

Quality ID #512: Prevalent Standardized Kidney Transplant Waitlist Ratio (PSWR)

2026 COLLECTION TYPE:

MERIT-BASED INCENTIVE PAYMENT SYSTEM (MIPS) CLINICAL QUALITY MEASURE (CQM)

MEASURE TYPE:

Process

DESCRIPTION:

The number of prevalent dialysis patients in a practitioner group who are under the age of 75 and were listed on the kidney or kidney-pancreas transplant waitlist or received a living donor transplant. The practitioner group is inclusive of physicians and advanced practice providers. The measure is the ratio-observed number of waitlist events in a practitioner group to its expected number of waitlist events. The measure uses the expected waitlist events calculated from a Cox model, which is adjusted for age, patient comorbidities, and other risk factors at the time of dialysis.

INSTRUCTIONS:

Reporting Frequency:

This measure is to be submitted a minimum of once per performance period for denominator eligible cases as defined in the denominator criteria.

Intent and Clinician Applicability:

The intent of this measure is to track initial placement on the kidney or kidney-pancreas transplantation waitlist, or receipt of a living donor transplant for patients on dialysis. This measure may only be submitted by Merit-based Incentive Payment System (MIPS) eligible clinician groups who provide the measure-specific denominator coding. This measure is not intended to be reported by individual clinicians.

Measure Strata and Performance Rates:

This measure contains two submission criteria which together ensure capture of the full patient population and assessment of timely and continued listing to the kidney or kidney-pancreas transplant waitlist or receipt of a living donor transplant.

There are 2 Submission Criteria for this measure:

- 1) Patients on dialysis who had documentation of waitlist status at the end of the performance period.
AND
- 2) Prevalent Standardized Waitlist Ratio (PSWR).

Submission Criteria 1 ensures a complete patient population is being assessed and measure requirements are being met. Submission Criteria 2 evaluates the expected number of waitlist events for observed events.

The measure will be calculated with 2 performance rates:

- 1) Percentage of patients on dialysis who had documentation of waitlist status at the end of the performance period.
- 2) Ratio of the observed number of waitlist events to the number of expected waitlist events for each calendar year.

For accountability reporting in the CMS MIPS program, the rate for Submission Criteria 2 is used for performance. For the purposes of submitting this measure, use the Data Completeness determined in Submission Criteria 1.

Implementation Considerations:

For the purposes of MIPS implementation, this patient-process measure is submitted as a ratio based upon reporting for each patient during the performance period.

Unique to this measure is the Minimum Process of Care Performance Threshold Requirement. This measure-based threshold requires that at least 90% of all eligible patients have an outcome documented by the end of the performance period. Therefore, if the performance rate for Submission Criteria 1 is below 90%, the MIPS eligible clinician would not be able to meet the denominator for Submission Criteria 2 and this measure CANNOT BE SUBMITTED. CMS anticipates the performance rate for Submission Criteria 2 will be calculated using all denominator eligible patients for Submission Criteria 1.

CMS determined that it's not technologically feasible to calculate the 1st performance rate using the existing submission JavaScript Object Notation (JSON) structure. As a result, only the 2nd submission criteria will be accepted when submitting the measure for the performance period. While not required for submission, MIPS eligible clinicians, groups, or third-party intermediaries must continue to collect and calculate the 1st submission criteria as the data is utilized to determine if the threshold requirement for the 2nd submission criteria is met and the measure can be reported.

The noted exclusions represent conditions for which transplant waitlist candidacy is highly unlikely, and which can be identified readily with available data. Patients who were attributed to dialysis practitioner groups with fewer than 11 patients or 2 expected events are not excluded from the measure. If a provider cannot be matched to a TIN, patients will be grouped into a separate 'null' TIN and still included in the models but are not summarized to any valid individual TINs. All patients who meet the denominator inclusion criteria are included and used to model a given dialysis practitioner group's expected waitlist rate. If a dialysis practitioner group has fewer than 11 patients or 2 expected events, then the dialysis practitioner group is excluded from reporting outcomes.

Technical notes describing the statistical methods used to calculate the measure, including model details, can be found on the following publicly available webpage: <https://dialysisdata.org/content/MIPS>. Please refer to the technical notes when calculating this measure.

Telehealth:

NOT TELEHEALTH ELIGIBLE: This measure is not appropriate for nor applicable to the telehealth setting. This measure is procedure based and therefore doesn't allow for the denominator criteria to be conducted via telehealth. It would be appropriate to remove these patients from the denominator eligible patient population. Telehealth eligibility is at the measure level for inclusion within the denominator eligible patient population and based on the measure specification definitions which are independent of changes to coding and/or billing practices.

