

## Expert to Expert Webinar: New Measure Review - Excessive Radiation Dose or Inadequate Image Quality for Diagnostic Computed Tomography (CT) in Adults eCQM (for both Inpatient and Outpatient Settings) for 2025 implementation

### Questions and Answers

June 18, 2025

Question	Answer
Does ALARA's software allow facilities to analyze their data to improve their score (e.g., by identifying which scanner, protocol or technologist may be contributing to a high score)?	Alara's software provides study-level reports that can be analyzed by sites to identify opportunities for improvement.
How is image quality determined? What is the definition of "Global Noise"? Is there a paper that describes how exactly the software calculates it?	Alara uses a scientifically proven methodology for calculating noise that has been fine-tuned for the measure. Image quality is measured using measurements in the air surrounding the patient, described in Dr Smith-Bindman's paper in Investigative Radiology: Improving the Safety of Computed Tomography through automated quality measurement.
Can you show the mechanism or sliding scale of the allowable noise changes with increase patient's size?	This measure's approach to calculating image noise does not vary with patient size, as the noise level is determined from the air surrounding the patient.
Will weight of the patient be required for this calculation?	Patient weight is not required for this measure.
Is this only for inpatients? What about ER patients, are they dependent on admission/discharge or excluded?	The same measure logic has been intentionally implemented for all three CMS payment programs: Hospital Outpatient, Hospital Inpatient, and Physician Fee Schedule (MIPS). A single CT exam may be simultaneously measured in both MIPS and only one of the hospital reporting programs (inpatient or outpatient). ED patients are measured in the hospital outpatient program.
If a patient has a CT scan in the ED and then is admitted, would that CT scan count for the IP measure if it meets all the criteria?	In the presented scenario, the scan would be measured in the Hospital Outpatient program as the patient was not admitted when the scan was performed. This scan could also be counted for MIPS. Measure logic will only attribute a scan to either the inpatient or outpatient setting.
The spec mentioned that InpatientEncounter.relevantPeriod overlaps "Measurement Period", but the flow diagram mentioned that the encounter needs to be end during the measurement period. Which one should we follow?	For all eCQMs, the measure specification is the source of truth. For reporting period 2025, there is a known issue for CMS1074v2 which is posted at <a href="https://oncprojectracking.healthit.gov/support/browse/EKI-36">https://oncprojectracking.healthit.gov/support/browse/EKI-36</a> . In this issue, the Initial Population logic contains an error and will not report CT scans within an encounter that does not end during the reporting period, due to missing end interval information. For the 2025 reporting period, please follow the measure logic as written.

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What is considered the measurement period?	The Measurement Period is January 1, 20XX through December 31, 20XX of the given reporting year.
Where was the form for interest in using Alara?	Alara can be contacted for additional questions at <a href="https://www.alaragateway.com/contact">https://www.alaragateway.com/contact</a>
Are there instructions and support for the Alara software?	Yes, Alara provides documentation at <a href="https://www.alaragateway.com/documentation">https://www.alaragateway.com/documentation</a> to the public, and support for its customers. Please fill out the form at <a href="https://www.alaragateway.com/contact">https://www.alaragateway.com/contact</a> with your specific request.
How long does it take for Alara to set up their gateway with a single facility?	This depends on the facility and the details of the implementation. Alara has deployed gateways in as little as one day.
We have 11 hospitals all on a single enterprise EHR...will we need translation software at each facility or just one?	This depends on a number of factors related to your networking, image archive, and EHR configuration. Please fill out the form at <a href="https://www.alaragateway.com/contact">https://www.alaragateway.com/contact</a> and Alara can provide more specific guidance.
Do you have to use a translation software or can this be captured manually	Translation software is required to process the radiation dose data, and calculate intermediate variables. These values cannot be collected manually.
Are the measures being pulled automatically into eCQM?	The ExRad measures are electronic clinical quality measures (eCQMs). Because they depend on image data, preprocessing software is needed to calculate intermediate variables. More information on the required steps can be found here: <a href="https://www.alaragateway.com/documentation">https://www.alaragateway.com/documentation</a>
If there is not a standard algorithm provided for calculating noise and dose from pixel level data, how will different translation softwares provide consistent values? Comparing to a static noise and dose threshold published by a measure steward means there could be different performance based on the translation vendor selected.	Hospitals and clinicians who choose to report this eCQM may use any vendor's software that meets the necessary requirements to generate the standardized data elements required to calculate the measure, consistent with the measure's specifications. Hospitals and clinicians are not required to use the Alara Imaging Software for CMS measure compliance. Any software vendor capable of calculating and reporting this eCQM in accordance with the measure's specifications, including transforming radiology data into a format compatible with eCQM reporting, may report this measure on behalf of hospitals and clinicians. Hospitals and clinicians are not required to demonstrate to CMS that the software they or their vendors use can generate and transform the radiology data into the necessary format. However, nothing would prevent a hospital or clinician seeking assurance about the ability of specific software to perform these tasks from requesting that information from a vendor.

