# Topic Brief: Documentation Burden

**Date:** 12/13/2022
**Nomination Number:** 1013

**Purpose:** This document summarizes the information addressing a nomination submitted on June 3, 2022, through the Effective Health Care Website. This information was used to inform the Evidence-based Practice Center (EPC) Program decisions about whether to produce an evidence report on the topic, and if so, what type of evidence report would be most suitable.

**Issue:** Documentation burden contributes to increased clinician work and cognitive loads, and has been shown to impact the quality of patient care. The nominating organization for this topic has a goal of reducing documentation burden by 25 percent by 2025, but there is no standardized working definition of documentation burden used in studies. A technical brief could provide an overview of which metrics of documentation burden have been used.
Link to nomination

**Findings:** The EPC Program will develop a new technical brief based on this nomination. To sign up for notification when this and other Effective Health Care (EHC) Program topics are posted for public comment, please go to https://effectivehealthcare.ahrq.gov/email-updates.

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## Background

Electronic Health Records (EHRs) began to be implemented primarily in academic centers to replace paper medical records around 1992. By 2015, EHRs were being used in primary care exam rooms and by insurance companies, as well as in settings such as nursing homes, hospice centers, and in departments of corrections.[1] EHRs may provide advantages over paper medical records, including providing accurate, up-to-date, and complete information about patients at the point of care, enhancing privacy and security of patient data, and enabling quick access to patient records.[2]

The implementation of EHRs, however, has also led to increases in burdens such as extended work hours, time constraints, increased clerical workload, and disruptions to the patient-provider encounter. While the concept of this documentation burden is recognized, there is no standardized metric or definition, thus complicating the process of conducting research.[3] The American Medical Informatics Association has a goal of reducing existing documentation burden by 25 percent by 2025. One important preliminary task in this process is identifying a workable metric for documentation burden. A technical brief could provide a useful survey of information about work that has been done related to documentation burden, such as different metrics that have been applied in studies.

## Scope

Description/Overview of measurements of documentation burden:

1. What metrics of documentation burden that have been developed or used? (including metrics broadly – quantitative and qualitative)
    a. For which settings, populations, and intended uses were the metrics developed?
    b. How have these metrics been applied?
    c. Is there published information available on validity of the metrics?
    d. What are the key strengths and weaknesses of different metrics that have been used?
2. What are the different perspectives on the appropriateness of different metrics of documentation burden that have been applied/proposed? (For example: scalability, resource intensiveness to collect? equitable across populations?)
3. What are the perceptions of documentation burden from the perspective of people in different clinical roles (e.g., doctor, nurse, etc.) and patients/caregivers?

Factors influencing documentation burden:

4. What is the role of patients in documentation burden?
5. What is the role of setting (i.e., rural vs. urban, hospital, outpatient, academic institution, etc.) in documentation burden?

## Assessment Methods

See Appendix A.

## Summary of Literature Findings

We found a significant number of studies, both reviews and primary studies, covering different ways that the concept of documentation burden has been measured broadly. In some of these, the term 'documentation burden' is used explicitly, while in others, the concept is described in other terms, such as 'EHR-related impacts on physician well-being.'

We found seven reviews of various types[3-9] that are potential sources of information for technical brief development. We also found 38 primary studies in a sample of 200 out of 824. Twenty-two[10-31] of these we categorized as most directly addressing the scope. For example, objectives of these studies included: understanding clinicians' wants, needs, and perceived barriers imposed by the EHR; and quantifying EHR time after work and daily clinical time burden associated with burnout. The remainder of the primary studies focused on interventions to prevent documentation burden. Eleven[32-42] of these were focused on the effect of including a medical scribe on outcomes such as the physician's attitudes and relationship with the workplace, and one[43] on the impact of clerical support personnel on outcomes such as physician satisfaction. The other category of intervention was the introduction of new or modified electronic systems, of which there were four[44-47] studies. There were also three in-process studies, two evaluating the inclusion of medial scribes[48, 49] and one focused on an electronic system intervention.[50] The Centers for Medicare & Medicaid Services' Meaningful Measures Initiative, which attempts to reduce the number of Medicare quality measures and ease the burden on users[51] may also be a useful source of information for a technical brief.

