

This factsheet provides an overview of electronic patient-reported outcomes (ePROs) in EOM, as well as an example timeline for the gradual implementation of ePROs within the model.

What are patient-reported outcomes?



Patient-reported outcomes (PROs) are measurements based on a report that comes directly from the patient, without amendment or interpretation of the patient's response.¹

*ePROs are the **electronic capture** of this data.*

Why are ePROs important to EOM?



ePROs have been studied in a variety of practice settings – including community-based practices – and have been found to have a number of benefits.²

Using ePRO tools in oncology settings can lead to better identification of patients' needs, improving patient-provider communication, care management, and patient satisfaction, as well as advancing other positive cancer outcomes, such as decreased emergency department visits and improved survival, sometimes exceeding the benefits of oncology drugs.^{3,4}

Immediate benefits of ePROs include, but are not limited to:

- ✔ Prompting discussions with a clinician
- ✔ Streamlining consultations
- ✔ Increasing awareness and triaging of symptoms
- ✔ Facilitating interprofessional communication



Clinicians in community settings report that utilization of ePROs has been shown to be **helpful for clinical documentation**. Studies also show high levels of **patient engagement**, for patients who are 65 years and older.⁵



Patients report that utilization of ePROs **improved discussions** with providers and made them feel **more in control** of their care.

¹ BEST (Biomarkers, Endpoints, and other Tools) Resource. (2016). Glossary. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK338448/#IX-P>

Basch E, Deal AM, Dueck AC, et al. (2017) Overall Survival Results of a Trial Assessing Patient-Reported Outcomes for Symptom Monitoring During Routine Cancer Treatment. JAMA. 318(2):197–198. Retrieved from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5817466/>

² Patt D, Wilfong L, Hudson KE, et al: Implementation of electronic patient-reported outcomes for symptom monitoring in a large multisite community oncology practice: Dancing the Texas two-step through a pandemic. JCO Clin Cancer Inform 5:615-621, 2021.

³ Ladanie, A., Schmitt, A.M., Speich, B. (2020). Clinical trial evidence supporting US Food and Drug Administration approval of novel cancer therapies between 2000 and 2016. JAMA. Retrieved from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7656288/>

⁴ Jensen, R. E., Snyder, C. F., Abernethy, A. P., Basch, E., Potosky, A. L., Roberts, A. C., Loeffler, D. R., & Reeve, B. B. (2014). Review of electronic patient-reported outcomes systems used in cancer clinical care. Journal of oncology practice, 10(4), e215–e222. Retrieved from: <https://doi.org/10.1200/JOP.2013.001067>

⁵ Cherry, N. I., Parrinello C.M., Kwiatkosky, L., Hunnicutt, J.B., Schaefer, E., Thurow, T., Kolodziej, M. (2022). Feasibility of Large-Scale Implementation of an Electronic Patient-Reported Outcome Remote Monitoring System for Patients on Active Treatment at a Community Cancer Center. JCO Oncology Practice. Retrieved from: <https://pubmed.ncbi.nlm.nih.gov/36240475/>

Which ePROs tool should EOM participants use?

CMS is **not** requiring the use of a specific ePRO tool; however, participants must use tools that capture, where applicable, outcomes for each of the following domains:

Symptoms and/or Symptomatic Toxicities

Examples: frequency, severity, activity interference, presence/absence of symptoms

Functioning

Examples: physical functioning, role functioning (e.g., activities of daily living (ADLs) or instrumental activities of daily living (IADLS))

Health-Related Social Needs (HRSN)

Examples: financial distress/ toxicity, transportation, food insecurity, housing instability

Behavioral Health

Examples: anxiety, depression, other behavioral health concerns

Examples of validated and publicly available ePROs tools include the Patient-Reported Outcomes version of the Common Terminology Criteria for Adverse Events ([PRO-CTCAE®](#)) and the Patient-Reported Outcomes Measurement Information System ([PROMIS®](#)).

Note: The ePROs tools listed here are for example only and do not constitute an endorsement by CMS or CMS affiliates. For any ePROs survey (e.g., PRO-CTCAE or PROMIS), EOM participants should check with organizations that manage each tool for rules concerning modifications and use.



Model participants must integrate ePRO data into electronic health records (EHRs). However, EOM participants **do not need** to report the data to CMS at this time.

The section below provides example methods for collecting and monitoring ePROs.

How can participants collect ePROs from patients?

CMS requires that ePROs be administered in an electronic format, including but not limited to the following:



Screen-Based Reporting Devices

(e.g., via the patient portal on a smart phone or computer)



Interactive Voice Response Systems

(e.g., calls to a patient who responds to phone prompts)



SMS Text Systems

(e.g., patient provides information via text on mobile device)



ePRO Collection in the Waiting Room

(e.g., patient provides data via a tablet while waiting for office visit)

Example ePROs Implementation Timeline

Below is an example gradual implementation timeline for ePROs collection for EOM participants to integrate ePROs into practice decision-making:

Performance Period (PP)	Model Year (MY)	Cohort 1 ePROs Data Collection Requirement		Cohort 2 ePROs Data Collection Requirement	
1	Year 1	Optional pre-implementation years	EOM participants collect data using a gradual implementation approach, including an optional pre-implementation period. During the pre-implementation period, if EOM participants are not administering ePROs to their EOM beneficiaries, then they should be building the capabilities to do so beginning in PP5. EOM participants are not required to report data to CMS at this time.		
2					
3	Year 2				
4					
5	Year 3	35% attributed EOM beneficiaries*	Beginning in PP5 (MY3), participants will be required to implement ePROs prior to each visit where one or more qualifying E&M services are furnished to the EOM beneficiary.	Optional pre-implementation years	EOM participants will collect data using a gradual implementation approach, including an optional pre-implementation period. During the pre-implementation period, if EOM participants are not administering ePROs to their EOM beneficiaries, then they should be building the capabilities to do so beginning in PP9. EOM participants are not required to report data to CMS at this time.
6					
7	Year 4	50% attributed EOM beneficiaries*			
8					
9	Year 5	75% attributed EOM beneficiaries*	Similar to the pre-implementation period, EOM participants are not required to report data to CMS at this time. Note: This does not include the beneficiary's first visit with the EOM participant, however it does include subsequent visits.	35% attributed EOM beneficiaries*	Beginning in PP9 (MY5), participants will be required to implement ePROs prior to each visit where one or more qualifying E&M services are furnished to the EOM beneficiary. Similar to the pre-implementation period, EOM participants are not required to report data to CMS at this time. Note: This does not include the beneficiary's first visit with the EOM participant, however it does include subsequent visits
10					
11	Year 6	75% attributed EOM beneficiaries*		50% attributed EOM beneficiaries*	
12					
13	Year 7	75% attributed EOM beneficiaries*	75% attributed EOM beneficiaries*		

* **Note:** This timeline includes *example* percentages of ePROs data collection.