Measure Submission:

The quality data codes listed do not need to be submitted by MIPS eligible clinicians, groups, or third party intermediaries that utilize this collection type for submissions; however, these codes may be submitted for those third party intermediaries that utilize Medicare Part B claims data. The coding provided to identify the measure criteria: Denominator or Numerator, may be an example of coding that could be used to identify patients that meet the intent of this clinical topic. When implementing this measure, please refer to the 'Reference Coding' section to determine if other codes or code languages that meet the intent of the criteria may also be used within the medical record to identify and/or assess patients. For more information regarding Application Programming Interface (API), please refer to the Quality Payment Program (QPP) website.

SUBMISSION CRITERIA 1: PATIENTS ON DIALYSIS WHO HAD DOCUMENTATION OF WAITLIST STATUS AT THE END OF THE PERFORMANCE PERIOD

DENOMINATOR (CRITERIA 1):

Patients age less than 75 years who are on dialysis during the performance period prior.

DENOMINATOR NOTE:

Dialysis should have occurred during the 2025 performance period.

If a dialysis practitioner group has fewer than 11 patients, then the dialysis practitioner group is excluded from reporting outcomes. The Nursing Home Minimum Dataset (MDS) may be used to identify patients in skilled nursing facilities.

For the purposes of this measure, the transplant program or Organ Procurement and Transplant Network (OPTN) can be utilized as the data source for the numerator as well as patients on the kidney/kidney-pancreas waitlist prior to the initiation of dialysis.

Denominator Criteria 1(Eligible Cases):

Patients aged <75 years at the beginning of the performance period

AND

Receiving ESRD MCP dialysis services by the provider during the performance period: M1491

AND NOT

DENOMINATOR EXCLUSIONS:

Patients admitted to a skilled nursing facility (SNF) during the period of evaluation: M1486

OR

Patients in hospice in the year before or during the period of evaluation: M1487

OR

Patients with a diagnosis for dementia in the year before or during the period of evaluation: M1488

NUMERATOR (CRITERIA 1):

Patients who were on dialysis and had documentation of status at the end of the year.

NUMERATOR NOTE:

Documentation of the patient's status should indicate if denominator eligible patients were either added or not added to the kidney or kidney-pancreas transplant waitlist or if they received a living donor transplant. Patients who do not have documentation of their status at the end of the year, would be reported as a performance not met. Documentation within the medical record doesn't have to occur on the last day of the year.

Numerator Options:

Performance Met: Patient status documented (M1489)

OR

Performance Not Met: Patient status not documented (M1490)

AND

SUBMISSION CRITERIA 2: PREVALENT STANDARDIZED WAITLIST RATIO (PSWR)

DENOMINATOR (CRITERIA 2):

The denominator for the Prevalent Standardized Waitlist Ratio (PSWR) is the total number of patients on dialysis under the age of 75 in the practitioner group according to each patient's treatment history each year.

DENOMINATOR NOTE:

If a dialysis practitioner group has fewer than 11 patients or 2 expected waitlist events, then the dialysis practitioner group is excluded from reporting outcomes. The Nursing Home Minimum Dataset (MDS) may be used to identify patients in skilled nursing facilities.

For the purposes of this measure, the transplant program or Organ Procurement and Transplant Network (OPTN) can be utilized as the data source for the numerator as well as patients on the kidney/kidney-pancreas waitlist prior to the initiation of dialysis.

Denominator Criteria 2 (Eligible Cases):

Minimum Process of Care Threshold Requirement: At least 90% of all eligible patients had documentation

indicating their status as of the last day of each year after initializing dialysis (M1489 submitted for Submission Criteria 1)

AND

Patients aged <75 years old at the beginning of the performance period

AND

Receiving ESRD MCP dialysis services by the provider during the performance period: M1491

AND NOT

DENOMINATOR EXCLUSIONS:

Patients admitted to a skilled nursing facility (SNF) during the period of evaluation: M1486

OR

Patients in hospice in the year before or during the period of evaluation: M1487

OR

Patients with a diagnosis for dementia in the year before or during the period of evaluation: M1488

NUMERATOR (CRITERIA 2):

The ratio of the observed number of waitlist events in a practitioner group to the model-based expected number of waitlist events.

Definitions:

Expected Waitlist Event – A model-based expected number of waitlist events that is calculated from a Cox model, adjusting for age, incident and prevalent comorbidities, previous waitlist, previous transplant, dual Medicare-Medicaid eligibility, Area Deprivation Index (from patient's residence zip code) and transplant center characteristics. The number of days at risk (time from the latest of (1) start or re-start of dialysis, (2) January 1, or (3) entrance into the practitioner group, or (4) de-listed from kidney waitlist to the earliest of (1) being placed on the waitlist, (2) receiving a living donor transplant, (3) death, (4) exit from the practitioner group, or (5) December 31) for each patient is used to calculate the expected waitlist or living donor transplant events. Patients can be included more than once in a period.

Observed Waitlist Event – The number of patients placed on the kidney or kidney-pancreas waitlist or who received a living donor transplant during the performance period.

