Stanford Pediatrics Residency Updates

Program Director: Carrie Rassbach, MD, MA Ed
Associate Program Directors: Caroline Buckway, Sarah Hilgenberg, Kevin Kuo, Caroline Okorie, Elizabeth Stuart, Lahia Yemane
Program Coordinators: Carrie Johnson, Michelle Brooks, Kat Jackman, Carrie McGaughey
Chief Residents: July Lee, Bradford Nguyen, Samantha Scanlon (2020-2021)
Jonji Barber, Caitlin Billingham, Elisa Phillips (2021-2022)
Overview

- Residency Growth
- Educational Strengths
- Educational Challenges: Workload, Burnout, Moral Distress
- Measures to Address
- New Innovations
Residency Growth
Residency Program Growth

2007
Categorical-20
Child Neuro-2

2009
Categorical-26
Child Neuro-2

2011
Pediatrics-Anesthesiology-2

2014
Categorical-22
PSTP (Physician Scientist)-4

2017
Pediatrics-Genetics -2
Child Neuro-3

2019
Child Neuro-4

2020
Categorical-23

2021
Categorical-27
Child Neuro -4, PSTP -4
Pediatrics-Anesthesiology-2
Pediatrics-Genetics-2

39 new interns!
Associate Program Directors

Lahia Yemane, MD
Advising APD, Intern Class, Peds Genetics Program

Caroline Okorie, MD
Advising APD, Junior Class and Child Neuro Program

Caroline Buckway, MD
Advising APD, Senior Class and Peds-Anesthesia Program

Sarah Hilgenberg, MD
Curriculum APD, General Pediatrics and Assoc Specialties

Kevin Kuo, MD, MHPE
Curriculum APD, Subspecialties

Elizabeth Stuart, MD, MEd
APD of Continuity Clinic and Primary Care
Residency Coordinators
Chief Residents

- 2020 - 2021 chiefs:
  - July Lee
  - Bradford Nguyen
  - Samantha Scanlon

- 2021 - 2022 chiefs:
  - Elisa Phillips
  - Jonji Barber
  - Caitlin Billingham
Other Residency Leaders

Clea Sarnquist, DrPH, MPH  
Director, Scholarly Concentrations Program

Rasika Behl, MPH,  
Program Officer, Scholarly Concentrations Program

Becky Blankenburg, MD, MPH,  
Coaching Program Director

Zack Sellers, MD, PhD  
Physician Scientist Research Advisor
Educational Strengths
Educational Strengths

- Top Program!
- Phenomenal Residents!
- Strong applicant pool (1200+ applicants/year for 39 positions)
- Outstanding leadership support (APDs, Chiefs, Coordinators, etc)
- Diverse residency (31% UIM), commitment to service, advocacy, and equity
Educational Strengths

- Robust clinical curriculum
  - Balance of clinical sites, general vs. subspecialty pediatrics
  - Comprehensive didactic curriculum

- First-in-the-nation Coaching Program
- Innovative Scholarly Concentrations Program and research curriculum

- Transparency: Monthly Residency Town Halls for all residents
- Engagement: Residency Council for residents to engage in ongoing improvements
Educational Strengths

Pediatrics residents bring in grant funding!

- 2021-2024: $870,000 from CalMedForce grant
- 2020-2023: $600,000 from CalMedForce grant
- 2020-2021: $250,000 from Office of Statewide Health Planning and Development
- 2020-2023: R38 NIH Stimulating Access to Research in Residency Award
- Cystic Fibrosis Foundation Fellowship Awards

Pediatrics residents are the future!

- A pipeline to subspecialties
- A pipeline to PCHA, Gardner & community practices
Educational Challenges
Educational Challenges - Workload

- Gradually worsening resident workload since new hospital opened in 2017
- “Service over education” challenges
- Didactic conference attendance (required by the ACGME)
- Continuity clinics from San Mateo to South San Jose
- Late, stressful arrivals to continuity clinic
- Frequent handoffs
- Extremely tight staffing
Stanford GME Survey
Nov 2020:

- 41/87 respondents, 47% response rate
- Peds (left) worse than Stanford average (right) on:
  - Time for education
  - Service over education
- Similar data from the ACGME Survey
Educational Challenges – Workload

- Growth of clinical services:

<table>
<thead>
<tr>
<th>Avg. daily census</th>
<th>2016-2017</th>
<th>2019-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heme-onc</td>
<td>20</td>
<td>32</td>
</tr>
<tr>
<td>Hospital Medicine</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>All acute care</td>
<td>80</td>
<td>102</td>
</tr>
</tbody>
</table>
Educational Challenges - Burnout

- Stanford Pediatrics Resident burnout is significant:
  - Burnout higher among Stanford pediatrics residents than other Stanford residents
  - Higher among Stanford pediatrics residents than pediatrics residents nationally
Stanford GME Survey Nov 2020:

- 41/87 respondents, 47% response rate
- Peds (left) worse than Stanford average (right) on:
  - Burnout
Stanford pediatrics residents are below the national mean on all questions.

