877	\$3,662	\$1,732	\$446	Dominant	Dominant	Dominant	Dominant	Dominant
\$800	Dominated	\$35,177	\$14,595	\$7,735	\$4,305	\$2,247	\$874	Dominant	Dominant	Dominant	Dominant	Dominant
\$850	Dominated	\$37,749	\$15,882	\$8,593	\$4,948	\$2,761	\$1,303	\$262	Dominant	Dominant	Dominant	Dominant
\$900	Dominated	\$40,322	\$17,168	\$9,450	\$5,591	\$3,276	\$1,732	\$629	Dominant	Dominant	Dominant	Dominant
\$950	Dominated	\$42,895	\$18,454	\$10,308	\$6,234	\$3,790	\$2,161	\$997	\$124	Dominant	Dominant	Dominant
\$1,000	Dominated	\$45,468	\$19,741	\$11,165	\$6,877	\$4,305	\$2,590	\$1,365	\$446	Dominant	Dominant	Dominant

^aAll costs in 2012 Canadian dollars.

Table 19: Continuity of Care for People With Diabetes: Sensitivity Analysis

	Intervention Effectiveness (% Increase of Patients in High-Continuity Cohort) ^a											
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	
\$0	Dominated	\$8,800	\$8,800	\$8,800	\$8,800	\$8,800	\$8,800	\$8,800	\$8,800	\$8,800	\$8,800	\$8,800
\$50	Dominated	\$12,686	\$10,743	\$10,095	\$9,771	\$9,577	\$9,447	\$9,355	\$9,285	\$9,231	\$9,188	\$9,188
\$100	Dominated	\$16,572	\$12,686	\$11,390	\$10,743	\$10,354	\$10,095	\$9,910	\$9,771	\$9,663	\$9,577	\$9,577
\$150	Dominated	\$20,458	\$14,629	\$12,686	\$11,714	\$11,131	\$10,743	\$10,465	\$10,257	\$10,095	\$9,965	\$9,965
\$200	Dominated	\$24,344	\$16,572	\$13,981	\$12,686	\$11,909	\$11,390	\$11,020	\$10,743	\$10,527	\$10,354	\$10,354
\$250	Dominated	\$28,231	\$18,515	\$15,277	\$13,657	\$12,686	\$12,038	\$11,575	\$11,228	\$10,959	\$10,743	\$10,743
\$300	Dominated	\$32,117	\$20,458	\$16,572	\$14,629	\$13,463	\$12,686	\$12,131	\$11,714	\$11,390	\$11,131	\$11,131
\$350	Dominated	\$36,003	\$22,401	\$17,867	\$15,600	\$14,240	\$13,333	\$12,686	\$12,200	\$11,822	\$11,520	\$11,520
\$400	Dominated	\$39,889	\$24,344	\$19,163	\$16,572	\$15,017	\$13,981	\$13,241	\$12,686	\$12,254	\$11,909	\$11,909
\$450	Dominated	\$43,775	\$26,287	\$20,458	\$17,544	\$15,795	\$14,629	\$13,796	\$13,172	\$12,686	\$12,297	\$12,297
\$500	Dominated	\$47,661	\$28,231	\$21,754	\$18,515	\$16,572	\$15,277	\$14,351	\$13,657	\$13,118	\$12,686	\$12,686
\$550	Dominated	\$51,548	\$30,174	\$23,049	\$19,487	\$17,349	\$15,924	\$14,906	\$14,143	\$13,549	\$13,074	\$13,074
\$600	Dominated	\$55,434	\$32,117	\$24,344	\$20,458	\$18,126	\$16,572	\$15,462	\$14,629	\$13,981	\$13,463	\$13,463
\$650	Dominated	\$59,320	\$34,060	\$25,640	\$21,430	\$18,904	\$17,220	\$16,017	\$15,115	\$14,413	\$13,852	\$13,852
\$700	Dominated	\$63,206	\$36,003	\$26,935	\$22,401	\$19,681	\$17,867	\$16,572	\$15,600	\$14,845	\$14,240	\$14,240
\$750	Dominated	\$67,092	\$37,946	\$28,231	\$23,373	\$20,458	\$18,515	\$17,127	\$16,086	\$15,277	\$14,629	\$14,629
\$800	Dominated	\$70,979	\$39,889	\$29,526	\$24,344	\$21,235	\$19,163	\$17,682	\$16,572	\$15,708	\$15,017	\$15,017
\$850	Dominated	\$74,865	\$41,832	\$30,821	\$25,316	\$22,013	\$19,810	\$18,237	\$17,058	\$16,140	\$15,406	\$15,406
\$900	Dominated	\$78,751	\$43,775	\$32,117	\$26,287	\$22,790	\$20,458	\$18,793	\$17,544	\$16,572	\$15,795	\$15,795
\$950	Dominated	\$82,637	\$45,718	\$33,412	\$27,259	\$23,567	\$21,106	\$19,348	\$18,029	\$17,004	\$16,183	\$16,183
\$1,000	Dominated	\$86,523	\$47,661	\$34,708	\$28,231	\$24,344	\$21,754	\$19,903	\$18,515	\$17,436	\$16,572	\$16,572

^aAll costs in 2012 Canadian dollars.

Specialized Nursing Practice (Model 1)

Table 20 presents costs, QALYs, and ICERs for specialized nursing practice (patients treated by a nurse practitioner) and usual care (patients treated by a GP). Specialized nursing practice (Model 1) was dominant (i.e., less costly and more effective) compared with usual care.

Table 20: Specialized Nursing Practice (Model 1) for People With Diabetes: Results

Care	Cost/Patient ^a	QALYs/Patient	ICER
Usual care	\$30,226	2.584	—
Intervention	\$30,142	2.588	—
Incremental	-\$84	0.003	Dominant

Abbreviations: ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life-year.

^aAll costs in 2012 Canadian dollars. Any minor mathematical differences are due to rounding.

A sensitivity analysis was performed to test the robustness of the results to variations in model parameters. Table 21 shows that the intervention remained dominant, except when specialized nursing practice resulted in an increase in hospitalizations and ED visits. It is expected that this scenario would be associated with a decrease in QALYs, but the nature of administrative databases and the structure of the model did not allow us to reflect associated changes in health status.

Table 21: Specialized Nursing Practice (Model 1) for People With Diabetes: Sensitivity Analysis

Intervention Measures	Incremental Cost ^a	Incremental QALYs	ICER ^a
Effect of Intervention on Hospitalization and ED Visits (2-Way Sensitivity Analysis)			
RR of hospitalization = 0.28 RR of ED visit = 0.49	-\$172	0.003	Dominant
RR of hospitalization = 2.26 RR of ED visit = 1.46	\$155	0.003	\$46,018/QALY
Marginal Cost of Intervention (1-Way Sensitivity Analysis)			
-10% = -\$72	-\$90	0.003	Dominant
+10% = -\$59	-\$80	0.003	Dominant

Abbreviations: ED, emergency department; ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life-year; RR, relative risk.

^aAll costs in 2012 Canadian dollars. Any minor mathematical differences are due to rounding.

Specialized Nursing Practice (Model 2)

Table 22 presents costs, QALYs, and ICERs for specialized nursing practice (patients treated by a nurse practitioner plus a GP) and usual care (patients treated solely by a GP). Specialized nursing practice (Model 2) was dominant (i.e., less costly and more effective) compared with usual care.

Table 22: Specialized Nursing Practice (Model 2) for People With Diabetes: Results

Care	Cost/Patient ^a	QALYs/Patient	ICER
Usual care	\$30,226	3.068	—
Intervention	\$30,210	3.108	—
Incremental	-\$15	0.040	Dominant

Abbreviations: ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life-year.

^aAll costs in 2012 Canadian dollars. Any minor mathematical differences are due to rounding.

A sensitivity analysis was performed to test the robustness of the results to variations in select model parameters. Table 23 shows that the results were not sensitive to changes in intervention cost.

Table 23: Specialized Nursing Practice (Model 2) for People With Diabetes: Sensitivity Analysis

Marginal Cost of Intervention (1-Way Sensitivity Analysis) ^a	Incremental Cost ^a	Incremental QALYs	ICER
-10% = -\$22	-\$1,714	0.04	Dominant
+10% = -\$18	-\$1,417	0.04	Dominant

Abbreviations: ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life-year.

^aAll costs in 2012 Canadian dollars. Any minor mathematical differences are due to rounding.

Electronic Tools for Health Information Exchange

Table 24 presents costs, QALYs, and ICERs for centres with eTools and centres with usual care. Electronic tools were dominant (i.e., less costly and more effective) compared with usual care.

Table 24: Electronic Tools for People With Diabetes: Results

Care	Cost/Patient ^a	QALYs/Patient	ICER
Usual care	\$30,226	2.789	—
Intervention	\$29,889	2.795	—
Incremental	-\$337	0.006	Dominant

Abbreviations: ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life-year.

^aAll costs in 2012 Canadian dollars. Any minor mathematical differences are due to rounding.

A sensitivity analysis was performed to test the robustness of the results to variations in model parameters. Table 25 shows that the model was sensitive to changes in resource use and intervention cost.

Table 25: Electronic Tools for People With Diabetes: Sensitivity Analysis

Intervention Measures	Incremental Cost ^a	Incremental QALYs	ICER
Effect of Intervention on Hospitalization and ED Visits (2-Way Sensitivity Analysis)			
RD of hospitalization = 0.75 RD of ED visit = 0.61	-\$1,228	0.011	Dominant
RD of hospitalization = 0.95 RD of ED visit = 0.89	\$554	0.002	\$257,074
Marginal Cost of Intervention (1-Way Sensitivity Analysis)			
Ongoing cost = \$74	-\$724	0.006	Dominant
Ongoing cost = \$233	\$639	0.006	\$38,869

Abbreviations: ED, emergency department; ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life-year; RD, relative difference.

^aAll costs in 2012 Canadian dollars. Any minor mathematical differences are due to rounding.

Incremental Net Benefit: Diabetes

The incremental net benefit for each diabetes intervention was calculated given a WTP of \$25,000, \$50,000, \$75,000, and \$100,000 (Table 26). (Because no intervention costs were associated with continuity of care, sensitivity analyses were not conducted.) Of the interventions evaluated in a population with diabetes, specialized nursing practice (Model 2) was associated with the greatest incremental net benefit.

Table 26: Incremental Net Benefit of Diabetes Interventions

Intervention	Incremental Net Benefit ^a			
	\$25,000	\$50,000	\$75,000	\$100,000
Specialized nursing practice (Model 2) vs. usual care	\$1,028	\$2,040	\$3,052	\$4,064
Electronic tools vs. usual care	\$499	\$660	\$822	\$984
Specialized nursing practice (Model 1) vs. usual care	\$169	\$254	\$338	\$422

^aAll costs in 2012 Canadian dollars. Any minor mathematical differences are due to rounding.

Coronary Artery Disease

Specialized Nursing Practice (Model 2)

Table 27 presents costs, QALYs, and ICERs for specialized nursing practice (patients treated by a nurse practitioner plus a GP) and usual care (patients treated solely by a GP). Specialized nursing practice (Model 2) was dominant (i.e., less costly and more effective) compared with usual care.

Table 27: Specialized Nursing Practice (Model 2) for People With Coronary Artery Disease: Results

Care	Cost/Patient ^a	QALYs/Patient	ICER
Usual care	\$111,611	1.406	—
Intervention	\$101,855	1.424	—
Incremental	-\$9,757	0.018	Dominant

Abbreviation: ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life-year.

^aAll costs in 2012 Canadian dollars. Any minor mathematical differences are due to rounding.

A sensitivity analysis was performed to test the robustness of the results to variations in select model parameters. Table 28 shows that the model was not sensitive to variations in resource use or intervention cost.

Table 28: Specialized Nursing Practice (Model 2) for People With Coronary Artery Disease: Sensitivity Analysis

Intervention Measure	Incremental Cost ^a	Incremental QALYs	ICER
Effect of Intervention on Hospitalization (1-Way Sensitivity Analysis)			
RR of hospitalization = 0.48	-\$14,086	0.018	Dominant
RR of hospitalization = 0.86	-\$3,804	0.018	Dominant
Marginal Cost of Intervention (1-Way Sensitivity Analysis)			
-10% = -\$24	-\$9,758	0.018	Dominant
+10% = -\$19	-\$9,755	0.018	Dominant

Abbreviations: ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life-year; RR, relative risk.

^aAll costs in 2012 Canadian dollars. Any minor mathematical differences are due to rounding.

Incremental Net Benefit: Coronary Artery Disease

The incremental net benefit for the CAD intervention was calculated given a WTP of \$25,000, \$50,000, \$75,000, and \$100,000 (Table 29). The intervention was cost-effective across all 4 WTP values.

Table 29: Incremental Net Benefit of Coronary Artery Disease Intervention

Intervention	Incremental Net Benefit ^a			
	\$25,000	\$50,000	\$75,000	\$100,000
Specialized nursing practice (Model 2) vs. usual care	\$10,218	\$10,678	\$11,139	\$11,600

^aAll costs in 2012 Canadian dollars. Any minor mathematical differences are due to rounding.

Congestive Heart Failure

Discharge Planning

Table 30 presents costs, QALYs, and ICERs for discharge planning (pre-discharge and post-discharge) and usual care. Discharge planning was dominant (i.e., less costly and more effective) compared with usual care.

Table 30: Discharge Planning for People With Congestive Heart Failure: Results

Care	Cost/Patient ^a	QALYs/Patient	ICER
Usual care	\$101,080	1.818	—
Intervention	\$100,352	1.890	—
Incremental	-\$728	0.072	Dominant

Abbreviation: ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life-year.

^aAll costs in 2012 Canadian dollars. Any minor mathematical differences are due to rounding.

A sensitivity analysis was performed to take into consideration possible differences in resource use associated with this program. Table 31 shows that in all scenarios, the cost savings associated with reduced hospital admissions and ER visits outweighed the cost of the intervention.

Table 31: Discharge Planning for People With Congestive Heart Failure: Sensitivity Analysis

Intervention Measure	Incremental Cost ^a	Incremental QALYs	ICER
Estimate of Intervention on Hospitalization (1-Way Sensitivity Analysis)			
RR for hospitalization = 0.67	-\$1,734	0.074	Dominant
RR for hospitalization = 0.81	\$278	0.069	\$4,039
Effect of Intervention on Mortality (1-Way Sensitivity Analysis)			
RR for mortality = 0.73	\$2,824	0.164	\$17,226
RR for mortality = 1.04	-\$3,606	-0.004	Dominated
Marginal Cost of Intervention (1-Way Sensitivity Analysis)			
Marginal cost = \$80	-\$780	0.071	Dominant
Marginal cost = \$757	-\$256	0.071	Dominant

Abbreviations: ICER, incremental cost-effectiveness; QALY, quality-adjusted life-year; RR, relative risk.

^aAll costs in 2012 Canadian dollars. Any minor mathematical differences are due to rounding.

In-Home Care

Table 32 presents costs, QALYs, and ICERs for in-home care and usual care. In-home care was dominant (i.e., less costly and more effective) compared with usual care.

Table 32: In-Home Care for People With Congestive Heart Failure: Results

Care	Cost/Patient ^a	QALYs/Patient	ICER
Usual care	\$101,080	1.818	—
Intervention	\$90,415	1.929	—
Incremental	-\$10,665	0.111	Dominant

Abbreviation: ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life-year.

^aAll costs in 2012 Canadian dollars. Any minor mathematical differences are due to rounding.

A sensitivity analysis was performed to test the robustness of the results to variations in model parameters. Table 33 shows that the model was not sensitive to changes in resource use or intervention cost.

Table 33: In-Home Care for People With Congestive Heart Failure: Sensitivity Analysis

Intervention Measure	Incremental Cost ^a	Incremental QALYs	ICER
Effect of Intervention on Hospitalization and ED Visits (2-Way Sensitivity Analysis)			
RR for hospitalization = 0.38 RR for ED visits = 0.23	-\$11,222	0.112	Dominant
RR for hospitalization = 0.42 RR for ED visits = 0.45	-\$10,109	0.109	Dominant
Effect of Intervention on Mortality (1-Way Sensitivity Analysis)			
RR for mortality = 0.81	-\$7,869	0.233	Dominant
RR for mortality = 1.04	-\$13,042	0.006	Dominant
Marginal Cost of Intervention (1-Way Sensitivity Analysis)			
\$82	-\$10,672	0.111	Dominant
\$100	-\$10,658	0.111	Dominant

Abbreviations: ED, emergency department; ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life-year; RR, relative risk.

^aAll costs in 2012 Canadian dollars. Any minor mathematical differences are due to rounding.

Incremental Net Benefit: Congestive Heart Failure

The incremental net benefit for each CHF intervention was calculated given a WTP of \$25,000, \$50,000, \$75,000, and \$100,000 (Table 34). Of the interventions evaluated in a population with CHF, in-home care was associated with the greatest incremental net benefit.

Table 34: Incremental Net Benefit of Congestive Heart Failure Interventions

Intervention	Incremental Net Benefit ^a			
	\$25,000	\$50,000	\$75,000	\$100,000
In-home care	\$13,432	\$16,198	\$18,965	\$21,731
Discharge planning (predischarge and postdischarge)	\$2,513	\$4,298	\$6,082	\$7,867

^aAll costs in 2012 Canadian dollars. Any minor mathematical differences are due to rounding.

Chronic Obstructive Pulmonary Disease

Continuity of Care

Table 35 presents the incremental cost per QALY gained for different hypothetical intervention costs and levels of intervention effectiveness (i.e., percent increase of patients to the high continuity of care cohort). The results suggested that the intervention was dominant across almost all variations of intervention cost and level of effectiveness.

Table 35: Continuity of Care for People With Chronic Obstructive Pulmonary Disease: Exploratory Analysis

	Intervention Effectiveness (% Increase of Patients in High Continuity Cohort) ^a											
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	
\$0	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$50	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$100	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$150	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$200	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$250	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$300	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$350	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$400	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$450	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$500	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$550	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$600	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$650	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$700	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$750	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$800	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$850	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$900	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$950	Dominant	\$808	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$1,000	Dominant	\$3,587	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant

^aAll costs in 2012 Canadian dollars.

As with the diabetes cohort, a sensitivity analysis was undertaken to explore the effect of different baseline levels of continuity of care. When base-case values were equal to that reported by ICES in 2008 (30) for people with chronic diseases (high 56.5%, medium 28.2%, low 10.5%), the results were largely unchanged (Table 36).

Table 36: Continuity of Care for People With Chronic Obstructive Pulmonary Disease: Sensitivity Analysis

	Intervention Effectiveness (% Increase of Patients in High-Continuity Cohort) ^a										
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
\$0	Dominated	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$50	Dominated	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$100	Dominated	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$150	Dominated	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$200	Dominated	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$250	Dominated	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$300	Dominated	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$350	Dominated	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$400	Dominated	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$450	Dominated	\$944	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$500	Dominated	\$5,182	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$550	Dominated	\$9,420	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$600	Dominated	\$13,658	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$650	Dominated	\$17,896	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$700	Dominated	\$22,135	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$750	Dominated	\$26,373	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$800	Dominated	\$30,611	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$850	Dominated	\$34,849	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$900	Dominated	\$39,087	\$944	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$950	Dominated	\$43,325	\$3,063	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant
\$1,000	Dominated	\$47,563	\$5,182	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant	Dominant

^aAll costs in 2012 Canadian dollars.

Budget Impact Analysis—Ontario Perspective

A budget impact analysis was conducted from the perspective of the Ontario Ministry of Health and Long-Term Care. Originally, we had planned to determine the estimated cost burden over the next 5 years for each intervention; however, this was not possible given the lack of data regarding the proportion of patients currently receiving the interventions in hospitals throughout Ontario. Were the different interventions not previously introduced to Ontario, the maximum target population would be the current prevalent population as well as the future incident population for CHF, diabetes, and CAD (Table 37). Continuity of care was excluded because there were no intervention costs.

Table 37: Incident and Prevalent Populations

Population	Estimate	Source
Congestive heart failure		
Incident population, n	33,552	ICES ^a
Prevalent population, n	99,490	Canadian Community Health Survey (2), Statistics Canada (40), Chow et al. 2005 (41)
Diabetes		
Incident population, n	91,908	ICES ^a
Prevalent population, n	1,164,492	Booth et al, 2012 (42)
Coronary artery disease		
Incident population, n	22,076	ICES ^a
Prevalent population, n	565,285	Canadian Community Health Survey (2), Statistics Canada (40)

^aData provided by ICES, December 17, 2012.

As mentioned previously, interventions analyzed in this study are currently being implemented in various ways in hospitals throughout Ontario. As a result, the incident and prevalent target populations presented in Table 37 overestimate the number of NEW patients who will be targeted for the interventions. Because the number of patients currently receiving any of the interventions is unknown, a total budget impact cannot be calculated. The costs are thus presented at a per-patient level (as the cost difference between the total lifetime health care cost per patient receiving the intervention, and the total lifetime health care cost per patient without the intervention). This cost difference was already calculated in the economic evaluation, and the base case results are summarized in Table 38. The resulting incremental cost per patient is represented as the cost savings estimated.

Table 38: Summary of the Incremental Cost per Patient for Various Interventions for Optimizing Chronic Disease Management

Intervention and Chronic Disease	Cost per Patient With Usual Care	Cost per Patient With Intervention	Incremental Cost per Patient	Source
Discharge planning (pre-discharge and post-discharge) in people with CHF	\$101,080	\$100,352	-\$728	Table 30
In-home care in people with CHF	\$101,080	\$90,415	-\$10,665	Table 32
Specialized nursing (model 1) in people with diabetes	\$30,226	\$30,142	-\$84	Table 20
Specialized nursing (model 2) in people with diabetes	\$30,226	\$30,210	-\$15	Table 22
Specialized Nursing (Model 2) in people with CAD	\$111,611	\$101,855	-\$9,757	Table 27
eTools in people with diabetes	\$30,226	\$29,889	-\$337	Table 24

Abbreviations: CAD, coronary artery disease; CHF, congestive heart failure; eTools, electronic tools.

Limitations

This analysis was subject to many limitations, summarized below.

The cost-effectiveness analyses paralleled the EBAs in that they evaluated specific interventions considered in the context of specific clinical studies. They differed in that not all clinical studies included in the EBAs reported outcomes that could be included in the cost-effectiveness analyses. To maintain consistency within each cost-effectiveness analysis, estimates of resource use for each intervention were based on the study or studies on which the clinical effect was based. The costs included in each analysis were no less generalizable than the effects, and the generalizability of these studies across interventions varied according to the intervention and the disease, at both the clinical and economic levels.

Because of time constraints, intervention costs were based on fee-for-service models (OHIP). As a result, it is likely that the intervention costs overestimate the costs to the Ministry, as some of these services would not trigger additional billings. If additional billings were excluded, the marginal cost of the intervention would be reduced, resulting in further cost savings.

Effect estimates for each intervention were based on point estimates obtained from the EBAs. Uncertainty surrounding effect size was explored using 1- and 2-way sensitivity analyses. These analyses provided more limited means of exploring uncertainty than probabilistic sensitivity analysis, which could not be constructed within our time constraints. An additional limitation associated with the effect estimates was that the evidence used to inform parameters was often limited to a single clinical trial with moderate- to very low-quality evidence.

Only effect estimates relating to resource use and mortality were included in the analysis. The model was not designed to allow for the inclusion of clinical outcomes, such as lipid levels or hemoglobin A_{1c}. Although these intermediate outcomes could indicate that an intervention has achieved a certain level of effectiveness compared with usual care, they require the use of a clinical disease model to forecast the long-term consequences.

Resource use associated with each intervention was largely based on the programs described in the clinical trials. Resource use estimates were then applied to Ontario-specific unit costs to calculate the cost of each intervention. This represented the best use of available data, but the intervention cost might not be directly applicable to an Ontario context. For example, data used to calculate per-patient costs for eTools in people with diabetes was based on the resources described in the study from the EBA, which took place in Vermont using a specific software tool and study protocol. Currently, similar software does not exist in Ontario; if it is developed and implemented in future, it could come at a different cost.

As a criterion for evaluation, this economic analysis considered only interventions that were conducted in 1 of several predefined chronic disease cohorts. Costs were calculated for each disease cohort, and clinical estimates of effect (which were derived from trials with homogeneous populations and often strict enrollment criteria) were applied. Therefore, the final cost associated with each intervention was population-specific and cannot be extrapolated to the general population.

Of the studies from the EBAs that reported generic quality-of-life measures, all found very little difference in health-related quality of life between baseline and follow-up. Given that there was also no difference in mortality associated with the interventions (except in the CHF cohort), there was little to no difference in QALYs.

Some of the included studies reported increases in patient satisfaction. However, because there is no standard method of measuring satisfaction and few reports on the reliability of satisfaction surveys, it is not accepted practice to capture this outcome in economic analyses. This difference highlights an important point: measures of satisfaction reflect items that refer to an aspect of treatment (usually defined by the researchers), whereas measures of health-related quality of life include a range of predefined emotional and physical parameters and do not refer to the treatment received. Patients tend to answer satisfaction surveys according to a perception of need, and quality-of-life measures are designed to incorporate value judgments. Because resource-allocation decisions are also based on value judgments, it is important to be sensitive to quality-of-life outcomes. However, quality of life and patient satisfaction are not mutually exclusive, and balance is needed when considering these related outcomes.

Another limitation in the use of utility measures was the lack of available quality-of-life data in 3 of the models. To calculate quality of life for eTools (diabetes) and in-home care (CHF), an average quality of life was applied to the cohort, and disease-specific reductions in quality of life were applied to episodes of hospitalization. Therefore, when the effect of each intervention on hospitalization rates was varied in each analysis, quality of life changed accordingly (in contrast to quality of life in studies that reported pre- and post-utility measures). Estimates of utility for patients with varying levels of continuity of care were obtained from the published economic literature rather than from the EBA.

When evaluating interventions in which there is a survival difference, the horizon of the analysis has implications for estimates of effectiveness. If an intervention is found to reduce mortality, any horizon that is less than the lifetime of the patient will underestimate total QALYs gained. Because of limitations in the data, we chose not to extrapolate our survival estimates beyond 5 years. Of our interventions, only those in the CHF populations included an estimate of mortality. Therefore, benefit is underestimated in this group.

As in the clinical trials, continuity of care was calculated as the ratio of visits to the same primary care provider over the total number of primary care consultations. This meant that, for physicians practising in a group, return visits were not captured in the index.

The findings indicate that most patients with diabetes and COPD had low continuity of care. However, a 2008 ICES paper reported that 90% to 95% of people with chronic disease had high continuity of care. (30;32) The reason for this discrepancy is unclear. It could be due to the fact that our cohort involved a group of patients with established chronic disease, whereas the ICES report included a random sample of the population with unnamed “high impact/high prevalence conditions.” Nevertheless, sensitivity analyses using the baseline distribution from the ICES report did not influence the results.

Conclusions

Of 70 potential cost-effectiveness analyses, 8 met our inclusion criteria. After calculating the total cost associated with each chronic disease cohort and applying the estimates of clinical effect identified in the evidence-based analyses (EBAs), all interventions were found to be cost-saving. On the basis of quality-of-life data identified in the EBAs and published literature, all were also found to result in a greater gain in quality-adjusted life years than usual care.

The incremental lifetime health care cost per patient receiving the intervention versus no intervention resulted in cost savings per patient in the base case. These savings were mainly attributable to a reduction in hospitalizations or emergency department visits as a result of the intervention.

However, this analysis was subject to many important limitations, the most important of which was the clinical evidence base. Most of these analyses were based on studies of moderate to very low quality with indirect applicability to Ontario. The nature of the method and sources make it difficult to generalize the results of this study beyond the populations included in each analysis. Thus the results should be viewed with caution.

Acknowledgements

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Expert Panel for Health Quality Ontario: Optimizing Chronic Disease Management in the Community (Outpatient) Setting

Name	Title	Organization
Shirlee Sharkey (chair)	President & CEO	Saint Elizabeth Health Care
Theresa Agnew	Executive Director	Nurse Practitioners' Association of Ontario
Onil Bhattacharrya	Clinician Scientist	Li Ka Shing Knowledge Institute, St. Michael's Hospital, University of Toronto
Arlene Bierman	Ontario Women's Health Council Chair in Women's Health	Department of Medicine, Keenan Research Centre in the Li Ka Shing Knowledge Institute, St. Michael's Hospital, University of Toronto
Susan Bronskill	Scientist	Institute for Clinical Evaluative Sciences
Catherine Demers	Associate Professor	Division of Cardiology, Department of Medicine, McMaster University
Alba Dicenso	Professor	School of Nursing, McMaster University
Mita Giacomini	Professor	Centre of Health Economics & Policy Analysis, Department of Clinical Epidemiology & Biostatistics
Ron Goeree	Director	Programs for Assessment of Technology in Health (PATH) Research Institute, St. Joseph's Healthcare Hamilton
Nick Kates	Senior Medical Advisor	Health Quality Ontario – QI McMaster University Hamilton Family Health Team
Murray Krahn	Director	Toronto Health Economics and Technology Assessment (THETA) Collaborative, University of Toronto
Wendy Levinson	Sir John and Lady Eaton Professor and Chair	Department of Medicine, University of Toronto
Raymond Pong	Senior Research Fellow and Professor	Centre for Rural and Northern Health Research and Northern Ontario School of Medicine, Laurentian University
Michael Schull	Deputy CEO & Senior Scientist	Institute for Clinical Evaluative Sciences
Moira Stewart	Director	Centre for Studies in Family Medicine, University of Western Ontario
Walter Wodchis	Associate Professor	Institute of Health Management Policy and Evaluation, University of Toronto

Appendices

Appendix 1: Literature Search Strategies

HEED was not available, and so was not searched for any of the topics.

