

Testimony for LD 107: An Act to Require Health Insurance for Biomarker Testing

Thank you to Senator Bailey, Representative Kristi Mathieson, and members of the Health Coverage, Insurance, & Financial Services allowing me the opportunity to share my written testimony. My name is Kelly Gao, MD, and I am a pediatric resident physician who lives in Scarborough, Maine. I am testifying on behalf of the Maine Chapter of the American Academy of Pediatrics, and thus, represent a large network of pediatricians across the state of Maine. We stand in support of LD 107, because we feel passionate that expanding access to biomarker testing is crucial to achieving better health outcomes, improving quality of life, and reducing healthcare costs.

As pediatricians, we dedicate our lives to supporting and promoting the health and safety of children so that they not only grow, develop, and thrive in present time, but so that they can also go on to reach their full adult potential. Although tremendous progress has been made in the management and treatment of childhood cancers, it remains one of the leading causes of death in children. Each year, around 400,000 children and adolescents are diagnosed with cancer worldwide¹. The prognosis of a child's cancer course is highly dependent on receiving a specific diagnosis, so that therapy may be targeted accordingly. With a disease as versatile and variable as cancer, specific diagnoses are important to guiding the many treatment options we have, and the primary way to do so is through biomarker testing. Cancer treatment options, while there are many, are also highly toxic and difficult on both the mind and body; some common ones include chemotherapy and radiation. Therein lies the **crucial** importance of knowing exactly which kind of cancer a child has, to best target with the treatment meant for it. In this way, we can avoid unnecessary and ineffective treatment options, and by extension, avoidable side effects and excessive healthcare costs. The research has far outpaced the insurance coverage for biomarker testing, leaving many families at risk for delay in diagnoses, and simply the lack of information to provide the most accurate and effective treatment method for their cases despite having the medical tools to provide better care.

As a resident physician, I see children in all contexts of their care; in the outpatient primary care clinic, the hospital, the ICU, specialists' offices, school-based clinics, and more. I have specifically worked with countless families followed by the hematology-oncology team and have been there for first time diagnosis discussions, chemotherapy admissions, discussion of end-of-life goals of care, admissions to manage illnesses and complications from their treatment, and many other conversations during some of a family's most difficult moments. Often, a child's general diagnosis of cancer can happen rapidly from imaging or basic lab tests, but the true specifics take days to clarify after biomarker testing and analyses. Treatment is often not initiated until we have the biomarker information, because the specificity of treatment is so highly dependent on which type of cancer they have. The fact that a treatment plan is entirely dependent on having the most exact classification we can attain through testing shows that the information biomarkers provide us is key to providing accurate and good care. To have families unable to access testing due to coverage issues is actively harming their prognosis and health due to delay

in diagnoses and less than optimal or even completely avoidable treatments. These all result in unnecessary side effects and increased healthcare costs. As mentioned above, cancer treatments have harsh effects on the body; my first patient who passed away was a young girl who developed a fatal brain tumor, called a glioblastoma, that was caused by radiation she received 10 years earlier to treat a different brain tumor she initially had. The side effects go beyond what one might imagine as nausea and vomiting. This is why it is so important to provide accurate care with the tools we have, and to ensure that barriers to access are reduced.

Regarding cost reduction, there have been many studies that have analyzed the data and concluded that better testing leads to better cost-effective treatment. One study looked at biomarker testing in non-small cell lung cancer patients and found that those who underwent broad panel biomarker testing saved approximately \$8500 per patient per month compared to those who had narrow panel biomarker testing done, as a result of more optimal treatment.² Some studies have also found minimal cost increases with biomarker testing as a result of the costs of more effective treatment and prolonged patient survival.^{3,4} Knowing this, access to biomarker testing can lead to significant healthcare reductions, both at a patient level and a systems level. This would open countless doors for patients to engage in their community, and for hospitals and healthcare systems to be able to more effectively use savings to improve other health outcomes.

60% of oncology drugs launched in the past 7 years require or recommend biomarker testing prior to use.⁵ From 2000 to 2008, there was an increase in 40% of the number of clinical trials that involved using biomarkers, with more since then.⁵ The research on which we base our evidence-based medical practices are advancing towards and becoming largely founded on biomarker use, and so the medicine we practice should reflect this. Coverage should not be a factor that prevents someone from being offered the most effective treatment for their case. Unfortunately, 66% of oncology providers reported that insurance coverage is a significant or moderate barrier to appropriate biomarker testing for their patients.⁵

LD 107 is an important piece of legislation for Maine's children to effectively diagnose and treat diseases such as cancer, achieve the best prognosis and outcomes, avoid unnecessary harmful effects, and effectively cut healthcare costs in the process. The research has already shown ample evidence on how important biomarker testing is for patients, and the effects it has beyond helping with the medical aspect. The stories from my own personal medical practice are even more convincing for the critical role biomarker testing plays in a family's and child's life. Please join Maine's pediatricians in supporting this bill. We owe it to supporting Maine's children, who are our future.

References

1. WHO . CureAll Framework: WHO Global Initiative for Childhood Cancer: Increasing Access, Advancing Quality, Saving Lives. WHO; Geneva, Switzerland: 2021.
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LD 107

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