



Platform Abstracts

March 24, 2021 from 12:00 - 12:30pm Eastern

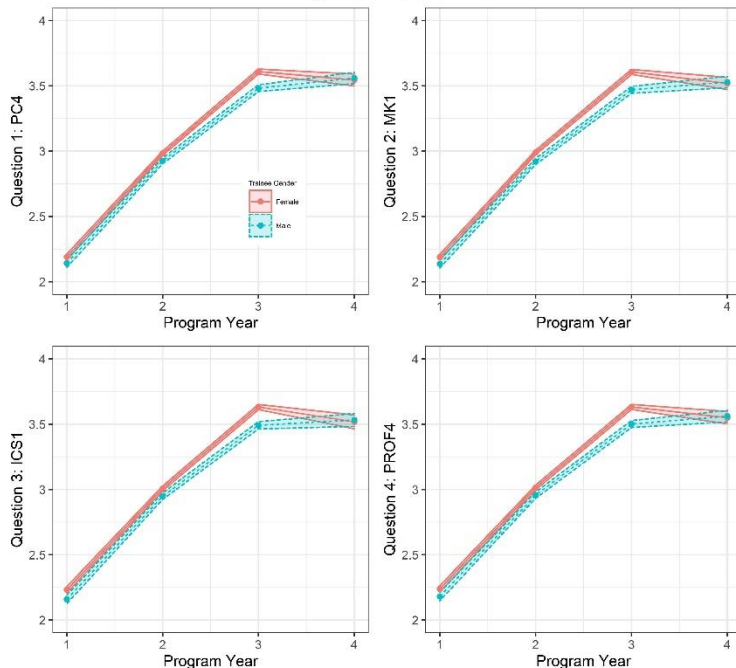
DOES FACULTY OR TRAINEE GENDER MATTER? A MIXED-METHODS EXAMINATION OF RESIDENT EVALUATIONS IN THE PEDIATRIC EMERGENCY DEPARTMENT

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Figure 1

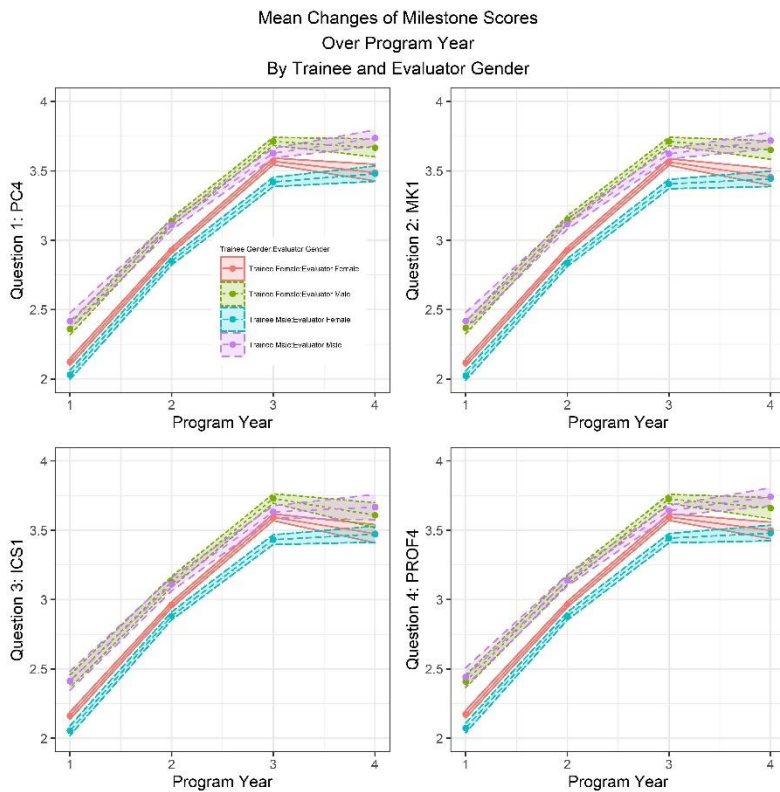
Mean Changes of Milestone Scores Over Program Year By Trainee Gender