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	As with all eQMs, CMS will monitor measure results to ensure that all reported data for the Excessive Radiation Dose or Inadequate Image Quality for Diagnostic Computed Tomography in Adults eCQM are both reliable and valid. This may include analyzing data to identify outliers and common characteristics of outlier submissions.
Who audits/verifies Alara's calculations?	Alara is responsible for the accuracy of its calculations, which are consistent with the measure's specifications.
While I understand that ALARA will perform calculations for noise- and size-adjusted dose, and that thresholds for these are provided in the following slides, where can I find the basic CMS-set thresholds and standards for PRIMARY DATA ELEMENTS for different CT exams?	As the measure is adjusted based on patient diameter, primary data elements such as CTDIvol, and DLP do not have associated thresholds. The dose and noise thresholds are specific to each CT Category.
Was there a specific diagnostic medical physics group or members of the AAPM that worked through this process?	<p>The ExRad measures adhere to the CMS Quality Measure Development process and follow the CMS Measure Management Blueprint (<a href="https://www.cms.gov/medicare/quality/hospice-quality-reporting-program/quality-measure-development">https://www.cms.gov/medicare/quality/hospice-quality-reporting-program/quality-measure-development</a>).</p> <p>A Technical Expert Panel guides measure development and physicists were involved in the Technical Expert Panel, Consensus-Based Entity review, as well as in the development and testing of Alara's preprocessing software. One of the members of the Technical Expert Panel was a former President of the American Association of Physicists in Medicine (AAPM).</p>
Does anyone know the wait time for customers to get their setup meeting with Alara if they try right now? Alara told us they will need to meet with every site individually which would be over 600 for our EHR alone. Alara said some sites take days to set up and others have been going through the process for over a year. Is it feasible for them to meet with every site individually by 01/01/2026?	<p>Meetings are set up within 24 hours of outreach. Meetings are coordinated at the health system level, not at the health site level. Yes, it is feasible. Please fill out the form at <a href="https://www.alaragateway.com/contact">https://www.alaragateway.com/contact</a> with additional concerns.</p>
If we have Dose Watch, does that fulfill this requirement?	This question should be directed to the DoseWatch vendor whether they conform to measure specifications for intermediate variable calculation.

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<p>Is there any software that's not ALARA Imaging successfully collecting data, from CMS's perspective? Is there other translation software, besides Alara's? What is another vendor that can calculate these variables?</p>	<p>Hospitals and clinicians who choose to report this eCQM may use any vendor's software that meets the necessary requirements to generate the standardized data elements required to calculate the measure, consistent with the measure's specifications. Hospitals and clinicians are not required to use the Alara Imaging Software for CMS measure compliance. Any software vendor capable of calculating and reporting this eCQM in accordance with the measure's specifications, including transforming radiology data into a format compatible with eCQM reporting, may report this measure on behalf of hospitals and clinicians. Hospitals and clinicians are not required to demonstrate to CMS that the software they or their vendors use can generate and transform the radiology data into the necessary format. However, nothing would prevent a hospital or clinician seeking assurance about the ability of specific software to perform these tasks from requesting that information from a vendor.</p> <p>As with all eCQMs, CMS will monitor measure results to ensure that all reported data for the Excessive Radiation Dose or Inadequate Image Quality for Diagnostic Computed Tomography in Adults eCQM are both reliable and valid. This may include analyzing data to identify outliers and common characteristics of outlier submissions.</p>
<p>What is an EHR vendor supposed to do if Alara is slow to work with them to get this implemented for their customers?</p>	<p>Please reach out to Alara via the website portal to schedule a follow-up call:  <a href="https://www.alaragateway.com/contact">https://www.alaragateway.com/contact</a></p>
<p>Has anyone used CT Dose Watch software as an alternative to ALARA for Ex-Rad purposes? If so, what has the experience been like?</p>	<p>Hospitals and clinicians who choose to report this eCQM may use any vendor's software that meets the necessary requirements to generate the standardized data elements required to calculate the measure, consistent with the measure's specifications. Hospitals and clinicians are not required to use the Alara Imaging Software for CMS measure compliance. Any software vendor capable of calculating and reporting this eCQM in accordance with the measure's specifications, including transforming radiology data into a format compatible with eCQM reporting, may report this measure on behalf of hospitals and clinicians. Hospitals and clinicians are not required to demonstrate to CMS that the software they or their vendors use can generate and transform the radiology data into the necessary format. However, nothing would prevent a hospital or clinician seeking assurance about the ability of specific software to perform these tasks from requesting that information from a vendor.</p>

