PERSONALIZED MEDICINE COALITION

August 31, 2022

Chiquita Brooks-LaSure
Administrator
Centers for Medicare & Medicaid Services
Department of Health and Human Services
Attn: CMS-1770-P
7500 Security Boulevard
Baltimore, MD 21244-1850

Re: Medicare and Medicaid Programs; CY 2023 Payment Policies under the Physician Fee Schedule and Other Changes to Part B Payment Policies, etc. (CMS-1770-P)

Dear Administrator Brooks-LaSure:

The Personalized Medicine Coalition (PMC), a multi-stakeholder group comprising more than 220 institutions from across the health care spectrum, thanks the Centers for Medicare & Medicaid Services (CMS) for the opportunity to submit comments on payment policies under the *CY 2023 Physician Fee Schedule (PFS) Proposed Rule*.[i] While PMC recognizes there are numerous important payment issues addressed in the *CY 2023 PFS Proposed Rule*, our comments are limited to the impact of specific proposed policy changes to CMS' Merit-based Incentive Payment System (MIPS) on beneficiary access to personalized medicine. We support CMS' proposals for certain quality measures and other improvement activities that promote biomarker testing in cancer care and screening under MIPS Value Pathways (MVPs). Finalizing these measures and activities could improve beneficiaries' health care by incentivizing the delivery of personalized medicine. Furthermore, we believe that encouraging health care providers to utilize personalized medicine technologies that are already available will help the Biden administration's Cancer Moonshot goals to improve cancer care for patients.

PMC defines personalized medicine as an evolving field in which physicians use diagnostic tests to determine which medical treatments will work best for each patient or use medical interventions to alter molecular mechanisms that impact health. By combining data from diagnostic tests with an individual's medical history, circumstances, and values, health care providers can develop targeted treatment and prevention plans with their patients.

Personalized medicine is helping to shift the patient and provider experiences away from trial-and-error toward a more streamlined process for making clinical decisions, which will lead to improved patient outcomes, a reduction in unnecessary treatment costs, and better patient and provider satisfaction. PMC's members are leading the way in personalized medicine and recommend that patients who may benefit from this

approach undergo appropriate testing and tailored treatment as soon as possible during their clinical experiences.

By incentivizing health care providers to improve and standardize the delivery of care through payment adjustments, the MIPS program provides important opportunities to set national benchmarks for the quality of health care in the United States. Historically, there has been a lack of quality measures promoting personalized medicine.[ii] In cancer, for example, even though personalized medicine has launched a paradigm shift in testing and treatment, traditional quality measures have focused on surgery and radiation, but not appropriate biomarker testing that informs treatment selection.[iii, iv]

Personalized medicine and CMS share the same goal of achieving better health outcomes and lowering costs. As CMS transitions to MVPs, which align MIPS reporting requirements around specific clinical specialties, medical conditions or episodes of care beginning with the 2023 performance year, we urge CMS to finalize its proposals to incorporate quality measures and improvement activities that would enhance patients' and the health care system's ability to benefit from this approach to care.

Statement of Neutrality

Many of PMC's members will present their own responses to the Medicare *PFS Proposed Rule for FY 2023* and will actively advocate for those positions. PMC's comments are designed to provide feedback so that the general concept of personalized medicine can advance, and are not intended to impact adversely the ability of individual PMC members, alone or in combination, to pursue separate comments with respect to the proposed rule.

Incorporating Biomarker Testing into Cancer Diagnosis and Treatment

In the *PFS* proposed rule, CMS proposes a new MVP for "Advancing Cancer Care" focusing on treatment and care management. Personalized medicines accounted for more than 25 percent of newly approved drugs for each of the last seven years, including many in oncology.[v] Treatments targeted to biomarkers in a patient's tumor may offer better quality care. Biomarker tests that play a critical role in helping patients evaluate their treatment options are increasingly being incorporated into clinical guidelines for cancer. Thus, PMC appreciates CMS' prioritization of the role of diagnostics in directing patients to treatments from which they are most likely to benefit.