Background: Male and female trainees are routinely evaluated differently from one another, both in quantitative evaluations and in qualitative comments. While this has been explored in other specialties, there are few studies of evaluation differences between genders in Pediatrics. Aims: This mixed-methods study aims to examine whether there are quantitative or qualitative differences in the evaluations of male and female trainees in the Pediatric Emergency Department (PED) and whether training program (Pediatrics vs. Emergency Medicine (EM)) or evaluator gender is correlated with these differences. Methods: We studied

20,210 de-identified evaluations completed by 57 faculty members of 1002 Pediatric and EM residents in our PED between 2014 and 2020. We conducted univariate and multivariate analyses using Kruskal-Wallis tests and a linear mixed model with compound symmetry. Our primary quantitative outcome was Milestone score, adjusted for year of training and evaluator gender. We sampled 3,154 de-identified comments for qualitative analysis and iteratively developed a code book grounded in the social role theory of sex differences. Using directed content analysis, we identified themes in evaluators free-text comments about trainees in Pediatrics and EM. Data are being independently double-coded with interval assessment of intercoder reliability. Results: Female (both EM and Pediatrics) residents receive higher Milestone scores than their male peers, with statistical significance in all domains and across all training years (Figure 1). Notably, female faculty assign lower Milestone scores than their male counterparts to both trainee genders, regardless of training program type (Figure 2). Qualitative data analysis is ongoing. Thus far, there are differences in words used to describe male (leader) and female (quiet) trainees, with autonomy, confidence, work ethic, and communication emerging as significant themes used differently across genders. Conclusions: While there is a clear difference in the Milestone scores of male and female trainees in the PED, evaluator gender appears to play an outsized role in quantitative evaluation scoring. As qualitative analysis continues, we hope to better understand what qualities are most highly valued by male and female faculty when evaluating trainees. Developing this understanding will help shape faculty development efforts aimed at addressing unconscious bias both in evaluations and in the learning environment.

Figure 2



Wallis tests and a linear mixed model with compound symmetry. Our primary quantitative outcome was Milestone score, adjusted for year of training and evaluator gender. We sampled 3,154 de-identified comments for qualitative analysis and iteratively developed a code book grounded in the social role theory of sex differences. Using directed content analysis, we identified themes in evaluators free-text comments about trainees in Pediatrics and EM. Data are being independently double-coded with interval assessment of intercoder reliability. Results: Female (both EM and Pediatrics) residents receive higher Milestone scores than their male peers, with statistical significance in all domains and across all training years (Figure 1). Notably, female faculty assign lower Milestone scores than their male counterparts to both trainee genders, regardless of training program type (Figure 2). Qualitative data analysis is ongoing. Thus far, there are differences in words used to describe male (leader)

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FILLING THE GAP: BEHAVIOR AND MENTAL HEALTH EDUCATION IN RESIDENT CONTINUITY CLINIC

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Background: There is a growing need to train pediatric residents to better address behavior and mental health (BMH) concerns in children. Methods: We piloted an integrated BMH training program using Kolbs experiential learning model in continuity clinic. Residents complete modules and just-in-time videos on BMH topics. General pediatricians co-precept with a child psychiatrist/psychologist or developmental pediatrician. We compared resident comfort to screen, identify, manage and refer patients with common BMH issues (ADHD, anxiety, depression, disruptive behavior disorders, trauma symptoms and substance use) with pre and 1-year post surveys using a 5-point Likert scale and unpaired t-test. Results:

31 residents participated in the BMH training program; 8 residents were at comparison continuity clinics. 42% (13/31) of intervention residents and 25% (2/8) of comparison residents responded to the pre-survey; 30% (9/31) and 63% (5/8) responded to the post-survey. Intervention and comparison groups had similar comfort levels at baseline ($p=0.2$). Intervention residents reported greater overall change in mean score between pre and post than comparison residents (0.5 vs. 0.1). Intervention residents reported greater overall comfort at post (3.8) than pre (3.3) intervention screening, identifying, managing and referring patients with common BMH issues ($p<0.01$). When analyzed by topic, residents increased comfort pre to post intervention screening and identifying depression (4.1 vs. 4.8, $p=0.005$; 3.6 vs. 4.4, $p=0.002$), screening for anxiety (3.7 vs. 4.4, $p=0.02$), and identifying disruptive behavior disorders (2.7 vs 3.6, $p=0.03$). Qualitative comments revealed residents found the BMH program helpful and effective. Residents suggested making teaching more efficient. Conclusions: Integrating BMH specialists increases resident overall comfort screening, identifying, managing and referring patients with common BMH issues. Future research should explore how to increase comfort in screening, identifying, treating and referring across all common BMH concerns and how to integrate teaching more efficiently in clinic.

March 25, 2021 from 12:00 - 12:30pm Eastern

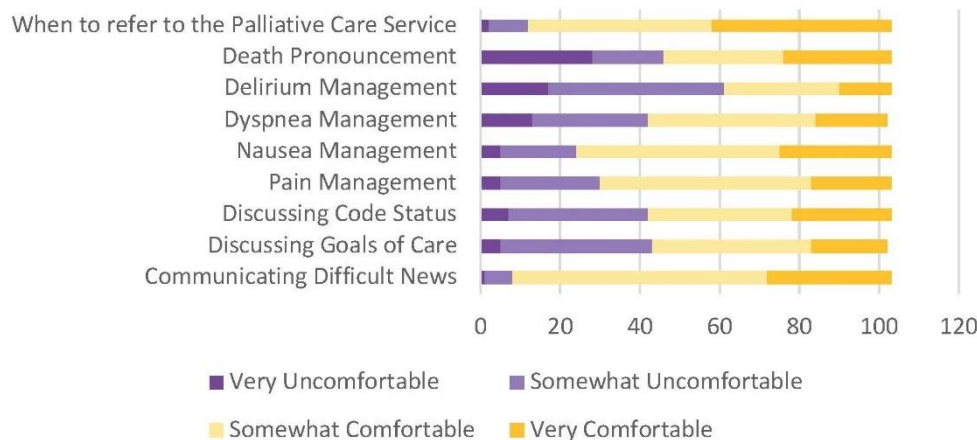
PRIMARY PEDIATRIC PALLIATIVE CARE: A CURRICULAR REFORM

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The AAP, IOM, and ACGME have each asserted that increased exposure to primary palliative care education is crucial for all physicians regardless of eventual specialty. Pediatric palliative care is defined by the World Health Organization as "the active total care of the child's body, mind and spirit, and also involves giving support to the family" beginning with diagnosis and regardless of disease trajectory. We agree with this holistic and inclusive definition of palliative care and believe all pediatric residents should be able to provide primary palliative care (PPC). We know, however, that stigma around palliative care continues to exist, pediatric residents have limited and variable exposure to end-of-life care (Trowbridge et al) and they continue to report inadequate PPC training (Baker et al). We performed a needs assessment for our institution and subsequently developed a Primary Palliative Care Curriculum (PPCC). The needs assessment included focus groups with current residents and anonymous surveys of current

residents (n=70) and current fellows and recent graduates (n=103) asking about overall comfort in and desire to learn more about PPC. Of current residents, 34% felt comfortable managing pain and 25.7% agreed they felt comfortable discussing goals of care. Residents expressed interest in gaining more skills

Fellow/Recent Residency Graduate Comfort with Key PPC Elements



in the domains of pain management (94.4%), non-pain symptom management (95.7%), delivering serious news (98.6%), discussing goals of care (97.1%), discussing code status (98.6%), and when to consult palliative care services (91.4%). While most recent graduates and