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<p>Does it seem odd that the Measure Steward for these measures is "Alara Imaging, Inc."? Shouldn't Measure Steward be an entity that does not stand to benefit from the Measure?</p>	<p>Alara was established in conjunction with a CMS cooperative agreement with UCSF to develop the Excessive Radiation Dose or Inadequate Image Quality for Diagnostic Computed Tomography in Adults electronic clinical quality measure for use across CMS's quality reporting programs. As part of this agreement, Alara was required to develop a mechanism for hospitals and physicians to report on the measure. Alara provides a mechanism, free of charge, for hospitals and physicians in the US to report on the CMS-adopted measure, with the aim of incentivizing the reduction of excessive radiation doses. As the steward of the electronic quality measure, Alara oversees the measure and updating of measure specifications.</p> <p>Hospitals and clinicians who choose to report this eCQM may use any vendor's software that meets the necessary requirements to generate the standardized data elements required to calculate the measure, consistent with the measure's specifications.</p> <p>Hospitals and clinicians are not required to use the Alara Imaging Software for CMS measure compliance. Any software vendor capable of calculating and reporting this eCQM in accordance with the measure's specifications, including transforming radiology data into a format compatible with eCQM reporting, may report this measure on behalf of hospitals and clinicians. Hospitals and clinicians are not required to demonstrate to CMS that the software they or their vendors use can generate and transform the radiology data into the necessary format. However, nothing would prevent a hospital or clinician seeking assurance about the ability of specific software to perform these tasks from requesting that information from a vendor.</p> <p>As with all eQMs, CMS will monitor measure results to ensure that all reported data for the Excessive Radiation Dose or Inadequate Image Quality for Diagnostic Computed Tomography in Adults eCQM are both reliable and valid. This may include analyzing data to identify outliers and common characteristics of outlier submissions.</p>

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Will there be any exemptions/exclusions for hospitals required to report for OQR?	There will not be exemptions and exclusions.
So, this is a choice for eCQM for 2025 for PPS hospitals, but not a requirement. Is that correct?	That is correct. A hospital may choose to submit this measure as one of the three self-selected eCQMs to meet the eCQM reporting requirement for the Hospital IQR and Medicare Promoting Interoperability Programs for the CY 2025 reporting period/FY 2027 payment determination. This measure is not currently mandatory.
When you say this measure is required CY 2027 does that mean that we need it in place by for 2026 patient to report on by 2027 or in place by 2027 for reporting in 2028? Will charts and exams completed in 2026 or 2027 be mandatory reporting?	All outpatient quality reporting (OQR) measures must be reported to avoid a 2% reimbursement reduction. Exams completed in 2027 will be subject to OQR reimbursement incentives.
Could you please explain when the measure will be required. Does it mean it will be required for JC reporting or for Promoting Interoperability/MIPS reporting or both??	Please consult The Joint Commission for information on their reporting program. A hospital may choose to submit this measure as one of the three self-selected eCQMs to meet the eCQM reporting requirement for the Hospital IQR and Medicare Promoting Interoperability Programs for the CY 2025 reporting period/FY 2027 payment determination. This measure is not currently mandatory. Questions about when this measure may be made mandatory for IQR and PI should be directed to CMS. For the Hospital OQR program, the measure is voluntary for the CY 2025 reporting period/FY2027 payment determination. For the outpatient program, mandatory reporting begins in 2027.
Is reimbursement affected by a facility's ExRad score?	For more information about reimbursement under CMS quality initiatives, please visit <a href="https://mmshub.cms.gov/about-quality/quality-at-CMS/quality/programs">https://mmshub.cms.gov/about-quality/quality-at-CMS/quality/programs</a> .
How will CMS review vendor results or flag results inconsistent with measure specifications? EMRs are beholden to third party software providing the 3 linking variables. Will the third-party software and the algorithms associated with calculation be subject to review if a hospital is selected for manual/clinical validation?	As with all eCQMs, CMS will monitor measure results to ensure that all reported data for the Excessive Radiation Dose or Inadequate Image Quality for Diagnostic Computed Tomography in Adults eCQM are both reliable and valid. This may include analyzing data to identify outliers and common characteristics of outlier submissions.
Is the IQR Measure still currently on hold?	For CMS quality programs, the ExRad IQR measure is not on hold and is part of the current, existing measure set.