Advanced Access – Economic Search 2012Jan19

Search date: January 17th, 2012

Databases searched: Ovid MEDLINE, Ovid MEDLINE In-Process and Other Non-Indexed Citations, Ovid EMBASE, PubMed (for non-MEDLINE records), Wiley Cochrane (HTA & NHSEED), Centre for Reviews and Dissemination

Limits: 2002-present; English; NOT comments, editorials, letters (conference abstracts in EMBASE)

Database: Ovid MEDLINE(R) <1946 to present>, Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations <January 16, 2012>, EMBASE <1980 to 2012 Week 02>

Search Strategy:

Search run 2012Jan17

#	Searches	Results
1	exp Coronary Artery Disease/	211661
2	exp Myocardial Infarction/ use pmz	133323
3	exp heart infarction/ use emez	216531
4	(coronary artery disease or cad or heart attack*).ti.	45038
5	((myocardi* or heart or cardiac or coronary) adj2 (atheroscleros* or arterioscleros* or infarct*)).ti.	149431
6	or/1-5	539191
7	exp Atrial Fibrillation/ use pmz	27983
8	exp heart atrium fibrillation/ use emez	55357
9	((atrial or atrium or auricular) adj1 fibrillation*).ti,ab.	73312
10	or/7-9	99156
11	exp heart failure/	300198
12	((myocardi* or heart or cardiac) adj2 (failure or decompensation or insufficiency)).ti,ab.	234158
13	or/11-12	381094
14	exp Stroke/	177630
15	exp Ischemic Attack, Transient/ use pmz	16352
16	exp transient ischemic attack/ use emez	19630
17	exp stroke patient/ use emez	5626
18	exp brain infarction/ or exp cerebrovascular accident/ use emez	100861
19	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA).ti,ab.	280544
20	or/14-19	390765
21	exp Diabetes Mellitus, Type 2/ use pmz	67951
22	exp non insulin dependent diabetes mellitus/ use emez	101327
23	exp diabetic patient/ use emez	12828
24	(diabetes or diabetic* or niddm or t2dm).ti,ab.	763708
25	or/21-24	788575
26	exp Skin Ulcer/	71941

27 ((pressure or bed or skin) adj2 (ulcer* or sore* or wound*)).ti,ab.	28642
28 (decubitus or bedsore*).ti,ab.	8514
29 or/26-28	90619
30 exp Pulmonary Disease, Chronic Obstructive/ use prmz	16974
31 exp chronic obstructive lung disease/ use emez	54556
32 (chronic obstructive adj2 (lung* or pulmonary or airway* or airflow or respiratory) adj (disease* or disorder*)).ti,ab.	54291
33 (copd or coad).ti,ab.	45422
34 chronic airflow obstruction.ti,ab.	1063
35 exp Emphysema/	37370
36 exp chronic bronchitis/ use emez	6962
37 ((chronic adj2 bronchitis) or emphysema).ti,ab.	50776
38 or/30-37	158905
39 exp Chronic Disease/	340391
40 ((chronic* adj2 disease*) or (chronic* adj2 ill*)).ti,ab.	219542
41 or/39-40	505687
42 exp Comorbidity/	143130
43 (comorbid* or co-morbid* or multimorbid* or multi-morbid* or (complex* adj patient*) or "patient* with multiple" or (multiple adj2 (condition* or disease*))).ti,ab.	202862
44 or/42-43	283382
45 6 or 10 or 13 or 20 or 25 or 29 or 38 or 41 or 44	2817928
46 "Appointments and Schedules"/ use prmz	6211
47 Health Services Accessibility/ use prmz	41879
48 Patient-Centered Care/ use prmz	7809
49 ((patient-driven or patientdriven or patient-centered or patientcentered or patient-centred or patientcentred or same-day or sameday) adj2 (access* or appointment* or booking? or schedul*)).ti,ab.	216
50 ((advanced adj2 access*) or (enhanc* adj access*) or ((advanc* access or open access) adj (appointment* or schedul*))).ti,ab.	1612
51 *Health Care Access/ use emez	4285
52 Patient Scheduling/ use emez	734
53 or/46-49,51-52	60274
54 (45 and 53) or 50	6184
55 Case Reports/ or Comment.pt. or Editorial.pt. or Letter.pt. use prmz	2921591
56 Case Report/ or Editorial/ or Letter/ or Conference Abstract.pt. use emez	5791752
57 or/55-56	5896259
58 54 not 57	5622
59 *Economics/ use prmz	10087
60 *Economics, Medical/ use prmz	5122
61 *Economics, Pharmaceutical/ use prmz	1203
62 exp "Costs and Cost Analysis"/ use prmz	160072
63 exp Models, Economic/ use prmz	8268
64 Markov Chains/ use prmz	7501
65 Monte Carlo Method/ use prmz	16039
66 Quality-Adjusted Life Years/ use prmz	5264

67 "Value of Life"/ use prmz	5190
68 Decision Trees/ use prmz	7745
69 exp "Health Care Cost"/ use emez	168886
70 exp *Health Economics/ use emez	166475
71 exp Economic Evaluation/ use emez	176160
72 Quality Adjusted Life Year/ use emez	8255
73 *Statistical Model/ use emez	11107
(econom* or cost or costly or costing or costed or price or prices or pricing or priced or discount or discounts or	
74 discounted or discounting or expenditure or expenditures or budget* or afford* or pharmacoeconomic* or	204987
pharmaco-economic*).ti.	
75 (decision adj1 (tree* or analy* or model*).ti,ab.	18027
76 ((value or values or valuation) adj2 (money or monetary or life or lives or costs or cost)).ti,ab.	7799
(sensitivity analysis or sensitivity analyses or "willingness to pay" or quality-adjusted life year* or quality adjusted	
77 life year* or quality-adjusted life expectanc* or quality adjusted life expectanc* or disability adjusted life or health	35632
adjusted life).ti,ab.	
78 (unit cost* or drug cost* or hospital cost* or health care cost* or medical cost*).ti,ab.	42568
79 (economic evaluation* or economic review*).ti,ab.	12039
80 (cost* adj2 (util* or effectiveness or efficac* or benefit* or consequence* or analy* or minimi*).ti,ab.	114063
81 (markov* or monte carlo).ti,ab.	61885
82 or/59-81	800342
83 58 and 82	714
84 limit 83 to english language	703
85 remove duplicates from 84	642
86 limit 85 to yr="2002 -Current"	489

PubMed

Coronary Artery Disease[mh]

Myocardial Infarction[mh]

coronary artery disease[ti] OR cad[ti] OR heart attack*[ti]

(myocardi*[ti] OR heart[ti] OR cardiac[ti] OR coronary[ti]) AND (atheroscleros*[ti] OR arterioscleros*[ti] OR infarct*[ti])

OR/

Atrial Fibrillation[mh]

(atrial[tiab] OR atrium[tiab] OR auricular[tiab]) AND fibrillation*[tiab]

OR/

Heart Failure[mh]

(myocardi*[tiab] OR heart[tiab] OR cardiac[tiab]) AND (failure[tiab] OR decompensation[tiab] OR insufficiency[tiab])

OR/

Stroke[mh]

Ischemic Attack, Transient[mh]

stroke[tiab] OR tia[tiab] OR transient ischemic attack[tiab] OR cerebrovascular apoplexy[tiab] OR cerebrovascular accident[tiab]

OR cerebrovascular infarct*[tiab] OR brain infarct*[tiab] OR CVA[tiab]

OR/

Diabetes Mellitus, Type 2[mh]

diabetes[tiab] OR diabetic*[tiab] OR niddm[tiab] OR t2dm[tiab]

OR/

Skin Ulcer[mh]

(pressure[tiab] OR bed[tiab] OR skin[tiab]) AND (ulcer*[tiab] OR sore*[tiab] OR wound*[tiab])

decubitus[tiab] OR bedsore*[tiab]

OR/

Pulmonary Disease, Chronic Obstructive[mh]

chronic obstructive[tiab] AND (lung*[tiab] OR pulmonary[tiab] OR airway*[tiab] OR airflow[tiab] OR respiratory[tiab]) AND (disease*[tiab] OR disorder*[tiab])

copd[tiab] OR coad[tiab]

chronic airflow obstruction[tiab]
 Emphysema[mh]
 chronic[tiab] AND bronchitis[tiab] OR emphysema[tiab]
 OR/
 Chronic Disease[mh]
 (chronic*[tiab] AND disease*[tiab]) OR (chronic*[tiab] AND ill*[tiab])
 OR/
 Comorbidity[mh]
 comorbid*[tiab] OR co-morbid*[tiab] OR multimorbid*[tiab] OR multi-morbid*[tiab] OR (complex*[tiab] AND patient*[tiab])
 OR "patient* with multiple"[tiab] OR (multiple[tiab] AND (condition*[tiab] OR disease*[tiab]))
 OR/
 OR/
 "Appointments and Schedules"[mh]
 Health Services Accessibility[mh]
 Patient-Centered Care[mh]
 ((patient-driven[tiab] OR patientdriven[tiab] OR patient-centered[tiab] OR patientcentered[tiab] OR patient-centred[tiab] OR
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 schedul*[tiab]))
 OR/
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 OR schedul*[tiab]))

Economics[MAJR:NOEXP]
 Economics, Medical[MAJR:NOEXP]
 Economics, Pharmaceutical[MAJR:NOEXP]
 "Costs and Cost Analysis"[mh]
 Models, Economic[mh]
 Markov Chains[mh]
 Monte Carlo Method[mh]
 Quality-Adjusted Life Years[mh]
 "Value of Life"[mh]
 Decision Trees[mh]
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 discount[ti] OR discounts[ti] OR discounted[ti] OR discounting[ti] OR expenditure[ti] OR expenditures[ti] OR budget*[ti] OR
 afford*[ti] OR pharmaco-economic*[ti] OR pharmaco-economic*[ti]
 decision tree*[tiab] OR decision analy*[tiab] OR decision model*[tiab]
 sensitivity analysis[tiab] OR sensitivity analyses[tiab] OR "willingness to pay"[tiab] OR quality-adjusted life year*[tiab] OR
 quality adjusted life year*[tiab] OR quality-adjusted life expectanc*[tiab] OR quality adjusted life expectanc*[tiab] OR disability
 adjusted life[tiab] OR health adjusted life[tiab]
 unit cost*[tiab] OR drug cost*[tiab] OR hospital cost*[tiab] OR health care cost*[tiab] OR medical cost*[tiab]
 economic evaluation*[tiab] OR economic review*[tiab]
 cost* util*[tiab] OR cost* effectiveness[tiab] OR cost* efficac*[tiab] OR cost* benefit*[tiab] OR cost* consequence*[tiab]
 OR cost* analy*[tiab] OR cost* minimi*[tiab]
 markov*[tiab] OR monte carlo[tiab]

publisher[sb] OR in process[sb] OR pubmednotmedline[sb]

Limit to 2002-present & English

Search run 2012Jan18

Search	Query	Items found
#64	Search (#36 AND #55 AND #60 AND #62) OR (#55 AND #61 AND #62) Limits: English, Publication Date from 2002 to 2012	40
#63	Search (#36 AND #55 AND #60 AND #62) OR (#55 AND #61 AND #62)	42
#62	Search publisher[sb] OR in process[sb] OR pubmednotmedline[sb]	1680294
#61	Search advanced access*[tiab] OR enhanc* access*[tiab] OR ((advanc* access[tiab] OR open access[tiab]) AND (appointment*[tiab] OR schedul*[tiab]))	15809
#60	Search #56 OR #57 OR #58 OR #59	91453

Search	Query	Items found
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#58	Search Patient-Centered Care[mh]	7814
#57	Search Health Services Accessibility[mh]	72428
#56	Search "Appointments and Schedules"[mh]	12797
#55	Search #37 OR #38 OR #39 OR #40 OR #41 OR #42 OR #44 OR #45 OR #46 OR #47 OR #48 OR #49 OR #50 OR #51 OR #52 OR #53 OR #54	288827
#54	Search markov*[tiab] OR monte carlo[tiab]	33823
#53	Search cost* utili*[tiab] OR cost* effectiveness[tiab] OR cost* efficac*[tiab] OR cost* benefit*[tiab] OR cost* consequence*[tiab] OR cost* analy*[tiab] OR cost* minimi*[tiab]	6242
#52	Search economic evaluation*[tiab] OR economic review*[tiab]	5311
#51	Search unit cost*[tiab] OR drug cost*[tiab] OR hospital cost*[tiab] OR health care cost*[tiab] OR medical cost*[tiab]	19018
#50	Search sensitivity analysis[tiab] OR sensitivity analyses[tiab] OR "willingness to pay"[tiab] OR quality-adjusted life year*[tiab] OR quality adjusted life year*[tiab] OR quality-adjusted life expectanc*[tiab] OR quality adjusted life expectanc*[tiab] OR disability adjusted life[tiab] OR health adjusted life[tiab]	15950
#49	Search decision tree*[tiab] OR decision analy*[tiab] OR decision model*[tiab]	8142
#48	Search econom*[ti] OR cost[ti] OR costly[ti] OR costing[ti] OR costed[ti] OR price[ti] OR prices[ti] OR pricing[ti] OR priced[ti] OR discount[ti] OR discounts[ti] OR discounted[ti] OR discounting[ti] OR expenditure[ti] OR expenditures[ti] OR budget*[ti] OR afford*[ti] OR pharmacoeconomic*[ti] OR pharmaco-economic*[ti]	95227
#47	Search Decision Trees[mh]	7742
#46	Search "Value of Life"[mh]	5190
#45	Search Quality-Adjusted Life Years[mh]	5245
#44	Search Monte Carlo Method[mh]	16020
#42	Search Markov Chains[mh]	7484
#41	Search Models, Economic[mh]	8263
#40	Search "Costs and Cost Analysis"[mh]	159980
#39	Search Economics, Pharmaceutical[MAJR:NOEXP]	1202
#38	Search Economics, Medical[MAJR:NOEXP]	5144
#37	Search Economics[MAJR:NOEXP]	10084
#36	Search #5 OR #8 OR #11 OR #15 OR #18 OR #22 OR #29 OR #32 OR #35	1680055
#35	Search #33 OR #34	401374
#34	Search comorbid*[tiab] OR co-morbid*[tiab] OR multimorbid*[tiab] OR multi-morbid*[tiab] OR (complex*[tiab] AND patient*[tiab]) OR "patient* with multiple"[tiab] OR (multiple[tiab] AND (condition*[tiab] OR disease*[tiab]))	367247
#33	Search Comorbidity[mh]	52132
#32	Search #30 OR #31	424945
#31	Search (chronic*[tiab] AND disease*[tiab]) OR (chronic*[tiab] AND ill*[tiab])	276652
#30	Search Chronic Disease[mh]	202004
#29	Search #23 OR #24 OR #25 OR #26 OR #27 OR #28	68130
#28	Search chronic[tiab] AND bronchitis[tiab] OR emphysema[tiab]	25491
#27	Search Emphysema[mh]	22452
#26	Search chronic airflow obstruction[tiab]	500
#25	Search copd[tiab] OR coad[tiab]	19861
#24	Search chronic obstructive[tiab] AND (lung*[tiab] OR pulmonary[tiab] OR airway*[tiab] OR airflow[tiab] OR respiratory[tiab]) AND (disease*[tiab] OR disorder*[tiab])	25329
#23	Search Pulmonary Disease, Chronic Obstructive[mh]	16987

Search	Query	Items found
#22	Search #19 OR #20 OR #21	63955
#21	Search decubitus [tiab] OR bedsore *[tiab]	3926
#20	Search (pressure [tiab] OR bed [tiab] OR skin [tiab]) AND (ulcer *[tiab] OR sore *[tiab] OR wound *[tiab])	39591
#19	Search Skin Ulcer [mh]	31354
#18	Search #16 OR #17	352235
#17	Search diabetes [tiab] OR diabetic *[tiab] OR niddm [tiab] OR t2dm [tiab]	345642
#16	Search Diabetes Mellitus, Type 2 [mh]	67907
#15	Search #12 OR #13 OR #14	157624
#14	Search stroke [tiab] OR tia [tiab] OR transient ischemic attack [tiab] OR cerebrovascular apoplexy [tiab] OR cerebrovascular accident [tiab] OR cerebrovascular infarct *[tiab] OR brain infarct *[tiab] OR CVA [tiab]	124378
#13	Search Ischemic Attack, Transient [mh]	16351
#12	Search Stroke [mh]	66792
#11	Search #9 OR #10	157370
#10	Search (myocardi *[tiab] OR heart [tiab] OR cardiac [tiab]) AND (failure [tiab] OR decompensation [tiab] OR insufficiency [tiab])	135119
#9	Search Heart Failure [mh]	74920
#8	Search #6 OR #7	39905
#7	Search (atrial [tiab] OR atrium [tiab] OR auricular [tiab]) AND fibrillation *[tiab]	32918
#6	Search Atrial Fibrillation [mh]	28044
#5	Search #1 OR #2 OR #3 OR #4	285625
#4	Search (myocardi *[ti] OR heart [ti] OR cardiac [ti] OR coronary [ti]) AND (atheroscleros *[ti] OR arterioscleros *[ti] OR infarct *[ti])	74988
#3	Search coronary artery disease [ti] OR cad [ti] OR heart attack *[ti]	20571
#2	Search Myocardial Infarction [mh]	133662
#1	Search Coronary Artery Disease [mh]	166906

Wiley Cochrane
Search run 2012Jan19

ID	Search	Hits
#1	MeSH descriptor Coronary Artery Disease explode all trees	2183
#2	MeSH descriptor Myocardial Infarction explode all trees	7746
#3	(myocardi* or heart or cardiac or coronary) NEAR/2 (atheroscleros* or arterioscleros* or infarct*):ti or (coronary artery disease or cad or heart attack*):ti	8469
#4	MeSH descriptor Atrial Fibrillation explode all trees	2102
#5	(atrial NEAR/2 fibrillation* or atrium NEAR/2 fibrillation* or auricular NEAR/2 fibrillation*):ti	2310
#6	MeSH descriptor Heart Failure explode all trees	4710
#7	(myocardi* NEAR/2 (failure or decompensation or insufficiency)):ti or (heart NEAR/2 (failure or decompensation or insufficiency)):ti or (cardiac NEAR/2 (failure or decompensation or insufficiency)):ti	5252
#8	MeSH descriptor Stroke explode all trees	3899
#9	MeSH descriptor Ischemic Attack, Transient explode all trees	466
#10	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA):ti	9902
#11	MeSH descriptor Diabetes Mellitus, Type 2 explode all trees	6993
#12	(diabetes or diabetic* or niddm or t2dm):ti	16585

#13	MeSH descriptor Skin Ulcer explode all trees	1572
#14	(pressure or bed or skin) NEAR/2 (ulcer* or sore* or wound*):ti	669
#15	(decubitus or bedsore*):ti	98
#16	MeSH descriptor Pulmonary Disease, Chronic Obstructive explode all trees	1754
#17	(chronic obstructive NEAR/2 (lung* or pulmonary or airway* or airflow or respiratory)):ti	2415
#18	(copd or coad):ti	3319
#19	(chronic airflow obstruction):ti	72
#20	MeSH descriptor Emphysema explode all trees	91
#21	(chronic NEAR/2 bronchitis) or emphysema:ti	1183
#22	(Chronic Disease):ti	4464
#23	((chronic* NEAR/2 disease*) or (chronic* NEAR/2 ill*)):ti	1670
#24	MeSH descriptor Comorbidity explode all trees	1941
#25	(comorbid* OR co-morbid* OR multimorbid* OR multi-morbid* OR (complex* NEXT patient*) OR "patient* with multiple" OR (multiple NEAR/2 (condition* OR disease*)):ti	649
#26	(#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25)	61123
#27	MeSH descriptor Appointments and Schedules, this term only	295
#28	MeSH descriptor Health Services Accessibility, this term only	410
#29	MeSH descriptor Patient-Centered Care explode all trees	203
#30	(patient-driven or patientdriven or patient-centered or patientcentered or patient-centred or patientcentred or same-day or sameday) NEAR/2 (access* or appointment* or booking? or schedul*):ti.ab.kw	13
#31	(advanced NEAR/2 access*) or (enhanc* NEXT access*) or ((advanc* access or open access) NEXT (appointment* or schedul*)):ti.ab.kw	26
#32	(#27 OR #28 OR #29 OR #30)	902
#33	((#26 AND #32) OR #31)	119
#34	((#26 AND #32) OR #31), from 2002 to 2012	8

Centre for Reviews and Dissemination
Search run 2012Jan19

Search	Hits	
1	MeSH DESCRIPTOR coronary artery disease EXPLODE ALL TREES	230
2	(coronary artery disease or cad or heart attack*):TI	211
3	((myocardi* or heart or cardiac or coronary) adj2 (atheroscleros* or arterioscleros* or infarct*)):TI	223
4	MeSH DESCRIPTOR Atrial Fibrillation EXPLODE ALL TREES	225
5	((atrial or atrium or auricular) adj1 fibrillation*):TI	0
6	((atrial or atrium or auricular) adj1 fibrillation*):TI	167
7	MeSH DESCRIPTOR heart failure EXPLODE ALL TREES	418
8	((myocardi* or heart or cardiac) adj2 (failure or decompensation or insufficiency)):TI	279
9	MeSH DESCRIPTOR stroke EXPLODE ALL TREES	549

10	MeSH DESCRIPTOR Ischemic Attack, Transient EXPLODE ALL TREES	32
11	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA):TI	621
12	MeSH DESCRIPTOR Diabetes Mellitus, Type 2 EXPLODE ALL TREES	511
13	(diabetes or diabetic* or niddm or t2dm):TI	1220
14	MeSH DESCRIPTOR Skin Ulcer EXPLODE ALL TREES	253
15	((pressure or bed or skin) adj2 (ulcer* or sore* or wound*)):TI	73
16	(decubitus or bedsore*):TI	0
17	MeSH DESCRIPTOR Pulmonary Disease, Chronic Obstructive EXPLODE ALL TREES	237
18	(chronic obstructive adj2 (lung* or pulmonary or airway* or airflow or respiratory)):TI	218
19	(copd or coad):TI	107
20	(chronic airflow obstruction):TI	0
21	MeSH DESCRIPTOR Emphysema EXPLODE ALL TREES	10
22	((chronic adj2 bronchitis) or emphysema):TI	47
23	MeSH DESCRIPTOR Chronic Disease EXPLODE ALL TREES	687
24	((chronic* adj2 disease*) or (chronic* adj2 ill*)):TI	249
25	MeSH DESCRIPTOR Comorbidity EXPLODE ALL TREES	146
26	(comorbid* OR co-morbid* OR multimorbid* OR multi-morbid* OR (complex* adj1 patient*) OR "patient* with multiple" OR (multiple adj2 (condition* OR disease*)):TI	22
27	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26	4644
28	MeSH DESCRIPTOR Appointments and Schedules EXPLODE ALL TREES	84
29	MeSH DESCRIPTOR Health Services Accessibility EXPLODE ALL TREES	197
30	MeSH DESCRIPTOR Patient-Centered Care EXPLODE ALL TREES	40
31	((patient-driven or patientdriven or patient-centered or patientcentered or patient-centred or patientcentred or same-day or sameday) adj2 (access* or appointment* or booking? or schedul*)):TI	2
32	((advanced adj2 access*) or (enhanc* adj1 access*) or ((advanc* access or open access) adj1 (appointment* or schedul*)):TI	2
33	#28 OR #29 OR #30 OR #31	310
34	#27 AND #33	24
35	#32 OR #34	26

Nursing – Economic Search
2012Aug15

Search date: August 15th, 2012

Databases searched: Ovid MEDLINE, Ovid MEDLINE In-Process and Other Non-Indexed Citations, Ovid EMBASE, PubMed (for non-MEDLINE records), Wiley Cochrane (HTA & NHSEED), Centre for Reviews and Dissemination

Limits: 2002-present; English; NOT comments, editorials, letters, conference abstract (EMBASE)

Database: Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R)1946 to Present, EMBASE <1980 to 2012 Week 32>

Search Strategy:

#	Searches	Results
1	exp Coronary Artery Disease/	229118
2	exp Myocardial Infarction/ use prmz	137438
3	exp heart infarction/ use emez	231179
4	(coronary artery disease or cad or heart attack*).ti.	47837
5	((myocardi* or heart or cardiac or coronary) adj2 (atheroscleros* or arterioscleros* or infarct*)).ti.	156317
6	or/1-5	572283
7	exp Atrial Fibrillation/ use prmz	29796
8	exp heart atrium fibrillation/ use emez	61196
9	((atrial or atrium or auricular) adj1 fibrillation*).ti,ab.	80553
10	or/7-9	108185
11	exp heart failure/	321154
12	((myocardi* or heart or cardiac) adj2 (failure or decompensation or insufficiency)).ti,ab.	252011
13	or/11-12	408033
14	exp Stroke/	192344
15	exp Ischemic Attack, Transient/ use prmz	16799
16	exp transient ischemic attack/ use emez	21128
17	exp stroke patient/ use emez	6274
18	exp brain infarction/ or exp cerebrovascular accident/ use emez	107109
19	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA).ti,ab.	305035
20	or/14-19	421423
21	exp Diabetes Mellitus, Type 2/ use prmz	73613
22	exp non insulin dependent diabetes mellitus/ use emez	113928
23	exp diabetic patient/ use emez	15238
24	(diabetes or diabetic* or niddm or t2dm).ti,ab.	827576
25	or/21-24	854579
26	exp Skin Ulcer/	76033
27	((pressure or bed or skin) adj2 (ulcer* or sore* or wound*)).ti,ab.	30732
28	(decubitus or bedsore*).ti,ab.	8898
29	or/26-28	96132
30	exp Pulmonary Disease, Chronic Obstructive/ use prmz	18847
31	exp chronic obstructive lung disease/ use emez	59156
32	(chronic obstructive adj2 (lung* or pulmonary or airway* or airflow or respiratory) adj (disease* or disorder*)).ti,ab.	59336

33	(copd or coad).ti,ab.	50278
34	chronic airflow obstruction.ti,ab.	1090
35	exp Emphysema/	39015
36	exp chronic bronchitis/ use emez	7164
37	((chronic adj2 bronchitis) or emphysema).ti,ab.	52943
38	or/30-37	169570
39	exp Chronic Disease/	358585
40	((chronic* adj2 disease*) or (chronic* adj2 ill*)).ti,ab.	240358
41	or/39-40	540078
42	exp Comorbidity/	158025
43	(comorbid* or co-morbid* or multimorbid* or multi-morbid* or (complex* adj patient*) or "patient* with multiple" or (multiple adj2 (condition* or disease*))).ti,ab.	227955
44	or/42-43	316167
45	6 or 10 or 13 or 20 or 25 or 29 or 38 or 41 or 44	3025391
46	exp nursing discipline/ or exp nurse/ or exp Team Nursing/ or exp nurse attitude/ or exp nurse patient relationship/ or exp doctor nurse relation/ or exp nursing staff/ use emez	346422
47	exp Nursing/ or exp nurse's practice patterns/ or exp nursing, team/ or exp nurses/ or exp nursing staff/ or exp Nurse's Role/ or exp Nurse-Patient Relations/ or exp physician-nurse relations/ or exp Nursing Process/ or exp nursing care/ or exp nursing services/ or exp Nursing Faculty Practice/ use pmz	792843
48	(nurse or nurses or nursing).ti,ab.	624089
49	or/46-48	1019656
50	exp Intermediate Care Facilities/ use pmz	603
51	(intermedia* adj2 care).ti,ab.	2522
52	exp ambulatory care/	78452
53	exp Ambulatory Care Facilities/ use pmz	40981
54	exp ambulatory care nursing/ use emez	9
55	exp Outpatients/ use pmz	7573
56	exp Outpatient Department/ use emez	34390
57	exp outpatient care/ use emez	18565
58	exp Community Health Services/ use pmz	457932
59	exp community care/ use emez	89835
60	exp Community Medicine/	3950
61	exp Subacute Care/ use pmz	714
62	exp General Practice/	126613
63	exp Primary Health Care/	162088
64	exp Physicians, Family/ or exp general practitioners/ or exp Physicians, Primary Care/ use pmz	65809
65	exp general practitioner/ use emez	49880
66	exp family medicine/ use emez	6089
67	exp Group Practice/ use pmz	22352
68	exp Team Nursing/ use emez	28
69	exp Primary Care Nursing/ use pmz	52
70	exp Patient Care Team/ use pmz	50441
71	exp Teamwork/ use emez	9602
72	*Patient Care Management/ use pmz	1311

73	((primary or family or community or outpatient* or ambulatory) adj2 (care* or physician* or nurs* or service* or clinic* or facility or facilities)).ti,ab.	352478
74	((transitional or multidisciplin* or multifacet* or multi-disciplin* or multi-facet* or cooperat* or co-operat* or interdisciplin* or inter-disciplin* or collaborat* or multispecial* or multi-special* or share or sharing or shared or integrat* or joint or multi-modal or multimodal) adj2 (care or team*)).ti,ab.	52649
75	(team* or liaison).ti,ab.	192091
76	((general or family or primary care or community) adj2 (practic* or clinic* or program* or doctor* or nurse* or physician*)).ti,ab.	226044
77	or/50-76	1420221
78	*Economics/ use prmz	10178
79	*Economics, Medical/ use prmz	5163
80	*Economics, Pharmaceutical/ use prmz	1242
81	exp "Costs and Cost Analysis"/ use prmz	166708
82	exp Models, Economic/ use prmz	8787
83	Markov Chains/ use prmz	8188
84	Monte Carlo Method/ use prmz	17300
85	Quality-Adjusted Life Years/ use prmz	5814
86	"Value of Life"/ use prmz	5229
87	Decision Trees/ use prmz	8074
88	exp "Health Care Cost"/ use emez	178191
89	exp *Health Economics/ use emez	175532
90	exp Economic Evaluation/ use emez	186842
91	Quality Adjusted Life Year/ use emez	9437
92	*Statistical Model/ use emez	12546
93	(econom* or cost or costly or costing or costed or price or prices or pricing or priced or discount or discounts or discounted or discounting or expenditure or expenditures or budget* or afford* or pharmaco-economic* or pharmaco-economic*).ti.	217335
94	(decision adj1 (tree* or analy* or model*)).ti,ab.	19795
95	((value or values or valuation) adj2 (money or monetary or life or lives or costs or cost)).ti,ab.	8385
96	(sensitivity analysis or sensitivity analyses or "willingness to pay" or quality-adjusted life year* or quality adjusted life year* or quality-adjusted life expectanc* or quality adjusted life expectanc* or disability adjusted life or health adjusted life).ti,ab.	40275
97	(unit cost* or drug cost* or hospital cost* or health care cost* or medical cost*).ti,ab.	45977
98	(economic evaluation* or economic review*).ti,ab.	13059
99	(cost* adj2 (util* or effectiveness or efficac* or benefit* or consequence* or analy* or minimi*)).ti,ab.	123458
100	(markov* or monte carlo).ti,ab.	67096
101	or/78-100	846143
102	Case Reports/ or Comment.pt. or Editorial.pt. or Letter.pt. use prmz	3031884
103	Case Report/ or Editorial/ or Letter/ or Conference Abstract.pt. use emez	6182350
104	or/102-103	6295848
105	101 not 104	749545
106	Meta-Analysis.pt.	35484
107	Meta-Analysis as Topic/ or exp Technology Assessment, Biomedical/	36737
108	((systematic* adj3 (review* or overview*)) or (methodologic* adj3 (review* or overview*))).ti,ab.	96595
109	((quantitative adj3 (review* or overview* or synthes*)) or (research adj3 (integrati* or overview*))).ti,ab.	9993

110	((integrative adj3 (review* or overview*)) or (collaborative adj3 (review* or overview*)) or (pool* adj3 analy*).ti,ab.	19322
111	(data syntheses* or data extraction* or data abstraction*).ti,ab.	24863
112	(handsearch* or hand search*).ti,ab.	9790
113	(mantel haenszel or peto or der simonian or dersimonian or fixed effect* or latin square*).ti,ab.	23913
114	(met analy* or metanaly* or health technology assessment* or HTA or HTAs).ti,ab.	5632
115	(meta regression* or metaregression* or mega regression*).ti,ab.	3835
116	(meta-analy* or metaanaly* or systematic review* or biomedical technology assessment* or bio-medical technology assessment*).mp,hw.	232371
117	(cochrane or health technology assessment or evidence report).jw.	22629
118	(Meta Analysis or Systematic Review or Biomedical Technology Assessment).sh.	141334
119	(Systematic Review Topic or Meta Analysis Topic).sh.	5857
120	or/106-119	313407
121	45 and 49 and 77 and 105 and 120	139
122	limit 121 to english language	136
123	limit 122 to yr="2002 -Current"	126
124	remove duplicates from 123	95

PubMed

Search	Query	Items found
#16	Search #1 AND #2 AND #5 AND #13 AND #14 AND #15	3
#15	Search publisher[sb] OR in process[sb] OR pubmednotmedline[sb]	1776609
#14	Search systematic[sb] OR meta-analysis[pt] OR meta-analysis as topic[mh] OR meta analy*[tw] OR metanaly*[tw] OR metaanaly*[tw] OR met analy*[tw] OR integrative research[tiab] OR integrative review*[tiab] OR integrative overview*[tiab] OR research integration*[tiab] OR research overview*[tiab] OR collaborative review*[tiab] OR collaborative overview*[tiab] OR systematic review*[tiab] OR technology assessment*[tiab] OR "Technology Assessment, Biomedical"[mh] OR HTA[tiab] OR HTAs[tiab] OR "Cochrane Database Syst Rev"[Journal: __jrid21711] OR "health technology assessment winchester, england"[Journal] OR "Evid Rep Technol Assess (Full Rep)"[Journal] OR "Evid Rep Technol Assess (Summ)"[Journal]	212005
#13	Search #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12	1489596
#12	Search (general[tiab] OR family[tiab] OR primary care[tiab] OR community[tiab]) AND (practic*[tiab] OR clinic*[tiab] OR program*[tiab] OR doctor*[tiab] OR nurse*[tiab] OR physician*[tiab])	441737
#11	Search team*[tiab] OR liaison[tiab]	83975
#10	Search (transitional[tiab] OR multidisciplin*[tiab] OR multifacet*[tiab] OR multi-disciplin*[tiab] OR multi-facet*[tiab] OR cooperat*[tiab] OR co-operat*[tiab] OR interdisciplin*[tiab] OR inter-disciplin*[tiab] OR collaborat*[tiab] OR multispecial*[tiab] OR multi-special*[tiab] OR share[tiab] OR sharing[tiab] OR shared[tiab] OR integrat*[tiab] OR joint[tiab] OR multi-modal[tiab] OR multimodal[tiab]) AND (care[tiab] OR team*[tiab])	102965
#9	Search (primary[tiab] OR family[tiab] OR community[tiab] OR outpatient*[tiab] OR ambulatory[tiab]) AND (care*[tiab] OR physician*[tiab] OR nurs*[tiab] OR service*[tiab] OR clinic*[tiab] OR facility[tiab] OR facilities[tiab])	572846
#8	Search intermedia*[tiab] AND care[tiab]	4988
#7	Search Physicians, Family[mh] OR General Practitioners[mh] OR Physicians, Primary Care[mh] OR Group Practice[mh] OR Primary Care Nursing[mh] OR Patient Care Team[mh] OR Patient Care Management[MAJR]	313992

Search	Query	Items found
#6	Search Intermediate Care Facilities[mh] OR Ambulatory Care[mh] OR Outpatients[mh] OR Ambulatory Care Facilities[mh] OR Community Health Services[mh] OR Community Medicine[mh] OR Subacute Care[mh] OR General Practice[mh] OR Primary Health Care[mh]	621977
#5	Search #3 OR #4	521843
#4	Search Nurse[tiab] OR nurses[tiab] OR nursing[tiab]	299207
#3	Search Nursing[mh] OR Nurse's Practice Patterns[mh] OR Nursing, Team OR Nurses[mh] OR Nursing Staff[mh] OR Nurse's Role[mh] OR Nurse-Patient Relations[mh] OR Physician-Nurse Relations[mh] OR Nursing Process[mh] OR Nursing Care[mh] OR Nursing Services[mh] OR Nursing Faculty Practice[mh]	406898
#2	Search ((Economics[MAJR:noexp]) OR (Economics, Medical[MAJR:noexp]) OR (Economics, Pharmaceutical[MAJR:noexp]) OR ("Costs and Cost Analysis"[mh]) OR (Models, Economic[mh]) OR (Markov Chains[mh]) OR (Monte Carlo Method[mh]) OR (Quality-Adjusted Life Years[mh]) OR ("Value of Life"[mh]) OR (Decision Trees[mh]) OR (econom*[ti] OR cost[ti] OR costly[ti] OR costing[ti] OR costed[ti] OR price[ti] OR prices[ti] OR pricing[ti] OR priced[ti] OR discount[ti] OR discounts[ti] OR discounted[ti] OR discounting[ti] OR expenditure[ti] OR expenditures[ti] OR budget*[ti] OR afford*[ti] OR pharmaco-economic*[ti] OR pharmaco-economic*[ti] OR (decision tree*[tiab] OR decision analy*[tiab] OR decision model*[tiab] OR (sensitivity analysis[tiab] OR sensitivity analyses[tiab] OR "willingness to pay"[tiab] OR quality-adjusted life year*[tiab] OR quality adjusted life year*[tiab] OR quality-adjusted life expectanc*[tiab] OR quality adjusted life expectanc*[tiab] OR disability adjusted life[tiab] OR health adjusted life[tiab]) OR (unit cost*[tiab] OR drug cost*[tiab] OR hospital cost*[tiab] OR health care cost*[tiab] OR medical cost*[tiab]) OR (economic evaluation*[tiab] OR economic review*[tiab]) OR (cost* AND util*[tiab] OR cost* AND effectiveness[tiab] OR cost* AND efficac*[tiab] OR cost* AND benefit*[tiab] OR cost* AND consequence*[tiab] OR cost* AND analy*[tiab] OR cost* AND minimi*[tiab]) OR (markov*[tiab] OR monte carlo[tiab]))	299301
#1	Search (((Coronary Artery Disease[mh]) OR (Myocardial Infarction[mh]) OR (coronary artery disease[ti] OR cad[ti] OR heart attack*[ti] OR ((myocardi*[ti] OR heart[ti] OR cardiac[ti] OR coronary[ti]) AND (atheroscleros*[ti] OR arterioscleros*[ti] OR infarct*[ti]))) OR ((Atrial Fibrillation[mh]) OR (atrial[tiab] OR atrium[tiab] OR auricular[tiab]) AND fibrillation*[tiab])) OR ((Heart Failure[mh]) OR ((myocardi*[tiab] OR heart[tiab] OR cardiac[tiab]) AND (failure[tiab] OR decompensation[tiab] OR insufficiency[tiab]))) OR ((Stroke[mh]) OR (Ischemic Attack, Transient[mh]) OR (stroke[tiab] OR tia[tiab] OR transient ischemic attack[tiab] OR cerebrovascular apoplexy[tiab] OR cerebrovascular accident[tiab] OR cerebrovascular infarct*[tiab] OR brain infarct*[tiab] OR CVA[tiab])) OR ((Diabetes Mellitus, Type 2[mh]) OR (diabetes[tiab] OR diabetic*[tiab] OR niddm[tiab] OR t2dm[tiab])) OR ((Skin Ulcer[mh]) OR ((pressure[tiab] OR bed[tiab] OR skin[tiab]) AND (ulcer*[tiab] OR sore*[tiab] OR wound*[tiab])) OR (decubitus[tiab] OR bedsore*[tiab])) OR ((Pulmonary Disease, Chronic Obstructive[mh]) OR (chronic obstructive[tiab] AND (lung*[tiab] OR pulmonary[tiab] OR airway*[tiab] OR airflow[tiab] OR respiratory[tiab]) AND (disease*[tiab] OR disorder*[tiab])) OR (copd[tiab] OR coad[tiab]) OR (chronic airflow obstruction[tiab]) OR (Emphysema[mh]) OR (chronic[tiab] AND bronchitis[tiab] OR emphysema[tiab])) OR ((Chronic Disease[mh]) OR ((chronic*[tiab] AND disease*[tiab]) OR (chronic*[tiab] AND ill*[tiab]))) OR ((Comorbidity[mh]) OR (comorbid*[tiab] OR co-morbid*[tiab] OR multimorbid*[tiab] OR multi-morbid*[tiab] OR (complex*[tiab] AND patient*[tiab]) OR "patient* with multiple"[tiab] OR (multiple[tiab] AND (condition*[tiab] OR disease*[tiab]))))	1746102

