



# Topic Brief: Impact of Insurance Prior Authorizations on Patient Outcomes

**Date:** 1/4/2021

**Nomination Number:** 0936

**Purpose:** This document summarizes the information addressing a nomination submitted on July 17, 2020 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:** Insurance prior authorization (PA) is a health-plan cost-control measure that requires healthcare providers to obtain advanced approval from insurance companies before a specific service or treatment is delivered to a patient to qualify for coverage.<sup>1</sup> The nominator for this topic sought to understand the impact of this practice on patient healthcare and its general impact on clinicians, providers, and healthcare systems, in the area of post-acute rehabilitation.

## Program Decision:

The EPC Program will not develop a new evidence review because we did not find enough primary studies addressing the concerns of this nomination.

## Key Findings

- We did not find any existing evidence to address the nomination.

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## Background

According to the American Medical Association (AMA), insurance prior authorization (PA), which is also known as prior approval, is a “health plan cost-control process by which physicians and other healthcare providers must obtain advance approval from a health plan before a specific service is delivered to the patient to qualify for payment coverage.”<sup>1</sup> The primary rationale behind the use of prior authorization is to help control health care costs without negatively impacting health outcomes. However, the impact of prior authorization is not fully understood.<sup>2</sup>

An important consideration is the potential impact of PA on healthcare delivery.<sup>2</sup> A 2019 AMA survey of physicians regarding PA found that 74 percent reported that it led to patients abandoning treatment, 90 percent perceived that negative outcomes were associated with it, 24 percent reported patient adverse outcomes associated with it, and 16 percent reported a hospital admission associated with it.<sup>3</sup>

The AMA identifies PA as an issue to be addressed nationally, describing it as a process that comes between a physician and patient’s care, costs physicians valuable time, undermines physician expertise, and “doesn’t put patients first.”<sup>4</sup> Congress has also recognized the some of these concerns, and secured funding to study the impact of such PA on patient health in May 2019.<sup>5</sup>

The nominators for this topic are specifically interested in the benefits and harms of PA for post-acute rehabilitation on healthcare outcomes, clinicians and administrators, and healthcare systems. Post-acute hospital rehabilitation is a high-cost area of healthcare, and, as such, is an area where there may be motivation to cut costs through measures such as PA.<sup>6</sup>

## Scope

1. What are the benefits and harms of insurance prior authorization (PA) requirements for post-acute rehabilitation on patient healthcare outcomes?
  - a. How do patient characteristics (diagnosis and severity, age, sex, race, education, socioeconomic status, care for which PA is sought) influence patient health outcomes?
  - b. How do features of the insurance PA process (e.g. paper, electronic, phone, clinical pathways, limited authorization operating hours, etc.) influence patient health outcomes?
2. What are the benefits and harms of insurance PA requirement for post-acute rehabilitation on clinicians and administrative staff?
  - a. How do provider characteristics (physician, practice size, facility, expertise, staff experience, geographic location, etc.) influence clinical and administrative staff outcomes?
  - b. How do features of the insurance PA process (e.g. paper, electronic, phone, clinical pathways, limited authorization operating hours, etc.) influence clinical and administrative staff outcomes?
3. What are the benefits and harms of insurance PA for post-acute rehabilitation on healthcare systems?
  - a. How do features of the healthcare system (size, single payer versus fee for service versus other insurance structures, etc.) influence health system related outcomes.
  - b. How do features of the PA process (e.g. paper, electronic, phone, clinical pathways, limited authorization operating hours, etc.) influence health system related outcomes?

**Table 1. Questions and PICOs**

<b>Questions</b>	1. Benefits and harms of insurance PA for post-acute rehabilitation on patient healthcare outcomes	2. Benefits and harms of insurance PA for post-acute rehabilitation on clinicians and administrative staff	3. Benefits and harms of insurance PA for post-acute rehabilitation on healthcare systems
<b>Population</b>	Adults seeking post-acute rehabilitation treatment	Clinicians and administrative staff who provide post-acute rehabilitation services	Healthcare systems that provide post-acute rehabilitation services
<b>Interventions</b>	Any	Any	Any
<b>Comparators</b>	Any	Any	Any
<b>Outcomes</b>	Healthcare outcomes	Clinical and administrative staff outcomes	Health-system related outcomes

Abbreviations: PA=prior authorization; PICOS= population, intervention, comparator, outcome, setting.

## Assessment Methods

See Appendix A.

## Summary of Literature Findings

We did not find any systematic reviews or primary studies addressing the key questions (KQs).