<table>
<thead>
<tr>
<th>ACGME Wellbeing Items</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>St mean</th>
<th>National Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>I find my work to be meaningful.</td>
<td>50.0%</td>
<td>48.4%</td>
<td>0.0%</td>
<td>1.6%</td>
<td>3.47</td>
<td>3.6</td>
</tr>
<tr>
<td>I work in a supportive environment.</td>
<td>41.9%</td>
<td>54.8%</td>
<td>3.2%</td>
<td>0.0%</td>
<td>3.38</td>
<td>3.5</td>
</tr>
<tr>
<td>The amount of work I am expected to complete in a day is reasonable.</td>
<td>22.6%</td>
<td>62.9%</td>
<td>11.3%</td>
<td>3.2%</td>
<td>3.05</td>
<td>3.4</td>
</tr>
<tr>
<td>I participate in decisions that affect my work.</td>
<td>25.8%</td>
<td>59.7%</td>
<td>12.9%</td>
<td>1.6%</td>
<td>3.097</td>
<td>3.5</td>
</tr>
<tr>
<td>I have enough time to think and reflect.</td>
<td>8.1%</td>
<td>40.3%</td>
<td>46.8%</td>
<td>4.8%</td>
<td>2.52</td>
<td>3.3</td>
</tr>
<tr>
<td>I am treated with respect at work.</td>
<td>33.9%</td>
<td>58.1%</td>
<td>6.5%</td>
<td>1.6%</td>
<td>3.25</td>
<td>3.5</td>
</tr>
<tr>
<td>I often feel emotionally drained at work.</td>
<td>19.4%</td>
<td>38.7%</td>
<td>37.1%</td>
<td>4.8%</td>
<td>2.73</td>
<td>2.8</td>
</tr>
<tr>
<td>I feel more and more engaged in my work.</td>
<td>9.7%</td>
<td>48.4%</td>
<td>38.7%</td>
<td>3.2%</td>
<td>2.65</td>
<td>3.3</td>
</tr>
<tr>
<td>I find my work to be a positive challenge.</td>
<td>27.4%</td>
<td>66.1%</td>
<td>6.5%</td>
<td>0.0%</td>
<td>3.21</td>
<td>3.5</td>
</tr>
<tr>
<td>I find new and interesting aspects in my work.</td>
<td>24.2%</td>
<td>67.7%</td>
<td>6.5%</td>
<td>1.6%</td>
<td>3.15</td>
<td>3.5</td>
</tr>
<tr>
<td>After work, I need more time than in the past in order to relax.</td>
<td>32.3%</td>
<td>45.2%</td>
<td>19.4%</td>
<td>3.2%</td>
<td>3.07</td>
<td>2.6</td>
</tr>
<tr>
<td>I feel worn out and weary after work.</td>
<td>25.8%</td>
<td>58.1%</td>
<td>12.9%</td>
<td>3.2%</td>
<td>3.07</td>
<td>2.6</td>
</tr>
</tbody>
</table>
Pediatric Resident Burnout-Resilience Study Consortium: 2016-20 Annual Survey Results

70% response rate

Stanford peds residents on average (47%) more burned out than 15 other programs (31%)

Special thanks to Caroline Buckway, PI
In comparison with 15 other programs:

- Fewer of our residents feel that resident education is a high priority
- More feel that their co-residents are burned out
In comparison with 15 other programs:

- More of our residents experienced mistreatment from staff
- More experienced mistreatment from families
Moral Distress in Pediatric Residents and Pediatric Hospitalists: Sources and Association With Burnout

Jimmy Beck, MD, MEd; Cameron L. Randall, MS, PhD; Hannah K. Bassett, MD; Kimberly L. O’Hara, MD; Carla N. Falco, MD; Erin M. Sullivan, MPH; Douglas J. Opel, MD, MPH

From the Department of Pediatrics, University of Washington (J Beck, EM Sullivan, and DJ Opel), Seattle, Wash; Department of Oral Health Sciences, University of Washington School of Dentistry (CL Randall), Seattle, Wash; Department of Pediatrics, Stanford University (HK Bassett), Palo Alto, Calif; Department of Pediatrics, University of Colorado School of Medicine and Children’s Hospital Colorado (KL O’Hara), Aurora, Colo; Department of Pediatrics, Baylor College of Medicine (CN Falco), Houston, Tex; and Seattle Children’s Core for Biomedical Statistics (EM Sullivan), Seattle, Wash.

