



Health Systems Evidence

Evidence to Support Policymaking and Management (2)

<< healthsystemsevidence.org >>

Veterans Health Administration

October 5th, 2010

Lori Greco MHS, Knowledge Broker

Kaelan Moat, Doctoral Student



Agenda

- Overview of Health Systems Evidence
 - What it is
 - How is was created
 - Why use it
 - What is in it
 - How to search it
- Tour of Health Systems Evidence
- Demonstration searches



Health Systems Evidence Partners

McMaster HEALTH FORUM



Canadian Cochrane Centre



 **Program in Policy Decision-Making**
A research program affiliated with McMaster University's Centre for Health Economics and Policy Analysis



Interactive Question 1

- *What is your role?*
 - Clinician
 - Researcher
 - Manager or Administrator
 - Other



Background

- John Lavis' research program
 - To promote the use of research evidence in policymaking and management
 - Michael Wilsons' work to develop the database



What is Health Systems Evidence? (1)

- Online repository
- Continuously updated
- Easy to search





What is Health Systems Evidence? (2)

Contains policy-relevant synthesized research evidence about:

- ❑ governance, financial and delivery arrangements within health systems
- ❑ implementation strategies that can support change within health systems.



Interactive Question 2

- *Given what you know so far, are you likely to use **Health Systems Evidence** to find synthesized research evidence about governance, financial and delivery arrangements within health systems and about implementation strategies within health systems?*

Yes

No

Maybe



Methods: How we build and maintain HSE

- On-going process of:
 - Identifying and screening abstracts of systematic reviews/other research syntheses for inclusion;
 - Coding each included synthesis according to type and how it addresses health systems arrangements and implementation strategies;
 - Searching for and linking to free online pdfs, full text files, user friendly summaries, abstracts;
 - Applying a validated quality rating tool to produce a methodological quality score for each synthesis and;
 - Identifying countries in which the studies included in each review were conducted



How we build and maintain HSE (2)

- Identifying abstracts of research syntheses
 - Centre for Reviews and Dissemination (UK) Database of Abstracts of Reviews of Effects— “DARE” (weekly updates)
 - Cochrane library of systematic reviews (monthly updates)
 - Cochrane Effective Practice and Organization of Care Group (EPOC)
 - Other syntheses and sources of syntheses that are identified (personal knowledge, forwards from colleagues, list-servs, etc.)



How we build and maintain HSE (3)

- Screening abstracts of systematic reviews/other research syntheses for inclusion
 - Reviews/overviews of reviews: at least two databases need to have been searched, explicit inclusion/exclusion criteria must be included
 - Policy briefs: must address two or more of the policy problem, options for addressing the problem, and implementation strategies; and; they draw (at least in part) on systematic reviews to describe what is known about two or more of the problem, options for addressing the problem, and implementation strategies
- Performed independently by at least two reviewers



How we build and maintain HSE (4)

- Coding each included synthesis according to type:
 - Policy brief
 - Overview of systematic review
 - Systematic review
 - Systematic review (Cochrane)
 - Systematic review protocol (often Cochrane)
- Coding each included synthesis according to type of question:
 - Effectiveness
 - Not effectiveness
 - Many



How we build and maintain HSE (5)

- Coding based on which health system arrangement(s) and implementation strategies they address:
 - Governance Arrangements (i.e. centralization/decentralization of policy authority)
 - Financial Arrangements (i.e. the use of fee for service as a form of remuneration)
 - Delivery Arrangements (i.e. substitution of nurse practitioners for general physicians)
 - Implementation strategies (i.e. providing consumers with information or education about a program)
- Independently coded by two reviewers



Health System Arrangements

Governance Arrangement (79)	Financial Arrangement (104)	Delivery Arrangement (1081)
<ul style="list-style-type: none"> • Policy Authority (14) • Organizational authority (32) • Professional authority (20) • Commercial authority (11) • Consumer and stakeholder involvement (23) 	<ul style="list-style-type: none"> • Financing (35) • Funding (21) • Remuneration (44) • Financial incentives for patients (27) • Resource allocation (15) 	<ul style="list-style-type: none"> • To whom care is provided & with what efforts to reach them (270) • By whom care is provided (548) • Where care is provided (328) • With what information & communication technology is care provided? (215) • With what level of quality & safety is care provided (37)



Implementation strategies

Consumer-targeted (135)	Provider-targeted (181)	Organization-targeted (12)
<ul style="list-style-type: none"> • Information or education provision (104) • Behaviour change support (64) • Skills and competencies development (32) • (Personal) Support (32) • Communication and decision-making facilitation (15) • System participation (1) 	<ul style="list-style-type: none"> • Educational material (80) • Educational meeting (92) • Educational outreach visit (37) • Local opinion leader (7) • Local consensus process (4) • Peer review (0) • Audit and feedback (49) • Reminders and prompt (0) • Tailored intervention (2) • Patient-mediated intervention (18) • Multi-faceted intervention (89) 	



