EOM
SOCIODEMOGRAPHIC DATA ELEMENTS GUIDE

Version 2.3

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Centers for Medicare & Medicaid Services
Center for Medicare & Medicaid Innovation

ENHANCING ONCOLOGY MODEL

Revision History

Revision #	Revision Date	Description of Change
1.0	June 1, 2023	Initial Version
1.1	July 11, 2023	• Appendix A Beneficiary Preferred Language Reporting Options: Added English, Esperanto, Estonian, Ewe, Faroese, Fijian, and Finnish
2.0	November 29, 2023	• Section 1 SDEs: Added details on Disability Status data collection • Section 2 SDE Collection and Reporting Technical Requirements: Updated • Section 3 Additional EOM Resources: Updated • Appendix A Beneficiary Preferred Language Reporting Options: Updated the order of languages in Appendix A • Appendix B Beneficiary Expanded Ethnicity Reporting Options: Updated the order of ethnicities
2.1	January 31, 2024	• Section 1.2 Beneficiary SDEs to be Collected and Reported to CMS: Added details on sociodemographic data element guidance to align with the US Core Interoperability (USCDI) version 3 (v3) • Section 2.3 SDEs and Guidance: Updated guidance • Appendix C USCDI v2 to v3 Mapping: Added resource for USCDI v2 to v3 Mapping • Appendix D Alternate Plain-Text Language for Sexual Orientation and Gender Identity (SOGI): Added resource for alternate plain-text language for SOGI
2.2	June 5, 2024	• Introduction: Updated • Figure 1: Updated • Section 2.1 EOM HDR Application: Updated reporting option guidance • Table 1: Updated format and added reporting timeline

		• Table 2: Updated format • Appendix E Additional Resources for Collecting SDE Data: Added list of resources for collecting SDEs. • Appendix F Applying Cultural Responsiveness: Added resource for cultural responsiveness • Appendix G Acronyms and Abbreviations: Added resource for acronyms and abbreviations throughout document • Full document: Updated header format throughout the document
2.3	November 22, 2024	• Introduction: Updated • Figure 1: Updated • Section 2 SDE Collection and Reporting Technical Requirements: Updated • Appendix E Additional Resources for Collecting SDE Data: Updated

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Introduction

This document is designed to guide Enhancing Oncology Model (EOM) participants in the collection and reporting of beneficiary sociodemographic data as part of EOM health equity strategies.

EOM is a Center for Medicare & Medicaid Innovation alternative payment model designed to promote high-quality person-centered care, advance health equity, promote better care coordination, improve access to care, reduce costs, and improve outcomes for Medicare fee-for-service beneficiaries with cancer who receive cancer treatment. EOM builds on lessons from the Oncology Care Model (OCM) and shares certain features with OCM, including episode-based payments that financially incentivize physician group practices (PGPs) to improve care and lower costs. EOM participants are oncology PGPs that prescribe and administer-cancer therapy for included cancer types. The model is centered on 6-month episodes of care triggered by the receipt of an Initiating Cancer Therapy for an included cancer type. Seven cancer types are included in the model:

- Breast Cancer[1]
- Chronic Leukemia
- Lung Cancer
- Lymphoma
- Multiple Myeloma
- Prostate Cancer[1]
- Small Intestine/Colorectal Cancer

In alignment with the Centers for Medicare & Medicaid Services' (CMS') commitment to reducing health disparities and achieving health equity in CMS quality programs and within Innovation Center models, EOM is designed to advance health equity within all stages of the model design, implementation, and evaluation. The model aims to improve quality of care and equitable health outcomes for all EOM beneficiaries.[2,3] Beneficiary sociodemographic factors influence health outcomes.[4,5]

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[1] Low-risk breast cancer and low-intensity prostate cancer are not included in EOM. For the purposes of EOM, low-risk breast cancer is defined as breast cancer treated with only long-term oral endocrine chemotherapy; and low-intensity prostate cancer is defined as prostate cancer treated with either androgen deprivation and/or anti-androgen therapy without any other chemotherapy.

[2] Brooks-LaSure, C., Fowler, E., Seshamani, M. & Tsai, D. (2021). Innovation at the Centers for Medicare and Medicaid Services: A Vision for the Next 10 Years. Health Affairs. Retrieved from: https://www.healthaffairs.org/content/forefront/innovation-centers-medicare-and-medicaid-services-vision-next-10-years.

[3] Centers for Medicare & Medicaid Services, Office of Minority Health. (2021). Paving the Way to Equity: A Progress Report. Retrieved from: cms.gov/files/document/paving-way-equity-cms-omh-progress-report.pdf

[4] American Association for Cancer Research. (2020). AACR Cancer Disparities Progress Report 2020. Philadelphia, PA. Retrieved from: https://cancerprogressreport.aacr.org/wp-content/uploads/sites/2/2020/09/AACR_CDPR_2020.pdf

[5] Jemal, A., Siegal, R.L., Ma, J., Islami, F., DeSantis, C., Sauer, A.G., Simard, E.P., Ward, E.M. (2015). Inequalities in Premature Death from Colorectal Cancer by State. Journal of Clinical Oncology. Retrieved from: Inequalities in Premature Death From Colorectal Cancer by State | Journal of Clinical Oncology (ascopubs.org)

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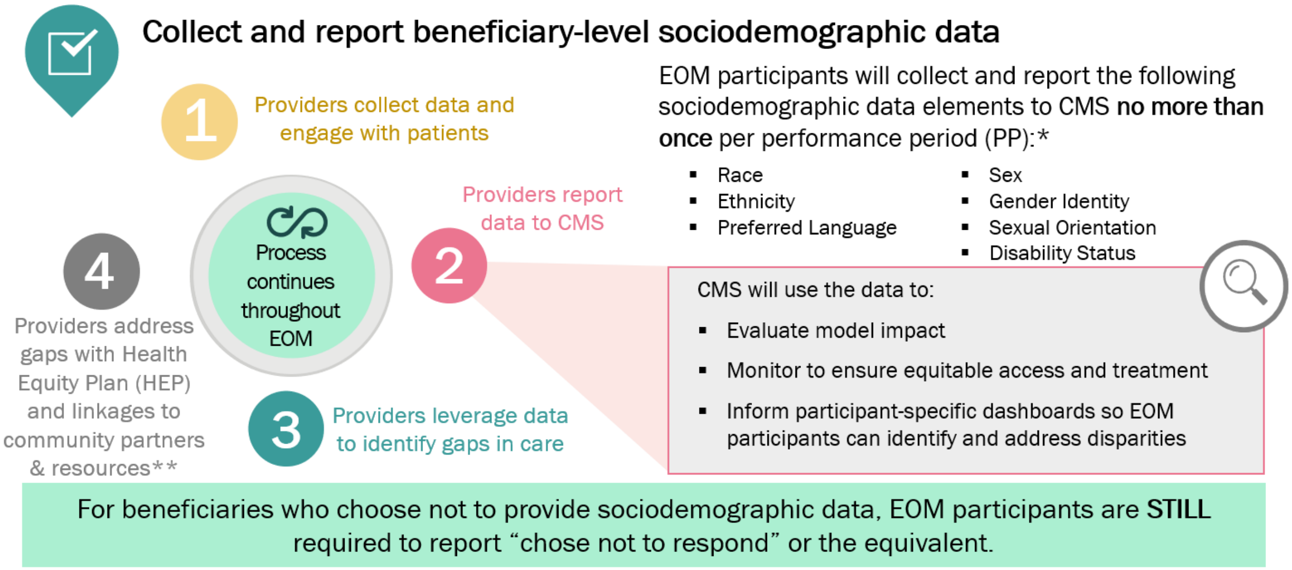
Enhancing Oncology Model (EOM) Sociodemographic Data Elements Guide

