



Creating a Financial Wellness Elective for Fourth Year Medical Students

Matthew Adamkin, M.D.
University of Louisville, School of Medicine



Background

- The University of Louisville School of Medicine (ULSOM) has a Financial Aid Office that creates programming in the first and second year regarding financial education.
- The existing programming predominantly relates to student loans and budgeting and is presented in the form of optional lunch and learns.
- The Financial Aid Office at ULSOM also meets individually with indebted students to discuss their individual student loan situations and loan forgiveness.
- There is little structured programming regarding personal finance, financial planning, investing, taxes, large purchases, insurance, etc.
- Medical students occupy a unique financial position that makes them prone to financial mistakes. They are frequently indebted due to student loans, with high likelihood of several years as a high earner in their future.

Purpose

We hypothesize that:

- Creating a Financial Wellness elective for fourth year medical students will improve their financial literacy, their confidence, and their satisfaction

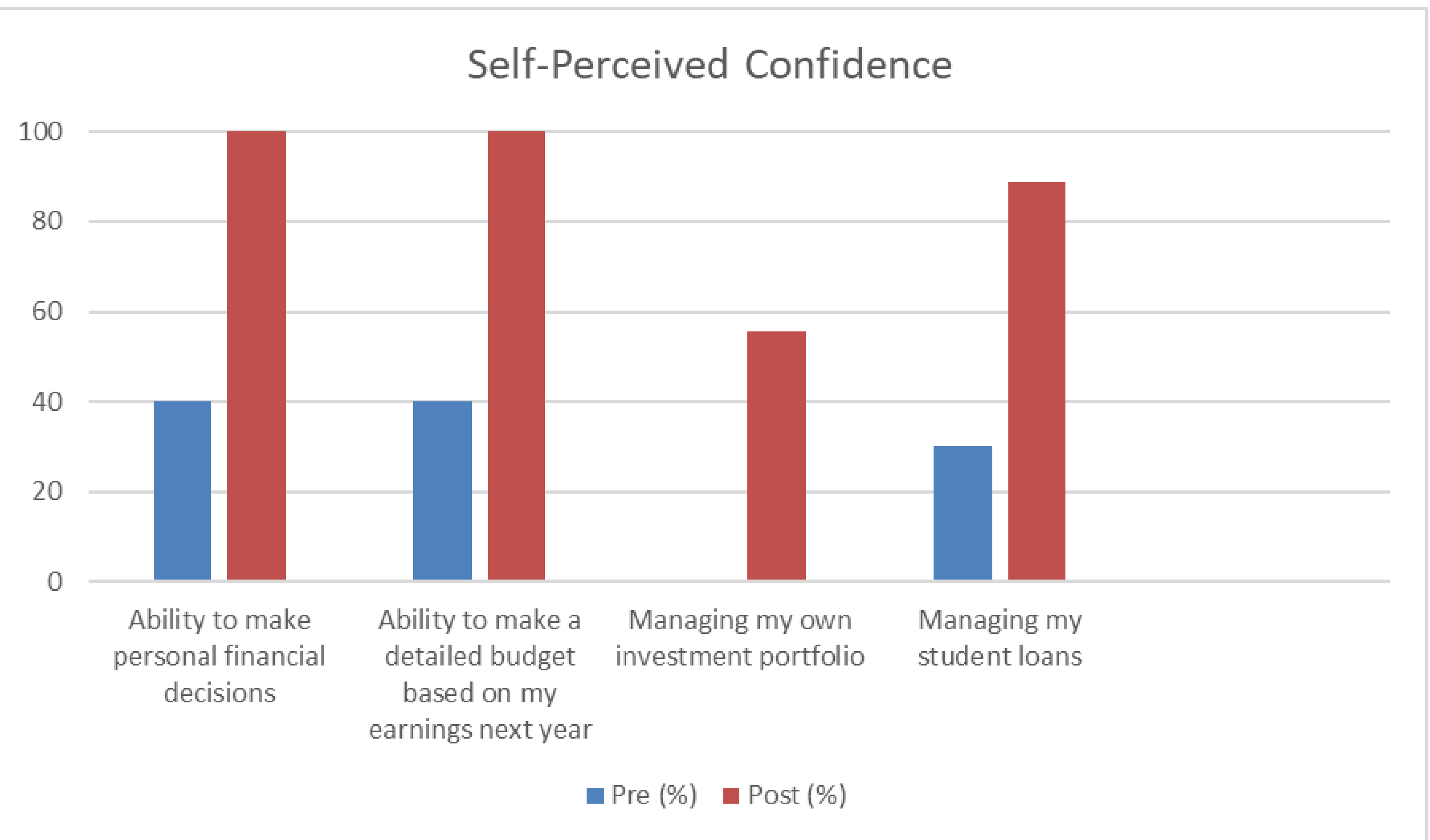
Methods

- We sought approval through the ULSOM Educational Planning Committee to create a Financial Wellness elective for fourth year medical students
- We partnered with the Financial Aid Office, key community stakeholders, and the UofL Business School to create an interactive curriculum
- We held our inaugural 2-week elective in the Spring of 2023
- Students were surveyed before and after the course regarding their financial demographics, financial literacy, confidence, and satisfaction with financial education

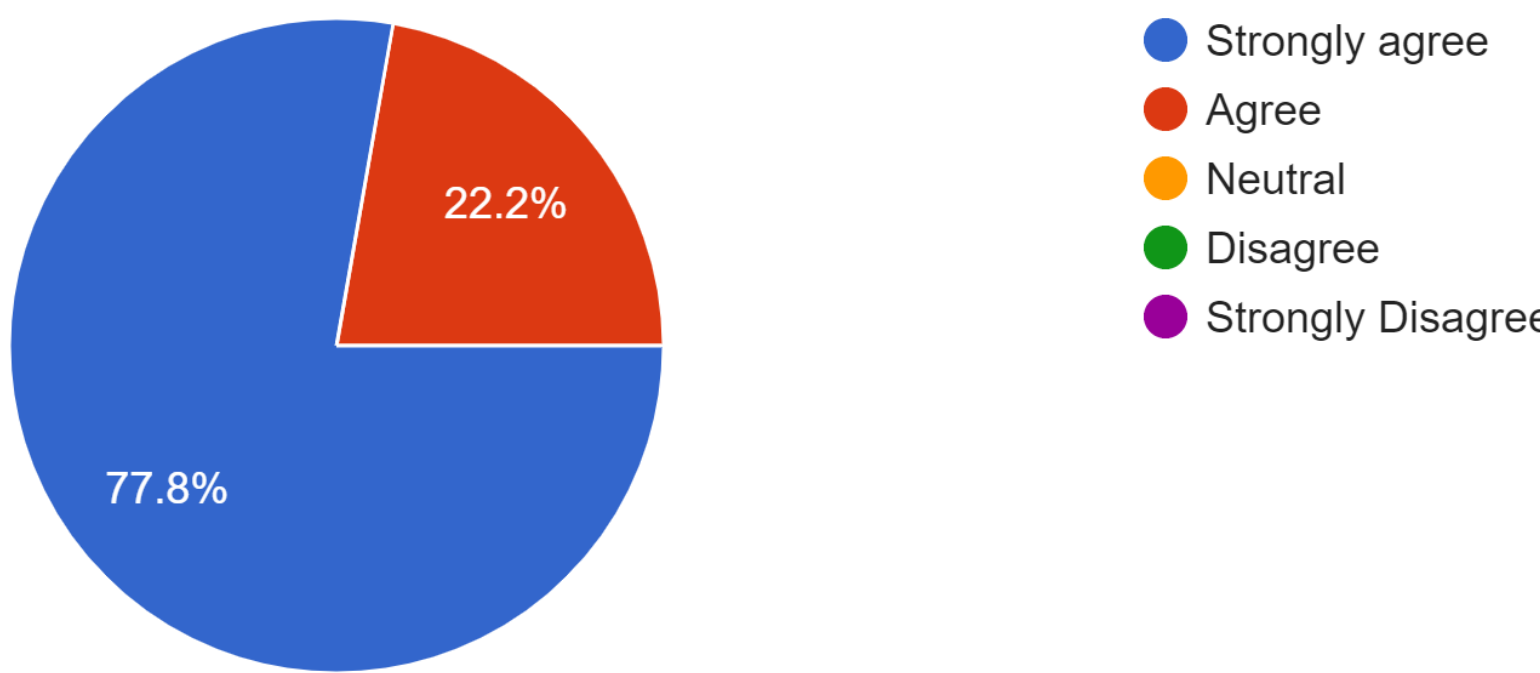
Results

What resource(s) do you use when seeking financial guidance? Please check all that apply.

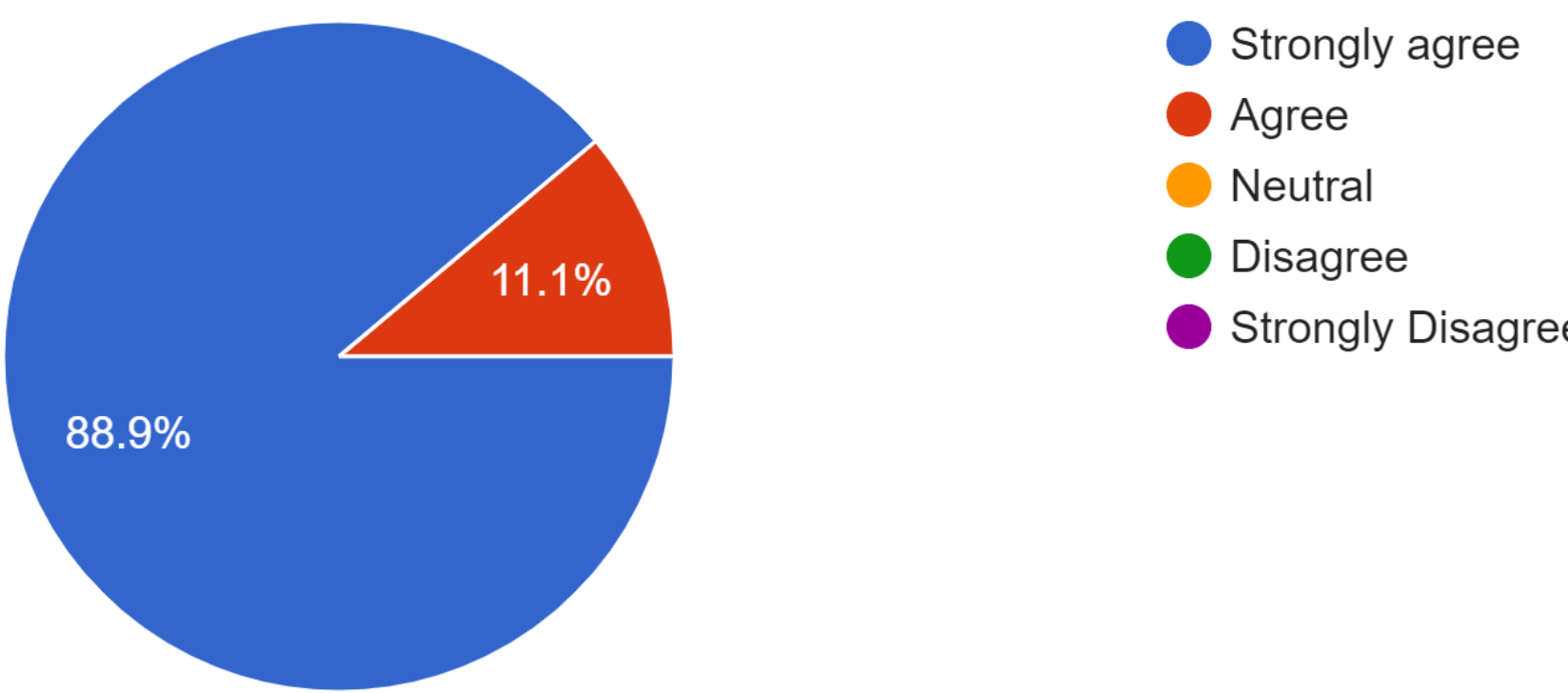
- Family (n=9)
- Friends (n=6)
- My bank (n=5)
- Mentors (n=4)
- Other online or book resources (n=4)
- The White Coat Investor (n=3)
- The medical school Financial Aid Office (n=2)
- A financial adviser (n=2)
- I have never sought financial guidance (n=1)



After taking this course, I feel more capable of setting myself up for a successful financial future.
9 responses