Components of Primary Palliative Care Curriculum



fellows reported some formal training in PPC, only 57% felt comfortable leading goals of care conversations and 25% felt very well prepared in pain and symptom management. In response to these findings and with funding from an APPD resident research grant, we were able to design and implement a longitudinal, interdisciplinary, multimodal PPCC. Knowledge targets include pain and symptom management, end-of-life care, medical ethics, and when to consult the palliative care team. Skill-based sessions target communication via longitudinal VitalTalk experiences (a nationally recognized methodology to teach empathic communication skills) and partnership sessions with Child Life Specialists. Resilience building sessions include structured debriefs embedded in high acuity rotations and recurrent residency-class based support groups. Pediatric trainees desire to improve skills in communication, pain and symptom management, and utilizing palliative care resources. We designed and implemented a longitudinal, interdisciplinary PPCC to target the educational needs of our residents. Future directions include further evaluating our curriculum after a year of intervention and adjusting based on our findings and further developing bereavement support and structured debriefing training.

X+Y SCHEDULING IMPROVES PERCEPTIONS OF SEVERAL ASPECTS OF RESIDENT EDUCATION 2 YEARS OF DATA FROM THE PEDIATRIC X+Y SCHEDULING COLLABORATIVE

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Background: Five pediatric residency programs were granted the ability from the ACGME in 2018 to create true X+Y scheduling models where residents see continuity clinic patients in blocks rather than half-day per week experiences. We previously reported the perceived improvements at 1 year and continue to evaluate the impact of X+Y scheduling annually. Objective: Assess the impact X+Y

scheduling has on pediatric resident perceptions of patient care and other educational experiences at 2 years after implementation. Methods: Surveys were sent via REDCap to pediatric residents of the five original participating X+Y pilot programs both prior to, 12 months, and 2 years after implementing X+Y scheduling. Survey questions measured resident perception of outpatient continuity, clinic schedule satisfaction, and the impact continuity clinic schedules had on inpatient and subspecialty rotation experiences using a 5-point Likert scale. Data was analyzed using z-tests for proportion differences. Results: 126 out of 183 residents responded to the pre survey, with 122 out of 259 residents and 176 out of 259 residents responding to the 12 month and 2-year surveys respectively. Each outcome measure evaluated showed significant difference ($p < 0.01$) in perceptions between the pre and post-implementation surveys at 2 years including the ability to have continuity with patients (27% pre-X+Y to 57% 2-years post-X+Y), quality of handoffs affected by clinic scheduling (69% to 11%), and allowing adequate time for teaching on inpatient rotations (36% to 86%) and in continuity clinic (35% to 75%). No significant differences were noted between the 12-month and 2-year responses except for an increase in perceived teaching time on inpatient rotations at 2-years (63% 12-month to 86% 2-year) Conclusions: At 2 years after implementation, residents continue to perceive improved patient continuity and better quality of inpatient handoffs along with enhanced educational opportunities in X+Y scheduling compared to traditional half-day per week continuity clinic scheduling.

