

Health Care Spending Guiding Principles: A Checklist for Assessing Health Care Spending Estimates and Policies for Patient-centered Care

Mike Ciarametaro

Agenda



Why the need for Health Spending Guiding Principles (HSGPs)?

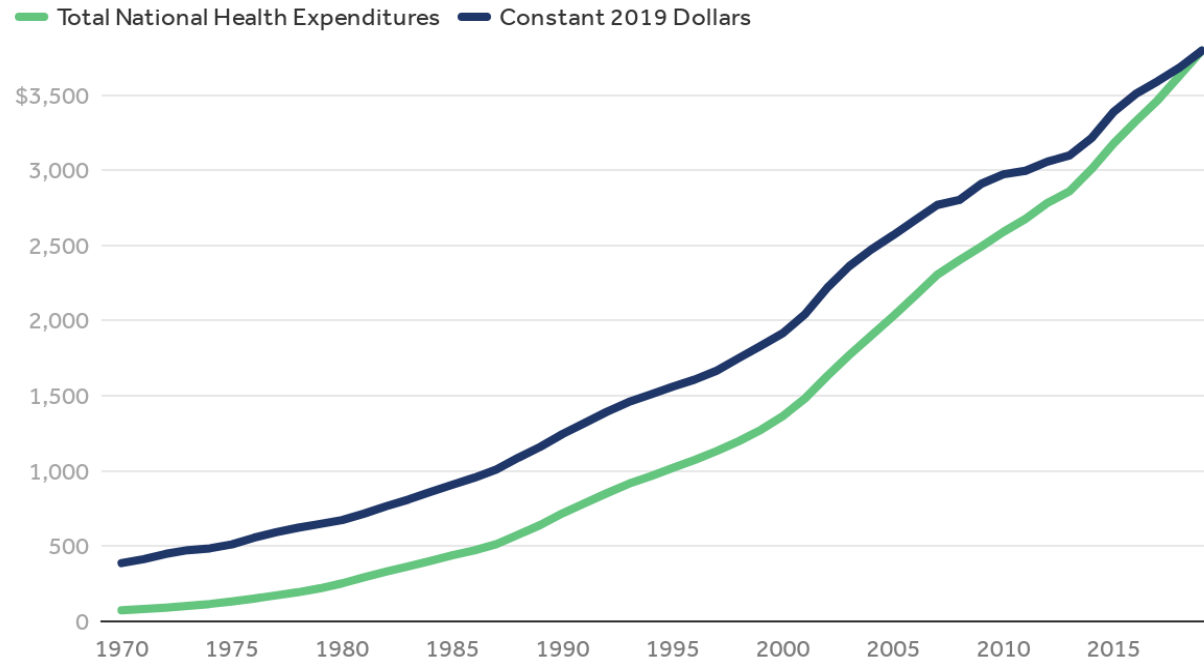
What are the HSGPs?

How to Use the HSGPs?