NUMERATOR NOTE:

For the purposes of this measure, the transplant program or Organ Procurement and Transplant Network (OPTN) can be utilized as the data source for the numerator.

Calculations for the ratio measures are detailed below, but for more information on how to calculate the PSWR, please see Technical Notes on the Merit-based Incentive Payment System Clinical Quality Measure (MIPS CQM) for Prevalent Standardized Waitlist Ratio (PSWR) found at <https://dialysisdata.org/content/MIPS>.

- **Step One:** Calculate days at risk.
- **Step Two:** For each patient period, calculate the linear prediction using the Model Coefficients table in the PSWR_ModellInfo.xlsx Excel file located at <https://dialysisdata.org/content/MIPS>. Table 2 shows these details for the example. Note the calculations can be affected by rounding. For this calculation example, we show only four decimal places for ease of display.
- **Step Three:** Use the Excel file to find the baseline cumulative hazard, by finding the corresponding hazard value given the number of days at risk in the patient period. Table 3 shows these details for the example. Again, note the baseline cumulative hazard values are shown to four decimal places in this example.
- **Step Four:** Using the linear prediction and baseline cumulative hazard in Tables 2 and 3, compute the expected number of waitlists for each of these patients by calculating the exponentiation of the linear prediction and multiplying by the baseline cumulative hazard.
 - The expected number of waitlists of a patient is calculated as:

$$\begin{aligned} \text{Expected number of waitlists} \\ = \exp(\text{Linear prediction})^*(\text{Baseline cumulative hazard}) \end{aligned}$$

- **Step Five:** Calculate the total expected number of waitlists by adding each patient's expected number of waitlists for all the patients.
- **Step Six:** Finally, calculate PSWR by dividing the total number of observed events (waitlists or living donor transplants) by the total number of expected waitlists:

$$PSWR = \frac{\text{Sum observed waitlist}}{\text{Sum expected waitlist}}$$

RATIONALE:

A measure focusing on the outcome of waitlisting is appropriate for several reasons. First, in preparing patients for suitability for waitlisting, dialysis practitioners optimize their health and functional status, improving their overall health state. Second, waitlisting is a necessary step prior to potential receipt of a deceased donor kidney transplant (receipt of a living donor kidney is also accounted for in the measure), which is known to be beneficial for survival and quality of life [1]. Third, dialysis practitioners exert substantial control over the processes that result in waitlisting. This includes proper education of dialysis patients on the option for transplant, referral of appropriate patients to a transplant center for evaluation, and assisting patients with completion of the transplant evaluation process, in order to increase their candidacy for transplant waitlisting. These types of activities are included as part of the conditions for coverage for Medicare certification of ESRD dialysis facilities. Finally, wide regional and facility variations in waitlisting rates highlight substantial room for improvement for this measure [2-5].

Additionally, this measure focuses specifically on the population of prevalent patients on dialysis, examining for the occurrence of new waitlisting or living donor transplant events. This will evaluate and encourage rapid attention from dialysis practitioner groups to the optimization of health of patients to ensure early access to the waitlist, which has been demonstrated to be particularly beneficial [6-9]. Given that many patients may not be ready for transplant candidacy immediately following initiation of dialysis, this measure encourages ongoing attention to transplant candidacy throughout the period following dialysis initiation.

CLINICAL RECOMMENDATION STATEMENTS:

Empirical support for the value of waitlisting to patients comes from a published study reporting on a large survey of 409 patients or family members who agreed to receiving emails from the National Kidney Foundation [10]. Participants include both patients with advanced chronic kidney disease prior to transplant, and recipients of transplants, and were asked about their priorities in choice of a transplant center. Notably, participants were most likely (a plurality of participants) to rank waitlisting characteristics (such as ease of getting on the waitlist) as the most important feature, in contrast to other transplant center characteristics such as post-transplant outcomes and practical considerations (e.g., distance to center).

National or large regional studies provide strong empirical support for the association between processes under dialysis practitioner control and subsequent waitlisting. In one large regional study conducted on facilities in the state of Georgia, a standardized dialysis facility referral ratio was developed, adjusted for age, demographics and comorbidities [11].

There was substantial variability across dialysis facilities in referral rates, and a Spearman correlation performed between ranking on the referral ratio and dialysis facility waitlist rates was highly significant ($r=0.35$, $p<0.001$). A national study using registry data (United States Renal Data System) from 2005-2007 examined the association between whether patients were informed about kidney transplantation (based on reporting on the Medical Evidence Form 2728) and subsequent access to kidney transplantation (waitlisting or receipt of a live donor transplant) [12]. Approximately 30% of patients were uninformed about kidney transplantation, and this was associated with half the rate of access to transplantation compared to patients who were informed. In a related survey study of 388 hemodialysis patients, whether provision of information about transplantation by nephrologists or dialysis staff occurred was directly confirmed with patients [13]. Patient report of provision of such information was associated with a three-fold increase in likelihood of waitlisting. Finally, a large survey study of 170 dialysis facilities in the Heartland Kidney Network (Iowa, Kansas, Missouri and Nebraska) was conducted to examine transplant education practices [14]. Facilities employing multiple (>3) transplant education strategies (e.g., provision of brochures, referral to formal transplant education program, distribution of transplant center contact information) had 36% higher waitlist rates compared to facilities employing fewer strategies.