See Appendix B for detailed assessments of all EPC selection criteria.

## Summary of Selection Criteria Assessment

The American Medical Informatics Association has a goal of reducing existing documentation burden by 25 percent by 2025. One important preliminary task in this process is identifying a

workable metric for documentation burden. A technical brief could provide a useful survey of information about work that has been done related to documentation burden, such as different metrics that have been applied in studies. We found reviews and primary studies containing relevant information on ways in which the concept of documentation burden has been measured that could provide useful material for a technical brief.

Please see Appendix B for detailed assessments of individual EPC Program selection criteria.

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**Author**
Emily Gean
Lisa Winterbottom

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


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# Appendix A: Methods

We assessed nomination for priority for a systematic review or other AHRQ Effective Health Care report with a hierarchical process using established selection criteria. Assessment of each criteria determined the need to evaluate the next one. See Appendix B for detailed description of the criteria.

## Appropriateness and Importance

We assessed the nomination for appropriateness and importance.

## Desirability of New Review/Absence of Duplication

We searched for high-quality, completed or in-process evidence reviews published in the last three years December 30, 2019 - December 30, 2022 on the questions of the nomination from these sources:

- AHRQ: Evidence reports and technology assessments
    - AHRQ Evidence Reports https://www.ahrq.gov/research/findings/evidence-based-reports/index.html
    - EHC Program https://effectivehealthcare.ahrq.gov/
    - US Preventive Services Task Force https://www.uspreventiveservicestaskforce.org/
    - AHRQ Technology Assessment Program https://www.ahrq.gov/research/findings/ta/index.html
- US Department of Veterans Affairs Products publications
    - Evidence Synthesis Program https://www.hsrd.research.va.gov/publications/esp/
    - VA/Department of Defense Evidence-Based Clinical Practice Guideline Program https://www.healthquality.va.gov/
- Cochrane Systematic Reviews https://www.cochranelibrary.com/
- University of York Centre for Reviews and Dissemination database https://www.crd.york.ac.uk/CRDWeb/
- PROSPERO Database (international prospective register of systematic reviews and protocols) http://www.crd.york.ac.uk/prospero/
- PubMed https://www.ncbi.nlm.nih.gov/pubmed/
- Joanna Briggs Institute http://joannabriggs.org/
- Epistemonikos https://www.epistemonikos.org/

## 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 limited literature search in PubMed for the last five years December 30, 2017 - December 30, 2022. Because a large number of articles were identified, we reviewed a random sample of 200 titles and abstracts out of 824 for each question for inclusion. We then calculated the projected total number of included studies based on the proportion of studies included from the random sample.