This document provides guidance on the details, terminologies, and definitions necessary for the required collection and reporting of EOM sociodemographic data elements (SDE) from EOM beneficiaries. EOM participants will have two reporting options, 1) a 'low-tech' reporting approach which utilizes a standardized Excel template, referred to as the Health Data Reporting (HDR) submission template, which can be accessed via the HDR application. The HDR submission template contains two tabs; one for SDE and one for clinical data elements (CDE), and 2) a 'high-tech' reporting approach that is based on Fast Healthcare Interoperability Resources (FHIR)® leveraging the HL7 FHIR US Core IG.

As detailed in Figure 1, EOM participants are required to collect and report beneficiary-level sociodemographic data on their EOM-attributed beneficiaries. The following sections of this guide provide more detail about the collection and reporting of EOM SDEs.

- **Section 1** lists the SDEs required for collection and reporting on attributed beneficiaries and details the beneficiary attribution methodology.
- **Section 2** provides the technical requirements for collecting and reporting the data, including the secure data portal overview.
- **Section 3** lists additional resources for EOM participants.

Figure 1. Collecting SDEs as Part of the EOM Health Equity Strategy



Collect and report beneficiary-level sociodemographic data

1 Providers collect data and engage with patients

2 Providers report data to CMS

3 Providers leverage data to identify gaps in care

4 Providers address gaps with Health Equity Plan (HEP) and linkages to community partners & resources**

Process continues throughout EOM

EOM participants will collect and report the following sociodemographic data elements to CMS **no more than once** per performance period (PP):*

- Race
- Ethnicity
- Preferred Language
- Sex
- Gender Identity
- Sexual Orientation
- Disability Status

CMS will use the data to:

- Evaluate model impact
- Monitor to ensure equitable access and treatment
- Inform participant-specific dashboards so EOM participants can identify and address disparities

For beneficiaries who choose not to provide sociodemographic data, EOM participants are **STILL** required to report "chose not to respond" or the equivalent.

*This is a current list of sociodemographic data elements and is subject to modification

**Facilitating linkages to follow-up services and community resources is a core function of patient navigation as described in Appendix B of the EOM RFA

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Section 1: SDEs

This section provides an overview of how beneficiary sociodemographic data collection and reporting is part of the EOM data collection strategy; lists the SDEs participants are required to collect from EOM-attributed beneficiaries and report to CMS; and describes the methodology by which eligible beneficiaries will be attributed to EOM participants.

1.1 Beneficiary Sociodemographic Data as Part of the EOM Data Collection Strategy

Collecting standardized patient demographic and language data across care settings is an important first step toward improving population health.[6] EOM participants are required to collect beneficiary-level SDEs from EOM-attributed beneficiaries who have not opted out of sharing such data pursuant to Section 11.4 of the Participation Agreement, and to report data collected to CMS no more than once per model performance period (PP).

The SDEs reported to CMS will be used for monitoring and evaluation activities. CMS may also use the data to inform participant dashboards through the Expanded Data Feedback Reporting (eDFR) application Data Feedback Tool (DFT). Collecting and reporting beneficiary SDEs will inform CMS about the model's generalizability and will provide guidance for EOM participants to help identify gaps in care or potential health disparities, which participants are encouraged to consider as data to inform their Health Equity Plans.

EOM participants are expected to collect and report sociodemographic data. While CMS believes in the importance of collecting complete and accurate data to inform model monitoring and evaluation activities, to avoid discouraging beneficiaries from accessing care from EOM participants, **EOM-attributed beneficiaries are not required to share sociodemographic data with their EOM practitioner(s) or with CMS**. Beneficiaries can choose to disclose some, all, or none of these data elements. EOM participants are expected to ask every EOM beneficiary for this information; however, there is no penalty should a beneficiary choose not to disclose some or all the information. As noted in the description for each data element in Table 2, if there are no data to report (e.g., the beneficiary chooses to not share), the guidance is to select the appropriate "non answer option" for each required data element. The appropriate selection is noted for each data element in the description tab. It is "choose not to disclose" for most but not all. For instance, for "sex" it is "unknown". If the patient has opted out of sharing all sociodemographic data, the guidance is still to select the appropriate "non-answer option" for each required data element.[7]

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[6] Center for Medicare and Medicaid Services (CMS). Office of Minority Health (OMH*). Inventory of Resources for Standardized Demographic and Language Data Collection*. Retrieved from: https://www.cms.gov/about-cms/agency-information/omh/downloads/data-collection-resources.pdf

[7] If a beneficiary declines to provide a preferred language, the field may be left blank. EOM participants should use their best judgement when there is no available data for attributed beneficiaries for required data elements.

If beneficiaries do not wish to share their sociodemographic data with their EOM practitioner or CMS, they can indicate they would like to opt-out to their EOM practitioner. When the participant reports the SDE data to CMS (in the EOM HDR application), they should indicate that the beneficiary opted out of sharing sociodemographic data by reporting the appropriate non-answer option for each required data element.

As a reminder, separate from the SDE data opt-out, EOM beneficiaries may also opt-out of beneficiary claims data sharing, which beneficiaries can do by calling 1-800-Medicare. EOM participants will not see claims data through the EOM eDFR application for beneficiaries who have opted out via 1-800-Medicare.

1.2 Beneficiary SDEs to be Collected and Reported to CMS

The U.S. Department of Health and Human Services Assistant Secretary for Technology Policy and Office of the National Coordinator for Health Information Technology (ASTP/ONC) developed US Core Interoperability (USCDI) standards to establish a set of structured health data classes and elements that allow interoperable health information exchange. This baseline language enables data integration across different healthcare systems.

ASTP/ONC finalized USCDI v3 in July 2022 as part of the Standards Version Advancement Process. In the January 9, 2024 ASTP/ONC HTI-1 final rule, USCDI v3 was named as the new baseline standard within the ASTP/ONC Health IT Certification Program beginning January 1, 2026. USCDI v3 is also based on the Health Level 7 (HL7) US Core Implementation Guide (IG) 6.1.0. Updates for this IG include revised plain language labels for several of the Sexual Orientation and Gender Identity (SOGI) data elements, included in ***Appendix D***. We note that the Systematized Nomenclature of Medicine (SNOMED) codes are unchanged.

