

Neurology: Clinical Practice Publish Ahead of Print

DOI: 10.1212/CPJ.0000000000001153

Tackling Quality It's Never a Level Playing Field: Companion Piece to the Neurology Outcome Measure Set

Author(s):

Brian Cabaniss, MD¹; Korwyn Williams, MD, PhD²; Meghan Ward, MD³; Desiree Cremeen, MA⁴; Kavita Nair, PhD⁵

Corresponding Author:

Brian Cabaniss
brian.t.cabaniss@emory.edu

Neurology® Clinical Practice Published Ahead of Print articles have been peer reviewed and accepted for publication. This manuscript will be published in its final form after copyediting, page composition, and review of proofs. Errors that could affect the content may be corrected during these processes.

Affiliation Information for All Authors: 1.Emory University, Atlanta, GA; 2.Phoenix Children's Hospital, Phoenix, AZ; 3.Intermountain Medical Group, Murray, UT; 4.American Academy of Neurology, Minneapolis, MN; 5.University of Colorado Anschutz Medical Campus, Aurora, CO;

Contributions:

Brian Cabaniss: Drafting/revision of the manuscript for content, including medical writing for content
Korwyn Williams: Drafting/revision of the manuscript for content, including medical writing for content
Meghan Ward: Drafting/revision of the manuscript for content, including medical writing for content
Desiree Cremeen: Drafting/revision of the manuscript for content, including medical writing for content
Kavita Nair: Drafting/revision of the manuscript for content, including medical writing for content

Number of characters in title: 103

Abstract Word count: 123

Word count of main text: 1007

References: 10

Figures: 0

Tables: 0

Search Terms: [51] Other Education, [328] Billing, [329] Insurance

Study Funding: The authors report no targeted funding

Disclosures: B.T. Cabaniss has nothing to disclose relevant to the manuscript; K.L. Williams has received honoraria for lectures on behalf of the AAN; M.A. Ward has nothing to disclose relevant to the manuscript; D. L. Cremeen is an employed by the American Academy of Neurology; K.V. Nair has nothing to disclose relevant to the manuscript

ABSTRACT: The American Academy of Neurology (AAN) has recently proposed three outcome metrics crafted to be both broadly applicable across neurological diseases and to function as potential tools to facilitate quality improvement. These measures should be of interest to physicians and payers due to the increasing linkage of reimbursement to quality care. However, the use of quality measures cannot exist in a vacuum as external factors outside of physician control can negatively impact these metrics. The original Centers for Medicare and Medicaid (CMS) value-based programs illustrate the necessity for iterative review and revision of outcome metrics to allow for risk adjustment to avoid unjust penalties. Accordingly, at this time, the Neurology Outcome Measurement Set is not suitable for inclusion in a quality payment program.

BODY: Since 2008, healthcare in the United States (US) has been shifting from a volume driven, fee-for-service system to value-based reimbursement. Value in healthcare is defined as health outcomes achieved per dollar spent¹. By changing the basis of provider payments, the goal has been to improve both individual and population health, while also limiting cost increases. This move to value-based care has been driven by legislation and programs managed by the Center for Medicare and Medicaid Services (CMS). CMS exists at the vanguard of reimbursement policies, being the largest healthcare payer in the US, with Medicare and Medicaid accounting for 37% of healthcare spending in 2017². Private insurers often adopt efforts led by CMS; for example, UnitedHealth Group, Aetna and Anthem distributed nearly half of their reimbursements via value-based arrangements in 2017³.