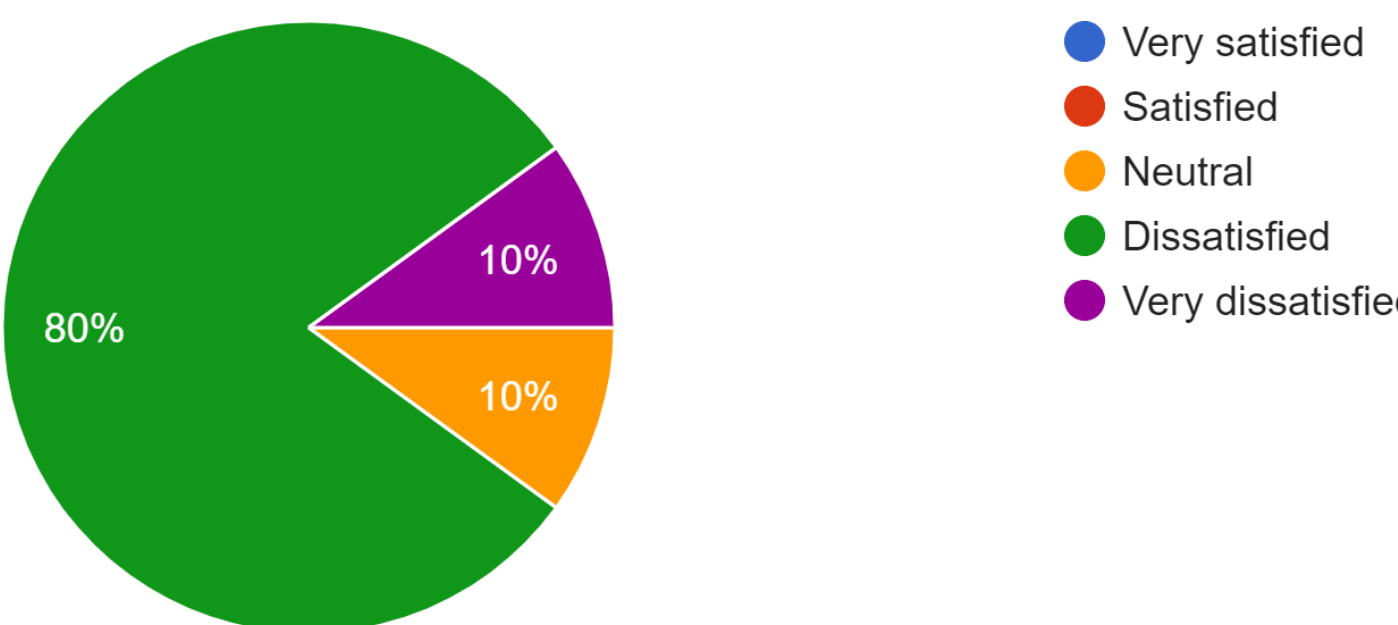
I would recommend this course to future fourth year students.
9 responses



“I feel like I want to teach everyone I know about what I learned in this class. This was invaluable for my future not only as a physician but as someone who didn't have great financial literacy to begin with. I have been sharing what I've learned with my partner and with my siblings because it is so helpful.”

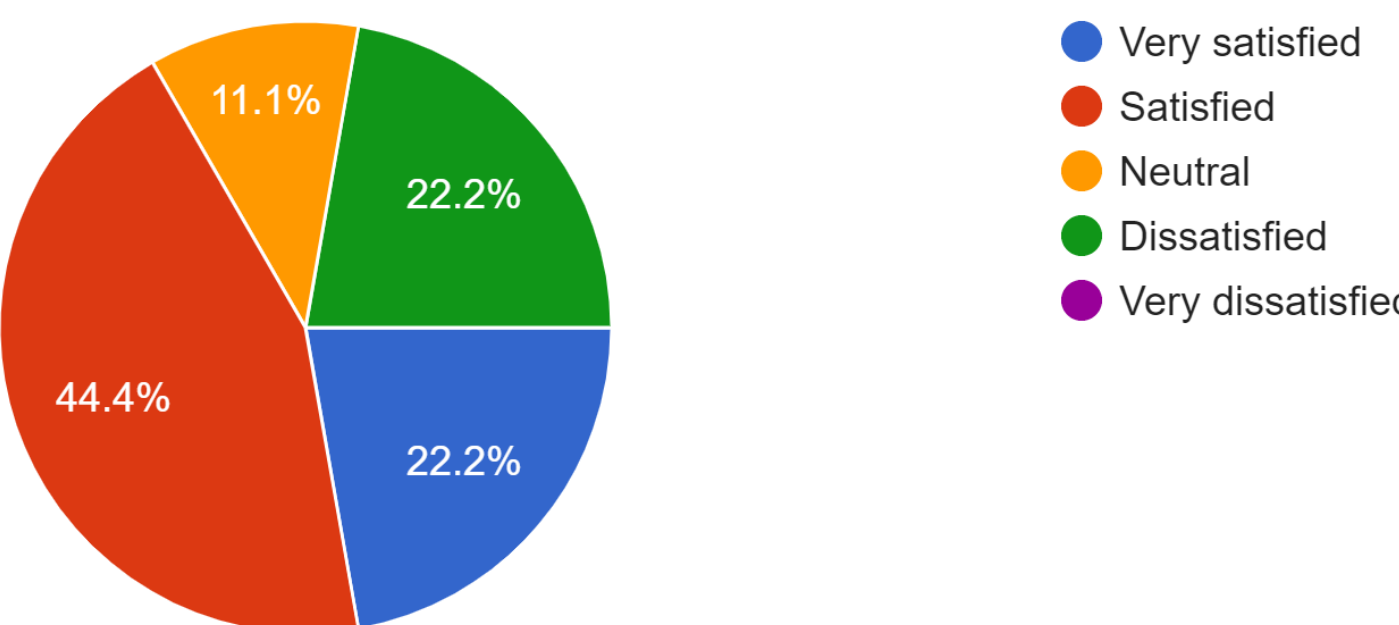
Satisfaction Pre-Intervention

How satisfied are you with the financial literacy education you have received while in medical school?
10 responses



Satisfaction Post-Intervention

How satisfied are you with the financial literacy education you have received while in medical school?
9 responses



Conclusions

- Student confidence in making personal financial decisions increased.
- Student Satisfaction in their financial literacy education increased.
- Student confidence in their ability to budget increased.
- 100% of students reported they would recommend this course to future fourth year students.
- Given that students rely on their informal networks (family, friends) the most often for financial guidance, the Financial Aid Office at the medical school may play a particularly important role in improving financial literacy
- Short financial wellness/literacy courses may serve to provide impactful personal finance education to set students up for success, particularly those who lack informal networks (family, friends) for financial guidance.

Future Work

- This course will recur annually, we will track student enrollment numbers and anticipate these will increase (11 students in 2023, 25 enrolled for 2024)
- May design multiple choice knowledge test to better assess specific topics within the course

Acknowledgements

- Emma Crawford, M.A., CFP
- Gregory Worsowicz M.D.- Mayo Clinic Jacksonville
- Tony Simms – ULSOM Student Affairs
- Leslie Kaelin – ULSOM Financial Aid
- Angela Hall – ULSOM Financial Aid
- Sarah Huelsman – Merrill Lynch Wealth Management

Teaching Professionalism in the Pre-Clinical Years: A Video Case-Based Approach

Idris Amin, MD¹

Internal Mentors: Devang Patel, MD², Nirav Shah, MD²; External Mentor: David Haustein, MD³

Acknowledgements: Anthony Chiu, MD Candidate, Amit Ratanpal, MD Candidate

1. Department of Neurology & Orthopaedics, University of Maryland School of Medicine, Baltimore, MD; 2. Department of Internal Medicine, University of Maryland School of Medicine, Baltimore, MD; 3. Department of Physical Medicine & Rehabilitation, University of Missouri School of Medicine, Columbia, MO

BACKGROUND

Professionalism is a core competency in medical education. Upholding professional standards is paramount during patient care, collaborating with colleagues, and working with ancillary staff members. While much emphasis is placed on professionalism in clinical settings, the principles of what it means to be a medical professional must be introduced earlier. In our medical school, it is common to see individuals struggling with professionalism in non-clinical settings to continue to struggle as they progress in medical school and post-graduate training. That is why it is essential to identify these students early and offer corrective behaviors when first recognized to avoid developing a pattern of unprofessionalism.

One thought as to why there are unprofessional behaviors in highly driven individuals like medical students is that there may be a need for more insight and understanding of what it means to be a medical professional. In addition, it is sometimes difficult for a student to visualize what unprofessional behavior in a medical school setting may look like. This is especially true as many students are only a few months removed from college, where expectations and responsibilities may differ.

DESIGN

Our first-year medical students participated in a two-hour workshop on this topic during their “Introduction to Medical School” course to better understand their comprehension of medical professionalism.

Before starting the activity, students completed a pre-test regarding their knowledge and understanding of professionalism. The session began with students reading two articles on medical professionalism and discussing “what attributes make someone professional.” Students then reviewed three cases, each involving a video scenario (these cases were written, directed, and acted by second-, third-, and fourth-year medical students at our school), with time in between cases for students to discuss their observations of professional and unprofessional behavior seen in the examples. Following the session, students completed a post-test to gauge learning.

RESULTS

- We asked the students in the pre-test to report how frequently they had observed unprofessional behaviors in their lives so far. Most of the students reported observing this 1-2 times (*Figure 1*)
- The students were given statements on medical professionalism and were asked to grade them on a Likert scale. Based on the results, the session increased the students’ understanding of medical professionalism in 5 out of 6 statements. (*Table 1*)
- “Awareness of tools and resources to call out unprofessionalism” increased the most, followed by “Ability to recognize unprofessionalism.” (*Table 2*)

Figure 1. Frequency of Observed Unprofessionalism Reported by Student Participants

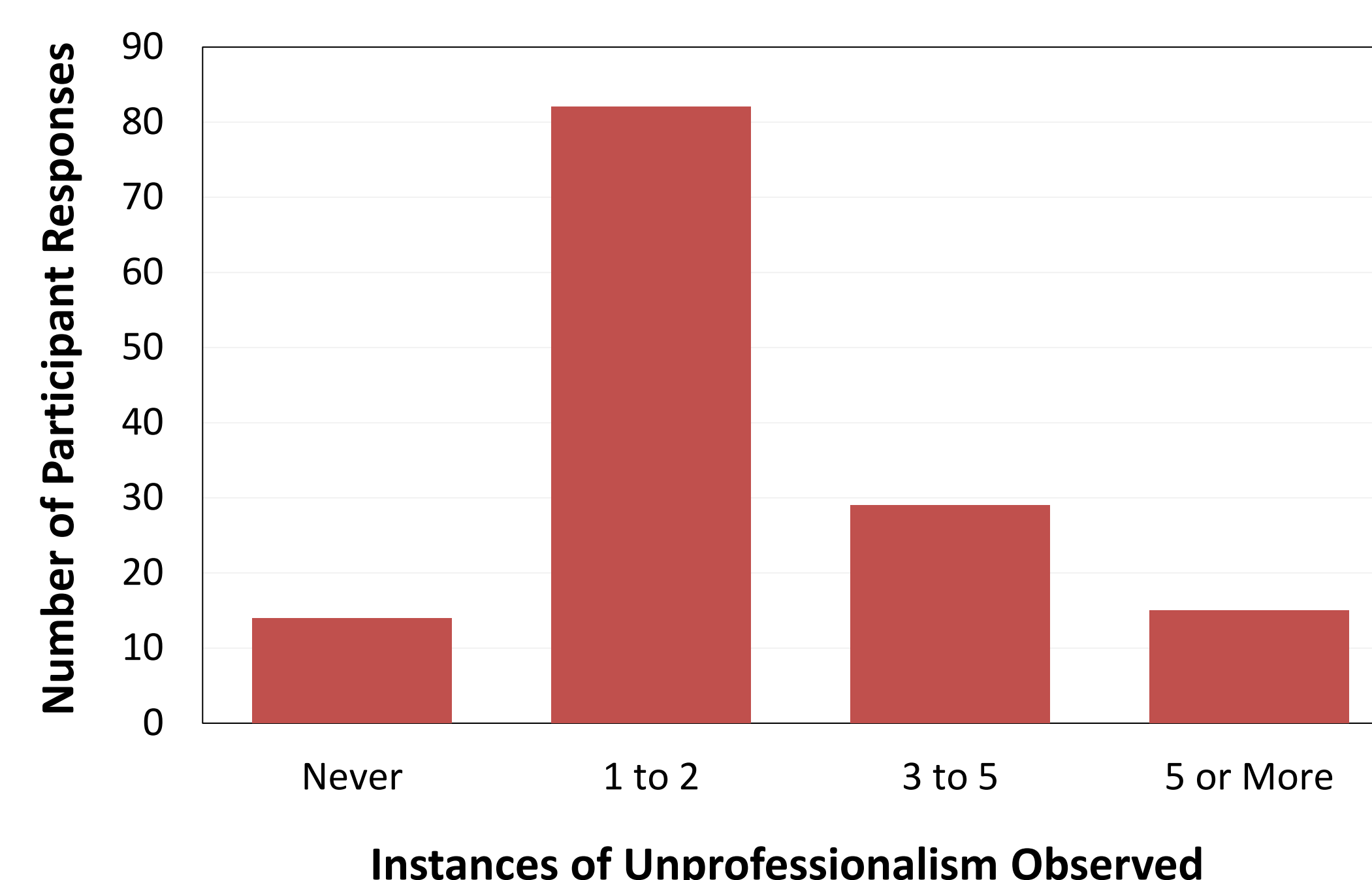


Table 1. Pre- to Post-Test Difference in Median Self-Reported Medical Professionalism Competencies**			
Competency	Pre-Test, Median	Post-Test, Median	p-value*
Clear Understanding of Professionalism	4	5	0.182
Ability to Recognize Unprofessionalism	4	5	<0.001
Awareness of Tools and Resources to Call Out Unprofessionalism	3	5	<0.001
Understand Professionalism Expectations			
In the Classroom	4	5	<0.001
In Interactions	4	5	<0.001
When Giving Feedback	4	5	<0.001

*Competency measured via Likert Scale (1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree)
**Paired Sample Mann-Whitney U Test

Table 2. Pre- to Post-Test Change in Self-Reported Medical Professionalism Competencies						
Competency	Increased from Pre- to Post-Test		Decreased from Pre- to Post-Test		No Change	
	N	(%)	N	(%)	N	(%)
Clear Understanding of Professionalism	55	(39.3%)	17	(12.1%)	68	(48.6%)
Ability to Recognize Unprofessionalism	78	(55.7%)	5	(3.6%)	57	(40.7%)
Awareness of Tools and Resources to Call Out Unprofessionalism	113	(80.7%)	5	(3.6%)	22	(15.7%)
Understand Professionalism Expectations						
In the Classroom	73	(52.1%)	6	(4.3%)	61	(43.6%)
In Interactions	70	(50.0%)	5	(3.6%)	65	(46.4%)
When Giving Feedback	61	(43.6%)	3	(2.1%)	76	(54.3%)

DISCUSSION

Based on our survey results, our session did increase the knowledge of medical professionalism. The areas where our session did the best-included awareness of the resources to call out unprofessionalism and the ability to recognize unprofessionalism. We believe the use of video cases contributed to this. Our post-test allowed for a free text response, and a common comment was that the video cases “brought to life” what students would only read or hear about in other professional presentations. While teaching medical professionalism to pre-clinical medical students is not a new concept, using video cases seems to be a novel approach based on literature review.