REFERENCES:

1. Tonelli M, Wiebe N, Knoll G, et al. Systematic review: kidney transplantation compared with dialysis in clinically relevant outcomes. *American Journal of Transplantation* 2011;11:2093-2109.
2. Ashby VB, Kalbfleisch JD, Wolfe RA, et al. Geographic variability in access to primary kidney transplantation in the United States, 1996-2005. *American Journal of Transplantation* 2007; 7 (5 Part 2):1412-1423.
3. Satayathum S, Pisoni RL, McCullough KP, et al. Kidney transplantation and wait-listing rates from the international Dialysis Outcomes and Practice Patterns Study (DOPPS). *Kidney Intl* 2005 Jul; 68 (1):330-337.
4. Patzer RE, Plantinga L, Krisher J, Pastan SO. Dialysis facility and network factors associated with low kidney transplantation rates among United States dialysis facilities. *Am J Transplant*. 2014 Jul; 14(7):1562-72.
5. Melanson TA, Gander JC, Rossi A, et al. Variation in Waitlisting Rates at the Dialysis Facility Level in the Context of Goals for Improving Kidney Health in the United States. *Kidney International Reports* 2021;6:1965-1968.
6. Meier-Kriesche, Herwig-Ulf, and Bruce Kaplan. "Waiting time on dialysis as the strongest modifiable risk factor for renal transplant outcomes: A Paired Donor Kidney Analysis." *Transplantation* 74.10 (2002): 1377-1381.
7. Meier-Kriesche, H. U., Port, F. K., Ojo, A. O., Rudich, S. M., Hanson, J. A., Cibrik, D. M., ... & Kaplan, B. (2000). Effect of waiting time on renal transplant outcome. *Kidney international*, 58(3), 1311-1317.
8. Schold JD, Huml AM, Poggio ED et al. Patients with High Priority for Kidney Transplant Who Are Not Given Expedited Placement on the Transplant Waiting List Represent Lost Opportunities. *J Am Soc Nephrol* 2021;32:1733-1746.
9. Schold J and Meier-Kreische HU. Which Renal Transplant Candidates Should Accept Marginal Kidneys in Exchange for a Shorter Waiting Time on Dialysis? *Clin J Am Soc Nephrol* 2006;1:532-538.
10. Husain SA, Brennan C, Michelson A, Tsapepas D, Patzer RE, Schold JD, Mohan S. Patients prioritize waitlist over posttransplant outcomes when evaluating kidney transplant centers. *Am J Transplant*. 2018 Nov;18(11):2781-2790.
11. Paul S, Plantinga LC, Pastan SO, Gander JC, Mohan S, Patzer RE. Standardized Transplantation Referral Ratio to Assess Performance of Transplant Referral among Dialysis Facilities. *Clin J Am Soc Nephrol*. 2018 Feb 7;13(2):282-289.
12. Kucirka LM, Grams ME, Balhara KS, Jaar BG, Segev DL. Disparities in provision of transplant information affect access to kidney transplantation. *Am J Transplant*. 2012 Feb;12(2):351-7.
13. Salter ML, Orandi B, McAdams-DeMarco MA, Law A, Meoni LA, Jaar BG, Sozio SM, Kao WH, Parekh RS, Segev DL. Patient- and provider-reported information about transplantation and subsequent waitlisting. *J Am Soc Nephrol*. 2014 Dec;25(12):2871-7.
14. Waterman AD, Peipert JD, Goalby CJ, Dinkel KM, Xiao H, Lentine KL. Assessing Transplant Education Practices in Dialysis Centers: Comparing Educator Reported and Medicare Data. *Clin J Am Soc Nephrol*. 2015 Sep 4;10(9):1617-25.

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**2026 Clinical Quality Measure Flow for Quality ID #512:
Prevalent Standardized Kidney Transplant Waitlist Ratio (PSWR)**
Multiple Performance Rates

Disclaimer: Refer to the measure specification for specific coding and instructions to submit this measure.

