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

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county (39% in 2017), particularly for children of color (15% in 2017).

Objectives The primary objective for this work was to pilot improvement science techniques in the four lowest performing schools in Spartanburg county so see if a high-quality improvement science approach could support school faculty and staff as they work to improve reading proficiency rates for children.

Methods Two of Spartanburg's superintendents turned to Spartanburg Academic Movement (SAM) and its national partner, StriveTogether, to discuss a partnership to improve reading outcomes by using an improvement science approach. To help the community get started, StriveTogether led continuous improvement training and technical assistance for Spartanburg educators in 2018. A pilot program called the Four Schools Project began in the 2018 – 2019 school year,

Abstract 31 Figure 1

bringing improvement to the classroom

Students explain the I-CANS posted for each subject.

SAM worked closely with StriveTogether to create a plan to implement continuous improvement in select schools. A pilot program called the Four Schools Project began in the 2018 - 2019 school year, focusing on schools where students experienced poverty and disparate outcomes. SAM engaged teachers at these schools, providing coaching to help them use continuous improvement in the classroom.

third-grade reading proficiency — Spartanburg County vs. Four Schools

the Four Schools Project saw a more than 60% increase from 2018 - 2019

Their efforts led to measurable progress. Third-grade reading proficiency increased more than 60% in 2019. One of the four schools saw a decrease in discipline referrals from 600 to 700 per year to fewer than 450.

Along with these results, Spartanburg's schools have also seen a shift in culture among teachers, who have embraced the use of data to understand progress and places for improvement.

looking to the future

This success is spreading across the community. Teachers from all districts are receiving training to bring this approach to their classrooms. In the midst of the COVID-19 pandemic, it's difficult to tell what's ahead for Spartanburg County. But for Cheryl Broadnax, StriveTogether's senior director of district improvement, this situation demonstrates the power of continuous improvement.

Continuous improvement is a journey taken one step at a time. It's not a long-term plan — and that's exactly why a situation like COVID-19 doesn't throw us off our game. Continuous improvement allows us to write our own journey, and we can pivot and return when we are ready.

— Cheryl Broadnax, StriveTogether's architect of continuous improvement for education systems

Abstract 31 Figure 2

focusing on schools where students experienced poverty and disparate outcomes. SAM engaged teachers at these schools, providing coaching to help them use continuous improvement in the classroom. Their efforts led to measurable progress (figure 1).

Results Third-grade reading proficiency increased more than 60% in 2019. One of the four schools saw a decrease in discipline referrals from 600 to 700 per year to fewer than 450 (figure 2). Along with these results, Spartanburg's

schools have also seen a shift in culture among teachers, who have embraced the use of data to understand progress and places for improvement.

Conclusions This success is currently being spread and scaled across the community. School district leaders, principals and teachers from all seven school districts are receiving training in the science of improvement to bring this approach to their schools and classrooms.