



Effective Health Care

Having a designated usual healthcare provider and Outcomes for People with Chronic Conditions

Results of Topic Selection Process & Next Steps

The nominator representing a stakeholder panel is interested in a new evidence review on whether a designated usual healthcare provider improves outcomes for adults with chronic conditions to inform new research.

Because limited original research addresses the nomination, a new review is not feasible at this time. No further activity on this nomination will be undertaken by the Effective Health Care (EHC) Program.

Topic Brief

Topic Name: Having a designated usual healthcare provider and Outcomes for People with Chronic Conditions, #762

Nomination Date: 1/31/2018

Topic Brief Date: 8/2/2018

Authors

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Conflict of Interest: None of the investigators have any affiliations or financial involvement that conflicts with the material presented in this report.

Summary

- We identified seven studies addressing the nomination. Because of the limited number of publications that studied a variety of conditions a new review is not feasible.

Background

- Both diabetes and hypertension are prevalent conditions among US adults. 75 million or 29% of American adults have hypertension¹; and 30.3 million or 9.4% of American adults have diabetes²
- People with chronic conditions typically require regular follow-up with healthcare providers to manage medications and other treatments. In 2014, 40.3 million visits to physician offices had essential hypertension as the primary diagnosis ², and 30.3 million visits had diabetes as the primary diagnosis ³.
- The definition of relational continuity is “a therapeutic relationship between a patient and one or more providers that spans various healthcare events and results in accumulated knowledge of the patient and care consistent with the patient's needs.”⁴
- The concern of this nomination is relational continuity with a single provider leads to improved outcomes.
- This topic was prioritized through a PCORI-funded project, SEED project. In this process a stakeholder group including providers and patients identified and prioritized topics for a research agenda. Researchers then performed a literature scan and investigated which aspects of each question had been answered by prior studies and made recommendations targeting research gaps. This topic was one of the research gaps. As a part of the final step of the process topics were shared with research funders, community stakeholders, and national advocacy groups.⁵

Nominator and Stakeholder Engagement: After consultation with the nominator, we broadened the nomination to include adults with chronic medical conditions. They confirmed that the focus is on a designated healthcare provider, and this individual could be within a team. We confirmed that this topic was identified as a research gap, and that nevertheless this topic should be considered for a new systematic review.

The key questions for this nomination are:

KQ 1: What is the effect of a designated usual healthcare provider on outcomes for adults with chronic conditions, such as diabetes or hypertension?

- a. Does effectiveness vary by patient characteristics such as race or ethnicity, comorbidities, and socioeconomic status?

To define the inclusion criteria for the key questions we specify the population, interventions, comparators, outcomes, timing, and setting (PICOTS) of interest (Table 1).

Table 1. Key Questions and PICOTS

Population	Adults with chronic conditions, such as diabetes or hypertension Subgroups: race/ethnicity, comorbidities, and socioeconomic status
Intervention	Relational continuity with a designated usual healthcare provider
Comparator	Usual care
Outcomes	<ul style="list-style-type: none">• Clinical outcomes such as Hemoglobin A1c and blood pressure control• Self-management behavior such as medication adherence, changes in diet, changes in physical activity
Timing	All
Setting	Outpatient

Methods

We assessed nomination “Having a designated healthcare provider for people with chronic conditions” for priority for a systematic review or other AHRQ EHC report with a hierarchical process using established selection criteria (Appendix A). Assessment of each criteria determined the need for evaluation of the next one.

1. Determine the *appropriateness* of the nominated topic for inclusion in the EHC program.
2. Establish the overall *importance* of a potential topic as representing a health or healthcare issue in the United States.
3. Determine the *desirability of new evidence review* by examining whether a new systematic review or other AHRQ product would be duplicative.
4. Assess the *potential impact* a new systematic review or other AHRQ product.
5. Assess whether the *current state of the evidence* allows for a systematic review or other AHRQ product (feasibility).
6. Determine the *potential value* of a new systematic review or other AHRQ product.

Appropriateness and Importance

We assessed the nomination for appropriateness and importance.

Desirability of New Review/Duplication

We searched for high-quality, completed or in-process evidence reviews published in the last three years on the key questions of the nomination. See Appendix B for sources searched.