Search strategy

**Ovid MEDLINE ALL 1946 to December 30, 2022**
Date searched: January 3, 2023
1 Medical Records/ or exp Medical Records Systems, Computerized/ (113053)
2 (CIS or computer* or digital* or EHR$1 or electronic or EMR$1 or ((health or medical) adj1 record$1) or "information systems" or "information technology" or IT).ti,kf. or inform*.jw. (450344)
3 or/1-2 (528375)
4 Documentation/ (19073)
5 (clerical or document* or note*).ti,ab,kf. (979237)
6 or/4-5 (988443)
7 Burnout, Professional/ or Burnout, Psychological/ (16538)
8 (burnout or burden* or "cognitive load" or "off-hours" or satisfaction or stress or work-life).ti,ab,kf. (1394093)
9 or/7-8 (1398009)
10 "Costs and Cost Analysis"/ or "Process Assessment, Health Care"/ or "Task Performance and Analysis"/ or "Time and Motion Studies"/ or "Time Factors"/ or User-Centered Design/ or Workload/ or Workflow/ (1347890)
11 (measur* or metric* or qualitat* or quantif* or quantitativ* or time or usability or workflow$1 or workload$1).ti,kf. (1035442)
12 or/10-11 (2281897)
13 exp Allied Health Personnel/ or exp Dentists/ or Health Personnel/ or exp Nurses/ or exp Patients/ or Physical Therapists/ or exp Physicians/ or Physician Assistants/ or Psychotherapists/ (456685)
14 (assistants or clinician$1 or dentist$1 or doctor$1 or nurse$1 or nursing or patient$1 or physician$1 or provider$1 or psychiatrist$1 or psychologist$1 or psychotherapist$1 or scribes or therapist$1).ti,ab,kf. (8635081)
15 or/13-14 (8804656)
16 and/3,6,9,12,15 (330)
17 limit 16 to english language (323)
18 limit 17 to yr="2019 -Current" (147)
19 (((integrative or interpretive or "mixed method" or "mixed methods" or qualitative or realist or thematic) adj3 (synthes* or review*)) or ((framework or narrative) adj2 synthes*)).ti,ab,kf. (26773)
20 (mega-ethnograph* or megaethnograph* or meta-aggregat* or metaaggregat* or meta-ethnograph* or metaethnograph* or meta-interpret* or metainterpret* or meta-method* or metamethod* or meta-narrative* or metanarrative* or meta-study or metastudy or meta-synthe* or metasynthe* or meta-summary or metasummary or meta-triangulat* or metatriangulat*).ti,ab,kf. (3206)
21 ((qualitative adj2 (literature or paper or papers or research or study or studies)) and (synthes* or "systematic review" or "systematic reviews")).ti,ab,kf. (7652)
22 (CERQUAL or CONQUAL or JBI-QARI or QualSys or "Mixed Methods Appraisal Tool" or MMAT).ti,ab,kf. (1348)
23 or/19-22 (31414)
24 and/18,23 (3)
25 (meta-analysis or systematic review).pt. or (meta-anal* or metaanal* or ((evidence or review or scoping or systematic or umbrella) adj3 (review or synthesis))).ti. (788642)
26 and/18,25 (13)
27 limit 17 to yr="2017 -Current" (206)
28 (controlled clinical trial or randomized controlled trial).pt. or (control or controls or controlled or placebo$1 or random* or trial*).ti,ab,kf. (5680469)

29 and/27-28 (42)
30 Case-Control Studies/ or Cohort Studies/ or Comparative Study/ or Controlled Before-After Studies/ or Cross-Sectional Studies/ or Epidemiologic Studies/ or exp Evaluation Studies as Topic/ or Follow-Up Studies/ or Historically Controlled Study/ or Interrupted Time Series Analysis/ or Longitudinal Studies/ or Prospective Studies/ or Retrospective Studies/ or ("case-control" or cohort$1 or "before-after" or ((comparative or epidemiologic or evaluation) adj3 study) or cross-sectional or follow-up or (historic* adj4 control*) or "interrupted time" or longitudinal$2 or prospective$2 or retrospective$2).ti,ab,kf. (6871198)
31 and/27,30 (69)
32 exp Attitude/ or Focus Groups/ or Grounded Theory/ or "Interviews as Topic"/ or Narration/ or exp Qualitative Research/ or exp "Surveys and Questionnaires"/ or px.fs. (2437754
33 ("critical interpretive" or "critical race" or "critical realism" or "critical realist" or emic or etic or ethnograph* or ethnolog* or hermeneutic* or heuristic* or "grounded theory" or phenomenolog* or semiotic*).ti,ab,kf,kw. (79189)
34 (((content or conversation or discourse or narrative or thematic) adj2 analy*) or ((cluster or purposive or theoretical) adj2 (sample* or sampling)) or "constant comparative" or descriptive or ethnonursing or ethno-nursing or (field adj1 (study or studies or work)) or fieldwork or "focus group" or "focus groups" or "key informant" or "key informants" or interview* or "mixed design" or "mixed methods" or qualitative or ((semi-structured or semistructured or unstructured or informal or in-depth or indepth or face-to-face or structured or guided) adj3 (discussion* or questionnaire*)) or survey* or thematic or triangulat*).ti,ab,kf,kw. (1558439)
35 (attitud* or barrier* or benefit* or context* or emotion* or facilitator* or experienc* or narratives or opinion* or perception* or perspective* or preference* or react* or theme or themes or value* or valuing or viewpoint* or view or views).ti,ab. (7790126)
36 or/32-35 (9749195)
37 3 and 6 and 9 and 15 and 36 (1067)
38 limit 37 to (english language and yr="2017 -Current") (594)
39 38 not (24 or 26 or 29 or 31) (517)
40 remove duplicates from 39 (476)