We recognize a limitation is that our results are derived mainly from self-reported survey responses. Ideally, we would test for knowledge gained about medical professionalism through an assessment or validated scale. However, there are no such tools currently available.

NEXT STEPS

We hope to implement this workshop into the “Introduction to Medical School” course annually. We can then track instances of unprofessional behavior reported through our Advancement Committee meetings and see if there is an overall decrease in these events. While our immediate goal is to improve the professionalism of students while at our medical school, we hope the principles they learn will translate as they progress into post-graduate training and, ultimately, their careers in medicine.

Resident Education Social Determinants of Healthcare

Jaclýn Barcikowski, DO

Internal Mentor: Alberto Esquenazi, MD

External Mentor: Amanda Harrington, MD



Background

Social determinants of healthcare (SDOH) are nonmedical factors that influence health outcomes and are key drivers of health inequities within communities of color. The impact is pervasive and deeply embedded in our society, creating inequities that place people at higher risk of poor health outcomes. Patients with public insurance or no insurance are likely to have fewer resources available to them upon discharge from inpatient rehabilitation which indicates its significant impact as a SDOH. It is important for healthcare providers to be aware and to understand how to assess SDOH for their impact on a patient and their healthcare outcomes. There is currently no education on SDOH as part of the resident physician didactics programming at our institution. It is not clear if residents understand the impact of SDOH on health status is as it relates to patient care.

Design

Used e-rehab and EMR to assess data on patients with stroke diagnosis admitted to inpatient rehab from 10/2022 to 7/2023. Outcomes from this data included:

- Insurance type
- Rehab length of stay (LOS)
- Race/ethnicity groups

Data was assessed to determine average LOS in number of days amongst the different insurance coverage groups and racial/ethnicity groups.

Current resident physicians received education on SDOH which included lecture and real patient case discussions. A pre and post lecture questionnaire was given to residents to assess their SDOH knowledge and utilization and comfort with its application in their clinical practice.

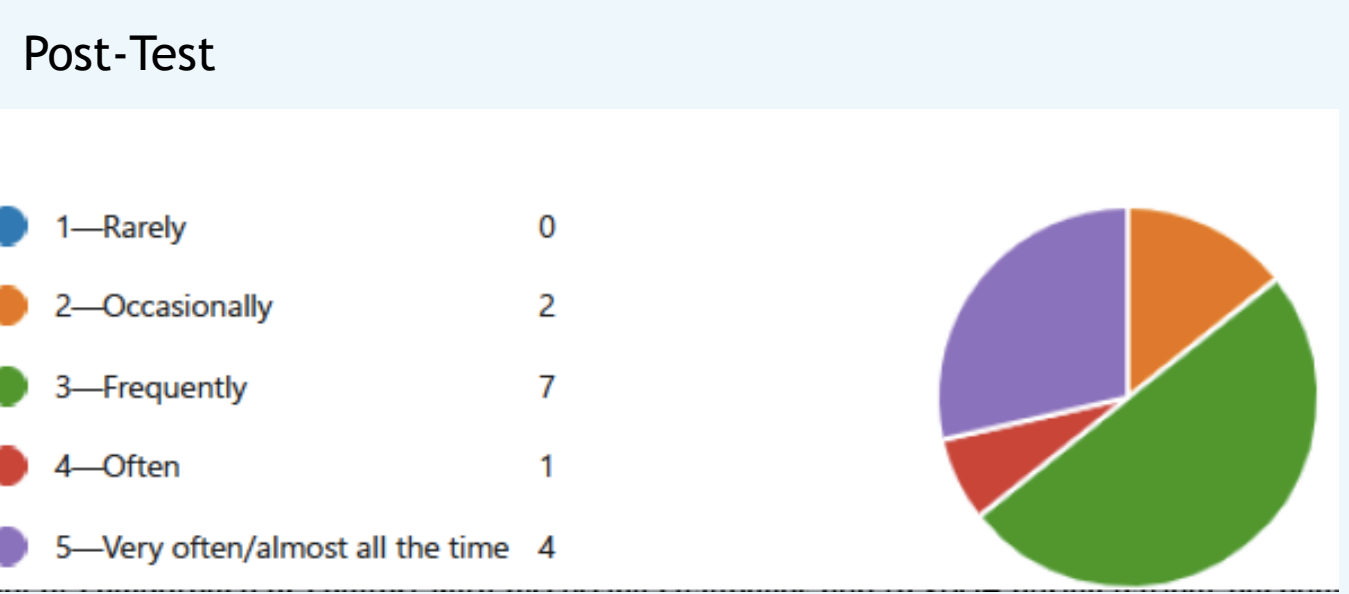
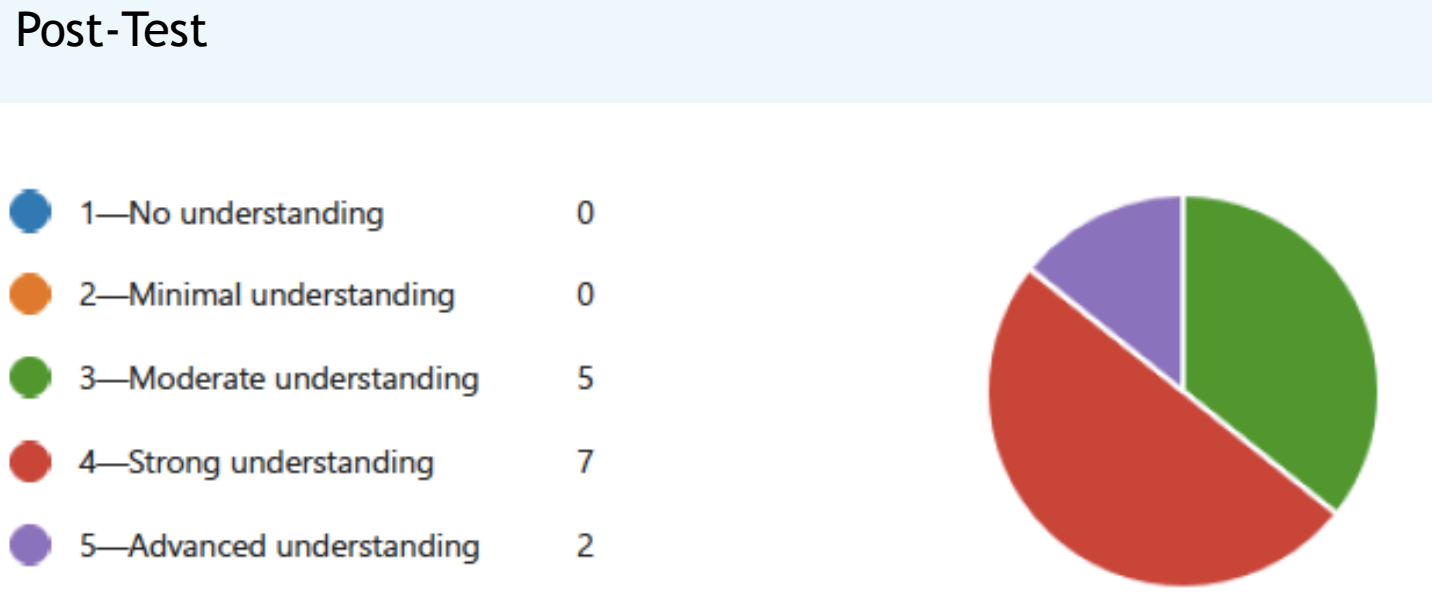
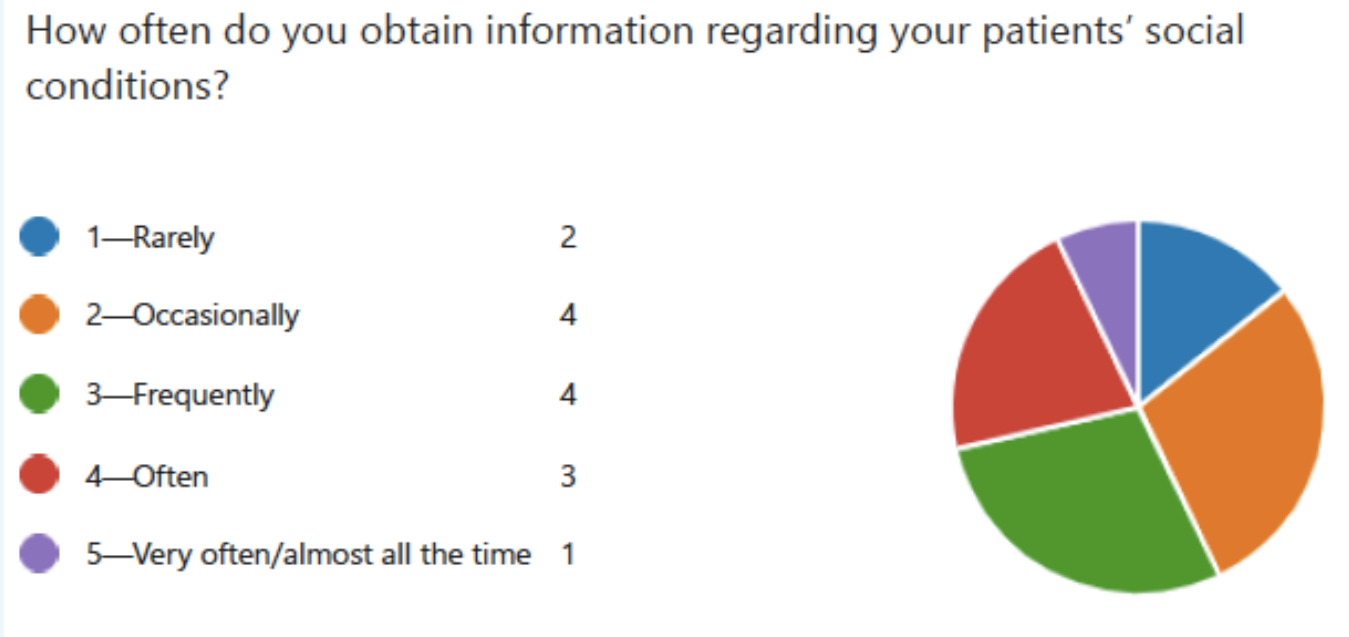
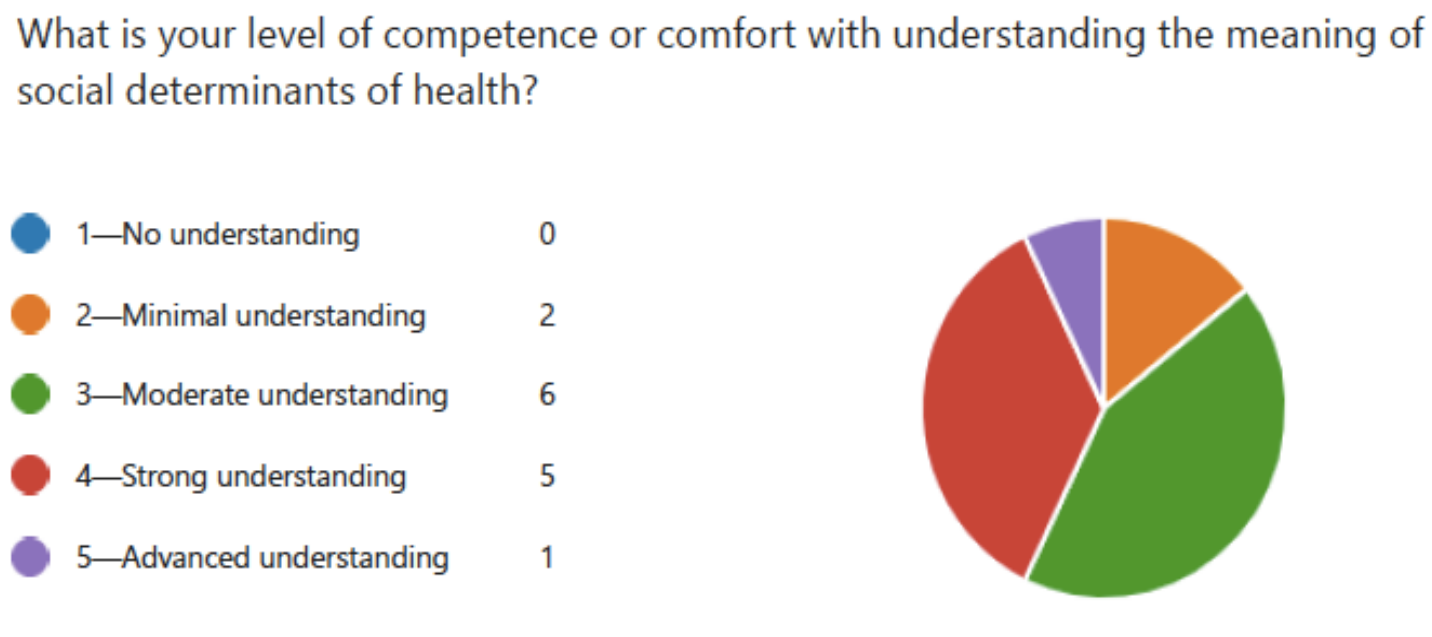
The information obtained from the data was proposed to be used to educate staff, especially social work team and residents, on how to proactively identify patients who are at risk for potential insurance or financial challenges at discharge time to improve outcomes.