Impact of a New Evidence Review

The impact of a new evidence review was qualitatively assessed by analyzing the current standard of care, the existence of potential knowledge gaps, and practice variation. We considered whether it was possible for this review to influence the current state of practice through various dissemination pathways (practice recommendation, clinical guidelines, etc.).

Feasibility of New Evidence Review

We conducted a literature search in PubMed from June 2013 to June 2018. We reviewed all identified titles and abstracts for inclusion and classified them by study design, to assess the size and scope of a potential evidence review. See Appendix C for the PubMed search strategy and links to the ClinicalTrials.gov search.

Results

Appropriateness and Importance

This is an appropriate and important topic.

Desirability of New Review/Duplication

A new evidence review would not be duplicative of an existing product. We did not identify any relevant systematic reviews.

Impact of a New Evidence Review

A new systematic review may have limited impact potential. Relational continuity is highly valued by primary care and likely there is diversity in approaches to achieving this.

Feasibility of a New Evidence Review

A new evidence review examining is not feasible. We identified seven cohort studies. See Table 2, Feasibility column.

Table 2. Key questions and Results for Duplication and Feasibility

Key Question	Duplication (6/2015-6/2018)	Feasibility (6/2013-6/2018)
KQ 1: What is the effect of a designated usual healthcare provider on outcomes for adults with chronic conditions, such as diabetes or hypertension?	Total number of identified systematic reviews: 0	Size/scope of review Relevant Studies Identified: 7 <ul style="list-style-type: none"> • Cohort: 7⁶⁻¹² Clinicaltrials.gov: 0

Abbreviations: KQ=Key Question;

Value

The potential for value is limited given the lack of a concrete plan for use of the systematic review.

Summary of Findings

- Appropriateness and importance: The topic is both appropriate and important.
- Duplication: A new review would not be duplicative of an existing product. We identified no relevant systematic reviews.
- Impact: A new systematic review may have limited impact potential.
- Feasibility: A new review is not feasible. The evidence base is likely small.

References

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Appendix A. Selection Criteria Summary

Selection Criteria	Assessment
1. Appropriateness	
1a. Does the nomination represent a health care drug, intervention, device, technology, or health care system/setting available (or soon to be available) in the U.S.?	Yes
1b. Is the nomination a request for a systematic review?	Yes
1c. Is the focus on effectiveness or comparative effectiveness?	Yes
1d. Is the nomination focus supported by a logic model or biologic plausibility? Is it consistent or coherent with what is known about the topic?	Yes
2. Importance	
2a. Represents a significant disease burden; large proportion of the population	Yes, chronic diseases such as diabetes and hypertension are prevalent conditions.
2b. Is of high public interest; affects health care decision making, outcomes, or costs for a large proportion of the US population or for a vulnerable population	Yes
2c. Represents important uncertainty for decision makers	Unknown. Primary care professional organizations have cited continuity care as an important element of healthcare delivery.
2d. Incorporates issues around both clinical benefits and potential clinical harms	No
2e. Represents high costs due to common use, high unit costs, or high associated costs to consumers, to patients, to health care systems, or to payers	Discontinuity in care could result in higher healthcare utilization and poor patient outcomes.
3. Desirability of a New Evidence Review/Duplication	
3. Would not be redundant (i.e., the proposed topic is not already covered by available or soon-to-be available high-quality systematic review by AHRQ or others)	No systematic reviews were identified.
4. Impact of a New Evidence Review	
4a. Is the standard of care unclear (guidelines not available or guidelines inconsistent, indicating an information gap that may be addressed by a new evidence review)?	Perhaps not. Relational continuity with a single provider or a team has been cited as a distinguishing feature of primary care ^{13, 14} . Several older evidence reviews have concluded that continuity of care provides benefits for patients, improves care satisfaction, and decrease healthcare utilization. ¹⁵⁻¹⁸ A recent systematic review found that continuity of care was associated with decreased mortality. ¹⁹
4b. Is there practice variation (guideline inconsistent with current practice, indicating a potential implementation gap and not best addressed by a new evidence review)?	Yes. There is an increasing focus on team-based care, which focuses on relational continuity with a team of providers rather with a single person. ²⁰

