

Virtual





Symposium for Innovation in Medical Education

Virtual Poster Session – Room A

Artwork courtesy of Cathy Cichon, MD, MPH



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Global virtual strabismus surgery teaching for ophthalmology residents during Covid-19

Exploring the Effects of Sense of Belonging on Professional Identity Formation in Preclerkship Medical Students

UCSD Pediatric Resident Neonatal Intubation Attempts are **Declining over a 15 Year Period**

Contributors and Detractors to Senior Medical Students' Sense of Belonging on Clinical Rotations

PREPPED: Plastic Surgery Research, Education, and Preparation Promoting Equity and Diversity

"Zoom"ing to the Kitchen: A Novel Approach to Virtual **Nutrition Education for Medical Trainees**

Training the Neurology Resident in End of Life Care



Poster Title

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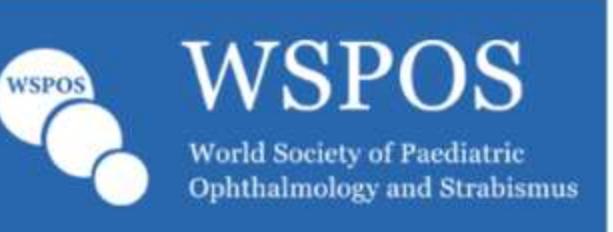
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SHILEY EYE INSTITUTE UC SAN DIEGO

The Viterbi Family Department of Ophthalmology

PURPOSE

To demonstrate the feasibility of teaching strabismus surgical skills remotely by evaluating resident comfort and confidence level with strabismus surgery technical skills

BACKGROUND

The COVID19 pandemic forced residency programs to limit, or altogether stop in-person training with ophthalmology ORs around the world closed, further limiting residents' exposure to surgical training. In response, WSPOS piloted strabismus surgery simulation webinars providing real-time surgical instruction using an accessible model eye.

Survey Study, Queen's University Health Sciences and Affiliated Teaching Hospitals Research Ethics Board approval.

Methods: Residents created a basic ping pong eye model at home following emailed video instructions with basic surgical techniques demonstrated (www.simulatedocularsurgery.com) (Fig.1A). Prior METHODS to watching the video, the Pre-Video survey was completed. After watching the video the Post-Video survey was completed. The March 21st virtual teaching session was conducted via Zoom, with 5 breakout rooms, each room with 1 instructor and 2 Participants: Ophthalmology trainees residents. Both trainees and instructors had the worldwide were invited to participate in the remote strabismus surgery set up (Fig.1B). Basic WSPOS Virtual Strabismus Surgery Wet Lab strabismus surgery technical skills (needle handling, Webinar on March 27, 2021. Residents selected scleral passes, muscle suturing) were introduced and for the educational event were invited to practiced during this 45 minute live remote session. participate in the research study on March 21, The Post-Surgery survey was completed after the 2021, after informed consent. breakout session.

Inclusion Criteria: Resident participants with no prior strabismus surgery experience, access to a cell phone, wifi , Zoom app, ability to create the eye model. Instructors were expert pediatric ophthalmologists in strabismus surgery.

Global Virtual Strabismus Surgery Teaching For Ophthalmology Residents During Covid-19

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METHODS (CON'T)

Surveys: Resident participants completed 3 surveys anonymously, created by the instructors: Pre-Video, Post-Video and Post-Surgery. Survey responses were collected online using the Qualtrics platform (Provo, UT). Data collected: demographic data, prior experience and interest in strabismus surgery and questions to confirm knowledge in strabismus surgery. Trainee's comfort and confidence in strabismus surgery technical skills was graded using a Likert scale (1-5) for each question.

Statistical Analyses:

Paired t-tests and repeated measures ANOVA of survey responses (Greenhouse-Geisser correction for lack of sphericity)

Alison X Chan, BS, Erin Dohaney, MD, Wilma M Hopman, MA, Rita Gama, MD, Ramesh Kekunnaya, MD, Yi Ning J Strube, MD, MS, FRCSC, DABO, John Ferris, MD, David B Granet, MD, MHCM