Even though personalized medicine approaches for testing and targeted treatment have been included in updated clinical guidelines for cancer, patient access to personalized medicine remains varied. One PMC study found that medically appropriate genomic profiling for advanced cancers was inconsistently utilized across the U.S. and outlined a broad range of administrative, educational, and technical challenges that are likely discouraging the use of genomic testing in clinical settings.[vi] In addition, for patients with non-small cell lung cancer, research conducted by PMC and others has identified an implementation gap whereby many patients with actionable mutations identified through next-generation sequencing (NGS)-based diagnostic testing did not transition to targeted treatment.[vii]

As CMS has recognized, under the traditional MIPS program — which includes hundreds of measures physicians can select from — physicians may select only the most favorable measures based on their current performance instead of making investments to improve health care delivery.[viii] Establishing an

MVP prioritizing appropriate diagnostic testing in cancer care could help close this implementation gap for patients and assess the quality of a patient's personalized medicine journey from cancer diagnosis to treatment.

We encourage CMS to finalize the "Advancing Cancer Care MVP" with the following quality measures:

- ***Q450: Appropriate Treatment for Patients with Stage I (T1c) – III HER2 Positive Breast Cancer*:** This MIPS quality measure could help ensure certain patients with HER2-positive breast cancer receive treatment in accordance with guidelines.

- ***Q451: RAS (KRAS and NRAS) Gene Mutation Testing Performed for Patients with Metastatic Colorectal Cancer who receive Anti-epidermal Growth Factor Receptor (EGFR) Monoclonal Antibody Therapy:*** By assessing if gene mutation testing was performed prior to therapy, this MIPS quality measure could help improve concordance with RAS (KRAS and NRAS) testing guidelines for metastatic colorectal cancer patients.

- ***Q452: Patients with Metastatic Colorectal Cancer and RAS (KRAS or NRAS) Gene Mutation Spared Treatment with Anti-epidermal Growth Factor Receptor (EGFR) Monoclonal Antibodies:*** This MIPS quality measure could help ensure patients with metastatic colorectal cancer and a RAS (KRAS or NRAS) gene mutation are not treated inappropriately with anti-EGFR monoclonal antibodies.

- ***PIMSH8: Oncology: Mutation testing for lung cancer completed prior to start of targeted therapy:*** This qualified clinical data registry would assess clinical practice guideline compliance regarding the implementation of mutations testing to optimize diagnosis and disease management. Specifically, this measure assesses the proportion of stage IV non-small cell lung cancer patients who were tested for actionable biomarkers, including EGFR and BRAF mutations; ROS1 and ALK rearrangements; and PD-L1 expression, and who received targeted therapy or chemotherapy based on biomarker results.[ix]

In addition to supporting the inclusion of "PIMSH8: Oncology: Mutation testing for lung cancer completed prior to start of targeted therapy" in the "Advancing Cancer Care MVP," we recommend CMS update this quality measure to include testing for <u>all</u> biomarkers recommended for screening in patients with non-small cell lung cancer according to guidelines published by the National Comprehensive Cancer Network (NCCN), the American Society of Clinical Oncology (ASCO), the College of American Pathologists (CAP), and the International Association for the Study of Lung Cancer (IASLC). The list of biomarkers mentioned above is no longer consistent with the current biomarkers recommended for screening under major clinical guidelines. For example, based on the availability of FDA-approved targeted therapies, clinical guidelines have since been updated to recommend additional biomarkers for mutations testing, such as RET rearrangements, MET-exon14 skipping mutations, NTRK gene fusions, and the KRAS G12C mutation.