**Table 2.** Literature identified for each KQ

Question	Systematic reviews (12/2017-12/2020)	Primary studies (12/2015-12/2020)
Question 1: PA patient healthcare outcomes	Total: 0	Total: 0
Question 2: PA and clinical and administrative outcomes	Total: 0	Total: 0
Question 3: PA and health system outcomes	Total: 0	Total: 0

Abbreviations: KQ=key question.

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

## Summary of Selection Criteria Assessment

We did not find any existing evidence synthesis products or primary studies addressing the nomination.

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

## References

1. Prior authorization practice resources. . American Medical Association. doi: <https://www.ama-assn.org/practice-management/sustainability/prior-authorization-practice-resources#:~:text=Prior%20authorization%E2%80%9494sometimes%20called%20precertification,to%20qualify%20for%20payment%20coverage>.
2. Sharma SP, Russo A, Deering T, et al. Prior Authorization: Problems and Solutions. *JACC Clin Electrophysiol.* 2020 Jun;6(6):747-50. doi: <https://doi.org/10.1016/j.jacep.2020.04.022>. PMID: 32553230.
3. Prior authorization physician survey 2019. American Medical Association. doi: <https://www.ama-assn.org/system/files/2020-06/prior-authorization-survey-2019.pdf>.
4. American Medical Association. doi: <https://fixpriorauth.org/physician>.
5. Congressional Record- House, May 16, 2019. doi: <https://www.congress.gov/116/crec/2019/05/16/CREC-2019-05-16-pt1-PgH3911-6.pdf>.
6. Cao Y, Nie J, Sisto SA, et al. Assessment of Differences in Inpatient Rehabilitation Services for Length of Stay and Health Outcomes Between US Medicare Advantage and Traditional Medicare Beneficiaries. *JAMA network open.* 2020;3(3):e201204-e. doi: <https://doi.org/10.1001/jamanetworkopen.2020.1204>. PMID: 32186746.
7. Sengupta M, Rome V, Harris-Kojetin L, et al. Long-Term Care Providers and Services Users in the United States—Residential care component: National Study of Long-Term Care Providers, 2015–2016: weighted national estimates and standard errors. National Center for Health Statistics. 2017. doi: [https://www.cdc.gov/nchs/data/nsltcp/2016\\_NSLTCP\\_RCC\\_Weighted\\_Estimates.pdf](https://www.cdc.gov/nchs/data/nsltcp/2016_NSLTCP_RCC_Weighted_Estimates.pdf).

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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 3, 2017 - December 3, 2020 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/>
- 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/>
- PDQ-Evidence <https://www.pdq-evidence.org/>
- Epistemonikos <https://www.epistemonikos.org/>
- Health System Evidence <https://www.healthsystemsevidence.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 from the last five years December 3, 2015 - December 3, 2020.

Search strategy

("Prior Authorization"[MeSH Terms] OR "Reimbursement Mechanisms"[MeSH Terms]) AND ("Rehabilitation"[MeSH Terms] OR "Rehabilitation"[MeSH Subheading] OR "Rehabilitation Research"[MeSH Terms]) AND 2015/12/01:3000/12/31[Date - Publication] AND "english"[Language]

## Appendix B. Selection Criteria Assessment

Selection Criteria	Assessment
<b>1. Appropriateness</b>	
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?	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
<b>2. Importance</b>	
2a. Represents a significant disease burden; large proportion of the population	Yes. In 2016, there were 28,900 residential care communities in the United States, with a total of 996,100 beds and 811,500 residents. <sup>7</sup> The AMA describes PA as a burdensome process that impacts both physicians and patients. <sup>4</sup>
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. In 2016, there were 28,900 residential care communities in the United States, with a total of 996,100 beds and 811,500 residents. <sup>7</sup> The AMA describes PA as a burdensome process that impacts both physicians and patients. <sup>4</sup>
2c. Incorporates issues around both clinical benefits and potential clinical harms	Yes
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. In 2015, Medicare spending on post-acute care was \$60.3 billion, which was 10% of the total national health care spending. <sup>6</sup>
<b>3. Desirability of a New Evidence Review/Absence of Duplication</b>	
3. A recent high-quality systematic review or other evidence review is not available on this topic	Yes. We did not find any systematic reviews to address the key questions.
<b>4. Impact of a New Evidence Review</b>	
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. The impact of PA for post-acute care is not known.
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. The impact of PA for post-acute care is not known.
<b>5. Primary Research</b>	
5. Effectively utilizes existing research and knowledge by considering: - Adequacy (type and volume) of research for conducting a systematic review - Newly available evidence (particularly for updates or new technologies)	We did not find any primary studies to address the nomination.

**Abbreviations:** AMA=American Medical Foundation.