Wiley Cochrane

ID	Search	Hits
#1	MeSH descriptor Coronary Artery Disease explode all trees	2279
#2	MeSH descriptor Myocardial Infarction explode all trees	7899
#3	(myocardi* or heart or cardiac or coronary) NEAR/2 (atheroscleros* or arterioscleros* or infarct*):ti or (coronary artery disease or cad or heart attack*):ti	8592
#4	MeSH descriptor Atrial Fibrillation explode all trees	2185
#5	(atrial NEAR/2 fibrillation* or atrium NEAR/2 fibrillation* or auricular NEAR/2 fibrillation*):ti	2379
#6	MeSH descriptor Heart Failure explode all trees	4856

#7	(myocardi* NEAR/2 (failure or decompensation or insufficiency)):ti or (heart NEAR/2 (failure or decompensation or insufficiency)):ti or (cardiac NEAR/2 (failure or decompensation or insufficiency)):ti	5376
#8	MeSH descriptor Stroke explode all trees	4074
#9	MeSH descriptor Ischemic Attack, Transient explode all trees	472
#10	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA):ti	10042
#11	MeSH descriptor Diabetes Mellitus, Type 2 explode all trees	7253
#12	(diabetes or diabetic* or niddm or t2dm):ti	16997
#13	MeSH descriptor Skin Ulcer explode all trees	1608
#14	(pressure or bed or skin) NEAR/2 (ulcer* or sore* or wound*):ti	679
#15	(decubitus or bedsore*):ti	100
#16	MeSH descriptor Pulmonary Disease, Chronic Obstructive explode all trees	1835
#17	(chronic obstructive NEAR/2 (lung* or pulmonary or airway* or airflow or respiratory)):ti	2449
#18	(copd or coad):ti	3368
#19	(chronic airflow obstruction):ti	72
#20	MeSH descriptor Emphysema explode all trees	92
#21	(chronic NEAR/2 bronchitis) or emphysema:ti	1186
#22	MeSH descriptor Chronic Disease explode all trees	10062
#23	(chronic* NEAR/2 disease* or chronic* NEAR/2 ill*):ti	1721
#24	MeSH descriptor Comorbidity explode all trees	2011
#25	(comorbid* OR co-morbid* OR multimorbid* OR multi-morbid* OR (complex* NEXT patient*) OR "patient* with multiple" OR (multiple NEAR/2 (condition* OR disease*))) :ti	664
#26	(#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25)	69545
#27	MeSH descriptor Intermediate Care Facilities explode all trees	13
#28	(intermedia* NEAR/2 care):ti or (intermedia* NEAR/2 care):ab	96
#29	MeSH descriptor Ambulatory Care Facilities explode all trees	1434
#30	MeSH descriptor Outpatients explode all trees	694
#31	MeSH descriptor Community Health Services explode all trees	20115
#32	MeSH descriptor Community Medicine explode all trees	34
#33	MeSH descriptor Subacute Care explode all trees	16
#34	MeSH descriptor General Practice explode all trees	2121
#35	MeSH descriptor Primary Health Care explode all trees	2968
#36	MeSH descriptor Physicians, Family explode all trees	446
#37	MeSH descriptor General Practitioners explode all trees	33
#38	MeSH descriptor Physicians, Primary Care explode all trees	23
#39	MeSH descriptor Group Practice explode all trees	380
#40	MeSH descriptor Primary Care Nursing explode all trees	1
#41	MeSH descriptor Patient Care Team explode all trees	1181
#42	MeSH descriptor Patient Care Management explode all trees	13279

#43	((primary or family or community or outpatient* or ambulatory) NEAR/2 (care* or physician* or nurs* or service* or clinic* or facility or facilities)):ti and ((primary or family or community or outpatient* or ambulatory) NEAR/2 (care* or physician* or nurs* or service* or clinic* or facility or facilities)):ab	2123
#44	(transitional or multidisciplin* or multifacet* or multi-disciplin* or multi-facet* or cooperat* or co-operat* or interdisciplin* or inter-disciplin* or collaborat* or multispecial* or multi-special* or share or sharing or shared or integrat* or joint or multi-modal or multimodal) NEAR/2 (care or team*):ti or (transitional or multidisciplin* or multifacet* or multi-disciplin* or multi-facet* or cooperat* or co-operat* or interdisciplin* or inter-disciplin* or collaborat* or multispecial* or multi-special* or share or sharing or shared or integrat* or joint or multi-modal or multimodal) NEAR/2 (care or team*):ab	1128
#45	((general or family or primary care or community) NEAR/2 (practic* or clinic* or program* or doctor* or nuse* or physician*)):ti or ((general or family or primary care or community) NEAR/2 (practic* or clinic* or program* or doctor* or nuse* or physician*)):ab	8115
#46	(team* or liaison):ti or (team* or liaison):ab	3223
#47	(#27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41 OR #42 OR #43 OR #44 OR #45 OR #46)	39654
#48	(#26 AND #47)	5369
#49	MeSH descriptor Nurse's Role explode all trees	270
#50	MeSH descriptor Nursing explode all trees	2716
#51	MeSH descriptor Nurse's Practice Patterns explode all trees	17
#52	MeSH descriptor Nurses explode all trees	830
#53	MeSH descriptor Nursing, Team explode all trees	17
#54	MeSH descriptor Nursing Staff explode all trees	450
#55	MeSH descriptor Nurse-Patient Relations explode all trees	269
#56	MeSH descriptor Physician-Nurse Relations explode all trees	19
#57	MeSH descriptor Nursing Process explode all trees	1741
#58	MeSH descriptor Nursing Care explode all trees	1447
#59	MeSH descriptor Nursing Services explode all trees	1380
#60	MeSH descriptor Nursing Faculty Practice explode all trees	4
#61	(nurse or nurses or nursing):ti and (nurse or nurses or nursing):ab	2323
#62	(#49 OR #50 OR #51 OR #52 OR #53 OR #54 OR #55 OR #56 OR #57 OR #58 OR #59 OR #60 OR #61)	6624
#63	(#48 AND #62)	878
#64	(#48 AND #62)	84

=15 results (2002-current; English) NHSEED

Centre for Reviews and Dissemination

Line	Search	Hits
1	MeSH DESCRIPTOR coronary artery disease EXPLODE ALL TREES	313
2	(coronary artery disease or cad or heart attack*):TI	236
3	((myocardi* or heart or cardiac or coronary) adj2 (atheroscleros* or arterioscleros* or infarct*)):TI	238
4	MeSH DESCRIPTOR Atrial Fibrillation EXPLODE ALL TREES	290
5	((atrial or atrium or auricular) adj1 fibrillation*):TI	0

6	((atrial or atrium or auricular) adj1 fibrillation*):TI	192
7	MeSH DESCRIPTOR heart failure EXPLODE ALL TREES	510
8	((myocardi* or heart or cardiac) adj2 (failure or decompensation or insufficiency)):TI	304
9	MeSH DESCRIPTOR stroke EXPLODE ALL TREES	708
10	MeSH DESCRIPTOR Ischemic Attack, Transient EXPLODE ALL TREES	43
11	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA):TI	695
12	MeSH DESCRIPTOR Diabetes Mellitus, Type 2 EXPLODE ALL TREES	664
13	(diabetes or diabetic* or niddm or t2dm):TI	1357
14	MeSH DESCRIPTOR Skin Ulcer EXPLODE ALL TREES	283
15	((pressure or bed or skin) adj2 (ulcer* or sore* or wound*)):TI	81
16	(decubitus or bedsore*):TI	0
17	MeSH DESCRIPTOR Pulmonary Disease, Chronic Obstructive EXPLODE ALL TREES	298
18	(chronic obstructive adj2 (lung* or pulmonary or airway* or airflow or respiratory)):TI	240
19	(copd or coad):TI	123
20	(chronic airflow obstruction):TI	0
21	MeSH DESCRIPTOR Emphysema EXPLODE ALL TREES	19
22	((chronic adj2 bronchitis) or emphysema):TI	50
23	MeSH DESCRIPTOR Chronic Disease EXPLODE ALL TREES	794
24	((chronic* adj2 disease*) or (chronic* adj2 ill*)):TI	274
25	MeSH DESCRIPTOR Comorbidity EXPLODE ALL TREES	181
26	(comorbid* OR co-morbid* OR multimorbid* OR multi-morbid* OR (complex* adj1 patient*) OR "patient* with multiple" OR (multiple adj2 (condition* OR disease*))) :TI	29
27	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26	5255
28	MeSH DESCRIPTOR nursing EXPLODE ALL TREES	321
29	MeSH DESCRIPTOR Nurse-Patient Relations EXPLODE ALL TREES	21
30	MeSH DESCRIPTOR nursing staff EXPLODE ALL TREES	45
31	MeSH DESCRIPTOR nurses EXPLODE ALL TREES	121
32	MeSH DESCRIPTOR nursing, team EXPLODE ALL TREES	3
33	MeSH DESCRIPTOR physician-nurse relations EXPLODE ALL TREES	3
34	MeSH DESCRIPTOR Nursing Process EXPLODE ALL TREES	150

35	MeSH DESCRIPTOR Nursing care EXPLODE ALL TREES	219
36	MeSH DESCRIPTOR nursing services EXPLODE ALL TREES	284
37	MeSH DESCRIPTOR nursing faculty practice EXPLODE ALL TREES	0
38	MeSH DESCRIPTOR Nurse's Role EXPLODE ALL TREES	64
39	(nurse or nurses or nursing)	3393
40	#28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39	3556
41	MeSH DESCRIPTOR Intermediate Care Facilities EXPLODE ALL TREES	4
42	(intermedia* adj2 care)	40
43	MeSH DESCRIPTOR ambulatory care EXPLODE ALL TREES	350
44	MeSH DESCRIPTOR Ambulatory Care Facilities EXPLODE ALL TREES	207
45	MeSH DESCRIPTOR Outpatients EXPLODE ALL TREES	76
46	MeSH DESCRIPTOR Community Health Services EXPLODE ALL TREES	4191
47	MeSH DESCRIPTOR Community Medicine EXPLODE ALL TREES	3
48	MeSH DESCRIPTOR Subacute Care EXPLODE ALL TREES	7
49	MeSH DESCRIPTOR Primary Health Care EXPLODE ALL TREES	691
50	MeSH DESCRIPTOR Physicians, Family EXPLODE ALL TREES	50
51	MeSH DESCRIPTOR Group Practice EXPLODE ALL TREES	65
52	MeSH DESCRIPTOR Patient Care Team EXPLODE ALL TREES	213
53	MeSH DESCRIPTOR Patient Care Management EXPLODE ALL TREES	2456
54	((primary or family or community or outpatient* or ambulatory) adj2 (care* or physician* or nurs* or service* or clinic* or facility or facilities))) OR (((transitional or multidisciplin* or multifacet* or multi-disciplin* or multi-facet* or cooperat* or co-operat* or interdisciplin* or inter-disciplin* or collaborat* or multispecial* or multi-special* or share or sharing or shared or integrat* or joint or multi-modal or multimodal) adj2 (care or team*))) OR (team* or liaison) OR (general or family or primary care or community) adj2 (practic* or clinic* or program* or doctor* or nuse* or physician*))	2158
55	#41 OR #42 OR #43 OR #44 OR #45 OR #46 OR #47 OR #48 OR #49 OR #50 OR #51 OR #52 OR #53 OR #54	7685
56	#27 AND #40 AND #55	301

=113 results (2002-current; English) NHSEED

Cardiac Rehab – Economic Search
2012Feb14

Search date: February 14th, 2012

Databases searched: Ovid MEDLINE, Ovid MEDLINE In-Process and Other Non-Indexed Citations, Ovid EMBASE, PubMed (for non-MEDLINE records), Wiley Cochrane (HTA & NHSEED), Centre for Reviews and Dissemination

Limits: 2002-present (SR/MA/HTA filter) & 2010-present primary studies; English; NOT comments, editorials, letters, conference abstract (EMBASE)

Database: **Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R)**1946 to Present, EMBASE <1980 to 2012 Week 06>

Search Strategy:

#	Searches	Results
1	exp Coronary Artery Disease/	212867
2	exp Myocardial Infarction/ use pmz	134000
3	exp heart infarction/ use emez	217674
4	(coronary artery disease or cad or heart attack*).ti.	45245
5	((myocardi* or heart or cardiac or coronary) adj2 (atheroscleros* or arterioscleros* or infarct*)).ti.	149895
6	or/1-5	541796
7	exp heart failure/	302389
8	((myocardi* or heart or cardiac) adj2 (failure or decompensation or insufficiency)).ti,ab.	235747
9	or/7-8	383648
10	exp Chronic Disease/	341731
11	((chronic* adj2 disease*) or (chronic* adj2 ill*)).ti,ab.	221492
12	or/10-11	508487
13	exp Comorbidity/	144447
14	(comorbid* or co-morbid* or multimorbid* or multi-morbid* or (complex* adj patient*) or "patient* with multiple" or (multiple adj2 (condition* or disease*))).ti,ab.	205122
15	or/13-14	286249
16	6 or 9 or 12 or 15	1592562
17	*Rehabilitation/ use pmz	12293
18	exp Dance Therapy/ use pmz	169
19	exp Early Ambulation/ use pmz	1706
20	exp Exercise Therapy/ use pmz	24263
21	exp Occupational Therapy/ use pmz	9225
22	exp Recreation Therapy/ use pmz	16
23	*Rehabilitation/ use emez	21295
24	Athletic Rehabilitation/ use emez	71
25	Community Based Rehabilitation/ use emez	318
26	Community Reintegration/ use emez	184
27	Functional Assessment/ use emez	40338
28	Functional Training/ use emez	358
29	Geriatric Rehabilitation/ use emez	318
30	Home Rehabilitation/ use emez	186
31	Muscle Training/ use emez	4058
32	Occupational Therapy/ use emez	14406
33	Recreational Therapy/ use emez	138
34	Rejuvenation/ use emez	1996
35	Exercise/ use emez	144749
36	Kinesiotherapy/ use emez	19109
37	Physiotherapy/ use emez	43028

38	exp Rehabilitation Nursing/ use emez	864
39	exp Physical Therapy Modalities/ use prmz	108458
40	exp Rehabilitation Centers/ use prmz	10803
41	exp rehabilitation center/ or exp Rehabilitation Care/ or exp rehabilitation medicine/ use emez	28155
42	exp physical medicine/ use emez	328855
43	(rehabilitat* or (physical* adj (therap* or train*)) or (train* adj (aerobic* or resistance or strength*)) or (exercise* adj (therap* or train*)) or kinesiotherap* or physiotherap*).ti.	121737
44	or/17-43	737039
45	Heart Rehabilitation/ use emez	4143
46	((cardiac* or coronary or heart* or myocardial) adj3 rehab*).ti.	6643
47	or/45-46	8826
48	(16 and 44) or 47	79621
49	*Economics/ use prmz	10096
50	*Economics, Medical/ use prmz	5122
51	*Economics, Pharmaceutical/ use prmz	1204
52	exp "Costs and Cost Analysis"/ use prmz	160841
53	exp Models, Economic/ use prmz	8328
54	Markov Chains/ use prmz	7589
55	Monte Carlo Method/ use prmz	16225
56	Quality-Adjusted Life Years/ use prmz	5335
57	"Value of Life"/ use prmz	5197
58	Decision Trees/ use prmz	7814
59	exp "Health Care Cost"/ use emez	169779
60	exp *Health Economics/ use emez	166975
61	exp Economic Evaluation/ use emez	177072
62	Quality Adjusted Life Year/ use emez	8345
63	*Statistical Model/ use emez	11179
64	(econom* or cost or costly or costing or costed or price or prices or pricing or priced or discount or discounts or discounted or discounting or expenditure or expenditures or budget* or afford* or pharmaco-economic* or pharmaco-economic*).ti.	206032
65	(decision adj1 (tree* or analy* or model*)).ti,ab.	18196
66	((value or values or valuation) adj2 (money or monetary or life or lives or costs or cost)).ti,ab. (sensitivity analysis or sensitivity analyses or "willingness to pay" or quality-adjusted life year* or quality	7846
67	adjusted life year* or quality-adjusted life expectanc* or quality adjusted life expectanc* or disability adjusted life or health adjusted life).ti,ab.	36037
68	(unit cost* or drug cost* or hospital cost* or health care cost* or medical cost*).ti,ab.	42857
69	(economic evaluation* or economic review*).ti,ab.	12105
70	(cost* adj2 (util* or effectiveness or efficac* or benefit* or consequence* or analy* or minimi*)).ti,ab.	114860
71	(markov* or monte carlo).ti,ab.	62381
72	or/49-71	804490
73	Case Reports/ or Comment.pt. or Editorial.pt. or Letter.pt. use prmz	2932274
74	Case Report/ or Editorial/ or Letter/ or Conference Abstract.pt. use emez	5827934
75	or/73-74	5933590
76	Meta-Analysis.pt.	31464
77	Meta-Analysis as Topic/ or exp Technology Assessment, Biomedical/	34121

78	((systematic* adj3 (review* or overview*)) or (methodologic* adj3 (review* or overview*))).ti,ab.	84366
79	((quantitative adj3 (review* or overview* or synthes*)) or (research adj3 (integrati* or overview*))).ti,ab.	9315
80	((integrative adj3 (review* or overview*)) or (collaborative adj3 (review* or overview*)) or (pool* adj3 analy*)).ti,ab.	17144
81	(data synthes* or data extraction* or data abstraction*).ti,ab.	22797
82	(handsearch* or hand search*).ti,ab.	8958
83	(mantel haenszel or peto or der simonian or dersimonian or fixed effect* or latin square*).ti,ab.	22092
84	(met analy* or metanaly* or health technology assessment* or HTA or HTAs).ti,ab.	5050
85	(meta regression* or metaregression* or mega regression*).ti,ab.	3202
86	(meta-analy* or metaanaly* or systematic review* or biomedical technology assessment* or bio-medical technology assessment*).mp,hw.	207910
87	(cochrane or health technology assessment or evidence report).jw.	21051
88	(Meta Analysis or Systematic Review or Biomedical Technology Assessment).sh.	127577
89	(Systematic Review Topic or Meta Analysis Topic).sh.	3909
90	or/76-89	283909
91	48 and 72 and 90	361
92	limit 91 to english language	343
93	limit 92 to yr="2002 -Current"	300
94	remove duplicates from 93	273
95	48 and 72	3512
96	95 not 75	3045
97	limit 96 to english language	2669
98	limit 97 to yr="2010 -Current"	470
99	remove duplicates from 98	434
100	94 or 99	652

PubMed

Coronary Artery Disease[mh]
 Myocardial Infarction[mh]
 coronary artery disease[ti] OR cad[ti] OR heart attack*[ti]
 (myocardi*[ti] OR heart[ti] OR cardiac[ti] OR coronary[ti]) AND (atheroscleros*[ti] OR arterioscleros*[ti] OR infarct*[ti])
 Heart Failure[mh]
 (myocardi*[tiab] OR heart[tiab] OR cardiac[tiab]) AND (failure[tiab] OR decompensation[tiab] OR insufficiency[tiab])
 Chronic Disease[mh]
 (chronic*[tiab] AND disease*[tiab]) OR (chronic*[tiab] AND ill*[tiab])
 Comorbidity[mh]
 comorbid*[tiab] OR co-morbid*[tiab] OR multimorbid*[tiab] OR multi-morbid*[tiab] OR (complex*[tiab] AND patient*[tiab])
 OR "patient* with multiple"[tiab] OR (multiple[tiab] AND (condition*[tiab] OR disease*[tiab]))
 OR/

AND

Rehabilitation[majr:noexp]
 Dance Therapy[mh]
 Early Ambulation[mh]
 Exercise Therapy[mh]
 Occupational Therapy[mh]
 Recreation Therapy[mh]
 Physical Therapy Modalities[mh]
 Rehabilitation Centers[mh]
 rehabilitat*[ti] OR physical* therap*[ti] OR physical* train*[ti] OR (train*[ti] AND (aerobic*[ti] OR resistance[ti] OR strength*[ti])) OR (exercise*[ti] AND (therap*[ti] OR train*[ti])) or kinesiotherap*[ti] OR physiotherap*[ti]

OR/
(cardiac*[ti] OR coronary[ti] OR heart*[ti] OR myocardial[ti]) AND rehab*[ti]

AND

Economics[MAJR:NOEXP]
Economics, Medical[MAJR:NOEXP]
Economics, Pharmaceutical[MAJR:NOEXP]
"Costs and Cost Analysis"[mh]
Models, Economic[mh]
Markov Chains[mh]
Monte Carlo Method[mh]
Quality-Adjusted Life Years[mh]
"Value of Life"[mh]
Decision Trees[mh]
econom*[ti] OR cost[ti] OR costly[ti] OR costing[ti] OR costed[ti] OR price[ti] OR prices[ti] OR pricing[ti] OR priced[ti] OR discount[ti] OR discounts[ti] OR discounted[ti] OR discounting[ti] OR expenditure[ti] OR expenditures[ti] OR budget*[ti] OR afford*[ti] OR pharmacoeconomic*[ti] OR pharmaco-economic*[ti]
decision tree*[tiab] OR decision analy*[tiab] OR decision model*[tiab]
sensitivity analysis[tiab] OR sensitivity analyses[tiab] OR "willingness to pay"[tiab] OR quality-adjusted life year*[tiab] OR quality adjusted life year*[tiab] OR quality-adjusted life expectanc*[tiab] OR quality adjusted life expectanc*[tiab] OR disability adjusted life[tiab] OR health adjusted life[tiab]
unit cost*[tiab] OR drug cost*[tiab] OR hospital cost*[tiab] OR health care cost*[tiab] OR medical cost*[tiab]
economic evaluation*[tiab] OR economic review*[tiab]
cost* util*[tiab] OR cost* effectiveness[tiab] OR cost* efficac*[tiab] OR cost* benefit*[tiab] OR cost* consequence*[tiab]
OR cost* analy*[tiab] OR cost* minimi*[tiab]
markov*[tiab] OR monte carlo[tiab]

AND

systematic[sb] OR meta-analysis[pt] OR meta-analysis as topic[mh] OR meta analy*[tw] OR metanaly*[tw] OR metaanaly*[tw] OR met analy*[tw] OR integrative research[tiab] OR integrative review*[tiab] OR integrative overview*[tiab] OR research integration*[tiab] OR research overview*[tiab] OR collaborative review*[tiab] OR collaborative overview*[tiab] OR systematic review*[tiab] OR technology assessment*[tiab] OR "Technology Assessment, Biomedical"[mh] OR HTA[tiab] OR HTAs[tiab] OR "Cochrane Database Syst Rev"[Journal: __jrid21711] OR "health technology assessment winchester, england"[Journal] OR "Evid Rep Technol Assess (Full Rep)"[Journal] OR "Evid Rep Technol Assess (Summ)"[Journal]

publisher[sb] OR in process[sb] OR pubmednotmedline[sb]

Limit to English

Search	Query	Items found
#45 Search #23 AND #41 AND #43 Limits: English		3
#44 Search #23 AND #41 AND #43		4
#43 Search publisher[sb] OR in process[sb] OR pubmednotmedline[sb]		1690740
#42 Search systematic[sb] OR meta-analysis[pt] OR meta-analysis as topic[mh] OR meta analy*[tw] OR metanaly*[tw] OR metaanaly*[tw] OR met analy*[tw] OR integrative research[tiab] OR integrative review*[tiab] OR integrative overview*[tiab] OR research integration*[tiab] OR research overview*[tiab] OR collaborative review*[tiab] OR collaborative overview*[tiab] OR systematic review*[tiab] OR technology assessment*[tiab] OR "Technology Assessment, Biomedical"[mh] OR HTA[tiab] OR HTAs[tiab] OR "Cochrane Database Syst Rev"[Journal: __jrid21711] OR "health technology assessment winchester, england"[Journal] OR "Evid Rep Technol Assess (Full Rep)"[Journal] OR "Evid Rep Technol Assess (Summ)"[Journal]		198866
#41 Search #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40		290294
#40 Search markov*[tiab] OR monte carlo[tiab]		34080
#39 Search cost* util*[tiab] OR cost* effectiveness[tiab] OR cost* efficac*[tiab] OR cost* benefit*[tiab] OR cost* consequence*[tiab] OR cost* analy*[tiab] OR cost* minimi*[tiab]		6294
#38 Search economic evaluation*[tiab] OR economic review*[tiab]		5350

Search	Query	Items found
#37	Search unit cost*[tiab] OR drug cost*[tiab] OR hospital cost*[tiab] OR health care cost*[tiab] OR medical cost*[tiab]	19151
#36	Search sensitivity analysis[tiab] OR sensitivity analyses[tiab] OR "willingness to pay"[tiab] OR quality-adjusted life year*[tiab] OR quality adjusted life year*[tiab] OR quality-adjusted life expectanc*[tiab] OR quality adjusted life expectanc*[tiab] OR disability adjusted life[tiab] OR health adjusted life[tiab]	16146
#35	Search decision tree*[tiab] OR decision analy*[tiab] OR decision model*[tiab]	8210
#34	Search econom*[ti] OR cost[ti] OR costly[ti] OR costing[ti] OR costed[ti] OR price[ti] OR prices[ti] OR pricing[ti] OR priced[ti] OR discount[ti] OR discounts[ti] OR discounted[ti] OR discounting[ti] OR expenditure[ti] OR expenditures[ti] OR budget*[ti] OR afford*[ti] OR pharmacoeconomic*[ti] OR pharmaco-economic*[ti]	95728
#33	Search Decision Trees[mh]	7797
#32	Search "Value of Life"[mh]	5194
#31	Search Quality-Adjusted Life Years[mh]	5306
#30	Search Monte Carlo Method[mh]	16155
#29	Search Markov Chains[mh]	7553
#28	Search Models, Economic[mh]	8315
#27	Search "Costs and Cost Analysis"[mh]	160634
#26	Search Economics, Pharmaceutical[MAJR:NOEXP]	1203
#25	Search Economics, Medical[MAJR:NOEXP]	5145
#24	Search Economics[MAJR:NOEXP]	10093
#23	Search (#11 AND #21) OR #22	18432
#22	Search (cardiac*[ti] OR coronary[ti] OR heart*[ti] OR myocardial[ti]) AND rehab*[ti]	4071
#21	Search #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20	155810
#20	Search rehabilitat*[ti] OR physical* therap*[ti] OR physical* train*[ti] OR (train*[ti] AND (aerobic*[ti] OR resistance[ti] OR strength*[ti])) OR (exercise*[ti] AND (therap*[ti] OR train*[ti])) or kinesiotherap*[ti] OR physiotherap*[ti]	25664
#19	Search Rehabilitation Centers[mh]	10785
#18	Search Physical Therapy Modalities[mh]	108879
#17	Search Recreation Therapy[mh]	16
#16	Search Occupational Therapy[mh]	9257
#15	Search Exercise Therapy[mh]	24265
#14	Search Early Ambulation[mh]	1671
#13	Search Dance Therapy[mh]	169
#12	Search Rehabilitation[majr:noexp]	12429
#11	Search #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10	1168979
#10	Search comorbid*[tiab] OR co-morbid*[tiab] OR multimorbid*[tiab] OR multi-morbid*[tiab] OR (complex*[tiab] AND patient*[tiab]) OR "patient* with multiple"[tiab] OR (multiple[tiab] AND (condition*[tiab] OR disease*[tiab]))	369969
#9	Search Comorbidity[mh]	52636
#8	Search (chronic*[tiab] AND disease*[tiab]) OR (chronic*[tiab] AND ill*[tiab])	278310
#7	Search Chronic Disease[mh]	202656
#6	Search (myocardi*[tiab] OR heart[tiab] OR cardiac[tiab]) AND (failure[tiab] OR decompensation[tiab] OR insufficiency[tiab])	135803
#5	Search Heart Failure[mh]	75294
#1	Search (myocardi*[ti] OR heart[ti] OR cardiac[ti] OR coronary[ti]) AND (atheroscleros*[ti] OR arterioscleros*[ti] OR infarct*[ti])	75195
#4	Search coronary artery disease[ti] OR cad[ti] OR heart attack*[ti]	20680
#3	Search Myocardial Infarction[mh]	134110
#2	Search Coronary Artery Disease[mh]	167369

Wiley Cochrane

ID	Search	Hits
#1	MeSH descriptor Coronary Artery Disease explode all trees	2183
#2	MeSH descriptor Myocardial Infarction explode all trees	7746
#3	(myocardi* or heart or cardiac or coronary) NEAR/2 (atheroscleros* or arterioscleros* or infarct*):ti or (coronary artery disease or cad or heart attack*):ti	8469
#4	MeSH descriptor Heart Failure explode all trees	4710
#5	(myocardi* NEAR/2 (failure or decompensation or insufficiency)):ti or (heart NEAR/2 (failure or decompensation or insufficiency)):ti or (cardiac NEAR/2 (failure or decompensation or insufficiency)):ti	5252
#6	MeSH descriptor Chronic Disease explode all trees	9875
#7	(chronic* NEAR/2 disease* or chronic* NEAR/2 ill*):ti	1670
#8	MeSH descriptor Comorbidity explode all trees	1941
#9	(comorbid* OR co-morbid* OR multimorbid* OR multi-morbid* OR (complex* NEXT patient*) OR "patient* with multiple" OR (multiple NEAR/2 (condition* OR disease*))) :ti	649
#10	(#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9)	30722
#11	MeSH descriptor Rehabilitation, this term only	259
#12	MeSH descriptor Dance Therapy explode all trees	23
#13	MeSH descriptor Early Ambulation explode all trees	255
#14	MeSH descriptor Exercise Therapy explode all trees	5072
#15	MeSH descriptor Occupational Therapy explode all trees	441
#16	MeSH descriptor Recreation Therapy explode all trees	4
#17	MeSH descriptor Physical Therapy Modalities explode all trees	12056
#18	MeSH descriptor Rehabilitation Centers explode all trees	495
#19	(rehabilitat*):ti or (physical* NEXT (therap* OR train*)):ti or (train* NEXT (aerobic* OR resistance OR strength*)):ti or (exercise* NEXT (therap* OR train*)):ti or (kinesiotherap* OR physiotherap*):ti	7131
#20	(#11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19)	18066
#21	(#10 AND #20)	1685
#22	(cardiac* OR coronary OR heart* OR myocardial) NEAR/3 rehab* :ti	400
#23	(#21 OR #22), from 2002 to 2012	1171

The screenshot shows the Wiley Online Library search interface. The search results are filtered to show 21 results from the Cochrane Database of Systematic Reviews. The results list includes titles, authors, and dates for various systematic reviews on topics like aquatic exercise, cardiac rehabilitation, and exercise training.