The authors have no conflicts of interest or corporate sponsors for this.

Address correspondence to Jimmy Beck, MD, MEd, Department of Pediatrics, University of Washington, Seattle WA, Seattle Children’s Hospital, 4800 Sand Point Way NE, M/S FA2.115, Seattle, WA 98105 (e-mail: Jimmy.Beck@seattlechildrens.org).

Received for publication January 22, 2020; accepted May 24, 2020.

ABSTRACT

OBJECTIVE: Moral distress is increasingly identified as a major problem affecting healthcare professionals, but it is poorly characterized among pediatricians. Our objective was to assess the sources of moral distress in residents and pediatric hospitalist attendings and to examine the association of moral distress with reported burnout.

METHODS: Cross-sectional survey from January through March 2019 of pediatric residents and hospital medicine attending physicians affiliated with 4 free-standing children’s hospitals. Moral distress was measured using the Measure of Moral Distress for Healthcare Professionals (MMD-HP). Burnout was measured using 2 items adapted from the Maslach Burnout Inventory.

RESULTS: Respondents included 288 of 541 eligible pediatric residents (response rate: 53%) and 118 of 168 pediatric hospitalists (response rate: 70%; total response rate: 57%). The mean MMD-HP composite score was 93.4 (SD = 42.5). Residents reported significantly higher frequency scores (residents: M = 38.5 vs. hospitalists: M = 33.3; difference: 5.2, 95% confidence interval [CI], 2.9–7.5) and composite scores (residents: M = 97.6 vs. hospitalists: M = 83.0; difference: 14.6, 95% CI, 5.7–23.5) than hospitalists. The most frequent source of moral distress was “having excessive documentation requirements that compromise patient care,” and the most intense source of moral distress was “being required to work with abusive patients/family members who are compromising quality of care.” Significantly higher mean MMD-HP composite scores were observed among participants reporting that they felt burned out at least once per week (M = 114.6 vs M = 82.3; difference: 32.3, 95% CI, 23.5–41.2).

CONCLUSIONS: Pediatric residents and hospitalists report experiencing moral distress from a variety of patient-, team-, and system-level sources, and this distress is associated with burnout.

KEYWORDS: Burnout; Moral distress

ACADEMIC PEDIATRICS 2020;20:1198–1205
Educational Challenge– Moral Distress

- We were site 4: our 41 residents + 17 hospitalists reported more frequent and more intense moral distress compared with 3 other sites (UW, U Colorado, Baylor)
- Excessive documentation and abusive patients/families biggest contributors

Table 2. Frequency, Intensity and Overall Composite Scores, Overall, by Position and Site

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>Residents</th>
<th>Hospitalists</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency score*</td>
<td>37.0 (11.3)</td>
<td>38.5 (11.2)</td>
<td>33.3 (10.7)</td>
<td>.0002</td>
</tr>
<tr>
<td>Intensity score*</td>
<td>58.1 (19.2)</td>
<td>57.7 (18.2)</td>
<td>59.1 (21.3)</td>
<td>.313</td>
</tr>
<tr>
<td>Overall Composite score*</td>
<td>93.4 (42.5)</td>
<td>97.6 (42.1)</td>
<td>83.0 (41.8)</td>
<td>.0082</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Site 1</th>
<th>Site 2</th>
<th>Site 3</th>
<th>Site 4</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency score*</td>
<td>32.5 (8.9)</td>
<td>38.0 (11.4)</td>
<td>36.5 (11.8)</td>
<td>41.5 (10.8)</td>
<td>.0004</td>
</tr>
<tr>
<td>Intensity score*</td>
<td>57.5 (17.7)</td>
<td>60.4 (18.3)</td>
<td>54.1 (20.2)</td>
<td>62.7 (19.2)</td>
<td>.0004</td>
</tr>
<tr>
<td>Total composite score*</td>
<td>82.4 (28.9)</td>
<td>94.9 (42.7)</td>
<td>90.7 (45.1)</td>
<td>109.9 (46.2)</td>
<td>.001</td>
</tr>
</tbody>
</table>