Results

Insurance	Average Length of Stay (Number of days)
Blue Cross	18.71
Commerical	17.38
HMO/PPO	19.33
Medicaid	21.74
Medicaid Managed Care	15.51
Medicare	14.84
Medicare Managed Care	17.40

Race	Average LOS (number of days)
Asian	21.00
Asian Indian	24.00
Asian Other	17.06
Black or African American	16.40
Caucasian	18.18
Hispanic Other	15.75
Hispanic Unknown	9.00
Other	14.38

Resident Education



- Residents reported an increased level of competence/comfort with understanding SDOH and how patients' social conditions may affect their health status
- Residents increased the frequency with which they obtain information about patient's social conditions
- Level of competence or comfort with discussing challenges due to SDOH during patient encounters improved
- Improved competence in referring patients to resources within MossRehab and to local community resources to address challenges related to SDOH impacting patients

Discussion

Data demonstrated shorter inpatient rehab LOS in Black and Hispanic population. Patients with Medicare and Managed Medicare insurance tended to have the shortest LOS. Identifying these differences is the first step to improving access to care for persons in high-risk insurance or race/ ethnicity groups. As a method to identify high risk groups, Health-Related Social Needs information is now required documentation for each inpatient admission by the rehab social worker. On the stroke rehab unit, a transitions program was created to improve transition home after inpatient rehabilitation. The pre-test of residents' knowledge of SDOH showed that most residents (12 out of 14) had prior training in SDOH and had at least a moderate level of comfort with understanding SDOH and its potential impact on their patients. Frequency with which residents asked about their patient's social conditions was mixed from "rarely" to "very often." Competence identifying challenges related to patient's social conditions was also variable. The understanding of resources available at MossRehab was modest and residents felt "competent" at best. Competence in SDOH knowledge, identifying and discussing challenges related to SDOH and its impact on patient's health improved following education and case reviews provided to residents. Residents had increased awareness of the programs available to MossRehab and in the community to assist with barriers to care. This project demonstrates the successful implementation of a SDOH didactic in a PM&R residency program.

Future Steps

- Further development of SDOH education into resident didactic and teachings
- Develop educational resources for stroke staff to improve discharge outcomes.
- Monitor the effectiveness of the Health-Related Social Needs documentation
- Evaluate effectiveness of transitions program from stroke unit

References

1. Lillie-Blanton M, Hoffman C. The role of health insurance coverage in reducing racial/ethnic disparities in health care. *Health Aff (Millwood)*. 2005 Mar-Apr;24(2):398-408.
2. 2021 National Healthcare Quality and Disparities Report. Rockville, MD: Agency for Healthcare Research and Quality; December 2021. AHRQ Pub. No. 21(22)-0054-EF.
3. Kirby JB, Kaneda T. Unhealthy and Uninsured: Exploring Racial Differences in Health and Health Insurance Coverage Using a Life Table Approach. *Demography*. 2010;47:1035-1051.
4. Sohn H. Racial and Ethnic Disparities in Health Insurance Coverage: Dynamics of Gaining and Losing Coverage over the Life-Course. *Popul Res Policy Rev*. 2017 Apr;36(2):181-201
5. Ghosh, Arnab K. MD, MSc, MA; Geisler, Benjamin P. MD, MPH; Ibrahim, Said MD, MPH, MBA. Racial/ethnic and socioeconomic variations in hospital length of stay: A state-based analysis. *Medicine* 100(20):p e25976, May 21, 2021.

Background

Exposure of people living with amputations during residency training is often limited and quite variable. This is notable in the immediate post-surgical period in regards of application of clinical practice guidelines. There are several factors that contribute to this knowledge gap including:

- lack of a dedicated curriculum;
- inexperience with hands-on residual limb care including residual limb wrapping
- varied experiential in the outpatient clinic setting

Design

A detailed, anonymous survey was conducted amongst PMR trainees as to their experience with amputees at the institution