How we build and maintain HSE (6)

- Searching for and linking to free online pdfs, full text files, user friendly summaries, abstracts
 - URLs for publicly available copies of included syntheses and user-friendly summaries of these syntheses are identified and included in the database for each synthesis
 - i.e. links to PubMed abstracts, Australasian Cochrane Centre Policy Liaison Initiative user-friendly summaries, PDF files if the review is published in an open access journal



How we build and maintain HSE (7)

- Applying a validated quality rating tool to produce a methodological quality score for each synthesis
 - Two reviewers independently assess each systematic review in the database using the *AMSTAR* quality rating tool
 - Reconciled scores are reported with each review
- Country coding
 - Two reviewers independently scan reviews to identify the countries in which the studies included were conducted
 - Reconciled codes appear in the database with each review



Why use Health Systems Evidence?

- **Saves time** by helping to rapidly identify:
 - ❑ synthesis of the best available research evidence on a given topic
 - ❑ prepared in a systematic and transparent way
 - ❑ how recently the search for studies was conducted
 - ❑ quality of the synthesis
 - ❑ countries in which the studies included in the synthesis were conducted
 - ❑ key findings from the synthesis



What is in Health Systems Evidence? (1)

- Details about **systematic reviews relevant to health systems**
 - policy briefs
 - overviews of systematic reviews
 - systematic reviews
 - review protocols
 - links to any user-friendly summaries, scientific abstracts and full-text reports currently available



What is in Health Systems Evidence? (2)

- Over 1300 citations (*at 2010-9-24*)
 - 17 policy briefs
 - 15 overviews of systematic reviews
 - 882 systematic reviews
 - 299 Cochrane reviews
 - 154 protocols for Cochrane reviews





Evidence Service

- General
 - All new reviews (coming soon)
- Topic-specific services
 - Primary healthcare
 - Chronic disease management
 - Diabetes management
 - Chronic pain management
 - Rural healthcare strategy
- Subscribe at
www.mcmasterhealthforum.org/healthsystemevidence/evidence_service.php



Finding Research Evidence

- Search by:
 - ❑ health system topic
 - ❑ Canadian priority area (which may overlap with priority areas in other jurisdictions)
 - ❑ type of synthesis
 - ❑ type of research question
 - ❑ author
 - ❑ open search
 - ❑ recent update
 - ❑ any combination of these options



Finding Research Evidence (2)

- Each search will yield a listing of syntheses and details:
 - ❑ type of synthesis (e.g., policy brief)
 - ❑ type of question (e.g., effectiveness)
 - ❑ health system topic (e.g., skill mix – role expansion or extension)
 - ❑ title of the synthesis
 - ❑ last year literature searched
 - ❑ quality rating (using AMSTAR criteria)
 - ❑ countries in which studies included in the synthesis were conducted
 - ❑ **links** to any freely available user-friendly summaries, scientific abstracts, and full-text reports.



A Searchable Question

What do you want to find out?

- About the problem
- About options to address the problem
- About option implementation considerations



Interactive Question 3

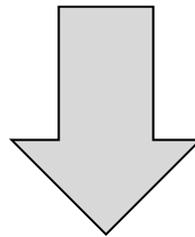
- *What topic areas or practice/ research questions would you use **Health Systems Evidence** to find research evidence about?*



Sample Search #1

Scenario:

- We want to provide a patient-centered medical home model, e.g., more shared decision-making with patients, and better coordination of care provided by specialists to improve outcomes for patients with chronic disease(s).



healthsystemevidence.org



Connect to HSE online



Sample Search #2

Scenario:

- ❑ We want to provide a patient-centered medical home model, e.g., improving access (particularly with the use of technology)



Sample Search #3

Scenario:

- ❑ A local health authority seeks information about alternative healthcare delivery models for rural communities



Sample Search #4

Scenario:

- ❑ A research-funding agency needs to identify what's known about implementation strategies to support national policy priorities



Sample Search #5

Scenario

- ❑ Discussions around the best ways improve the quality of diabetes care have resulted in a suggestion to educate providers about best practices and unique strategies to ensure effective implementation of treatment



Sample Search #6

Scenario

- ❑ One option being considered to reduce the cost of primary care service provision is to substitute nurses for physicians to deliver specific routine services



Next Steps for HSE

- Ongoing monthly updates
- New topic-specific bulletins
- General evidence service
- Tutorials on content and use
- Webinar series with the Canadian Cochrane Centre
- Podcasts of webinars



Interactive Question 4

- *Given what you now know, are you likely to use **Health Systems Evidence** to find synthesized research evidence about governance, financial and delivery arrangements within health systems and about implementation strategies within health systems ?*

Yes

No

Maybe



Questions?

Contacts:

- Lori Greco, Knowledge Broker
lgreco@mcmaster.ca
- Kaelan Moat, Doctoral Student
moatka@mcmaster.ca