# **Magnet Abstract**

#### **Title**

Pain Communication Algorithm: Improving staff communication and reducing delays in pain control

# **Program Description**

Learn about the development and implementation of a pain communication algorithm. Discover how the use of the algorithm improved communication between providers and nursing, increased utilization of complementary therapy in the treatment of pain and reduced the length of time patients ranked their pain as "unacceptable" by 42%.

### **Body 400 words**

# **Description/Background**

Improving pain management is a priority for all healthcare providers, yet the process for how pain is assessed, reported and resolved often lacks a defined process. This lack of structure can lead to delays in pain control for patients and frustrations within healthcare teams. In an effort to facilitate patient-centered care, an interdisciplinary workgroup was constructed to address this process.

### **Action**

In order to eliminate delays and define a process for pain management, an interdisciplinary workgroup utilized performance improvement processes to develop a communication algorithm. The group membership included nurses, physicians, advanced practice providers, nursing leadership and educators, physical therapists, pain specialists, and performance improvement members. The group completed extensive process mapping and data review. Many variations in practice were found to impact the length of time patients were reporting unacceptable pain levels. In addition, opportunities to improve pain assessment, nurse-provider communication and use of complementary therapies were identified. The Adult and Pediatric Pain Communication Algorithm was developed to take advantage of these opportunities. The algorithm, which is initiated by the bedside nurse, provides uniform methods for responding to a patient's statement of unacceptable pain. Some key changes for staff included incorporating complementary and alternative therapies, utilization of internal peer consultants, standardized text paging templates and an agreed-upon process to escalate concerns when a patient's pain remained unacceptable. The algorithm was piloted on a progressive-care medical-surgical unit utilizing the Plan-Do-Study-Act process. Over the course of a month, the algorithm was distributed to the entire nursing staff and data was compared against that of the previous state.

### **Outcomes and Takeaways**

A reduction was discovered, both in time from the initial report of unacceptable pain to the administration of medication, as well as from report of unacceptable pain to report of acceptable pain. The average reduction in time from the initial report of unacceptable pain to the administration of medication was 26.05 minutes, approximately 70 percent. Time from a report of unacceptable pain to report of acceptable pain was decreased by an average of 50.7 minutes, approximately 42 percent. After implementation, the use of non-pharmacologic options offered increased by 102 percent. Provider response time also significantly decreased. Even with a small population size, provider response time decreased significantly, along with the number of pages sent. While the guide allows up to 30 minutes for response prior to paging another provider, providers responded within five minutes after implementation. These results led to institutional adoption and implementation, with further data collection planned.