Evaluating time to analgesia for care delivered by nurse practitioners in the emergency department.

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Objectives. To evaluate quality of care delivered to patients presenting to the emergency department (ED) with pain and managed by emergency nurse practitioners by measuring
1) Evaluate time to analgesia from initial presentation
2) Evaluate time from being seen to next analgesia
3) Pain score documentation

Methods. A retrospective explicit chart review of 128 consecutive patients with pain and managed by emergency nurse practitioners was conducted. Data collected included demographics, presenting complaint, pain scores, and time to first dose of analgesia. Patients were identified from the ED Patient Information System (Cerner log) and data were extracted from electronic medical records

Results. Pain scores were documented in 67 (52.3%; 95% CI: 43.3-61.2) patients. The median time to analgesia from presentation was 60.5 (IQR 30-87) minutes, with 34 (26.6%; 95% CI: 19.1-35.1) patients receiving analgesia within 30 minutes of presentation to hospital. There were 22 (17.2%; 95% CI: 11.1-24.9) patients who received analgesia prior to assessment by a nurse practitioner. Among patients that received analgesia after assessment by a nurse practitioner, the median time to analgesia after assessment was 25 (IQR 12-50) minutes, with 65 (61.3%; 95% CI: 51.4-70.6) patients receiving analgesia within 30 minutes of assessment.

Conclusions
The majority of patients assessed by nurse practitioners received analgesia within 30 minutes after assessment. However, opportunities for substantial improvement in such times along with documentation of pain scores were identified and will be targeted in future research.

Keywords: nurse practitioners, emergency department, pain, analgesia, audit, documentation