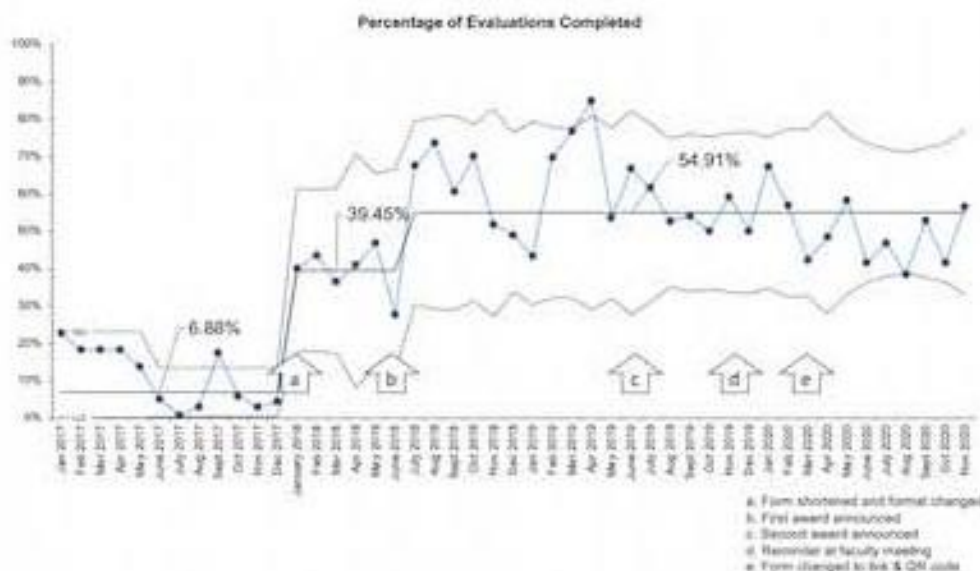
March 26, 2021 from 12:00 - 12:30pm Eastern

HOW TO SUCCEED IN FEEDBACK: QI METHODS REVEAL WHAT WORKS AND WHAT DOESN'T

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Background Trainee growth and development relies on formative feedback, but obtaining this feedback from attendings in a timely manner remains a universal challenge. Contributing factors are onerous forms that may be difficult to access and complete, supervisors with more pressing priorities, and a lack of accountability. Our baseline data demonstrated that response rate to trainee feedback forms was markedly low, around 7%. Aim Statement We aimed to increase attending response rate to trainee

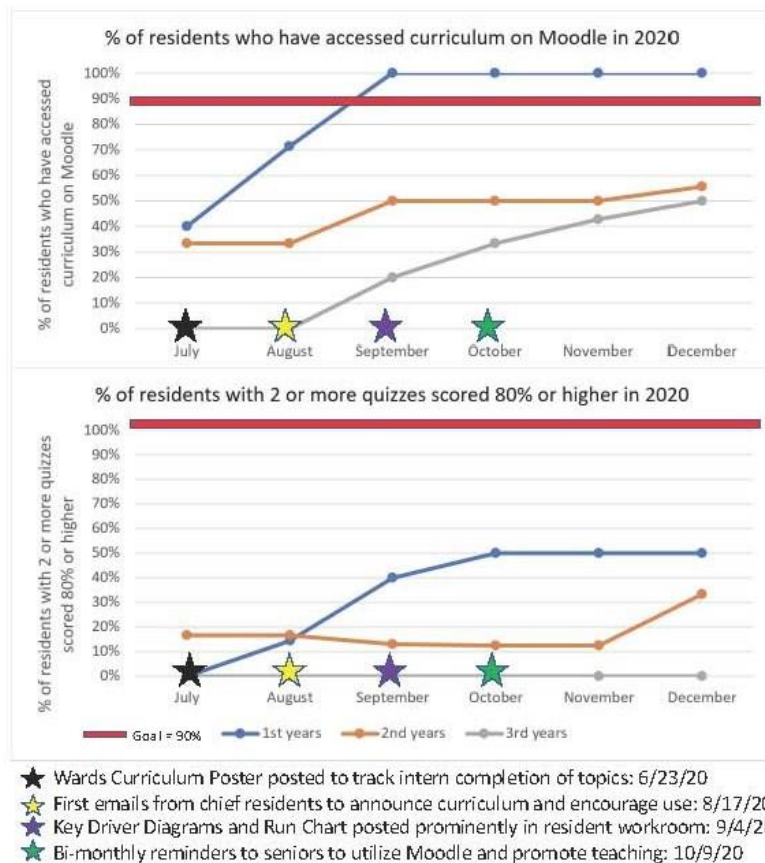
feedback forms from 7% to 50% by the end of one year, and sustain this improvement for at least one year. Interventions We used consecutive PDSA cycles to implement interventions aimed at increasing response rates to feedback forms sent to