*Mean (SD).
Summary: Workload, Burnout and Moral Distress

- **Workload:**
  - “Service over education” worse than other Stanford programs, worse than other pediatrics programs nationally

- **Burnout:**
  - Higher than other Stanford residents and than other pediatrics residents nationally

- **Mistreatment:**
  - By patients, families and staff higher than pediatrics residents nationally

- **Moral distress:**
  - Worse than in other institutions, related to workload and learning environment
Measures to Address Workload, Burnout and Moral Distress
Measures to Address

- Structural Changes within Rotations
- Residency Program Expansion
- Addressing Workplace Violence
- X+Y Scheduling
Step 1: Structural Changes Within Rotations

- Working with individual division chiefs to right size teams
- Expanding APP services & defining roles
- Night float system for residents
- Half-days off on some rotations
Step 2: Residency Program Expansion

- Expanding categorical program by 4 positions/year beginning June 2021
- Will allow better staffing of rotations
- Will allow more flexibility within residency program
- May have learner saturation in some sites
Step 3: Addressing Workplace Violence

Working with Mary Leonard, Denny Lund, Christy Sandborg, Julie Collier, Christy Foster on hospital policies

De-escalation curriculum – Sarah Hilgenberg

SAFTeam

Mistreatment surveys for residents and fellows

Mistreatment algorithm

Morning reports by
- Nursing supervisor – Grady Kimes
- Workplace Violence Champions
Step 4: X+Y Scheduling

- Resident-initiated
- Applicant-requested
- Peer institutions: Yale, Advocate Children’s, Cleveland Clinic, Utah, CHOP, NYU, Kentucky, Oklahoma, Buffalo, Boston
### Draft schedule model for interns

- **Y blocks** = dark green
- **X blocks** = other colors
X+Y Advantages

- Increased resident satisfaction “They love it. They would never go back”
- Increased faculty satisfaction

- Improved training and experience in primary care
  - Residents arriving on time, not rushed
  - Able to focus and be present for patients in clinic

- Improved resident experience in inpatient services
  - Fewer handoffs
  - Decreased cognitive load, emotional burden
  - Less need for cross-coverage
X + Y Scheduling in Pediatric Residency: Continuity, Handoffs, and Trainee Experience

Rachel Osborn, MD; Eliza Bullis, MD; Ada M. Fenick, MD; Emily Powers, MD; Sumeet Banker, MD, MPH; Andrea Asnes, MD, MSW

From the Department of Pediatrics (R Osborn, E Bullis, AM Fenick, E Powers, S Banker, and A Asnes), Yale University, New Haven, Conn; Department of Pediatrics and Communicable Diseases (R Osborn), University of Michigan, Ann Arbor; Tufts University School of Medicine (E Bullis), Boston, Mass; and Department of Pediatrics (S Banker), Columbia University, New York, NY
The authors have no conflicts of interest to disclose.
Address correspondence to Rachel Osborn, MD, Department of Pediatrics, 330 Cedar Street LMP 4100B, New Haven, CT 06510 (e-mail: rachel.osborn@yale.edu).
Received for publication December 5, 2018; accepted May 3, 2019.

ABSTRACT

BACKGROUND: Many internal medicine residency programs have transitioned to an X + Y clinic schedule, in which weekly continuity clinics are removed and clinic experience is instead condensed into 2-week blocks interspersed throughout the year, but few pediatric training programs have adopted this approach. We initiated X + Y scheduling in the 2015 academic year, with the hypothesis that outpatient continuity could be maintained or improved while inpatient handoffs would be reduced. We also hypothesized that learner experience with X + Y scheduling would be positive.

METHODS: Continuity and handoffs were compared over a 7-month period in 2013 to 2014 and 2015 to 2016. Outpatient continuity was calculated as the proportion of visits in which the patient was seen by the designated primary care provider (PCP). Handoffs were calculated through analysis of the online resident schedule with comparison of weekly totals for all inpatient teams. Resident perceptions were obtained in an online survey of residents who experienced both systems.

RESULTS: With X + Y scheduling, overall outpatient continuity improved from 2914 of 9882 (29.5%) of visits seen by a patient’s PCP to 3066 of 9769 (31.4%) (P = .004), but preventive visit continuity decreased from 2170 of 4687 (46.2%) to 2025 of 4709 (43%) (P = .001). Inpatient handoffs decreased with X + Y scheduling from 30 to 20 weekly handoffs (P < .001). In total, 85% of residents reported a positive experience with X + Y scheduling.