Furthermore, under the traditional MIPS program, **PMC supports the addition of the following quality measure encouraging biomarker testing for certain cancers under the pathology specialty set in Appendix I: Table B.31:**

- ***Mismatch Repair (MMR) or Microsatellite Instability (MSI) Biomarker Testing Status in Colorectal Carcinoma, Endometrial, Gastroesophageal, or Small Bowel Carcinoma:*** This new MIPS quality measure would evaluate the percentage of surgical pathology reports for primary colorectal, endometrial, gastroesophageal or small bowel carcinoma, biopsy or resection, that contain impression or conclusion of or recommendation for testing of mismatch repair (MMR) by immunohistochemistry (biomarkers MLH1, MSH2, MSH6, and PMS2), or microsatellite instability (MSI) by DNA-based testing status, or both.

Pathologists play a critical role in communicating information about a tumor's profile that informs patient-provider decision making. We appreciate CMS' recognition in the proposed rule that biomarker testing is an important part of personalized medicine and provides vital, individualized pathological data to clinicians that is necessary to guide them in diagnosing and treating their patients so that their care can be tailored to any specific biomarkers identified. Furthermore, as CMS notes in the proposed rule, MMR and MMI testing is already recommended in guidelines to identify patients at high risk for Lynch syndrome, an inherited condition that increases patients' risks of developing other cancers;[x] yet, in 2020, the average performance rates for the colorectal and endometrial carcinomas were only 71 and 77 percent, respectively. PMC agrees that finalizing this measure could lead to an increase in the rate of proper diagnosis and promote increased use of personalized medicine and patient choice.

While biomarker testing helps patients identify characteristics, targetable findings, or other results originating from their malignant tissue or blood, genetic testing for an inherited mutation (also known as germline testing) can help patients understand whether there are genetic factors contributing to their condition, inform treatment selection, identify opportunities to prevent and manage their risk for developing other types of cancer, and highlight the need for testing other family members' cancer risk. Thus, germline testing in patients with cancer provides important opportunities to improve their health care. It also provides opportunities to better manage their cancer risks, as well as those of their family members. **To ensure cancer patients are able to benefit from both kinds of testing, we encourage CMS to also develop and incorporate into the "Advancing Cancer Care MVP" future quality measure advancing genetic testing for an inherited mutation, or germline testing, in cancer patients.** Facilitating broader implementation of genetic testing for an inherited mutation aligns with the Biden administration's goals under the Cancer Moonshot to prevent cancer and to improve the experiences of cancer patients and their families.

Promoting Earlier Detection of Cancer through Blood-Based Biomarker Tests

PMC appreciates CMS' focus on screening for various cancers under the proposed "Promoting Wellness MVP." Molecular screening tests, including blood-based cancer tests, are emerging as an additional way to screen for cancer. While PMC would like to see blood-based cancer screening tests included for more cancer types, we recognize that these tests are currently only covered for colorectal cancer (CRC) screenings.[xi]

Despite strides made to increase survival rates, colorectal cancer remains the second leading cause of cancer death among men and women combined in the United States. Nearly half of CRC cases and deaths would be preventable with improved screening.[xii] In addition, there are significant racial inequities in CRC screening rates and outcomes, resulting in higher rates of mortality among Black Americans.[xiii] For CRC, blood-based biomarker tests can provide additional options for patients who otherwise may not

be screened with available screening tools such as colonoscopy, sigmoidoscopy, and fecal occult blood testing.

We therefore encourage CMS to retain the following quality measure under the proposed "Promoting Wellness MVP" in the final rule:

- ***Q113: colorectal cancer screening:*** This MIPS quality measure would help ensure patients have received appropriate screening for CRC.

