

## TexMed 2017 Quality Improvement Abstract

Please complete all of the following sections and include supporting charts and graphs in this document. Submit a total of two documents - this document and the Biographical Data and Disclosure Form to posters@texmed.org by midnight March 17, 2017.

## **Procedure and Selection Criteria**

- Applicants should demonstrate an understanding of QI concepts through the use of quality tools, measures of success and the use and interpretation of data. Judges will use the scoring described in this matrix to identify projects to be presented at the conference, as well as, projects to be considered for the awards.
- Maximum points are delineated with a brief explanation of the content that should be included under each section. Applicants must select one of the following improvement categories into which the project best fits: patient safety, patient centered care, timeliness, efficiency, effectiveness, or equity. Applicants may describe the problem

Improving adherence to Texas Medical Board Rule 170.3 regarding requirements for the treatment of chronic

## and results in narrative or graphic format. **PROJECT NAME:** pain Institution or Practice Name: University of Texas Southwestern **Setting of Care:** Anesthesiology and Pain Management **Primary Author:** Christopher Bender **Secondary Author:** Enas Kandil MD, Msc Other Members of Project Team: Abu Minhajuddin PhD, Trent Bryson, MD; Eleanor Phelps, RN; Suzanne Dellaria, MD; Steven Leach, MD, FACP: Elizabeth Paulk, MD, Is the Primary Author, Secondary Author or Member of Project Team a TMA member (required)? X Yes □ No Please provide name(s): Chris Bender **Project Category:** (Choose all appropriate categories) ☐ X Patient Safety ☐ X Patient Centered Care ☐ Timeliness ☐ X Efficiency ☐ X Effectiveness ☐ Equity ☐ Enhanced Perioperative Recovery ☐ Disaster Medicine and Emergency Preparedness

For this poster session, TMA is looking for projects that demonstrate the six aspects of Quality Care as defined by the Institute of Medicine.

- Safe avoids injuries to patients from care that is intended to help them
- Timely reduces waits and delays for both those who receive care and those who give care
- Effective based on scientific knowledge, extended to all likely to benefit, while avoiding underuse and overuse
- Equitable provides consistent quality, without regard to personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status
- Efficient avoids waste, including waste of equipment, supplies, ideas, and energy
- Patient centered respects and responds to individual patient preferences, needs, and values, ensuring that patient values guide all clinical decisions

## **Quality Improvement (QI)**

**Overview:** Describe 1) where the work was completed; 2) a description of the issue that includes how long the issue has been going on and the impact the issue has on the organization/facility; 3) what faculty/staff/patient groups were involved, and 4) the alignment to organizational goals.

Prescription opiate abuse and overdose represents a major healthcare problem. Overdose deaths caused by opioids in the year 2014 numbered over 28,000, of which more than half were due to prescription drugs rather than the illicit use of opioids. Even more concerning is this figure's rapid rate of growth, with the death rate having quadrupled since 1999 [1]. Although the options for addressing this crisis are myriad, the Texas Medical Board (TMB) has provided one such solution through a change in its rules on the treatment of chronic pain. On August 5<sup>th</sup>, 2015 the TMB changed the language in rule 170.3, replacing the word "should" with "must" in multiple locations, with the effect of transforming what was previously a recommendation into a mandated set of standard practices [2]. The content focuses on appropriately documenting multiple aspects of pain management, including mandating the use of the Texas State Prescription Database, a written pain management agreement signed by the patient, and toxicology drug screening for patients receiving scheduled drugs for the treatment of pain. The effect of these mandated regulations on opioid use and abuse is still to be determined however the concern becomes ensuring our familiarity and compliance with the relatively new mandates.

As it currently stands, UT Southwestern has no system or infrastructure in place to ensure compliance with these rules, and the actual rate of adherence is unknown. The use of opiate medications for the treatment of pain is present throughout many different aspects of the healthcare system, and frequency ranges from rare to common based on the clinic and setting of patient care. Changes in practice regarding the new rules have been implemented in some locations, but exist sporadically with varying rates of adherence. Ultimately this lack of compliance represents both a legal hazard, with consequences as severe as loss of licensure, and a patient safety concern, as the best practices are necessary to protect patients from the risks of prescription drug abuse and overdose.