Curriculum developed to address deficiencies in principles of gait

Skills labs on residual limb wrapping

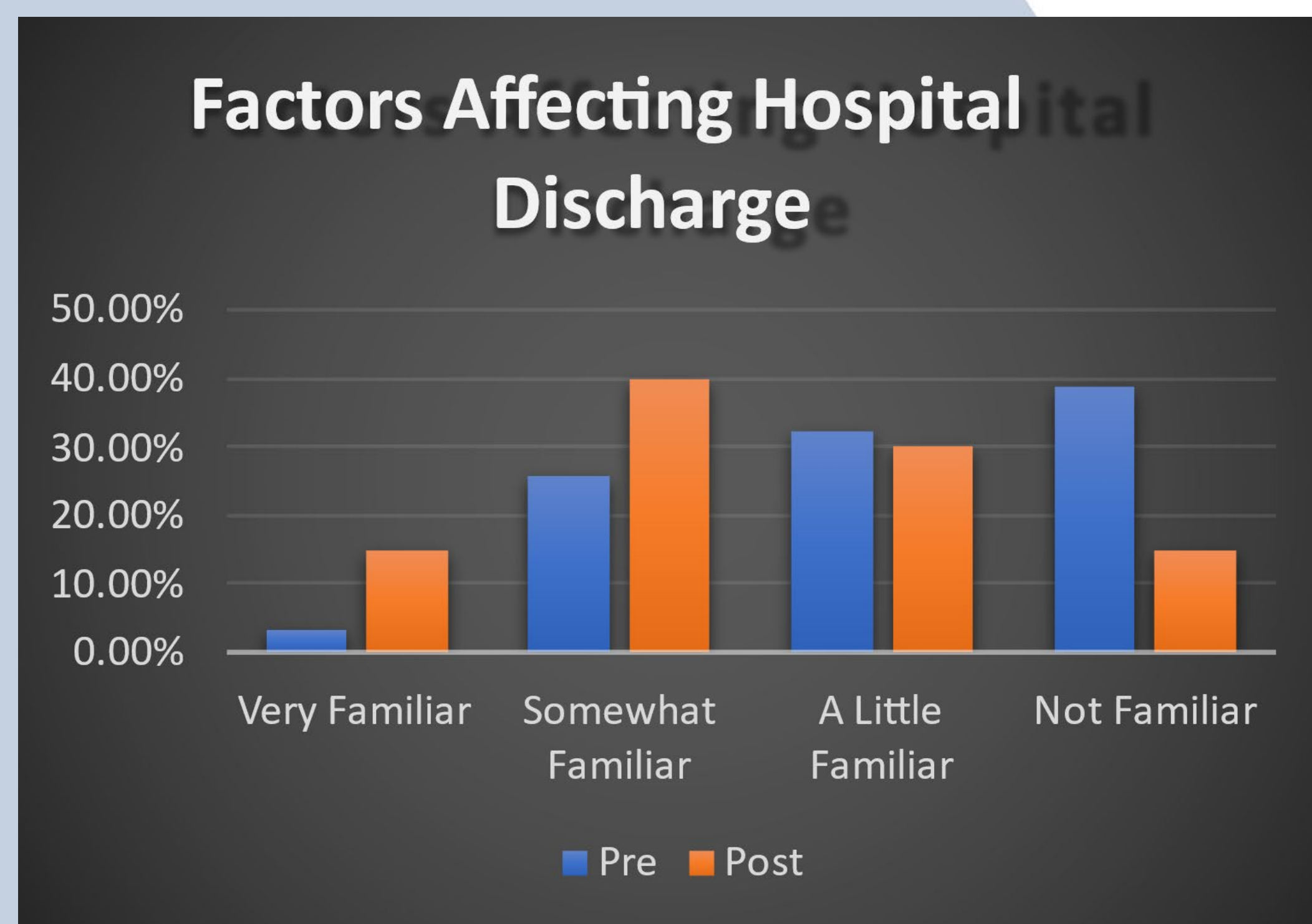
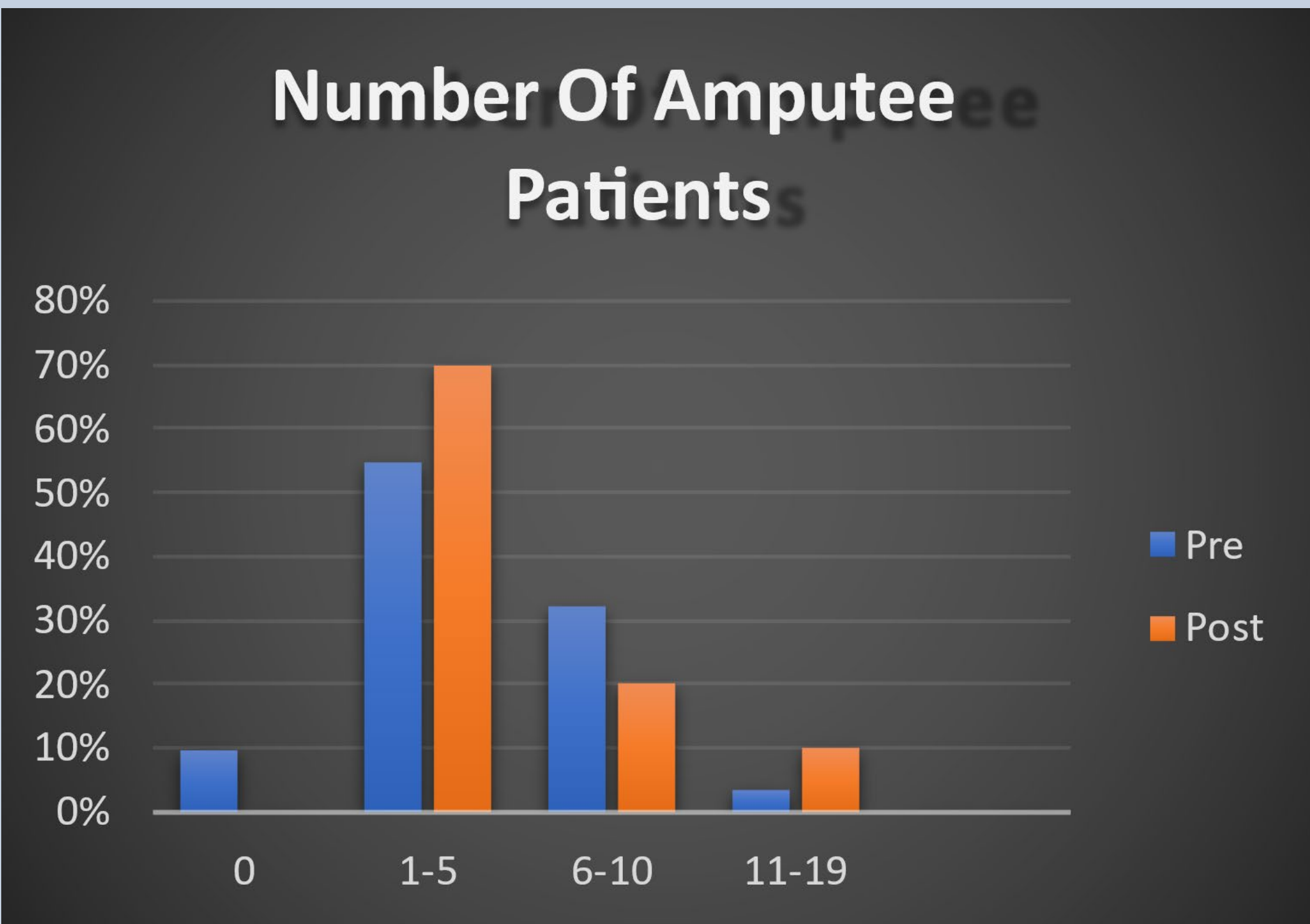
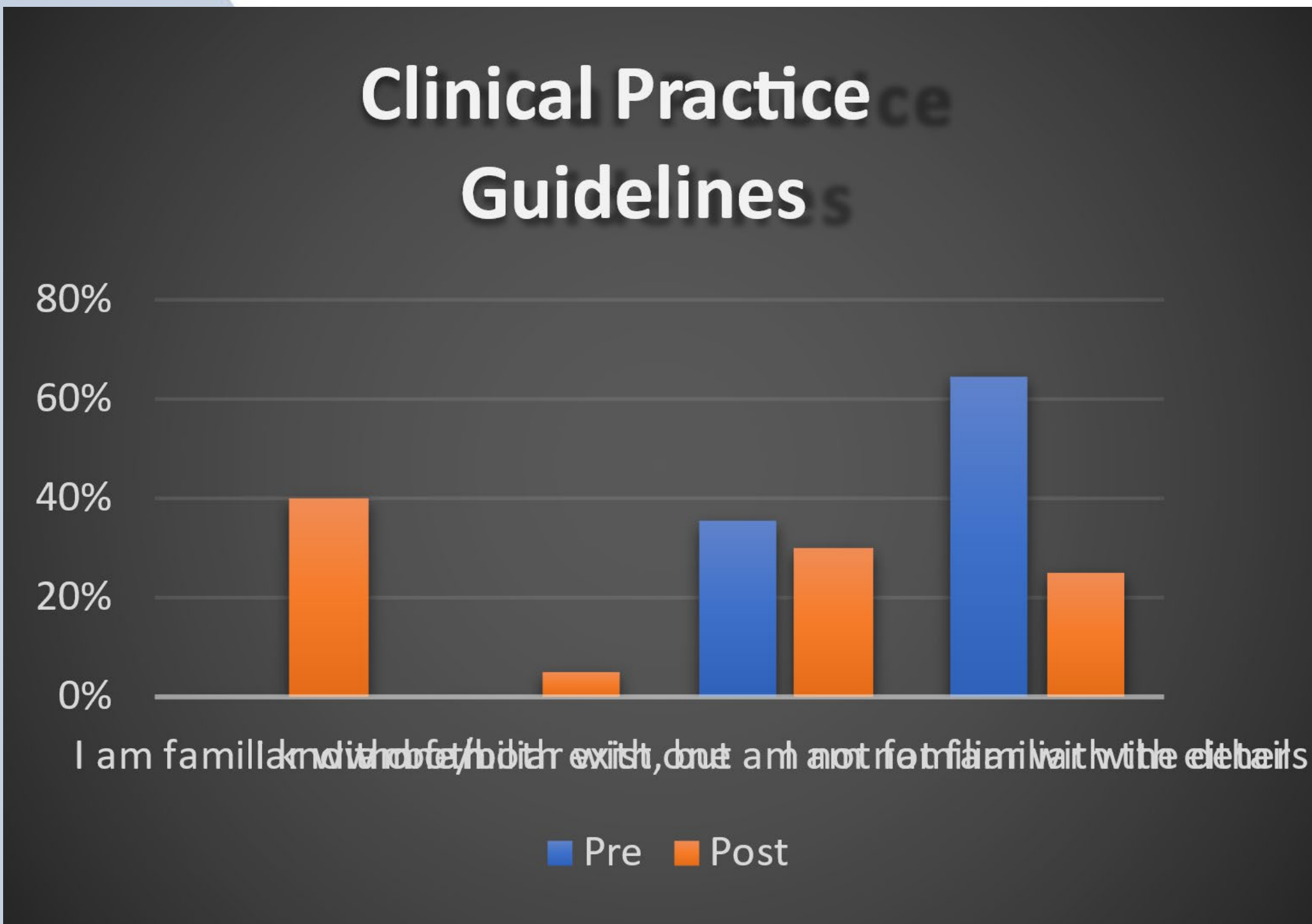
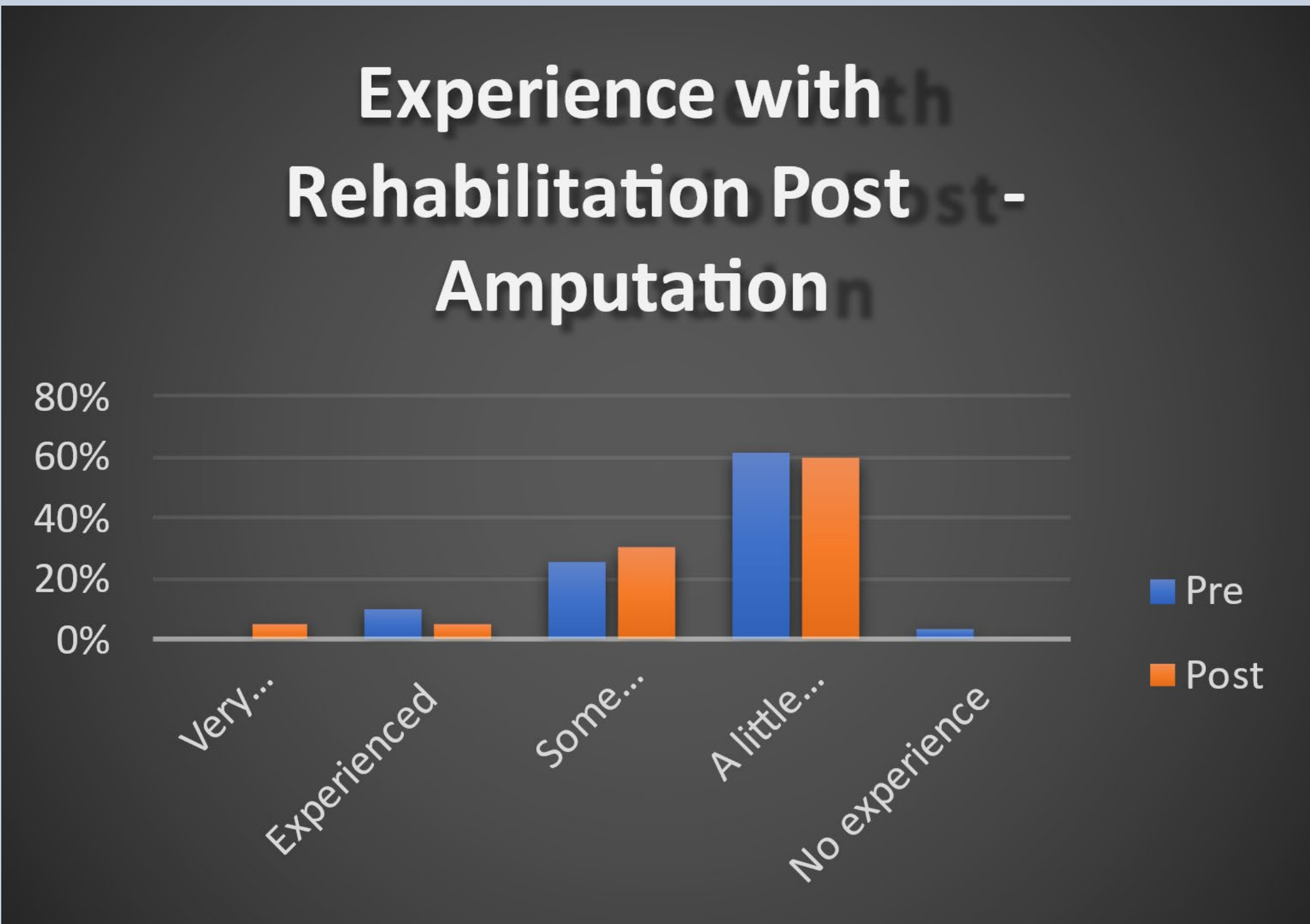
Assessment of knowledge of evidence based clinical practice guidelines from Department of Defense

Intervention

Didactic curriculum was created for the residents in coordination with multi-disciplinary team including physical and occupational therapists, prosthetists and physiatrist. This included review of principles of normal and pathologic gait and peri-operative care of patients living with amputations. A skills lab reinforced hands-on concepts to enable residents to familiarize themselves with limb wrapping.

Understanding the Peri-operative Care of People Living with Amputations

Akinpelumi Beckley, MD, Christopher Visco, MD, External Mentor Justin Hata, MD (Loma Linda University)
Columbia University Department of Rehabilitation & Regenerative Medicine, NY



Results

Residents showed improvements in knowledge of clinical practice guidelines as well as factors that contributed to discharge delays.

Discussion

It is expected this will improve comfort and clinical decision making in the care of patients in the immediate post-amputation period.

The goal is to standardize this initiative through all of the hospital locations in the institution.

Future Direction

Plan to incorporate these sessions institutional wide (therapy staff, nursing, surgical residents) with overall goal of developing a clinical pathway for care of patients living with amputations

References

Webster JB, Crunkhorn A, Sall J, Highsmith MJ, Pruziner A, Randolph BJ. Clinical Practice Guidelines for the Rehabilitation of Lower Limb Amputation: An Update from the Department of Veterans Affairs and Department of Defense. *Am J Phys Med Rehabil*. 2019;98(9):820-829. doi:10.1097/PHM.0000000000001213

Geertzen J, van der Linde H, Rosenbrand K, et al. Dutch evidence-based guidelines for amputation and prosthetics of the lower extremity: Amputation surgery and postoperative management. Part 1. *Prosthet Orthot Int*. 2015;39(5):351-360. doi:10.1177/0309364614541460

Geertzen J, van der Linde H, Rosenbrand K, et al. Dutch evidence-based guidelines for amputation and prosthetics of the lower extremity: Rehabilitation process and prosthetics. Part 2. *Prosthet Orthot Int*. 2015;39(5):361-371. doi:10.1177/0309364614542725

Fard B, Persoon S, Jutte PC, et al. Amputation and prosthetics of the lower extremity: The 2020 Dutch evidence-based multidisciplinary guideline. *Prosthet Orthot Int*. 2023;47(1):69-80. doi:10.1097/PXR.0000000000000170

Lee DJ, Repole T, Taussig E, et al. Self-Management in Persons with Limb Loss: A Systematic Review. *Can Prosthet Orthot J*. 2021;4(1):35098. Published 2021 Jun 4. doi:10.33137/cpoj.v4i1.35098





The impact of culture on feedback practices: A scoping review

Sharon David MD

Internal Mentors: Dr. Sara Parke MD & Dr. Jason DeLuigi DO

External Mentor: Dr. Alex Moroz MD

ABSTRACT

BACKGROUND

Globalization and international teams are becoming more prevalent.. The healthcare workforce is no exception. “A critical question for organizational effectiveness is whether feedback can be provided to teams regardless of the cultural background of their members and expect that it will be perceived and processed in the same way.”³ Do our feedback techniques need to mirror our work force and become more diverse? If so, do feedback techniques used with learners from the United States work as effectively on learners from other countries?

OBJECTIVE

Identify the gaps in research on effective feedback tools for culturally diverse teams.

METHODS

Using Arksey & O'Malley's 5 stage methodologic framework for a scoping review was completed.

RESULTS

In an aim to obtain any articles looking at the effect of culture/race/ethnicity/nationality on feedback from 1974-2023, we only identified 8 articles.

- A majority (6/8) were a combination editorial commentaries/hypotheses articles (3) and cross-sectional studies (3).
- There was only 1 article published in the last 3 years and it was an editorial commentary.
- Most studies looked at cultures based in China, the United States and Australia.
- The one randomized control trial examined feedback given between white leadership and black subordinates. Interestingly enough, it didn't look at black leadership and white subordinates. This study's incorporated stereotypes in its design.
- The studies looked at an assortment of things. There was no unifying theme. Topics ranged from determinants of effective feedback across cultures, impact of paternalistic vs personal cultures, collectivism vs individualism, cultures with a high vs low avoidance of uncertainty, to name a few. All discussed differences these cultural syndromes/concepts played on feedback.

CONCLUSIONS

We started to perform this review looking in the context of psychiatry residency programs. No articles were found. We broadened the search to all residency programs. Still, no articles were found. We then expanded it to all of healthcare education and we still found no articles. When we removed the context of education, we found 8 articles. **There is a void in the literature examining effective feedback techniques for diverse cultural teams in GME.**

OBJECTIVES

RATIONALE

Teams are more culturally heterogenous in many organizations for many reasons ranging from the increase in remote work options and because “Culturally heterogenous teams have the potential of achieving higher levels of innovativeness and performance than culturally homogenous teams”³

Effective feedback is important for organizational effectiveness and the ability to give effective feedback is part of leadership development. This ability becomes even more important in working with diverse teams. Feedback becomes more effective if it is given in the receiver's preferred and expected methods. Understanding these preferences and expectations are crucial. We perform a scoping review to understand the literature examining the impact of culture on how feedback is given and received.

METHODS

The Arksey & O'Malley's 5 stage methodologic framework was employed.

- Databases used: Pubmed, Embase, Business One
- Search terms: culture or race or ethnicity or nationality AND feedback
- Time frame searched: 1974-2023
- Publication language: English
- Who completed the search: institutional librarian
- No. of articles generated: 8
- No. of articles included in final selection: 8

RESULTS 1

TABLE 1

There were some reoccurring concepts within articles which was described as cultural syndromes. The theme/cultural syndrome & frequency in which they were referenced as an impact on how feedback is given/received is listed below.