Moving to USCDI v3 ahead of the official certification program deadline allows EOM participants to quickly benefit from its improvements. USCDI v3 simplifies data elements of interest to EOM and provides the standards to collect disability data, which advance high-quality and equitable care. To foster seamless data collection and integration, EOM aligned the demographic data elements collected for PP2 and subsequent performance periods with the USCDI v3.

As data are collected from beneficiaries, we note that the Centers for Disease Control and Prevention (CDC) provides alternative “preferred” plain language options that can be used to describe these concepts to beneficiaries. Plain language is included in the EOM SDE Sample Template and will be included in the HDR submission template. The tables in ***Appendix C*** show the differences between USCDI v2 and v3 language and the optional language provided by the CDC, now included in the SDE sample template.

The SDEs EOM participants are required to collect, and report include:

- Race
- Ethnicity
- Sex
- Gender Identity
- Sexual Orientation
- Preferred Language
- Disability Status[8]

Disability status was finalized as part of USCDI v3 in July 2022. There are multiple ways that disability status can be captured under the USCDI.

As part of a CMS Innovation Center initiative to advance the collection of disability status data, EOM will be including six well-tested questions endorsed by the Office of the Assistant Secretary for Planning and Evaluation and the CDC, among others, to support meeting the Affordable Care Act requirements under Section 4302 to collect standardized race, ethnicity, sex, primary language, and disability status data.[9] These six questions have been used as part of the American Community Survey and many other national surveys over the years.[10] Given this question set has been widely used and tested, EOM is requiring the collection and reporting of these data as part of EOM SDEs. Disability status collection was optional in PP2; however, disability status is required starting in PP3 and all performance periods thereafter. EOM participants collection of these data will inform and define the standard for collecting disability status, both at CMS and more broadly. As such, how these data are collected, and specifically what data are collected may evolve over time based on CMS priorities and EOM participant experience and insight into this important data collection effort.

Disability status is a patient-reported demographic characteristic like race, ethnicity, preferred language, gender identity, sexual orientation, etc. Documentation of SDEs is necessary for providing high-quality and equitable care. For some people with disabilities, their disability is a part of their identity, just like their race, ethnicity, sexual orientation, or gender identity, and may affect how others perceive or interact with them, making it valuable to collect this information with other demographic information.[11,12]

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[8] Disability status is required for PP3 and subsequent performance periods.

[9] Office of the Assistant Secretary for Planning and Evaluation (ASPE). (2011). *HHS Implementation Guidance on Data Collection Standards for Race, Ethnicity, Sex, Primary Language, and Disability Status*. Retrieved from: https://aspe.hhs.gov/reports/hhs-implementation-guidance-data-collection-standards-race-ethnicity-sex-primary-language-disability-0

[10] See footnote 12.

[11] Disability Equity Collaborative. (2022). Documenting Disability Status in Electronic Health Records. Implementation Guide. Retrieved from: https://www.disabilityequitycollaborative.org/wp-content/uploads/2022/10/221010_-DEC-IMPLEMENTATION-GUIDE.pdf;

[12] Morris, M. A. & Samiento, C. (October 2023, In press). Documentation of Disability Status and Accommodation Needs in the Electronic Health Record: A Qualitative Study of Health Care Organizations' Current Practices. Retrieved from: https://www.jointcommissionjournal.com/article/S1553-7250(23)00250-7/fulltext

Table 2 in **Section 2** below describes the SDEs to be collected and the response options. The list of preferred languages is shown in *Appendix A* and the list of expanded ethnicity categories is shown in *Appendix B*. More resources and information about how to collect SDEs is included in *Appendix E*.

1.3 Identifying EOM-attributed Beneficiaries

EOM participants are required to report SDEs on EOM-attributed beneficiaries on a semi-annual basis, within 30 days of attribution data being made available in the HDR application or via a FHIR-based API for each performance period. Since attribution is retrospective, CMS identification of which beneficiaries require sociodemographic data reporting will occur after episodes have been completed. It is recommended that participants collect sociodemographic data during the course of care delivery to be prepared for reporting later.

For that reason, CMS provides participants with a sample template for the collection of SDE data in the HDR application. More information about the official and sample templates is described in Section 2.1. The criteria below can help practices identify potential EOM-attributed beneficiaries prior to the time that attribution files are available to participants.

1. Identify patients who have a qualifying cancer diagnosis code.
    a. A list of qualifying ICD-10-CM diagnosis codes utilized within EOM for episode identification is located in the "EOM Technical Payment Resources" document on the "Cancer Type Mapping" tab.
    b. Of the patients with a qualifying cancer diagnosis code, identify those who have a qualifying initiating cancer therapy code. A list of initiating cancer therapy codes can be found in the "EOM Initiating Therapies List"[13] document (available on the EOM website) associated with the relevant performance period in the Healthcare Common Procedure Coding System (HCPCS) Codes or National Drug Code (NDC) Codes tabs.

2. Once all patients are identified, a beneficiary must meet the following requirements for all 6 months of the episode (or in the event the beneficiary dies during the episode, until the beneficiary's death) for that episode to be eligible for inclusion in EOM:
    a. Beneficiary is enrolled in Medicare Parts A and B, AND
    b. Beneficiary does not receive the Medicare End Stage Renal Disease benefit,[14] AND
    c. Beneficiary has Medicare as his or her primary payer, AND
    d. Beneficiary is not covered under Medicare Advantage or any other group health program, AND
    e. Beneficiary received an initiating cancer treatment for cancer, AND

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[13] The EOM Initiating Cancer Therapies List is updated for each EOM performance period. Participants must use the performance period specific list when determining potential eligibility for an episode. Receipt of this qualifying initiating cancer therapy code triggers the beginning of an episode. Once an episode has begun, it will last for 6 calendar months

[14] ESRD status is determined using information in the Medicare Enrollment Database

f. Beneficiary has at least one qualifying evaluation and management (E&M) visit during the 6 months of the episode:
   I. A qualifying E&M visit is defined as having an HCPCS code in the ranges 99201-99205 or 99211-99215, a cancer diagnosis included in the "EOM Technical Payment Resources" document (available on the EOM website) on the "Cancer Type Mapping" tab, and billed by a Taxpayer Identification Number (TIN) with at least one oncology provider in the performance period.[15]
   II. Oncology providers are those with a specialty code of Hematology/Oncology or Medical Oncology as described in Section 1.1. in "EOM Payment Methodology" document.

