EDITORIAL - GLOBAL HEALTH SERVICES RESEARCH

Opportunities and Challenges of Defining "Value" in Oncology Care

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There has been increasing recognition of the need to move toward a value-based healthcare system that optimizes clinical outcomes while avoiding unnecessary care and reducing excess costs. Moving toward value-based healthcare within oncology presents unique challenges given the psychological impact of a cancer diagnosis, which can fuel patients' and providers' desire to employ maximally aggressive therapy to prolong survival, sometimes irrespective of impacts on quality of life and overall value to the patient. In their study, Allen et al. explore similarities and differences in the perception of value between cancer patients and providers, thus highlighting the need to consider multiple stakeholders' perspectives, and where they may conflict, when developing and deploying value metrics in oncology.¹

The highest-rated value metric among patients and providers was overall survival, and patients commonly reported that survival had become more important to them over time. This finding is not surprising among the patients with gastric and pancreatic cancers, as these aggressive malignancies have poor overall prognoses. Extrapolating this finding to lower-risk cancers with an excellent prognosis may reveal opportunities for improvement in value. For example, for many breast, thyroid, and prostate cancers, overall prognosis is excellent and maximally aggressive therapy does not improve survival. Despite national guidelines supporting the omission of

more aggressive surgery or adjuvant therapy in certain contexts because they do not improve overall survival, such care remains frequently offered.^{5–7} Providers cite other reasons for recommending these treatments, such as reducing the risk of local recurrence, which may or may not be important relative to other outcomes for patients. In cases where overall survival is equivalent, further clarification of patients' values can help to avoid overtreatment.

Patients and providers also identified functional and emotional well-being among the highest-rated value metrics. As the authors note, these patient-reported outcomes can be difficult to measure and collect. Despite validated measures for depression, anxiety, and overall quality of life, it can be difficult to operationalize these measurements, or to measure more nuanced aspects of emotional well-being such as patients' and providers' desire for peace of mind. This gap highlights the need for additional research to identify appropriate, quantifiable measures of functional and emotional outcomes that are practical to measure in the clinical setting.

Of interest, the lowest-rated value metric for patients and providers was cost to the US healthcare system. This finding is notable considering that healthcare spending in the USA grew 4.6% in 2019, reaching a total of \$3.8 trillion or 17.7% of the gross domestic product—far outpacing other developed countries. ¹⁰ In the same year, the national cancer-attributed medical care costs in the USA were over \$2 billion. ¹¹ The combination of an aging population, expensive therapeutics, and improved survival for most cancer types calls us to re-engage in consideration of the societal-level costs of oncology care and to strategize ways to improve value within it. Physicians have an obligation not only to the patient in front of them, but also to all patients of society to be responsible stewards of limited healthcare resources. ^{12,13} The reduction of spending on

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low-value care may allow redirection of those funds toward more vulnerable patient populations from socioeconomically disadvantaged backgrounds or toward other services that patients and communities value.

Decisions become difficult when, as Allen et al. explore, patients and providers have conflicting perceptions of "value." For example, providers rated the active treatment experience (e.g., pain, discomfort, and symptoms during treatment) as significantly more important than patients did. Differences between patients and providers illustrate the inherent tension in value-based healthcare between respecting patient autonomy and preventing overtreatment. To resolve this tension, the authors suggest a multidimensional value framework allowing patients to "decide on options based on the endpoint that matters the most to them." While engaging in value clarification is an important and necessary step in moving toward valuebased oncology care, it is important to note the critical role physicians play in driving healthcare decisions. Interventions also targeting physicians will likely be necessary to achieve optimal value.

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REFERENCES

- Allen CJ, Smith GL, Prakash L, et al. What is "value"? Results of a survey of cancer patients and providers. *Ann Surg Onc.* 2022. https://doi.org/10.1245/s10434-022-11534-z.
- Chou R, Dana T, Haymart MR, et al. Active surveillance versus thyroid surgery for differentiated thyroid cancer: a systematic review. *Thyroid*. 2022. https://doi.org/10.1089/thy.2021.0539.
- Hughes KS, Schnaper LA, Bellon JR, et al. Lumpectomy plus tamoxifen with or without irradiation in women age 70 years or older with early breast cancer: long-term follow-up of CALGB 9343. J Clin Oncol. 2013;31(19):2382–7. https://doi.org/10.1200/ JCO.2012.45.2615.

- Klotz L, Vesprini D, Sethukavalan P, et al. Long-term follow-up of a large active surveillance cohort of patients with prostate cancer. J Clin Oncol. 2015;33(3):272–7. https://doi.org/10.1200/ JCO.2014.55.1192.
- Pasqual E, Sosa JA, Chen Y, Schonfeld SJ, Berrington de Gonzalez A, Kitahara CM. Trends in the management of localized papillary thyroid cancer in the United States (2000–2018). *Thyroid*. 2022. https://doi.org/10.1089/thy.2021.0557.
- Wang T, Bredbeck BC, Sinco B, et al. Variations in persistent use of low-value breast cancer surgery. *JAMA Surg*. 2021;156(4):353–62. https://doi.org/10.1001/jamasurg.2020. 6942.
- Mahal BA, Butler S, Franco I, et al. Use of active surveillance or watchful waiting for low-risk prostate cancer and management trends across risk groups in the United States, 2010–2015. *JAMA*. 2019;321(7):704–6. https://doi.org/10.1001/jama.2018.19941.
- Chen MM, Hughes TM, Dossett LA, Pitt SC. Peace of mind: a role in unnecessary care? *J Clin Oncol*. 2022;40(5):433–7. http s://doi.org/10.1200/JCO.21.01895.
- Wang T, Mott N, Miller J, et al. Patient perspectives on treatment options for older women with hormone receptor-positive breast cancer: a qualitative study. *JAMA Netw Open*. 2020;3(9):e2017129. https://doi.org/10.1001/jamanetworkopen.2 020.17129.
- Martin AB, Hartman M, Lassman D, Catlin A, Team NHEA. National health care spending in 2019: steady growth for the fourth consecutive year. *Health Aff (Millwood)*. 2021;40(1):14–24. https://doi.org/10.1377/hlthaff.2020.02022.
- Mariotto AB, Enewold L, Zhao J, Zeruto CA, Yabroff KR. Medical care costs associated with cancer survivorship in the United States. Cancer Epidemiol Biomarkers Prev. 2020;29(7):1304–12. https://doi.org/10.1158/1055-9965.EPI-19-1534.
- Jagsi R. Debating the oncologist's role in defining the value of cancer care: we have a duty to society. *J Clin Oncol*. 2014;32(36):4035–8. https://doi.org/10.1200/JCO.2014.58.1587.
- Baskin AS, Wang T, Miller J, Jagsi R, Kerr EA, Dossett LA. A health systems ethical framework for de-implementation in health care. *J Surg Res.* 2021;11(267):151–8. https://doi.org/10.1016/j.jss.2021.05.006.

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