



An EMR Pain Page That Works: Partnering with a National EMR

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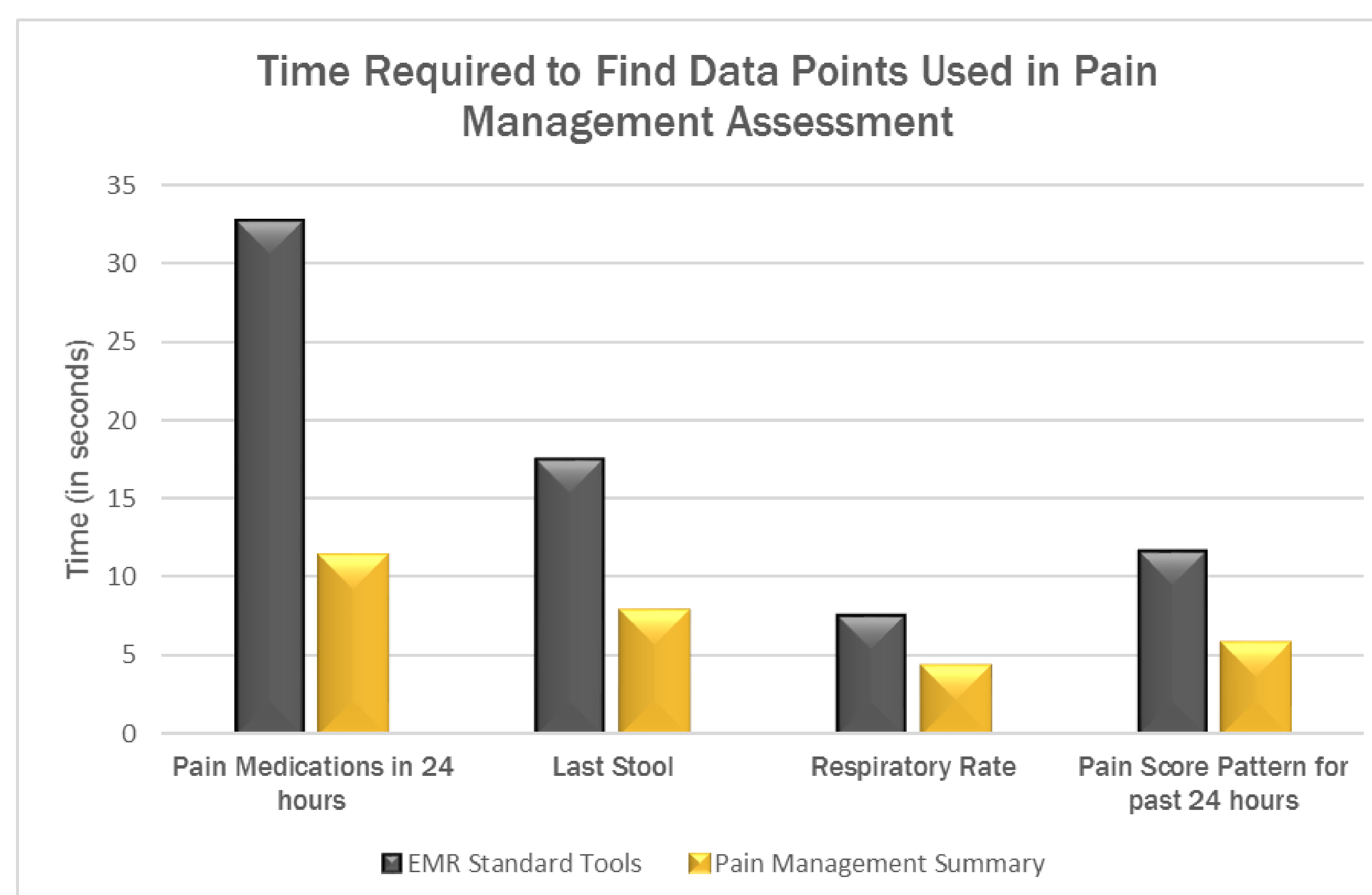
BACKGROUND

With 20% annual growth in inpatient palliative care census, maximizing time with patients and minimizing time spent in the electronic medical record (EMR) is essential.

Starting in 2014, the MU Health Care Palliative Care Team partnered in designing a Palliative Care and inpatient care MPage dedicated to supporting patient pain management. The Pain Management Summary MPage was implemented in an effort to improve the care team workflow and save time and effort required to find data supporting pain management decisions in the patient's EMR.