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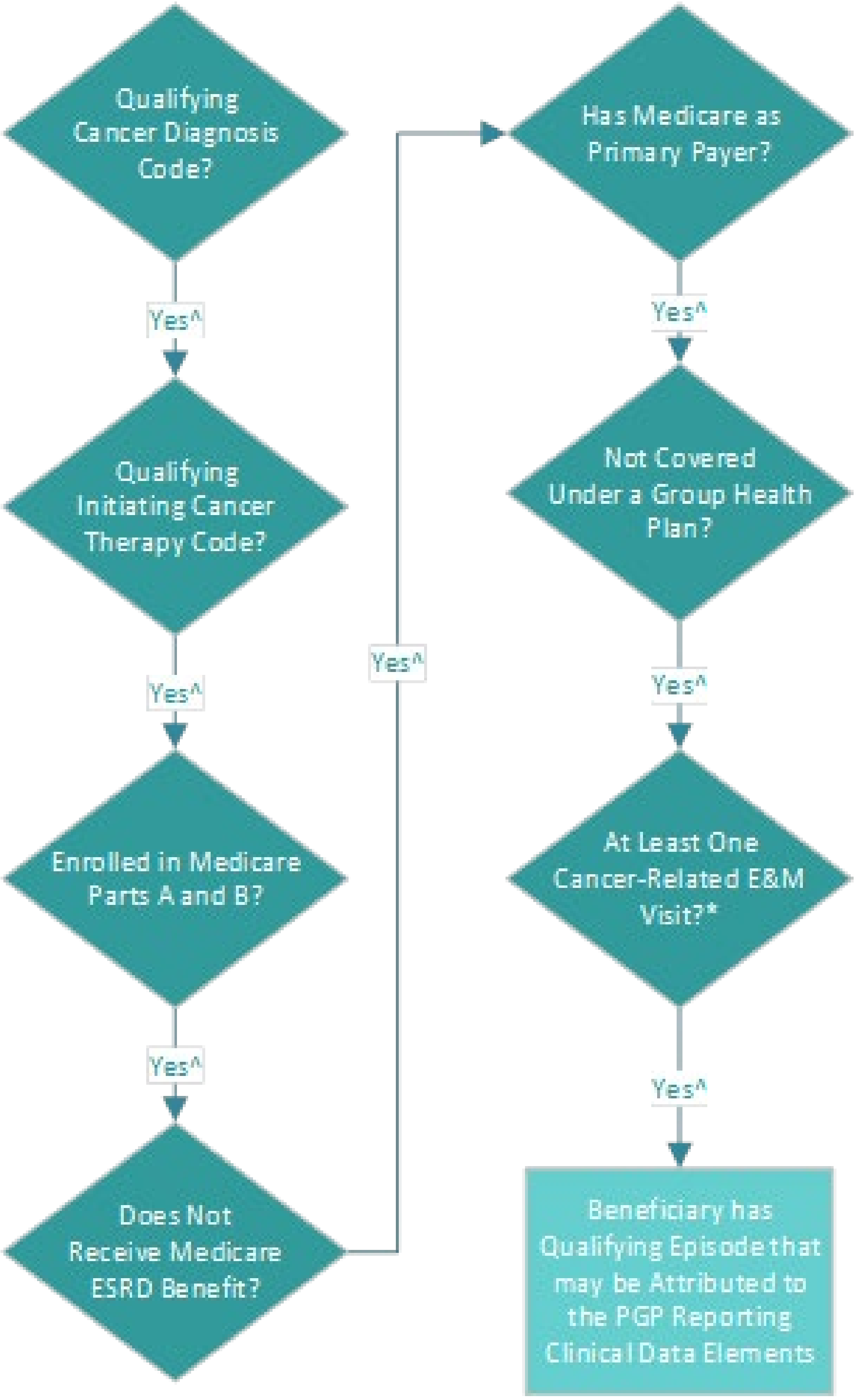
[15] When determining attribution, each episode is attributed to the TIN that provided the first qualifying E&M service during the episode. The TIN must also provide at least 25 percent of the total qualifying E&M services for the episode. If the TIN that provided the first qualifying E&M service did not render at least 25 percent of the total qualifying E&M services, then the attribution is based on E&M plurality and the episode is attributed to the TIN providing the largest proportion of qualifying E&M services during the period. EOM participants are only required to report on beneficiaries attributed to their TIN

Figure 2: Identification of Potential EOM-attributed Beneficiaries



^ If any of these criteria is answered "No," the patient does not qualify as a potential EOM-attributed beneficiary.

Section 2: SDE Collection and Reporting Technical Requirements

This section describes the data reporting platform and options for reporting SDEs, including the timeframe by EOM performance periods and associated reporting windows.

2.1 EOM HDR Application

EOM participants will use a centralized reporting platform, the Innovation Support Platform (ISP), to report SDE data. The HDR application, part of the ISP, is a web-based data submission and collection tool that EOM participants will use to submit data, including practice-level quality measures, beneficiary-specific CDEs, and beneficiary-specific SDEs. The HDR User Guide is now available in EOM Connect on the Resource page of the Innovation Center Portal for EOM participants.

EOM participants will have access to the HDR submission template within the HDR application which will be pre-populated with key information for each attributed beneficiary for the performance period. This template can be used for participants using the “low-tech” option to complete reporting for attributed beneficiaries or as a reference for those using the “high-tech” FHIR API option to identify the attributed beneficiaries with cancer types which are required for reporting.

The EOM Reporting Timelines and frequently asked questions (FAQs) resource is available in EOM Connect on the Resource page of the Innovation Center Portal for EOM participants. This set of timelines and FAQs have been assembled to provide answers to EOM participants regarding reporting requirements and EOM data submission timeframes for reporting SDEs. This document also provides tools to help participants understand the reporting requirements and submission timeframes.

Two reporting options are available for EOM participants to utilize for reporting data to the EOM:

- **Low-Tech Option—HDR submission template via EOM HDR Application:** This reporting option allows EOM participants to leverage (through the HDR application) a standardized Excel template pre-populated with the list of attributed beneficiaries for reporting sociodemographic data elements. The template is designed for EOM participants who may not have significant technical support or limited support from Health Information Technology vendors. The pre-populated HDR submission template will be available via download from the HDR application and must be used to submit data. Participants who have used the sample template to collect data will need to move the data into the HDR submission template downloaded from the HDR for the attributed beneficiaries. Submission of data using the sample template, or any format other than the official pre-populated template will not be accepted by the EOM HDR application.

Note: Beneficiary Date of Birth is pre-populated in the HDR submission template based on Medicare enrollment data and is provided for reference to help EOM participants match attributed beneficiaries when reporting SDEs. If the Beneficiary Date of Birth pre-populated in the HDR submission template is not accurate, (e.g., inaccurate information was in claims data), please correct it when reporting the SDE data for that beneficiary by updating the prefilled values for Beneficiary Date of Birth.