**Ovid EBM Reviews Cochrane Central Register of Controlled Trials** November 2022
Date searched: January 4, 2023
1 Medical Records/ or exp Medical Records Systems, Computerized/ 1422
2 (CIS or computer* or digital* or EHR$1 or electronic or EMR$1 or ((health or medical) adj1 record$1) or "information systems" or "information technology" or IT).ti,kf. or inform*.jw. 20437
3 or/1-2 21425
4 Documentation/ 169
5 (clerical or document* or note*).ti,ab. 89181
6 or/4-5 89239
7 Burnout, Professional/ or Burnout, Psychological/ 462
8 (burnout or burden* or "cognitive load" or "off-hours" or satisfaction or stress or work-life).ti,ab. 134510
9 or/7-8 134551
10 Allied Health Personnel/ or Dentists/ or Health Personnel/ or Nurses/ or Physical Therapists/ or Physicians/ or Physician Assistants/ or Psychotherapists/ 3251
11 (assistants or clinician$1 or dentist$1 or doctor$1 or nurse$1 or nursing or physician$1 or provider$1 or psychiatrist$1 or psychologist$1 or psychotherapist$1 or scribes or therapist$1).ti,ab. 146983
12 or/10-11 147913
13 and/3,6,9,12 106
14 limit 13 to yr="2017 -Current" 60