Questions

Rising US Health Care Spending is a Focus for Both Policymakers and Researchers

Total national health expenditures, US \$ Billions, 1970-2019

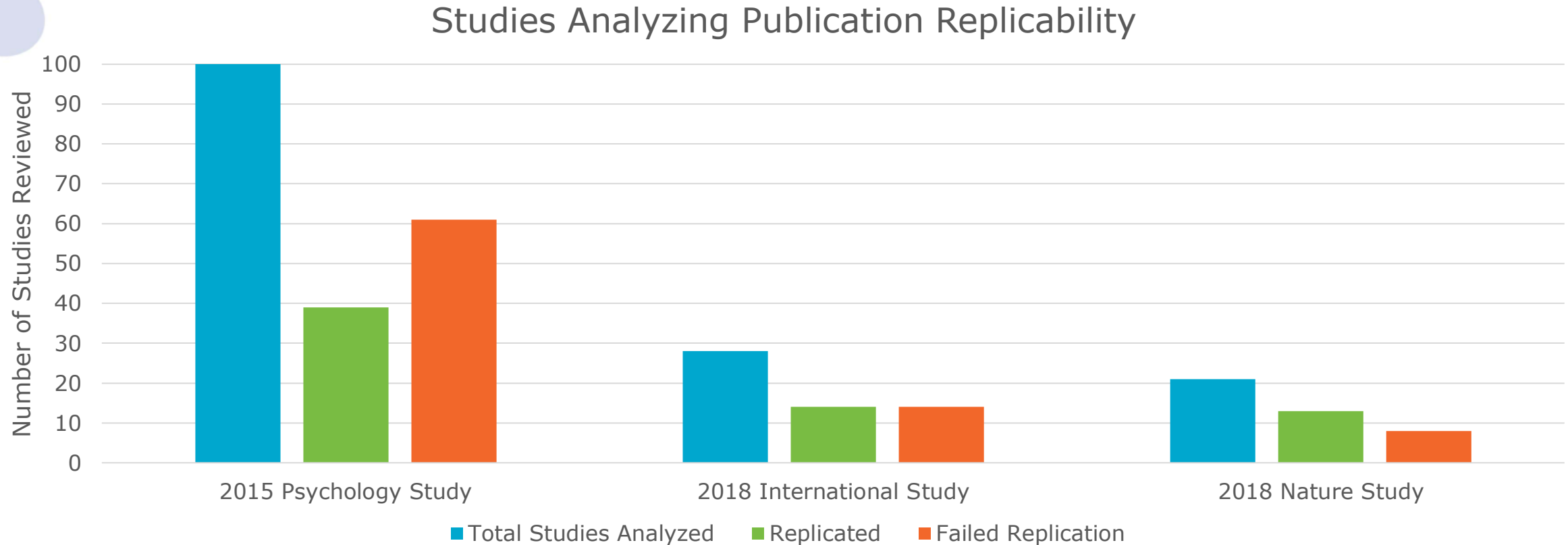


Notes: A constant dollar is an inflation adjusted value used to compare dollar values from one period to another.

Source: KFF analysis of National Health Expenditure (NHE) and BEA data
• PNG

Peterson-KFF
Health System Tracker

Publication of bad science remains an ongoing problem



Piper, Kelsey. "Science has been in a "replication crisis" for a decade. Have we learned anything?" Vox, October 2020, <https://www.vox.com/future-perfect/21504366/science-replication-crisis-peer-review-statistics>.

2015 Psychology Study: Open Science Collaboration. "Estimating the reproducibility of psychological science." *Science* 349.6251 (2015): aac4716

2018 International Study: Klein, Richard A., et al. "Many Labs 2: Investigating variation in replicability across samples and settings." *Advances in Methods and Practices in Psychological Science* 1.4 (2018): 443-490.

2018 Study: Camerer, Colin F., et al. "Evaluating the replicability of social science experiments in Nature and Science between 2010 and 2015." *Nature Human Behaviour* 2.9 (2018): 637-644.

Cognitive biases impact decision making

Everybody is vulnerable to cognitive bias in decision making

The Dunning-Kruger Effect

Confirmation Bias

Self-Serving Bias

Hindsight Bias

Optimism/Pessimism Bias

Sunk Cost Fallacy

Negativity Bias

Decline Bias

Backfire Effect

Fundamental Attribution Error

In-group Bias

Forer Effect

The Health Spending Guiding Principles are a tool used to address evidence and decision-making challenges

Purpose: Ensure alignment with the goals of patient-centered care as defined by the Institute of Medicine