CONCLUSIONS: An X + Y scheduling approach in pediatrics is a viable alternative to weekly clinics, resulting in improved learner experience, reductions in inpatient handoffs, and small mixed effects on outpatient continuity.

KEYWORDS: continuity clinic; inpatient hand-offs; resident education

ACADEMIC PEDIATRICS 2019;19:489—494
X+Y Scheduling in Pediatric Residency Programs: Resident Perspectives

Sara Muller, MD1; Ross Myers, MD2; Karla Garcia, MD3; Joanna Lewis, MD4
1 Norton Children's and University of Louisville School of Medicine 2 UH Rainbow Babies and Children's Hospital 3 Children's Hospital at Erlanger and University of Tennessee College of Medicine Chattanooga & Advocate Children's Hospital Park Ridge

BACKGROUND
• X+Y scheduling has been implemented and studied in Internal Medicine residency programs with successful outcomes in:
  • Resident satisfaction
  • Resident wellness
  • Continuity with patients

• In 2018, five pediatric programs were approved by the ACGME to pilot this scheduling model as part of the Advancing Innovation in Resident Education program. In 2019, six additional programs joined as Cohort 2.

• Data from the Cohort 2 experience adds to the body of knowledge from the initial cohort.

METHODS
• Six programs in the Cohort 2 implemented X+Y scheduling at their respective sites.

• Pre- and 12 month post-implementation surveys were distributed to residents at each program using RedCAP or Survey Monkey.

• Surveys included questions regarding:
  • Perceived continuity with patients
  • Satisfaction with scheduling
  • Perceived time for teaching in both inpatient and outpatient settings
  • Quality of handoffs on inpatient services
  • Preference of schedule type

• Data were analyzed using z tests for proportion differences.

RESULTS
• 123 residents responded to the pre-survey, a 60% response rate

• 131 residents responded to the post-survey, a 64% response rate

• The following perception outcomes showed significant difference (p < 0.01) between pre- and post-implementation surveys (Table 1)
  • Continuity with patients
  • Quality of handoffs
  • Time for teaching on inpatient and outpatient rotations
  • Impact on inpatient workflow

• 91% of resident respondents preferred X+Y scheduling to traditional scheduling models

Table 1: Pre- and Post-Implementation Survey Results
Respondents answering agree or strongly agree

<table>
<thead>
<tr>
<th></th>
<th>Pre (n=123)</th>
<th>Post (n=131)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived continuity with patients</td>
<td>19</td>
<td>50</td>
<td>&lt; 0.01</td>
</tr>
<tr>
<td>Ability to schedule repeat visits</td>
<td>31</td>
<td>45</td>
<td>0.13</td>
</tr>
<tr>
<td>Clinic limits time on subspecialty rotations</td>
<td>69</td>
<td>28</td>
<td>&lt; 0.01</td>
</tr>
<tr>
<td>Impact of clinic on handoffs</td>
<td>79</td>
<td>14</td>
<td>&lt; 0.01</td>
</tr>
<tr>
<td>Impact of clinic on inpatient workflow</td>
<td>80</td>
<td>18</td>
<td>&lt; 0.01</td>
</tr>
<tr>
<td>Time for teaching on inpatient rounds</td>
<td>27</td>
<td>92</td>
<td>&lt; 0.01</td>
</tr>
<tr>
<td>Time for teaching in clinic</td>
<td>22</td>
<td>83</td>
<td>&lt; 0.01</td>
</tr>
</tbody>
</table>

CONCLUSIONS
• X+Y scheduling was widely preferred by residents across institutions with perceived improvements in several areas of work flow.

• These results are in concordance with those previously presented by Cohort 1.

• Regarding resident perceptions, the X+Y scheduling method is non-inferior to traditional resident scheduling and has potential to improve resident education.

• Programs implemented X+Y with different formulas (3+1, 4+1, 4+2+2) which may have caused variability in results between institutions.