IMPORTANT: Do not include non-attributed beneficiaries in the HDR submission template for reporting to the HDR application as the file will be rejected.[16]

- **High-Tech Option—HL7 FHIR-based Application Programming Interface (API):** This reporting option allows for the reporting of SDEs directly from the EOM participants Electronic Health Record (EHR) system via a FHIR-based API, which enables the electronic sharing of healthcare data across systems. Reporting via this method will leverage USCDI and specifically the HL7 FHIR US Core IG where there is detailed guidance for submitting the SDE data via the EOM Cancer Patient Profile.

Participants may use both the Low-Tech option (HDR submission template) and High-Tech option (FHIR-based API) for reporting (e.g. SDE may be submitted via Low-Tech option and CDEs may be submitted via the High-Tech option), however, data cannot be combined across reporting methods for a single beneficiary and data type (SDE or CDE). When using either option the high-tech or low-tech option, data is not combined across submissions for the same beneficiary (portions of data from one submission for a single beneficiary are not combined with portions of data from a different submission for the same beneficiary). Participants will have an opportunity to gain familiarity with reporting via the EOM HDR application (low-tech reporting option) or via the HL7 FHIR API (high-tech reporting option) prior to each reporting period beginning. More information on the reporting process can be found in the Health Data Reporting (HDR) User Guide, the EOM Reporting Timeline and FAQ and the EOM FAQ located in Connect.

Note: All documents referenced within this guide are located on EOM Connect.

EOM participants are expected to ask every EOM beneficiary for their sociodemographic information. For reporting through the low-tech option- HDR submission template via the EOM HDR Application, if a blank value is submitted for a required data element, the participant will receive an error message upon submission.

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[16] Note: Although EOM participants are not required to submit SDEs until after they receive attribution lists, they are encouraged to start collecting SDEs before the lists are available. Participants can begin to collect data using the EOM SDE “Sample” Template (available in EOM Connect). The sample template is made available prior to the reporting period and does not include any prefilled data described under ’low-tech’ option. This will further support participants as a tool to help prepare for your data submission and should only be used as a reference. If you choose to submit data via the EOM HDR application ’low-tech’ option, be sure to submit the official HDR submission template. To access the official template, you must download it from the HDR. This version contains the prefilled data discussed above as this official copy has and contains all the necessary metadata to ensure successful validation and submission. The SDE “Sample” Template is for reference only.

As noted in the description for each data element in Table 2, if there are no data to report (i.e., the beneficiary chose not to share), the guidance is to select the appropriate "non-answer option" for each required data element. The appropriate selection is noted for each data element in the description tab. It is "choose not to disclose" for most but not all, for example, for "sex" it is "unknown." If the patient has opted out of sharing all sociodemographic data, the guidance is still to select the appropriate "non-answer option" for each required data element.

2.2 EOM Performance Periods and Data Reporting Windows

As noted in section 1.3, EOM participants will report SDEs on EOM-attributed beneficiaries on a semi-annual basis, within 30 days of attribution data being made available in the EOM HDR application for each performance period. CMS expects that the attribution lists for a performance period will be available within 90 days after the end of the performance period.

EOM participants will be required to report data during PP1 in Fall 2024 and for PP2 in Spring 2025. Specific due dates will be communicated to EOM participants in a timely manner. Each performance period consists of the episode initiation date and end date as shown in Table 1.

Table 1. Performance Periods and Episodes

Performance Period	Episode Initiation Dates	Episode End Dates	Reporting Timeline
1	7/1/2023–12/31/2023	12/31/2023–6/29/2024	Fall 2024
2	1/1/2024–6/30/2024	6/30/2024–12/29/2024	Spring 2025
3	7/1/2024–12/31/2024	12/31/2024–6/29/2025	Fall 2025
4	1/1/2025–6/30/2025	6/30/2025–12/29/2025	Spring 2026
5	7/1/2025–12/31/2025	12/31/2025–6/29/2026	Fall 2026
6	1/1/2026–6/30/2026	6/30/2026–12/29/2026	Spring 2027
7	7/1/2026–12/31/2026	12/31/2026–6/29/2027	Fall 2027
8	1/1/2027–6/30/2027	6/30/2027–12/29/2027	Spring 2028
9	7/1/2027–12/31/2027	12/31/2027–6/29/2028	Fall 2028
10	1/1/2028–6/30/2028	6/30/2028–12/29/2028	Spring 2029
11	7/1/2028–12/31/2028	12/31/2028–6/29/2029	Fall 2029
12	1/1/2029–6/30/2029	6/30/2029–12/29/2029	Spring 2030
13	7/1/2029–12/31/2029	12/31/2029–6/29/2030	Fall 2030

2.3 SDEs and Guidance

Table 2 illustrates the data collection and reporting options for each of the SDEs to be reported by EOM participants for their EOM-attributed beneficiaries for each performance period. EOM participants will have access to the HDR submission template within the EOM HDR application which will be pre-populated with key information for each attributed beneficiary for the performance period. The SDE tab of the HDR submission template must be used for participants using the "low-tech" option to complete SDE reporting for attributed beneficiaries or may be used as a reference for those using the "high-tech" FHIR API[17] option. The data elements which will be pre-populated for each EOM Participant and attributed beneficiary include the following:

- EOM-ID
- MBI
- Beneficiary first name
- Beneficiary last name
- Date of birth

The subsequent SDEs are required to be reported (as applicable for the attributed cancer type) by the participant for each EOM-attributed beneficiary: race and ethnicity, preferred language (***Appendix A***), sex, sexual orientation, gender identity, expanded ethnicity, and disability status (***Appendix B***).

Table 2. SDEs EOM Participants Are Required to Collect and Report

Data Element Label	Data Element Name	Data Element Guidance
EOM-PGP-ID	EOM-ID	- This data element will be **pre-populated** (e.g., EOM-ID, Format = EOM-PGP-XXXX).
MBI	Medicare Beneficiary Identifier (MBI)	- This data element will be **pre-populated** (e.g., MBIs must be 11 characters. The 1st, 4th, 7th, 10th, and 11th characters will always be numbers. The 2nd, 5th, 8th, and 9th characters will always be upper-case letters, except for S, L, O, I, B, and Z. The 3rd and 6th characters will be letters or numbers).
first_name	Beneficiary first name	- This data element will be **pre-populated** (e.g., beneficiary's first name).

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[17] EOM participants submitting SDEs via a FHIR-based API will be provided directions to query the CMS FHIR server to receive their attributed beneficiary list and the relevant information indicated in section 2.3 that will be pre-populated in the EOM HDR template. Additional information about accessing this information will be made available in the EOM IG.

