

Quality Measures for Medical Toxicology Patients: an 18-Month Update

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Background: Beginning in January 2018, the American College of Medical Toxicology (ACMT) initiated a program to collect quality measure data on medical toxicology patients. Utilizing the Toxicology Investigators Consortium (ToxIC) infrastructure, a Qualified Clinical Data Registry (QCDR) was established to provide the opportunity for participating sites to voluntarily report on six quality measures that were previously developed under the ACMT Quality Measure Initiative.

Hypothesis: Participation in a quality strategy for medical toxicologists through voluntary reporting in the Toxic Investigators Consortium Registry (ToxIC) can facilitate the development of benchmarks in medical toxicology treatment.

Methods: Over 18 months, data were collected on performance measures on the following topics: opioid misuse screening, pregnancy testing in poisoned patients, timely EKG assessment in drug ingestions, appropriate treatment of acetaminophen ingestions, assessment of suspected toxic alcohol exposures, and repeat assessment of salicylate concentrations in salicylate ingestions. The measured performance did not necessarily reflect the practice of the medical toxicologist since the care may have occurred prior to the medical toxicologist consultation (e.g., ordering of EKG after emergency medicine presentation); hence, the measures reflect the multidisciplinary care of the medical toxicology patient.

Results: Forty-nine medical toxicologists from 17 ToxIC sites participated in the ToxIC QCDR over 18 months. Performance rates were as follows: opioid screening 51.7%, pregnancy testing 74.6%, EKG assessment 54.3%, appropriate treatment of acetaminophen ingestions 14.7%, toxic alcohol assessment 36.7%, and serial salicylate determinations 23.1%.

Conclusion: Performance rates are considerably lower on medical toxicology patient performance measures than ideal benchmarks established by the Centers for Medicare and Medicaid Services (> 95% performance). Other specialties have already demonstrated that variability in healthcare delivery is not optimal for patient outcomes. Our data suggest medical toxicologists must continue to improve the quality and consistency of healthcare delivery to the poisoned patient.