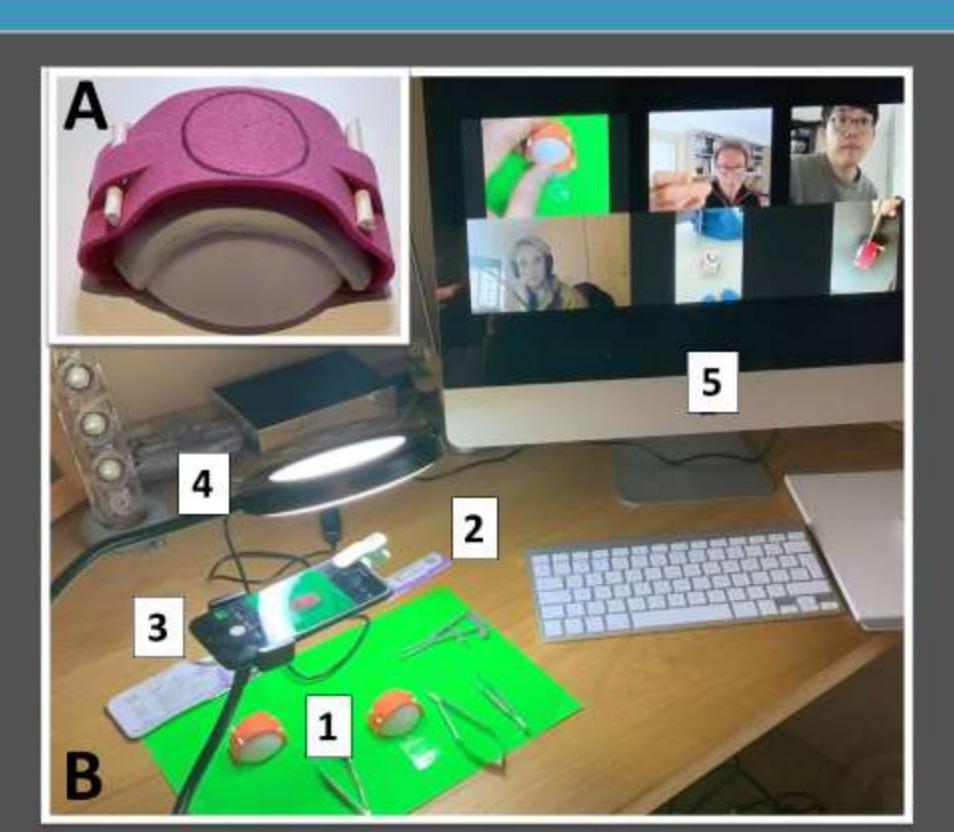
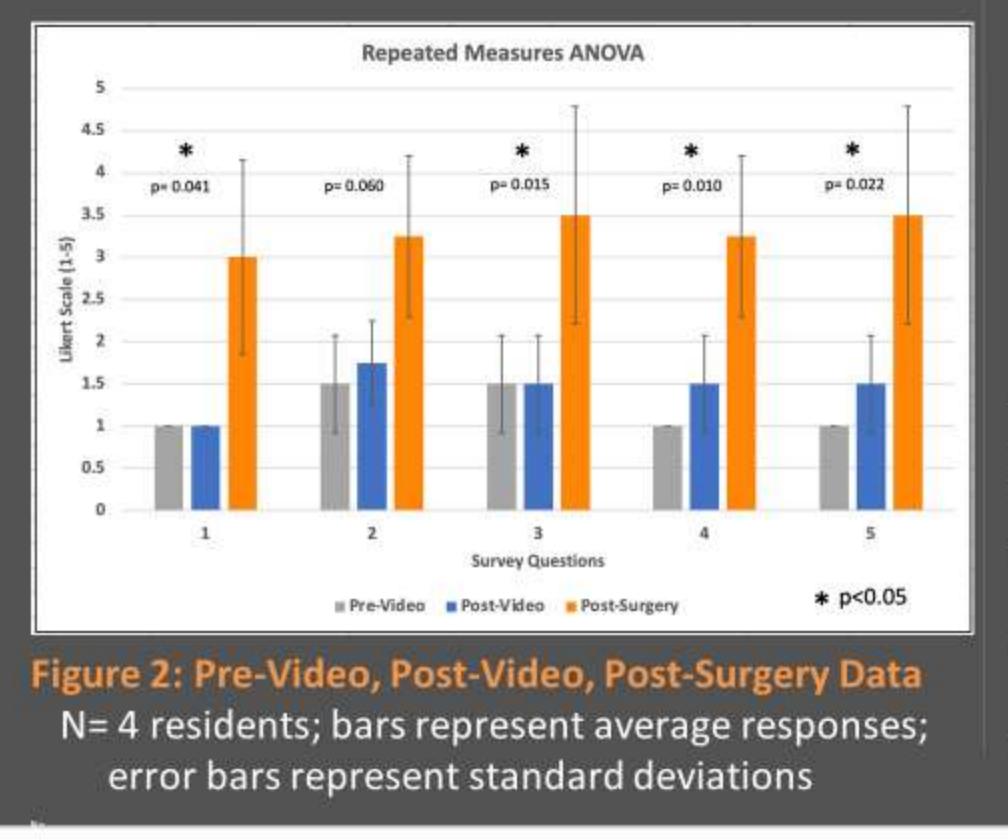


Figure 1A: Simple Model Eye

Made at home by participants, from ping pong ball, craft foam, match sticks and modeling clay

Figure 1B: Remote Virtual Strabismus Sim Set Up

- 1. Model Eye
- 2. Surgical instruments and sutures
- 3. Cell phone Zoom recording surgery on model eye
- 4. Light source
- 5. Computer Zoom recording participants' faces



RESULTS

10 residents and 5 instructors participated in the March 21st teaching session. Residents were from South Africa, Asia and Europe. 8/10 residents participated in the survey study; 4/10 residents completed all 3 surveys: there was marked improvement comparing Pre-Video to Post-Surgery survey scores, with some improvement Pre-Video to Post-Video (Fig.2). Feedback from residents for learning was positive.

CONCLUSIONS

- REFERENCES
- 2020;24:3.e1-6.
- 2017;152:318-325





 Our pilot project and data showed that strabismus surgery can be effectively taught virtually using an accessible model eye Technology-based training tools can facilitate remote mentoring and simulation-based surgical teaching

 With remote surgical simulation the world expertise in strabismus surgery teaching can be easily delivered to trainees worldwide No longer are residents and students limited by local resources and teaching staff Opens up previous barriers to learning Ultimately improves care to our pediatric strabismus patients worldwide.

1. Ferrara M, Romano V, Steel DH, et al. Reshaping ophthalmology training after COVID-19 pandemic. Eye (Lond). 2020;34(11):2089-2097. doi:10.1038/s41433-020-1061-3 2. Jagan L, Turk W, Petropolis C, Egan R, Cofie N, Wright KW, Strube YJ. Validation of a novel strabismus surgery 3D-printed silicone eye model for simulation training. J AAPOS

3. Kennedy A, Lee A, Ambinder D, Naslund M, Siddiqui MM, Phelan M, Malik RD. Video-based coaching as an educational platform for urological residency training: a pilot study. Urology Practice 2021 May 1 (online ahead of print).

4. Hu YY, Mazer LM, Yule SJ, Arriaga AF, Greenberg CC, Lipsitz SR, Gawande AA, Smink DS. Complementing operating room teaching with video-based coaching. JAMA Surg.

UC San Diego Exploring the Effects of Sense of Belonging on Professional Identity Formation in Preclerkship Medical Students

School of Medicine

Authors: Kanchi Mehta BS¹, Helen Wang MD² ¹University of California, San Diego, School of Medicine, San Diego, CA, ²University of California, San Diego, Department of Pediatrics, San Diego, CA

Background

- **Professional Identity Formation** (PIF): students' pre-existing identities integrate into new identities that incorporate the tenets of being a physician Sense of belonging (SB) is likely a critical aspect of PIF and correlates to a person's self-esteem, connectedness, and efficacy
- SB strengthens social ties, enhances academic performance and motivation
- SB has not been adequately \bullet explored in preclerkship medical students

Objectives

Explore effects of SB in preclerkship students on their motivation to learn and their PIF

Methods

- Class of 2025 and 2026 students were recruited via electronic postings to participate in an anonymous survey based on prior SB and PIF conceptual frameworks
- IRB approval and participant consent were obtained
- Recruitment and data analysis occurred concurrently until data saturation was achieved
- Using Dedoose and through an iterative process, two investigators (K.M., H.W.) coded and identified themes together
- Consensus was reached for any coding disagreements

28 medical students responded

Components ormation Identity Professional

In a field where lifelong learning is a hallmark, the negative effects of SB on PIF so early in training for low SB students is alarming and needs to be addressed

 SB influenced by prior experiences (i.e. clinical w volunteer experiences, research, travel, and personal/family health experiences), physician mentorship, and interactions with classmates Students with higher SB had increased self-effica educational settings

• Students with lower SB frequently compared themselves with peers and were fearful of external judgement

Table 1. Effect of SB on PIF in students with high vs. low SB. Excerpts of students' perspectives on how their SB affected their PIF are listed below.