attending physicians. Interventions included shortening the forms to include only two high-yield questions, changing the timing of feedback requests, shifting from a cumbersome website to a direct email system, adding a QR code to forms, and public feedback at faculty meetings announcing the physicians with the highest percentage of completed forms. Data was collected monthly, including number of feedback forms sent out to specific attendings and compliance with completion. Measures The primary outcome measure was the percentage of total feedback forms completed. A secondary measure was the percentage of faculty who had 0% completion. Data was collected monthly, including number of feedback forms sent out to specific attendings and compliance with completion. Results Response rate for trainee feedback forms increased significantly in the first year, corresponding with three key interventions: 1) shortening the feedback form, 2) changing from an online form to direct emails, and 3) announcing compliance rates at faculty meetings with an award for the highest. The initial interventions improved response rate from 7% to 39%, and then from 39% to 55%. Further interventions yielded sustained results over the ensuing 18 months with no further significant improvements or deterioration in performance. Conclusions and Next Steps Simple interventions such as simplifying data collection tools, direct email communication and public review of ongoing data can be effective to improve physician response rate on feedback forms. Our interventions were low-cost and easy to sustain over time. Future interventions include direct audit and feedback to physicians with poor performance and more frequent data review at faculty meetings.

INCREASING UTILIZATION OF THE PEDIATRIC WARDS CURRICULUM TO STANDARDIZE RESIDENT EDUCATION

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- ★ Wards Curriculum Poster posted to track intern completion of topics: 6/23/20
- ★ First emails from chief residents to announce curriculum and encourage use: 8/17/20
- ★ Key Driver Diagrams and Run Chart posted prominently in resident workroom: 9/4/20
- ★ Bi-monthly reminders to seniors to utilize Moodle and promote teaching: 10/9/20

Background Factors including variable clinical exposure, resident stress, and interest in education affect the development of resident inpatient clinical proficiency. Curriculum resources to standardize inpatient education are available at our institution via an online portal (Moodle); however, there is currently low usage by residents. Aim Statement Our aim is to increase resident utilization of Moodle to >90% by the end of the 2020-2021 academic year. A secondary aim is >90% of residents completing 2 online quizzes scored >80%. Interventions We created a key driver diagram and tested interventions using PDSA cycles. Interventions included: posting a pediatric wards curriculum 30-topic poster for interns to track and compare their educational progress with their colleagues; posting run-charts monthly to advertise usage rates of Moodle; creating one-page topic summaries uploaded to Moodle throughout the

project; and emailing to raise awareness of Moodle and to encourage senior residents to take an active educational role in their team. Measures Usage of Moodle and quiz completion rates on Moodle were tracked monthly for residents who had completed >2 weeks of ward time in the 2020-2021 academic year. The primary outcome measure was use of the ward curriculum on Moodle. Results Prior to our intervention, 70% of interns, 50% of 2nd years, 50% of seniors accessed Moodle within the past 12 months. Since our intervention, resident access to Moodle in the first 6 months of the academic year has reached 100%, 50%, and 40% for the intern, second-year, and third-year classes, respectively. Residents who took at least 2 online topic quizzes and scored >80% reached 50%, 10%, and 0% for each respective class. Conclusions and Next Steps Based on the trajectory of increased usage, we anticipate reaching our aim of 90% usage of the pediatric wards curriculum on Moodle by the end of the academic year. Future interventions include emails to attendings to remind them to promote the use of the curriculum and re-assessing barriers for senior residents. Factors that may lead to greater access to the resources in the intern class may include: increased motivation and energy compared to the senior residents, decreased clinical experience, and the focus of the topic poster on the interns. The high utilization of Moodle by the current intern class will likely translate to the incoming intern class, leading to a cultural shift as Moodle is accepted as a reliable educational tool.