Centre for Reviews and Dissemination

Line	Search	Hits
1	MeSH DESCRIPTOR coronary artery disease EXPLODE ALL TREES	283
2	(coronary artery disease or cad or heart attack*):TI	213
3	((myocardi* or heart or cardiac or coronary) adj2 (atheroscleros* or arterioscleros* or infarct*)):TI	225
4	MeSH DESCRIPTOR heart failure EXPLODE ALL TREES	479
5	((myocardi* or heart or cardiac) adj2 (failure or decompensation or insufficiency)):TI	283
6	MeSH DESCRIPTOR Chronic Disease EXPLODE ALL TREES	753
7	((chronic* adj2 disease*) or (chronic* adj2 ill*)):TI	253
8	MeSH DESCRIPTOR Comorbidity EXPLODE ALL TREES	158
9	(comorbid* OR co-morbid* OR multimorbid* OR multi-morbid* OR (complex* adj1 patient*) OR "patient* with multiple" OR (multiple adj2 (condition* OR disease*)):TI	22
10	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9	2128
11	MeSH DESCRIPTOR Rehabilitation	87
12	MeSH DESCRIPTOR Dance Therapy EXPLODE ALL TREES	1
13	MeSH DESCRIPTOR Early Ambulation EXPLODE ALL TREES	22
14	MeSH DESCRIPTOR Exercise Therapy EXPLODE ALL TREES	555
15	MeSH DESCRIPTOR Occupational Therapy EXPLODE ALL TREES	65
16	MeSH DESCRIPTOR Physical Therapy Modalities EXPLODE ALL TREES	1467

17	MeSH DESCRIPTOR Rehabilitation Centers EXPLODE ALL TREES	69
18	(rehabilitat*):TI OR (physical* adj (therap* or train*)):TI OR (train* adj (aerobic* or resistance or strength*)):TI OR (exercise* adj (therap* or train*)):TI OR (kinesiotherap* or physiotherap*):TI	699
19	#11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18	1966
20	((cardiac* or coronary or heart* or myocardial) adj3 rehab*):TI	36
21	#10 AND #19	171
22	#20 OR #21	196
23	* FROM 2002 TO 2012	36226
24	#22 AND #23	172

Continuity of Care – Economic Search
2012Jan19

Search date: January 19th, 2012

Databases searched: Ovid MEDLINE, Ovid MEDLINE In-Process and Other Non-Indexed Citations, Ovid EMBASE, Wiley Cochrane (HTA & NHSEED), Centre for Reviews and Dissemination (HTA & NHSEED)

Limits: 2002-present; English; NOT comments, editorials, letters, conference abstract (EMBASE)

Database: Ovid MEDLINE(R) <1946 to January Week 2>, Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations <January 18, 2012>, EMBASE <1980 to 2012 Week 02>

Search Strategy:

Search run 2012Jan19

#	Searches	Results
1	exp Coronary Artery Disease/	211683
2	exp Myocardial Infarction/ use prmz	133477
3	exp heart infarction/ use emez	216531
4	(coronary artery disease or cad or heart attack*).ti.	45038
5	((myocardi* or heart or cardiac or coronary) adj2 (atheroscleros* or arterioscleros* or infarct*)).ti.	149415
6	or/1-5	539278
7	exp Atrial Fibrillation/ use prmz	28045
8	exp heart atrium fibrillation/ use emez	55357
9	((atrial or atrium or auricular) adj1 fibrillation*).ti,ab.	73301
10	or/7-9	99152
11	exp heart failure/	300244
12	((myocardi* or heart or cardiac) adj2 (failure or decompensation or insufficiency)).ti,ab.	234111
13	or/11-12	381055
14	exp Stroke/	177671
15	exp Ischemic Attack, Transient/ use prmz	16364
16	exp transient ischemic attack/ use emez	19630
17	exp stroke patient/ use emez	5626
18	exp brain infarction/ or exp cerebrovascular accident/ use emez	100872

19	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA).ti,ab.	280505
20	or/14-19	390735
21	exp Diabetes Mellitus, Type 2/ use prmz	68071
22	exp non insulin dependent diabetes mellitus/ use emez	101327
23	exp diabetic patient/ use emez	12828
24	(diabetes or diabetic* or niddm or t2dm).ti,ab.	763637
25	or/21-24	788513
26	exp Skin Ulcer/	71958
27	((pressure or bed or skin) adj2 (ulcer* or sore* or wound*)).ti,ab.	28634
28	(decubitus or bedsore*).ti,ab.	8517
29	or/26-28	90626
30	exp Pulmonary Disease, Chronic Obstructive/ use prmz	17004
31	exp chronic obstructive lung disease/ use emez	54556
32	(chronic obstructive adj2 (lung* or pulmonary or airway* or airflow or respiratory) adj (disease* or disorder*)).ti,ab.	54290
33	(copd or coad).ti,ab.	45419
34	chronic airflow obstruction.ti,ab.	1062
35	exp Emphysema/	37372
36	exp chronic bronchitis/ use emez	6962
37	((chronic adj2 bronchitis) or emphysema).ti,ab.	50775
38	or/30-37	158909
39	exp Chronic Disease/	340455
40	((chronic* adj2 disease*) or (chronic* adj2 ill*)).ti,ab.	219548
41	or/39-40	505746
42	exp Comorbidity/	143174
43	(comorbid* or co-morbid* or multimorbid* or multi-morbid* or (complex* adj patient*) or "patient* with multiple" or (multiple adj2 (condition* or disease*))).ti,ab.	202840
44	or/42-43	283385
45	6 or 10 or 13 or 20 or 25 or 29 or 38 or 41 or 44	2817908
46	Continuity of Patient Care/ use prmz	12345
47	"Referral and Consultation"/ use prmz	45944
48	((continuity or continuum) adj5 (care or health care or healthcare or in-patient? or inpatient? or patient? or physician? or provider? or out-patient? or outpatient? or visit?)) or continuity-of-care or continuous care or continuous health care or continuous healthcare).ti,ab.	16205
49	((patient-physician relation* or physician-patient relation* or patient relation?) and (continuous* or length or time)).mp.	15487
50	*Patient Care/ use emez	36214
51	*Patient Referral/ use emez	11098
52	or/46-51	130598
53	*Economics/ use prmz	10087
54	*Economics, Medical/ use prmz	5122
55	*Economics, Pharmaceutical/ use prmz	1203
56	exp "Costs and Cost Analysis"/ use prmz	160206
57	exp Models, Economic/ use prmz	8274

58 Markov Chains/ use prmz	7519
59 Monte Carlo Method/ use prmz	16060
60 Quality-Adjusted Life Years/ use prmz	5271
61 "Value of Life"/ use prmz	5190
62 Decision Trees/ use prmz	7752
63 exp "Health Care Cost"/ use emez	168886
64 exp *Health Economics/ use emez	166475
65 exp Economic Evaluation/ use emez	176160
66 Quality Adjusted Life Year/ use emez	8255
67 *Statistical Model/ use emez	11107
(econom* or cost or costly or costing or costed or price or prices or pricing or priced or discount or discounts or	
68 discounted or discounting or expenditure or expenditures or budget* or afford* or pharmaco-economic* or	204978
pharmaco-economic*).ti.	
69 (decision adj1 (tree* or analy* or model*).ti,ab.	18028
70 ((value or values or valuation) adj2 (money or monetary or life or lives or costs or cost)).ti,ab.	7800
(sensitivity analysis or sensitivity analyses or "willingness to pay" or quality-adjusted life year* or quality adjusted	
71 life year* or quality-adjusted life expectanc* or quality adjusted life expectanc* or disability adjusted life or health	35630
adjusted life).ti,ab.	
72 (unit cost* or drug cost* or hospital cost* or health care cost* or medical cost*).ti,ab.	42556
73 (economic evaluation* or economic review*).ti,ab.	12038
74 (cost* adj2 (util* or effectiveness or efficac* or benefit* or consequence* or analy* or minimi*).ti,ab.	114050
75 (markov* or monte carlo).ti,ab.	61882
76 or/53-75	800409
77 Case Reports/ or Comment.pt. or Editorial.pt. or Letter.pt. use prmz	2921704
78 Case Report/ or Editorial/ or Letter/ or Conference Abstract.pt. use emez	5791799
79 or/77-78	5896307
80 45 and 52 and 76	1305
81 80 not 79	1198
82 limit 81 to english language	1102
83 limit 82 to yr="2002 -Current"	694
84 remove duplicates from 83	623

PubMed

Coronary Artery Disease[mh]

Myocardial Infarction[mh]

coronary artery disease[ti] OR cad[ti] OR heart attack*[ti]

(myocardi*[ti] OR heart[ti] OR cardiac[ti] OR coronary[ti]) AND (atheroscleros*[ti] OR arterioscleros*[ti] OR infarct*[ti])

OR/

Atrial Fibrillation[mh]

(atrial[tiab] OR atrium[tiab] OR auricular[tiab]) AND fibrillation*[tiab]

OR/

Heart Failure[mh]

(myocardi*[tiab] OR heart[tiab] OR cardiac[tiab]) AND (failure[tiab] OR decompensation[tiab] OR insufficiency[tiab])

OR/

Stroke[mh]

Ischemic Attack, Transient[mh]

stroke[tiab] OR tia[tiab] OR transient ischemic attack[tiab] OR cerebrovascular apoplexy[tiab] OR cerebrovascular accident[tiab]

OR cerebrovascular infarct*[tiab] OR brain infarct*[tiab] OR CVA[tiab]

OR/

Diabetes Mellitus, Type 2[mh]

diabetes[tiab] OR diabetic*[tiab] OR niddm[tiab] OR t2dm[tiab]
OR/
Skin Ulcer[mh]
(pressure[tiab] OR bed[tiab] OR skin[tiab]) AND (ulcer*[tiab] OR sore*[tiab] OR wound*[tiab])
decubitus[tiab] OR bedsore*[tiab]
OR/
Pulmonary Disease, Chronic Obstructive[mh]
chronic obstructive[tiab] AND (lung*[tiab] OR pulmonary[tiab] OR airway*[tiab] OR airflow[tiab] OR respiratory[tiab]) AND
(disease*[tiab] OR disorder*[tiab])
copd[tiab] OR coad[tiab]
chronic airflow obstruction[tiab]
Emphysema[mh]
chronic[tiab] AND bronchitis[tiab] OR emphysema[tiab]
OR/
Chronic Disease[mh]
(chronic*[tiab] AND disease*[tiab]) OR (chronic*[tiab] AND ill*[tiab])
OR/
Comorbidity[mh]
comorbid*[tiab] OR co-morbid*[tiab] OR multimorbid*[tiab] OR multi-morbid*[tiab] OR (complex*[tiab] AND patient*[tiab])
OR "patient* with multiple"[tiab] OR (multiple[tiab] AND (condition*[tiab] OR disease*[tiab]))
OR/
OR/

Economics[MAJR:NOEXP]
Economics, Medical[MAJR:NOEXP]
Economics, Pharmaceutical[MAJR:NOEXP]
"Costs and Cost Analysis"[mh]
Models, Economic[mh]
Markov Chains[mh]
Monte Carlo Method[mh]
Quality-Adjusted Life Years[mh]
"Value of Life"[mh]
Decision Trees[mh]
econom*[ti] OR cost[ti] OR costly[ti] OR costing[ti] OR costed[ti] OR price[ti] OR prices[ti] OR pricing[ti] OR priced[ti] OR
discount[ti] OR discounts[ti] OR discounted[ti] OR discounting[ti] OR expenditure[ti] OR expenditures[ti] OR budget*[ti] OR
afford*[ti] OR pharmacoeconomic*[ti] OR pharmaco-economic*[ti]
decision tree*[tiab] OR decision analy*[tiab] OR decision model*[tiab]
sensitivity analysis[tiab] OR sensitivity analyses[tiab] OR "willingness to pay"[tiab] OR quality-adjusted life year*[tiab] OR
quality adjusted life year*[tiab] OR quality-adjusted life expectanc*[tiab] OR quality adjusted life expectanc*[tiab] OR disability
adjusted life[tiab] OR health adjusted life[tiab]
unit cost*[tiab] OR drug cost*[tiab] OR hospital cost*[tiab] OR health care cost*[tiab] OR medical cost*[tiab]
economic evaluation*[tiab] OR economic review*[tiab]
cost* util*[tiab] OR cost* effectiveness[tiab] OR cost* efficac*[tiab] OR cost* benefit*[tiab] OR cost* consequence*[tiab] OR
cost* analy*[tiab] OR cost* minimi*[tiab]
markov*[tiab] OR monte carlo[tiab]

Continuity of Patient Care[mh]
"Referral and Consultation"[mh]
((continuity[tiab] OR continuum[tiab]) AND (care[tiab] OR health care[tiab] OR healthcare[tiab] OR in-patient*[tiab] OR
inpatient*[tiab] OR patient*[tiab] OR physician*[tiab] OR provider*[tiab] OR out-patient*[tiab] OR outpatient*[tiab] OR
visit*[tiab])) OR continuity-of-care[tiab] OR continuous care[tiab] OR continuous health care[tiab] OR continuous
healthcare[tiab]
((patient-physician relation*[tiab] OR physician-patient relation*[tiab] OR patient relation*[tiab]) AND (continuous*[tiab] OR
length OR time[tiab]))

publisher[sb] OR in process[sb] OR pubmednotmedline[sb]

Limit to 2002-present & English

Search run 2012Jan19

Search	Query	Items found
#9	Search #1 AND #6 AND #7 Limits: English, Publication Date from 2002 to 2012	3
#8	Search #1 AND #6 AND #7	4
#7	Search publisher[sb] OR in process[sb] OR pubmednotmedline[sb]	1682875
#6	Search #2 OR #3 OR #4 OR #5	76103
#5	Search ((patient-physician relation*[tiab] OR physician-patient relation*[tiab] OR patient relation*[tiab]) AND (continuous*[tiab] OR length OR time[tiab]))	912
#4	Search ((continuity[tiab] OR continuum[tiab]) AND (care[tiab] OR health care[tiab] OR healthcare[tiab] OR in-patient*[tiab] OR inpatient*[tiab] OR patient*[tiab] OR physician*[tiab] OR provider*[tiab] OR out-patient*[tiab] OR outpatient*[tiab] OR visit*[tiab])) OR continuity-of-care[tiab] OR continuous care[tiab] OR continuous health care[tiab] OR continuous healthcare[tiab])	16418
#3	Search "Referral and Consultation"[mh]	50440
#2	Search Continuity of Patient Care[mh]	12348
#1	Search (((Coronary Artery Disease[mh]) OR (Myocardial Infarction[mh]) OR (coronary artery disease[ti] OR cad[ti] OR heart attack*[ti]) OR ((myocardi*[ti] OR heart[ti] OR cardiac[ti] OR coronary[ti]) AND (atherosclerosis*[ti] OR arteriosclerosis*[ti] OR infarct*[ti])) OR ((Atrial Fibrillation[mh]) OR ((atrial[tiab] OR atrium[tiab] OR auricular[tiab]) AND fibrillation*[tiab])) OR ((Heart Failure[mh]) OR ((myocardi*[tiab] OR heart[tiab] OR cardiac[tiab]) AND (failure[tiab] OR decompensation[tiab] OR insufficiency[tiab]))) OR ((Stroke[mh]) OR (Ischemic Attack, Transient[mh]) OR (stroke[tiab] OR tia[tiab] OR transient ischemic attack[tiab] OR cerebrovascular apoplexy[tiab] OR cerebrovascular accident[tiab] OR cerebrovascular infarct*[tiab] OR brain infarct*[tiab] OR CVA[tiab])) OR ((Diabetes Mellitus, Type 2[mh]) OR (diabetes[tiab] OR diabetic*[tiab] OR niddm[tiab] OR t2dm[tiab])) OR ((Skin Ulcer[mh]) OR ((pressure[tiab] OR bed[tiab] OR skin[tiab]) AND (ulcer*[tiab] OR sore*[tiab] OR wound*[tiab])) OR (decubitus[tiab] OR bedsore*[tiab])) OR ((Pulmonary Disease, Chronic Obstructive[mh]) OR (chronic obstructive[tiab] AND (lung*[tiab] OR pulmonary[tiab] OR airway*[tiab] OR airflow[tiab] OR respiratory[tiab]) AND (disease*[tiab] OR disorder*[tiab])) OR (copd[tiab] OR coad[tiab]) OR (chronic airflow obstruction[tiab] OR (Emphysema[mh]) OR (chronic[tiab] AND bronchitis[tiab] OR emphysema[tiab])) OR ((Chronic Disease[mh]) OR ((chronic*[tiab] AND disease*[tiab]) OR (chronic*[tiab] AND ill*[tiab]))) OR ((Comorbidity[mh]) OR (comorbid*[tiab] OR co-morbid*[tiab] OR multimorbid*[tiab] OR multi-morbid*[tiab] OR (complex*[tiab] AND patient*[tiab]) OR "patient* with multiple"[tiab] OR (multiple[tiab] AND (condition*[tiab] OR disease*[tiab])))) AND ((Economics[MAJR:noexp]) OR (Economics, Medical[MAJR:noexp]) OR (Economics, Pharmaceutical[MAJR:noexp]) OR ("Costs and Cost Analysis"[mh]) OR (Models, Economic[mh]) OR (Markov Chains[mh]) OR (Monte Carlo Method[mh]) OR (Quality-Adjusted Life Years[mh]) OR ("Value of Life"[mh]) OR (Decision Trees[mh]) OR (econom*[ti] OR cost[ti] OR costly[ti] OR costing[ti] OR costed[ti] OR price[ti] OR prices[ti] OR pricing[ti] OR priced[ti] OR discount[ti] OR discounts[ti] OR discounted[ti] OR discounting[ti] OR expenditure[ti] OR expenditures[ti] OR budget*[ti] OR afford*[ti] OR pharmaco-economic*[ti] OR pharmaco-economic*[ti] OR (decision tree*[tiab] OR decision analy*[tiab] OR decision model*[tiab] OR (sensitivity analysis[tiab] OR sensitivity analyses[tiab] OR "willingness to pay"[tiab] OR quality-adjusted life year*[tiab] OR quality adjusted life year*[tiab] OR quality-adjusted life expectanc*[tiab] OR quality adjusted life expectanc*[tiab] OR disability adjusted life[tiab] OR health adjusted life[tiab]) OR (unit cost*[tiab] OR drug cost*[tiab] OR hospital cost*[tiab] OR health care cost*[tiab] OR medical cost*[tiab]) OR (economic evaluation*[tiab] OR economic review*[tiab]) OR (cost* AND util*[tiab] OR cost* AND effectiveness[tiab] OR cost* AND efficac*[tiab] OR cost* AND benefit*[tiab] OR cost* AND consequence*[tiab] OR cost* AND analy*[tiab] OR cost* AND minimi*[tiab] OR (markov*[tiab] OR monte carlo[tiab]))	

Wiley Cochrane
Search run 2012Jan19

ID	Search	Hits
#1	MeSH descriptor Coronary Artery Disease explode all trees	2183
#2	MeSH descriptor Myocardial Infarction explode all trees	7746
#3	(myocardi* or heart or cardiac or coronary) NEAR/2 (atherosclerosis* or arteriosclerosis* or infarct*):ti or (coronary artery disease or cad or heart attack*):ti	8469
#4	MeSH descriptor Atrial Fibrillation explode all trees	2102
#5	(atrial NEAR/2 fibrillation* or atrium NEAR/2 fibrillation* or auricular NEAR/2 fibrillation*):ti	2310

#6	MeSH descriptor Heart Failure explode all trees	4710
#7	(myocardi* NEAR/2 (failure or decompensation or insufficiency)):ti or (heart NEAR/2 (failure or decompensation or insufficiency)):ti or (cardiac NEAR/2 (failure or decompensation or insufficiency)):ti	5252
#8	MeSH descriptor Stroke explode all trees	3899
#9	MeSH descriptor Ischemic Attack, Transient explode all trees	466
#10	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA):ti	9902
#11	MeSH descriptor Diabetes Mellitus, Type 2 explode all trees	6993
#12	(diabetes or diabetic* or niddm or t2dm):ti	16585
#13	MeSH descriptor Skin Ulcer explode all trees	1572
#14	(pressure or bed or skin) NEAR/2 (ulcer* or sore* or wound*):ti	669
#15	(decubitus or bedsore*):ti	98
#16	MeSH descriptor Pulmonary Disease, Chronic Obstructive explode all trees	1754
#17	(chronic obstructive NEAR/2 (lung* or pulmonary or airway* or airflow or respiratory)):ti	2415
#18	(copd or coad):ti	3319
#19	(chronic airflow obstruction):ti	72
#20	MeSH descriptor Emphysema explode all trees	91
#21	(chronic NEAR/2 bronchitis) or emphysema:ti	1183
#22	(Chronic Disease):ti	4464
#23	(chronic* NEAR/2 disease* or chronic* NEAR/2 ill*):ti	1670
#24	MeSH descriptor Comorbidity explode all trees	1941
#25	(comorbid* OR co-morbid* OR multimorbid* OR multi-morbid* OR (complex* NEXT patient*) OR (multiple NEAR/2 (condition* OR disease* OR patient*)):ti	1535
#26	(#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25)	61998
#27	MeSH descriptor Continuity of Patient Care explode all trees	418
#28	MeSH descriptor Referral and Consultation explode all trees	1474
#29	((continuity OR continuum) NEAR/5 (care OR "health care" OR healthcare OR in-patient* OR inpatient* OR patient* OR physician* OR provider* OR out-patient* OR outpatient* OR visit*)) OR "continuity-of-care" OR "continuous care" OR "continuous health care" OR "continuous healthcare":ti,ab,kw or ((patient-physician relation* OR physician-patient relation* OR patient relation?) AND (continuous* OR length OR time)):ti,ab,kw	954
#30	(#27 OR #28 OR #29)	2371
#31	(#26 AND #30), from 2002 to 2011	183
#32	(#26 AND #30), from 2002 to 2012(NHSEED)	14
#33	(#26 AND #30), from 2002 to 2012(HTA)	8

Centre for Reviews and Dissemination

Search run 2012Jan19

Line	Search	Hits
1	MeSH DESCRIPTOR coronary artery disease EXPLODE ALL TREES	230
2	(coronary artery disease or cad or heart attack*):TI	211

3	((myocardi* or heart or cardiac or coronary) adj2 (atheroscleros* or arterioscleros* or infarct*)):TI	223
4	MeSH DESCRIPTOR Atrial Fibrillation EXPLODE ALL TREES	225
5	((atrial or atrium or auricular) adj1 fibrillation*):TI	0
6	((atrial or atrium or auricular) adj1 fibrillation*):TI	167
7	MeSH DESCRIPTOR heart failure EXPLODE ALL TREES	418
8	((myocardi* or heart or cardiac) adj2 (failure or decompensation or insufficiency)):TI	279
9	MeSH DESCRIPTOR stroke EXPLODE ALL TREES	549
10	MeSH DESCRIPTOR Ischemic Attack, Transient EXPLODE ALL TREES	32
11	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA):TI	621
12	MeSH DESCRIPTOR Diabetes Mellitus, Type 2 EXPLODE ALL TREES	511
13	(diabetes or diabetic* or niddm or t2dm):TI	1220
14	MeSH DESCRIPTOR Skin Ulcer EXPLODE ALL TREES	253
15	((pressure or bed or skin) adj2 (ulcer* or sore* or wound*)):TI	73
16	(decubitus or bedsore*):TI	0
17	MeSH DESCRIPTOR Pulmonary Disease, Chronic Obstructive EXPLODE ALL TREES	237
18	(chronic obstructive adj2 (lung* or pulmonary or airway* or airflow or respiratory)):TI	218
19	(copd or coad):TI	107
20	(chronic airflow obstruction):TI	0
21	MeSH DESCRIPTOR Emphysema EXPLODE ALL TREES	10
22	((chronic adj2 bronchitis) or emphysema):TI	47
23	MeSH DESCRIPTOR Chronic Disease EXPLODE ALL TREES	687
24	((chronic* adj2 disease*) or (chronic* adj2 ill*)):TI	249
25	MeSH DESCRIPTOR Comorbidity EXPLODE ALL TREES	146
26	(comorbid* OR co-morbid* OR multimorbid* OR multi-morbid* OR (complex* adj1 patient*) OR "patient* with multiple" OR (multiple adj2 (condition* OR disease*)):TI	22
27	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26	4644
28	MeSH DESCRIPTOR Continuity of Patient Care EXPLODE ALL TREES	72
29	MeSH DESCRIPTOR Referral and Consultation EXPLODE ALL TREES	278
30	((continuity OR continuum) adj5 (care OR health care OR healthcare OR in-patient* OR inpatient* OR patient* OR physician* OR provider* OR out-patient* OR outpatient* OR	10

visit*)) OR continuity-of-care OR continuous care OR continuous health care OR continuous healthcare):TI OR ((patient-physician relation* OR physician-patient relation* OR patient relation?) AND (continuous* OR length OR time)):TI

31	#28 OR #29 OR #30	342
32	#27 AND #31	43

Depression – Economic Search
2012Jan24

Search date: January 24th, 2012

Databases searched: Ovid MEDLINE, Ovid MEDLINE In-Process and Other Non-Indexed Citations, Ovid EMBASE, Wiley Cochrane (HTA & NHSEED), Centre for Reviews and Dissemination (HTA & NHSEED)

Limits: 2002-present; English; NOT comments, editorials, letters, conference abstract (EMBASE)

Database: Ovid MEDLINE(R) <1946 to January Week 2>, Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations <January 23, 2012>, EMBASE <1980 to 2012 Week 03>

Search Strategy:

Search run 2012Jan24

#	Searches	Results
1	exp Coronary Artery Disease/	211859
2	exp Myocardial Infarction/ use prmz	133477
3	exp heart infarction/ use emez	216783
4	(coronary artery disease or cad or heart attack*).ti.	45066
5	((myocardi* or heart or cardiac or coronary) adj2 (atheroscleros* or arterioscleros* or infarct*).ti.	149492
6	or/1-5	539673
7	exp Atrial Fibrillation/ use prmz	28045
8	exp heart atrium fibrillation/ use emez	55436
9	((atrial or atrium or auricular) adj1 fibrillation*).ti,ab.	73408
10	or/7-9	99276
11	exp heart failure/	300628
12	((myocardi* or heart or cardiac) adj2 (failure or decompensation or insufficiency)).ti,ab.	234356
13	or/11-12	381546
14	exp Stroke/	177809
15	exp Ischemic Attack, Transient/ use prmz	16364
16	exp transient ischemic attack/ use emez	19656
17	exp stroke patient/ use emez	5632
18	exp brain infarction/ or exp cerebrovascular accident/ use emez	100915
19	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA).ti,ab.	280886
20	or/14-19	391193
21	exp Diabetes Mellitus, Type 2/ use prmz	68071
22	exp non insulin dependent diabetes mellitus/ use emez	101510
23	exp diabetic patient/ use emez	12865
24	(diabetes or diabetic* or niddm or t2dm).ti,ab.	764276
25	or/21-24	789178

26	exp Skin Ulcer/	71985
27	((pressure or bed or skin) adj2 (ulcer* or sore* or wound*)).ti,ab.	28655
28	(decubitus or bedsore*).ti,ab.	8523
29	or/26-28	90677
30	exp Pulmonary Disease, Chronic Obstructive/ use prmz	17004
31	exp chronic obstructive lung disease/ use emez	54703
32	(chronic obstructive adj2 (lung* or pulmonary or airway* or airflow or respiratory) adj (disease* or disorder*)).ti,ab.	54411
33	(copd or coad).ti,ab.	45638
34	chronic airflow obstruction.ti,ab.	1063
35	exp Emphysema/	37418
36	exp chronic bronchitis/ use emez	6977
37	((chronic adj2 bronchitis) or emphysema).ti,ab.	50824
38	or/30-37	159217
39	exp Chronic Disease/	340516
40	((chronic* adj2 disease*) or (chronic* adj2 ill*)).ti,ab.	219887
41	or/39-40	506096
42	exp Comorbidity/	143277
43	(comorbid* or co-morbid* or multimorbid* or multi-morbid* or (complex* adj patient*) or "patient* with multiple" or (multiple adj2 (condition* or disease*))).ti,ab.	203158
44	or/42-43	283744
45	6 or 10 or 13 or 20 or 25 or 29 or 38 or 41 or 44	2820445
46	exp *Depression/ use prmz	35734
47	exp *Depressive Disorder/ use prmz	53303
48	exp *Depression/ use emez	135504
49	(depression* or depressive*).ti.	161726
50	exp *Anxiety/ use prmz	22377
51	exp *Anxiety Disorders/ use prmz	44601
52	exp *Anxiety/ or exp *Anxiety Disorder/ use emez	111975
53	(anxiety or panic).ti.	67269
54	or/46-53	389615
55	*Mass Screening/ use prmz	36958
56	exp *Psychological Tests/ use prmz	50530
57	exp *Psychiatric Status Rating Scales/ use prmz	7853
58	exp *Interview, Psychological/ use prmz	2344
59	*Severity of Illness Index/ use prmz	9325
60	*Diagnostic Self Evaluation/ use prmz	146
61	exp *Screening/ use emez	91501
62	exp *Psychologic Test/ use emez	40298
63	*Self Evaluation/ use emez	3048
64	((depression* or depressive* or anxiety or anxieties) adj2 (assessment? or detect* or diagnos* or inventor* or scale? or screen* or self-assessment? or test*)).ti,ab.	84713
65	case-finding.ti.	1644
66	or/55-65	318106

67	45 and 54 and 66	11073
68	(((((cardiovascular or cardio-vascular) adj (care or disease?)) or heart disease?) adj5 (depression* or depressive* or anxiety or anxieties) adj5 (assessment? or detect* or diagnos* or inventor* or scale? or screen* or self-assessment? or test*)).ti,ab.	127
69	67 or 68	11163
70	*Economics/ use prnz	10087
71	*Economics, Medical/ use prnz	5122
72	*Economics, Pharmaceutical/ use prnz	1203
73	exp "Costs and Cost Analysis"/ use prnz	160206
74	exp Models, Economic/ use prnz	8274
75	Markov Chains/ use prnz	7519
76	Monte Carlo Method/ use prnz	16060
77	Quality-Adjusted Life Years/ use prnz	5271
78	"Value of Life"/ use prnz	5190
79	Decision Trees/ use prnz	7752
80	exp "Health Care Cost"/ use emez	169111
81	exp *Health Economics/ use emez	166598
82	exp Economic Evaluation/ use emez	176357
83	Quality Adjusted Life Year/ use emez	8269
84	*Statistical Model/ use emez	11132
85	(econom* or cost or costly or costing or costed or price or prices or pricing or priced or discount or discounts or discounted or discounting or expenditure or expenditures or budget* or afford* or pharmacoeconomic* or pharmaco-economic*).ti.	205148
86	(decision adj1 (tree* or analy* or model*)).ti,ab.	18055
87	((value or values or valuation) adj2 (money or monetary or life or lives or costs or cost)).ti,ab.	7808
88	(sensitivity analysis or sensitivity analyses or "willingness to pay" or quality-adjusted life year* or quality adjusted life year* or quality-adjusted life expectanc* or quality adjusted life expectanc* or disability adjusted life or health adjusted life).ti,ab.	35671
89	(unit cost* or drug cost* or hospital cost* or health care cost* or medical cost*).ti,ab.	42611
90	(economic evaluation* or economic review*).ti,ab.	12049
91	(cost* adj2 (util* or effectiveness or efficac* or benefit* or consequence* or analy* or minimi*)).ti,ab.	114147
92	(markov* or monte carlo).ti,ab.	61975
93	or/70-92	801089
94	Case Reports/ or Comment.pt. or Editorial.pt. or Letter.pt. use prnz	2922023
95	Case Report/ or Editorial/ or Letter/ or Conference Abstract.pt. use emez	5796469
96	or/94-95	5901110
97	69 and 93	358
98	97 not 96	336
99	limit 98 to english language	321
100	limit 99 to yr="2002 -Current"	251
	remove duplicates from 100	
101	Embase <1980 to 2012 Week 03>(124) Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) <1946 to Present>(52)	176

PubMed

Coronary Artery Disease[mh]

Myocardial Infarction[mh]

coronary artery disease[ti] OR cad[ti] OR heart attack*[ti]

(myocardi*[ti] OR heart[ti] OR cardiac[ti] OR coronary[ti]) AND (atheroscleros*[ti] OR arterioscleros*[ti] OR infarct*[ti])

OR/

Atrial Fibrillation[mh]

(atrial[tiab] OR atrium[tiab] OR auricular[tiab]) AND fibrillation*[tiab]

OR/

Heart Failure[mh]

(myocardi*[tiab] OR heart[tiab] OR cardiac[tiab]) AND (failure[tiab] OR decompensation[tiab] OR insufficiency[tiab])

OR/

Stroke[mh]

Ischemic Attack, Transient[mh]

stroke[tiab] OR tia[tiab] OR transient ischemic attack[tiab] OR cerebrovascular apoplexy[tiab] OR cerebrovascular accident[tiab]

OR cerebrovascular infarct*[tiab] OR brain infarct*[tiab] OR CVA[tiab]

OR/

Diabetes Mellitus, Type 2[mh]

diabetes[tiab] OR diabetic*[tiab] OR niddm[tiab] OR t2dm[tiab]

OR/

Skin Ulcer[mh]

(pressure[tiab] OR bed[tiab] OR skin[tiab]) AND (ulcer*[tiab] OR sore*[tiab] OR wound*[tiab])

decubitus[tiab] OR bedsore*[tiab]

OR/

Pulmonary Disease, Chronic Obstructive[mh]

chronic obstructive[tiab] AND (lung*[tiab] OR pulmonary[tiab] OR airway*[tiab] OR airflow[tiab] OR respiratory[tiab]) AND (disease*[tiab] OR disorder*[tiab])

copd[tiab] OR coad[tiab]

chronic airflow obstruction[tiab]

Emphysema[mh]

chronic[tiab] AND bronchitis[tiab] OR emphysema[tiab]

OR/

Chronic Disease[mh]

(chronic*[tiab] AND disease*[tiab]) OR (chronic*[tiab] AND ill*[tiab])

OR/

Comorbidity[mh]

comorbid*[tiab] OR co-morbid*[tiab] OR multimorbid*[tiab] OR multi-morbid*[tiab] OR (complex*[tiab] AND patient*[tiab])

OR "patient* with multiple"[tiab] OR (multiple[tiab] AND (condition*[tiab] OR disease*[tiab]))

OR/

OR/

Economics[MAJR:NOEXP]

Economics, Medical[MAJR:NOEXP]

Economics, Pharmaceutical[MAJR:NOEXP]

"Costs and Cost Analysis"[mh]

Models, Economic[mh]

Markov Chains[mh]

Monte Carlo Method[mh]

Quality-Adjusted Life Years[mh]

"Value of Life"[mh]

Decision Trees[mh]

econom*[ti] OR cost[ti] OR costly[ti] OR costing[ti] OR costed[ti] OR price[ti] OR prices[ti] OR pricing[ti] OR priced[ti] OR

discount[ti] OR discounts[ti] OR discounted[ti] OR discounting[ti] OR expenditure[ti] OR expenditures[ti] OR budget*[ti] OR

afford*[ti] OR pharmaco-economic*[ti] OR pharmaco-economic*[ti]

decision tree*[tiab] OR decision analy*[tiab] OR decision model*[tiab]

sensitivity analysis[tiab] OR sensitivity analyses[tiab] OR "willingness to pay"[tiab] OR quality-adjusted life year*[tiab] OR

quality adjusted life year*[tiab] OR quality-adjusted life expectanc*[tiab] OR quality adjusted life expectanc*[tiab] OR disability

adjusted life[tiab] OR health adjusted life[tiab]

unit cost*[tiab] OR drug cost*[tiab] OR hospital cost*[tiab] OR health care cost*[tiab] OR medical cost*[tiab]

economic evaluation*[tiab] OR economic review*[tiab]

cost* util*[tiab] OR cost* effectiveness[tiab] OR cost* efficac*[tiab] OR cost* benefit*[tiab] OR cost* consequence*[tiab] OR

cost* analy*[tiab] OR cost* minimi*[tiab]

markov*[tiab] OR monte carlo[tiab]