	High SB	
Imposter syndrome	"My sense of belonging allows me to shape my professional identity because I can focus on exploration and skill-development rather than being stressed about whether I belong or not."	"Constant imposter to seek out new op
Motivation to learn	Growth mindset: "When I experience belonging uncertainty, I'm motivated to reach out more to guidance counselors and peers to help iron out my fears. "	Self-limiting mindse "Constantly afraid to because of how I fe assessing me and based on things I s
	"It has made me more comfortable with participating in group settings. It is hard to relate to many people that I encounter, but it hasn't been an insurmountable challenge."	"Feeling that not be a lack of confidence extremely intimidate groups, or during controls [ambulatory care and electives, etc)."

Conclusion

Results
Figure 1. Students self-rated 10 scale.
1

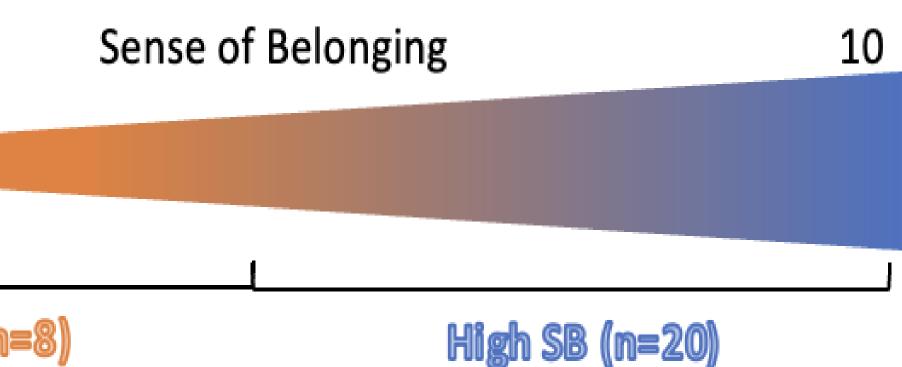
Low SB (n=8)

Future Directions

• Explore SB and PIF in preclerkship students with larger sample sizes • Explore SB and PIF over the course of medical training

This study was funded by the UC San Diego Sanford Institute for Empathy and Compassion.

their SB on a 1 to



Low SB er syndrome impedes my ability opportunities"

set:

to speak out and talk in class feel that others will be I making assumptions about me say or questions I ask"

belonging contributes hugely to ice, and that can make it ating to speak up in small clinical experiences (like ACA apprenticeship], preceptorship

Acknowledgements

UC San Diego SCHOOL OF MEDICINE DEPARTMENT OF PEDIATRICS

UC San Diego SANFORD INSTITUTE FOR **EMPATHY AND COMPASSION** Center for Mentorship in Medicine



Abstract

UCSD Pediatric Resident Neonatal Intubation Attempts are Declining over a 15 Year Period

Charles W Sauer, James K Goodmar, Crystal Le, Richard Song Department of Pediatrics, University of California San Diego

Background- Traditionally, pediatric residents have been taught the skill of endotracheal intubation, during their neonatal intensive care unit (NICU) rotation. Pediatric residency programs have been changing over the years that required less rotations in the NICU. In addition, there is a change in management of infants with respiratory distress syndrome to need mechanical centilation less often. Consistent across the country, pediatric residents have had less opportunities to perform endotracheal intubation. Trainees entering critical care fellowship are less shilled at performing intubation and have been a priority in getting intubation attempts. As of 2021, the Accreditation Council for Graduate Medical Education has removed questions for pediatric residents inquiring about neonatal endotracheal intubation experience. The University of California San Diego (UCSD) NICU keeps a log on each intubation performed and identifies the provider that attempted the intubation

determine how the number of intubation attempts for pediatric residents at the UCSD NICU on actual infants has changed over the last 15 years. Methods- Review of the University of California San Diego Neonatal Intensive Care Unit intubation log to determine the number of infants that had an intubation attempt by a pediatric resident and how this has changed over a 15 year period from July 1, 2007 to June 30, 2022.

intubation log shows 3164 infants having intubation attempts over the last 15 years. (July 1, 2007-June 30, 222) In the academic year 2007-2008 there were 158 infants that had an intubation attempt by a pediatric resident. Since then, there has been a steady decline in the number of infants that had a pediatric resident perform an intubation. From the start of academic year 2017 to present there has only been 24 infants with an intubation attempt by a pediatric resident

conatal intubation attempts by pediatric residents has steadily declined over time. This is a skill that can no longer be expected of the graduates of pediatric residency Conclusion- 1 program because the opportunity to perform it on actual patients is no longer available. The expectation of critical care fellowship programs should be that new trainees will not have this skill. Nonetheless, other innovations or opportunities can be offered through simulation training. This should be part of the pediatric residency curriculum so that if graduates of find

Background

Traditionally, pediatric residents have been taught the skill of endotracheal intubation during their neonatal intensive care unit (NICU) rotation. Pediatric residency programs have been changing over the years that required less rotations in the NICU. In addition, there is a change in management of infants with respiratory distress syndrome to need mechanical ventilation less often. Consistent across the country, pediatric residents have had less opportunities to perform endotracheal intubation. Trainees entering critical care fellowship are less skilled at performing intubation and have been a priority in getting intubation attempts. As of 2021, the Accreditation Council for Graduate Medical Education has removed questions for pediatric residents inquiring about neonatal endotracheal intubation experience. The University of California San Diego (UCSD) NICU keeps a log on each intubation performed and identifies the provider that attempted the intubation.