Selection Criteria	Assessment
<p data-bbox="250 128 513 159">5. Primary Research</p> <p data-bbox="201 159 704 222">5. Effectively utilizes existing research and knowledge by considering:</p> <ul style="list-style-type: none"> <li data-bbox="201 222 740 285">- Adequacy (type and volume) of research for conducting a systematic review <li data-bbox="201 285 805 348">- Newly available evidence (particularly for updates or new technologies) 	<p data-bbox="850 159 1403 285">We identified seven cohort studies. A new review would likely be small. Studies had varying populations, outcomes, and measures of continuity of care.</p> <ul style="list-style-type: none"> <li data-bbox="899 285 1403 411">• Three studies included general adult populations^{6, 10, 11}, two studied diabetes patients^{7, 8}, and two studied people with hypertension.^{9, 12} <li data-bbox="899 411 1370 558">• Outcomes included healthcare utilization, mortality, inappropriate medication use, and complications. Three studies assessed blood pressure control. <li data-bbox="899 558 1256 621">• No studies assessed self-management behaviors. <li data-bbox="899 621 1370 957">• Continuity of care was defined in a variety of ways including: <ul style="list-style-type: none"> <li data-bbox="997 684 1321 716">○ Registration with a GP⁶ <li data-bbox="997 716 1208 747">○ COC index^{8, 9} <li data-bbox="997 747 1370 810">○ Modified modified continuity index (MMCI)⁹ <li data-bbox="997 810 1321 873">○ Most frequent provider continuity (MFPC)⁹ <li data-bbox="997 873 1354 905">○ Named accountable GP¹⁰ <li data-bbox="997 905 1338 957">○ Usual provider continuity index^{7, 12} <p data-bbox="850 957 1354 1020">No ongoing studies were identified through Clinicaltrials.gov.</p>

Abbreviations: AHRQ=Agency for Healthcare Research and Quality; KQ=Key Question

Appendix B. Search for Evidence Reviews (Duplication)

Listed are the sources searched.

Search date: June 2015 to June 2018
AHRQ: Evidence reports and technology assessments, USPSTF recommendations
VA Products: PBM, and HSR&D (ESP) publications, and VA/DoD EBCPG Program
Cochrane Systematic Reviews and Protocols http://www.cochranelibrary.com/
PubMed
PubMed Health http://www.ncbi.nlm.nih.gov/pubmedhealth/
PROSPERO Database (international prospective register of systematic reviews and protocols) http://www.crd.york.ac.uk/prospero/
Secondary Sources checked on an as needed basis
Campbell Collaboration http://www.campbellcollaboration.org/
Systematic Reviews (Journal) : protocols and reviews http://systematicreviewsjournal.biomedcentral.com/

Appendix C. Search Strategy & Results (Feasibility)

Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to Present

Searched: June 18, 2018

Searched by: Robin Paynter, MLIS

#	Searches	Results
1	("continuity of care" or ((physician* or doctor* or provider*) adj3 (continuity or continuing or patient or personal or regular or regularly or relations*))).tw,kf.	53576
2	continuity of patient care/ or physician-patient relations/	84692
3	or/1-2	122565
4	(diabet* or T2DM or T1DM or T2D or T1D or NIDDM or IDDM).tw,kf.	558992
5	Diabetes Mellitus/ or Diabetes Mellitus, Type 1/ or Diabetes Mellitus, Type 2/ or Diabetes Complications/	298436
6	(hypertensi* or "high-blood pressure").tw,kf.	404550
7	exp HYPERTENSION/	239786
8	or/4-7	972539
9	and/3,8	4657
10	limit 9 to ("young adult (19 to 24 years)" or "adult (19 to 44 years)" or "young adult and adult (19-24 and 19-44)" or "middle age (45 to 64 years)" or "middle aged (45 plus years)" or "all aged (65 and over)" or "aged (80 and over)")	2403
11	remove duplicates from 10	2384
12	limit 11 to yr="2013 -Current"	683
13	limit 12 to (adaptive clinical trial or clinical trial, all or clinical trial or controlled clinical trial or equivalence trial or pragmatic clinical trial or randomized controlled trial)	171
14	limit 13 to (meta analysis or systematic reviews)	3

Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to Present

Date Searched: June 29, 2018

Searched by: Robin Paynter, MLIS

#	Searches	Results
1	continuity of patient care/ and (physician-patient relations/ or trust/ or patient satisfaction/)	1843

#	Searches	Results
2	((credib* or loyalty or mistrust or trust*) and ((care or clinician* or doctor* or hospitalist* or physician* or practitioner* or provider*) adj3 (continuity or continuing or patient or personal or regular or regularly or relations*))).ti,kf.	239
3	or/1-2	2074
4	limit 3 to yr="2013-Current"	527
5	remove duplicates from 4	525
6	limit 5 to english language	507
7	limit 6 to (adaptive clinical trial or clinical trial, all or clinical trial or controlled clinical trial or equivalence trial or pragmatic clinical trial or randomized controlled trial)	KQ1 Trials 69
8	limit 6 to (meta analysis or systematic reviews)	KQ1 SRs MAAs 25
9	(trust/ or patient satisfaction/ or perception/) and (physician-patient relations/ or exp physicians/)	8800
10	((credib* or loyalty or mistrust or trust* or "therapeutic alliance") not (trustees or ((Charitable or Foundation or Medical or NHS or Wellcome) adj2 (trust or trusts))).tw,kf.	50115
11	or/9-10	57672
12	Chronic Disease/ or Multiple Chronic Conditions/ or Diabetes Mellitus/ or Diabetes Mellitus, Type 1/ or Diabetes Mellitus, Type 2/ or Diabetes Complications/ or exp Hypertension/	754866
13	((chronic* adj2 (condition* or disease* or ill or illness*)) or diabet* or T2DM or T1DM or T2D or T1D or NIDDM or IDDM or hypertensi* or "high-blood pressure").tw,kf.	1059153
14	or/12-13	1334847
15	and/11,14	2737
16	limit 15 to ("young adult (19 to 24 years)" or "adult (19 to 44 years)" or "young adult and adult (19-24 and 19-44)" or "middle age (45 to 64 years)" or "middle aged (45 plus years)" or "all aged (65 and over)" or "aged (80 and over)")	1374
17	limit 16 to yr="2013-Current"	493
18	remove duplicates from 17	493
19	limit 18 to english language	468
20	limit 19 to (adaptive clinical trial or clinical trial, all or clinical trial or controlled clinical trial or equivalence trial or pragmatic clinical trial or randomized controlled trial)	KQ2 Trials 79
21	limit 19 to (meta analysis or systematic reviews)	KQ2 SRs MAAs 29
22	Continuity of Care/	17426

#	Searches	Results
23	((care or clinician* or doctor* or hospitalist* or physician* or provider*) adj3 (continuity or continuing or patient or personal or regular or regularly or relations*)).ti,kf.	33134
24	or/22-23	48581
25	Chronic Disease/ or Multiple Chronic Conditions/ or Diabetes Mellitus/ or Diabetes Mellitus, Type 1/ or Diabetes Mellitus, Type 2/ or Diabetes Complications/ or exp Hypertension/	754866
26	((chronic* adj2 (condition* or disease* or ill or illness*)) or diabet* or T2DM or T1DM or T2D or T1D or NIDDM or IDDM or hypertensi* or "high-blood pressure").tw,kf.	1059153
27	or/25-26	1334847
28	and/24,27	3794
29	limit 28 to ("young adult (19 to 24 years)" or "adult (19 to 44 years)" or "young adult and adult (19-24 and 19-44)" or "middle age (45 to 64 years)" or "middle aged (45 plus years)" or "all aged (65 and over)" or "aged (80 and over)")	1807
30	remove duplicates from 29	1805
31	limit 30 to english language	1688
32	limit 31 to (adaptive clinical trial or clinical trial, all or clinical trial or controlled clinical trial or equivalence trial or pragmatic clinical trial or randomized controlled trial)	KQ3 Trials 253
33	limit 31 to (meta analysis or systematic reviews)	KQ 3 SRs MAs 59

<https://clinicaltrials.gov/ct2/results?cond=continuity&term=&cntry=&state=&city=&dist=>