financial burden; when one arm of a trial compels the patient to agree to responsibility for a bill of any amount whereas the other arm is SOC and fully covered by insurance, decisions of patients and their families can vary greatly depending on their perceived level of financial security and ability to take financial risk. These barriers can be just as harmful but are completely avoidable.

When the charges are not waived for those who cannot pay, the result may be denial of patient access to the superior examination, in this case PSMA PET (6). All clinical trials should provide equal access to all races and ethnic groups. Our institution's research access program still needs to improve access to match the regional racial composition, but billing for participation is not a factor.

Every man with prostate cancer who meets eligibility criteria deserves equal access to trials of PSMA PET regardless of how much he can afford to pay.

## **REFERENCES**

- Bucknor MD, Lichtensztajn DY, Lin TK, Borno HT, Gomez SL, Hope TA. Disparities in PET imaging for prostate cancer at a tertiary academic medical center. J Nucl Med. September 25, 2020 [Epub ahead of print].
- Song H, Harrison C, Duan H, et al. Prospective evaluation of <sup>18</sup>F-DCFPyL PET/CT in biochemically recurrent prostate cancer in an academic center: a focus on disease localization and changes in management. J Nucl Med. 2020;61:546–551.
- Zheng S, Ren ZJ, Heineke J, Geissler KH. Reductions in diagnostic imaging with high deductible health plans. Med Care. 2016;54:110–117.
- Galgano SJ, Calderone CE, McDonald AM, et al. Patient demographics and referral patterns for [F-18]fluciclovine-PET imaging at a tertiary academic medical center. J Am Coll Radiol. 2019;16:315–320.
- Copeland TP, Franc BL. High-cost cancer imaging: opportunities for utilization management. J Cancer Policy. 2017;12:16–20.
- Calais J, Ceci F, Eiber M, et al. <sup>18</sup>F-fluciclovine PET-CT and <sup>68</sup>Ga-PSMA-11 PET-CT in patients with early biochemical recurrence after prostatectomy: a prospective, single-centre, single-arm, comparative imaging trial. *Lancet Oncol.* 2019;20: 1286–1294.

## Andrei Iagaru\* Benjamin Franc

\*Stanford University 300 Pasteur Dr., H-2200 Stanford, CA 94305 E-mail: aiagaru@stanford.edu

Published online Oct. 30, 2020. DOI: 10.2967/jnumed.120.258160

## Reply: Disparities in PET Imaging of Prostate Cancer at a Tertiary Academic Medical Center

**REPLY:** Iagaru and Franc note the key finding of our paper (*I*): that in patients with biochemical recurrence of prostate cancer, Black or African American patients had nearly 4 times lower odds of receiving PET imaging with <sup>68</sup>Ga-PSMA-11, as opposed to <sup>18</sup>F-fluciclovine, than did their non-Hispanic White counterparts. This held true even though we controlled for age, preferred language, neighborhood socioeconomic status, and health insurance, among other demographic factors.

Iagaru and Franc describe a "different experience in equitable access to care through a research trial" at their neighboring

institution in Northern California. They point out that, in contrast to our study, a very slightly higher percentage of Black patients had access to PSMA PET (<sup>18</sup>F-DCFPyL) (4.8%) than to <sup>18</sup>F-fluciclovine (4.4%) at their institution, and they go on to note differences in how their trial was conducted with regard to patient financial liability. However, they do not clearly address the fact that the additional data they report demonstrate similar concerning trends in equitable access to advanced imaging technologies.

The other side of the coin to decreased access for any one demographic group is often relatively increased access for a different group. Similar to our own institution, Iagaru and Franc found at their institution an 11.7% absolute increase in the percentage of White patients who received PSMA PET imaging: 79.7% compared with 68%. We reported a similar absolute increase of 8.4% at the University of California San Francisco: 80% compared with 71.6%. Although Iagaru and Franc do not report the results of further statistical analysis, their stated data suggest similar preferential access for non-Hispanic White patients to a novel advanced imaging technology. The difference appears to be that, whereas at our institution better access for non-Hispanic White patients was disproportionately associated with decreased access for Black patients, at their institution the burden of reduced access was distributed across a wider spectrum of different racial and ethnic minorities. Indeed, they report a 33% lower rate of use of PSMA PET for Asian American patients. At both institutions, access for persons of color to a rapidly emerging gold standard for PET imaging in prostate cancer was likely reduced.

How can two sets of investigators look at the same data and reach such different conclusions? Part of the answer may be related to the traditional roles of imaging departments, which tend to more often focus on how to provide the highest-quality imaging experience for the patients who make it through the doors and less time thinking about how and why different patients reach the doorstep. Radiology is often thought of as an intermediary step in health-care delivery, unlikely to contribute directly to differential patient outcomes. But it is critical to recognize that many of the most frustratingly persistent health disparities we face may result from the accruement of differential patient experiences across multiple aspects of a health system.

A commitment to health equity means working intentionally and systematically to apply our research toolkits to investigations of health-care delivery across all domains. There has never been a moment with a greater mandate to proactively identify and root out biases that reduce patient access to the best possible care. Let's not waste this moment.

## **REFERENCE**

 Bucknor MD, Lichtensztajn DY, Lin TK, Borno HT, Gomez SL, Hope TA. Disparities in PET imaging for prostate cancer at a tertiary academic medical center. J Nucl Med. September 25, 2020 [Epub ahead of print].

> Matthew D. Bucknor\* Thomas A. Hope

\*University of California San Francisco, San Francisco, California E-mail: matthew.bucknor@ucsf.edu

Published online Mar. 19, 2021. DOI: 10.2967/jnumed.121.262332