**CINAHL Complete**
Date searched: January 3, 2023
S1 (MH "Medical Records") OR (MH "Electronic Health Records") (50,380)
S2 TI ( (CIS or computer* or digital* or EHR# or electronic or EMR# or ((health or medical) N1 record#) or "information systems" or "information technology" or IT) ) OR SO inform* (202,166)
S3 S1 OR S2 (237,281)
S4 (MH "Documentation") (34,927)
S5 TI ( (clerical or document* or note*) ) OR AB ( (clerical or document* or note*) ) (268,154)
S6 S4 OR S5 (292,163)
S7 (MH "Burnout, Professional") (14,646)
S8 TI ( (burnout or burden* or "cognitive load" or "off-hours" or satisfaction or stress or work-life) ) OR AB ( (burnout or burden* or "cognitive load" or "off-hours" or satisfaction or stress or work-life) ) (364,766)
S9 S7 OR S8 (369,301)
S10 (MH "Costs and Cost Analysis") OR (MH "Process Assessment (Health Care)") OR (MH "Task Performance and Analysis") OR (MH "Time and Motion Studies") OR (MH "Time Factors") OR (MH Workload) OR (MH "Workload Measurement") OR (MH Workflow) (247,730)
S11 TI (measur* or metric* or qualitat* or quantif* or quantitativ* or time or usability or workflow# or workload#) (267,713)
S12 S10 OR S11 (489,954)
S13 (MH "Allied Health Personnel+") OR (MH "Dentists+") OR (MH "Health Personnel+") or (MH "Nurses+") or (MH "Patients+") or (MH "Physician Assistants") OR (MH "Physical Therapists") or (MH "Physicians+") OR (MH "Mental Health Personnel+") (911,951)
S14 TI ( (assistants or clinician# or dentist# or doctor# or nurse# or nursing or patient# or physician# or provider# or psychiatrist# or psychologist# or psychotherapist# or scribes or therapist#) ) OR AB ( (assistants or clinician# or dentist# or doctor# or nurse# or nursing or patient# or physician# or provider# or psychiatrist# or psychologist# or psychotherapist# or scribes or therapist#) ) (2,761,076)
S15 S13 OR S14 (3,187,166)
S16 S3 AND S6 AND S9 AND S12 AND S15 Limiters - Published Date: 20190101-20230131; English Language (85)
S17 TI ( (((integrative or interpretive or "mixed method" or "mixed methods" or qualitative or realist or thematic) N3 (synthes* or review*)) or ((framework or narrative) N2 synthes*)) ) OR AB ( (((integrative or interpretive or "mixed method" or "mixed methods" or qualitative or realist or thematic) N3 (synthes* or review*)) or ((framework or narrative) N2 synthes*)) ) (20,429)
S18 TI ( (mega-ethnograph* or megaethnograph* or meta-aggregat* or metaaggregat* or meta-ethnograph* or metaethnograph* or meta-interpret* or metainterpret* or meta-method* or metamethod* or meta-narrative* or metanarrative* or meta-study or metastudy or meta-synthe* or metasynthe* or meta-summary or metasummary or meta-triangulat* or metatriangulat* ) OR AB ( (mega-ethnograph* or megaethnograph* or meta-aggregat* or metaaggregat* or meta-ethnograph* or metaethnograph* or meta-interpret* or metainterpret* or meta-method* or metamethod* or meta-narrative* or metanarrative* or meta-study or metastudy or meta-synthe* or metasynthe* or meta-summary or metasummary or meta-triangulat* or metatriangulat* ) (2,672)
S19 TI ( ((qualitative N2 (literature or paper or papers or research or study or studies)) and (synthes* or "systematic review" or "systematic reviews")) ) OR AB ( ((qualitative N2 (literature or paper or papers or research or study or studies)) and (synthes* or "systematic review" or "systematic reviews")) ) (5,449)