Aim Statement (2 points for each portion of SMART, with max points 10): Describe the goal of the project incorporating SMART.

This project aims to improve the treatment of patients with chronic pain in accordance with the new Texas Medical Board guidelines and achieve complete compliance with the eight defined rules at UT Southwestern and its associated clinics by the end of 2017. It will first focus on the following three clinics:

Eugene McDermott Center for Pain Management

Multispecialty Clinic in the Outpatient Building

Palliative Care Clinic located in Old Parkland Hospital

The 8 rules of the new TMB guidelines are defined as documentation of the following in the electronic medical record:

- 1. History and physical exam
- 2. Use of the prescription drug monitoring program
- 3. Baseline drug screening
- 4. Discussion of risks and benefits
- 5. Treatment plan that outlines goals of care
- 6. Written pain management agreement
- 7. List of patient medications
- 8. Periodic Review (< 3 months)

Measures of Success (5 points for describing solutions measurement and 5 points for describing outcome measurement, with max points 10): Describe how you measured your interventions to ensure adherence and describe how you measured your outcome.

*Methods:* This project aims to measure the baseline compliance at three different clinics representative of the system as a whole, identify which processes at each of the clinics results in failures, and implement changes in order bring each site completely into compliance with the new rules. An initial data analysis of a pre-existing dataset of chronic pain patients found that only 21% of patients had a record that was completely in compliance with the medical board rules.

**Use of Quality Tools (5 points for appropriate tools utilized during each PDSA phase, with max points 20):** What quality tools did you use to identify and monitor progress and solve the problem? Provide sample QI tools, such as fishbone diagram or process map, and identify which phase of the PDSA cycle each tool was utilized in. Note tools here and send as addendum with abstract form.

Initial background knowledge was obtained through observation at each of the three clinics, and this information was compiled into process maps that diagrammed the treatment and documentation of pain patients. (Process maps attached separately in addendum)

Data analysis was performed using a Plan, Do, Study, Act (PDSA) methodology. From a previously compiled dataset a total of 534 patients were identified that used scheduled drugs and were seen in the pain management clinic, and compliance was assessed through the electronic medical record and analyzed with a Pareto chart (see addendum). After an initial run through 100 of the patients it was determined that too many of the patients were receiving their medications outside of the UTSW system, and thus did not pertain to the stated scope of the project. To improve the process, steps were taken to compile a new dataset consisting only of patients who were being prescribed scheduled drugs by physicians at the listed clinics.

The first set of data collected during the plan phase was analy

Interventions (max points 15 includes points for innovation): What was your overall improvement plan (include interventions and identify quick wins)? How did you implement the proposed change? Who was involved in implementing the change? How did you communicate the change to all key stakeholders? What was the timeline for the change? Describe any features you feel were especially innovative.

**Planned Interventions:** Multiple options for improving compliance are under consideration, including the use of an opioid-specific dashboard within EPIC, as well as an institution wide opioid registry. Such a registry will help identify which clinics and physicians are struggling the most with compliance in order to provide guidance and address the problem.

**Results (max points 25):** Include all results, using control charts, graphs or tables as appropriate. Charts and graphs must be appropriately labeled or points will be deducted. Note charts, graphs and tables here and send as addendum with abstract form.

An initial data analysis of a pre-existing dataset of chronic pain patients found that only 21% of patients had a record that was completely in compliance with the medical board rules.

See attached charts in addendum:

"Preliminary Compliance results"