In addition, **we support CMS' proposal elsewhere in the *PFS* proposed rule to revise this quality measure to align with recent changes to the United States Preventive Services Task Force guideline that lower the age of CRC screening from 50 to 45.**

CMS also proposes to expand the definition of CRC screening tests to include a follow-on screening colonoscopy after a "Medicare-covered non-invasive stool-based CRC screening test" returns a positive result, eliminating Medicare beneficiary cost-sharing for the follow-on colonoscopy. **While we strongly support this provision, we encourage CMS to broaden the scope of this language to cover the follow-on colonoscopy for all non-invasive CRC screening tools that receive coverage under Medicare, which would include blood-based biomarker tests in addition to stool-based tests.** As written, the current language excludes blood-based biomarker tests. In the future, this inconsistency could lead patients that utilize Medicare-covered non-stool-based biomarker tests, such as blood-based tests, to have out of pocket costs for the same follow-on colonoscopies that are covered for stool-based tests, creating unnecessary confusion and costs for patients. Consistently applying this policy will prevent patients, especially those in under-resourced communities already facing barriers to preventive screening, from encountering a coverage loophole. It will also empower patients to choose the non-invasive CRC screening test that best fits their screening needs.

Improving Medication Management Through Pharmacogenomics

Medication management can optimize care for patients across diseases and conditions and can also help in the management of comorbidities. Many of the new MVPs in CMS' *PFS* proposed rule include the improvement activity "IA_PM_16: Medication Management," which incentivizes managing medications to maximize efficiency, effectiveness, and safety. Activities related to this improvement activity include the reconciliation and coordination of medications; providing medication management across transitions of care settings and eligible clinicians or groups; integrating a pharmacist into the care team; and conducting periodic, structured medication reviews.[xiv]

Certain personalized medicine tests, called pharmacogenomic (PGx) tests, may be able to predict which medications at which doses will be most effective and less likely to lead to adverse events for individuals, based on their genetic makeup and known drug-gene interactions.[xv] This information can help guide the application of medicines for many health conditions. For example, one case study in retirees over age 65 found that leveraging pharmacists' expertise to recommend medication changes based on patients' genetic information and known PGx implications resulted in a 7 percent decrease in emergency department visits and a 15 percent decrease in inpatient hospitalizations. This shift in health care resource utilization away from acute care services and toward more cost-effective primary care options led to a reduction of about $7,000 per patient in direct medical charges. For 5,288 patients over 32 months, this yielded an economic savings of $37 million.[xvi] Looking at the impact of PGx testing on treatment for

major depressive disorder, another study found that after providing PGx testing results to health care providers, patients showed a meaningful decrease in symptoms.[xvii]

We encourage CMS to consider opportunities to promote more comprehensive medication management and incentivize the clinical adoption of PGx testing, based on a drug's FDA-approved label or clinical guidelines, through "IA_PM_16: Medication Management" and/or other improvement activities. The broad-based clinical integration of PGx testing could help patients achieve better outcomes and reduce avoidable health care costs attributed to poor disease management.

Addressing Health Inequities Through Need-Based Interventions

PMC appreciates CMS' focus on how to address disparities in health throughout the proposed MVPs. Delivering personalized medicine successfully depends on consideration of patients' biology, medical history, values, and circumstances. Unfortunately, clinical care is too often delivered, and therapies prescribed, based on one-size-fits-all assumptions that do not account for the needs of underserved groups of patients or the underrepresentation of certain groups in medical research. This approach risks disease progression and can exacerbate health inequities.

As a health equity measure, improvement activity "IA_PM_11: Regular Review Practices in Place on Targeted Patient Population Needs" incentivizes the stratification of patient data by demographic characteristics and health-related social needs to appropriately identify differences among unique populations, assess the drivers of gaps and disparities, and assess how clinical treatment needs are being tailored to the related sub-populations.[xviii] This health equity improvement activity is included under all of the new MVPs, except for the "Promoting Cancer Care MVP."

To align with CMS' strategic vision and with other CMS initiatives like CMMI's Enhancing Oncology Model, which considers how to help health-related social needs in cancer care, we ask CMS to add "IA_PM_11: Regular Review Practices in Place on Targeted Patient Population Needs" to the "Promoting Cancer Care MVP" before finalizing the proposed rule. Incentivizing the development of interventions unique to the needs of certain groups will help to ensure all patients with cancer are able to benefit from personalized medicine.