Cultural Syndrome	Frequency Cited (# Articles)
Collectivism vs Individualism	6
Power Differentials- High vs Low	5
Tolerance for Ambiguity: High vs Low	4
Holistic vs Specific	3
Paternalism vs Personalism	2
High Context vs Low Context	2
Masculine vs Feminine	2

RESULTS 2

FIGURE 1

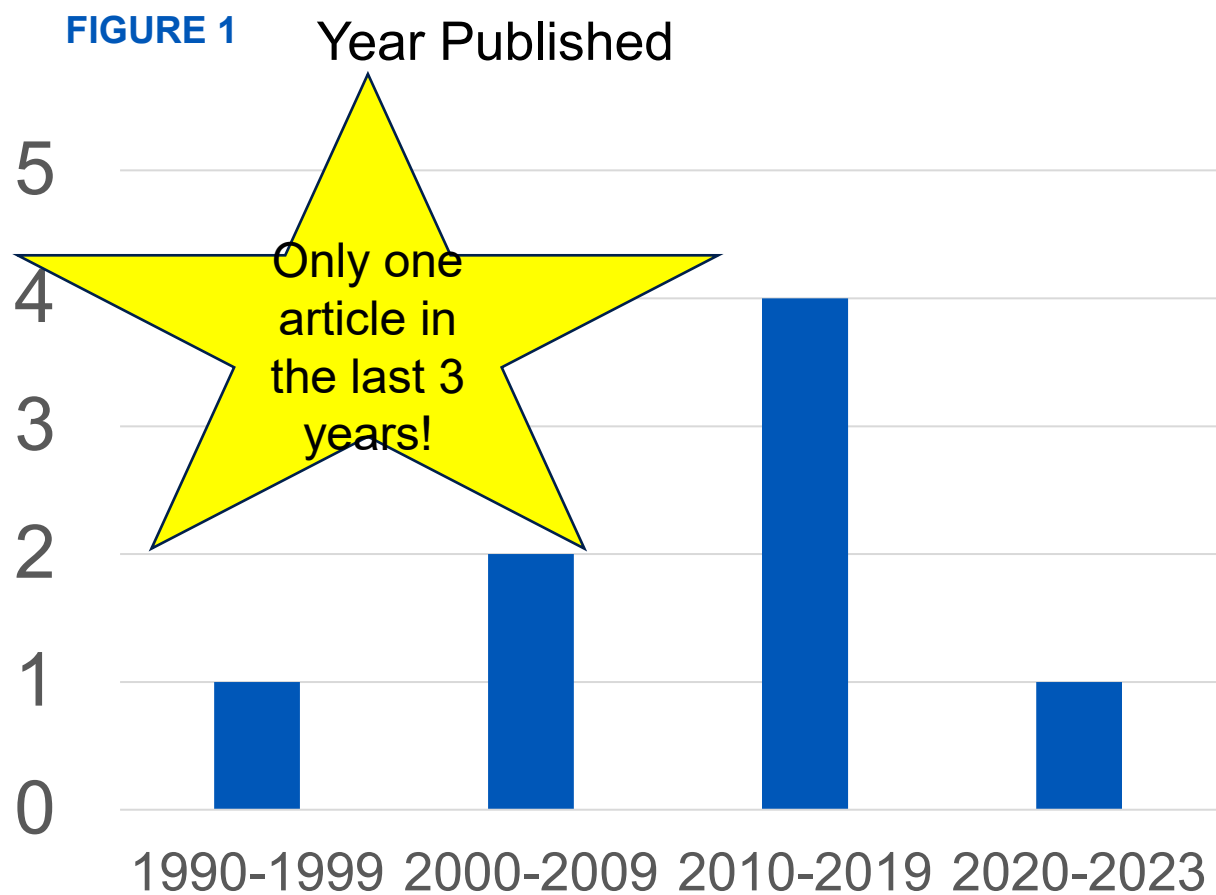


FIGURE 2

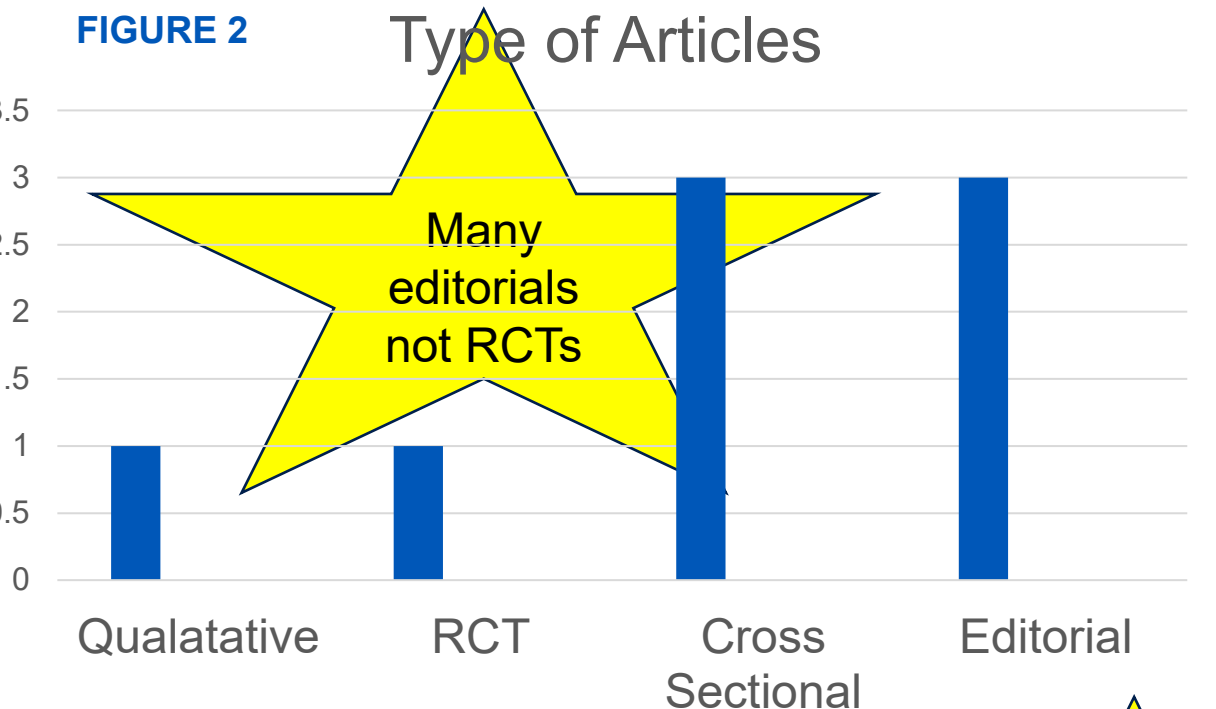


FIGURE 3

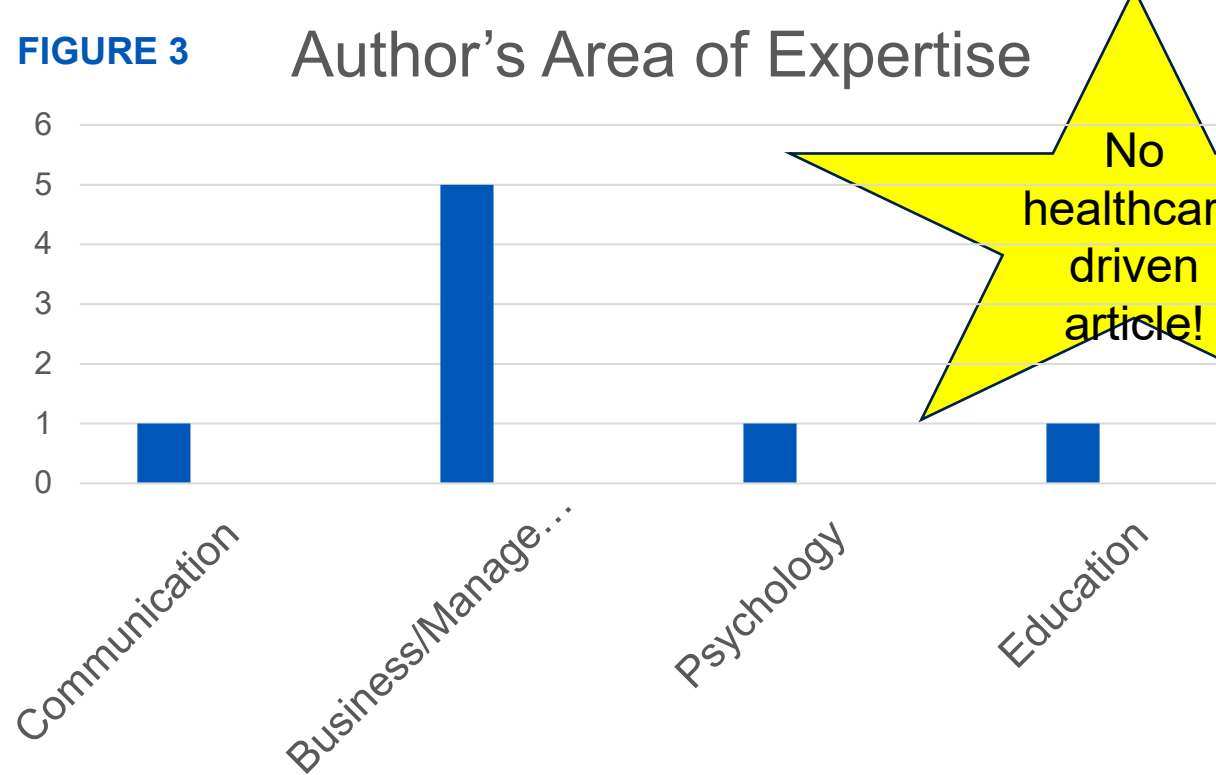


TABLE 2

Below I report the difference between the most commonly cited theme: collectivism vs individualism

Collectivism	Individualism
“How are we doing?” *interest in group performance	“How am I doing?” *interest in self performance
“Can we accomplish this target?” * Leader determines goals based on the group's collective ability to pursue a course of action	“Can I accomplish this target?” *Leader determines goals based on their ability to pursue a course of action
Reality is stable *A poor performer should be removed due to lack of ability	Reality is Dynamic *A poor performer can change with more effort
Incremental Fine Tuning *low risk, stable solutions	Innovation *high risk, creative solutions
Conformity is valued	Uniqueness is valued
Subordinates want feedback on weaknesses	Subordinates want feedback on strengths
“How are my competitors doing?” *Goals are based on social aspirations *more prone to social comparisons	“How did I do before?” Goals are based on historical aspirations: what you did in the past.

DISCUSSION

This scoping review shows that there are some reoccurring themes in the literature on the impacts of culture on feedback. However, many of the articles listed are editorials or commentaries with hypotheses based on reasoning and deduction. Also, the articles were not written in the setting of healthcare or graduate medical education.

It would be interesting to see future studies examine the impact of culture on self evaluation in terms of history taking/developing a differential diagnosis/management.. Future studies are also needed to help define culture. Clearly, there is a gap in the current literature.

CONCLUSIONS

- Feedback is important for multiple reasons.
 - It can help the performance of a team or individual.
 - It can increase motivation.
 - It can decrease uncertainty.
 - It can clarify goals.
- Feedback can be interpreted differently depending on giver's/receiver's culture.
- Culture affects one's preferred method of feedback.
- As teams become more diverse, incorporating different cultures, understanding of these cultural implications on feedback may be transformative; however, currently, there is not much published data.
- We need more data on this topic, especially in the context of graduate medical education..

REFERENCES

- Bo, S., et al. (2020). I know your intention is good, but I still feel bad. *Personnel review: A Journal of People, Work and Organizations*, 49 (8), 1591-1606.
- Eckert, R., et al. (2010) “I don’t see me like you see me, but is that a problem? ”Cultural influences on rating discrepancy in 360-degree feedback instruments. *European Journal of Work and Organizational Psychology*, 19(3), 259-278.
- Gilson, L. (2020). “One Size Does not Fit All”: Revisiting Team Feedback Theories from A Cultural Dimensions Perspective. *Group & Organization Management*, 45(2), 252-309.
- Lee, S.Y., et al. (1996). Determinants of employee willingness to use feedback for performance improvement: cultural and organizational interpretations. *The International Journal of Human Resource Management*, 7(4), 878-890.
- Mooweon, R., et al. (2020). Individualism-collectivism cultural difference in performance feedback theory. *Cross Cultural & Strategic Management*, 27 (3), 343-364.
- Ruscher, J., et al. (2010). Constructive feedback in cross-race interactions. *Group Processes & Intergroup Relations GPIR*, 13(5), 603-619.
- Shipper, F., et al. (2007). Does the 360 Feedback Process Create Actionable Knowledge Equally Across Cultures? *Academy of Management Learning & Education*, 6 (1), 33-50.
- Sully De Luque, M., et al. (2000). The impact of culture on feedback-seeking behavior: an integrated model and propositions. *Academy of Management Review*, 25(4)829-849.