Data Element Label	Data Element Name	Data Element Guidance
last_name	Beneficiary last name	• This data element will be **pre-populated** (e.g., beneficiary's last name).
date_of_birth	Date of birth	• This data element will be **pre-populated** (e.g., date format must be numeric **YYYY-MM-DD**). If this prefilled information from claims is not correct, please update with the correct date of birth.
sex	Sex	• Answer options include: **Patient sex unknown, Female, Male, and Asked but declined.** • If a beneficiary chooses not to disclose, please select 'Asked but declined'.
preferred_language[18]	Preferred language	• One preferred language can be chosen from a list of 183 language options using this code set ***(See Appendix A).***
race[19]	Beneficiary race	• Answer options include: **American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, White, Other Race, Asked but unknown, and Unknown**. • If a beneficiary chooses not to disclose, please select 'Asked but unknown'.
ethnicity_base[20]	Beneficiary ethnicity	• Answer options include: **Hispanic or Latino, Not Hispanic or Latino, Asked but unknown, and Unknown**. • If a beneficiary chooses not to disclose, please select 'Asked but unknown'.

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[18] Based on ISO 639-1 language codes in accordance with HL7 US Core IG guidance.

[19] Based on the OMB race categories as defined by the OMB Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity, Statistical Policy Directive No. 15, as revised, October 30, 1997, and supported by the US Core Data for Interoperability v3.

[20] Based on the OMB ethnicity categories as defined by the OMB Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity, Statistical Policy Directive No. 15, as revised, October 30, 1997, and supported by the US Core Data for Interoperability v3.

Data Element Label	Data Element Name	Data Element Guidance
sex_orientation[21]	Sexual orientation	- Beneficiary identification of their emotional, romantic, sexual, or affectional attraction to another person. - Answer options include: **Lesbian or gay, Heterosexual (not lesbian, gay, or bisexual), Bisexual, Other, Unknown, Asked but no answer.** - If a beneficiary chooses not to disclose, please select 'Asked but no answer'.
gender_identity[22]	Gender identity	- Beneficiary's internal sense of being a man, woman, both, or neither. - Answer options include: **Male-to-Female (MTF)/Transgender Female/Trans Woman, Female-to-Male (FTM)/Transgender Male/Trans Man, Genderqueer, neither exclusively male nor female, Female, Male, Asked but unknown, Other.** - If a beneficiary chooses not to disclose, please select 'Asked but unknown'.
ethnicity_expanded_x[23]	Expanded beneficiary ethnicity	- Based on the CDC expanded ethnicity categories, and includes 45 ethnicity category options (***See Appendix B*)**. - A beneficiary can choose up to four ethnicity categories to best define their identity.

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[21] This is based on the HL7 FHIR Value Set as defined by the US Core Data for Interoperability v3 - US Core Sexual Orientation using the [CDC preferred plain language]() for the relevant SNOMED codes.

[22] This is based on the HL7 FHIR Value Set as defined by the US Core Data for Interoperability v3 - US Core Gender Identity Extension using the [CDC preferred plain language]() for the relevant SNOMED codes.

[23] Expanded ethnicity is an optional data element. The beneficiary can choose up to four additional ethnicity categories to best define their identity. Currently for the low-tech reporting option, there are 45 available categories as defined by CDC for the first and second level hierarchy. If the expanded ethnic option is not available to select, this series of data elements can be left blank. Please note that for participants submitting data via based the high-tech option- FHIR APIs, there is a complete set of over 900 ethnicities as defined by CDC, including all hierarchy levels, available to report via the value set. More information on representing race and ethnicity, and the expanded ethnicity categories, can be found here: https://www.healthit.gov/isa/representing-patient-race-and-ethnicity.

Data Element Label	Data Element Name	Data Element Guidance
disability_status[24]	• This SDE was not required to be collected or reported in PP1 but is optional for PP2 and will be required in subsequent performance periods.	• Disability Status is defined by the six distinct data elements described below. Response options for the following questions include: **Yes/No, Asked but unknown, Not Asked, or Asked but declined.** • If a beneficiary chooses not to disclose, please select 'Asked but declined.'
	disability_status_hearing	Are you deaf, or do you have serious difficulty hearing?
	disability_status_seeing	Are you blind, or do you have serious difficulty seeing, even when wearing glasses?
	disability_status_concen	Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?
	disability_status_walking	Do you have serious difficulty walking or climbing stairs?
	disability_status_grooming	Do you have difficulty dressing or bathing?
	disability_status_errands	Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping?

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[24] For data collection via a FHIR-based API, we will use a base Observation resource to capture disability status. This requires a value for Observation.status. For EOM, this will be required to be set to “final”. This also requires a value for Observation.category based on the Observation Category value set. For EOM, this will be required to be set to “survey” using LOINC panel https://loinc.org/69919-9 for the disability status questions and the LOINC list https://loinc.org/LL5605-2 for answers.

Section 3: Additional EOM Resources

CMS EOM Website

- https://innovation.cms.gov/innovation-models/enhancing-oncology-model

EOM Connect:

- CMS IDM Login

CMS.gov (EOM eDFR and HDR)

- https://portal.cms.gov

EOM Support:

- EOM@cms.hhs.gov
- 1-888-734-6433 option 3

Appendix A: Beneficiary Preferred Language Reporting Options

Abkhazian	Chechen	Greenlandic, Kalaallisut	Interlingue, Occidental
Afar	Chichewa, Chewa, Nyanja	Guarani	Inuktitut
Afrikaans	Chinese	Gujarati	Inupiaq
Akan	Church Slavic, Old Slavonic	Haitian, Haitian Creole	Irish
American Sign Language (ASL)	Chuvash	Hausa	Italian
Albanian	Cornish	Hebrew	Japanese
Amharic	Corsican	Herero	Javanese
Arabic	Cree	Hindi	Kannada
Aragonese	Croatian	Hiri Motu	Kanuri
Armenian	Czech	Hungarian	Indonesian
Assamese	Danish	Icelandic	Interlingua
Avaric	Divehi, Dhivehi, Maldivian	Ido	Interlingue, Occidental
Avestan	Dutch, Flemish	Igbo	Inuktitut
Aymara	Dzongkha	Greek, Modern	Inupiaq
Azerbaijani	English	Greenlandic, Kalaallisut	Irish
Bambara	Esperanto	Guarani	Italian
Bashkir	Estonian	Gujarati	Japanese
Basque	Ewe	Haitian, Haitian Creole	Javanese
Belarusian	Faroese	Hausa	Kannada
Bengali	Fijian	Hebrew	Kanuri
Bislama	Finnish	Herero	Kashmiri
Bosnian	French	Hindi	Kazakh
Breton	Fulah	Hiri Motu	Kikuyu, Gikuyu
Bulgarian	Gaelic, Scottish Gaelic	Hungarian	Kinyarwanda
Burmese	Galician	Icelandic	Kirghiz, Kyrgyz
Castilian, Spanish	Ganda	Ido	Komi
Catalan, Valencian	Georgian	Igbo	Kongo
Central Khmer	German	Indonesian	Korean
Chamorro	Greek, Modern	Interlingua	Kuanyama, Kwanyama