Hypothesis/Aim

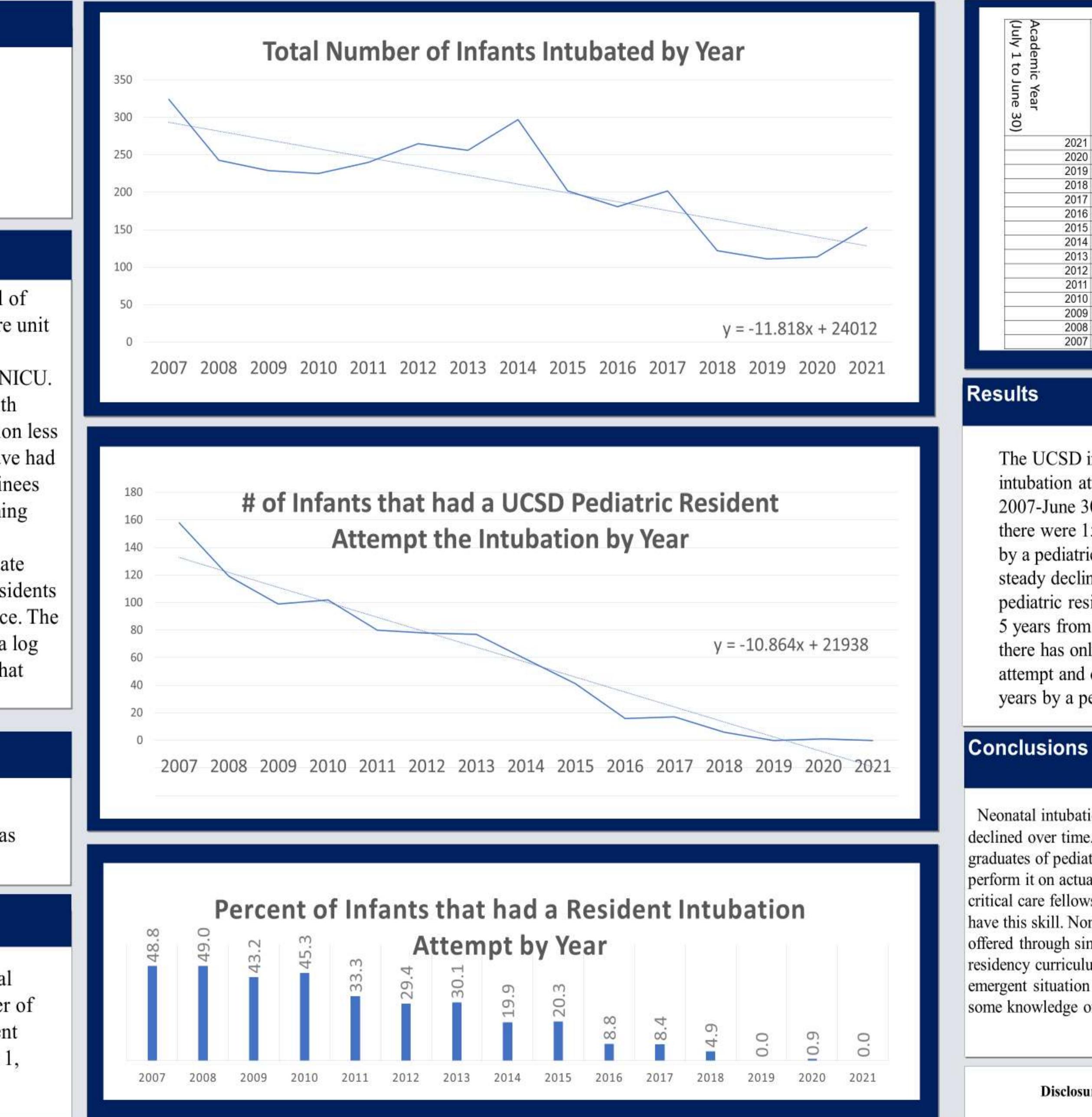
To determine how the number of intubation attempts for pediatric residents at the UCSD NICU on actual infants has changed over the last 15 years.

Methods

Review of the University of California San Diego Neonatal Intensive Care Unit intubation log to determine the number of infants that had an intubation attempt by a pediatric resident and how this has changed over a 15 year period from July 1, 2007 to June 30, 2022.

UCSD Pediatric Resident Neonatal Intubation Attempts are UC San Diego Declining over a 15 Year Period **School of Medicine**

Charles W Sauer DO, James K Goodmar, Crystal Le MD, Richard Song MD Department of Pediatrics, University of California San Diego



Contact: csauer@health.ucsd.edu

	Total number of infants intubate	# of infants that had a UCSD Pediatric resident attempt the intubation	Percent of infants that had an UCSD Pediatric resident intubation attempt
2021	153	0	0.0
2020	114	1	0.9
2019	111	0	0.0
2018	122	6	4.9
2017	202	17	8.4
2016	181	16	8.8
2015	202	41	20.3
2014	297	59	19.9
2013	256	77	30.1
2012	265	78	29.4
2011	240	80	33.3
2010	225	102	45.3
2009	229	99	43.2
2008	243	119	49.0
2007	324	158	48.8

The UCSD intubation log shows 3164 infants having intubation attempts over the last 15 years. (July 1, 2007-June 30, 222) In the academic year 2007-2008 there were 158 infants that had an intubation attempt by a pediatric resident. Since then, there has been a steady decline in the number of infants that had a pediatric resident perform an intubation. Over the last 5 years from the start of academic year 2017 to present there has only been 24 infants with an intubation attempt and only 1 infant with an attempt in the last 3 years by a pediatric resident.

Neonatal intubation attempts by pediatric residents has steadily declined over time. This is a skill that can no longer be expected of the graduates of pediatric residency program because the opportunity to perform it on actual patients is no longer available. The expectation of critical care fellowship programs should be that new trainees will not have this skill. Nonetheless, other innovations or opportunities can be offered through simulation training. This should be part of the pediatric residency curriculum so that if graduates find themselves in an emergent situation where intubation is required, they will at least have some knowledge on how to perform this procedure.

Disclosures: The authors have no relevant disclosures



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Background

- Professional identity formation (PIF): socialization process where one transforms to "think, act, and feel like a physician"
- Students' sense of belonging (SB) in the Community of Practice of Medicine (CoM) likely shapes how they interpret their experiences
- SB has not been adequately explored in medical students

Objectives

Characterize the clinical experiences senior medical students perceive to enhance and undermine belongingness.

Methods

- Focus groups and Written Reflections
- Phenomenological approach
- 6 institutions
- Iterative group coding process