ACCOUNTABILITY REPORTING IN THE CMS MIPS PROGRAM: SAMPLE CALCULATIONS

****Minimum Process of Care Threshold Requirement (Submission Criteria 1) =**

$$\frac{\text{Performance Met (a}^1=10 \text{ patients)} + \text{Performance Not Met (c}^1=1 \text{ patient)}}{\text{Eligible Population / Denominator (d}^1=12 \text{ patients)}} = \frac{11 \text{ patients}}{12 \text{ patients}} = 91.66\%$$

Overall Data Completeness (Submission Criteria 2) =

$$\frac{\text{Observation Instances (a}^1=10 \text{ patients} + \text{c}^1=1 \text{ patient)}}{\text{Eligible Population / Denominator (d}^1=12 \text{ patients)}} = \frac{11 \text{ patients}}{12 \text{ patients}} = 91.66\%$$

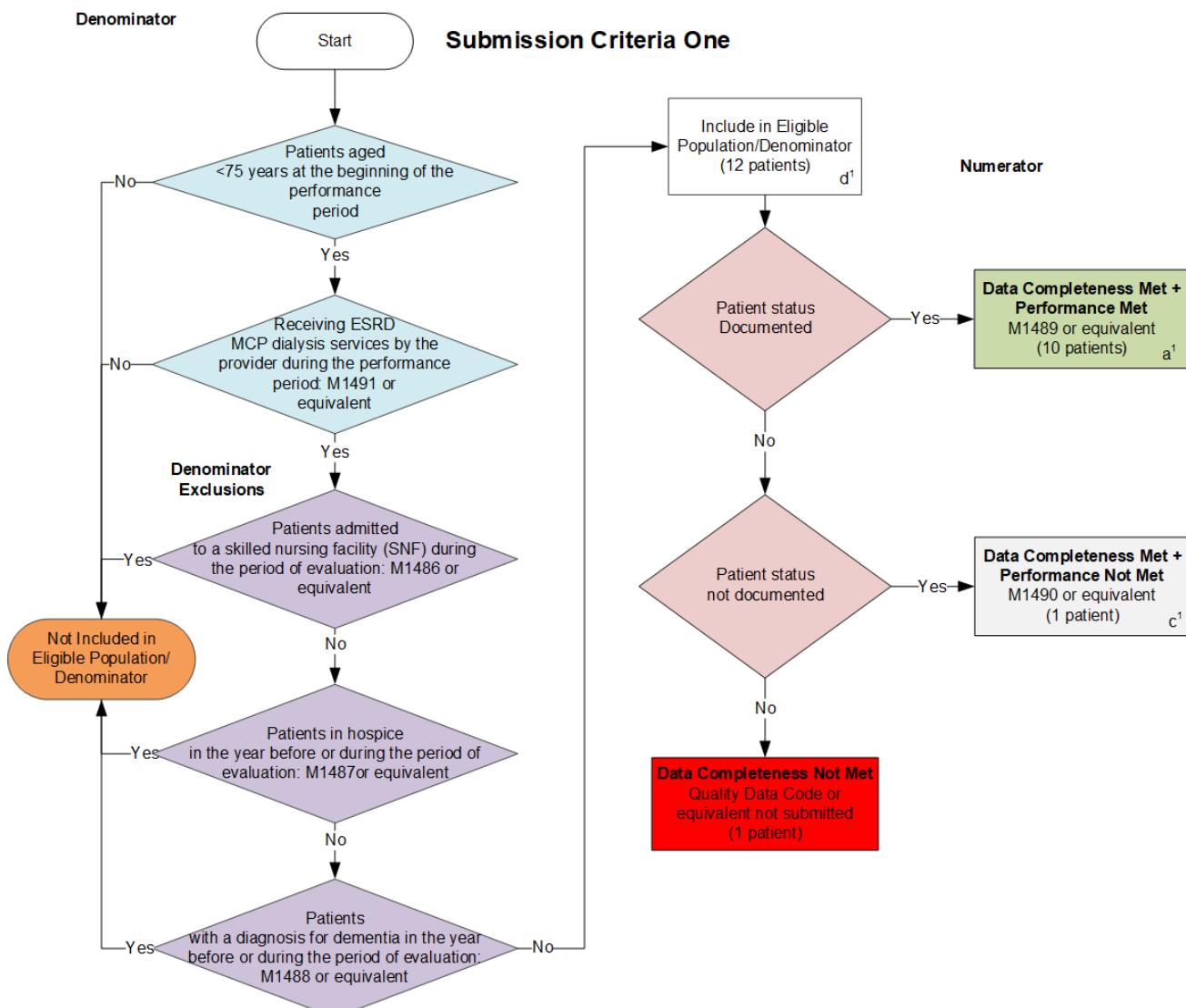
Overall Performance Rate (Performance Rate 2 - Continuous Variable) =

$$\frac{\text{Sum observed waitlists (3 + 2)}}{\text{Sum expected waitlists (4.46)}} = \frac{5 \text{ observed waitlist}}{4.46 \text{ expected waitlist}} = 1.12$$

*See the posted measure specification for specific coding and instructions to submit this measure. For a more technical workflow which includes applied model adjustments please refer to the technical notes found at <https://dialysisdata.org/content/MIPS>.

*Unique to this measure is the Minimum Process of Care Performance Threshold Requirement. This measure-based threshold requires that at least 90% of all eligible patients have an outcome documented by the end of the performance period.

