ABSTRACT

Outpatient Electronic Medical Record Documentation Compliance Based on National Quality Indicators at Mulawarman Dental Hospital

Daivy Putri Anzelina Marbun, Ratno Adrianto

Correspondence E-mail : daivymarbun@gmail.com

Background : Electronic medical record (EMR) completeness is a dimension of care quality and data quality, yet its patterns in teaching dental hospitals are rarely analyzed.

Objective : To analyze EMR documentation compliance in outpatients at the Universitas Mulawarman Dental and Oral Hospital and to identify patterns, associations, and key findings, referencing the hospital minimum service standard.

Research Methods/ Implementation Methods : This retrospective study used secondary data from 3,959 visits (February, March, May–August 2026) and 499 April 2026 audit observations; the primary analysis covered 3,526 outpatient clinic visits, using chi-square, phi correlation, logistic regression, and timeliness analysis (within 24 hours).

Results :Item completeness was highest for diagnosis and ICD-10 (98.4%) and lowest for physician education (82.0%). The proportion of complete visits differed across months ($\chi^2 = 558.8$, $df = 5$, $p < 0.001$), with a sharp August decline concentrated among specific attending dentists. Physician education accounted for 63.5% of 998 incomplete visits. Month and attending dentist were associated with completeness, whereas student involvement was not (OR 1.52, $p = 0.33$). Of complete visits, 98.0% were finished within 24 hours of discharge. The April audit found 94.8% compliance, but informed consent was completed in 46.7% of applicable cases. August timestamps were shifted by about 12 hours.

Conclusion/Lesson Learned : Incompleteness reflected omission, not delay, and centered on physician education. Prevention at the point of care, provider-level feedback, and alignment of indicator definitions with the minimum service standard are needed.

Keyword : documentation compliance; electronic medical record; completeness; quality indicator; outpatient; dental hospital