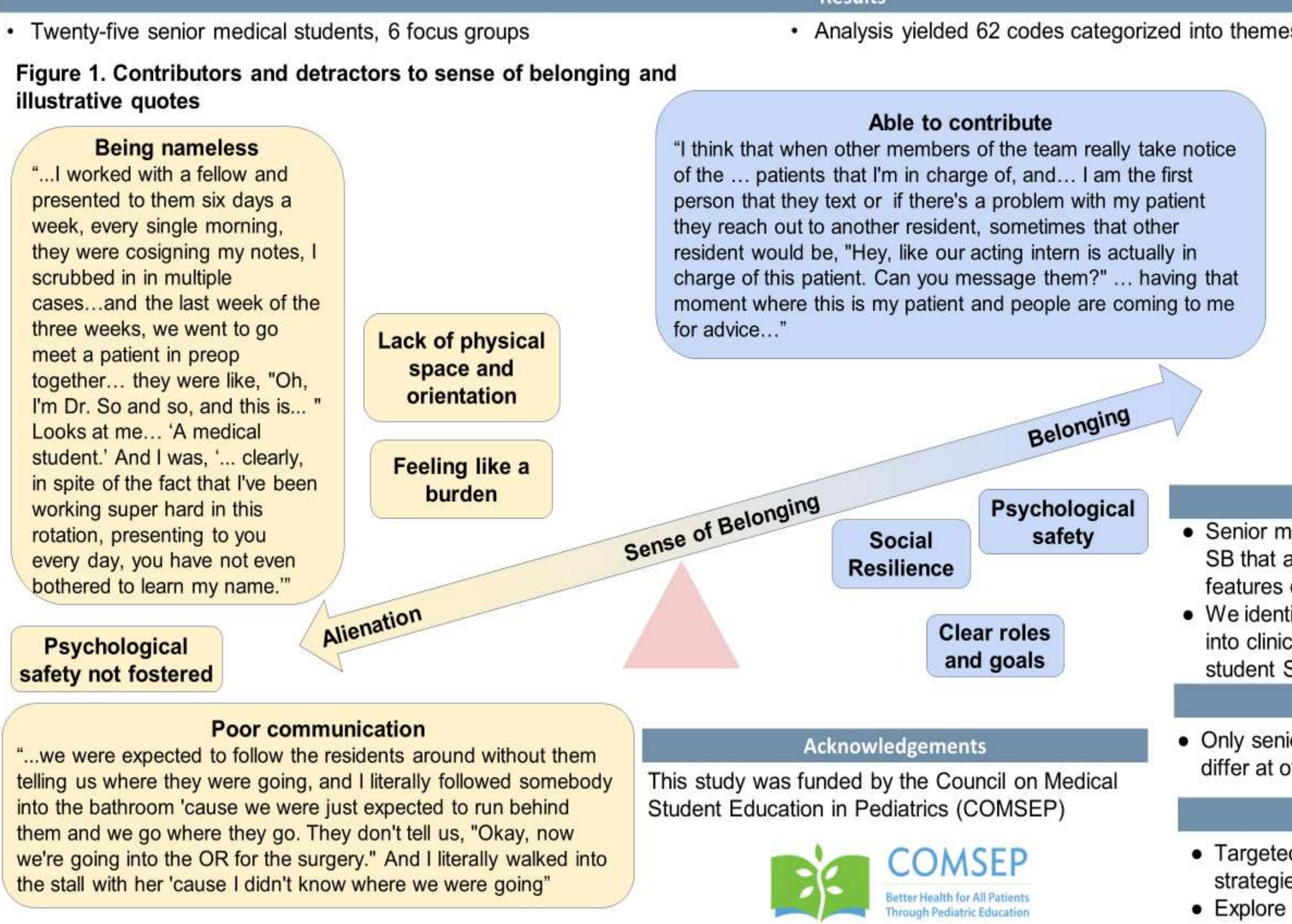
illustrative quotes

Being nameless

"...I worked with a fellow and presented to them six days a week, every single morning, they were cosigning my notes, I scrubbed in in multiple cases...and the last week of the three weeks, we went to go meet a patient in preop together ... they were like, "Oh, I'm Dr. So and so, and this is ... " Looks at me... 'A medical student.' And I was, '... clearly, in spite of the fact that I've been working super hard in this rotation, presenting to you every day, you have not even bothered to learn my name."

Psychological safety not fostered

"...we were expected to follow the residents around without them telling us where they were going, and I literally followed somebody into the bathroom 'cause we were just expected to run behind them and we go where they go. They don't tell us, "Okay, now we're going into the OR for the surgery." And I literally walked into the stall with her 'cause I didn't know where we were going"



Results

Analysis yielded 62 codes categorized into themes.

Known: life beyond medicine

"...collaborative and almost like family environment... really went out of her way to make sure she knew each of us personally. We kind of knew about each other's families and life stories... Even though we were so busy...the resident would take us down to the courtyard and we'd sit outside even if it was for five or 10 minutes and just talk about something nonmedical every day."

Conclusion

 Senior medical students report experiences with SB that are influenced by internal and external features during clinical rotations.

 We identified components that can be integrated into clinical rotations and teams to support medical student SB and PIF.

Limitations

 Only senior medical students, perspectives may differ at other points in training

Future Directions

 Targeted resident and faculty development strategies fostering SB Explore SB across levels or training and beyond



PREPPED Plastic Surgery Research, Education, and Preparation Promoting Equity and Diversity Meera Reghunathan MD, Jessica Blum MS, Greta Davis MD, Haripriya Ayyala MD, Amber Leis MD, Paris Butler MD, Amanda Gosman MD

Background

There are major pipeline issues in the matriculation of UIM students and other under-represented groups into surgical fields.

Evidence shows that UIM students are rated as performing more poorly in some categories on their sub-internships.

Match rate in 2022: 194 matches/ 351 applicants (55%)

Objective: Create a 2 day course for under-represented rising fourth year medical students to prepare for sub-internships and the application process.

Methods

Funding from Plastic Surgery Foundation Diversity & Inclusion grant as well as the Garnes Society, ACAPS (American Council of Academic Plastic Surgeons), and ConnectMed International.

Pre- and Post- surveys administered to students and faculty.

Day 1

7:00 - 7:30 am	Registration / Check-In
7:30 - 8:00 am	Course Welcome: Diversity in Plastic Surgery Meera Reghunathan, Amanda Gosman, Paris Butler
8:00 - 9:00 am	Basics of Breast Reconstruction Manish Champaneria, Julie Park
9:00 - 10:00 am	Small Group: Common Consults Ash Patel 양 Small Group Leaders
10:00 - 11:00 am	Success in Sub-Internships Meera Reghunathan, Julie Park, Amber Leis, Paris Butler
11:00 - 12:00 pm	Residency Application & Interview Tips Amanda Gosman, Ash Patel, Kerri Woodberry
12:00 - 1:00 pm	Lunch
1:00 - 2:30 pm	Skills Lab: Operating Room Basics / Suture Lab Gabrielle LaBove & Small Group Leaders
2:30 - 4:00 pm	Skills Lab: A to Z Plasties of Reconstruction Haripriya Ayyala & Small Group Leaders
4:00 - 5:00 pm	Resident Panel: Journey to Now Olivia Means, Pablo Padilla, Analissa Lopez

Social Hour / Networking Session 6:00 - 7:00 pm

Figure 1. Course schedule and the small group format

7:00 - 8:00 am	Aesthetics & Fac John Pang පි Inter
8:00 - 9:00 am	Elective Breast & Be Bryn Morris & E
9:00 - 10:30 am	Hand: Anatomy, Radiology Amber Leis & Small
10:30 - 12:00 pm	Skills Lab: Craniofacial (C Lip, Ear Scu Naikhoba Munabi පි Sm
12:00 - 1:00 pm	Lunch & Farewell