NOTE: Submission Frequency: Patient-Process



SAMPLE CALCULATIONS: SUBMISSION CRITERIA ONE

Data Completeness =

$$\frac{\text{Performance Met (a}^1=10 \text{ patients)} + \text{Performance Not Met (c}^1=1 \text{ patient)}}{\text{Eligible Population / Denominator (d}^1=12 \text{ patients)}} = \frac{11 \text{ patients}}{12 \text{ patients}} = 91.66\%$$

Performance Rate=

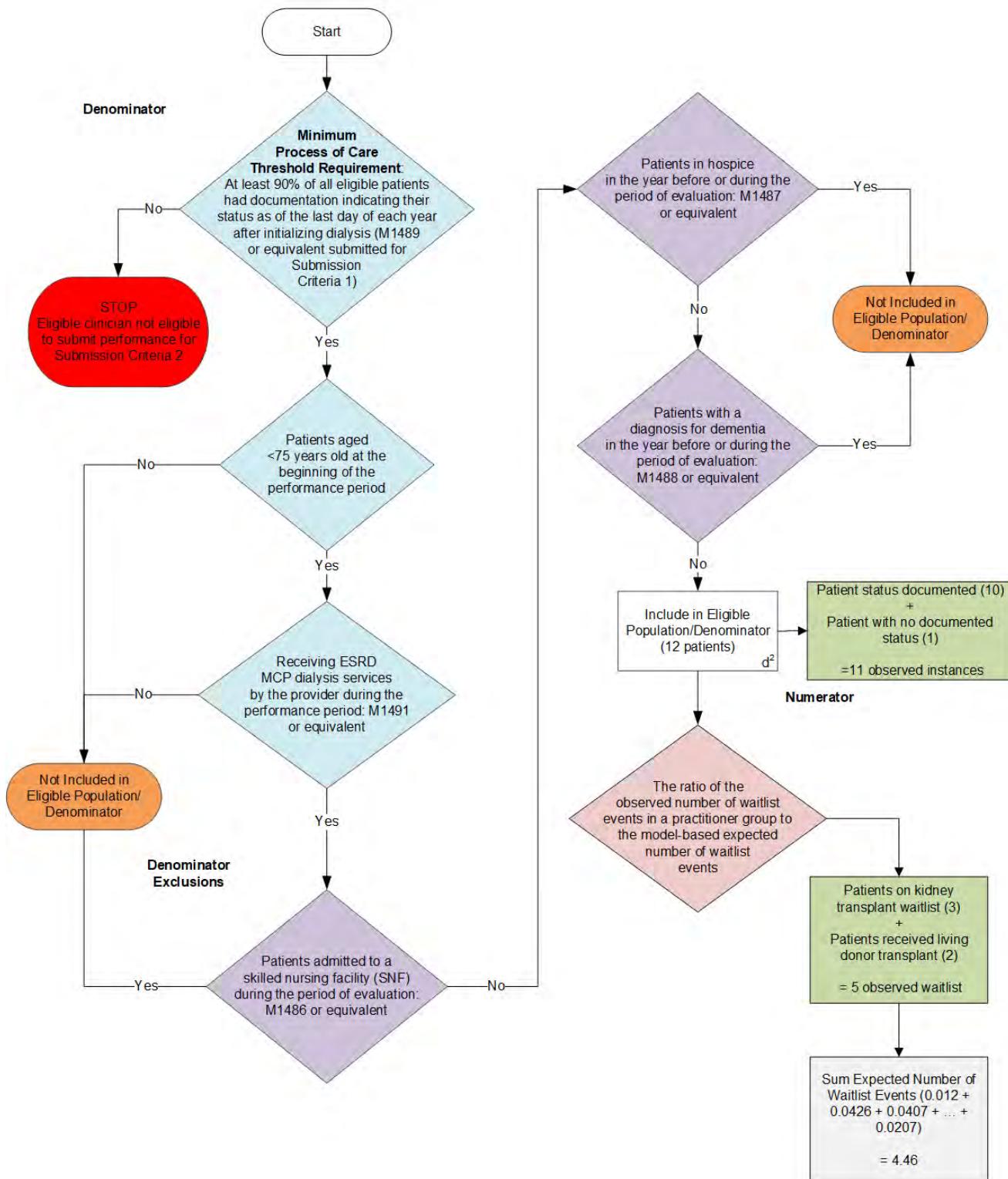
$$\frac{\text{Performance Met (a}^1=10 \text{ patients)}}{\text{Data Completeness Numerator (11 patients)}} = \frac{10 \text{ patients}}{11 \text{ patients}} = 90.90\%$$

*See the posted measure specification for specific coding and instructions to submit this measure. For a more technical workflow which includes applied model adjustments please refer to the technical notes found at <https://dialysisdata.org/content/MIPS>.
NOTE: Submission Frequency: Patient-Process

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Submission Criteria Two



SAMPLE CALCULATIONS: SUBMISSION CRITERIA TWO

For information on how to calculate the Prevalent Standardized Kidney Transplant Waitlist Ratio (PSWR), please see Technical Notes on the Merit-based Incentive Payment System Clinical Quality Measure (MIPS CQM) for PSWR found at <https://dialysisdata.org/content/MIPS>.

