

27 THE ACCREDITATION PROCESS DRIVES RAPID QUALITY IMPROVEMENT – CONTINUED REVIEW IS CRITICAL

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Background Accreditation for Cardiovascular Excellence (ACE) has reviewed over 100 organizations and 7023 cardiac catheterization cases. The review process includes identifying organizational characteristics relative to standards. The impact of accreditation on improving quality through corrective action plans and then reassessment through reaccreditation.

Objectives To review the impact accreditation has on quality and its maintenance and recognize the value of internally developed corrective action plans and their impact on sustainability of accreditation.

Methods Organizations that have experienced both an initial accreditation and then a reaccreditation were reviewed. Researchers reviewed accreditation reports (n=32), comparing the percentage of facilities meeting accreditation standards for initial and second reviews. Corrective action plans were coded to provide an overview of areas for improvement and then were assessed against their reaccreditation review.

Results For 25/60 standards examined there was a significant difference in achievement between 1st and 2nd accreditation. Those organizations addressing standards that required improvement in their corrective action plans were sustained in their reaccreditation review. Of the 25, all but one saw improvement between the 2 reviews. 'Does not meet' was less commonly observed in 23/25 between reviews. 7 standards saw changes in the number of 'NA' from 1st to 2nd accreditation suggesting changed organizational structures to meet requirements.

Conclusions Qualitative factors for organizational change indicate 'quality' as do clinical outcomes. These change-processes are unique, and must account for organizational capacity, context, and individualized systems. Accreditation should be understood as an ongoing process in the pursuit of quality, rather than a 'stamp of approval,' or one-time certification. The accreditation process results in organizational responses immediately in the form of corrective action plans which are then sustained through reaccreditation.

28 IMPLEMENTING OF WSM 1.0 IN 160 HEALTH FACILITIES ACROSS KINGDOM OF SAUDI ARABIA

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Background As part of its Vision 2030, the Kingdom's Ministry of Health (MOH) has undertaken a transformational initiative to achieve triple-aim objectives (improve health outcomes, enhance the quality of care and reduce the cost of care). IHI's Whole Systems Measures approach to performance measurement aligns with all three objectives and, therefore, was selected by the Statistics and Information Management Department to assist health decision-makers to monitor and improve health outcomes and quality of care.

Objectives This WSM implementation was focused on developing internal capabilities at the facility-level to collect and report data, enabling the MOH's Statistics and Information Management Department to analyze and report the data using interactive dashboards to facilitate strategic decision making, benchmark and compare the performance of health facilities and health clusters locally and internationally, identify areas of improvement, and provide the necessary support to improve health outcomes.

Methods As a pilot, this initiative was implemented in 80 hospitals and 80 PHCs. The facilities were purposely selected to represent all regions and sizes of healthcare facilities (based on the number of beds). Hospital-staff was trained on data collection, while directorate-staff was trained on supervision and data validation. Data were collected over ten months from May '19 to Feb '20 and was reported monthly.

Results 83% of hospitals and 73% of PHCs have participated and shared reliable data for WSM indicators monthly. Throughout this period, indicators such as 'rate of adverse events,' and 'reported patient satisfaction scores,' have displayed improvement, while others were broadly consistent.

Conclusions By implementing the WSM approach, the MOH has provided experiential learning for its staff at the facility, directorate, and central levels. Data were regularly analyzed, reported, and used for strategic decision making and supporting evidence-based health practices.

29 SHINING A LIGHT ON HEALTH INEQUITIES AND RACIAL DISPARITIES – CLOSING THE GAP WITH REAL-WORLD DATA & SPC METHODOLOGY

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Background Health disparities in racial minorities are well documented but few hospitals use real-world data to understand equity. The U.S. has invested over \$48 billion in electronic medical records (EMRs), that data can be used to surface and improve these disparities.

Objectives Identify disparities in outcomes for different racial groups across a range of acute care domains - emergency medicine through to peri-operative care.

Methods Using EMR data, a range of clinical metrics for acute care (surgical and emergencies) were surfaced in statistical process control (SPC) charts and then sub-grouped by race to identify disparities in care and opportunities to improve.

Results For stroke patients presenting to the emergency department, looking at time to receive tPA treatment - we detected special cause variation for black patients, 50 min door to treatment time compared to 28 minutes for white patients. Surgical pain following surgery measured in the recovery room (PACU) and the first 24 hours after surgery - we learned American indian patients experience more pain (4.3) than white patients (3.5). Post-operative hospital length of stay - we detected special cause variation for American indian patients who have a longer stay (7.7 days) compared to white patients (3.9 days). 30-day re-operation rate following elective surgeries - we detected special cause variation for American indian patients who have a higher re-operation rate than white patients (17.3% vs 11.4%). 30-day re-admission rates for elective surgeries - we detected special cause variation for

American Indian patients and those identifying as multiple races who have a higher rate (11.5% and 10.5%) than white patients (8.1%).