Evaluate
Evidence
Robustness

	Patient-Centered Guiding Principles for Evaluating Health Care Spending	Patient-Centered Guiding Principles for Reforming Health Care to Address Rising Health Care Spending
Purpose	(1) Examine the rigor and appropriateness of the methods used to estimate health care spending over time and across subpopulations. (2) Ensure that health care spending analyses are evaluated in a manner consistent with the goal of patient-centered care.	(1) Establish patient-centered principles to guide and evaluate reforms designed to control rising U.S. health care spending. (2) Evaluate individual health care spending policies for their intended and possible unintended impacts on patients' health.
Example application	(1) Review analyses (e.g., publications) to determine study quality and agreement with generally accepted methodological standards for analyzing health care spending. (2) Review analyses to ensure consistency with patient-centered care.	(1) Evaluate legislative, regulatory and/or payer (public or private) health spending reform agendas to determine their alignment with building a patient-centered health care system in the U.S. (2) Review legislative, regulatory and/or payer (public or private) health care spending policies or actions to determine their likely impacts on short-term and long-term patient health.

Systematically
Evaluate
Policy

Health Spending Guiding Principles were Developed using an Evidence-Based and Expert Informed Process

Literature Review of Established Standards

- ISPOR
- NAM
- CMS



Development of First Draft



Blinded Expert Review

- Patient Groups
- Academics
- Payers (Private & Public)
- Privates
- Think Tanks



Incorporation of Expert Feedback



Development of Illustrative Cases

Patient-Centered Guiding Principles for Evaluating Health Care Spending

Health care spending research should:



Consider the impacts of changes in health spending on patients and society



Incorporate estimates of the actual amounts paid for medical care



Recognize differences in spending across patients and time



Account for changes in disease- or condition-specific epidemiologic measures



Adjust for inflation



Use data relevant to the analysis objectives



Include a sensitivity analysis to elucidate any uncertainty in the evaluation



Place conclusions and policy recommendations in the appropriate context

Patient-Centered Guiding Principles for Reforming Health Care to Address Rising Health Care Spending

Policies to address rising health care spending should:



Align with the Triple Aim framework of health care improvement



Be rooted in patient-centered value



Recognize the differing needs of a diverse U.S. population



Preserve or improve short- and long-term patient-centered outcomes



Address the burden associated with financing care



Target significant sources of inefficient spending across health care settings, services, and conditions



Discourage the use of low-value care and encourage the use of high-value care



Address factors driving overall health care demand, including behavioral, cultural, and socioeconomic factors



Address misaligned incentives that distort utilization and price



Incentivize innovations that improve patient-centered outcomes

Detailed explanation, citations, use instruction, and an illustrative example are provided for each guiding principle



1.3 Evaluation of health care spending should recognize differences in spending across patients and time (Dieleman et al., 2017)

Supporting Detail

Rather than focusing solely on mean or median changes in health care spending for patients with a specific condition, health care spending analyses should consider the distribution of per-patient costs resulting from differences in patients' ages, underlying health conditions, comorbidities, and severity and treatment/utilization patterns resulting from changes in clinical practice or patient access [e.g., coverage policy, benefit design (including out-of-pocket responsibility)]. This distribution should be examined across both patients and time. Doing so can provide a more comprehensive assessment of health care spending and help identify the variance in and root causes of health care spending for specific health conditions (Dieleman et al., 2017). It may not be possible to perform this type of analysis when dealing with small patient populations such as those with a rare disease.

How to Use This Guiding Principle

Health care spending analyses should report results for both the total population and critical subpopulations that may differ from the population average. Further, studies analyzing changes over time should incorporate corresponding changes in the demographics, treatment and utilization patterns (resulting from changes in clinical practice or patient access, including financial burden), and key population health outcomes. Therefore, studies should always report their rationale for selecting specific analyses to account for differences in health care spending across patients and time. Researchers may not always have access to data to conduct rigorous subpopulation analyses or time-series assessments of changes in underlying population health and treatment or utilization patterns. In addition, the patient population may be too small to conduct this type of analysis, especially for rare diseases. In these circumstances, researchers should document the lack of data as a limitation of the study.

Instructions on how to use

Additional Context

Illustrative Example

In a study of patients with heart failure (Yoon et al., 2016), the authors reported the average per-patient cost of heart failure and factors that may contribute to higher costs. The annual cost of heart failure depended on the patient's age, race or ethnicity, history of substance abuse and comorbid conditions.