*See the posted measure specification for specific coding and instructions to submit this measure. For a more technical workflow which includes applied model adjustments please refer to the technical notes found at <https://dialysisdata.org/content/MIPS>.

NOTE: Submission Frequency: Patient-Process

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2026 Clinical Quality Measure Flow Narrative for Quality ID #512: Prevalent Standardized Kidney Transplant Waitlist Ratio (PSWR)

Disclaimer: Refer to the measure specification for specific coding and instructions to submit this measure.

Multiple Performance Rates

Accountability Reporting In The CMS MIPS Program: Sample Calculations

Minimum Process of Care Threshold Requirement (Submission Criteria 1) equals Performance Met (a¹ equals 10 patients) plus Performance Not Met (c¹ equals 1 patient) divided by Eligible Population/Denominator (d¹ equals 12 patients). All equals 11 patients divided by 12 patients. All equals 91.66 percent.

Overall Data Completeness Rate (Submission Criteria 2) equals Observation Instances (a¹ equals 10 patients plus c¹ equals 1 patient) divided by Eligible Population/Denominator (d¹ equals 12 patients). All equals 11 patients divided by 12 patients. All equals 91.66 percent.

Overall Performance Rate (Performance Rate 2 – Continuous Variable) equals Sum observed waitlists (3 + 2) divided by Sum expected waitlists (4.46). All equals 5 observed waitlist divided by 4.46 expected waitlist. All equals 1.12.

*See the posted measure specification for specific coding and instructions to submit this measure. For a more technical workflow which includes applied model adjustments please refer to the technical notes found at <https://dialysisdata.org/content/MIPS>.

**Unique to this measure is the Minimum Process of Care Performance Threshold Requirement. This measure-based threshold requires that at least 90% of all eligible patients have an outcome documented by the end of the performance period.

NOTE: Submission Frequency: Patient-Process

Submission Criteria One:

1. Start with Denominator
2. Check *Patients aged less than 75 years at the beginning of the performance period:*
 - a. If *Patients aged less than 75 years at the beginning of the performance period* equals No, do not include in *Eligible Population/Denominator*. Stop processing.
 - b. If *Patients aged less than 75 years at the beginning of the performance period* equals Yes, proceed to check *Receiving ESRD MCP dialysis services by the provider during the performance period.*
3. Check *Receiving ESRD MCP dialysis services by the provider during the performance period:*
 - a. If *Receiving ESRD MCP dialysis services by the provider during the performance period* equals No, do not include in *Eligible Population/Denominator*. Stop processing.
 - b. If *Receiving ESRD MCP dialysis services by the provider during the performance period* equals Yes, proceed to check *Patients admitted to a skilled nursing facility (SNF) during the period of evaluation.*
4. Check *Patients admitted to a skilled nursing facility (SNF) during the period of evaluation:*
 - a. If *Patients admitted to a skilled nursing facility (SNF) during the period of evaluation* equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.
 - b. If *Patients admitted to a skilled nursing facility (SNF) during the period of evaluation* No, proceed to check *Patients in hospice in the year before or during the period of evaluation.*
5. Check *Patients in hospice in the year before or during the period of evaluation:*

- a. If *Patients in hospice in the year before or during the period of evaluation* equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.
- b. If *Patients in hospice in the year before or during the period of evaluation* equals No, proceed to check *Patients with a diagnosis for dementia in the year before or during the period of evaluation*.

6. Check *Patients with a diagnosis for dementia in the year before or during the period of evaluation*:
 - a. If *Patients with a diagnosis for dementia in the year before or during the period of evaluation* equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.
 - b. If *Patients with a diagnosis for dementia in the year before or during the period of evaluation* equals No, include in *Eligible Population/Denominator*.
7. Denominator Population:
 - Denominator Population is all Eligible Patients in the Denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d^1 equals 12 patients in the Sample Calculation.
8. Start Numerator
9. Check *Patient status documented*:
 - a. If *Patient status documented* equal Yes, include in *Data Completeness Met and Performance Met*.
 - *Data Completeness Met and Performance Met* letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a^1 equals 10 patients in the Sample Calculation.
 - b. If *Patient status documented* equals No, proceed to check *Patient status not documented*.
10. Check *Patient status not documented*:
 - a. If *Patient status not documented* equals Yes, include in *Data Completeness Met and Performance Not Met*.
 - *Data Completeness Met and Performance Not Met* letter is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c^1 equals 1 patient in the Sample Calculation.
 - b. If *Patient status not documented* equals No, proceed to check *Data Completeness Not Met*.
11. Check *Data Completeness Not Met*:
 - If *Data Completeness Not Met*, the Quality Data Code or equivalent was not submitted. 1 patient has been subtracted from the Data Completeness Numerator in the Sample Calculation.