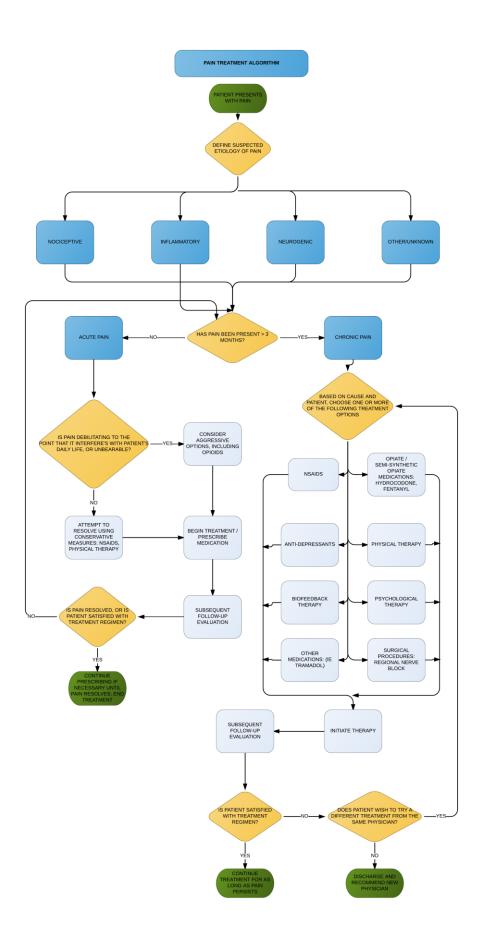
"Pareto Chart: Violations of new TMB rules"

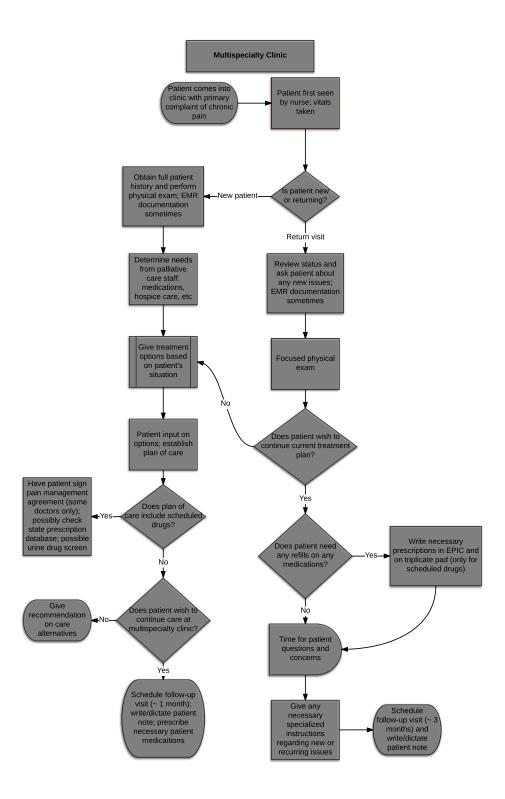
**Conclusions and Next Steps (max points 20):** Describe your conclusions drawn from this project and any recommendations for future work. How does this project align with organizational goals? Describe, as applicable, how you plan to move ahead with this project.

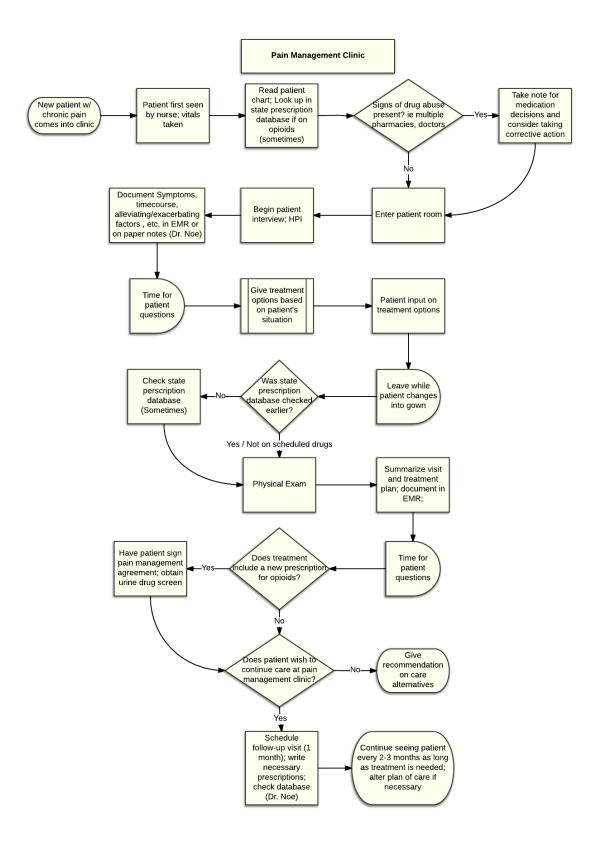
The initial data analysis the following components as causing the majority of the violations:

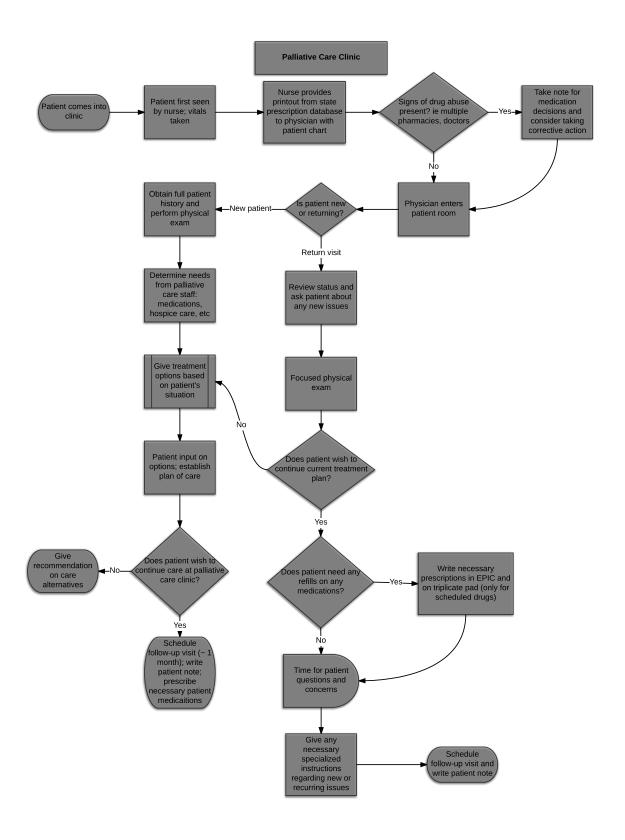
- i. Requirements for drug screening
- ii. Use of a signed pain management agreement.
- iii. Use of the state prescription drug monitoring program

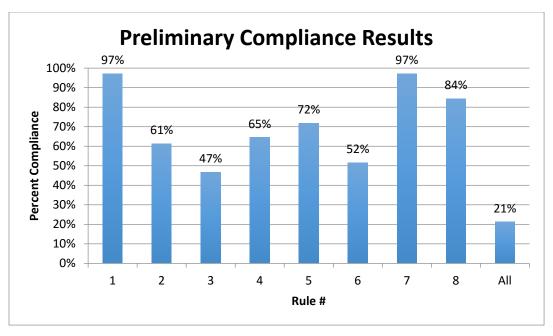
Therefore these will be the most fruitful targets for intervention. The next steps involve a more detailed analysis of these components at the three clinics, and implementing processes to increase compliance with the rules.

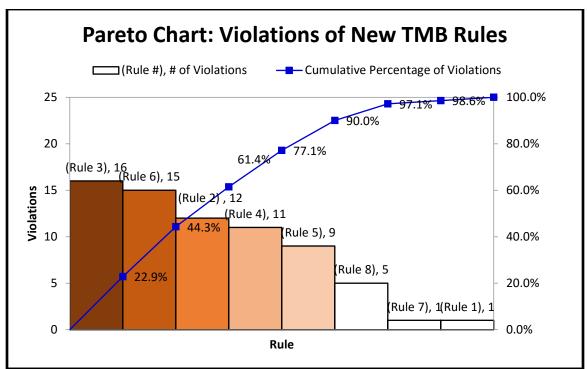












- 1. Rose A. Rudd, M.N.A., JD; Jon E. Zibbell, PhD; R. Matthew Gladden, PhD, *Increases in Drug and Opioid Overdose Deaths United States*, 2000–2014. Morbidity and Mortality Weekly Report, 2016. **64**(50): p. 1378-82.
- 2. Minimum Requirements for the Treatment of Chronic Pain, in 22, T.M. Board, Editor. 2015.