Day 2

cial Analysis active Session ody Contouring a Williams y & Common Consults Group Leaders aniosvnostosis, Cleft **ulpting)** mall Group Leaders

40 students

48.5% Male 48.5% Femal 1% non-binary

Question	Pre-PREPPED Score Mean (SD)	Post-PREPPED Score Mean (SD)	<i>p</i> -value
Sub-intern	ships and Applying to Res	sidency	
Rate your confidence:			
Understanding the process of applying to residency in plastic surgery.	2.66 (0.90)	4.34 (0.65)	< .001
Identifying the traits that make a good sub- intern and resident	3.06 (0.76)	4.66 (0.48)	< .001
Identifying the most common residency and interview questions	2.31 (0.82)	3.88 (0.71)	< .001
	Technical Skills		
Performing a two-handed knot	3.00 (1.41)	3.69 (1.23)	.004
Performing a subcuticular suture	2.88 (1.24)	3.94 (1.01)	< .001
Designing a z-plasty	1.50 (0.80)	4.16 (0.72)	< .001
Describing the reconstructive elevator	2.13 (1.21)	3.94 (0.95)	< .001
Workfo	rce Diversity and Mentors	ship	
I feel comfortable:			
Discussing the current state of gender disparities in plastic surgery	3.59 (0.91)	4.31 (0.82)	< .001
Discussing the current state of racial disparities in plastic surgery	3.63 (0.94)	4.50 (0.62)	< .001
Discussing how non-modifiable personal factors are related to barriers in a career in plastic surgery	3.58 (0.92)	4.42 (0.67)	< .001
Identifying resources in place to help overcome these barriers	3.00 (1.08)	4.31 (0.78)	< .001
Identifying the pathways to a career in plastic surgery	3.44 (0.98)	4.63 (0.61)	< .001
Identifying greater than or equal to three individuals in plastic surgery who are available as resources for advice and/or mentorship	3.19 (1.45)	4.52 (0.81)	< .001

Table 1. Pre and Post Survey Scores.





Results

le	
\sim	

30.3% White/ Caucasian 72 % Hispanic/ LatinX 45.4% Black/ AA 12.1% Asian/ Pacific Islander 3% AI/ Alaska Native 9.1% Multiracial

48.5% no home program

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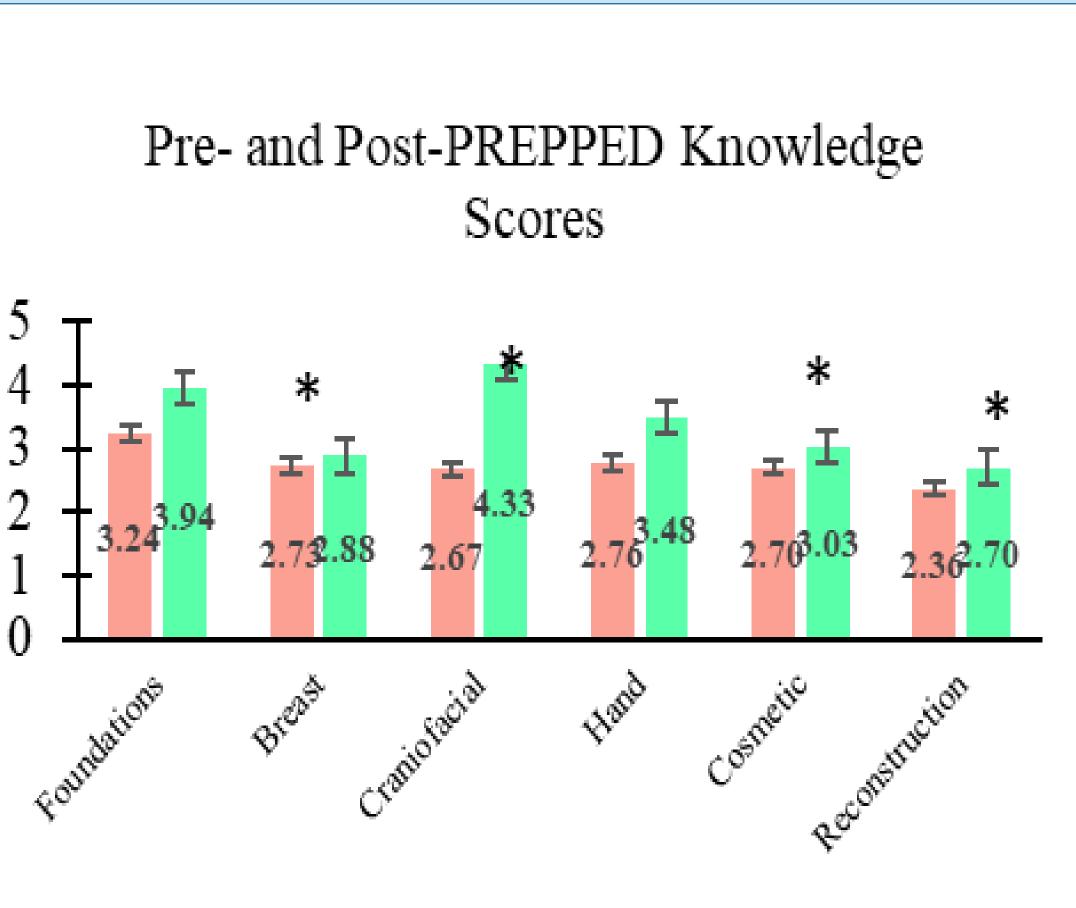
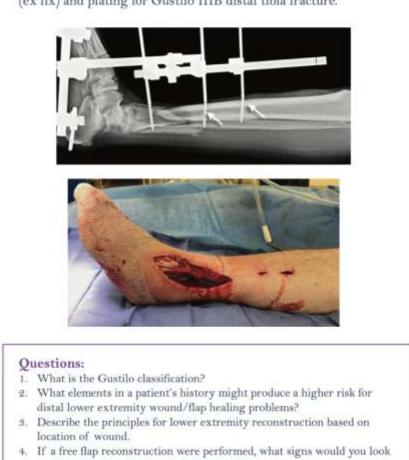


Figure 2. Pre and Post Survey knowledge scores by specialty...

Case 2: The Intra-Operative Consult ou receive an intra-operative consult from the orthop urgery service regarding a left lower extremity soft tissue defe r a 32-year-old male following removal of an external fixator



Students experienced a statistically significant improvement in their plastic surgery knowledge and ability to identify mentors and pathways to success in plastic surgery.