Due to this shift to value-based care, there are increasing calls for health outcomes data to serve as endpoints for quality improvement processes. A work group of health policy experts and patient representatives was recently assembled by the American Academy of Neurology Institute (AANI) to formulate outcome measures that would 1) be broadly applicable across neurological diseases and 2) function as meaningful tools to drive quality improvement in an individual provider's clinical practice⁴. After substantial iterative discussion informed by a 21-day public comment period, 3 outcome measures were ultimately approved: Patient Communication Experiences for Patients with Neurologic Conditions; a Quality of Life Outcome for Patients with Neurologic Conditions; and EMG Utilization for Isolated Lower Back Pain. It is important to emphasize that these outcome measures reflect expert consensus that they are targets with the potential for added value in neurological care. Whether the metrics lead to meaningful quality improvement will require continued study and consideration for risk adjustment to determine their value, and it will take time to understand how these proposed outcome metrics could fit into provider payment programs. The original CMS value-based programs illustrated the necessity of risk adjustment for fair use. Comparing patients, and by extension the healthcare practices caring for these patients, without consideration of the presence or absence of all variables affecting the outcome metric of interest, may lead to unjust impacts on reimbursement.

The CMS value-based programs originated from a Department of Health and Human Services (HHS) proposal to shift medical reimbursement along a spectrum from straightforward fee-for-service with no link to quality to population-based payments (essentially outcome measures dependent on quality care). By 2015, the goal was to have 90% of Medicare fee-for-service payments in categories 2 – 4⁵:

Category 1: Fee-for-service with no link of payment to quality

- Category 2: Fee-for-service with a link of payment to quality
- Category 3: Alternative payment models built on fee-for-service architecture
- Category 4: Population-based payment

Correspondingly, CMS developed value-based programs to guide US healthcare delivery away from Category 1. The original 5 were: the End-Stage Renal Disease Quality Incentive Program (ESRD QIP), the Hospital Value-Based Purchasing Program (VBP), the Hospital Readmission Reduction Program (HRRP), the Value Modifier Program (VM) and the Hospital Acquired Conditions Reduction Program (HAC)⁶.

While a program rather than a measure, the underlying goal of the HRRP was to improve communication, similar to the AANI's Patient Communication Experiences for Patients' outcome metric. By penalizing hospitals with high readmission rates with a 3% reduction in payments, institutions would be incentivized to improve internal process measures to limit avoidable readmissions^{7,8}. However, HRRP did not consider the impact of socioeconomic status or race/ethnicity, and when studied by Martsof et. al., these 2 factors alone affected payments for 80% of acute care hospitals and accounted for 10-40% of the HRRP payment penalty. In effect, safety net and rural hospitals taking care of sicker or poorer patients were inordinately penalized⁹. Sensitivity analysis by this group testing only for socioeconomic status noted a similar overall effect⁹. Consequently, recognition of this influential variable on payment penalties under HRRP resulted in the passage of legislation to separate hospitals into peer groups on the basis of socioeconomic status⁸.

The HRRP experience must serve as a reminder that external variables can affect outcome measures, and that contrasts in population outcomes on the basis of socioeconomic measures can be striking. Sico et. al. emphasized the necessity of review following implementation of their measures to ensure that appropriate risk adjustment strategies are implemented⁴. It is easy to imagine that caring for groups disadvantaged by limited caregiver support, access to electronic communication, or cognitive functioning due to co-existing health conditions would adversely affect scores on patient communication measures. With the outcome measure of "Quality of Life Outcome for Patients with Neurologic Conditions," considerations for risk adjustment could include factors associated with the conditions itself (e.g., severity and stage of a given disease), sociodemographic characteristics (e.g., age, education, homelessness), and provider type⁸. Collecting high quality, timely, and actionable survey data efficiently and with minimum burden on providers is the ideal. Payers and providers should partner together, likely with informatics/electronic medical records colleagues, to explore how to make this ideal a reality while having data attributed to a specific provider rather than an entire practice.

As discussed in this AANI article, an approach to mitigate these biases could be to focus on provider self-improvement. To do this, the outcome of interest would be a provider's relative improvement in outcome metrics over time as opposed to a comparison to other clinicians, particularly in the initial years of use. There is precedent: VBP payments are adjusted based on whether a hospital scores well relative to other hospitals or as compared to their own prior performance¹⁰.

CONCLUSION: The authors have provided worthwhile measures to investigate quality. Hopefully, these outcome measures will prove to be meaningful tools to improve health outcomes in a value-based environment, but at this time they have not been validated or tested for reliability. Therefore, they are not currently suitable for inclusion in a quality payment program. While these measures might not be ready for reimbursement programs, neurology

providers should take the lead in implementing outcomes measures, which may in turn lead to better risk adjustment development in the future as data are collated from usage.