Facilitating Stakeholder Input on the MVP Program

As the agency transitions towards MVPs over traditional MIPS, it will be important for CMS to consider a wide range of perspectives and ensure MVPs are meaningful to clinicians, patients, and the general public. In the *PFS* proposed rule, CMS identified process changes to facilitate feedback from stakeholders earlier during the MVP development process on draft versions of MVP candidates. CMS also identified modifications to the MVP maintenance process that would allow interested parties to submit recommendations for potential revisions to established MVPs on a rolling basis, followed by a public-facing webinar and notice and comment rulemaking. **PMC supports the process improvements proposed by CMS that would create additional opportunities for stakeholders to provide feedback on candidate and existing MVPs.**

Personalized medicine is a rapidly evolving field that consistently presents new opportunities to improve the quality of patient care in many disease and specialty areas. PMC shares concerns that quality measures may not be able to evolve quickly enough to stay up to date, thus raising the prospect of

measures promoting the use of less effective tests or therapies.[xix] Facilitating stakeholder input throughout the process to develop and revise MVPs could help CMS keep pace with progress in personalized medicine and optimize health care for patients.

Conclusion

PMC appreciates CMS' commitment to improving the quality of care for its beneficiaries. We look forward to working with you and your colleagues to continue fostering the clinical adoption of personalized medicine in cancer and other disease areas through payment incentives under the MIPS and MVP programs. If you have any questions about the content of this letter, please contact me at 202-499-0986 or cbens@personalizedmedicinecoalition.org, or David Davenport, PMC's Manager of Public Policy, at ddavenport@personalizedmedicinecoalition.org or 804-291-8572.

Sincerely yours,

Cynthia A. Bens
Senior Vice President, Public Policy

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[i] Centers for Medicare & Medicaid Services. *Medicare and Medicaid Programs; CY 2023 Payment Policies Under the Physician Fee Schedule and Other Changes to Part B Payment Policies, etc.* (*CMS-1770-P).* https://www.federalregister.gov/d/2022-14562.

[ii] Russ Montgomery et al. "Personalized Medicine and Quality Measurement: From Conflict To Alignment." *Health Affairs Blog*. April 30, 2019. https://www.healthaffairs.org/do/10.1377/forefront.20190424.431063 (accessed August 29, 2022).

[iii] Sara Pai et al. "Defining Current Gaps in Quality Measures for Cancer Immunotherapy: Consensus Report from the Society for Immunotherapy of Cancer (SITC) 2019 Quality Summit." *Journal for Immunotherapy of Cancer*. 2020. Vol. 8(1):e000112. https://doi.org/10.1136/jitc-2019-000112.

[iv] Tom Valuck et al. "Improving Oncology Quality Measurement in Accountable Care: Filling Gaps with Cross-Cutting Measures." *Journal of Managed Care & Specialty Pharmacy*. February 2017. Vol. 23(2):174-181. https://doi.org/10.18553/jmcp.2017.23.2.174.

[v] Personalized Medicine Coalition. *Personalized Medicine at FDA: The Scope and Significance of Progress in 2021*. February 22, 2022. https://www.personalizedmedicinecoalition.org/Userfiles/PMC-Corporate/file/Personalized_Medicine_at_FDA_The_Scope_Significance_of_Progress_in_2021.pdf (accessed August 29, 2022).

[vi] Personalized Medicine Coalition. *Understanding Genomic Testing Utilization and Coverage in the US*. June 2020. https://www.personalizedmedicinecoalition.org/Userfiles/PMC-Corporate/file/PMC_Understanding_Genomic_Testing_Utilization_and_Coverage_in_the_US2.pdf (accessed August 29, 2022).

