

Next Generation Sequencing (NGS) for Medicare Beneficiaries with Advanced Cancer (CAG-00450N)

Organization:

American College of Medical Genetics and Genomics (ACMG)

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Comment:

The American College of Medical Genetics and Genomics (ACMG) welcomes the opportunity to comment on the proposed National Coverage Determination (NCD) for Next Generation Sequencing (NGS) for Medicare Beneficiaries with Advanced Cancer. Our 2000 members are clinicians who evaluate, diagnose, and treat patients with genetic disorders, and laboratory medical geneticists who perform genetic and genomic testing. Our guiding principles regarding genetic and genomic testing policy are to ensure that:

- patients have appropriate access to the genetic tests available to diagnose and guide the treatment of the condition associated with their signs and symptoms, family history or genetic risk;
- physicians may order genetic tests medically indicated for their patients;
- laboratories may perform tests as ordered for patients and receive appropriate compensation for tests performed;
- patients with genetic disorders have access to clinical trials such as those promoted by clinicaltrials.gov, which typically require a patient to have confirmatory genetic tests to characterize their disorder.

ACMG applauds CMS for recognizing the importance of genomic testing in the care of cancer patients. Further, consistent with the above principles, we support FDA approval and the NCD for the FoundationOne CDx (F1CDx) test. We are, however, concerned that the NCD proposes a coverage policy that has implications well beyond the F1CDx test. It appears that the proposed NCD process would deny coverage for many currently available and widely-used NGS technology-based tests by restricting coverage only to FDA approved or cleared companion NGS tests or, alternatively, would establish a restricted category of tests which would receive coverage based on evidence development. This expansion in the proposed coverage policy would significantly and harmfully reduce patient access to vital tests and treatment by eliminating coverage for many NGS tests for cancer patients enrolled in Medicare.

Moreover, we have additional concerns regarding the NCD and its reliance on FDA approval which, de facto, establishes FDA regulation of NGS-based tests. First, nearly all NGS-technology-based tests are Laboratory Developed Tests (LDTs), over which the FDA currently exercises enforcement discretion but has not yet produced final guidance or rule-making defining how they would propose to regulate LDTs. Consequently, FDA cannot currently regulate LDTs. Second, it has been widely reported that there are

over 60,000 genetic and genomic tests currently available clinically. Exactly how many of these use NGS technology has not been published, but it is reasonable to estimate that more than 1000 are NGS-based. Even if the FDA were to develop an acceptable process for regulating NGS-technology-based tests, it is impractical to assume that the agency has the capacity to review such a large volume in a timely fashion. Finally, ACMG's position regarding oversight of NGS testing has been widely published and made clear in public comments at several FDA workshops. In our view, NGS-based testing is analogous to medical imaging, wherein the platform is a medical device, but the tests performed are not devices. Our position has supported CLIA modernization, rather than imposition of a new regulatory scheme.

Further, even if the FDA were to develop and publish a reasonable process for evaluating NGS-technology-based tests, we have serious concerns that tests for rare disorders would all but disappear. Most are sui generis, low-volume tests, and laboratories which perform these niche tests would be hard pressed to go through the expense of FDA clearance let alone approval. Patients and their physicians would consequently lose access to these critical tests. Requiring FDA clearance or approval would also stifle innovation and potentially harm patients. One example regards testing for BRAF mutations, which can be targeted by a specific drug. The only FDA approved test kit for BRAF targets a single mutation in the gene. Research has identified other mutations in BRAF which can be targeted by the same drug. However, because it is time-consuming and expensive to re-submit an application for an expanded BRAF test kit to the FDA, the only way a patient currently can have testing for these additional mutations is through the use of an LDT. FDA regulation of LDTs would further impede progress in precision medicine, and patients would suffer the unintended, but foreseeable, consequences.

In summary, while the ACMG supports CMS's decision to cover F1CDx, we do not support the expanded scope of the proposed NCD as written. We suggest that CMS and FDA engage stakeholders in a public process to ensure that physicians and their patients realize all the benefits of precision medicine.