Mohammed Emam MD

Physical Medicine and Rehabilitation, Johns Hopkins University School of Medicine, Baltimore, MD, USA

Background

Residency training in PM&R emphasizes evidence-based and informed practice. However, challenges in cultivating a culture of inquiry and mentorship for resident-based journal clubs often hinder the development of critical appraisal skills that are essential and key to success with resident-based journal clubs.

Objectives

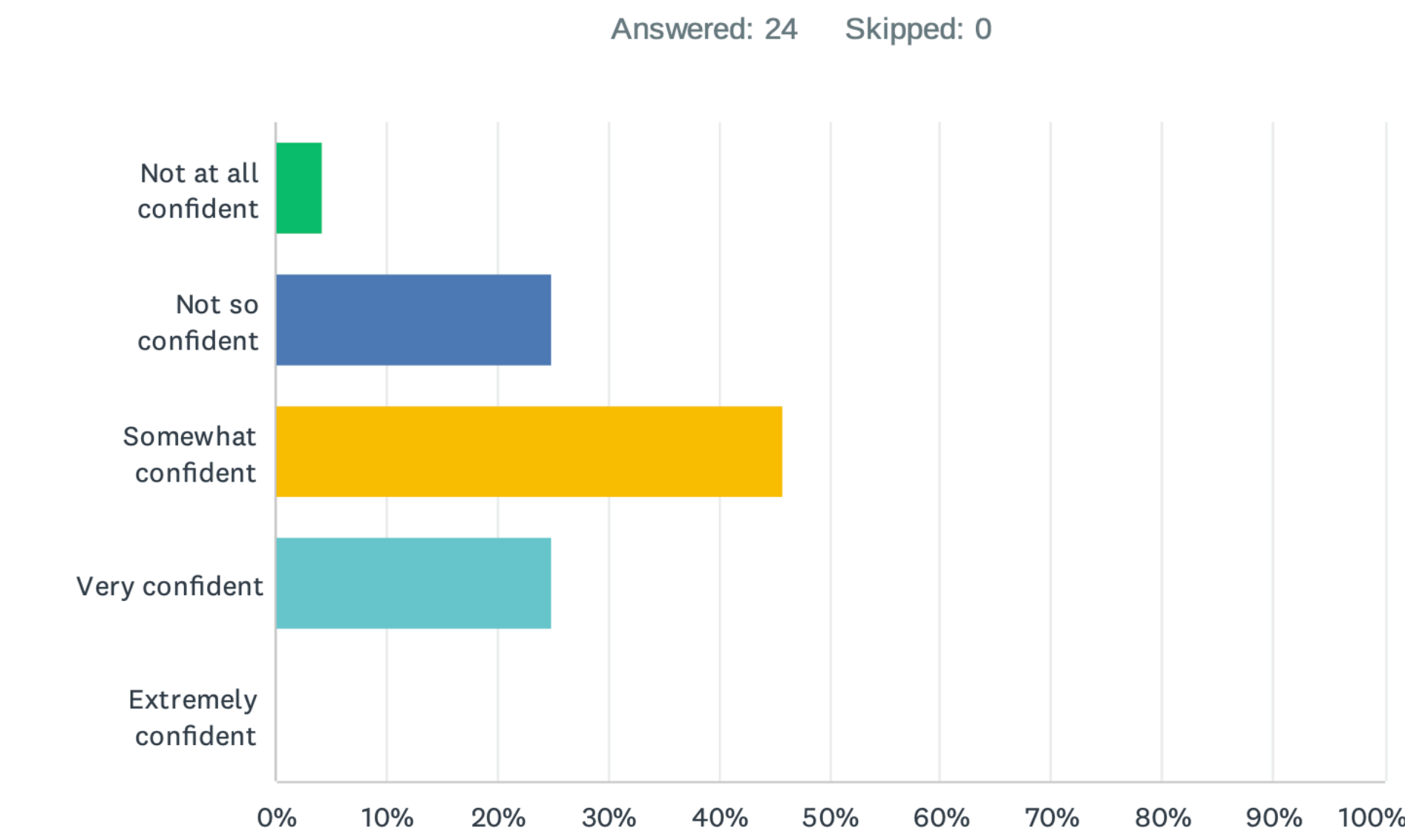
The aim of this quality improvement project is to investigate the current state of journal club critical appraisal skills and design interventions to improve the level of confidence of physical medicine and rehabilitation residents in these skills.

Preassessment

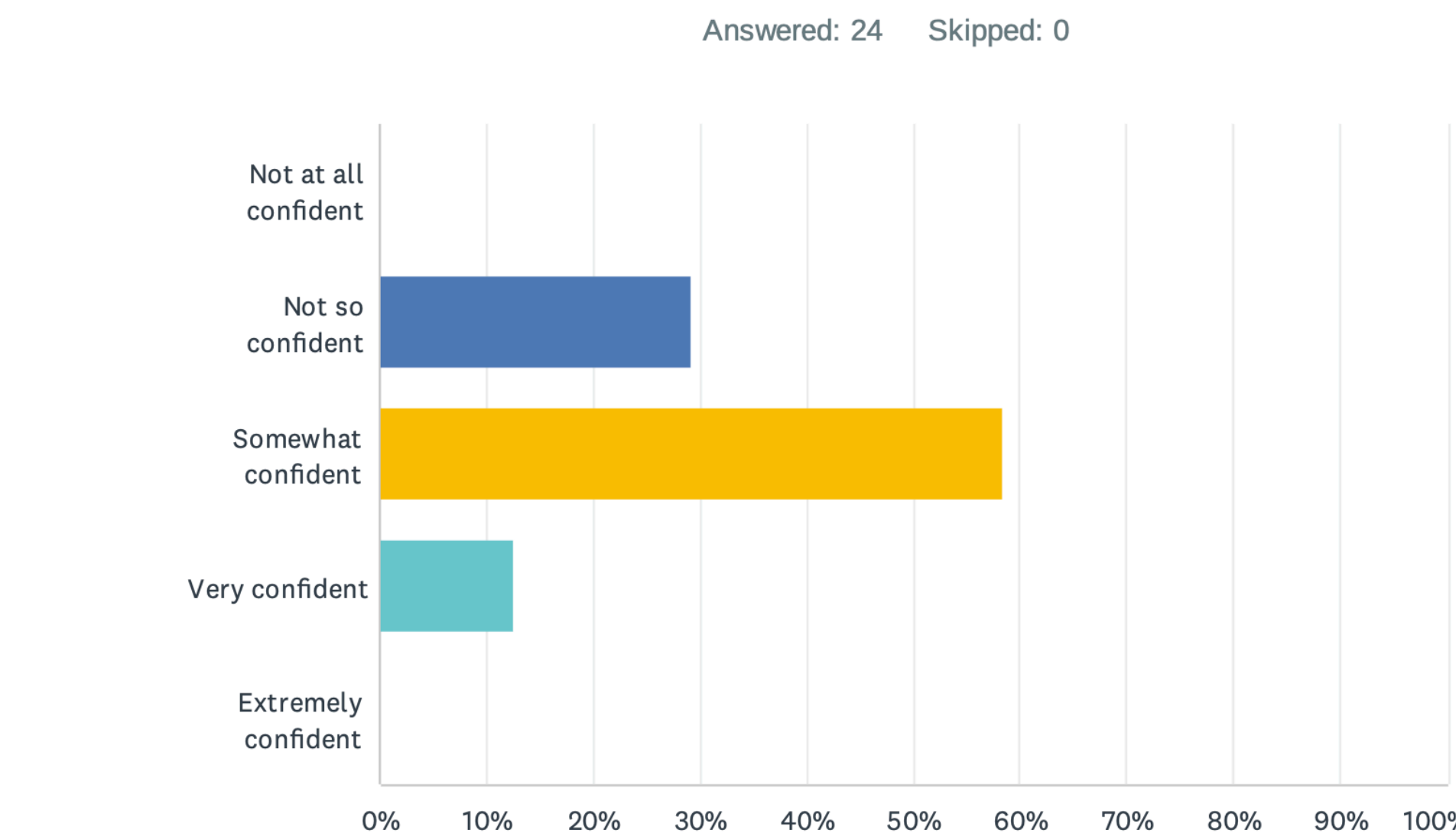
- Study Population:** 24 PM&R residents at Johns Hopkins University (8 from each PGY level).
- Pre-Assessment:** A 20-question Likert scale survey identified residents' confidence levels and perceived barriers in critical appraisal skills.
- Some of Key Results: 30% were not confident and 50% were somewhat confident in critically appraising scientific literature.
- 50% had little knowledge in critical appraisal.
- 40% rarely performed critical appraisal during journal club.
- 87% agreed that learning critical appraisal is essential.
- Some of the challenges listed: Lack of educational resources, time constraints, need for guidance, anxiety about research, insufficient practice.

Key Baseline Assessment Results

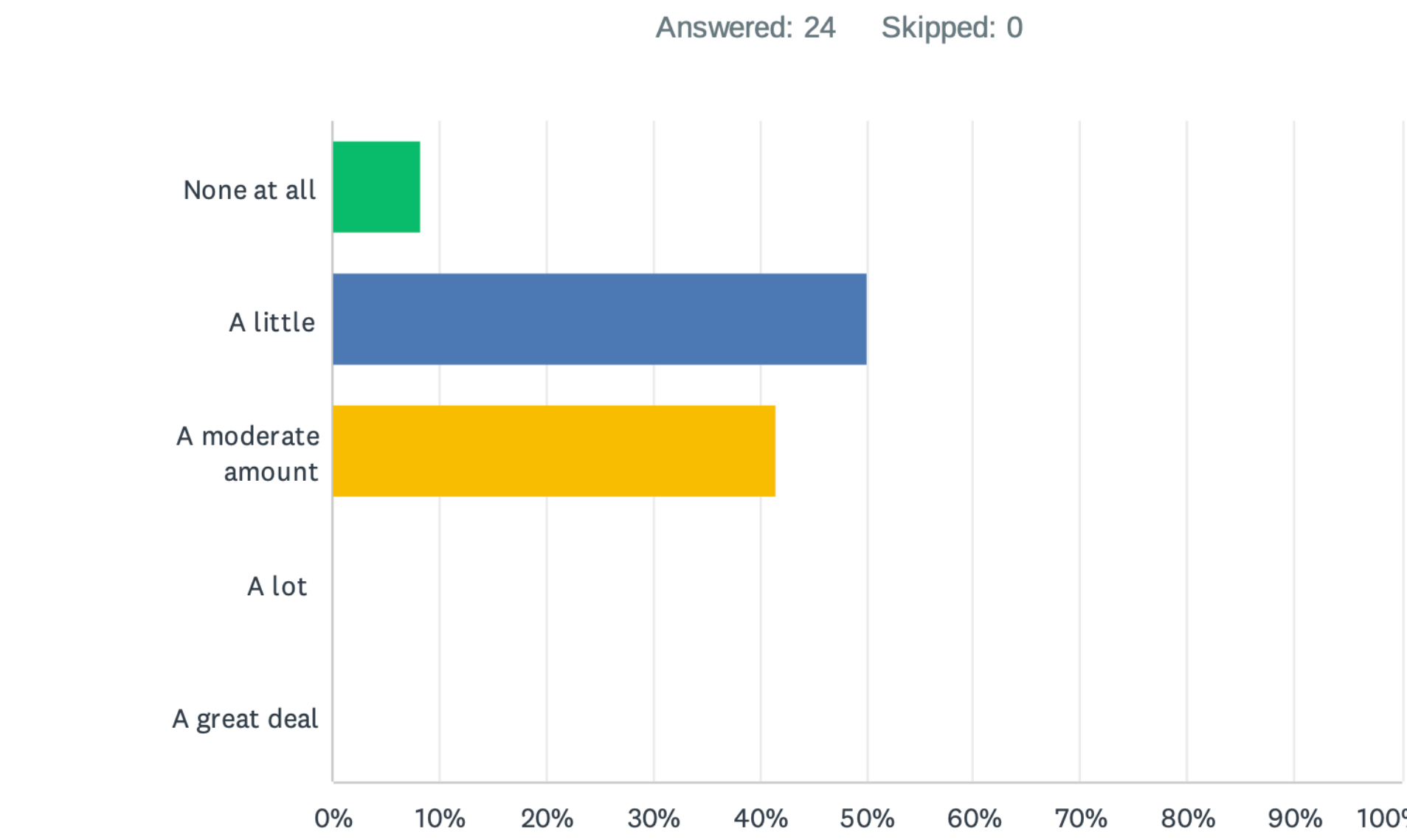
Q9 I know how to discern high- and low-quality scientific article.