Assessment 3. Evaluation of the Yoon Study (Yoon et al., 2016)

#	Criteria	Evaluation
1	Did the authors report key subpopulations that may have differed from the population average? If not, was the rationale for not including them documented?	The authors reported demographic and clinical risk factors for high spending.
2	If the study analyzed changes over time, did it report changes in the demographics, treatment/ utilization patterns, patient access and key population health outcomes during the studied time frame? If not, was the rationale for not including them documented?	Not applicable because the study did not compare health care spending over time.

Example Guiding Principle Application



An NPC analysis of “Will Reducing Drug Prices Slow Innovation” by West Health Policy Center



1717 Pennsylvania Avenue, NW, Suite 800
Washington, DC 20006
info@npcw.org
www.npcw.org

Patient-Centered Guiding Principles for Evaluating Health Care Spending

An NPC analysis of “Will Reducing Drug Prices Slow Innovation,”
a self-published white paper by West Health Policy Center
May 2022

Background

On Aug. 12, 2021, the West Health Policy Center published a *white paper* exploring the impact of drug price controls on future biopharmaceutical innovation. The study examined the relationship between changes in revenue and research and development (R&D) for pharmaceutical companies of different sizes from 2000 to 2018. The authors concluded that drug price regulation would have minimal impact on future innovation. West Health promoted this study as evidence that “policymakers do not need to make a false choice between reducing prices to ensure the affordability of pharmaceutical products currently on the market and the innovation required to bring new products to market in the future.”

As lawmakers continue to debate drug price controls, it's critically important that they understand whether West Health's claim can be substantiated with evidence. It's also imperative that policy conversations are based on sound evidence and that the effects on innovation and patient health are fully understood. As such, the National Pharmaceutical Council (NPC) reviewed this study using the *Patient-Centered Guiding Principles for Evaluating Health Care Spending*, a framework designed to help decision-makers assess the quality, rigor, and patient-centeredness of health spending analyses. We found significant concerns, which are summarized below and detailed in the Appendix.

STRENGTHS

- ✓ Appropriately adjusts for inflation

AREAS OF CONCERN

- ✗ Promotional materials and study make conclusions not substantiated by data in the analysis
- ✗ Does not consider how changes in the level of innovation (e.g., clinical benefit) in response to price regulation will impact patient health
- ✗ Makes unsupported assumptions, is not transparent in its analysis, and lacks outside experts' review and validation to confirm its methods and findings
- ✗ Does not include a sensitivity analysis to test the uncertainty present in the study's underlying assumptions



EVALUATION

The use of this study in policymaking could pose **significant concerns** due to inadequate methods, unsupported assumptions, and conclusions not substantiated by the analysis. These shortcomings limit the study's ability to accurately inform policy discussions about pricing and innovation.

STRENGTHS

- ✓ Appropriately adjusts for inflation

AREAS OF CONCERN

- ✗ Promotional materials and study make conclusions not substantiated by data in the analysis
- ✗ Does not consider how changes in the level of innovation (e.g., clinical benefit) in response to price regulation will impact patient health
- ✗ Makes unsupported assumptions, is not transparent in its analysis, and lacks outside experts' review and validation to confirm its methods and findings
- ✗ Does not include a sensitivity analysis to test the uncertainty present in the study's underlying assumptions

EVALUATION

The use of this study in policymaking could pose **significant concerns** due to inadequate methods, unsupported assumptions, and conclusions not substantiated by the analysis. These shortcomings limit the study's ability to accurately inform policy discussions about pricing and innovation.





1

Rising US Health Spending Presents Challenges and Opportunities for both Policymakers and Researchers

2

Evidence and Cognitive Biases Produce Challenges for Creating Good Policy

3

The Health Spending Guiding Principles are a Tool to (1) Evaluate Evidence for Robustness (2) Systematically Evaluate Policy Options

Questions