Depression[MAJR]

Depressive Disorder[MAJR]

depression*[TI] OR depressive*[TI]

Anxiety[MAJR]

Anxiety Disorders[MAJR]

anxiety[ti] OR panic[ti]

Mass Screening[MAJR:NOEXP]

Psychological Tests[MAJR]

Psychiatric Status Rating Scales[MAJR]

Interview, Psychological[MAJR]

Severity of Illness Index[MAJR]

Diagnostic Self Evaluation[MAJR]

(depression*[tiab] OR depressive*[tiab] OR anxiety[tiab] OR anxieties[tiab]) AND (assessment*[tiab] OR detect*[tiab] OR diagnos*[tiab] OR inventor*[tiab] OR scale*[tiab] OR screen*[tiab] OR self-assessment*[tiab] OR test*[tiab]) case-finding[ti]

(cardiovascular care[tiab] OR cardiovascular disease*[tiab] OR cardio-vascular care[tiab] OR cardio-vascular disease*[tiab] OR heart disease*[tiab]) AND (depression*[tiab] OR depressive*[tiab] OR anxiety[tiab] OR anxieties[tiab]) AND (assessment*[tiab] OR detect*[tiab] OR diagnos*[tiab] OR inventor*[tiab] OR scale*[tiab] OR screen*[tiab] OR self-assessment*[tiab] OR test*[tiab])

publisher[sb] OR in process[sb] OR pubmednotmedline[sb]

Limit to 2002-present & English

Search run 2012Jan24

Search	Query	Items found
#25	Search #22 AND #23 Limits: English, Publication Date from 2002 to 2012	15
#24	Search #22 AND #23	18
#23	Search publisher[sb] OR in process[sb] OR pubmednotmedline[sb]	1681697
#22	Search #18 OR #21	411
#21	Search #19 AND #20	74
#20	Search ((Economics[MAJR:noexp]) OR (Economics, Medical[MAJR:noexp]) OR (Economics, Pharmaceutical[MAJR:noexp]) OR ("Costs and Cost Analysis"[mh]) OR (Models, Economic[mh]) OR (Markov Chains[mh]) OR (Monte Carlo Method[mh]) OR (Quality-Adjusted Life Years[mh]) OR ("Value of Life"[mh]) OR (Decision Trees[mh]) OR (econom*[ti] OR cost[ti] OR costly[ti] OR costing[ti] OR costed[ti] OR price[ti] OR prices[ti] OR pricing[ti] OR priced[ti] OR discount[ti] OR discounts[ti] OR discounted[ti] OR discounting[ti] OR expenditure[ti] OR expenditures[ti] OR budget*[ti] OR afford*[ti] OR pharmaco-economic*[ti] OR pharmaco-economic*[ti] OR (decision tree*[tiab] OR decision analy*[tiab] OR decision model*[tiab] OR (sensitivity analysis[tiab] OR sensitivity analyses[tiab] OR "willingness to pay"[tiab] OR quality-adjusted life year*[tiab] OR quality adjusted life year*[tiab] OR quality-adjusted life expectanc*[tiab] OR quality adjusted life expectanc*[tiab] OR disability adjusted life[tiab] OR health adjusted life[tiab]) OR (unit cost*[tiab] OR drug cost*[tiab] OR hospital cost*[tiab] OR health care cost*[tiab] OR medical cost*[tiab]) OR (economic evaluation*[tiab] OR economic review*[tiab]) OR (cost* AND util*[tiab] OR cost* AND effectiveness[tiab] OR cost* AND efficac*[tiab] OR cost* AND benefit*[tiab] OR cost* AND consequence*[tiab] OR cost* AND analy*[tiab] OR cost* AND minimi*[tiab]) OR (markov*[tiab] OR monte carlo[tiab]))	289213
#19	Search (cardiovascular care[tiab] OR cardiovascular disease*[tiab] OR cardio-vascular care[tiab] OR cardio-vascular disease*[tiab] OR heart disease*[tiab]) AND (depression*[tiab] OR depressive*[tiab] OR anxiety[tiab] OR anxieties[tiab]) AND (assessment*[tiab] OR detect*[tiab] OR diagnos*[tiab] OR inventor*[tiab] OR scale*[tiab] OR screen*[tiab] OR self-assessment*[tiab] OR test*[tiab])	2454
#18	Search #1 AND #8 AND #17	351
#17	Search #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16	218546
#16	Search case-finding[ti]	872
#15	Search (depression*[tiab] OR depressive*[tiab] OR anxiety[tiab] OR anxieties[tiab]) AND (assessment*[tiab] OR detect*[tiab] OR diagnos*[tiab] OR inventor*[tiab] OR scale*[tiab] OR screen*[tiab] OR self-assessment*[tiab] OR test*[tiab])	120958

Search	Query	Items found
#14	Search Diagnostic Self Evaluation[MAJR]	144
#13	Search Severity of Illness Index[MAJR]	9368
#12	Search Interview, Psychological[MAJR]	2338
#11	Search Psychiatric Status Rating Scales[MAJR]	7845
#10	Search Psychological Tests[MAJR]	50763
#9	Search Mass Screening[MAJR:NOEXP]	36949
#8	Search #2 OR #3 OR #4 OR #5 OR #6 OR #7	165630
#7	Search anxiety[ti] OR panic[ti]	31190
#6	Search Anxiety Disorders[MAJR]	44591
#5	Search Anxiety[MAJR]	22468
#4	Search depression*[TI] OR depressive*[TI]	75134
#3	Search Depressive Disorder[MAJR]	53258
#2	Search Depression[MAJR]	87394
#1	Search (((Coronary Artery Disease[mh]) OR (Myocardial Infarction[mh]) OR (coronary artery disease[ti] OR cad[ti] OR heart attack*[ti] OR ((myocardi*[ti] OR heart[ti] OR cardiac[ti] OR coronary[ti]) AND (atheroscleros*[ti] OR arterioscleros*[ti] OR infarct*[ti]))) OR ((Atrial Fibrillation[mh]) OR ((atrial[tiab] OR atrium[tiab] OR auricular[tiab]) AND fibrillation*[tiab])) OR ((Heart Failure[mh]) OR ((myocardi*[tiab] OR heart[tiab] OR cardiac[tiab]) AND (failure[tiab] OR decompensation[tiab] OR insufficiency[tiab]))) OR ((Stroke[mh]) OR (Ischemic Attack, Transient[mh]) OR (stroke[tiab] OR tia[tiab] OR transient ischemic attack[tiab] OR cerebrovascular apoplexy[tiab] OR cerebrovascular accident[tiab] OR cerebrovascular infarct*[tiab] OR brain infarct*[tiab] OR CVA[tiab])) OR ((Diabetes Mellitus, Type 2[mh]) OR (diabetes[tiab] OR diabetic*[tiab] OR niddm[tiab] OR t2dm[tiab])) OR ((Skin Ulcer[mh]) OR ((pressure[tiab] OR bed[tiab] OR skin[tiab]) AND (ulcer*[tiab] OR sore*[tiab] OR wound*[tiab])) OR (decubitus[tiab] OR bed sore*[tiab])) OR ((Pulmonary Disease, Chronic Obstructive[mh]) OR (chronic obstructive[tiab] AND (lung*[tiab] OR pulmonary[tiab] OR airway*[tiab] OR airflow[tiab] OR respiratory[tiab]) AND (disease*[tiab] OR disorder*[tiab])) OR (copd[tiab] OR coad[tiab] OR (chronic airflow obstruction[tiab] OR (Emphysema[mh]) OR (chronic[tiab] AND bronchitis[tiab] OR emphysema[tiab])) OR ((Chronic Disease[mh]) OR ((chronic*[tiab] AND disease*[tiab]) OR (chronic*[tiab] AND ill*[tiab]))) OR ((Comorbidity[mh]) OR (comorbid*[tiab] OR co-morbid*[tiab] OR multimorbid*[tiab] OR multi-morbid*[tiab] OR (complex*[tiab] AND patient*[tiab]) OR "patient* with multiple"[tiab] OR (multiple[tiab] AND (condition*[tiab] OR disease*[tiab])))) AND ((Economics[MAJR:noexp]) OR (Economics, Medical[MAJR:noexp]) OR (Economics, Pharmaceutical[MAJR:noexp]) OR ("Costs and Cost Analysis"[mh]) OR (Models, Economic[mh]) OR (Markov Chains[mh]) OR (Monte Carlo Method[mh]) OR (Quality-Adjusted Life Years[mh]) OR ("Value of Life"[mh]) OR (Decision Trees[mh]) OR (econom*[ti] OR cost[ti] OR costly[ti] OR costing[ti] OR costed[ti] OR price[ti] OR prices[ti] OR pricing[ti] OR priced[ti] OR discount[ti] OR discounts[ti] OR discounted[ti] OR discounting[ti] OR expenditure[ti] OR expenditures[ti] OR budget*[ti] OR afford*[ti] OR pharmacoeconomic*[ti] OR pharmaco-economic*[ti] OR (decision tree*[tiab] OR decision analy*[tiab] OR decision model*[tiab]) OR (sensitivity analysis[tiab] OR sensitivity analyses[tiab] OR "willingness to pay"[tiab] OR quality-adjusted life year*[tiab] OR quality adjusted life year*[tiab] OR quality-adjusted life expectanc*[tiab] OR quality adjusted life expectanc*[tiab] OR disability adjusted life[tiab] OR health adjusted life[tiab]) OR (unit cost*[tiab] OR drug cost*[tiab] OR hospital cost*[tiab] OR health care cost*[tiab] OR medical cost*[tiab]) OR (economic evaluation*[tiab] OR economic review*[tiab]) OR (cost* AND util*[tiab] OR cost* AND effectiveness[tiab] OR cost* AND efficac*[tiab] OR cost* AND benefit*[tiab] OR cost* AND consequence*[tiab] OR cost* AND analy*[tiab] OR cost* AND minimi*[tiab]) OR (markov*[tiab] OR monte carlo[tiab]))	28370

Wiley Cochrane
Search run 2012Jan24

ID	Search	Hits
#1	MeSH descriptor Coronary Artery Disease explode all trees	2183
#2	MeSH descriptor Myocardial Infarction explode all trees	7746
#3	(myocardi* or heart or cardiac or coronary) NEAR/2 (atheroscleros* or arterioscleros* or infarct*):ti or (coronary artery disease or cad or heart attack*):ti	8469

#4	MeSH descriptor Atrial Fibrillation explode all trees	2102
#5	(atrial NEAR/2 fibrillation* or atrium NEAR/2 fibrillation* or auricular NEAR/2 fibrillation*):ti	2310
#6	MeSH descriptor Heart Failure explode all trees	4710
#7	(myocardi* NEAR/2 (failure or decompensation or insufficiency)):ti or (heart NEAR/2 (failure or decompensation or insufficiency)):ti or (cardiac NEAR/2 (failure or decompensation or insufficiency)):ti	5252
#8	MeSH descriptor Stroke explode all trees	3899
#9	MeSH descriptor Ischemic Attack, Transient explode all trees	466
#10	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA):ti	9902
#11	MeSH descriptor Diabetes Mellitus, Type 2 explode all trees	6993
#12	(diabetes or diabetic* or niddm or t2dm):ti	16585
#13	MeSH descriptor Skin Ulcer explode all trees	1572
#14	(pressure or bed or skin) NEAR/2 (ulcer* or sore* or wound*):ti	669
#15	(decubitus or bedsore*):ti	98
#16	MeSH descriptor Pulmonary Disease, Chronic Obstructive explode all trees	1754
#17	(chronic obstructive NEAR/2 (lung* or pulmonary or airway* or airflow or respiratory)):ti	2415
#18	(copd or coad):ti	3319
#19	(chronic airflow obstruction):ti	72
#20	MeSH descriptor Emphysema explode all trees	91
#21	(chronic NEAR/2 bronchitis) or emphysema:ti	1183
#22	MeSH descriptor Chronic Disease explode all trees	9875
#23	(chronic* NEAR/2 disease* or chronic* NEAR/2 ill*):ti	1670
#24	MeSH descriptor Comorbidity explode all trees	1941
#25	(comorbid* OR co-morbid* OR multimorbid* OR multi-morbid* OR (complex* NEXT patient*) OR "patient* with multiple" OR (multiple NEAR/2 (condition* OR disease*))) :ti	649
#26	(#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25)	68126
#27	MeSH descriptor Depression explode all trees	4309
#28	MeSH descriptor Depressive Disorder explode all trees	6395
#29	MeSH descriptor Anxiety explode all trees	4337
#30	MeSH descriptor Anxiety Disorders explode all trees	4159
#31	(depression* OR depressive*):ti or (anxiety OR panic):ti	16500
#32	(#27 OR #28 OR #29 OR #30 OR #31)	25361
#33	MeSH descriptor Mass Screening explode all trees	4120
#34	MeSH descriptor Psychological Tests explode all trees	9194
#35	MeSH descriptor Psychiatric Status Rating Scales explode all trees	7297
#36	MeSH descriptor Interview, Psychological explode all trees	459
#37	MeSH descriptor Severity of Illness Index explode all trees	11790
#38	MeSH descriptor Diagnostic Self Evaluation explode all trees	15
#39	(depression* OR depressive* OR anxiety OR anxieties) NEAR/2 (assessment* OR detect* OR diagnos* OR inventor* OR scale* OR screen* OR self-assessment* OR test*):ti or (case-finding):ti	486

- #40 [\(#33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39\)](#) 30235
- #41 [\(\(\(cardiovascular OR cardio-vascular\) NEXT \(care OR disease*\)\) OR heart disease*\) NEAR/5 \(depression* OR depressive* OR anxiety OR anxieties\) NEAR/2 \(assessment* OR detect* OR diagnos* OR inventor* OR scale* OR screen* OR self-assessment* OR test*\):ti](#) 0
- #42 [\(#26 AND #32 AND #40\)](#) 670
- #43 [\(#26 AND #32 AND #40\), from 2002 to 2012](#) 439

Centre for Reviews and Dissemination
Search run 2012Jan24

Line	Search	Hits
1	MeSH DESCRIPTOR coronary artery disease EXPLODE ALL TREES	230
2	(coronary artery disease or cad or heart attack*):TI	213
3	((myocardi* or heart or cardiac or coronary) adj2 (atheroscleros* or arterioscleros* or infarct*)):TI	224
4	MeSH DESCRIPTOR Atrial Fibrillation EXPLODE ALL TREES	225
5	((atrial or atrium or auricular) adj1 fibrillation*):TI	0
6	((atrial or atrium or auricular) adj1 fibrillation*):TI	168
7	MeSH DESCRIPTOR heart failure EXPLODE ALL TREES	418
8	((myocardi* or heart or cardiac) adj2 (failure or decompensation or insufficiency)):TI	280
9	MeSH DESCRIPTOR stroke EXPLODE ALL TREES	549
10	MeSH DESCRIPTOR Ischemic Attack, Transient EXPLODE ALL TREES	32

11	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA):TI	622
12	MeSH DESCRIPTOR Diabetes Mellitus, Type 2 EXPLODE ALL TREES	511
13	(diabetes or diabetic* or niddm or t2dm):TI	1223
14	MeSH DESCRIPTOR Skin Ulcer EXPLODE ALL TREES	253
15	((pressure or bed or skin) adj2 (ulcer* or sore* or wound*)):TI	73
16	(decubitus or bedsore*):TI	0
17	MeSH DESCRIPTOR Pulmonary Disease, Chronic Obstructive EXPLODE ALL TREES	237
18	(chronic obstructive adj2 (lung* or pulmonary or airway* or airflow or respiratory)):TI	219
19	(copd or coad):TI	108
20	(chronic airflow obstruction):TI	0
21	MeSH DESCRIPTOR Emphysema EXPLODE ALL TREES	10
22	((chronic adj2 bronchitis) or emphysema):TI	47
23	MeSH DESCRIPTOR Chronic Disease EXPLODE ALL TREES	687
24	((chronic* adj2 disease*) or (chronic* adj2 ill*)):TI	251
25	MeSH DESCRIPTOR Comorbidity EXPLODE ALL TREES	146
26	(comorbid* OR co-morbid* OR multimorbid* OR multi-morbid* OR (complex* adj1 patient*) OR "patient* with multiple" OR (multiple adj2 (condition* OR disease*))) :TI	22
27	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26	4655
28	MeSH DESCRIPTOR Depression EXPLODE ALL TREES	286
29	MeSH DESCRIPTOR Depressive Disorder EXPLODE ALL TREES	572
30	MeSH DESCRIPTOR Anxiety EXPLODE ALL TREES	134
31	MeSH DESCRIPTOR Anxiety Disorders EXPLODE ALL TREES	255
32	(depression* or depressive*):TI OR (anxiety or panic):TI	899
33	#28 OR #29 OR #30 OR #31 OR #32	1292
34	MeSH DESCRIPTOR Mass Screening EXPLODE ALL TREES	1704
35	MeSH DESCRIPTOR Psychological Tests EXPLODE ALL TREES	139
36	MeSH DESCRIPTOR Psychiatric Status Rating Scales EXPLODE ALL TREES	171
37	MeSH DESCRIPTOR Interview, Psychological EXPLODE ALL TREES	15
38	MeSH DESCRIPTOR Severity of Illness Index EXPLODE ALL TREES	575

39	((depression* or depressive* or anxiety or anxieties) adj2 (assessment? or detect* or diagnos* or inventor* or scale? or screen* or self-assessment? or test*)):TI OR (case-finding):TI	34
40	#34 OR #35 OR #36 OR #37 OR #38 OR #39	2533
41	((cardiovascular or cardio-vascular) adj (care or disease?) or heart disease?) adj5 (depression* or depressive* or anxiety or anxieties) adj5 (assessment? or detect* or diagnos* or inventor* or scale? or screen* or self-assessment? or test*)):TI	0
42	#27 AND #33 AND #40	13
43	#41 OR #42	13

Discharge Planning – Economic Search

2012Feb14

Search date: February 14th, 2012

Databases searched: Ovid MEDLINE, Ovid MEDLINE In-Process and Other Non-Indexed Citations, Ovid EMBASE, PubMed (for non-MEDLINE records), Wiley Cochrane (HTA & NHSEED), Centre for Reviews and Dissemination

Limits: 2002-present (SR/MA/HTA filter) & 2010-present primary studies; English; NOT comments, editorials, letters, conference abstract (EMBASE)

Database: Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R)1946 to Present, EMBASE <1980 to 2012 Week 04>

Search Strategy:

#	Searches	Results
1	exp Coronary Artery Disease/	212867
2	exp Myocardial Infarction/ use prmz	134000
3	exp heart infarction/ use emez	217674
4	(coronary artery disease or cad or heart attack*).ti.	45245
5	((myocardi* or heart or cardiac or coronary) adj2 (atheroscleros* or arterioscleros* or infarct*)).ti.	149895
6	or/1-5	541796
7	exp Atrial Fibrillation/ use prmz	28253
8	exp heart atrium fibrillation/ use emez	55964
9	((atrial or atrium or auricular) adj1 fibrillation*).ti,ab.	74050
10	or/7-9	100117
11	exp heart failure/	302389
12	((myocardi* or heart or cardiac) adj2 (failure or decompensation or insufficiency)).ti,ab.	235747
13	or/11-12	383648
14	exp Stroke/	179066
15	exp Ischemic Attack, Transient/ use prmz	16399
16	exp transient ischemic attack/ use emez	19769
17	exp stroke patient/ use emez	5675
18	exp brain infarction/ or exp cerebrovascular accident/ use emez	101286
19	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA).ti,ab.	282730
20	or/14-19	393517
21	exp Diabetes Mellitus, Type 2/ use prmz	68717
22	exp non insulin dependent diabetes mellitus/ use emez	102160
23	exp diabetic patient/ use emez	13054

24	(diabetes or diabetic* or niddm or t2dm).ti,ab.	768826
25	or/21-24	793902
26	exp Skin Ulcer/	72352
27	((pressure or bed or skin) adj2 (ulcer* or sore* or wound*)).ti,ab.	28841
28	(decubitus or bedsore*).ti,ab.	8550
29	or/26-28	91144
30	exp Pulmonary Disease, Chronic Obstructive/ use prmz	17234
31	exp chronic obstructive lung disease/ use emez	54967
32	(chronic obstructive adj2 (lung* or pulmonary or airway* or airflow or respiratory) adj (disease* or disorder*)).ti,ab.	54771
33	(copd or coad).ti,ab.	46040
34	chronic airflow obstruction.ti,ab.	1063
35	exp Emphysema/	37547
36	exp chronic bronchitis/ use emez	6992
37	((chronic adj2 bronchitis) or emphysema).ti,ab.	50973
38	or/30-37	160008
39	exp Chronic Disease/	341731
40	((chronic* adj2 disease*) or (chronic* adj2 ill*)).ti,ab.	221492
41	or/39-40	508487
42	exp Comorbidity/	144447
43	(comorbid* or co-morbid* or multimorbid* or multi-morbid* or (complex* adj patient*) or "patient* with multiple" or (multiple adj2 (condition* or disease*))).ti,ab.	205122
44	or/42-43	286249
45	6 or 10 or 13 or 20 or 25 or 29 or 38 or 41 or 44	2835314
46	exp Patient Discharge/ use prmz	16074
47	exp hospital discharge/ use emez	48567
48	((post-discharge or postdischarge or post-hospital or posthospital or discharge) adj2 (patient or hospital or support* or service* or plan* or summar* or coordinat* or co-ordinat* or manage*)).ti,ab.	46852
49	exp Medication Reconciliation/ use prmz	88
50	exp Medication Errors/pc use prmz	3739
51	exp medication therapy management/ use emez	789
52	exp medication error/pc use emez	2174
53	((medication* or drug*) adj2 (reconcil* or manage*)).ti,ab.	9761
54	or/46-53	108956
55	*Economics/ use prmz	10096
56	*Economics, Medical/ use prmz	5122
57	*Economics, Pharmaceutical/ use prmz	1204
58	exp "Costs and Cost Analysis"/ use prmz	160841
59	exp Models, Economic/ use prmz	8328
60	Markov Chains/ use prmz	7589
61	Monte Carlo Method/ use prmz	16225
62	Quality-Adjusted Life Years/ use prmz	5335
63	"Value of Life"/ use prmz	5197
64	Decision Trees/ use prmz	7814

65	exp "Health Care Cost"/ use emez	169779
66	exp *Health Economics/ use emez	166975
67	exp Economic Evaluation/ use emez	177072
68	Quality Adjusted Life Year/ use emez	8345
69	*Statistical Model/ use emez	11179
70	(econom* or cost or costly or costing or costed or price or prices or pricing or priced or discount or discounts or discounted or discounting or expenditure or expenditures or budget* or afford* or pharmaco-economic* or pharmaco-economic*).ti.	206032
71	(decision adj1 (tree* or analy* or model*)),ti,ab.	18196
72	((value or values or valuation) adj2 (money or monetary or life or lives or costs or cost)),ti,ab.	7846
73	(sensitivity analysis or sensitivity analyses or "willingness to pay" or quality-adjusted life year* or quality adjusted life year* or quality-adjusted life expectanc* or quality adjusted life expectanc* or disability adjusted life or health adjusted life).ti,ab.	36037
74	(unit cost* or drug cost* or hospital cost* or health care cost* or medical cost*).ti,ab.	42857
75	(economic evaluation* or economic review*).ti,ab.	12105
76	(cost* adj2 (util* or effectiveness or efficac* or benefit* or consequence* or analy* or minimi*)),ti,ab.	114860
77	(markov* or monte carlo).ti,ab.	62381
78	or/55-77	804490
79	Case Reports/ or Comment.pt. or Editorial.pt. or Letter.pt. use prmz	2932274
80	Case Report/ or Editorial/ or Letter/ or Conference Abstract.pt. use emez	5827934
81	or/79-80	5933590
82	45 and 54 and 78	2392
83	Meta-Analysis.pt.	31464
84	Meta-Analysis as Topic/ or exp Technology Assessment, Biomedical/	34121
85	((systematic* adj3 (review* or overview*)) or (methodologic* adj3 (review* or overview*))).ti,ab.	84366
86	((quantitative adj3 (review* or overview* or synthes*)) or (research adj3 (integrati* or overview*))).ti,ab.	9315
87	((integrative adj3 (review* or overview*)) or (collaborative adj3 (review* or overview*)) or (pool* adj3 analy*)),ti,ab.	17144
88	(data synthes* or data extraction* or data abstraction*).ti,ab.	22797
89	(handsearch* or hand search*).ti,ab.	8958
90	(mantel haenszel or peto or der simonian or dersimonian or fixed effect* or latin square*).ti,ab.	22092
91	(met analy* or metanaly* or health technology assessment* or HTA or HTAs).ti,ab.	5050
92	(meta regression* or metaregression* or mega regression*).ti,ab.	3202
93	(meta-analy* or metaanaly* or systematic review* or biomedical technology assessment* or bio-medical technology assessment*).mp,hw.	207910
94	(cochrane or health technology assessment or evidence report).jw.	21051
95	(Meta Analysis or Systematic Review or Biomedical Technology Assessment).sh.	127577
96	(Systematic Review Topic or Meta Analysis Topic).sh.	3909
97	or/83-96	283909
98	45 and 54 and 78 and 97	127
99	limit 98 to english language	122
100	limit 99 to yr="2002 -Current"	111
101	remove duplicates from 100	88
102	45 and 54 and 78	2392
103	102 not 81	2132

104 limit 103 to english language	2001
105 limit 104 to yr="2010 -Current"	354
106 remove duplicates from 105	285
107 101 or 106	357

PubMed

Coronary Artery Disease[mh]
Myocardial Infarction[mh]
coronary artery disease[ti] OR cad[ti] OR heart attack*[ti]
(myocardi*[ti] OR heart[ti] OR cardiac[ti] OR coronary[ti]) AND (atheroscleros*[ti] OR arterioscleros*[ti] OR infarct*[ti])
Atrial Fibrillation[mh]
(atrial[tiab] OR atrium[tiab] OR auricular[tiab]) AND fibrillation*[tiab]
Heart Failure[mh]
(myocardi*[tiab] OR heart[tiab] OR cardiac[tiab]) AND (failure[tiab] OR decompensation[tiab] OR insufficiency[tiab])
Stroke[mh]
Ischemic Attack, Transient[mh]
stroke[tiab] OR tia[tiab] OR transient ischemic attack[tiab] OR cerebrovascular apoplexy[tiab] OR cerebrovascular accident[tiab]
OR cerebrovascular infarct*[tiab] OR brain infarct*[tiab] OR CVA[tiab]
Diabetes Mellitus, Type 2[mh]
diabetes[tiab] OR diabetic*[tiab] OR niddm[tiab] OR t2dm[tiab]
Skin Ulcer[mh]
(pressure[tiab] OR bed[tiab] OR skin[tiab]) AND (ulcer*[tiab] OR sore*[tiab] OR wound*[tiab])
decubitus[tiab] OR bedsore*[tiab]
Pulmonary Disease, Chronic Obstructive[mh]
chronic obstructive[tiab] AND (lung*[tiab] OR pulmonary[tiab] OR airway*[tiab] OR airflow[tiab] OR respiratory[tiab]) AND
(disease*[tiab] OR disorder*[tiab])
copd[tiab] OR coad[tiab]
chronic airflow obstruction[tiab]
Emphysema[mh]
chronic[tiab] AND bronchitis[tiab] OR emphysema[tiab]
Chronic Disease[mh]
(chronic*[tiab] AND disease*[tiab]) OR (chronic*[tiab] AND ill*[tiab])
Comorbidity[mh]
comorbid*[tiab] OR co-morbid*[tiab] OR multimorbid*[tiab] OR multi-morbid*[tiab] OR (complex*[tiab] AND patient*[tiab])
OR "patient* with multiple"[tiab] OR (multiple[tiab] AND (condition*[tiab] OR disease*[tiab]))
OR/

Economics[MAJR:NOEXP]
Economics, Medical[MAJR:NOEXP]
Economics, Pharmaceutical[MAJR:NOEXP]
"Costs and Cost Analysis"[mh]
Models, Economic[mh]
Markov Chains[mh]
Monte Carlo Method[mh]
Quality-Adjusted Life Years[mh]
"Value of Life"[mh]
Decision Trees[mh]
econom*[ti] OR cost[ti] OR costly[ti] OR costing[ti] OR costed[ti] OR price[ti] OR prices[ti] OR pricing[ti] OR priced[ti] OR
discount[ti] OR discounts[ti] OR discounted[ti] OR discounting[ti] OR expenditure[ti] OR expenditures[ti] OR budget*[ti] OR
afford*[ti] OR pharmaco-economic*[ti] OR pharmaco-economic*[ti]
decision tree*[tiab] OR decision analy*[tiab] OR decision model*[tiab]
sensitivity analysis[tiab] OR sensitivity analyses[tiab] OR "willingness to pay"[tiab] OR quality-adjusted life year*[tiab] OR
quality adjusted life year*[tiab] OR quality-adjusted life expectanc*[tiab] OR quality adjusted life expectanc*[tiab] OR disability
adjusted life[tiab] OR health adjusted life[tiab]
unit cost*[tiab] OR drug cost*[tiab] OR hospital cost*[tiab] OR health care cost*[tiab] OR medical cost*[tiab]
economic evaluation*[tiab] OR economic review*[tiab]
cost* util*[tiab] OR cost* effectiveness[tiab] OR cost* efficac*[tiab] OR cost* benefit*[tiab] OR cost* consequence*[tiab] OR
cost* analy*[tiab] OR cost* minimi*[tiab]
markov*[tiab] OR monte carlo[tiab]

AND

Patient Discharge[mh]
(post-discharge[tiab] OR postdischarge[tiab] OR post-hospital[tiab] OR posthospital[tiab] OR discharge) AND (patient[tiab] OR
hospital[tiab] OR support*[tiab] OR service*[tiab] OR plan*[tiab] OR summar*[tiab] OR coordinat*[tiab] OR co-ordinat*[tiab]
OR manage*[tiab])
Medication Reconciliation[mh]

Medication Errors/prevention and control[mh]
(medication*[tiab] OR drug*[tiab]) AND (reconcil*[tiab] OR manage*[tiab])

AND

systematic[sb] OR meta-analysis[pt] OR meta-analysis as topic[mh] OR meta analy*[tw] OR metanaly*[tw] OR metaanaly*[tw]
OR met analy*[tw] OR integrative research[tiab] OR integrative review*[tiab] OR integrative overview*[tiab] OR research
integration*[tiab] OR research overview*[tiab] OR collaborative review*[tiab] OR collaborative overview*[tiab] OR systematic
review*[tiab] OR technology assessment*[tiab] OR "Technology Assessment, Biomedical"[mh] OR HTA[tiab] OR HTAs[tiab]
OR "Cochrane Database Syst Rev"[Journal: __jrid21711] OR "health technology assessment winchester, england"[Journal] OR
"Evid Rep Technol Assess (Full Rep)"[Journal] OR "Evid Rep Technol Assess (Summ)"[Journal]

publisher[sb] OR in process[sb] OR pubmednotmedline[sb]

