

Opioid Use Disorder Cascade of Care: Defining a Taxonomy for Measurement

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## Abstract

Background: The opioid use disorder Cascade of Care (OUD Cascade) is a public health framework used by federal/state/other agencies and researchers to facilitate monitoring and evaluating responses to the opioid epidemic, including surveillance and performance evaluation. However, the field lacks standard stage definitions.

Objectives: Define a taxonomy to uniformly apply the OUD Cascade to improve delivery of OUD services and better compare patient outcomes across settings and populations.

Methods: We conducted a narrative review and synthesis focused on research and guidelines defining and measuring four key OUD Cascade stages: OUD identification, service engagement, medication initiation, and retention. Included articles come from peer reviewed literature and define and/or operationalize OUD Cascade stages and associated measures across six characteristics based on an adaptation of the Consolidated Health Economic Evaluation Reporting Standards (CHEERS) checklist including: 1) setting, 2) specific population, 3) perspective, 4) time horizon, 5) assumptions, and 6) analytic method.

Results: Our review (n=27 articles) and synthesis provide an overview of how OUD Cascade definitions and framework designs have been applied. We found considerable heterogeneity in study approaches for all four OUD Cascade stages. We define a taxonomy to guide future research emphasizing standardized definitions to harmonize efforts across settings. In particular we emphasize the need for clarity in defining criteria for sample construction (i.e. Identification), clear distinctions between receipt of care services generally (i.e. Engagement) from MOUD Initiation specifically, and Retention definitions that use a 30+ day gap in treatment to define discontinuation.

Conclusion: Establishing a shared taxonomy for key terms specifying OUD Cascade stages will help the field advance, compare approaches and results across settings, and improve population-level patient outcomes.

## Figure 1: Schematic for OUD Cascade Stages, Stage Definitions, Quality, and Intervention Efforts by Stage MOUD Identification Stages Retention Engagement Initiation Refers to a patient Does not rely on Initiation of MOUD in Typically 6+ months; Design seeking/starting services a setting that can documented OUD discontinuation in an outpatient MOUD provide long-term alone; MOUD use is defined as gaps 30+ Decisions\* pathognomonic care setting days without MOUD care Ability to link across Consider medication Time from While 6+ months is a Quality multiple data identification to adherence measures; quality measure, streams, detect hard sufficient choice/ engagement is a longer durations are Assessment dosing practices to reach populations **HEDIS** measure often needed Outreach and peer Case management Harm reduction and Low barrier care Interventions community outreach (e.g. pharmacy barriers) including telehealth services for linkage Funding for data ED dosing improves by stage Warm handoffs Patient-centered

## Affiliations & Funding

Address SDOH

systems, reporting

future outpatient use

use of drug testing

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**Funding**: Financial support for this work was provided by grants from the Substance Abuse Mental Health Services Opioid Response Network [TI-18-004 Subaward, Williams PI]. The funding organizations had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; or the decision to submit the manuscript for publication.