

## 2.1 Logic Model - #3565 Standardized Emergency Department Encounter Ratio (SEDR) for Dialysis Facilities

*[Measure Description]* The Standardized Emergency Department Encounter Ratio is defined as the ratio of the observed number of emergency department (ED) encounters that occur for adult Medicare ESRD dialysis patients treated at a particular facility to the number of ED encounters that would be expected given the characteristics of the dialysis facility's patients and the national event rate for dialysis facilities.

Inputs	Activities	Outputs	Outcomes	Impacts
<ul style="list-style-type: none"> <li>Quality Improvement Staff (Medical Director, Nurse manager, Dietician Social Worker, RN/PCT)</li> <li>Facility specific Policies and Procedures that reflect requirements in CMS' CfC 494 Conditions for Participation in the Medicare ESRD Chronic Dialysis Program</li> <li>Clinical data systems (EHR, quality dashboards)</li> <li>Clinic data reports (Dialysis Facility Reports, Dialysis Facility Care Compare)</li> </ul>	<ul style="list-style-type: none"> <li>Assessment of current dialysis prescription (target weight; fluid removal rate; treatment length; BP control; control of electrolytes; adequacy of small solute clearance)</li> <li>Identify high-risk patients and conduct root cause analysis for common ED visits (e.g. fluid overload, hyperkalemia, vascular access, shortened / missed treatments)</li> <li>Adherence to Infection Prevention and Control Standards specified in CMS CfC494 and CDC</li> <li>Reconcile medications after hospitalization or other outpatient visits</li> <li>Deliver education to patients about when to obtain ED care vs. care at facility or by other providers and who they should call if questions or concerns arise between treatments</li> <li>Conduct team meetings to discuss high risk patients with focus on avoiding ED encounters and strengthen staff communication between treatment sessions</li> <li>Staff Training for consistent health maintenance over time, early symptom recognition and response, avoidable ED triggers, and alternative strategies.</li> </ul>	<ul style="list-style-type: none"> <li>Root cause analysis report (proportion of ED encounters with dialysis related causes: fluid overload, vascular access, etc)</li> <li>Records/logs of Staff Training in Infection Prevention</li> <li>QAPI meeting output focusing on patient intradialytic adverse events (e.g. hypotension, hemorrhage)</li> <li>Provider alerts or flags for high-risk patients</li> <li>Reports on proportion of staff / patient education activities</li> <li>Results of high-risk assessment; care management for other comorbidities</li> <li>Results of medication review and reconciliation</li> </ul>	<p>Short Term</p> <ul style="list-style-type: none"> <li>Increased awareness among providers of avoidable ED visits</li> <li>Improved identification of high-risk patients</li> <li>Improved patient engagement</li> </ul> <p>Medium-term</p> <ul style="list-style-type: none"> <li>Decrease in avoidable ED visits</li> <li>Fewer missed/shortened dialysis treatments and blood stream infections</li> <li>Enhanced care coordination, staff communication, continuity of care, and use of preventative care strategies</li> </ul> <p>Long-term</p> <ul style="list-style-type: none"> <li>Sustained reduction in ED encounter rates</li> <li>Improved clinical outcomes (hospitalization and mortality)</li> <li>Sustained health maintenance</li> </ul>	<ul style="list-style-type: none"> <li>Control escalating medical costs, support provision of cost-effective health care across inpatient and outpatient settings.</li> <li>Fewer preventable emergency department visits can result in better quality of life for patients</li> <li>Reduce strain on acute care providers</li> </ul>

Feedback Mechanisms
<ul style="list-style-type: none"> <li>• Patient and care partner feedback on care transitions and ED experience</li> <li>• Reports from Dialysis Facility Care Compare and Dialysis Facility Reports</li> <li>• Feedback from QAPI team and dialysis facility staff</li> </ul>
Assumptions
<ul style="list-style-type: none"> <li>• ED encounters can be meaningfully attributed to dialysis facility care and dialysis-related causes</li> <li>• High ED encounter rates are preventable with better long-term dialysis management.</li> <li>• Providers and patients have the capacity and motivation to implement changes. Patient participation in the dietary, behavioral and medical requirements for successful dialysis care likely vary from patient to patient. Given the requirements for patient education and patient participation in development of dialysis treatment plans of care, we assume that a significant portion of patient behavior and adherence to the plan of care is related to the quality and quantity of education, training, and engagement the patient, family and caregivers receive by the dialysis facility.</li> </ul>
External Factors
<ul style="list-style-type: none"> <li>• Regional variation in Emergency Department access (vs. urgent care centers)</li> <li>• Certain socioeconomic and comorbidity patient risk factors</li> <li>• Alternative payment models and CMS policy changes</li> <li>• Availability of primary and specialty care services</li> </ul>