

Background

- Shared decision-making (SDM) supports patient-centered care by aligning treatment with patient preferences and values.
- A consistent and reliable method for measuring SDM is crucial for accurately assessing its impact on health outcomes across diverse populations.
- The Medical Expenditure Panel Survey (MEPS) has been used to examine the relationship between SDM and patient outcomes.
- The measurement of SDM in MEPS lacks comprehensive evaluation, indicating a need for further refinement.

Objective

- To assess how SDM is measured in MEPS, identify gaps, and propose improvements.

Methods

- We conducted a targeted literature review using PubMed, Scopus, and Embase, including peer-reviewed, English-language studies that:
 - Used MEPS data
 - Measured SDM in chronic diseases
- Titles and abstracts were screened for relevance, with full-text review to confirm eligibility.
- Studies were evaluated based on how SDM was conceptualized and operationalized, including theoretical grounding.

Results

- Of the 41 studies screened, 17 met the inclusion criteria.
- The most common approach to measuring SDM in MEPS was the use of composite measures (Table 1), particularly the Fiks et al. 7-item measure based on the Charles et al. SDM framework (Figure 1).
- Despite being developed for pediatric outcomes, the Fiks et al. measure, which combines SDM and communication items, has been applied in MEPS studies with adult populations.

Figures and Tables

Figure 1. Charles et al. SDM framework⁴

Information Seeking

Information between a patient and a provider are openly shared between them.

Deliberation

Patient and provider build consensus on the treatment plan based on evidence and the patient's preferences.

Decision-Making

Patient and provider actively engage in decision-making.

Table 1. Summary of Approaches to Measure Shared Decision Making in the Medical Expenditure Panel Survey (n=17)

Publication	Approach	# of items	Content	Theoretical Framework	Study population
Donneyong et al., 2024 ⁵	Composite measure	7	Patient-Provider Communication; SDM	✓	Adults with Major depressive disorder
Kikuchi et al., 2024 ⁶	Composite measure	7	Patient-Provider Communication; SDM	✓	Adults with psoriasis
Zaidi & Axon, 2024 ⁷	Composite measure	3	SDM	✗	Adults with multimorbidities
Brown et al., 2023 ⁸	Composite measure	7	Patient-Provider Communication; SDM	✓	Individuals aged 15 to 85 noninstitutionalized U.S. population
Yakubu et al., 2023 ⁹	Composite measure	7	Patient-Provider Communication; SDM	✓	Adults with high blood pressure
Hong et al., 2022 ¹⁰	Latent variable	1	SDM	✗	Adults with type 1 and type 2 diabetes
Chang et al., 2021 ¹¹	Composite measure	7	Patient-Provider Communication; SDM	✓	Black adults with hypertension
Okunrintemi et al., 2021 ¹²	Composite measure	4	SDM	✗	Adults with a ASCVD (coronary heart disease, peripheral arterial disease, or cerebrovascular disease)
Milky & Thomas, 2020 ¹³	Composite measure	7	Patient-Provider Communication; SDM	✓	Adults with diabetes mellitus
Batsis et al., 2019 ¹⁴	Latent variables	3	SDM	✗	Older adults
Hong et al., 2019 ¹⁵	Latent variables	2	SDM	✗	Adults who had health insurance coverage for a full year
Okunrintemi et al., 2019 ¹⁶	Composite measure	4	SDM	✗	Adults that reported a usual source of care
Hughes et al., 2018 ¹⁷	Composite measure	4	SDM	✗	Adults with BMI ≥18.5 kg/m2 that reported a usual source of care
Levine et al., 2017 ¹⁸	Composite measure	7	Patient-Provider Communication; SDM	✓	Adults that reported a usual source of care
Fiks et al., 2012 ¹	Composite measure	7	Patient-Provider Communication; SDM	✓	Children with special health care needs that reported a usual source of care
Fiks et al., 2012 ²	Composite measure	7	Patient-Provider Communication; SDM	✓	Children (5-17 years) with special health care needs that reported a usual source of care
Fiks et al., 2010 ³	Composite measure	7	Patient-Provider Communication; SDM	✓	Children with ADHD or asthma

The list of citations for the table, as well as a compilation of commonly used MEPS items to measure SDM, are available via the QR code below

Recommendations

- Develop a standardized and rigorous approach for measuring SDM in MEPS.
- Prioritize efforts to create contemporary theoretical frameworks and measures that capture SDM across diverse population subgroups within MEPS.

Limitations

- The review was limited to English-language studies indexed in PubMed, Scopus, and Embase.
- Studies outside of the MEPS were excluded, which may reduce the generalizability of findings to other data sources.
- A limited number of studies applied theoretical frameworks, which constrains the consistency of evaluating the rigor of measuring SDM.
- The review focused on chronic diseases, potentially overlooking SDM studies in other clinical areas.

Conclusions

- Current approaches to measuring SDM in MEPS lack standardization and rigor, which limits the ability to evaluate SDM-related outcomes across diverse populations.
- Inconsistent measurement of SDM across studies in MEPS highlights the need for standardized, and validated frameworks, as well as comprehensive measures to enhance SDM assessment in future research.

References

1.Fiks AG, Localio AR, Alessandrini EA, Asch DA, Guevara JP. Shared decision-making in pediatrics: a national perspective. *Pediatrics*. 2010;126(2):306-314. doi:10.1542/peds.2010-0526

2.Fiks AG, Mayne S, Localio AR, Alessandrini EA, Guevara JP. Shared decision-making and health care expenditures among children with special health care needs. *Pediatrics*. 2012;129(1):99-107. doi:10.1542/peds.2011-1352

3.Fiks AG, Mayne S, Localio AR, Feudtner C, Alessandrini EA, Guevara JP. Shared decision making and behavioral impairment: a national study among children with special health care needs. *BMC Pediatr*. 2012;12:153. Published 2012 Sep 21. doi:10.1186/1471-2431-12-153

4.Charles C, Gafni A, Whelan T. Shared decision-making in the medical encounter: what does it mean? (or it takes at least two to tango). *Soc Sci Med*. 1997;44(5):681-692. doi:10.1016/s0277-9536(96)00221-3

Entire list of citations is available using the QR code below.