Sample Calculations: Submission Criteria One

Data Completeness equals Performance Met (a^1 equals 10 patients) plus Performance Not Met (c^1 equals 1 patient) divided by Eligible Population/Denominator (d^1 equals 12 patients). All equals 11 patients divided by 12 patients. All equals 91.66 percent.

Performance Rate equals Performance Met (a^1 equals 10 patients) divided by Data Completeness Numerator (11 patients). All equals 10 patients divided by 11 patients. All equals 90.90 percent.

*See the posted measure specification for specific coding and instructions to submit this measure. For a more technical workflow which includes applied model adjustments please refer to the technical notes found at <https://dialysisdata.org/content/MIPS>.

NOTE: Submission Frequency: Patient-Process

The measure diagrams were developed by CMS as a supplemental resource to be used in conjunction with the measure specifications. They should not be used alone or as a substitution for the measure specification.

Submission Criteria Two:

1. Start with Denominator
2. Check *Minimum Process of Care Threshold Requirement: At least 90% of all eligible patients had documentation indicating their status as of the last day of each year after initializing dialysis:*
 - a. If *Minimum Process of Care Threshold Requirement: At least 90% of all eligible patients had documentation indicating their status as of the last day of each year after initializing dialysis* equals No, STOP, Eligible clinician not eligible to submit performance for Submission Criteria 2. Stop processing.
 - b. If *Minimum Process of Care Threshold Requirement: At least 90% of all eligible patients had documentation indicating their status as of the last day of each year after initializing dialysis* equals Yes, proceed to check *Patients aged less than 75 years old at the beginning of the performance period.*
3. Check *Patients aged less than 75 years old at the beginning of the performance period:*
 - a. If *Patients aged less than 75 years old at the beginning of the performance period* equals No, do not include in *Eligible Population/Denominator*. Stop processing.
 - b. If *Patients aged less than 75 years old at the beginning of the performance period* equals Yes, proceed to check *Receiving ESRD MCP dialysis services by the provider during the performance period.*
4. Check *Receiving ESRD MCP dialysis services by the provider during the performance period:*
 - a. If *Receiving ESRD MCP dialysis services by the provider during the performance period* equals No, do not include in *Eligible Population/Denominator*. Stop processing.
 - b. If *Receiving ESRD MCP dialysis services by the provider during the performance period* equals Yes, proceed to check *Patients admitted to a skilled nursing facility (SNF) during the period of evaluation.*
5. Check *Patients admitted to a skilled nursing facility (SNF) during the period of evaluation:*
 - a. If *Patients admitted to a skilled nursing facility (SNF) during the period of evaluation* equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.
 - b. If *Patients admitted to a skilled nursing facility (SNF) during the period of evaluation* No, proceed to check *Patients in hospice in the year before or during the period of evaluation.*
6. Check *Patients in hospice in the year before or during the period of evaluation:*
 - a. If *Patients in hospice in the year before or during the period of evaluation* equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.
 - b. If *Patients in hospice in the year before or during the period of evaluation* equals No, proceed to check *Patients with a diagnosis for dementia in the year before or during the period of evaluation.*

7. Check *Patients with a diagnosis for dementia in the year before or during the period of evaluation*:
 - a. If *Patients with a diagnosis for dementia in the year before or during the period of evaluation* equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.
 - b. If *Patients with a diagnosis for dementia in the year before or during the period of evaluation* equals No, include in *Eligible Population/Denominator*.
8. Denominator Population:
 - Denominator Population is all Eligible Patients in the Denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d^2 equals 12 patients in the Sample Calculation.
 - Patient status documented (10) plus patient with no documented status (1) equals 11 observed instances.
9. Start Numerator
10. Check *The ratio of the observed number of waitlist events in a practitioner group to the model-based expected number of waitlist events*:
 - a. Patients on kidney transplant waitlist (3) plus patients receiving living donor transplant (2) equals 5 observed waitlist.

Sample Calculations: Submission Criteria Two

For information on how to calculate the Prevalent Standardized Kidney Transplant Waitlist Ratio (PSWR), please see Technical Notes on the Merit-based Incentive Payment System Clinical Quality Measure (MIPS CQM) for PSWR found at <https://dialysisdata.org/content/MIPS>.

*See the posted measure specification for specific coding and instructions to submit this measure. For a more technical workflow which includes applied model adjustments please refer to the technical notes found at <https://dialysisdata.org/content/MIPS>.

NOTE: Submission Frequency: Patient-Process

The measure diagrams were developed by CMS as a supplemental resource to be used in conjunction with the measure specifications. They should not be used alone or as a substitution for the measure specification.