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Kurdish	North Ndebele	Sardinian	Tsonga
Lao	Northern Sami	Serbian	Tswana
Latin	Norwegian	Shona	Turkish
Latvian	Norwegian Bokmål	Sindhi	Turkmen
Limburgan, Limburger, Limburgish	Norwegian Nynorsk	Sinhala, Sinhalese	Twi
Lingala	Nuosu, Sichuan Yi	Slovak	Uighur, Uyghur
Lithuanian	Occitan	Slovenian	Ukrainian
Luba-Katanga	Ojibwa	Somali	Urdu
Luxembourgish, Letzeburgesch	Oriya	South Ndebele	Uzbek
Macedonian	Oromo	Southern Sotho	Venda
Malagasy	Ossetian, Ossetic	Sundanese	Vietnamese
Malay	Pali	Swahili	Volapük
Malayalam	Pashto, Pushto	Swati	Walloon
Maltese	Persian	Swedish	Welsh
Manx	Polish	Tagalog	Western Frisian
Maori	Portuguese	Tahitian	Wolof
Marathi	Punjabi, Panjabi	Tajik	Xhosa
Marshallese	Quechua	Tamil	Yiddish
Moldavian, Moldovan, Romanian	Romansh	Tatar	Yoruba
Mongolian	Rundi	Telugu	Zhuang, Chuang
Nauru	Russian	Thai	Zulu
Navajo, Navaho	Samoan	Tibetan	
Ndonga	Sango	Tigrinya	
Nepali	Sanskrit	Tonga (Tonga Islands)	

Appendix B:
Beneficiary Expanded Ethnicity Reporting Options

African	Japanese
African American	Korean
Alaskan Native	Laotian
American Indian	Madagascar
Arab	Malaysian
Asian Indian	Maldivian
Bahamian	Melanesian
Bangladeshi	Micronesian
Barbadian	Middle Eastern or North African
Bhutanese	Nepalese
Black	Okinawan
Burmese	Other Pacific Islander
Cambodian	Pakistani
Chinese	Polynesian
Dominican Islander	Singaporean
Dominican	Sri Lankan
European	Taiwanese
Filipino	Thai
Haitian	Tobogoan
Hmong	Trinidadian
Indonesian	Vietnamese
Iwo Jiman	West Indian
Jamaican	

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Appendix C: USCDI v2 to v3 Mapping[25]

Data Element	USCDI v2	USCDI v3
Sex	Male (M) (248153007) Female (F) (248152002) Unknown (UNK)	Male (248153007) Female (248152002) Patient sex unknown (184115007) Asked but declined (asked-declined)
Sexual Orientation	Lesbian, gay, or homosexual (38628009) Straight or heterosexual (20430005) Bisexual (42035005) Something else, please describe (OTH) Don't Know (UNK) Choose not to disclose (ASKU)	Lesbian or gay (38628009) Heterosexual (not lesbian, gay or bisexual) (20430005) Bisexual (42035005) Other (OTH) Unknown (UNK) Asked but no answer (ASKU)
Gender Identity	Male (446151000124109) Female (446141000124107) Female-to-Male (FTM)/Transgender Male/Trans Man (407377005) Male-to-Female (MTF)/Transgender Female/Trans Woman (407376001) Genderqueer, neither exclusively male nor female (446131000124102) Additional gender category or other, please specify (OTH) Choose not to disclose (ASKU)	Male (446151000124109) Female (446141000124107) Female-to-Male (FTM)/Transgender Male/Trans Man (407377005) Male-to-Female (MTF)/Transgender Female/Trans Woman (407376001) Genderqueer, neither exclusively male nor female (446131000124102) Other (OTH) Asked but unknown (ASKU)
Preferred Language	Language codes unchanged	Language codes unchanged

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[25] Note: The changes from USCDI v2 to v3 are noted in purple and green in the table.

Data Element	USCDI v2	USCDI v3
Race	American Indian or Alaska Native (1002-5) Asian (2028-9) Black or African American (2054-5) Native Hawaiian or Other Pacific Islander (2076-8) White (2106-3) Other (OTH) Asked but unknown (ASKU) Unknown (UNK)	American Indian or Alaska Native (1002-5) Asian (2028-9) Black or African American (2054-5) Native Hawaiian or Other Pacific Islander (2076-8) White (2106-3) Other Race (2131-1) Asked but unknown (ASKU) Unknown (UNK)
Ethnicity	Hispanic or Latino (2135-2) Not Hispanic or Latino (2186-5) Asked but unknown (ASKU) Other (OTH) Unknown (UNK)	Hispanic or Latino (2135-2) Not Hispanic or Latino (2186-5) Asked but unknown (ASKU) Unknown (UNK)
Expanded Ethnicity	No code changes	No code changes
Disability Status	not applicable	Are you deaf, or do you have serious difficulty hearing? (69856-3) Are you blind, or do you have serious difficulty seeing, even when wearing glasses? (69857-1) Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions? (69858-9) Do you have serious difficulty walking or climbing stairs? (69859-7) Do you have difficulty dressing or bathing? (69860-5) Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a physician's office or shopping? (69861-3)

		Answer Codes: • LA33-6 – Yes • LA32-8 – No • data absent reason codes: ○ Asked but unknown ○ Not asked ○ Asked but declined

Note: Please note that some links included in Appendix C are only accessible if you sign up for a free account.

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Appendix D: Alternate Plain-Text Language for Sexual Orientation and Gender Identity (SOGI)

Table D-1. Sexual Orientation

USCDI v2	USCDI v3	CDC Preferred USCDI v3 Language
Lesbian, gay, or homosexual (38628009)	Homosexual (38628009)	Lesbian or gay
Straight or heterosexual (20430005)	Heterosexual (20430005)	Heterosexual (not lesbian, gay, or bisexual)
Bisexual (42035005)	Bisexual (42035005)	Bisexual
Something else, please describe (OTH)	Other (OTH)	
Don't Know (UNK)	Unknown (UNK)	
Choose not to disclose (ASKU)	Asked but no answer (ASKU)	

Table D-2. Gender Identity

USCDI v2	USCDI v3	CDC Preferred USCDI v3 Language
Male (446151000124109)	Identifies as male gender (446151000124109)	Male
Female (446141000124107)	Identifies as female gender (446141000124107)	Female
Female-to-Male (FTM)/Transgender Male/Trans Man (407377005)	Female-to-male transsexual (407377005)	Female-to-Male (FTM)/Transgender Male/Trans Man
Male-to-Female (MTF)/Transgender Female/Trans Woman (407376001)	Male-to-female transsexual (407376001)	Male-to-Female (MTF)/Transgender Female/Trans Woman
Genderqueer, neither exclusively male nor female (446131000124102)	Identifies as non-conforming gender (446131000124102)	Genderqueer, neither exclusively male nor female
Additional gender category or other, please specify (OTH)	Other (OTH)	
Choose not to disclose (ASKU)	Asked but unknown (ASKU)	