References:

1. Porter ME, Teisberg EO. Redefining health care: creating value-based competition on results. Boston: Harvard Business School Press, 2006.
2. Centers for Medicare and Medicaid Services [Internet] National Health Expenditures 2017 Highlights. [cited 2020 Nov 9] Available at <https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/downloads/highlights.pdf>
3. Japsen, B. UnitedHealth, Aetna, Anthem Near 50% Value-Based Care Spending [Internet]. Forbes. 2017, Feb 2. [cited 2020 Nov 9] Available at <https://www.forbes.com/sites/brucejapsen/2017/02/02/unitedhealth-aetna-anthem-near-50-value-based-care-spending/?sh=5a2fa951d4e2>
4. Sico JJ, Sarwal A, Benish SM, et al. Quality improvement in neurology: Neurology Outcomes Quality Measurement Set. *Neurology*. 2020;94(22):982-990.
5. Centers of Medicare and Medicaid Services [Internet] Better Care. Smarter Spending. Healthier People: Paying Providers for Value, Not Volume. 2015, Jan 26. [cited 2020 Nov 9]. Available from <https://www.cms.gov/newsroom/fact-sheets/better-care-smarter-spending-healthier-people-paying-providers-value-not-volume#:~:text=Better%20Care.,Smarter%20Spending.,Providers%20for%20Value%2C%20Not%20Volume&text=Improving%20the%20quality%20and%20affordability,expanding%20access%20to%20such%20care.> Better Care. Smarter Spending. Healthier People: Paying Providers for Value, Not Volume
6. Centers for Medicare and Medicaid Services [Internet] What Are the Value-Based Programs?; Page Last Modified 2020 Jan 6 [cited 2020 Nov 9]. Available from <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/Value-Based-Programs>
7. Centers for Medicare and Medicaid Services [Internet] Hospital Readmissions Reduction Program (HRRP); Page Last Modified 2020 Aug 24 [cited 2020 Nov 9]. Available from <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction-Program>
8. NEJM Catalyst [Internet] What is Pay for Performance in Healthcare? 2018, Mar 1 [cited 2020 Nov 9]. Available from <https://catalyst.nejm.org/doi/full/10.1056/CAT.18.0245>
9. Martsof GR, Barrett ML, Weiss AJ, et al. Impact of Race/Ethnicity and Socioeconomic Status on Risk-Adjusted Readmission Rates: Implications for the Hospital Readmissions Reduction Program. *Inquiry*. 2016;53:0046958016667596.
10. Centers for Medicare and Medicaid Services [Internet] The Hospital Value-Based Purchasing (VBP) Program; Page Last Modified 2020 Jan 6 [cited 2020 Nov 9]. Available from <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/HVBP/Hospital-Value-Based-Purchasing>

Neurology® Clinical Practice

Tackling Quality—It's Never a Level Playing Field: Companion Piece to the Neurology Outcome Measure Set

Brian Cabaniss, Korwyn Williams, Meghan Ward, et al.
Neurol Clin Pract published online January 20, 2022
DOI 10.1212/CPJ.0000000000001153

This information is current as of January 20, 2022

Updated Information & Services	including high resolution figures, can be found at: http://cp.neurology.org/content/early/2022/01/19/CPJ.0000000000001153.full.html
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): Billing http://cp.neurology.org/cgi/collection/billing Insurance http://cp.neurology.org/cgi/collection/insurance Other Education http://cp.neurology.org/cgi/collection/other_education
Permissions & Licensing	Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: http://cp.neurology.org/misc/about.xhtml#permissions
Reprints	Information about ordering reprints can be found online: http://cp.neurology.org/misc/addir.xhtml#reprintsus

Neurol Clin Pract is an official journal of the American Academy of Neurology. Published continuously since 2011, it is now a bimonthly with 6 issues per year. Copyright © 2022 American Academy of Neurology. All rights reserved. Print ISSN: 2163-0402. Online ISSN: 2163-0933.