Limit to English

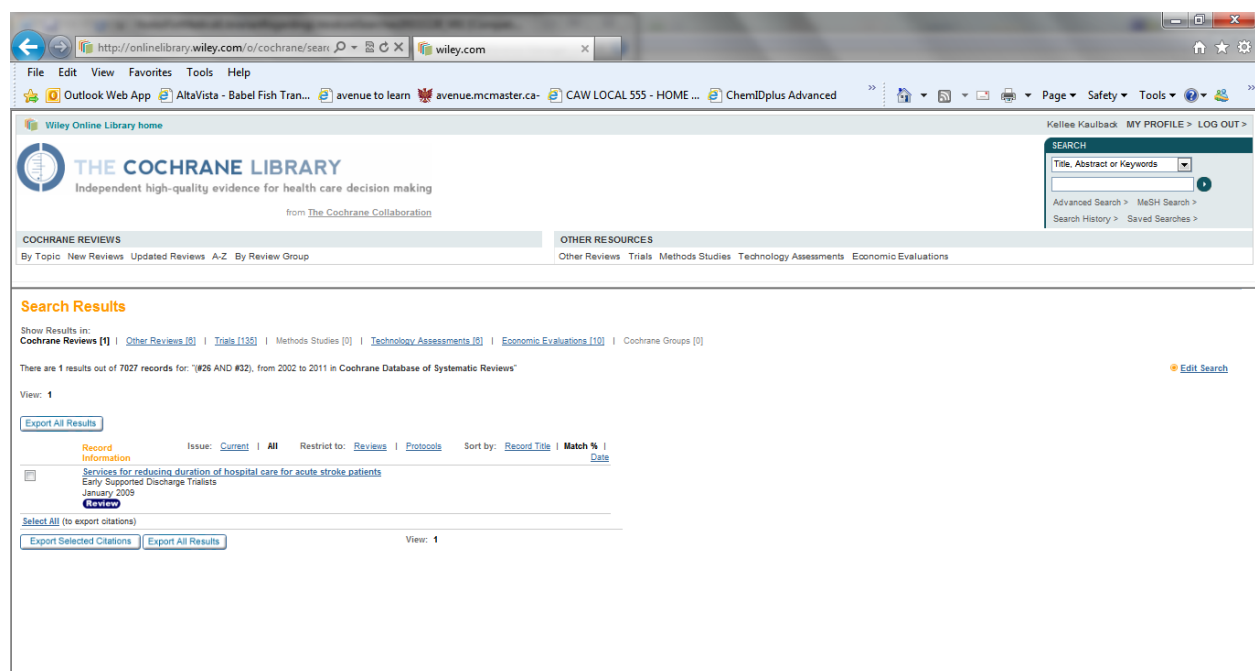
Search	Query	Items found
#14	Search #1 AND #7 AND #9 Limits: English, Publication Date from 2010 to 2012	54
#13	Search #1 AND #7 AND #9	86
#12	Search #1 AND #7 AND #8 AND #9	9
#9	Search publisher[sb] OR in process[sb] OR pubmednotmedline[sb]	1690740
#8	Search systematic[sb] OR meta-analysis[pt] OR meta-analysis as topic[mh] OR meta analy*[tw] OR metanaly*[tw] OR metaanaly*[tw] OR integrative research[tiab] OR integrative review*[tiab] OR integrative overview*[tiab] OR research integration*[tiab] OR research overview*[tiab] OR collaborative review*[tiab] OR collaborative overview*[tiab] OR systematic review*[tiab] OR technology assessment*[tiab] OR "Technology Assessment, Biomedical"[mh] OR HTA[tiab] OR HTAs[tiab] OR "Cochrane Database Syst Rev"[Journal: __jrid21711] OR "health technology assessment winchester, england"[Journal] OR "Evid Rep Technol Assess (Full Rep)"[Journal] OR "Evid Rep Technol Assess (Summ)"[Journal]	198866
#7	Search #2 OR #3 OR #4 OR #5 OR #6	124245
#6	Search (medication*[tiab] OR drug*[tiab]) AND (reconcil*[tiab] OR manage*[tiab])	56929
#5	Search Medication Errors/prevention and control[mh]	3739
#4	Search Medication Reconciliation[mh]	88
#3	Search (post-discharge[tiab] OR postdischarge[tiab] OR post-hospital[tiab] OR posthospital[tiab] OR discharge) AND (patient[tiab] OR hospital[tiab] OR support*[tiab] OR service*[tiab] OR plan*[tiab] OR summar*[tiab] OR coordinat*[tiab] OR co-ordinat*[tiab] OR manage*[tiab])	60571
#2	Search Patient Discharge[mh]	16049
#1	Search (((Coronary Artery Disease[mh]) OR (Myocardial Infarction[mh]) OR (coronary artery disease[ti] OR cad[ti] OR heart attack*[ti] OR ((myocardi*[ti] OR heart[ti] OR cardiac[ti] OR coronary[ti]) AND (atheroscleros*[ti] OR arterioscleros*[ti] OR infarct*[ti]))) OR ((Atrial Fibrillation[mh]) OR ((atrial[tiab] OR atrium[tiab] OR auricular[tiab]) AND fibrillation*[tiab])) OR ((Heart Failure[mh]) OR ((myocardi*[tiab] OR heart[tiab] OR cardiac[tiab]) AND (failure[tiab] OR decompensation[tiab] OR insufficiency[tiab]))) OR ((Stroke[mh]) OR (Ischemic Attack, Transient[mh]) OR (stroke[tiab] OR tia[tiab] OR transient ischemic attack[tiab] OR cerebrovascular apoplexy[tiab] OR cerebrovascular accident[tiab] OR cerebrovascular infarct*[tiab] OR brain infarct*[tiab] OR CVA[tiab])) OR ((Diabetes Mellitus, Type 2[mh]) OR (diabetes[tiab] OR diabetic*[tiab] OR niddm[tiab] OR t2dm[tiab])) OR ((Skin Ulcer[mh]) OR ((pressure[tiab] OR bed[tiab] OR skin[tiab]) AND (ulcer*[tiab] OR sore*[tiab] OR wound*[tiab])) OR (decubitus[tiab] OR bedsores*[tiab])) OR ((Pulmonary Disease, Chronic Obstructive[mh]) OR (chronic obstructive[tiab] AND (lung*[tiab] OR pulmonary[tiab] OR airway*[tiab] OR airflow[tiab] OR respiratory[tiab]) AND (disease*[tiab] OR disorder*[tiab])) OR (copd[tiab] OR coad[tiab] OR (chronic airflow obstruction[tiab] OR (Emphysema[mh]) OR (chronic[tiab] AND bronchitis[tiab] OR emphysema[tiab])) OR ((Chronic Disease[mh]) OR ((chronic*[tiab] AND disease*[tiab]) OR (chronic*[tiab] AND ill*[tiab])))) OR ((Comorbidity[mh]) OR (comorbid*[tiab] OR co-morbid*[tiab] OR multimorbid*[tiab] OR multi-morbid*[tiab] OR (complex*[tiab] AND patient*[tiab]) OR "patient* with multiple"[tiab] OR (multiple[tiab] AND (condition*[tiab] OR disease*[tiab])))) AND ((Economics[MAJR:noexp]) OR (Economics, Medical[MAJR:noexp]) OR (Economics, Pharmaceutical[MAJR:noexp]) OR ("Costs and Cost Analysis"[mh]) OR (Models, Economic[mh]) OR (Markov Chains[mh]) OR (Monte Carlo Method[mh]) OR (Quality-Adjusted Life Years[mh]) OR ("Value of Life"[mh]) OR (Decision Trees[mh]) OR (econom*[ti] OR	

Search	Query	Items found
	cost[ti] OR costly[ti] OR costing[ti] OR costed[ti] OR price[ti] OR prices[ti] OR pricing[ti] OR priced[ti] OR discount[ti] OR discounts[ti] OR discounted[ti] OR discounting[ti] OR expenditure[ti] OR expenditures[ti] OR budget*[ti] OR afford*[ti] OR pharmaco-economic*[ti] OR pharmaco-economic*[ti] OR (decision tree*[tiab] OR decision analy*[tiab] OR decision model*[tiab]) OR (sensitivity analysis[tiab] OR sensitivity analyses[tiab] OR "willingness to pay"[tiab] OR quality-adjusted life year*[tiab] OR quality adjusted life year*[tiab] OR quality-adjusted life expectanc*[tiab] OR quality adjusted life expectanc*[tiab] OR disability adjusted life[tiab] OR health adjusted life[tiab]) OR (unit cost*[tiab] OR drug cost*[tiab] OR hospital cost*[tiab] OR health care cost*[tiab] OR medical cost*[tiab]) OR (economic evaluation*[tiab] OR economic review*[tiab]) OR (cost* AND util*[tiab] OR cost* AND effectiveness[tiab] OR cost* AND efficac*[tiab] OR cost* AND benefit*[tiab] OR cost* AND consequence*[tiab] OR cost* AND analy*[tiab] OR cost* AND minimi*[tiab]) OR (markov*[tiab] OR monte carlo[tiab]))	

Wiley Cochrane

ID	Search	Hits
#1	MeSH descriptor Coronary Artery Disease explode all trees	2183
#2	MeSH descriptor Myocardial Infarction explode all trees	7746
#3	(myocardi* or heart or cardiac or coronary) NEAR/2 (atheroscleros* or arterioscleros* or infarct*):ti or (coronary artery disease or cad or heart attack*):ti	8469
#4	MeSH descriptor Atrial Fibrillation explode all trees	2102
#5	(atrial NEAR/2 fibrillation* or atrium NEAR/2 fibrillation* or auricular NEAR/2 fibrillation*):ti	2310
#6	MeSH descriptor Heart Failure explode all trees	4710
#7	(myocardi* NEAR/2 (failure or decompensation or insufficiency)):ti or (heart NEAR/2 (failure or decompensation or insufficiency)):ti or (cardiac NEAR/2 (failure or decompensation or insufficiency)):ti	5252
#8	MeSH descriptor Stroke explode all trees	3899
#9	MeSH descriptor Ischemic Attack, Transient explode all trees	466
#10	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA):ti	9902
#11	MeSH descriptor Diabetes Mellitus, Type 2 explode all trees	6993
#12	(diabetes or diabetic* or niddm or t2dm):ti	16585
#13	MeSH descriptor Skin Ulcer explode all trees	1572
#14	(pressure or bed or skin) NEAR/2 (ulcer* or sore* or wound*):ti	669
#15	(decubitus or bedsore*):ti	98
#16	MeSH descriptor Pulmonary Disease, Chronic Obstructive explode all trees	1754
#17	(chronic obstructive NEAR/2 (lung* or pulmonary or airway* or airflow or respiratory)):ti	2415
#18	(copd or coad):ti	3319
#19	(chronic airflow obstruction):ti	72
#20	MeSH descriptor Emphysema explode all trees	91
#21	(chronic NEAR/2 bronchitis) or emphysema:ti	1183
#22	(Chronic Disease):ti	4464
#23	(chronic* NEAR/2 disease* or chronic* NEAR/2 ill*):ti	1670
#24	MeSH descriptor Comorbidity explode all trees	1941
#25	(comorbid* OR co-morbid* OR multimorbid* OR multi-morbid* OR (complex* NEXT patient*) OR "patient* with multiple" OR (multiple NEAR/2 (condition* OR disease*))) :ti	649

#26	(#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25)	61123
#27	MeSH descriptor Patient Discharge explode all trees	863
#28	(post-discharge or postdischarge or post-hospital or posthospital or discharge) NEAR/2 (patient or hospital or support* or service* or plan* or summar* or coordinat* or co-ordinat* or manage*):ti	478
#29	MeSH descriptor Medication Reconciliation explode all trees	2
#30	MeSH descriptor Medication Errors explode all trees with qualifier: PC	103
#31	(medication* or drug*) NEAR/2 (reconcil* or manage*):ti	71
#32	(#27 OR #28 OR #29 OR #30 OR #31)	1285
#33	(#26 AND #32), from 2002 to 2011	158



Centre for Reviews and Dissemination

Line	Search	Hits
1	MeSH DESCRIPTOR coronary artery disease EXPLODE ALL TREES	283
2	(coronary artery disease or cad or heart attack*):TI	213
3	((myocardi* or heart or cardiac or coronary) adj2 (atheroscleros* or arterioscleros* or infarct*)):TI	225
4	MeSH DESCRIPTOR Atrial Fibrillation EXPLODE ALL TREES	265
5	((atrial or atrium or auricular) adj1 fibrillation*):TI	0
6	((atrial or atrium or auricular) adj1 fibrillation*):TI	171
7	MeSH DESCRIPTOR heart failure EXPLODE ALL TREES	479
8	((myocardi* or heart or cardiac) adj2 (failure or decompensation or insufficiency)):TI	283

9	MeSH DESCRIPTOR stroke EXPLODE ALL TREES	645
10	MeSH DESCRIPTOR Ischemic Attack, Transient EXPLODE ALL TREES	40
11	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA):TI	623
12	MeSH DESCRIPTOR Diabetes Mellitus, Type 2 EXPLODE ALL TREES	594
13	(diabetes or diabetic* or niddm or t2dm):TI	1226
14	MeSH DESCRIPTOR Skin Ulcer EXPLODE ALL TREES	276
15	((pressure or bed or skin) adj2 (ulcer* or sore* or wound*)):TI	74
16	(decubitus or bedsore*):TI	0
17	MeSH DESCRIPTOR Pulmonary Disease, Chronic Obstructive EXPLODE ALL TREES	275
18	(chronic obstructive adj2 (lung* or pulmonary or airway* or airflow or respiratory)):TI	221
19	(copd or coad):TI	110
20	(chronic airflow obstruction):TI	0
21	MeSH DESCRIPTOR Emphysema EXPLODE ALL TREES	11
22	((chronic adj2 bronchitis) or emphysema):TI	47
23	MeSH DESCRIPTOR Chronic Disease EXPLODE ALL TREES	753
24	((chronic* adj2 disease*) or (chronic* adj2 ill*)):TI	253
25	MeSH DESCRIPTOR Comorbidity EXPLODE ALL TREES	158
26	((comorbid* OR co-morbid* OR multimorbid* OR multi-morbid* OR (complex* NEXT patient*) OR "patient* with multiple" OR (multiple adj2 (condition* OR disease*)))):TI	21
27	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26	4828
28	MeSH DESCRIPTOR Patient Discharge EXPLODE ALL TREES	158
29	((post-discharge or postdischarge or post-hospital or posthospital or discharge) adj2 (patient or hospital or support* or service* or plan* or summar* or coordinat* or co-ordinat* or manage*)):TI	27
30	MeSH DESCRIPTOR Medication Errors EXPLODE ALL TREES WITH QUALIFIER PC	0
31	((medication* or drug*) adj2 (reconcil* or manage*)):TI	20
32	#28 OR #29 OR #30 OR #31	183
33	#27 AND #32	35

Electronic Tools – Economic Search
2012Aug14

Search date: August 14th, 2012

Databases searched: Ovid MEDLINE, Ovid MEDLINE In-Process and Other Non-Indexed Citations, Ovid EMBASE, PubMed (for non-MEDLINE records), Wiley Cochrane (HTA & NHSEED), Centre for Reviews and Dissemination

Limits:2002-present; English; NOT comments, editorials, letters, conference abstract (EMBASE)

Database:Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) 1946 to Present, EMBASE <1980 to 2012 Week 32>

Search Strategy:

#	Searches	Results
1	exp Coronary Artery Disease/	229118
2	exp Myocardial Infarction/ use prmz	137438
3	exp heart infarction/ use emez	231179
4	(coronary artery disease or cad or heart attack*).ti.	47830
5	((myocardi* or heart or cardiac or coronary) adj2 (atheroscleros* or arterioscleros* or infarct*)).ti.	156297
6	or/1-5	572256
7	exp Atrial Fibrillation/ use prmz	29796
8	exp heart atrium fibrillation/ use emez	61196
9	((atrial or atrium or auricular) adj1 fibrillation*).ti,ab.	80518
10	or/7-9	108150
11	exp heart failure/	321154
12	((myocardi* or heart or cardiac) adj2 (failure or decompensation or insufficiency)).ti,ab.	251933
13	or/11-12	407955
14	exp Stroke/	192344
15	exp Ischemic Attack, Transient/ use prmz	16799
16	exp transient ischemic attack/ use emez	21128
17	exp stroke patient/ use emez	6274
18	exp brain infarction/ or exp cerebrovascular accident/ use emez	107109
19	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA).ti,ab.	304938
20	or/14-19	421326
21	exp Diabetes Mellitus, Type 2/ use prmz	73613
22	exp non insulin dependent diabetes mellitus/ use emez	113928
23	exp diabetic patient/ use emez	15238
24	(diabetes or diabetic* or niddm or t2dm).ti,ab.	827339
25	or/21-24	854342
26	exp Skin Ulcer/	76033
27	((pressure or bed or skin) adj2 (ulcer* or sore* or wound*)).ti,ab.	30721
28	(decubitus or bedsore*).ti,ab.	8897
29	or/26-28	96120
30	exp Pulmonary Disease, Chronic Obstructive/ use prmz	18847
31	exp chronic obstructive lung disease/ use emez	59156
32	(chronic obstructive adj2 (lung* or pulmonary or airway* or airflow or respiratory) adj (disease* or disorder*)).ti,ab.	59303
33	(copd or coad).ti,ab.	50241

34	chronic airflow obstruction.ti,ab.	1090
35	exp Emphysema/	39015
36	exp chronic bronchitis/ use emez	7164
37	((chronic adj2 bronchitis) or emphysema).ti,ab.	52934
38	or/30-37	169517
39	exp Chronic Disease/	358585
40	((chronic* adj2 disease*) or (chronic* adj2 ill*)).ti,ab.	240287
41	or/39-40	540007
42	exp Comorbidity/	158025
43	(comorbid* or co-morbid* or multimorbid* or multi-morbid* or (complex* adj patient*) or "patient* with multiple" or (multiple adj2 (condition* or disease*))).ti,ab.	227850
44	or/42-43	316062
45	6 or 10 or 13 or 20 or 25 or 29 or 38 or 41 or 44	3024761
46	exp Medical Informatics/ use prmz	280330
47	exp Medical Records Systems, Computerized/ use prmz	21517
48	exp *Data Processing/ use emez	465074
49	(ehr or ehealth or etool* or eprescri* or (computer* adj2 physician order entry) or CPOE or clinical decision support system* or picture archiving communication* system* or PACS).ti,ab.	14182
50	((electronic or e or computer*) adj2 (health or patient or medical) adj record*).ti,ab.	21724
51	((electronic or e or computer*) adj2 (management or tool* or system* or prescrib* or decision support or discharge or (medication adj2 reconciliation))).ti,ab.	41965
52	or/46-51	785556
53	exp Intermediate Care Facilities/ use prmz	603
54	(intermedia* adj2 care).ti,ab.	2522
55	exp ambulatory care/	78452
56	exp Ambulatory Care Facilities/ use prmz	40981
57	exp ambulatory care nursing/ use emez	9
58	exp Outpatients/ use prmz	7573
59	exp Outpatient Department/ use emez	34390
60	exp outpatient care/ use emez	18565
61	exp Community Health Services/ use prmz	457932
62	exp community care/ use emez	89835
63	exp Community Medicine/	3950
64	exp Subacute Care/ use prmz	714
65	exp General Practice/	126613
66	exp Primary Health Care/	162088
67	exp Physicians, Family/ or exp general practitioners/ or exp Physicians, Primary Care/ use prmz	65809
68	exp general practitioner/ use emez	49880
69	exp family medicine/ use emez	6089
70	exp Group Practice/ use prmz	22352
71	exp Team Nursing/ use emez	28
72	exp Primary Care Nursing/ use prmz	52
73	exp Patient Care Team/ use prmz	50441
74	exp Teamwork/ use emez	9602

75	*Patient Care Management/ use prmz	1311
76	((primary or family or community or outpatient* or ambulatory) adj2 (care* or physician* or nurs* or service* or clinic* or facility or facilities)).ti,ab.	352398
77	((transitional or multidisciplin* or multifacet* or multi-disciplin* or multi-facet* or cooperat* or co-operat* or interdisciplin* or inter-disciplin* or collaborat* or multispecial* or multi-special* or share or sharing or shared or integrat* or joint or multi-modal or multimodal) adj2 (care or team*)).ti,ab.	52629
78	(team* or liaison).ti,ab.	192035
79	((general or family or primary care or community) adj2 (practic* or clinic* or program* or doctor* or nurse* or physician*)).ti,ab.	226015
80	or/53-79	1420078
81	*Economics/ use prmz	10178
82	*Economics, Medical/ use prmz	5163
83	*Economics, Pharmaceutical/ use prmz	1242
84	exp "Costs and Cost Analysis"/ use prmz	166708
85	exp Models, Economic/ use prmz	8787
86	Markov Chains/ use prmz	8188
87	Monte Carlo Method/ use prmz	17300
88	Quality-Adjusted Life Years/ use prmz	5814
89	"Value of Life"/ use prmz	5229
90	Decision Trees/ use prmz	8074
91	exp "Health Care Cost"/ use emez	178191
92	exp *Health Economics/ use emez	175532
93	exp Economic Evaluation/ use emez	186842
94	Quality Adjusted Life Year/ use emez	9437
95	*Statistical Model/ use emez	12546
96	(econom* or cost or costly or costing or costed or price or prices or pricing or priced or discount or discounts or discounted or discounting or expenditure or expenditures or budget* or afford* or pharmaco-economic* or pharmaco-economic*).ti.	217276
97	(decision adj1 (tree* or analy* or model*)).ti,ab.	19783
98	((value or values or valuation) adj2 (money or monetary or life or lives or costs or cost)).ti,ab.	8382
99	(sensitivity analysis or sensitivity analyses or "willingness to pay" or quality-adjusted life year* or quality adjusted life year* or quality-adjusted life expectanc* or quality adjusted life expectanc* or disability adjusted life or health adjusted life).ti,ab.	40250
100	(unit cost* or drug cost* or hospital cost* or health care cost* or medical cost*).ti,ab.	45952
101	(economic evaluation* or economic review*).ti,ab.	13054
102	(cost* adj2 (util* or effectiveness or efficac* or benefit* or consequence* or analy* or minimi*)).ti,ab.	123408
103	(markov* or monte carlo).ti,ab.	67068
104	or/81-103	846004
105	Case Reports/ or Comment.pt. or Editorial.pt. or Letter.pt. use prmz	3031296
106	Case Report/ or Editorial/ or Letter/ or Conference Abstract.pt. use emez	6181848
107	or/105-106	6295260
108	104 not 107	749412
109	limit 108 to english language	676480
110	45 and 52 and 80 and 109	584
111	limit 110 to yr="2002 -Current"	451
112	remove duplicates from 111	382

PubMed

Search	Query	Items found
#33	Search #3 AND #9 AND #29 AND #30 Filters: Publication date from 2002/01/01 to 2013/12/31; English	41
#32	Search #3 AND #9 AND #29 AND #30 Filters: Publication date from 2002/01/01 to 2013/12/31	42
#31	Search #3 AND #9 AND #29 AND #30	43
#30	Search publisher[sb] OR in process[sb] OR pubmednotmedline[sb]	1778611
#29	Search #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28	1489140
#28	Search (general[tiab] OR family[tiab] OR primary care[tiab] OR community[tiab]) AND (practic*[tiab] OR clinic*[tiab] OR program*[tiab] OR doctor*[tiab] OR nurse*[tiab] OR physician*[tiab])	441644
#27	Search team*[tiab] OR liaison[tiab]	83950
#26	Search (transitional[tiab] OR multidisciplin*[tiab] OR multifacet*[tiab] OR multi-disciplin*[tiab] OR multi-facet*[tiab] OR cooperat*[tiab] OR co-operat*[tiab] OR interdisciplin*[tiab] OR inter-disciplin*[tiab] OR collaborat*[tiab] OR multispecial*[tiab] OR multi-special*[tiab] OR share[tiab] OR sharing[tiab] OR shared[tiab] OR integrat*[tiab] OR joint[tiab] OR multi-modal[tiab] OR multimodal[tiab]) AND (care[tiab] OR team*[tiab])	102938
#25	Search (primary[tiab] OR family[tiab] OR community[tiab] OR outpatient*[tiab] OR ambulatory[tiab]) AND (care*[tiab] OR physician*[tiab] OR nurs*[tiab] OR service*[tiab] OR clinic*[tiab] OR facility[tiab] OR facilities[tiab])	572713
#24	Search Patient Care Management[MAJR]	265486
#23	Search Patient Care Team[mh]	50137
#22	Search Primary Care Nursing[mh]	1964
#21	Search Group Practice[mh]	22278
#20	Search Physicians, Family[mh] OR General Practitioners[mh] OR Physicians, Primary Care[mh]	15652
#19	Search Primary Health Care[mh]	68924
#18	Search General Practice[mh]	60028
#17	Search Subacute Care[mh]	708
#16	Search Community Medicine[mh]	1830
#15	Search Community Health Services[mh]	451951
#14	Search Outpatients[mh]	7468
#13	Search Ambulatory Care Facilities[mh]	40496
#12	Search ambulatory care[mh]	42703
#11	Search intermedia*[tiab] AND care[tiab]	4987
#10	Search Intermediate Care Facilities[mh]	599
#9	Search #4 OR #5 OR #6 OR #7 OR #8	542662

Search	Query	Items found
#8	Search (electronic[tiab] OR e[tiab] OR computer*[tiab]) AND (management[tiab] OR tool*[tiab] OR system*[tiab] OR prescrib*[tiab] OR decision support[tiab] OR discharge[tiab] OR (medication[tiab] AND reconciliation[tiab]))	286417
#7	Search (electronic[tiab] OR e[tiab] OR computer*[tiab]) AND (health[tiab] OR patient[tiab] OR medical[tiab]) AND record*[tiab]	25634
#6	Search ehr[tiab] OR ehealth[tiab] OR etool*[tiab] OR eprescri*[tiab] OR (computer*[tiab] AND physician order entry[tiab]) OR CPOE[tiab] OR clinical decision support system*[tiab] OR picture archiving communication* system*[tiab] OR PACS[tiab]	5123
#5	Search Medical Records Systems, Computerized[mh]	21169
#4	Search Medical Informatics[mh]	275199
#3	Search #1 AND #2	29735
#2	Search ((Economics[MAJR:noexp]) OR (Economics, Medical[MAJR:noexp]) OR (Economics, Pharmaceutical[MAJR:noexp]) OR ("Costs and Cost Analysis"[mh]) OR (Models, Economic[mh]) OR (Markov Chains[mh]) OR (Monte Carlo Method[mh]) OR (Quality-Adjusted Life Years[mh]) OR ("Value of Life"[mh]) OR (Decision Trees[mh]) OR (econom*[ti] OR cost[ti] OR costly[ti] OR costing[ti] OR costed[ti] OR price[ti] OR prices[ti] OR pricing[ti] OR priced[ti] OR discount[ti] OR discounts[ti] OR discounted[ti] OR discounting[ti] OR expenditure[ti] OR expenditures[ti] OR budget*[ti] OR afford*[ti] OR pharmaco-economic*[ti] OR pharmaco-economic*[ti]) OR (decision tree*[tiab] OR decision analy*[tiab] OR decision model*[tiab]) OR (sensitivity analysis[tiab] OR sensitivity analyses[tiab] OR "willingness to pay"[tiab] OR quality-adjusted life year*[tiab] OR quality adjusted life year*[tiab] OR quality-adjusted life expectanc*[tiab] OR quality adjusted life expectanc*[tiab] OR disability adjusted life[tiab] OR health adjusted life[tiab]) OR (unit cost*[tiab] OR drug cost*[tiab] OR hospital cost*[tiab] OR health care cost*[tiab] OR medical cost*[tiab] OR (economic evaluation*[tiab] OR economic review*[tiab]) OR (cost* AND util*[tiab] OR cost* AND effectiveness[tiab] OR cost* AND efficac*[tiab] OR cost* AND benefit*[tiab] OR cost* AND consequence*[tiab] OR cost* AND analy*[tiab] OR cost* AND minimi*[tiab]) OR (markov*[tiab] OR monte carlo[tiab]))	299234
#1	Search (((Coronary Artery Disease[mh]) OR (Myocardial Infarction[mh]) OR (coronary artery disease[ti] OR cad[ti] OR heart attack*[ti]) OR ((myocardi*[ti] OR heart[ti] OR cardiac[ti] OR coronary[ti]) AND (atheroscleros*[ti] OR arterioscleros*[ti] OR infarct*[ti])) OR ((Atrial Fibrillation[mh]) OR ((atrial[tiab] OR atrium[tiab] OR auricular[tiab] AND fibrillation*[tiab])) OR ((Heart Failure[mh]) OR ((myocardi*[tiab] OR heart[tiab] OR cardiac[tiab] AND (failure[tiab] OR decompensation[tiab] OR insufficiency[tiab])) OR ((Stroke[mh]) OR (Ischemic Attack, Transient[mh]) OR (stroke[tiab] OR tia[tiab] OR transient ischemic attack[tiab] OR cerebrovascular apoplexy[tiab] OR cerebrovascular accident[tiab] OR cerebrovascular infarct*[tiab] OR brain infarct*[tiab] OR CVA[tiab])) OR ((Diabetes Mellitus, Type 2[mh]) OR (diabetes[tiab] OR diabetic*[tiab] OR niddm[tiab] OR t2dm[tiab])) OR ((Skin Ulcer[mh]) OR ((pressure[tiab] OR bed[tiab] OR skin[tiab] AND (ulcer*[tiab] OR sore*[tiab] OR wound*[tiab])) OR (decubitus[tiab] OR bedsore*[tiab])) OR ((Pulmonary Disease, Chronic Obstructive[mh]) OR (chronic obstructive[tiab] AND (lung*[tiab] OR pulmonary[tiab] OR airway*[tiab] OR airflow[tiab] OR respiratory[tiab]) AND (disease*[tiab] OR disorder*[tiab])) OR (copd[tiab] OR coad[tiab]) OR (chronic airflow obstruction[tiab] OR (Emphysema[mh]) OR (chronic[tiab] AND bronchitis[tiab] OR emphysema[tiab])) OR ((Chronic Disease[mh]) OR ((chronic*[tiab] AND disease*[tiab]) OR (chronic*[tiab] AND ill*[tiab])) OR ((Comorbidity[mh]) OR (comorbid*[tiab] OR co-morbid*[tiab] OR multimorbid*[tiab] OR multi-morbid*[tiab] OR (complex*[tiab] AND patient*[tiab]) OR "patient* with multiple"[tiab] OR (multiple[tiab] AND (condition*[tiab] OR disease*[tiab])))	1745752

#1	MeSH descriptor Coronary Artery Disease explode all trees	2276
#2	MeSH descriptor Myocardial Infarction explode all trees	7892
#3	(myocardi* or heart or cardiac or coronary) NEAR/2 (atheroscleros* or arterioscleros* or infarct*):ti or (coronary artery disease or cad or heart attack*):ti	8587
#4	MeSH descriptor Atrial Fibrillation explode all trees	2184
#5	(atrial NEAR/2 fibrillation* or atrium NEAR/2 fibrillation* or auricular NEAR/2 fibrillation*):ti	2378
#6	MeSH descriptor Heart Failure explode all trees	4855
#7	(myocardi* NEAR/2 (failure or decompensation or insufficiency)):ti or (heart NEAR/2 (failure or decompensation or insufficiency)):ti or (cardiac NEAR/2 (failure or decompensation or insufficiency)):ti	5375
#8	MeSH descriptor Stroke explode all trees	4063
#9	MeSH descriptor Ischemic Attack, Transient explode all trees	472
#10	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA):ti	10038
#11	MeSH descriptor Diabetes Mellitus, Type 2 explode all trees	7242
#12	(diabetes or diabetic* or niddm or t2dm):ti	16983
#13	MeSH descriptor Skin Ulcer explode all trees	1608
#14	(pressure or bed or skin) NEAR/2 (ulcer* or sore* or wound*):ti	679
#15	(decubitus or bedsore*):ti	100
#16	MeSH descriptor Pulmonary Disease, Chronic Obstructive explode all trees	1834
#17	(chronic obstructive NEAR/2 (lung* or pulmonary or airway* or airflow or respiratory)):ti	2448
#18	(copd or coad):ti	3367
#19	(chronic airflow obstruction):ti	72
#20	MeSH descriptor Emphysema explode all trees	92
#21	(chronic NEAR/2 bronchitis) or emphysema:ti	1185
#22	MeSH descriptor Chronic Disease explode all trees	10057
#23	(chronic* NEAR/2 disease* or chronic* NEAR/2 ill*):ti	1716
#24	MeSH descriptor Comorbidity explode all trees	2007
#25	(comorbid* OR co-morbid* OR multimorbid* OR multi-morbid* OR (complex* NEXT patient*) OR "patient* with multiple" OR (multiple NEAR/2 (condition* OR disease*))) :ti	662
#26	(#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25)	69497
#27	MeSH descriptor Medical Informatics explode all trees	7472
#28	MeSH descriptor Medical Records Systems, Computerized explode all trees	290
#29	((electronic or e or computer*) NEAR/2 (health or patient or medical) NEAR record*):ti or ((electronic or e or computer*) NEAR/2 (health or patient or medical) NEAR record*):ab	279
#30	(ehr or ehealth or etool* or eprescri* or (computer* NEAR/2 physician order entry) or CPOE or clinical decision support system* or picture archiving communication* system* or PACS):ti or (ehr or ehealth or etool* or eprescri* or (computer* NEAR/2 physician order entry) or CPOE or clinical decision support system* or picture archiving communication* system* or PACS):ab	358
#31	((electronic or e or computer*) NEAR/2 (management or tool* or system* or prescri* or decision support or discharge or (medication NEAR/2 reconciliation))):ti or ((electronic or e or computer*) NEAR/2 (management or tool* or system* or prescri* or decision support or discharge or (medication NEAR/2 reconciliation))):ab	894
#32	(#27 OR #28 OR #29 OR #30 OR #31)	8479

#33	MeSH descriptor Intermediate Care Facilities explode all trees	13
#34	(intermedia* NEAR/2 care):ti or (intermedia* NEAR/2 care):ab	96
#35	MeSH descriptor Ambulatory Care explode all trees	3204
#36	MeSH descriptor Ambulatory Care Facilities explode all trees	1434
#37	MeSH descriptor Outpatients explode all trees	694
#38	MeSH descriptor Community Health Services explode all trees	20097
#39	MeSH descriptor Community Medicine explode all trees	34
#40	MeSH descriptor Subacute Care explode all trees	16
#41	MeSH descriptor General Practice explode all trees	2118
#42	MeSH descriptor Primary Health Care explode all trees	2963
#43	MeSH descriptor Physicians, Family explode all trees	446
#44	MeSH descriptor General Practitioners explode all trees	33
#45	MeSH descriptor Physicians, Primary Care explode all trees	23
#46	MeSH descriptor Group Practice explode all trees	380
#47	MeSH descriptor Primary Care Nursing explode all trees	1
#48	MeSH descriptor Patient Care Team explode all trees	1179
#49	MeSH descriptor Patient Care Management explode all trees	13262
#50	((primary or family or community or outpatient* or ambulatory) NEAR/2 (care* or physician* or nurs* or service* or clinic* or facility or facilities)):ti and ((primary or family or community or outpatient* or ambulatory) NEAR/2 (care* or physician* or nurs* or service* or clinic* or facility or facilities)):ab	2120
#51	(transitional or multidisciplin* or multifacet* or multi-disciplin* or multi-facet* or cooperat* or co-operat* or interdisciplin* or inter-disciplin* or collaborat* or multispecial* or multi-special* or share or sharing or shared or integrat* or joint or multi-modal or multimodal) NEAR/2 (care or team*):ti or (transitional or multidisciplin* or multifacet* or multi-disciplin* or multi-facet* or cooperat* or co-operat* or interdisciplin* or inter-disciplin* or collaborat* or multispecial* or multi-special* or share or sharing or shared or integrat* or joint or multi-modal or multimodal) NEAR/2 (care or team*):ab	1126
#52	((general or family or primary care or community) NEAR/2 (practic* or clinic* or program* or doctor* or nuse* or physician*)):ti or ((general or family or primary care or community) NEAR/2 (practic* or clinic* or program* or doctor* or nuse* or physician*)):ab	8105
#53	(team* or liaison):ti or (team* or liaison):ab	3218
#54	(#50 OR #51 OR #52 OR #53)	12407
#55	(#54 AND #32 AND #26)	85

NHSEED=1 record

Search Results

Show Results in: [Cochrane Reviews \[3\]](#) | [Other Reviews \[0\]](#) | [Trials \[80\]](#) | [Methods Studies \[1\]](#) | [Technology Assessments \[0\]](#) | **[Economic Evaluations \[1\]](#)** | [Cochrane Groups \[0\]](#)

There are 1 results out of 12360 records for: "(#54 AND #32 AND #26) in NHS Economic Evaluation Database"

View: 1

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Record Information

Sort by: [Record Title](#) | **[Match %](#)** | [Date](#)