S20 TI ( (CERQUAL or CONQUAL or JBI-QARI or QualSys or "Mixed Methods Appraisal Tool" or MMAT). ) OR AB ( (CERQUAL or CONQUAL or JBI-QARI or QualSys or "Mixed Methods Appraisal Tool" or MMAT). ) OR (PT "Meta Synthesis") (2,550)
S21 S17 OR S18 OR S19 OR S20 (23,856)
S22 S16 AND S21 (3)
S23 TI ( (meta-anal* or metaanal* or ((evidence or review or scoping or systematic or umbrella) N3 (review or synthesis))) ) OR ( (PT "Meta Analysis") OR (PT "Systematic Review") ) (213,142)
S24 S16 AND S23 (6)
S25 S3 AND S6 AND S9 AND S12 AND S15 Limiters - Published Date: 20170101-; English Language (119)
S26 TI ( (control or controls or controlled or placebo# or random* or trial*) ) OR AB ( (control or controls or controlled or placebo# or random* or trial*) ) OR PT ( "Clinical Trial" OR "Randomized Controlled Trial" ) (1,156,337)
S27 S25 AND S26 (15)
S28 ( (MH "Case Control Studies+") OR (MH "Comparative Studies") OR (MH "Controlled Before-After Studies") OR (MH "Cross Sectional Studies") OR (MH "Epidemiological Research") OR (MH "Evaluation Research+") OR (MH "Historically Controlled Study") OR (MH "Interrupted Time Series Analysis") OR (MH "Prospective Studies") OR (MH "Retrospective Design") ) OR TI ( ("case-control" or cohort# or "before-after" or ((comparative or epidemiologic or evaluation) N3 study) or cross-sectional or follow-up or (historic* N4 control*) or "interrupted time" or longitudinal* or prospective* or retrospective*) ) OR AB ( ("case-control" or cohort# or "before-after" or ((comparative or epidemiologic or evaluation) N3 study) or cross-sectional or follow-up or (historic* N4 control*) or "interrupted time" or longitudinal* or prospective* or retrospective*) ) (1,765,327)
S29 S25 AND S28 (44)
S30 (MH "Attitude+") OR (MH "Focus Groups") OR (MH "Grounded Theory") OR (MH "Interviews+") OR (MH "Narratives+") OR (MH "Qualitative Studies+") OR (MH "Surveys+") (940,115)
S31 TI ( ("critical interpretive" or "critical race" or "critical realism" or "critical realist" or emic or etic or ethnograph* or ethnolog* or hermeneutic* or heuristic* or "grounded theory" or phenomenolog* or semiotic*) ) OR AB ( ("critical interpretive" or "critical race" or "critical realism" or "critical realist" or emic or etic or ethnograph* or ethnolog* or hermeneutic* or heuristic* or "grounded theory" or phenomenolog* or semiotic*) ) (49,848)
S32 TI ( (content or conversation or discourse or narrative or thematic) N2 analy*) or ((cluster or purposive or theoretical) N2 (sample* or sampling)) or "constant comparative" or descriptive or ethnonursing or ethno-nursing or (field N1 (study or studies or work)) or fieldwork or "focus group" or "focus groups" or "key informant" or "key informants" or interview* or "mixed design" or "mixed methods" or qualitative or ((semi-structured or semistructured or unstructured or informal or in-depth or indepth or face-to-face or structured or guided) N3 (discussion* or questionnaire*)) or survey* or thematic or triangulat*) ) OR AB ( (content or conversation or discourse or narrative or thematic) N2 analy*) or ((cluster or purposive or theoretical) N2 (sample* or sampling)) or "constant comparative" or descriptive or ethnonursing or ethno-nursing or (field N1 (study or studies or work)) or fieldwork or "focus group" or "focus groups" or "key informant" or "key informants" or interview* or "mixed design" or "mixed methods" or qualitative or ((semi-structured or semistructured or unstructured or informal or in-depth or indepth or face-to-face or structured or guided) N3 (discussion* or questionnaire*)) or survey* or thematic or triangulat*) ) (1,427,007)
S33 TI ( (attitud* or barrier* or benefit* or context* or emotion* or facilitator* or experienc* or narratives or opinion* or perception* or perspective* or preference* or react* or theme or

themes or value* or valuing or viewpoint* or view or views) ) OR AB ( (attitud* or barrier* or benefit* or context* or emotion* or facilitator* or experienc* or narratives or opinion* or perception* or perspective* or preference* or react* or theme or themes or value* or valuing or viewpoint* or view or views) ) (1,848,183)
S34 S30 OR S31 OR S32 OR S33 (2,847,234)
S35 S25 AND S34 (97)

**ClinicalTrials.gov (expert search mode)**
Date searched: January 4, 2023
( CIS OR computer* OR digital* OR EHR OR EHRS OR EMR OR EMRS OR EXPAND[Concept] "health record" OR EXPAND[Concept] "medical record" OR EXPAND[Concept] "information systems" OR EXPAND[Concept] "information technology" OR clerical OR document* OR note* ) AND ( burnout OR burden* OR EXPAND[Concept] "cognitive load" OR EXPAND[Concept] "off-hours" OR satisfaction OR stress OR work* ) AND ( measur* OR metric* OR qualitat* OR quantif* OR quantitativ* OR time OR usability OR workflow* OR workload* ) AND AREA[TitleSearch] ( assistant OR clinician OR dentist OR doctor OR nurse OR nursing OR physician OR provider OR psychiatrist OR psychologist OR psychotherapist OR scribe OR therapist ) AND AREA[StudyFirstPostDate] EXPAND[Term] RANGE[01/01/2017, 01/04/2023] (39)

