BACKGROUND
Among the many Accreditation Council for Graduate Medical Education (ACGME) program accreditation requirements, resident education must include Quality Improvement (QI) training. Residency Review Committees (RRC) set accreditation standards and provide peer program evaluation. Meaningful participation in clinical QI projects is highly pertinent to ACGME Clinical Learning Environment Review (CLER) success. The UTHSCSA Pediatric residency training program devised a faculty-mentored, learner-centered on-the-job QI curriculum to teach systematic practical application of QI principles in a way that would meet accreditation standards and requirements, provide experiential learning and ingrain patient safety and clinical care QI professional skills for life.

PROJECT DESCRIPTION
Six QI learning groups each comprised of 6 residents (2 from each PL1–3 training year) experienced the 9-month curriculum, consisting of 4 formal didactic sessions, curricular materials and course objectives hosted on Blackboard, needs-driven problem-based group learning and mentored problem-solving sessions. The curriculum was presented through a combination of group teaching and step-wise experiential application of team building, nominal group technique, aim statement construction, workflow and fishbone diagramming, IRB process and pre- and post-intervention survey tools. The QI goal was to identify and address specific areas of need, and model comprehensive process analysis and PDSA (Plan Do Study Act) cycle planning and use. Groups identified 3 inpatient and 3 outpatient QI needs to focus their aim statements and training projects. QI case example: A learner-centered project addressing resident continuity clinic (CC) efficiency identified areas of clinic flow where changes would decrease incremental patient waiting and total throughput time. CC time expenditure surveys identified inefficiencies. PDSA intervention targeted staff and exam room availability and house staff-nursing staff teambuilding. Innovative ‘Knock & Talk’ reminders cued house staff about patient encounter time usage, patient wait time and flow.

QI CASE EXAMPLE PLANNING TOOL & OUTCOMES
Protracted patient wait and total throughput times were significantly improved as was total clinic productivity, patient and staff satisfaction, house staff training satisfaction and ability to fulfill work duties within program accreditation work-hour limits.

OUTCOMES
All Pediatric house staff engaged in full QI training through the curriculum and mentored learning groups, and completed their group QI projects. Each group’s formal oral presentation to their peers was ‘scored’ by a faculty mentor panel. Projects included patient discharge processing, referral security, CC efficiency, inpatient education and neonatal abstinence care protocol. Project posters were presented at the Pediatric Department Research Day, and professional society meetings on the state and national levels. Trainees fulfilled specific clinical training requirements while providing patient care, but they simultaneously gained appreciation for the importance of patient care and safety QI through this integrated educational experience.

CONCLUSIONS
This learner-centered on-the-job QI Pediatrics residency training program securely met RRC program accreditation standards, including CC training requirements, and contributed to meeting departmental ACGME requirements for QI training aligned with CLER focus areas. The positive experience improved house staff self-efficacy and eagerness to continue the QI changes, use their new QI skills, and engage in QI project continuation. Adding QI training reinforces learning and skills experientially during each QI project, engages house staff in teaching new trainees, and boosts the likelihood of QI use in practice settings after completion of residency training.

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