[vii] Apostolia M. Tsimberidou et al. "Clinical and Economic Value of Genetic Sequencing for Personalized Therapy in Non–small-cell Lung Cancer." *Clinical Lung Cancer*. November 1, 2020. Vol. 1(6):477-481. https://doi.org/10.1016/j.cllc.2020.05.029 (accessed August 29, 2022).

[viii] Douglas Jacobs et al. "The Medicare Value-Based Care Strategy: Alignment, Growth, And Equity." *Health Affairs Forefront*. July 21, 2022. https://www.healthaffairs.org/content/forefront/medicare-value-based-care-strategy-alignment-growth-and-equity (accessed August 29, 2022).

[ix] Find-A-Code. "QPP Measure #PIMSH8." 2022. https://www.findacode.com/medicare/qpp/measure.php?m=PIMSH8&year=2022 (accessed August 29, 2022).

[x] Antonia R. Sepulveda et al. "Molecular Biomarkers for the Evaluation of Colorectal Cancer: Guideline From the American Society for Clinical Pathology, College of American Pathologists, Association for Molecular Pathology, and American

Society of Clinical Oncology." *Archives of Pathology & Laboratory Medicine*. May 1, 2017. Vol. 141(5):625–657. https://doi.org/10.5858/arpa.2016-0554-CP.

[xi] Centers for Medicare & Medicaid Services. *National Coverage Determination for Screening for Colorectal Cancer-Blood-Based Biomarker Tests (CAG-00454N)*. January 19, 2021. https://www.cms.gov/medicare-coverage-database/view/ncacal-decision-memo.aspx?proposed=N&ncaid=299 (accessed August 29, 2022).

[xii] Centers for Disease Control and Prevention. *Vital Signs: Screening for Colorectal Cancer*. Updated March 12, 2020. https://www.cdc.gov/vitalsigns/colorectalcancer/index.html (accessed August 29, 2022).

[xiii] Centers for Disease Control and Prevention. *United States Cancer Statistics: Data Visualizations*. 2019. https://gis.cdc.gov/Cancer/USCS/#/Demographics.

[xiv] MDinteractive. "2022 MIPS IA_PM_16: Implementation of Medication Management Practice Improvements." https://mdinteractive.com/mips_ia/2022-mips-IA_PM_16-implementation-medication-management-practice-improvements (accessed August 29, 2022).

[xv]Personalized Medicine Coalition. *The Personalized Medicine Report: Opportunity, Challenges, and the Future*. 6th edition. November 17, 2020. https://www.personalizedmedicinecoalition.org/Userfiles/PMC-Corporate/file/PMC_The_Personalized_Medicine_Report_Opportunity_Challenges_and_the_Future.pdf (accessed August 29, 2022).

[xvi] Joseph P. Jarvis et al. "Real-World Impact of a Pharmacogenomics-Enriched Comprehensive Medication Management Program." *Journal of Personalized Medicine*. March 18, 2022. Vol. 12(3):421. https://doi.org/10.3390/jpm12030421.

[xvii] David W. Oslin et al. "Effect of Pharmacogenomic Testing for Drug-Gene Interactions on Medication Selection and Remission of Symptoms in Major Depressive Disorder: The PRIME Care Randomized Clinical Trial." *JAMA*. July 12, 2022. Vol. 328(2):151-161. https://doi.org/10.1001/jama.2022.9805.

[xviii] MDinteractive. "2022 MIPS IA_PM_11: Regular Review Practices in Place on Targeted Patient Population Needs." 2022. https://mdinteractive.com/mips_ia/2022-mips-IA_PM_11-regular-review-practices-place-targeted-patient-population-needs (accessed August 29, 2022).

[xix] Discern Health. "Quality Measurement of Personalized Medicine: Tensions Between Personalization and Standardization." November 2018. http://www.discernhealth.com/wp-content/uploads/2018/12/Quality-Measurement-of-Personalized-Medicine-Issue-Brief.pdf (accessed August 29, 2022).