• Future research could examine differences in survey responses based on X+Y formula and direct comparison of programs using traditional scheduling v. X+Y

ACKNOWLEDGMENTS
The authors would like to acknowledge all of the programs and directors in in Cohorts 1, 2, 3 of the AIRE pilot study: Advocate Children's Hospital Park Ridge, Rainbow Babies and Children's Hospital, University of Texas Austin, University of Toledo, New York University, University of Buffalo, University of Tennessee Chattanooga, University of Louisville, Cleveland Clinic, University of South Alabama, Kaiser Oakland, Children's Hospital of Philadelphia, University of Texas Southwestern, University of Oklahoma, University of Chicago, University of California Los Angeles, University of Kansas Wichita, University of Utah

REFERENCES

Impact of X+Y Scheduling on Faculty Perceptions of Resident Education
2 Years of Data from the Pediatric X+Y Scheduling Collaborative

Ross Myers¹, Lynn Thoreson², Heather Howell³, Kathryn Weedon⁴, Joyce Bevington⁵, Patricia Poitevien⁶, Mary Beth Wroblewski⁷, Keith Ponitz⁸, Joanna Lewis⁹

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**Background**

- Traditional continuity clinic scheduling can lead to fragmented educational experiences
- X+Y scheduling is when residents spend time on educational blocks without continuity clinic (X) with continuity clinics clustered together during smaller time periods throughout the academic year (Y)
- Five pediatric residency programs were granted permission from the ACGME to transition to X+Y scheduling via the AIRE program

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**Objective**

- Assess the impact X+Y scheduling has on pediatric faculty perceptions of patient care and other educational experiences

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**Methods**

- Surveys sent to faculty of the five Cohort 1 X+Y pilot programs n=384
  - Pre X+Y; 1-year and 2-year Post-X+Y
  - Response rates: 51%, 26%, 40%
- Questions based on faculty area of practice
  - General Pediatrics
    - Adequate time for teaching
    - Continuity with clinic patients
  - Hospital Medicine
    - Adequate time for teaching
    - Clinic impacts inpatient workflow
  - Subspecialty
    - Adequate time for teaching
- Measures evaluated with 5-point Likert scale
  - Strongly Agree to Strongly Disagree

---

**Results**

- **Time for Teaching**
  - Gen Peds
    - Pre-X+Y: 64%
    - 1-year: 63%
    - 2-year: 83%
  - Hospitalist
    - Pre-X+Y: 60%
    - 1-year: 61%
    - 2-year: 85%
  - Schedule Impacts Workflow
    - Subspecialist
      - Pre-X+Y: 79%
      - 1-year: 77%
      - 2-year: 42%

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**Conclusions**

- Faculty perceived improvement with X+Y over traditional schedule at 1 and 2 years
  - General Peds
  - Adequate time for teaching
  - Continuity with clinic patients
  - Hospitalist
  - Adequate time for teaching
  - Clinic impacts inpatient workflow
- No change in perceived teaching time for subspecialty faculty
- No statistical difference between Years 1 and 2

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**Next Steps**

- Evaluate 3-year data
- Analyze qualitative data
- Additional programs have been added
  - Cohort 2 – 6 programs
  - Cohort 3 – 7 programs
  - Cohort 4 – 3 programs
- Analyze data based on type of X+Y schedule
- Obtain patient-level continuity metrics (EMR, scheduling software)
- Analyze data from Med/Peds programs in Cohort 2, 3, 4

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Legend: Graphs above with faculty responses Strongly Agree or Agree Pre-X+Y, 1 year, and 2 years Post-X+Y. Lines denote p<0.05

Stanford Pediatrics Residency X+Y Model

- Approved by GMEC (Dec 2020) and ACGME (Feb 2021)
- Launching June 2021
- 4+2 week model
  - No change in duration of current rotations, all are 4- or 2-weeks
  - Some 4-week ambulatory rotations will be split into 2, 2-week blocks
- Cadence will change
  - Generally no more than 4 consecutive weeks on inpatient services
- Continuity clinic will change
  - 2 half-days/week on Y blocks
  - Generally no clinic on X blocks (occasionally needed to meet clinic numbers)
  - 36 clinics over approximately 18 weeks (not 26 weeks)
Residents overwhelmingly excited

Applicants overwhelmingly excited

Will be better for primary care/continuity clinic training

Will be better for inpatient continuity

Rotations on Y blocks will have 2 continuity clinics/week
New Innovations
New Innovations

- Anti-Racism Curriculum
  - Rotation-based
  - Longitudinal
  - Academic Half Day
- Mental Health Curriculum
  - Depression, Anxiety, ADHD, Postpartum depression, psychosis, trauma-informed care
  - Buprenorphine induction for adolescent at SCVMC inpatient
- Expansion of Community and Advocacy Training
  - Social determinants of health, environmental health, adverse childhood experiences
- Social Media: Slack, Twitter, Instagram
  - Internal communication, education, recruitment
Summary

- Residency Growth
- Educational Strengths
- Educational Challenges: Workload, Burnout, Moral Distress
- Measures to Address
- New Innovations
Questions?

Thank you!