[#0369 Standardized Mortality Ratio for Dialysis Facilities]

[*Measure Description*] **The Standardized Mortality Ratio (SMR) is defined as the ratio of the number of deaths that occur for Medicare ESRD dialysis patients treated at a particular facility to the number of deaths that would be expected given the characteristics of the dialysis facility's patients and the national norm for dialysis facilities. This measure is calculated as a ratio but can also be expressed as a rate.**

Inputs	Activities	Outputs	Outcomes	Impacts
• Dialysis center staff (Nephrologists, Dietician, Social Worker, RN, Patient Care Technicians, Biomedical) • Facility specific Policies and Procedures that reflect requirements in CMS' CfC 494 Conditions for Participation in the Medicare ESRD Chronic Dialysis Program • Quality Improvement Team (including Medical Director and, Nurse Manager) • Partnerships with Acute Care Hospitals and Kidney Transplant Programs • EHR Systems and Data analytic tools	• Collect and analyze mortality data (e.g. cause of death; contribution related to facility care) • Identification of high-risk patients for intervention. • Assessment of dialysis adequacy (Kt/V) to ensure appropriate small solute clearance as well as target weight to ensure appropriate fluid balance. • Assessment by dietitian of patient adherence to dietary prescription (e.g. potassium; fluid gains); counselling and education as needed. • Strict adherence to Infection Prevention and Control Standards specified in CMS CfC494 and CDC published standards • Quality Improvement Team review of: medication errors; patient falls; treatment prescription errors; intradialytic events; development of quality improvement activities	• Records/logs of Staff Training in infection prevention, dialysis machine operation, vascular access management, QAPI. • QAPI meeting output focusing on patient death investigations, hospitalizations and intradialytic adverse events (e.g. loss of consciousness, hemorrhage) • Number of high-risk patients identified and who receive individualized care plans to reduce risk. • Number of patients with inadequate Kt/V, large interdialytic weight gain, or laboratory abnormalities (e.g. hyperkalemia, phosphorus, PTH). • Interdialytic Team (IDT) Assessments/Care Plans at the patient level- Mandated regular occurrence per CfC494	**Short-term** • Improved dialysis indicators (Kt/V, fluid gains, hyperkalemia) • Reduction in Intradialytic Adverse Events • Improvement in Dialysis Access Infections (catheter-related bacteremia; catheter-related peritonitis) Intermediate • Reduction in emergency department visits and hospitalizations **Long-term** • Improvement in dialysis facility risk-adjusted mortality. Observable reduction in chronic dialysis patient mortality rates, relative to general population mortality over time	• Sustained improvement in the poor survival rate observed for patient with ESRD, and particularly those receiving chronic dialysis therapies. • Reduction in cardiovascular complications related to kidney failure and dialysis. • Reduced burden of kidney disease on healthcare systems and communities. • Reduced healthcare costs related to dialysis complications and hospitalizations. • Increased life expectancy and quality of life for patients on dialysis.

Feedback Mechanisms
• Monthly performance reports to quality improvement team • Root cause analysis of intradialytic adverse events and patient deaths. • Learning collaboratives to share best practices among dialysis centers • Benchmarking against other facilities through Dialysis Facility Care Compare (DFCC), and Dialysis Facility Reports (DFR).
Assumptions
• Given that CMS Certification is required for participation in the Medicare Chronic Dialysis ESRD Program, we assume that dialysis facilities have the basic resources, funding, and administrative support required to provide safe and effective dialysis. • With appropriate education and support, patients are willing to participate in the dietary, behavioral and medical requirements for successful dialysis care. • Interdisciplinary collaboration is feasible across settings
External Factors
• Healthcare System Factors: workforce shortages, facility capacity, access to specialists. • Patient Factors: patient comorbidity risk factors not resulting from dialysis care • Geographic differences in general population mortality and socioeconomic factors.