**EPISTEMONIKOS**
Date searched: January 4, 2023
(title:(title:((CIS OR computer* OR digital* OR EHR OR EHRS OR EMR OR EMRS OR "health record" OR "medical record" OR "information systems" OR "information technology" OR clerical OR document* OR note*)) AND title:((assistants OR clinician OR dentist OR doctor OR nurse OR nursing OR patient OR physician OR provider OR psychiatrist OR psychologist OR psychotherapist OR scribes OR therapist)) AND title:((burnout OR burden* OR "cognitive load" OR "off-hours" OR satisfaction OR stress OR work*))) OR abstract:(title:((CIS OR computer* OR digital* OR EHR OR EHRS OR EMR OR EMRS OR "health record" OR "medical record" OR "information systems" OR "information technology" OR clerical OR document* OR note*)) AND title:((assistants OR clinician OR dentist OR doctor OR nurse OR nursing OR patient OR physician OR provider OR psychiatrist OR psychologist OR psychotherapist OR scribes OR therapist)) AND title:((burnout OR burden* OR "cognitive load" OR "off-hours" OR satisfaction OR stress OR work*)))) (21)

ClinicalTrials.gov

## Value

We assessed the nomination for value. We considered whether or not the clinical, consumer, or policymaking context had the potential to respond with evidence-based change, if a partner organization would use this evidence review to influence practice, and if the topic supports a priority area of AHRQ or the Department of Health and Human Services.

# Appendix B. Selection Criteria Assessment

| 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 United States? | Yes |
| 1b. Is the nomination a request for an evidence report? | Yes |
| 1c. Is the focus on effectiveness or comparative effectiveness? | No |
| 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. Nearly 4 in 5 office-based physicians and nearly all non-federal acute care hospitals use EHR systems.[52] |
| 2b. Is of high public interest; affects health care decision making, outcomes, or costs for a large proportion of the United States population or for a vulnerable population | Yes. Nearly 4 in 5 office-based physicians and nearly all non-federal acute care hospitals use EHR systems.[52] |
| 2c. Incorporates issues around both clinical benefits and potential clinical harms | No. |
| 2d. 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 | Yes. Burdens associated with the introduction of EHRs include extended work hours, time constraints, clerical workload, and disruptions to the patient-provider encounter. [3] |
| 3. Desirability of a New Evidence Review/Absence of Duplication | |
| 3. A recent high-quality systematic review or other evidence review is not available on this topic | Yes. We did not find any recent evidence products that address the scope and meet the nominators' needs. |
| 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)? | Yes. There is currently not a standardized definition of 'documentation burden'. |
| 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. EHR systems vary widely and there is no standardized definition of 'documentation burden' and, consequently, no statistics on the extent of documentation burden. |
| 5. Primary Research | |
| 5. Effectively utilizes existing research and knowledge by considering:<br>- Adequacy (type and volume) of research for conducting a systematic review<br>- Newly available evidence (particularly for updates or new technologies) | Size/scope of review: We found 38 primary studies from of a sample of 200 out of 824, and three ClinicalTrials.gov protocols. |
| 6. Value | |
| 6a. The proposed topic exists within a clinical, consumer, or policy-making context that is amenable to evidence-based change and supports a priority of AHRQ or the Department of Health and Human Services | Yes, reducing documentation burden/clinician burnout is aligned with AHRQ's mission to make health care safer and higher quality. |

| | |
|---|---|
| 6b. Identified partner who will use the systematic review to influence practice (such as a guideline or recommendation) | Yes, the nominator would use a technical brief as a preliminary step in their aim to reduce existing documentation burden by 25% by 2025. |

Abbreviations: AHRQ=Agency for Healthcare Research and Quality; EHR=electronic health records.