Proposed Decision Memo for Next Generation Sequencing (NGS) for Medicare Beneficiaries with Advanced Cancer (CAG-00450R)

Organization:
American College of Medical Genetics and Genomics (ACMG)

Date:
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Comment:
The American College of Medical Genetics and Genomics (ACMG) welcomes the opportunity to comment on CMS's Proposed Decision Memo for Next Generation Sequencing (NGS) for Medicare Beneficiaries with Advanced Cancer. ACMG is the only nationally recognized professional membership organization dedicated to improving health through the practice of medical genetics and genomics. Our membership includes over 2300 genetics professionals, nearly 80% of whom are board-certified clinical and laboratory geneticists and genetic counselors.

ACMG appreciates CMS's attention to the importance of germline genetic testing in patients diagnosed with cancer. Recognition and coverage of this type of testing is a key step towards ensuring that Medicare beneficiaries benefit from the concepts of precision medicine. However, we are concerned about certain gaps in the proposed policy and believe that addressing these gaps will lead to better health outcomes for Medicare beneficiaries.

As written, the proposed coverage policy would only apply to germline variant tests for breast and ovarian cancer if they are FDA-cleared or approved NGS-based tests. The local coverage option provided to Medicare Administrative Contractors (MACs) would include laboratory-developed tests (LDTs) but only for cancers other than breast or ovarian**. To our knowledge, FDA-cleared or approved NGS-based diagnostic tests for germline variants in breast or ovarian cancer currently do not exist.** Current FDA-cleared or approved tests for breast and ovarian cancer are either intended for somatic cells or rely on other methods such as polymerase chain reaction (PCR). To date, NGS-based germline variant tests for breast and ovarian cancers are only offered as LDTs, yet neither the proposed national coverage policy nor the local coverage option provided to MACs would cover these tests.

At minimum, MACs should have the discretion to cover LDTs for inherited breast and ovarian cancer. This could be achieved by revising the local coverage option so that it applies to any cancer diagnosis and is not limited to a "*cancer diagnosis **other than breast or ovarian cancer***". However, consideration should also be given to a national coverage policy that includes certain LDTs. LDTs are legally marketed tests, and standard of care relies on these tests. Since passage of the Medical Devices Amendments of 1976, the FDA states they have authority to regulate but have opted to use enforcement discretion for the majority of LDTs. Laboratory use of these tests is regulated by CMS as high-complexity tests through the Clinical Laboratory Improvement Amendments (CLIA) program to "*ensure the accuracy and reliability of patient test results*" (MLN Fact Sheet, ICN 006270 October 2018). It is unclear why such medically relevant tests would not be nationally covered when CMS is ensuring that the results are accurate and reliable, and the tests are legally marketed.

Overall, the proposed coverage policy for breast and ovarian cancer patients is written in such a way that no tests would actually be covered by the policy, and no patients will benefit from it. We appreciate that CMS is acknowledging the benefits of germline testing and are confident that CMS intends to develop coverage policies that will allow Medicare beneficiaries to benefit from such testing. **All legally-marketed NGS-based diagnostic tests, including LDTs, that are performed in a CLIA-certified laboratory and intended to detect germline variants in breast and ovarian cancer patients should be covered.**

Further, the clinical utility of germline variant identification is not affected by the type of sequencing or genotyping technology that is used. Variant information identified by any analytically and clinically valid test provides the same information that may influence patient management and treatment. In section VII.B.5. (Evidence-Based Guidelines) of the proposed decision memo, CMS notes that guidelines demonstrating clinical utility using non-NGS methods such as PCR or immunohistochemistry (IHC) were not reviewed. It is unclear as to why guidelines discussing the evidence for patient treatment based on germline variant information would be discarded. The significance of a given variant does not change depending on whether NGS, PCR, or other methods were used. Such information is relevant and should not be omitted from the evidence review. Patient access should be based on medical need rather than a specific sequencing or genotyping technology.

Another concern in the proposed decision memo is that both the national policy and local option for germline testing only apply if the patient has "*not been previously tested using NGS*". As currently written, this suggests that germline diagnostic testing would not be covered if the patient had any type of prior NGS-based testing, not just NGS-based germline diagnostic testing for inherited cancer or for a specific gene. It is very plausible that a cancer patient may undergo NGS-based somatic and germline variant testing to inform treatment decisions at various stages of disease. Further a patient may have received NGS-based testing for a condition unrelated to cancer, such as to identify another heritable condition or an NGS-based microbial test to diagnose an infection. Even if the policy were reworded to be limited to prior NGS-based germline diagnostic testing for inherited cancer, this still would not account for standard situations in which testing of additional genes is needed or retesting would be warranted. For example, retesting may be needed when new pathogenic variants have been identified that were outside of the original reportable range, and a new test with an expanded reportable range must be performed. **We encourage CMS to revise the language to ensure that patient access to medically reasonable and necessary tests is not prohibited by prior testing.**

In conclusion, ACMG appreciates the opportunity to provide comments on the Proposed Decision Memo for Next Generation Sequencing (NGS) for Medicare Beneficiaries with Advanced Cancer (CAG-00450R). We are pleased to see that CMS recognizes the importance of germline variant testing for management and treatment of patients with hereditary cancers, including both those with advanced and nonadvanced disease. We look forward to continuing to work with CMS to ensure that Medicare beneficiaries have access to medically reasonable and necessary genetic tests. For questions or if we can be of further assistance, please contact Michelle McClure at mmcclure@acmg.net.