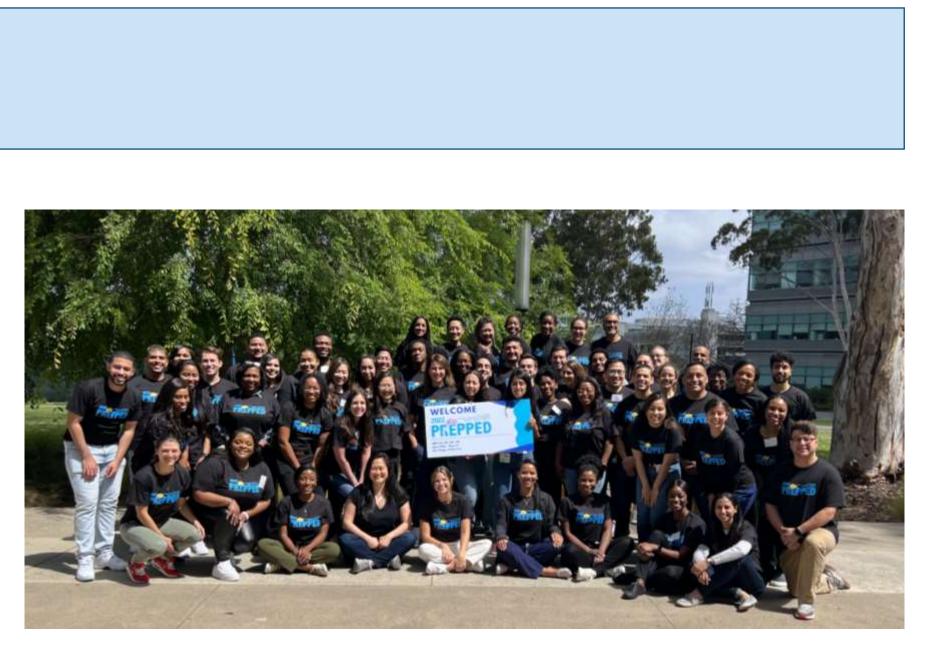
Figure 3. Student Workbooks.

Conclusion

out for post-operatively to indicate flap failure?

PREPPED is a promising program to help underrepresented medical students overcome barriers to matriculating into plastic surgery residency, specifically addressing the transitional period into sub-internships and the application process.







Curriculum Impact Residents were more likely to perform dietary history-taking & nutrition counseling and PA students improved their nutrition knowledge







"Zoom"ing to the Kitchen: A Novel Approach to Virtual Nutrition Education for Medical Trainees

Justin A. Charles, MD, Nathan I. Wood, MD, Benjamin Brink, MD, MS, Lindsey Scierka, MD, MPH, Stephanie Neary, MPA, MMS, PA-C, Kaitlin Maciejewski, MS, Julian Zhao, MSPH, Katherine Gielissen, MD, MHS

Background: The Need for Innovation

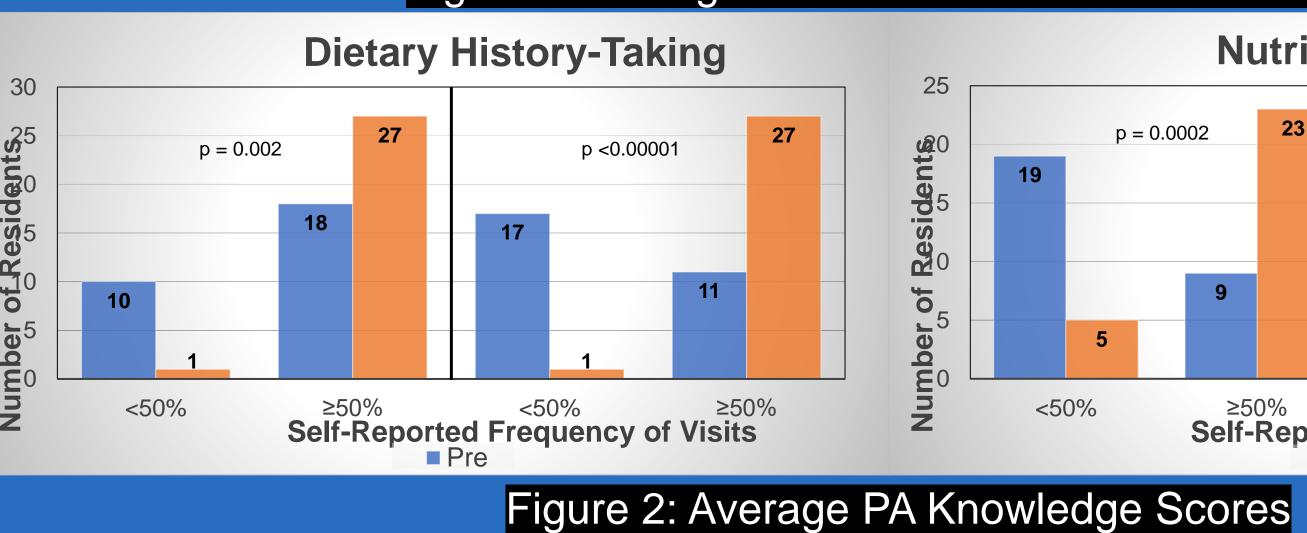
- Poor diet is the leading global risk factor for death¹
- Plant-based nutrition has the potential to prevent, treat, and reverse chronic diseases²
- Most medical schools have <20 hours of nutrition³
- Culinary Medicine combines nutrition and culinary arts⁴
- Improves success in counseling patients and personal nutrition behaviors⁵

Methods: A Novel Curriculum

- Delivered to 42 YPCMP Residents and 80 Online PA Students
- Interactive virtual nutrition curriculum comprised of three 1-hour modules:
- Using a Plant-Based Diet for Chronic Disease Prevention and Treatment
- 2. Introduction to Behavior Change and Performing a 24-Hour Dietary Recall
- 3. Culinary Medicine Crash Course
- Video cooking demonstration to guide preparation of plant-based meal virtually
- Surveyed pre- and post-curriculum to assess effects on nutrition attitudes and knowledge

Post-Intervention Results

- Residents and PA students alike were >90% satisfied with each aspect of the curriculum
- Residents gained confidence in nutrition counseling (57% vs. 93%; p = 0.002)
- Improvements in resident behavioral intention (Fig 1) and PA student knowledge (Fig 2)



90-80-

ຍ 20-10-

Figure 1: Change in Resident Behavioral Intention

References

1. Afshin A, Sur PJ, Fay KA, et al. Health effects of dietary risks in 195 countries, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. *The Lancet*. 2019;393(10184):1958-1972. doi:10.1016/S0140-6736(19)30041-8 2. Bodai BI, Nakata TE, Wong WT, et al. Lifestyle Medicine: A Brief Review of Its Dramatic Impact on Health and Survival. Perm J. 2018;22:17-025. doi:10.7812/TPP/17-025