Appendix E: Additional Resources for Collecting SDE Data

Resources	Description
Race, Ethnicity and Language (REAL) Data Collection Resources	
A Framework for Stratifying Race, Ethnicity, and Language Data	This report summarizes the five-step framework to help systems stratify REAL data to more effectively identify health care disparities and provides dashboard templates.
Culturally Responsive Outreach	This resource was adapted from a Medicare Current Beneficiary Survey (MCBS) Resource and helps define culturally responsive research and identifies techniques for outreach and gaining cooperation with patients from diverse cultural backgrounds. This resource is available in EOM Connect on the Resource page of the Innovation Center Portal for EOM participants.
Building an Organizational Response to Health Disparities	This document includes resources and concepts key to addressing disparities and improving health care quality.
National Culturally and Linguistically Appropriate Services (CLAS) Standards	The National CLAS Standards are intended to advance health equity, improve quality, and help eliminate health care disparities by establishing a blueprint for health and health care organizations.
A Practical Guide to Implementing the National CLAS Standards	The purpose of this toolkit is to enable organizations to implement the National CLAS Standards and improve health equity.
Identifying and Meeting the Language Preferences of Health Plan Members	A webinar discussing the strategies that health plans can use to meet and assess diverse language preferences.
Data on Race, Ethnicity, and Language Largely Incomplete for Managed Care Plan Members	This article presents findings from assessing REAL data availability in commercial, Medicaid, and Medicare managed care plans using the Healthcare Effectiveness Data and Information Set.
Providing Language Services to Diverse Populations: Lessons from the Field	This resource discusses several innovative approaches to provide language assistance services to people with limited English proficiency based on the findings of case studies conducted with a variety of health care organizations.
Rural Health Equity Toolkit	The toolkit provides evidence-based frameworks, strategies, and resources to support organizations working toward health equity in rural communities across the United States.

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Disability Data Collection Resources	
2023 Compendium of Disability Data Collection Methods	An easily accessible source of research on the methodological issues associated with collecting data from or about people with disabilities.
Disability Data Advocacy Toolkit	The aim of this toolkit is to contribute to the growing global dialogue on the importance of data on persons with disabilities, specifically to provide some basic knowledge on data collection, analysis, and use of data for evidenced based advocacy to influence policy and decision makers.
The Future of Disability in America	The report offers recommendations in the areas of disability monitoring, disability research, access to health care and other support services, and public and professional education.
Health Care Equity Requires Standardized Disability Data in the EHR	This article details the reasons that health care equity requires standardized disability data in the EHR.
Washington Group 2015 Video Series	This video series, presented by Mitchell Loeb from the National Center for Health Statistics, provides background on the six-item short set of questions designed by the Washington group.
Sexual Orientation and Gender Identity Resources	
SOGI Training Content	This resource is a training module adapted from the MCBS survey and covers SOGI questions in a culturally appropriate manner. These questions help CMS understand the diversity of Medicare recipients across all their possible identities. This resource is available in EOM Connect on the Resource page of the Innovation Center Portal for EOM participants.
Protecting the Rights of Lesbian, gay, Bisexual, Transgender, Queer, and Intersex (LGBTQI+) People	The Department of Health and Human Services' Office for Civil Rights efforts information to support the rights of LGBTQI+ individuals.
HHS LGBTQI+ Resources	Technical assistance and trainings on how to build inclusive and supportive health care spaces for LGBTQI+ individuals and families.
Measuring Sex, Gender Identity, and Sexual Orientation	This report recommends standardized language to be used in survey questions that ask about a respondent's sex, gender identity, and sexual orientation.
Recommendations on the Best Practices for the Collection of Sexual Orientation and Gender Identity Data on Federal Statistical Surveys	The report highlights the importance of continual learning, offers considerations for including SOGI items on surveys, provides example approaches for collecting and reporting this information, offers guidance on how to safeguard SOGI data, and concludes with a summary of challenges that need further research.

Appendix F: Applying Cultural Responsiveness Resources

Resources	Description
Think Cultural Health	This website features information, continuing education opportunities, resources, and more for health and health care professionals to learn about culturally and linguistically appropriate services, or CLAS.
CLAS Behavioral Health Implementation Guide	This Behavioral Health Implementation Guide underscores the ways in which the National CLAS Standards can improve access to behavioral health care, promote quality behavioral health programs and practice, and ultimately reduce persistent disparities in mental health and substance use treatment for underserved minority communities.
2016 National Ambulatory Medical Care Survey Supplement on Culturally and Linguistically Appropriate Services for Office-based Physicians	This material provides documentation for users of the public use micro-data file for the 2016 National Ambulatory Medical Care Survey Supplement on Culturally and Linguistically Appropriate Services for Office-based Physicians (National CLAS Physician Survey).
Culturally Competent Gender-Related Communications (C3) Training Resource	This training resource contains an overview of gender-related language, including descriptions of related constructs (such as sex, gender, and gender identity), relevant linguistic issues, and practical examples and recommended practices for engaging in gender-sensitive and -competent communication in interactions with and discussions about professional colleagues, research investigators, administrative staff, coworkers, and people in general.

Note: Although the resources in Appendix E and F are not endorsed by CMS, they serve as examples that EOM participants can utilize to collect SDE data. There are many more resources available online than are listed here, some of which may be more accessible based on local or state resources. In addition to the sources above, CMS encourages EOM participants to develop community partnerships to help identify and address SDEs. Practices are encouraged to share any resources not included in the above table with CMS so that they may be included in future updates.

Appendix G: Acronyms and Abbreviations

Acronym	Literal Translation
ASTP/ONC	Assistant Secretary for Technology Policy and Office of the National Coordinator for Health Information Technology
CDE	Clinical Data Element
CLAS	The National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care
CMMI	Center for Medicare and Medicaid Innovation
CMS	Centers for Medicare & Medicaid Services
DFT	Data Feedback Tool
EOM	Enhancing Oncology Model
EDFR	Expanded Data Feedback Reporting
E&M	Evaluation and Management
FHIR	Fast Healthcare Interoperability Resources
HCPCS	Healthcare Common Procedure Coding System
HDR	Health Data Reporting
HL7	Health Level Seven
ICD-10-CM	International Classification of Diseases, Tenth Revision, Clinical Modification
IG	Implementation Guide
ISP	Innovation Support Platform
LOINC	Logical Observation Identifiers Names and Codes
MBI	Medicare Beneficiary Identifier
NDC	National Drug Codes
PGP	Physician Group Practice
REAL	Race, Ethnicity, and Language
RFA	Request for Applications
SDE	Sociodemographic Data Elements
SNOMED	Systemized Nomenclature of Medicine
TIN	Taxpayer Identification Number
USCDI	United States Core Data for Interoperability

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