RESULTS

Improved Efficiencies for Clinicians



54%
reduction in time to find all primary pain data elements

Reductions in time to find individual pain data elements:

- Pain Medications in 24 hours: 65% decrease
- Last stool: 55% decrease
- Respiratory rate: 43% decrease
- Pain score pattern for past 24 hours: 51% decrease

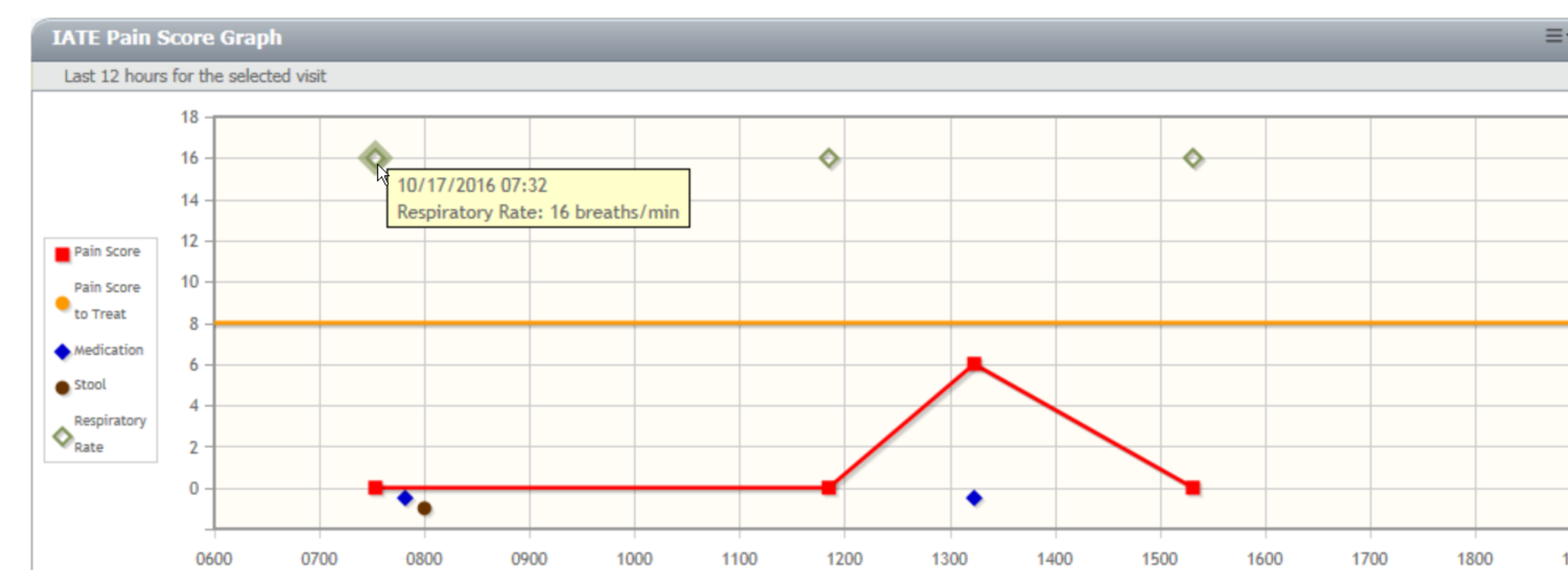
METHODS

Purpose: Evaluating the four primary data elements that support pain management

- Pain Medications over 24 hours
- Last Stool
- Respiratory Rate
- Pain score pattern over 24 hours

- **Time in Motion comparison** between EMR standard tools and Pain Management Summary Page
- **NASA Task Load Index** with Pain Management Summary Page
- **Participants:** 16 clinicians (attending physician, resident physician, medical student, registered nurse)

EHR PAIN MANAGEMENT SUMMARY



Medications	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800
LORazepam													
ibuprofen													
morphine													
morphine													
morphine													
morphine													
morphine (morphine IMMEDIATE (MSIR) 15 mg Tablet)										75 (mg)			
75 mg = 5 Tablet(s), form: Tablet, Oral, q2h, PRN for Pain, Breakthrough, first dose 10/04/16 9:17:00													
may give 30-60mg													
naloxone										500 (mg)			

The Pain Score Graph (top left) displays the charted pain scores during the 12 hour time interval in focus, the patient's preferred score at which to be treated, and vitals that can best be visualized with a shorter y-axis than the vitals graph. This view allows the care team to evaluate if medicinal interventions are impacting the patient's pain and if they need to treat based on patient preference and tolerance. A date picker and graphs with non-medicinal interventions also fall in vertical alignment to provide context for changes in pain.

The Pain Medication Doses table shows all active orders and those administered within the 12 hour time interval. Hovering over a line will pull in all details for that order, including provider notes, so that PCA and titrated medication options can be gathered without leaving the page.

CONCLUSIONS

- Effective EMR design can improve efficiencies by reducing palliative care team effort to find key data to support decision-making with minimal task burden.
- Early design work with an EMR designer produces tools that meet palliative care team needs.