BACKGROUND Depression affects 12% to 20% of adolescents and up to 30% of Appalachian residents. Given its frequency, routine adolescent depression screening and management is recommended by the American Academy of Pediatrics. However, routine depression screening is limited. Quality improvement (QI) practice facilitators (PF) can help clinicians standardise care, remove unwanted variation and improve outcomes. A QI PF model may improve depression screening and management.

QUALITY IMPROVEMENT PRACTICE FACILITATION TO INCREASE DEPRESSION SCREENING AND BEHAVIOURAL HEALTH MANAGEMENT IN A PAEDIATRIC PRACTICE IN OHIO'S APPALACHIA

Suzanne Hoholik, Christina Toth, Mike Fetzer, Rebecca Baum, Stephen Cardamone, Sean Gleeson. Nationwide Children's Hospital, US

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Objectives
Increase use of a validated depression screening tool from 0% to 30%, and create a management plan for those diagnosed with depression from 43% to 85% by 6/30/2016 and sustain through 12/31/2016.

Methods
QI PFs from Partners For Kids, an affiliate of Nationwide Children’s Hospital, supported a practice in Ohio’s Appalachian region to initiate a depression screening and management project with 6 months follow-up. PFs used the IHI Model for Improvement and led recurring, on-site meetings. Interventions included training from a NCH developmental and behavioural paediatrician, new workflows and implementing a change package — establishing referral sources, process to manage emergencies and effective management plan checklist. PFs performed regular audits of the project.

Results
Screening for depression increased from 0% to 42% within 3 months with initial QI interventions and increased to 80% with subsequent interventions. Documentation of evidence-based management of depression increased from 43% to 85% within 3 months.
Depression diagnosis increased from 21 children in 2015 to 34 in 2016, a 62% increase.

Conclusions Implementing behavioural health recommendations using PF led to increased screening, diagnosis and management of depression at an Appalachian primary care practice.

935 A QUALITY IMPROVEMENT INITIATIVE REDUCES CAST COMPLICATIONS IN A PAEDIATRIC HOSPITAL

Julie Samora, Walter Samora, Kevin Dolan, Kevin Klingele. Nationwide Children’s Hospital, US

Background Casts are frequently used as routine treatment in paediatric orthopaedic practice, and yet are not without complications. At our large tertiary care paediatric hospital, baseline rate of all casting complications was 5.6 complications per 1000 casts applied (0.56%).

Objectives The project aimed to decrease the overall cast complication rate and improve patient care using quality improvement (QI) methodology.

Methods We implemented quality improvement concepts derived from the Institute for Healthcare Improvement (IHI) models, including Plan-Do-Study-Act (PDSA) cycles, to perform a quality improvement initiative to decrease our cast complication rate. We developed a resident casting education program with a competency ‘checklist’ to ensure that casts are applied, bivalved, and removed in a safe and standardised manner to prevent patient harm. We implemented a policy and procedure change, requiring AquaCast Saw Stop Protective Strips to be applied with every cast application. We reviewed our facility’s processes and procedures and determined adequate measures were in place to effectively manage inventory and maintenance of cast saw blades.

Results With the multi-modal QI intervention, our complication rate was reduced to 0.15 complications per one thousand applications, a more than 90% improvement.

Conclusions Implementation of QI concepts to perform a quality improvement initiative resulted in a shift toward fewer cast complications, leading to overall improved patient care at a large tertiary paediatric hospital.