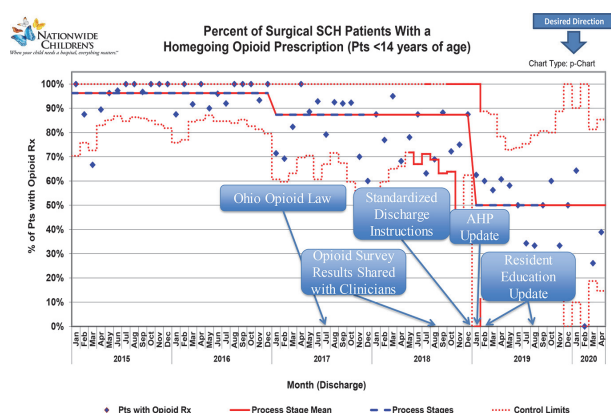
Conclusions SPC methodology allows clinicians to use EMR data to understand how patients' race effects their outcomes across a range of acute care domains. Enabling them to track the effect of system changes to understand if equity improves.

30 REDUCING OPIOID PRESCRIPTIONS FOR PEDIATRIC SUPRACONDYLAR HUMERUS FRACTURES

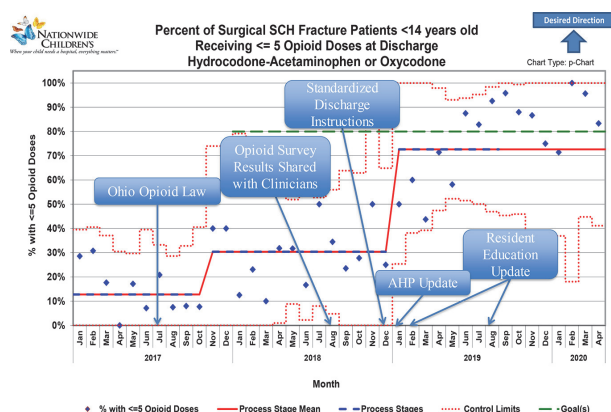
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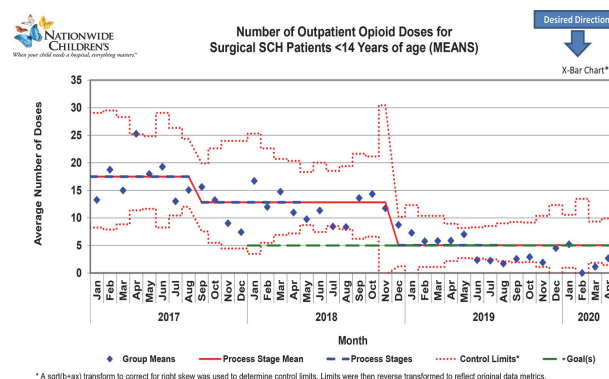
Background Supracondylar humerus (SCH) fractures are the most common elbow injuries in children. Pain management following treatment is essential, as untreated pain could lead to delayed healing, hyperesthesia, and fear of medical care. Pain management has not been standardized, and variability exists in opioid prescribing patterns. While effective for pain control, opioid therapy has associated adverse events including nausea, vomiting, constipation, blood pressure swings, and physical dependence. As the national opioid crisis continues,



Abstract 30 Figure 1



Abstract 30 Figure 2



Abstract 30 Figure 3

this project highlights our efforts to reduce the opioid footprint.

Objectives Increase the percent of patients receiving ≤ 5 doses of hydrocodone-acetaminophen for home use, after a surgical repair of an SCH fracture, from 30% to 80% by 4/1/19 and sustain for one year.

Methods A survey was distributed to orthopedic providers as a self-appraisal of opioid prescribing relative to peers. Survey results guided the development of educational interventions. This project standardized the use of non-opioid pain control to limit opioid prescribing. Providers were encouraged to schedule alternating doses of acetaminophen and ibuprofen every three hours. Standard discharge instructions for pain medication paralleled its use during the child's hospitalization. Measures included percent of patients with a homegoing opioid prescription, the number of doses prescribed, and whether the patient called back due to uncontrolled pain.

Results Our orthopedic team increased the percent of opioid prescriptions of ≤ 5 doses for SCH fractures from 30% to 75% (figure 2). Average prescribed doses decreased from 12 to 5 (figure 3). We have reduced the number of patients discharged with an opioid from 96.2% to 46% (figure 1).

Conclusions Through this QI initiative, we were able to significantly reduce our opioid prescribing practices for patients with SCH fractures by establishing prescribing standards, educating providers and standardizing discharge medication instructions. We anticipate an effective translation of these practices to other orthopedic injuries and to other institutions.

31 READING PROFICIENCY IS A SOCIAL DETERMINANT OF HEALTH: IMPROVING POPULATION OUTCOMES AND REDUCING RACIAL DISPARITIES IN EDUCATION

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Background Spartanburg County, S.C., faces a major economic mobility challenge, particularly for Black and Latinx children and families. Spartanburg leaders were particularly concerned with the low third-grade reading proficiency rates across the