[Chronic care model and shared care in diabetes: randomized trial of an electronic decision support system \(Provisional abstract\)](#)
 Centre for Reviews and Dissemination
 Original Author(s): S A Smith, N D Shah, S C Bryant, T J Christianson, S S Bjornsen, P D Giesler, K Krause, P J Erwin, V M Montori
 2008

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View: 1

Centre for Reviews and Dissemination

Search	Hits	
1	MeSH DESCRIPTOR coronary artery disease EXPLODE ALL TREES	313
2	(coronary artery disease or cad or heart attack*):TI	236
3	((myocardi* or heart or cardiac or coronary) adj2 (atheroscleros* or arterioscleros* or infarct*)):TI	238
4	MeSH DESCRIPTOR Atrial Fibrillation EXPLODE ALL TREES	290
5	((atrial or atrium or auricular) adj1 fibrillation*):TI	0
6	((atrial or atrium or auricular) adj1 fibrillation*):TI	192
7	MeSH DESCRIPTOR heart failure EXPLODE ALL TREES	510
8	((myocardi* or heart or cardiac) adj2 (failure or decompensation or insufficiency)):TI	304
9	MeSH DESCRIPTOR stroke EXPLODE ALL TREES	708
10	MeSH DESCRIPTOR Ischemic Attack, Transient EXPLODE ALL TREES	43
11	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA):TI	695
12	MeSH DESCRIPTOR Diabetes Mellitus, Type 2 EXPLODE ALL TREES	664
13	(diabetes or diabetic* or niddm or t2dm):TI	1356
14	MeSH DESCRIPTOR Skin Ulcer EXPLODE ALL TREES	283
15	((pressure or bed or skin) adj2 (ulcer* or sore* or wound*)):TI	81
16	(decubitus or bedsore*):TI	0
17	MeSH DESCRIPTOR Pulmonary Disease, Chronic Obstructive EXPLODE ALL TREES	298
18	(chronic obstructive adj2 (lung* or pulmonary or airway* or airflow or respiratory)):TI	240
19	(copd or coad):TI	123
20	(chronic airflow obstruction):TI	0
21	MeSH DESCRIPTOR Emphysema EXPLODE ALL TREES	19
22	((chronic adj2 bronchitis) or emphysema):TI	50
23	MeSH DESCRIPTOR Chronic Disease EXPLODE ALL TREES	794
24	((chronic* adj2 disease*) or (chronic* adj2 ill*)):TI	274
25	MeSH DESCRIPTOR Comorbidity EXPLODE ALL TREES	181
26	(comorbid* OR co-morbid* OR multimorbid* OR multi-morbid* OR (complex* adj1 patient*) OR "patient* with multiple" OR (multiple adj2 (condition* OR disease*))) :TI	29
27	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26	5254
28	MeSH DESCRIPTOR medical informatics EXPLODE ALL TREES	2398

29	MeSH DESCRIPTOR Medical Records Systems, Computerized EXPLODE ALL TREES	54
30	((ehr or ehealth or etool* or eprescri* or (computer* adj2 physician order entry) or CPOE or clinical decision support system* or picture archiving communication* system* or PACS))	68
31	((electronic or e or computer*) adj2 (health or patient or medical) adj record*)	89
32	((electronic or e or computer*) adj2 (management or tool* or system* or prescrib* or decision support or discharge or (medication adj2 reconciliation)))	356
33	#28 OR #29 OR #30 OR #31 OR #32	2678
34	MeSH DESCRIPTOR Intermediate Care Facilities EXPLODE ALL TREES	4
35	(intermedia* adj2 care)	40
36	MeSH DESCRIPTOR ambulatory care EXPLODE ALL TREES	350
37	MeSH DESCRIPTOR Ambulatory Care Facilities EXPLODE ALL TREES	207
38	MeSH DESCRIPTOR Outpatients EXPLODE ALL TREES	76
39	MeSH DESCRIPTOR Community Health Services EXPLODE ALL TREES	4191
40	MeSH DESCRIPTOR Community Medicine EXPLODE ALL TREES	3
41	MeSH DESCRIPTOR Subacute Care EXPLODE ALL TREES	7
42	MeSH DESCRIPTOR Primary Health Care EXPLODE ALL TREES	691
43	MeSH DESCRIPTOR Physicians, Family EXPLODE ALL TREES	50
44	MeSH DESCRIPTOR Group Practice EXPLODE ALL TREES	65
45	MeSH DESCRIPTOR Patient Care Team EXPLODE ALL TREES	213
46	MeSH DESCRIPTOR Patient Care Management EXPLODE ALL TREES	2456
47	((primary or family or community or outpatient* or ambulatory) adj2 (care* or physician* or nurs* or service* or clinic* or facility or facilities)) OR (((transitional or multidisciplin* or multifacet* or multidisciplin* or multi-facet* or cooperat* or co-operat* or interdisciplin* or inter-disciplin* or collaborat* or multispecial* or multi-special* or share or sharing or shared or integrat* or joint or multi-modal or multimodal) adj2 (care or team*)) OR (team* or liaison) OR (general or family or primary care or community) adj2 (practic* or clinic* or program* or doctor* or nuse* or physician*))	2158
48	#34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41 OR #42 OR #43 OR #44 OR #45 OR #46 OR #47	7685
49	#27 AND #33 AND #48	68

Home Care – Economic Search
2012Feb15

Search date: February 15th, 2012

Databases searched: Ovid MEDLINE, Ovid MEDLINE In-Process and Other Non-Indexed Citations, Ovid EMBASE, PubMed (for non-MEDLINE records), Wiley Cochrane (HTA & NHSEED), Centre for Reviews and Dissemination

Limits: 2002-present; English; NOT comments, editorials, letters, conference abstract (EMBASE)

Database: **Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R)** 1946 to Present, EMBASE <1980 to 2012 Week 06>

Search Strategy:

#	Searches	Results
1	exp Coronary Artery Disease/	212867
2	exp Myocardial Infarction/ use prmz	134000
3	exp heart infarction/ use emez	217674
4	(coronary artery disease or cad or heart attack*).ti.	45250
5	((myocardi* or heart or cardiac or coronary) adj2 (atheroscleros* or arterioscleros* or infarct*)).ti.	149911
6	or/1-5	541817
7	exp Atrial Fibrillation/ use prmz	28253
8	exp heart atrium fibrillation/ use emez	55964
9	((atrial or atrium or auricular) adj1 fibrillation*).ti,ab.	74061
10	or/7-9	100128
11	exp heart failure/	302389
12	((myocardi* or heart or cardiac) adj2 (failure or decompensation or insufficiency)).ti,ab.	235776
13	or/11-12	383677
14	exp Stroke/	179066
15	exp Ischemic Attack, Transient/ use prmz	16399
16	exp transient ischemic attack/ use emez	19769
17	exp stroke patient/ use emez	5675
18	exp brain infarction/ or exp cerebrovascular accident/ use emez	101286
19	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA).ti,ab.	282777
20	or/14-19	393564
21	exp Diabetes Mellitus, Type 2/ use prmz	68717
22	exp non insulin dependent diabetes mellitus/ use emez	102160
23	exp diabetic patient/ use emez	13054
24	(diabetes or diabetic* or niddm or t2dm).ti,ab.	768968
25	or/21-24	794044
26	exp Skin Ulcer/	72352
27	((pressure or bed or skin) adj2 (ulcer* or sore* or wound*)).ti,ab.	28844
28	(decubitus or bedsore*).ti,ab.	8553
29	or/26-28	91149
30	exp Pulmonary Disease, Chronic Obstructive/ use prmz	17234
31	exp chronic obstructive lung disease/ use emez	54967
32	(chronic obstructive adj2 (lung* or pulmonary or airway* or airflow or respiratory) adj (disease* or disorder*)).ti,ab.	54780
33	(copd or coad).ti,ab.	46051
34	chronic airflow obstruction.ti,ab.	1063
35	exp Emphysema/	37547
36	exp chronic bronchitis/ use emez	6992
37	((chronic adj2 bronchitis) or emphysema).ti,ab.	50975
38	or/30-37	160022
39	exp Chronic Disease/	341731
40	((chronic* adj2 disease*) or (chronic* adj2 ill*)).ti,ab.	221536

41	or/39-40	508531
42	exp Comorbidity/	144447
43	(comorbid* or co-morbid* or multimorbid* or multi-morbid* or (complex* adj patient*) or "patient* with multiple" or (multiple adj2 (condition* or disease*))).ti,ab.	205176
44	or/42-43	286303
45	6 or 10 or 13 or 20 or 25 or 29 or 38 or 41 or 44	2835629
46	exp Home Care Services/ use prmz	36959
47	exp Home Care/ use emez	46985
48	exp Home Care Agencies/ or exp Home Health Aides/ use prmz	48501
49	exp House Calls/ use prmz	2060
50	((home or domicil* or communit*) adj2 (visit* or care or caring or caregiver* or healthcare or assist* or aid* or agenc* or service* or rehabilitation)).ti,ab.	87404
51	(homecare or homemaker service* or home nurs* or meals on wheels).ti,ab.	3990
52	or/46-51	143884
53	*Economics/ use prmz	10096
54	*Economics, Medical/ use prmz	5122
55	*Economics, Pharmaceutical/ use prmz	1204
56	exp "Costs and Cost Analysis"/ use prmz	160841
57	exp Models, Economic/ use prmz	8328
58	Markov Chains/ use prmz	7589
59	Monte Carlo Method/ use prmz	16225
60	Quality-Adjusted Life Years/ use prmz	5335
61	"Value of Life"/ use prmz	5197
62	Decision Trees/ use prmz	7814
63	exp "Health Care Cost"/ use emez	169779
64	exp *Health Economics/ use emez	166975
65	exp Economic Evaluation/ use emez	177072
66	Quality Adjusted Life Year/ use emez	8345
67	*Statistical Model/ use emez	11179
68	(econom* or cost or costly or costing or costed or price or prices or pricing or priced or discount or discounts or discounted or discounting or expenditure or expenditures or budget* or afford* or pharmaco-economic* or pharmaco-economic*).ti.	206057
69	(decision adj1 (tree* or analy* or model*)).ti,ab.	18201
70	((value or values or valuation) adj2 (money or monetary or life or lives or costs or cost)).ti,ab.	7847
71	(sensitivity analysis or sensitivity analyses or "willingness to pay" or quality-adjusted life year* or quality adjusted life year* or quality-adjusted life expectanc* or quality adjusted life expectanc* or disability adjusted life or health adjusted life).ti,ab.	36052
72	(unit cost* or drug cost* or hospital cost* or health care cost* or medical cost*).ti,ab.	42865
73	(economic evaluation* or economic review*).ti,ab.	12107
74	(cost* adj2 (util* or effectiveness or efficac* or benefit* or consequence* or analy* or minimi*)).ti,ab.	114884
75	(markov* or monte carlo).ti,ab.	62399
76	or/53-75	804558
77	Case Reports/ or Comment.pt. or Editorial.pt. or Letter.pt. use prmz	2932728
78	Case Report/ or Editorial/ or Letter/ or Conference Abstract.pt. use emez	5828310
79	or/77-78	5934044

80	Meta-Analysis.pt.	31464
81	Meta-Analysis as Topic/ or exp Technology Assessment, Biomedical/	34121
82	((systematic* adj3 (review* or overview*)) or (methodologic* adj3 (review* or overview*))).ti,ab.	84417
83	((quantitative adj3 (review* or overview* or synthes*)) or (research adj3 (integrati* or overview*))).ti,ab.	9317
84	((integrative adj3 (review* or overview*)) or (collaborative adj3 (review* or overview*)) or (pool* adj3 analy*)).ti,ab.	17149
85	(data synthes* or data extraction* or data abstraction*).ti,ab.	22798
86	(handsearch* or hand search*).ti,ab.	8959
87	(mantel haenszel or peto or der simonian or dersimonian or fixed effect* or latin square*).ti,ab.	22095
88	(met analy* or metanaly* or health technology assessment* or HTA or HTAs).ti,ab.	5053
89	(meta regression* or metaregression* or mega regression*).ti,ab.	3204
90	(meta-analy* or metaanaly* or systematic review* or biomedical technology assessment* or bio-medical technology assessment*).mp,hw.	207977
91	(cochrane or health technology assessment or evidence report).jw.	21051
92	(Meta Analysis or Systematic Review or Biomedical Technology Assessment).sh.	127577
93	(Systematic Review Topic or Meta Analysis Topic).sh.	3909
94	or/80-93	283987
95	45 and 52 and 76 and 94	177
96	limit 95 to english language	171
97	limit 96 to yr="2002 -Current"	157
98	remove duplicates from 97	118
99	45 and 52 and 76	2862
100	99 not 79	2626
101	limit 100 to english language	2387
102	limit 101 to yr="2010 -Current"	314
103	remove duplicates from 102	230
104	98 or 103	330

PubMed

Coronary Artery Disease[mh]
Myocardial Infarction[mh]
coronary artery disease[ti] OR cad[ti] OR heart attack*[ti]
(myocardi*[ti] OR heart[ti] OR cardiac[ti] OR coronary[ti]) AND (atheroscleros*[ti] OR arterioscleros*[ti] OR infarct*[ti])
Atrial Fibrillation[mh]
(atrial[tiab] OR atrium[tiab] OR auricular[tiab]) AND fibrillation*[tiab]
Heart Failure[mh]
(myocardi*[tiab] OR heart[tiab] OR cardiac[tiab]) AND (failure[tiab] OR decompensation[tiab] OR insufficiency[tiab])
Stroke[mh]
Ischemic Attack, Transient[mh]
stroke[tiab] OR tia[tiab] OR transient ischemic attack[tiab] OR cerebrovascular apoplexy[tiab] OR cerebrovascular accident[tiab]
OR cerebrovascular infarct*[tiab] OR brain infarct*[tiab] OR CVA[tiab]
Diabetes Mellitus, Type 2[mh]
diabetes[tiab] OR diabetic*[tiab] OR niddm[tiab] OR t2dm[tiab]
Skin Ulcer[mh]
(pressure[tiab] OR bed[tiab] OR skin[tiab]) AND (ulcer*[tiab] OR sore*[tiab] OR wound*[tiab])
decubitus[tiab] OR bedsore*[tiab]
Pulmonary Disease, Chronic Obstructive[mh]
chronic obstructive[tiab] AND (lung*[tiab] OR pulmonary[tiab] OR airway*[tiab] OR airflow[tiab] OR respiratory[tiab]) AND
(disease*[tiab] OR disorder*[tiab])
copd[tiab] OR coad[tiab]
chronic airflow obstruction[tiab]

Emphysema[mh]
 chronic[tiab] AND bronchitis[tiab] OR emphysema[tiab]
 Chronic Disease[mh]
 (chronic*[tiab] AND disease*[tiab]) OR (chronic*[tiab] AND ill*[tiab])
 Comorbidity[mh]
 comorbid*[tiab] OR co-morbid*[tiab] OR multimorbid*[tiab] OR multi-morbid*[tiab] OR (complex*[tiab] AND patient*[tiab])
 OR "patient* with multiple"[tiab] OR (multiple[tiab] AND (condition*[tiab] OR disease*[tiab]))
 OR/

Economics[MAJR:NOEXP]
 Economics, Medical[MAJR:NOEXP]
 Economics, Pharmaceutical[MAJR:NOEXP]
 "Costs and Cost Analysis"[mh]
 Models, Economic[mh]
 Markov Chains[mh]
 Monte Carlo Method[mh]
 Quality-Adjusted Life Years[mh]
 "Value of Life"[mh]
 Decision Trees[mh]
 econom*[ti] OR cost[ti] OR costly[ti] OR costing[ti] OR costed[ti] OR price[ti] OR prices[ti] OR pricing[ti] OR priced[ti] OR
 discount[ti] OR discounts[ti] OR discounted[ti] OR discounting[ti] OR expenditure[ti] OR expenditures[ti] OR budget*[ti] OR
 afford*[ti] OR pharmacoeconomic*[ti] OR pharmaco-economic*[ti]
 decision tree*[tiab] OR decision analy*[tiab] OR decision model*[tiab]
 sensitivity analysis[tiab] OR sensitivity analyses[tiab] OR "willingness to pay"[tiab] OR quality-adjusted life year*[tiab] OR
 quality adjusted life year*[tiab] OR quality-adjusted life expectanc*[tiab] OR quality adjusted life expectanc*[tiab] OR disability
 adjusted life[tiab] OR health adjusted life[tiab]
 unit cost*[tiab] OR drug cost*[tiab] OR hospital cost*[tiab] OR health care cost*[tiab] OR medical cost*[tiab]
 economic evaluation*[tiab] OR economic review*[tiab]
 cost* util*[tiab] OR cost* effectiveness[tiab] OR cost* efficacy*[tiab] OR cost* benefit*[tiab] OR cost* consequence*[tiab] OR
 cost* analy*[tiab] OR cost* minimi*[tiab]
 markov*[tiab] OR monte carlo[tiab]

AND

Home Care Services[mh]
 Home Care Agencies[mh] OR Home Health Aides[mh]
 House Calls[mh]
 (home[tiab] OR domicil*[tiab] OR communit*[tiab]) AND (visit*[tiab] OR care[tiab] OR caring[tiab] OR caregiver*[tiab] OR
 healthcare[tiab] OR assist*[tiab] OR aid*[tiab] OR agenc*[tiab] OR service*[tiab] OR rehabilitation[tiab])
 homecare[tiab] OR homemaker service*[tiab] OR home nurs*[tiab] OR meals on wheels[tiab]

AND

systematic[sb] OR meta-analysis[pt] OR meta-analysis as topic[mh] OR meta analy*[tw] OR metanaly*[tw] OR metaanaly*[tw]
 OR met analy*[tw] OR integrative research[tiab] OR integrative review*[tiab] OR integrative overview*[tiab] OR research
 integration*[tiab] OR research overview*[tiab] OR collaborative review*[tiab] OR collaborative overview*[tiab] OR systematic
 review*[tiab] OR technology assessment*[tiab] OR "Technology Assessment, Biomedical"[mh] OR HTA[tiab] OR HTAs[tiab]
 OR "Cochrane Database Syst Rev"[Journal: __jrid21711] OR "health technology assessment winchester, england"[Journal] OR
 "Evid Rep Technol Assess (Full Rep)"[Journal] OR "Evid Rep Technol Assess (Summ)"[Journal]

publisher[sb] OR in process[sb] OR pubmednotmedline[sb]

Limit to English

Search	Query	Items found
#12	Search #1 AND #7 AND #9 Limits: English, Publication Date from 2002 to 2012	63
#11	Search #1 AND #7 AND #9	71
#10	Search #1 AND #7 AND #8 AND #9	8
#9	Search publisher[sb] OR in process[sb] OR pubmednotmedline[sb]	1689981

Search	Query	Items found
#8	Search systematic[sb] OR meta-analysis[pt] OR meta-analysis as topic[mh] OR meta analy*[tw] OR metanaly*[tw] OR metaanaly*[tw] OR met analy*[tw] OR integrative research[tiab] OR integrative review*[tiab] OR integrative overview*[tiab] OR research integration*[tiab] OR research overview*[tiab] OR collaborative review*[tiab] OR collaborative overview*[tiab] OR systematic review*[tiab] OR technology assessment*[tiab] OR "Technology Assessment, Biomedical"[mh] OR HTA[tiab] OR HTAs[tiab] OR "Cochrane Database Syst Rev"[Journal: __jrid21711] OR "health technology assessment winchester, england"[Journal] OR "Evid Rep Technol Assess (Full Rep)"[Journal] OR "Evid Rep Technol Assess (Summ)"[Journal]	198949
#7	Search #2 OR #3 OR #4 OR #5 OR #6	177554
#6	Search homecare[tiab] OR homemaker service*[tiab] OR home nurs*[tiab] OR meals on wheels[tiab]	1811
#5	Search (home[tiab] OR domicil*[tiab] OR communit*[tiab]) AND (visit*[tiab] OR care[tiab] OR caring[tiab] OR caregiver*[tiab] OR healthcare[tiab] OR assist*[tiab] OR aid*[tiab] OR agenc*[tiab] OR service*[tiab] OR rehabilitation[tiab])	156951
#4	Search House Calls[mh]	2053
#3	Search Home Care Agencies[mh] OR Home Health Aides[mh]	1518
#2	Search Home Care Services[mh]	36935
#1	Search (((Coronary Artery Disease[mh]) OR (Myocardial Infarction[mh]) OR (coronary artery disease[ti] OR cad[ti] OR heart attack*[ti] OR ((myocardi*[ti] OR heart[ti] OR cardiac[ti] OR coronary[ti]) AND (atheroscleros*[ti] OR arterioscleros*[ti] OR infarct*[ti]))) OR ((Atrial Fibrillation[mh]) OR ((atrial[tiab] OR atrium[tiab] OR auricular[tiab]) AND fibrillation*[tiab])) OR ((Heart Failure[mh]) OR ((myocardi*[tiab] OR heart[tiab] OR cardiac[tiab]) AND (failure[tiab] OR decompensation[tiab] OR insufficiency[tiab]))) OR ((Stroke[mh]) OR (Ischemic Attack, Transient[mh]) OR (stroke[tiab] OR tia[tiab] OR transient ischemic attack[tiab] OR cerebrovascular apoplexy[tiab] OR cerebrovascular accident[tiab] OR cerebrovascular infarct*[tiab] OR brain infarct*[tiab] OR CVA[tiab])) OR ((Diabetes Mellitus, Type 2[mh]) OR (diabetes[tiab] OR diabetic*[tiab] OR niddm[tiab] OR t2dm[tiab])) OR ((Skin Ulcer[mh]) OR ((pressure[tiab] OR bed[tiab] OR skin[tiab]) AND (ulcer*[tiab] OR sore*[tiab] OR wound*[tiab])) OR (decubitus[tiab] OR bed sore*[tiab])) OR ((Pulmonary Disease, Chronic Obstructive[mh]) OR (chronic obstructive[tiab] AND (lung*[tiab] OR pulmonary[tiab] OR airway*[tiab] OR airflow[tiab] OR respiratory[tiab]) AND (disease*[tiab] OR disorder*[tiab])) OR (copd[tiab] OR coad[tiab] OR (chronic airflow obstruction[tiab] OR (Emphysema[mh]) OR (chronic[tiab] AND bronchitis[tiab] OR emphysema[tiab])) OR ((Chronic Disease[mh]) OR ((chronic*[tiab] AND disease*[tiab]) OR (chronic*[tiab] AND ill*[tiab]))) OR ((Comorbidity[mh]) OR (comorbid*[tiab] OR co-morbid*[tiab] OR multimorbid*[tiab] OR multi-morbid*[tiab] OR (complex*[tiab] AND patient*[tiab]) OR "patient* with multiple"[tiab] OR (multiple[tiab] AND (condition*[tiab] OR disease*[tiab]))) AND ((Economics[MAJR:noexp] OR (Economics, Medical[MAJR:noexp] OR (Economics, Pharmaceutical[MAJR:noexp] OR ("Costs and Cost Analysis"[mh]) OR (Models, Economic[mh]) OR (Markov Chains[mh]) OR (Monte Carlo Method[mh]) OR (Quality-Adjusted Life Years[mh]) OR ("Value of Life"[mh]) OR (Decision Trees[mh]) OR (econom*[ti] OR cost[ti] OR costly[ti] OR costing[ti] OR costed[ti] OR price[ti] OR prices[ti] OR pricing[ti] OR priced[ti] OR discount[ti] OR discounts[ti] OR discounted[ti] OR discounting[ti] OR expenditure[ti] OR expenditures[ti] OR budget*[ti] OR afford*[ti] OR pharmacoeconomic*[ti] OR pharmaco-economic*[ti]) OR (decision tree*[tiab] OR decision analy*[tiab] OR decision model*[tiab] OR (sensitivity analysis[tiab] OR sensitivity analyses[tiab] OR "willingness to pay"[tiab] OR quality-adjusted life year*[tiab] OR quality adjusted life year*[tiab] OR quality-adjusted life expectanc*[tiab] OR quality adjusted life expectanc*[tiab] OR disability adjusted life[tiab] OR health adjusted life[tiab]) OR (unit cost*[tiab] OR drug cost*[tiab] OR hospital cost*[tiab] OR health care cost*[tiab] OR medical cost*[tiab]) OR (economic evaluation*[tiab] OR economic review*[tiab] OR (cost* AND util*[tiab] OR cost* AND effectiveness[tiab] OR cost* AND efficacy*[tiab] OR cost* AND benefit*[tiab] OR cost* AND consequence*[tiab] OR cost* AND analy*[tiab] OR cost* AND minimi*[tiab] OR (markov*[tiab] OR monte carlo[tiab]))	28533

Wiley Cochrane

ID	Search	Hits
#1	MeSH descriptor Coronary Artery Disease explode all trees	2157
#2	MeSH descriptor Myocardial Infarction explode all trees	7836
#3	(myocardi* or heart or cardiac or coronary) NEAR/2 (atheroscleros* or arterioscleros* or infarct*):ti or (coronary artery disease or cad or heart attack*):ti	8560

#4	MeSH descriptor Atrial Fibrillation explode all trees	2124
#5	(atrial NEAR/2 fibrillation* or atrium NEAR/2 fibrillation* or auricular NEAR/2 fibrillation*):ti	2349
#6	MeSH descriptor Heart Failure explode all trees	4731
#7	(myocardi* NEAR/2 (failure or decompensation or insufficiency)):ti or (heart NEAR/2 (failure or decompensation or insufficiency)):ti or (cardiac NEAR/2 (failure or decompensation or insufficiency)):ti	5249
#8	MeSH descriptor Stroke explode all trees	3876
#9	MeSH descriptor Ischemic Attack, Transient explode all trees	470
#10	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA):ti	9954
#11	MeSH descriptor Diabetes Mellitus, Type 2 explode all trees	7006
#12	(diabetes or diabetic* or niddm or t2dm):ti	16492
#13	MeSH descriptor Skin Ulcer explode all trees	1599
#14	(pressure or bed or skin) NEAR/2 (ulcer* or sore* or wound*):ti	671
#15	(decubitus or bedsore*):ti	101
#16	MeSH descriptor Pulmonary Disease, Chronic Obstructive explode all trees	1772
#17	(chronic obstructive NEAR/2 (lung* or pulmonary or airway* or airflow or respiratory)):ti	2399
#18	(copd or coad):ti	3367
#19	(chronic airflow obstruction):ti	70
#20	MeSH descriptor Emphysema explode all trees	91
#21	(chronic NEAR/2 bronchitis) or emphysema:ti	1198
#22	MeSH descriptor Chronic Disease explode all trees	9841
#23	(chronic* NEAR/2 disease* or chronic* NEAR/2 ill*):ti	1674
#24	MeSH descriptor Comorbidity explode all trees	1925
#25	(comorbid* OR co-morbid* OR multimorbid* OR multi-morbid* OR (complex* NEXT patient*) OR "patient* with multiple" OR (multiple NEAR/2 (condition* OR disease*))):ti	638
#26	(#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25)	68167
#27	MeSH descriptor Home Care Services explode all trees	1884
#28	MeSH descriptor Home Care Agencies explode all trees	7
#29	MeSH descriptor Home Health Aides explode all trees	18
#30	MeSH descriptor House Calls explode all trees	216
#31	((home or domicil* or communit*) NEAR/2 (care or caring or caregiver* or healthcare or assist* or aid* or agenc* or service* or rehabilitation)):ti or ((home or domicil* or communit*) NEAR/2 (care or caring or caregiver* or healthcare or assist* or aid* or agenc* or service* or rehabilitation)):ab	2184
#32	(homecare or homemaker service*):ti and (homecare or homemaker service*):ab	9
#33	(#27 OR #28 OR #29 OR #30 OR #31 OR #32)	3674
#34	(#26 AND #33), from 2002 to 2012	509

Centre for Reviews and Dissemination

Line	Search	Hits
1	MeSH DESCRIPTOR coronary artery disease EXPLODE ALL TREES	282
2	(coronary artery disease or cad or heart attack*):TI	213
3	((myocardi* or heart or cardiac or coronary) adj2 (atheroscleros* or arterioscleros* or infarct*)):TI	226
4	MeSH DESCRIPTOR Atrial Fibrillation EXPLODE ALL TREES	265
5	((atrial or atrium or auricular) adj1 fibrillation*):TI	0
6	((atrial or atrium or auricular) adj1 fibrillation*):TI	171
7	MeSH DESCRIPTOR heart failure EXPLODE ALL TREES	479
8	((myocardi* or heart or cardiac) adj2 (failure or decompensation or insufficiency)):TI	283
9	MeSH DESCRIPTOR stroke EXPLODE ALL TREES	645
10	MeSH DESCRIPTOR Ischemic Attack, Transient EXPLODE ALL TREES	40
11	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA):TI	623
12	MeSH DESCRIPTOR Diabetes Mellitus, Type 2 EXPLODE ALL TREES	595
13	(diabetes or diabetic* or niddm or t2dm):TI	1228
14	MeSH DESCRIPTOR Skin Ulcer EXPLODE ALL TREES	276
15	((pressure or bed or skin) adj2 (ulcer* or sore* or wound*)):TI	74
16	(decubitus or bedsore*):TI	0

17	MeSH DESCRIPTOR Pulmonary Disease, Chronic Obstructive EXPLODE ALL TREES	276
18	(chronic obstructive adj2 (lung* or pulmonary or airway* or airflow or respiratory)):TI	222
19	(copd or coad):TI	110
20	(chronic airflow obstruction):TI	0
21	MeSH DESCRIPTOR Emphysema EXPLODE ALL TREES	11
22	((chronic adj2 bronchitis) or emphysema):TI	47
23	MeSH DESCRIPTOR Chronic Disease EXPLODE ALL TREES	754
24	((chronic* adj2 disease*) or (chronic* adj2 ill*)):TI	253
25	MeSH DESCRIPTOR Comorbidity EXPLODE ALL TREES	158
26	(comorbid* OR co-morbid* OR multimorbid* OR multi-morbid* OR (complex* adj1 patient*) OR "patient* with multiple" OR (multiple adj2 (condition* OR disease*))) :TI	22
27	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26	4833
28	MeSH DESCRIPTOR home care services EXPLODE ALL TREES	397
29	MeSH DESCRIPTOR home care agencies EXPLODE ALL TREES	1
30	MeSH DESCRIPTOR home health aides EXPLODE ALL TREES	2
31	MeSH DESCRIPTOR house calls EXPLODE ALL TREES	34
32	((home or domicil* or communit*) adj2 (visit* or care or caring or caregiver* or healthcare or assist* or aid* or agenc* or service* or rehabilitation))) FROM 2006 TO 2012	793
33	#28 OR #29 OR #30 OR #31 OR #32	1067
34	#27 AND #33	198
35	#27 AND #33 FROM 2002 TO 2012	168

Self-Management – Economic Search
2012Feb15

Search date: February 15th, 2012

Databases searched: Ovid MEDLINE, Ovid MEDLINE In-Process and Other Non-Indexed Citations, Ovid EMBASE, PubMed (for non-MEDLINE records), Wiley Cochrane (HTA & NHSEED), Centre for Reviews and Dissemination

Limits: 2002-present; English; NOT comments, editorials, letters, conference abstract (EMBASE)

Database: **Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R)** 1946 to Present, EMBASE <1980 to 2012 Week 06>

Search Strategy:

#	Searches	Results
1	exp Coronary Artery Disease/	212867
2	exp Myocardial Infarction/ use prmz	134000
3	exp heart infarction/ use emez	217674
4	(coronary artery disease or cad or heart attack*).ti.	45250

5	((myocardi* or heart or cardiac or coronary) adj2 (atheroscleros* or arterioscleros* or infarct*)).ti.	149911
6	or/1-5	541817
7	exp Atrial Fibrillation/ use prmz	28253
8	exp heart atrium fibrillation/ use emez	55964
9	((atrial or atrium or auricular) adj1 fibrillation*).ti,ab.	74061
10	or/7-9	100128
11	exp heart failure/	302389
12	((myocardi* or heart or cardiac) adj2 (failure or decompensation or insufficiency)).ti,ab.	235776
13	or/11-12	383677
14	exp Stroke/	179066
15	exp Ischemic Attack, Transient/ use prmz	16399
16	exp transient ischemic attack/ use emez	19769
17	exp stroke patient/ use emez	5675
18	exp brain infarction/ or exp cerebrovascular accident/ use emez	101286
19	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA).ti,ab.	282777
20	or/14-19	393564
21	exp Diabetes Mellitus, Type 2/ use prmz	68717
22	exp non insulin dependent diabetes mellitus/ use emez	102160
23	exp diabetic patient/ use emez	13054
24	(diabetes or diabetic* or niddm or t2dm).ti,ab.	768968
25	or/21-24	794044
26	exp Skin Ulcer/	72352
27	((pressure or bed or skin) adj2 (ulcer* or sore* or wound*)).ti,ab.	28844
28	(decubitus or bedsore*).ti,ab.	8553
29	or/26-28	91149
30	exp Pulmonary Disease, Chronic Obstructive/ use prmz	17234
31	exp chronic obstructive lung disease/ use emez	54967
32	(chronic obstructive adj2 (lung* or pulmonary or airway* or airflow or respiratory) adj (disease* or disorder*)).ti,ab.	54780
33	(copd or coad).ti,ab.	46051
34	chronic airflow obstruction.ti,ab.	1063
35	exp Emphysema/	37547
36	exp chronic bronchitis/ use emez	6992
37	((chronic adj2 bronchitis) or emphysema).ti,ab.	50975
38	or/30-37	160022
39	exp Chronic Disease/	341731
40	((chronic* adj2 disease*) or (chronic* adj2 ill*)).ti,ab.	221536
41	or/39-40	508531
42	exp Comorbidity/	144447
43	(comorbid* or co-morbid* or multimorbid* or multi-morbid* or (complex* adj patient*) or "patient* with multiple" or (multiple adj2 (condition* or disease*))).ti,ab.	205176
44	or/42-43	286303
45	6 or 10 or 13 or 20 or 25 or 29 or 38 or 41 or 44	2835629