Pre-Test

Immediate Post-Test

Adams KM, Butsch WS, Kohlmeier M. The State of Nutrition Education at US Medical Schools. Journal of Biomedical Education. doi:https://doi.org/10.1155/2015/357627 4. Hauser ME. A Novel Culinary Medicine Course for Undergraduate Medical Education. American Journal of Lifestyle Medicine. 2019;13(3):262-264. doi:10.1177/1559827619825553

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Funding

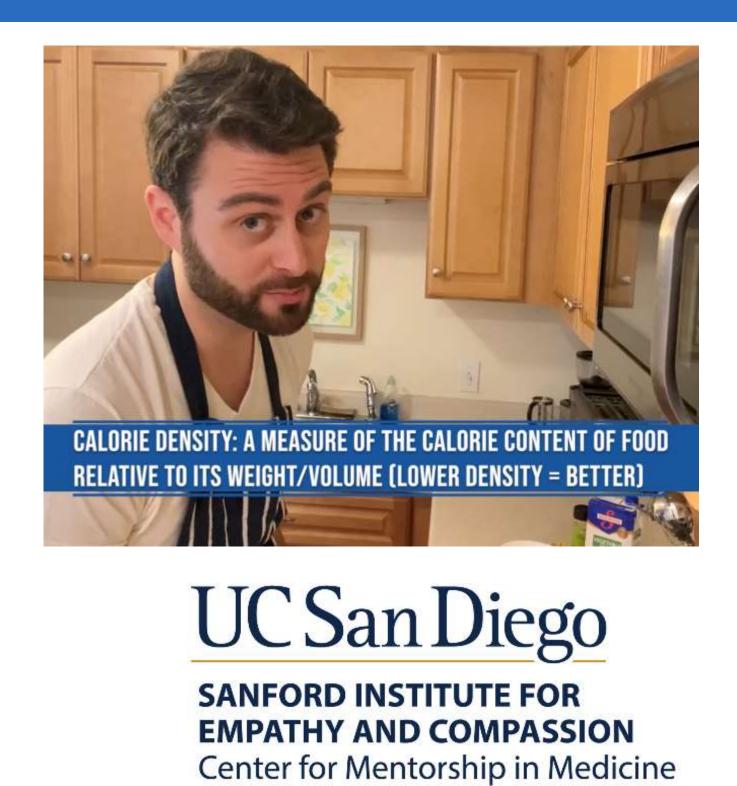
 Yale Office Based Medicine Scholarship and Innovation Fund • American College of Lifestyle Medicine (ACLM) Trainee Research Scholarship and Grant





Nutrition Counseling ≥50% <50% ≥50% Self-Reported Frequency of Visits

Delayed Post-Test



UC San Diego

Health Sciences

Background: From the acuity of strokes to the insidious course of dementia, neurologists treat patients with lifethreatening, life-limiting, and life-altering diseases. However, neurology residencies do not have a standardized amount of palliative care training.

Aim:

- **1)** To teach neurology resident physicians foundational knowledge of palliative care medicine including the difference between palliative care vs hospice and end of life symptom management
- 2) To empower neurology resident physicians with communication skills to navigate end of life conversations by developing and running a case with affiliated simulation center.

Methods: Neurology residents participated in structured didactics tailored to end of life care including

- 3 one-hour lectures
- A simulated patient experience.

A survey evaluating participant comfort on Likert scales and knowledge-based questions on aspects of palliative care were administered pre- and post-didactic series. Statistical significance was calculated with unpaired 2-tail T-tests assuming equal variance.

Training the Neurology Resident in End-of-Life Care Bu JT¹, McGehrin K^{1,2}, Bruner HC² ¹Department of Neurosciences, UC San Diego, San Diego, CA, USA ²Department of Medicine, UC San Diego, San Diego, CA, USA

Table 1: Summary of Survey Results Pre- and Post- Targeted Didactics

Subjective Comfort Based Questions			
	Very to extremely comfortable prior to didactic (4 or 5 out of 5 on Likert)	Very to extremely comfortable after didactic (4 or 5 out of 5 on Likert)	P-value (T-test)
Describe difference in palliative and hospice	86% (12/14)	100% (10/10)	0.189
Performing pain assessment and management at end of life	14% (2/14)	60% (6/10)	0.002
Communication with patient and family at end of life	57% (8/14)	100% (10/10)	0.0002
Assessment and management of non-pain symptoms at end of life	28% (4/14)	80% (8/10)	0.006
Withdrawing life prolonging therapies at end of life	28% (4/14)	80% (8/10)	0.004

Objective Knowledge Based Questions

Objective Knowledge Based Questions				
	Percentage correct prior to didactic	Percentage correct after didactic	Percentage Change	
What is a POLST?	71% (10/14)	100% (10/10)	+29%	
15 mg oral morphine is equianalgesic to _mg IV morphine?	36% (5/14)	30% (3/10)	-6%	
5 mg IV morphine is equianalgesic to _ mcg IV fentanyl	7% (1/14)	40% (4/10)	+33%	
An opioid infusion will reach steady state approximately _ hours after initiation	0% (0/14)	10% (1/10)	+10%	
1 mg IV Lorazepam is equivalent to _ mg IV Midazolam	43% (6/14)	50% (5/10)	+7%	
All comfort care patients should be started on an opioid infusion. (True/false)	100% (14/14)	90% (9/10)	-10%	
Breathing changes at end of life are inherently uncomfortable and should be medicated. (True/false)	64% (9/14)	50% (5/10)	-14%	
It is possible for code status to be "ok CPR – no intubation". (True/false)	36% (5/14)	60% (6/10)	+24%	
Glycopyrrolate crosses the blood brain barrier poorly. (True/false)	71% (10/14)	90% (9/10)	+19%	

Results: All respondents had palliative care experience prior to didactics. 71% (10/14) believed it was very or extremely important to be able to perform pain assessment and management at the end of life; there was a statistically significant difference (p=0.002) in resident comfort in doing so before and after didactics. Statistical significance was also seen in resident comfort before and after didactics for communicating with patient and family at the end of life (p=0.0002), assessment and management of non-pain symptoms (p=0.006) and withdrawing life prolonging therapies (p=0.004). There was no statistically significant change in objective knowledge based questions before and after didactics.

Discussion: Neurology resident comfort level of palliative care topics increased with a targeted didactics curriculum. Improvement was seen in some aspects of curriculum such as describing a POLST, though knowledge of specific medication and symptom management are not uniformly improved. Further research is needed on what palliative care themes would be most helpful for neurology resident training.

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Overall Symposium Evaluation Please complete the Overall Evaluation in order to receive CME credit