46	exp Self Care/ use prmz	34221
47	Self-Help Groups/ use prmz	7183
48	exp Consumer Participation/ use prmz	28082
49	Self Efficacy/ use prmz	9335
50	exp Self Care/ use emez	39721
51	Self Concept/ use emez	49572
52	Self Injection/ use emez	716
53	Self Monitoring/ use emez	2916
54	Patient Participation/ use emez	13437
55	Empowerment/ use emez	1649
56	(selfadminist* or selfcar* or selfinject* or selfmanag* or selfmeasur* or selfmedicat* or selfmonitor* or selfregulat* or selftest* or selftreat*).ti,ab.	1240
57	(self-administ* or self-car* or self-inject* or self-manag* or self-measur* or self-medicat* or self-monitor* or self-regulat* or self-test* or self-treat*).ti,ab.	107590
58	(selfactivation or selfdevelop* or selfintervention).ti,ab.	11
59	(self-activation or self-develop* or self-intervention).ti,ab.	1892
60	((patient? or consumer?) adj3 (activation or coach* or empowerment or involv* or participat*).ti,ab.	116251
61	health coach*.ti,ab.	203
62	((behaviour* adj (coach* or modif*)) or (behavior* adj (coach* or modif*))).ti,ab.	6999
63	(dsmp or cdsmp or dsme or smp or sme or smt).ti,ab.	5790
64	(medication? adherence adj5 self*).ti,ab.	508
65	or/46-64	378082
66	*Economics/ use prmz	10096
67	*Economics, Medical/ use prmz	5122
68	*Economics, Pharmaceutical/ use prmz	1204
69	exp "Costs and Cost Analysis"/ use prmz	160841
70	exp Models, Economic/ use prmz	8328
71	Markov Chains/ use prmz	7589
72	Monte Carlo Method/ use prmz	16225
73	Quality-Adjusted Life Years/ use prmz	5335
74	"Value of Life"/ use prmz	5197
75	Decision Trees/ use prmz	7814
76	exp "Health Care Cost"/ use emez	169779
77	exp *Health Economics/ use emez	166975
78	exp Economic Evaluation/ use emez	177072
79	Quality Adjusted Life Year/ use emez	8345
80	*Statistical Model/ use emez	11179
81	(econom* or cost or costly or costing or costed or price or prices or pricing or priced or discount or discounts or discounted or discounting or expenditure or expenditures or budget* or afford* or pharmaco-economic* or pharmaco-economic*).ti.	206057
82	(decision adj1 (tree* or analy* or model*).ti,ab.	18201
83	((value or values or valuation) adj2 (money or monetary or life or lives or costs or cost)).ti,ab.	7847
84	(sensitivity analysis or sensitivity analyses or "willingness to pay" or quality-adjusted life year* or quality adjusted life year* or quality-adjusted life expectanc* or quality adjusted life expectanc* or disability adjusted life or health adjusted life).ti,ab.	36052

85	(unit cost* or drug cost* or hospital cost* or health care cost* or medical cost*).ti,ab.	42865
86	(economic evaluation* or economic review*).ti,ab.	12107
87	(cost* adj2 (util* or effectiveness or efficacy* or benefit* or consequence* or analy* or minimi*)).ti,ab.	114884
88	(markov* or monte carlo).ti,ab.	62399
89	or/66-88	804558
90	Case Reports/ or Comment.pt. or Editorial.pt. or Letter.pt. use prnz	2932728
91	Case Report/ or Editorial/ or Letter/ or Conference Abstract.pt. use emez	5828310
92	or/90-91	5934044
93	Meta-Analysis.pt.	31464
94	Meta-Analysis as Topic/ or exp Technology Assessment, Biomedical/	34121
95	((systematic* adj3 (review* or overview*)) or (methodologic* adj3 (review* or overview*))).ti,ab.	84417
96	((quantitative adj3 (review* or overview* or synthes*)) or (research adj3 (integrati* or overview*))).ti,ab.	9317
97	((integrative adj3 (review* or overview*)) or (collaborative adj3 (review* or overview*)) or (pool* adj3 analy*)).ti,ab.	17149
98	(data synthes* or data extraction* or data abstraction*).ti,ab.	22798
99	(handsearch* or hand search*).ti,ab.	8959
100	(mantel haenszel or peto or der simonian or dersimonian or fixed effect* or latin square*).ti,ab.	22095
101	(met analy* or metanaly* or health technology assessment* or HTA or HTAs).ti,ab.	5053
102	(meta regression* or metaregression* or mega regression*).ti,ab.	3204
103	(meta-analy* or metaanaly* or systematic review* or biomedical technology assessment* or bio-medical technology assessment*).mp,hw.	207977
104	(cochrane or health technology assessment or evidence report).jw.	21051
105	(Meta Analysis or Systematic Review or Biomedical Technology Assessment).sh.	127577
106	(Systematic Review Topic or Meta Analysis Topic).sh.	3909
107	or/93-106	283987
108	45 and 65 and 89 and 107	341
109	limit 108 to english language	335
110	limit 109 to yr="2002 -Current"	306
111	remove duplicates from 110	237
112	45 and 65 and 89	3531
113	112 not 92	3184
114	limit 113 to english language	2996
115	limit 114 to yr="2010 -Current"	564
116	remove duplicates from 115	436
117	111 or 116	620

PubMed

Coronary Artery Disease[mh]

Myocardial Infarction[mh]

coronary artery disease[ti] OR cad[ti] OR heart attack*[ti]

(myocardi*[ti] OR heart[ti] OR cardiac[ti] OR coronary[ti]) AND (atheroscleros*[ti] OR arterioscleros*[ti] OR infarct*[ti])

Atrial Fibrillation[mh]

(atrial[tiab] OR atrium[tiab] OR auricular[tiab]) AND fibrillation*[tiab]

Heart Failure[mh]

(myocardi*[tiab] OR heart[tiab] OR cardiac[tiab]) AND (failure[tiab] OR decompensation[tiab] OR insufficiency[tiab])

Stroke[mh]

Ischemic Attack, Transient[mh]

stroke[tiab] OR tia[tiab] OR transient ischemic attack[tiab] OR cerebrovascular apoplexy[tiab] OR cerebrovascular accident[tiab] OR cerebrovascular infarct*[tiab] OR brain infarct*[tiab] OR CVA[tiab]
 Diabetes Mellitus, Type 2[mh]
 diabetes[tiab] OR diabetic*[tiab] OR niddm[tiab] OR t2dm[tiab]
 Skin Ulcer[mh]
 (pressure[tiab] OR bed[tiab] OR skin[tiab]) AND (ulcer*[tiab] OR sore*[tiab] OR wound*[tiab])
 decubitus[tiab] OR bedsore*[tiab]
 Pulmonary Disease, Chronic Obstructive[mh]
 chronic obstructive[tiab] AND (lung*[tiab] OR pulmonary[tiab] OR airway*[tiab] OR airflow[tiab] OR respiratory[tiab]) AND (disease*[tiab] OR disorder*[tiab])
 copd[tiab] OR coad[tiab]
 chronic airflow obstruction[tiab]
 Emphysema[mh]
 chronic[tiab] AND bronchitis[tiab] OR emphysema[tiab]
 Chronic Disease[mh]
 (chronic*[tiab] AND disease*[tiab]) OR (chronic*[tiab] AND ill*[tiab])
 Comorbidity[mh]
 comorbid*[tiab] OR co-morbid*[tiab] OR multimorbid*[tiab] OR multi-morbid*[tiab] OR (complex*[tiab] AND patient*[tiab]) OR "patient* with multiple"[tiab] OR (multiple[tiab] AND (condition*[tiab] OR disease*[tiab]))

Economics[MAJR:NOEXP]
 Economics, Medical[MAJR:NOEXP]
 Economics, Pharmaceutical[MAJR:NOEXP]
 "Costs and Cost Analysis"[mh]
 Models, Economic[mh]
 Markov Chains[mh]
 Monte Carlo Method[mh]
 Quality-Adjusted Life Years[mh]
 "Value of Life"[mh]
 Decision Trees[mh]
 econom*[ti] OR cost[ti] OR costly[ti] OR costing[ti] OR costed[ti] OR price[ti] OR prices[ti] OR pricing[ti] OR priced[ti] OR discount[ti] OR discounts[ti] OR discounted[ti] OR discounting[ti] OR expenditure[ti] OR expenditures[ti] OR budget*[ti] OR afford*[ti] OR pharmacoeconomic*[ti] OR pharmaco-economic*[ti]
 decision tree*[tiab] OR decision analy*[tiab] OR decision model*[tiab]
 sensitivity analysis[tiab] OR sensitivity analyses[tiab] OR "willingness to pay"[tiab] OR quality-adjusted life year*[tiab] OR quality adjusted life year*[tiab] OR quality-adjusted life expectanc*[tiab] OR quality adjusted life expectanc*[tiab] OR disability adjusted life[tiab] OR health adjusted life[tiab]
 unit cost*[tiab] OR drug cost*[tiab] OR hospital cost*[tiab] OR health care cost*[tiab] OR medical cost*[tiab]
 economic evaluation*[tiab] OR economic review*[tiab]
 cost* util*[tiab] OR cost* effectiveness[tiab] OR cost* efficac*[tiab] OR cost* benefit*[tiab] OR cost* consequence*[tiab] OR cost* analy*[tiab] OR cost* minimi*[tiab]
 markov*[tiab] OR monte carlo[tiab]

Self Care[mh]
 Self-Help Groups[mh:noexp]
 Consumer Participation[mh]
 Self Efficacy[mh:noexp]
 selfadminist*[tiab] OR selfcar*[tiab] OR selfinject*[tiab] OR selfmanag*[tiab] OR selfmeasur*[tiab] OR selfmedicat*[tiab] OR selfmonitor*[tiab] OR selfregulat*[tiab] OR selftest*[tiab] OR selftreat*[tiab]
 self-administ*[tiab] OR self-car*[tiab] OR self-inject*[tiab] OR self-manag*[tiab] OR self-measur*[tiab] OR self-medicat*[tiab] OR self-monitor*[tiab] OR self-regulat*[tiab] OR self-test*[tiab] OR self-treat*[tiab]
 selfactivation[tiab] OR selfdevelop*[tiab] OR selfintervention[tiab] OR self-activation[tiab] OR self-develop*[tiab] OR self-intervention[tiab]
 (patient*[tiab] OR consumer*[tiab]) AND (activation[tiab] OR coach*[tiab] OR empowerment[tiab] OR involv*[tiab] OR participat*[tiab])
 health coach*[tiab] OR behaviour* coach*[tiab] OR behaviour* modif*[tiab] OR behavior* coach*[tiab] OR behavior* modif*[tiab]
 dsmp[tiab] OR cdsmp[tiab] OR dsme[tiab] OR smp[tiab] OR sme[tiab] OR smt[tiab]
 medication* adherence[tiab] AND self*[tiab]

systematic[sb] OR meta-analysis[pt] OR meta-analysis as topic[mh] OR meta analy*[tw] OR metanaly*[tw] OR metaanaly*[tw] OR met analy*[tw] OR integrative research[tiab] OR integrative review*[tiab] OR integrative overview*[tiab] OR research

integration*[tiab] OR research overview*[tiab] OR collaborative review*[tiab] OR collaborative overview*[tiab] OR systematic review*[tiab] OR technology assessment*[tiab] OR "Technology Assessment, Biomedical"[mh] OR HTA[tiab] OR HTAs[tiab] OR "Cochrane Database Syst Rev"[Journal: __jrid21711] OR "health technology assessment winchester, england"[Journal] OR "Evid Rep Technol Assess (Full Rep)"[Journal] OR "Evid Rep Technol Assess (Summ)"[Journal]

publisher[sb] OR in process[sb] OR pubmednotmedline[sb]

Limit to English

Search	Query	Items found
#20	Search #18 OR #19 Limits: English, Publication Date from 2002 to 2012	75
#19	Search #1 AND #13 AND #14 AND #15 Limits: English, Publication Date from 2002 to 2012	23
#18	Search #1 AND #13 AND #15 Limits: English, Publication Date from 2010 to 2012	70
#17	Search #1 AND #13 AND #15	116
#16	Search #1 AND #13 AND #14 AND #15	24
#15	Search publisher[sb] OR in process[sb] OR pubmednotmedline[sb]	1689981
#14	Search systematic[sb] OR meta-analysis[pt] OR meta-analysis as topic[mh] OR meta analy*[tw] OR metanaly*[tw] OR metaanaly*[tw] OR met analy*[tw] OR integrative research[tiab] OR integrative review*[tiab] OR integrative overview*[tiab] OR research integration*[tiab] OR research overview*[tiab] OR collaborative review*[tiab] OR collaborative overview*[tiab] OR systematic review*[tiab] OR technology assessment*[tiab] OR "Technology Assessment, Biomedical"[mh] OR HTA[tiab] OR HTAs[tiab] OR "Cochrane Database Syst Rev"[Journal: __jrid21711] OR "health technology assessment winchester, england"[Journal] OR "Evid Rep Technol Assess (Full Rep)"[Journal] OR "Evid Rep Technol Assess (Summ)"[Journal]	198949
#13	Search #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12	629372
#12	Search medication* adherence[tiab] AND self*[tiab]	1872
#11	Search dsmp[tiab] OR cdsmp[tiab] OR dsme[tiab] OR smp[tiab] OR sme[tiab] OR smt[tiab]	2734
#10	Search health coach*[tiab] OR behaviour* coach*[tiab] OR behaviour* modif*[tiab] OR behavior* coach*[tiab] OR behavior* modif*[tiab]	37042
#9	Search (patient*[tiab] OR consumer*[tiab]) AND (activation[tiab] OR coach*[tiab] OR empowerment[tiab] OR involv*[tiab] OR participat*[tiab])	488330
#8	Search selfactivation[tiab] OR selfdevelop*[tiab] OR selfintervention[tiab] OR self-activation[tiab] OR self-develop*[tiab] OR self-intervention[tiab]	834
#7	Search self-administ*[tiab] OR self-car*[tiab] OR self-inject*[tiab] OR self-manag*[tiab] OR self-measur*[tiab] OR self-medicat*[tiab] OR self-monitor*[tiab] OR self-regulat*[tiab] OR self-test*[tiab] OR self-treat*[tiab]	51364
#6	Search selfadminist*[tiab] OR selfcar*[tiab] OR selfinject*[tiab] OR selfmanag*[tiab] OR selfmeasur*[tiab] OR selfmedicat*[tiab] OR selfmonitor*[tiab] OR selfregulat*[tiab] OR selftest*[tiab] OR selftreat*[tiab]	145
#5	Search Self Efficacy[mh:noexp]	9302
#4	Search Consumer Participation[mh]	28053
#3	Search Self-Help Groups[mh:noexp]	7178
#2	Search Self Care[mh]	34101
#1	Search (((Coronary Artery Disease[mh]) OR (Myocardial Infarction[mh]) OR (coronary artery disease[ti] OR cad[ti] OR heart attack*[ti]) OR ((myocardi*[ti] OR heart[ti] OR cardiac[ti] OR coronary[ti]) AND (atheroscleros*[ti] OR arterioscleros*[ti] OR infarct*[ti]))) OR ((Atrial Fibrillation[mh]) OR ((atrial[tiab] OR atrium[tiab] OR auricular[tiab]) AND fibrillation*[tiab])) OR ((Heart Failure[mh]) OR ((myocardi*[tiab] OR heart[tiab] OR cardiac[tiab]) AND (failure[tiab] OR decompensation[tiab] OR insufficiency[tiab]))) OR ((Stroke[mh]) OR (Ischemic Attack, Transient[mh]) OR (stroke[tiab] OR tia[tiab] OR transient ischemic attack[tiab] OR cerebrovascular apoplexy[tiab] OR cerebrovascular accident[tiab] OR cerebrovascular infarct*[tiab] OR brain infarct*[tiab] OR CVA[tiab])) OR ((Diabetes Mellitus, Type 2[mh]) OR (diabetes[tiab] OR diabetic*[tiab] OR niddm[tiab] OR t2dm[tiab])) OR ((Skin Ulcer[mh]) OR ((pressure[tiab] OR bed[tiab] OR skin[tiab]) AND (ulcer*[tiab] OR sore*[tiab] OR wound*[tiab])) OR (decubitus[tiab] OR bedsore*[tiab])) OR ((Pulmonary Disease, Chronic Obstructive[mh]) OR (chronic obstructive[tiab] AND (lung*[tiab] OR pulmonary[tiab] OR airway*[tiab] OR airflow[tiab] OR respiratory[tiab]) AND (disease*[tiab] OR disorder*[tiab])) OR (copd[tiab] OR coad[tiab]) OR (chronic airflow obstruction[tiab]) OR (Emphysema[mh]) OR (chronic[tiab] AND bronchitis[tiab] OR emphysema[tiab])) OR ((Chronic	

Search	Query	Items found
	Disease[mh] OR ((chronic*[tiab] AND disease*[tiab]) OR (chronic*[tiab] AND ill*[tiab])) OR ((Comorbidity[mh]) OR (comorbid*[tiab] OR co-morbid*[tiab] OR multimorbid*[tiab] OR multi-morbid*[tiab] OR (complex*[tiab] AND patient*[tiab]) OR "patient* with multiple"[tiab] OR (multiple[tiab] AND (condition*[tiab] OR disease*[tiab])))) AND ((Economics[MAJR:noexp]) OR (Economics, Medical[MAJR:noexp]) OR (Economics, Pharmaceutical[MAJR:noexp]) OR ("Costs and Cost Analysis"[mh]) OR (Models, Economic[mh]) OR (Markov Chains[mh]) OR (Monte Carlo Method[mh]) OR (Quality-Adjusted Life Years[mh]) OR ("Value of Life"[mh]) OR (Decision Trees[mh]) OR (econom*[ti] OR cost[ti] OR costly[ti] OR costing[ti] OR costed[ti] OR price[ti] OR prices[ti] OR pricing[ti] OR priced[ti] OR discount[ti] OR discounts[ti] OR discounted[ti] OR discounting[ti] OR expenditure[ti] OR expenditures[ti] OR budget*[ti] OR afford*[ti] OR pharmacoeconomic*[ti] OR pharmaco-economic*[ti]) OR (decision tree*[tiab] OR decision analy*[tiab] OR decision model*[tiab]) OR (sensitivity analysis[tiab] OR sensitivity analyses[tiab] OR "willingness to pay"[tiab] OR quality-adjusted life year*[tiab] OR quality adjusted life year*[tiab] OR quality-adjusted life expectanc*[tiab] OR quality adjusted life expectanc*[tiab] OR disability adjusted life[tiab] OR health adjusted life[tiab]) OR (unit cost*[tiab] OR drug cost*[tiab] OR hospital cost*[tiab] OR health care cost*[tiab] OR medical cost*[tiab]) OR (economic evaluation*[tiab] OR economic review*[tiab]) OR (cost* AND util*[tiab] OR cost* AND effectiveness[tiab] OR cost* AND efficac*[tiab] OR cost* AND benefit*[tiab] OR cost* AND consequence*[tiab] OR cost* AND analy*[tiab] OR cost* AND minimi*[tiab]) OR (markov*[tiab] OR monte carlo[tiab]))	

ID	Search	Hits
#1	MeSH descriptor Coronary Artery Disease explode all trees	2183
#2	MeSH descriptor Myocardial Infarction explode all trees	7746
#3	(myocardi* or heart or cardiac or coronary) NEAR/2 (atheroscleros* or arterioscleros* or infarct*):ti or (coronary artery disease or cad or heart attack*):ti	8479
#4	MeSH descriptor Atrial Fibrillation explode all trees	2102
#5	(atrial NEAR/2 fibrillation* or atrium NEAR/2 fibrillation* or auricular NEAR/2 fibrillation*):ti	2316
#6	MeSH descriptor Heart Failure explode all trees	4710
#7	(myocardi* NEAR/2 (failure or decompensation or insufficiency)):ti or (heart NEAR/2 (failure or decompensation or insufficiency)):ti or (cardiac NEAR/2 (failure or decompensation or insufficiency)):ti	5264
#8	MeSH descriptor Stroke explode all trees	3899
#9	MeSH descriptor Ischemic Attack, Transient explode all trees	466
#10	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA):ti	9913
#11	MeSH descriptor Diabetes Mellitus, Type 2 explode all trees	6993
#12	(diabetes or diabetic* or niddm or t2dm):ti	16640
#13	MeSH descriptor Skin Ulcer explode all trees	1572
#14	(pressure or bed or skin) NEAR/2 (ulcer* or sore* or wound*):ti	670
#15	(decubitus or bedsore*):ti	98
#16	MeSH descriptor Pulmonary Disease, Chronic Obstructive explode all trees	1754
#17	(chronic obstructive NEAR/2 (lung* or pulmonary or airway* or airflow or respiratory)):ti	2418
#18	(copd or coad):ti	3321
#19	(chronic airflow obstruction):ti	72
#20	MeSH descriptor Emphysema explode all trees	91
#21	(chronic NEAR/2 bronchitis) or emphysema:ti	1183
#22	MeSH descriptor Chronic Disease explode all trees	9875

#23	(chronic* NEAR/2 disease* or chronic* NEAR/2 ill*):ti	1673
#24	MeSH descriptor Comorbidity explode all trees	1941
#25	(comorbid* OR co-morbid* OR multimorbid* OR multi-morbid* OR (complex* NEXT patient*) OR "patient* with multiple" OR (multiple NEAR/2 (condition* OR disease*))) :ti	649
#26	(#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25)	68227
#27	MeSH descriptor Self Care explode all trees	3018
#28	MeSH descriptor Self-Help Groups , this term only	501
#29	MeSH descriptor Consumer Participation explode all trees	850
#30	MeSH descriptor Self Efficacy explode all trees	1167
#31	(selfadminist* OR selfcar* OR selfinject* OR selfmanag* OR selfmeasur* OR selfmedicat* OR selfmonitor* OR selfregulat* OR selftest* OR selftreat*):ti or (self-administ* OR self-car* OR self-inject* OR self-manag* OR self-measur* OR self-medicat* OR self-monitor* OR self-regulat* OR self-test* OR self-treat*):ti or (selfactivation OR selfdevelop* OR selfintervention):ti or (self-activation OR self-develop* OR self-intervention):ti or (patient? OR consumer?) NEAR/3 (activation OR coach* OR empowerment OR involv* OR participat*):ti	2059
#32	(health coach*):ti or (behaviour* NEXT (coach* OR modif*)) OR (behavior* NEXT (coach* OR modif*)) :ti or (dsmp OR cdsmp OR dsme OR smp OR sme OR smt):ti or (medication? adherence NEAR/5 self*):ti	188
#33	(#27 OR #28 OR #29 OR #30 OR #31 OR #32)	6479
#34	(#26 AND #33)	1413
#35	(#26 AND #33), from 2002 to 2012	1101

Wiley Cochrane

The screenshot displays the Wiley Cochrane Library search results page. At the top, the browser address bar shows the URL: <http://onlinelibrary.wiley.com/doi/cochrane/search>. The page header includes the Wiley Online Library logo and the text "THE COCHRANE LIBRARY Independent high-quality evidence for health care decision making". A search bar is visible in the top right corner with the text "SEARCH" and a dropdown menu showing "Title, Abstract or Keywords". Below the header, there are navigation tabs for "COCHRANE REVIEWS" and "OTHER RESOURCES". The main content area is titled "Search Results" and shows "11" results. The first result is "Interactive Health Communication Applications for people with chronic disease" by Elizabeth Murray, Joanne Burns, Sharon See Tai, Rosalind Lai, Irwin Nazareh, published in January 2009. Other results include "Computer-based diabetes self-management interventions for adults with type 2 diabetes mellitus" and "Group based training for self-management strategies in people with type 2 diabetes mellitus".

Centre for Reviews and Dissemination

Line	Search	Hits
1	MeSH DESCRIPTOR coronary artery disease EXPLODE ALL TREES	282
2	(coronary artery disease or cad or heart attack*):TI	213
3	((myocardi* or heart or cardiac or coronary) adj2 (atheroscleros* or arterioscleros* or infarct*)):TI	226
4	MeSH DESCRIPTOR Atrial Fibrillation EXPLODE ALL TREES	265
5	((atrial or atrium or auricular) adj1 fibrillation*):TI	0
6	((atrial or atrium or auricular) adj1 fibrillation*):TI	171
7	MeSH DESCRIPTOR heart failure EXPLODE ALL TREES	479
8	((myocardi* or heart or cardiac) adj2 (failure or decompensation or insufficiency)):TI	283
9	MeSH DESCRIPTOR stroke EXPLODE ALL TREES	645
10	MeSH DESCRIPTOR Ischemic Attack, Transient EXPLODE ALL TREES	40
11	(stroke or tia or transient ischemic attack or cerebrovascular apoplexy or cerebrovascular accident or cerebrovascular infarct* or brain infarct* or CVA):TI	623
12	MeSH DESCRIPTOR Diabetes Mellitus, Type 2 EXPLODE ALL TREES	595
13	(diabetes or diabetic* or niddm or t2dm):TI	1228
14	MeSH DESCRIPTOR Skin Ulcer EXPLODE ALL TREES	276
15	((pressure or bed or skin) adj2 (ulcer* or sore* or wound*)):TI	74
16	(decubitus or bedsore*):TI	0
17	MeSH DESCRIPTOR Pulmonary Disease, Chronic Obstructive EXPLODE ALL TREES	276
18	(chronic obstructive adj2 (lung* or pulmonary or airway* or airflow or respiratory)):TI	222
19	(copd or coad):TI	110
20	(chronic airflow obstruction):TI	0
21	MeSH DESCRIPTOR Emphysema EXPLODE ALL TREES	11
22	((chronic adj2 bronchitis) or emphysema):TI	47
23	MeSH DESCRIPTOR Chronic Disease EXPLODE ALL TREES	754
24	((chronic* adj2 disease*) or (chronic* adj2 ill*)):TI	253
25	MeSH DESCRIPTOR Comorbidity EXPLODE ALL TREES	158
26	(comorbid* OR co-morbid* OR multimorbid* OR multi-morbid* OR (complex* adj1 patient*) OR "patient* with multiple" OR (multiple adj2 (condition* OR disease*)):TI	22

27	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26	4833
28	MeSH DESCRIPTOR Self Care EXPLODE ALL TREES	369
29	MeSH DESCRIPTOR Self-Help Groups EXPLODE ALL TREES	66
30	MeSH DESCRIPTOR Consumer Participation EXPLODE ALL TREES	80
31	MeSH DESCRIPTOR Self Efficacy EXPLODE ALL TREES	31
32	(selfadminist* OR selfcar* OR selfinject* OR selfmanag* OR selfmeasur* OR selfmedicat* OR selfmonitor* OR selfregulat* OR selftest* OR selftreat*):TI OR (self-administ* OR selfcar* OR self-inject* OR self-manag* OR self-measur* OR self-medicat* OR self-monitor* OR self-regulat* OR self-test*OR self-treat*):TI OR (selfactivation OR selfdevelop* OR selfintervention):TI OR (self-activation OR self-develop* OR self-intervention):TI OR ((patient? OR consumer?) ADJ3 (activation OR coach* OR empowerment OR involv* OR participat*)):TI	26
33	(health coach*):TI OR ((behaviour* ADJ1 (coach* OR modif*)) OR (behavior* ADJ1 (coach* OR modif*)):TI OR (dsmp OR cdsmp OR dsme OR smp OR sme OR smt):TI OR (medication? adherence ADJ5 self*):TI	2
34	#28 OR #29 OR #30 OR #31 OR #32 OR #33	522
35	#27 AND #34 FROM 2002 TO 2012	153

Appendix 2: Disease Cohort Definitions

Table A1: Disease Cohort Definitions

Disease	Algorithm	Index Date	Source
Diabetes	Ontario Diabetes Database	As per Ontario Diabetes Database	ICES ^a
CAD	Canadian Institute for Health Information admission dx10code for I09.9, I11.0, I13.0, I25.5, I42.0, I42.5–I42.9, I43.x, or I50.x	First Canadian Institute for Health Information admission dx10code for I09.9, I11.0, I13.0, I25.5, I42.0, I42.5–I42.9, I43.x, or I50.x	So et al, 2006 (14), validation study of acute myocardial infarction population
CHF	Ontario Congestive Heart Failure Database	As per Ontario Congestive Heart Failure Database	ICES ^a
COPD	Ontario Chronic Obstructive Pulmonary Disease Database, sensitive definition	As per Ontario Chronic Obstructive Pulmonary Disease Database	ICES ^a

Abbreviation: CAD, coronary artery disease; CHF, congestive heart failure; COPD, chronic obstructive pulmonary disease; ICES, Institute for Clinical Evaluative Sciences.

^aData provided by ICES, December 17, 2012.

Appendix 3: Quality-of-Life Data

Table A2: Study Characteristics and Utilities Reported by Studies Identified in the Systematic Clinical and Economic Literature Review

Study (Location)	Mean Age, years	Male, %	Comorbidities	Study Identified in Tufts Cost-Effectiveness Analysis	Population Characteristics	Measure (Preference Weights)	Baseline Utility	Marginal Effects on Baseline Utility
Discharge Planning for Patients With CHF								
Phillips et al, 2004 (Australia, Canada, England, Holland, Ireland, Italy, Sweden, USA ^a) (31)	70	62	No additional data reported NYHA class NR	Aidelsburger et al, 2008 (Germany) (43)	—	EQ-5D (German)	NYHA class I: 0.97 NYHA class II: 0.80 NYHA class III: 0.65 NYHA class IV: 0.30	—
In-Home Care for Patients With CHF								
Aguado et al, 2010 (Spain) (25)	77	70	Hypertension: 58% Diabetes mellitus: 38% Hypercholesterolemia: 30% COPD: 31% Chronic renal failure: 20% Chronic liver disease: 6% Cerebrovascular accident: 15% Smoking: 37% NYHA class II: 47% NYHA class III: 30% NYHA class IV: 23%	Aidelsburger et al, 2008 (Germany) (43)	—	EQ-5D (German)	NYHA class I: 0.97 NYHA class II: 0.80 NYHA class III: 0.65 NYHA class IV: 0.30	—
				Gohler et al, 2008 (multiple countries) (7)	—	EQ-5D (German)	—	Index event: 0.840 First rehospitalization: 0.816
Continuity of Care for Patients With Diabetes								
Chen and Cheng, 2011 (Taiwan) (8)	60.7	45.4	<i>Diabetes Complications Severity Index</i> 0 = 47.2% 1 = 27.7% 2+ = 25.1%	Clarke et al, 2002 (UK) (21)	Diabetes type: 2 Mean age: 62.3 Male: NR Most common clinical event: myocardial infarction, 6.2% Least common clinical event: amputation, 0.7%	EQ-5D (UK)	0.77	Myocardial infarction: -0.055 Ischemic heart disease: -0.090 Stroke: -0.164 Heart failure: -0.108 Amputation: -0.280 Blindness (1 eye): -0.074
Worrall and Knight, 2011 (Canada) (44)	74.3	42.6	NR					

Hong et al, 2010 (Korea) (36)	70.6	38.3	Heart disease: 19.5% Stroke: 17.0% Renal disease: 3.5% Hypertension: 76.5%					
Lin et al, 2010 (Taiwan) (35)	58.8	48.6	NR					
Liu et al, 2010 (United States) (45)	58.7	35.4	Arthritis: 38.4% CAD: 16.9% Cancer: 26.6% CHF: 12.5% COPD: 7.2% Cerebrovascular disease: 10.5% Hypertension: 80.1% Psychiatric disease: 28.2%					
Atlas et al, 2009 (USA) (46)	47.8	45.3	Mean Charlson Comorbidity Index Score: 0.5					
Knight et al, 2009 (Canada) (34)	74.6	45.1	NR					
Mainous et al, 2004; (47) Koopman et al, 2003; (48) Harvey, 2004 (49) (United States)	NR	37	NR					
Continuity of Care for Patients With COPD								
Hong et al, 2010 (Korea) (36)	70	45.8	COPD severity: NR <i>Comorbidity</i> Heart disease: 20.3% Stroke: 15.5% Renal disease: 3.6% Hypertension: 59.9% Heart failure: 12.3% Diabetes mellitus: 24.6% Pneumonia: 30.2% <i>Mean Number of Comorbid Conditions</i> 0: 17.8% 1: 29.8% 2: 26.7%	Borg et al, 2004 (Sweden) (50)	—	EQ-5D	Very severe: 0.55 Severe: 0.75 Moderate: 0.76 Mild: 0.90	—
				NICE COPD, based on O'Reilly et al, 2007 (UK) (51)	<i>Number of comorbid conditions</i> 1 (COPD only): 54% 2: 26% 3: 12% 4+: 8%	EQ-5D	—	First 2 weeks: -0.120 Week 2 to 12: 0.389

			3+: 25.7%					
eTools for Patients With Diabetes								
Branger et al, 1999 (Netherlands) (52)	60.0	47	—	Clarke et al, 2002 (UK) (21)	Diabetes type: 2 Mean age: 62.3 Male: NR Most common clinical event: myocardial infarction, 6.2% Least common clinical event: amputation, 0.7%	EQ-5D (UK)	0.77	Myocardial infarction: -0.055 Ischemic heart disease: -0.090 Stroke: -0.164 Heart failure: -0.108 Amputation: -0.280 Blindness (1 eye): -0.074
Cebul et al, 2011 (USA) (53)	—	—	—					
Crosson et al, 2012 (USA) (54)	—	—	—					
Herrin et al, 2012 (USA) (55)	—	—	—					
Khan et al, 2010 (USA) (38)	—	—	—					
Montori et al, 2002 (USA) (56)	—	—	—					
Wells and Hill-Smith, 1996 (UK) (57)	—	—	—					
Atienza et al, 2004 (Spain) (58)	68	60	Most common cause of heart failure was ischemic heart disease (29%) NYHA class I: 10% NYHA class II: 40% NYHA class III: 40% NYHA class IV: 40%	Gohler et al, 2008 (multiple countries) (7)	—	EQ-5D (German)	—	Index event: 0.840 First rehospitalization: 0.816

Abbreviation: CAD, coronary artery disease; CHF, congestive heart failure; COPD, chronic obstructive pulmonary disease; EQ-5D, European Quality of Life 5 Domain; eTool, electronic tool; ICD-9, International Classification of Diseases, 9th edition; NR, not reported; NYHA, New York Heart Association.

*Systematic review with 18 randomized controlled trials from 8 different countries.

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