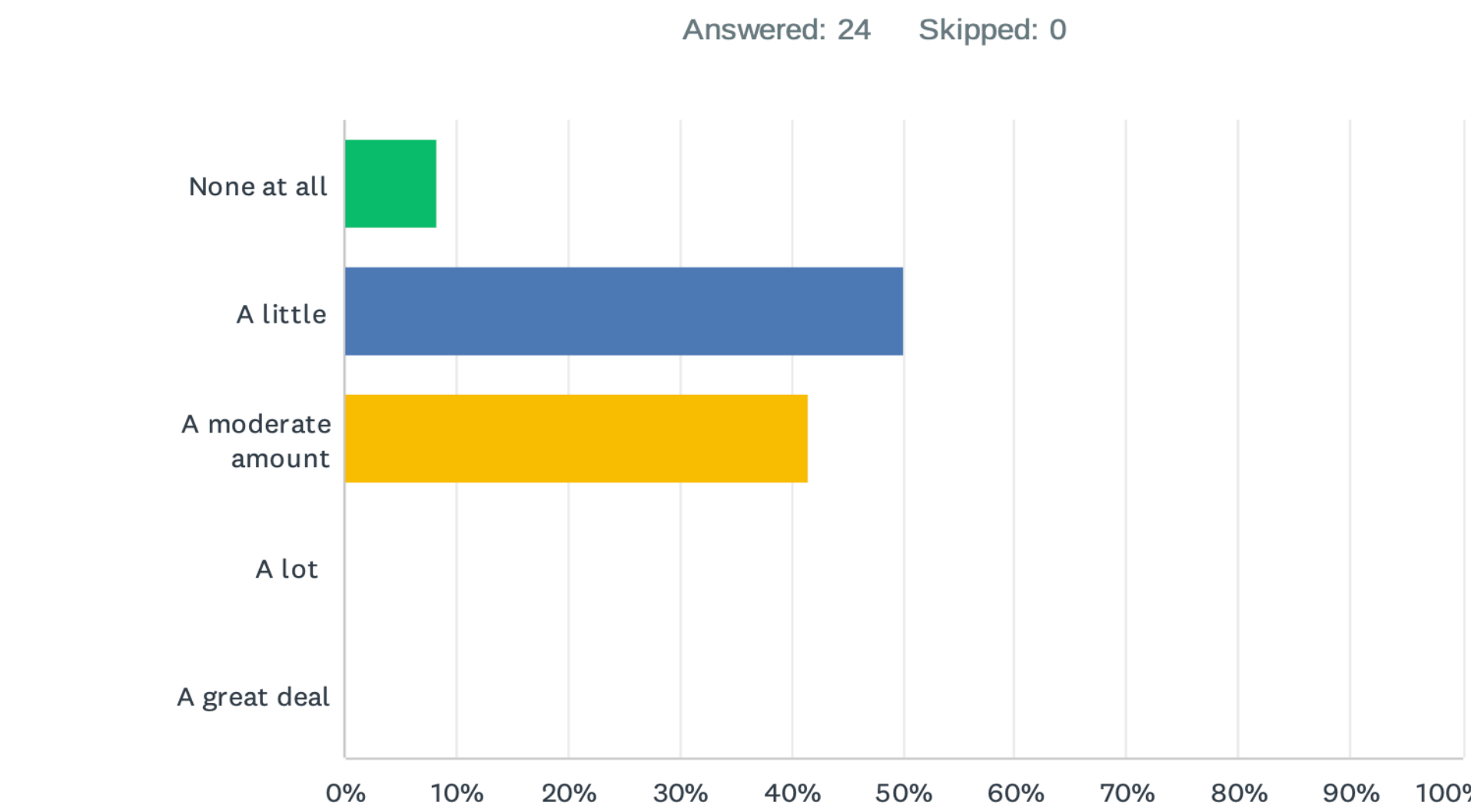
Q11 I can critically appraise scientific literature addressing strengths and weaknesses of the article.



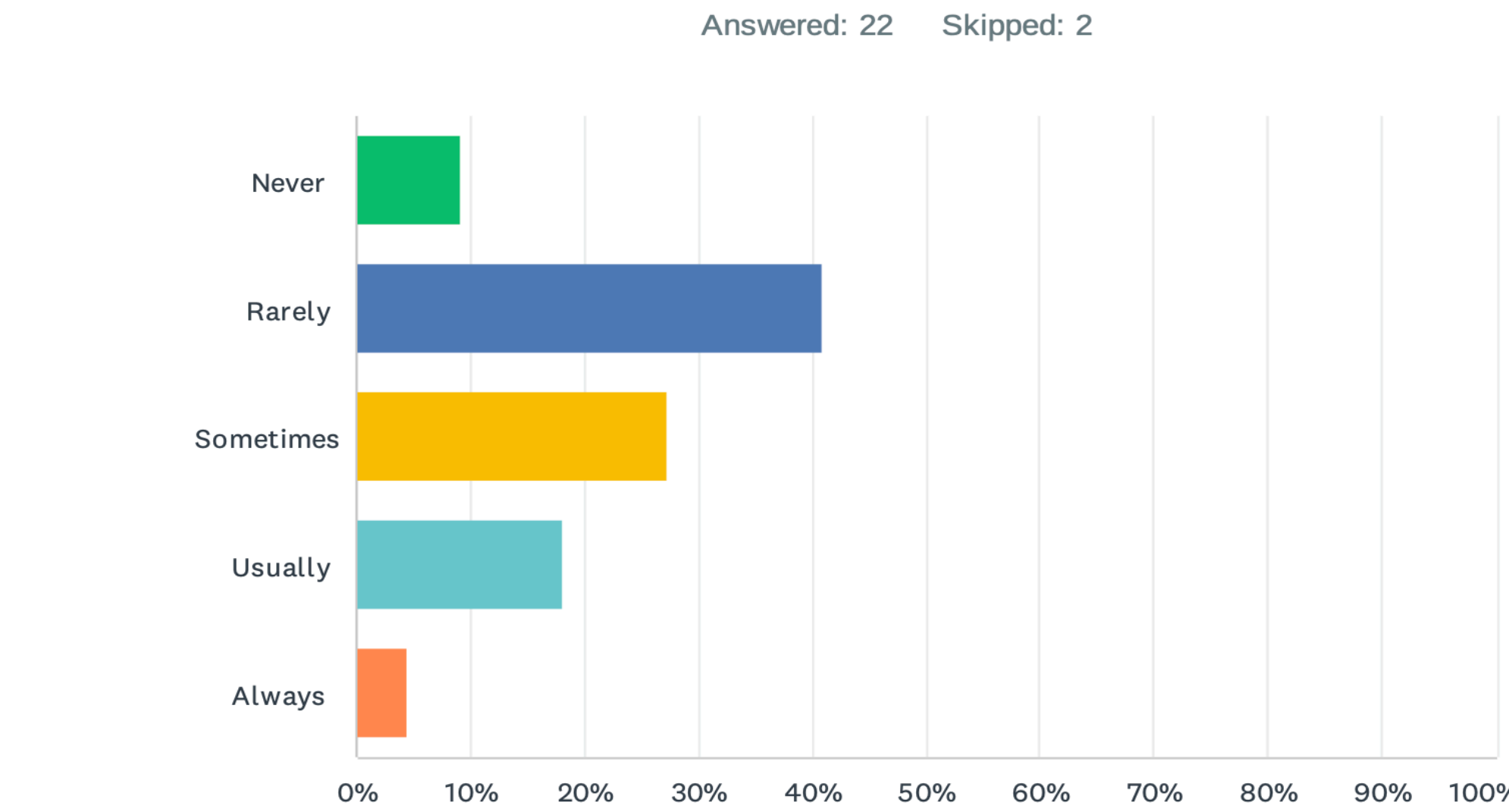
Q15 How knowledgeable do you consider yourself to be about critical appraisal?



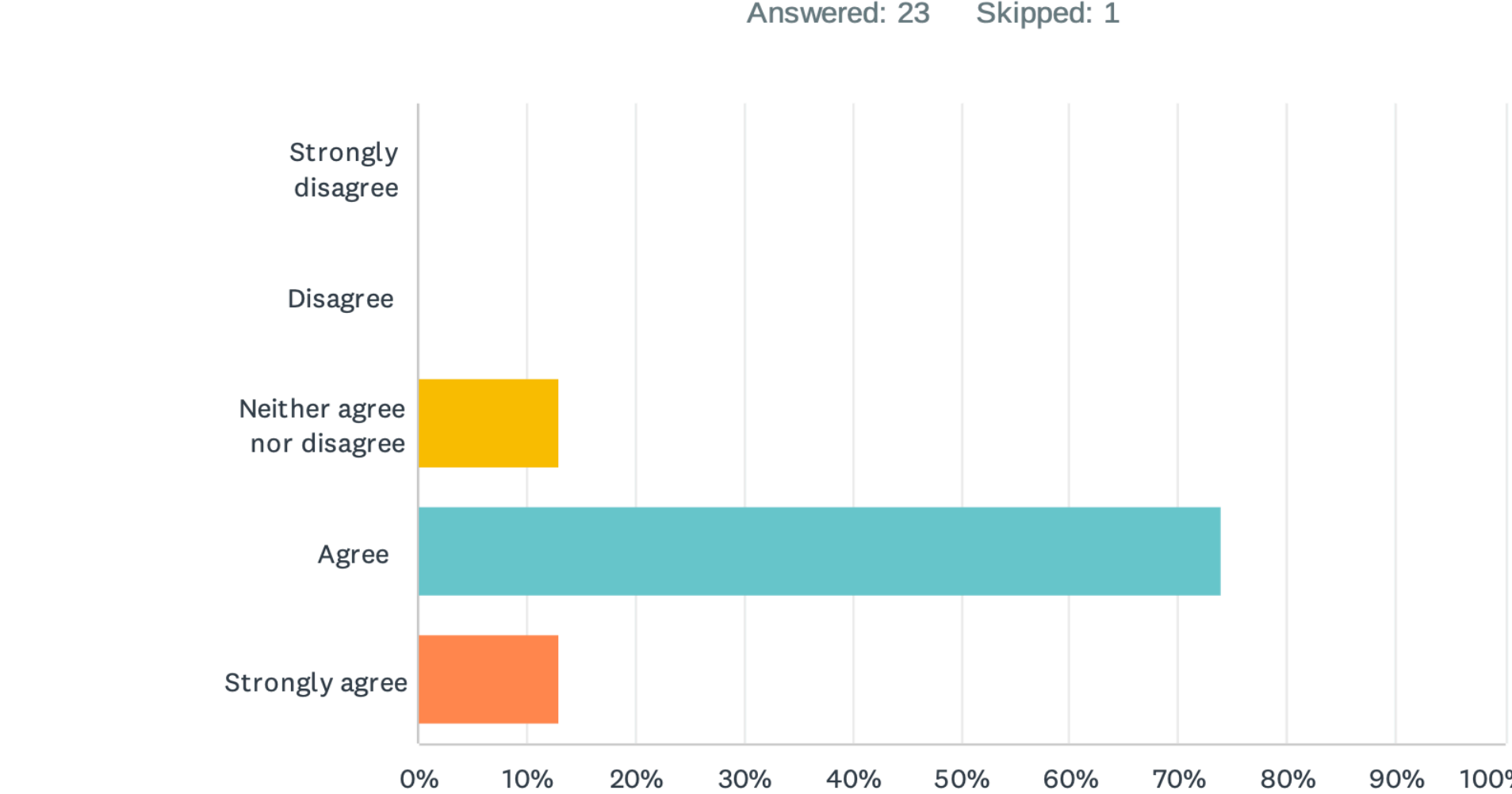
Q15 How knowledgeable do you consider yourself to be about critical appraisal?



Q16 9. How often do you perform critical appraisal during journal club now?



Q17 Learning medical literature critical appraisal is an essential component of my PM&R residency training



Intervention

- A Curriculum was developed and implemented focusing on research skills and evidence-based medicine in PM&R.
- The was composed of 4-hour didactics on fundamentals of research, biostatistics and evidence-based medicine in PM&R, divided into two separate sessions and supplemented by online educational material.
- Small groups workshop: residents were then divided into 3 groups with an assigned supervising faculty. The groups attended a 3-hour workshop working in a collaborative format on research design facilitated by the supervising faculty. Special attention was given to fundamentals of research, including hypothesis development, study design, dealing with confounders, and establishing a research protocol. While designing their group research project, residents were instructed on strengths and limitations of each specific research design, thus, can translate this knowledge to develop critical appraisal skills to implement during journal club sessions.

Post-Intervention and Future Direction

During the fourth quarter of the academic year and following additional scheduled journal club sessions, residents will administer a post-intervention survey to assess the effectiveness of the curriculum and evaluate the impact of the intervention on residents' ability to appreciate and analyze literature in PM&R. We will use findings to plan future curricula for ongoing improvement.

Acknowledgment

Special acknowledgment to Dr. Tracy Friedlander and Dr. Patrick Kortebein from Johns Hopkins and Dr. Chloe Slocum from Spaulding Rehabilitation for their mentorship and guidance throughout this project.

Implementing Entrustable Professional Activities for Resident Evaluations

Kevin Franzese, DO[†]; Elizabeth Runge, MD, PhD[†]; Amanda Harrington, MD[†]; Carol Vandenakker-Albanese, MD[‡]

[†] University of Pittsburgh, [‡] University of California, Davis

Background

Our departmental resident evaluations borrow heavily from the milestones of the core competencies and sub-competencies for Physical Medicine and Rehabilitation as laid out by the Accreditation Council for Graduate Medical Education. We identify several problems with their current configuration:

Length	1780 words, 34 items
Latency	22-44% late (> 10 days)
Accuracy	↑Time to complete, ↓Accuracy of feedback
Relevance	Not personalized to each rotation
Impersonality	Subjective comments often terse

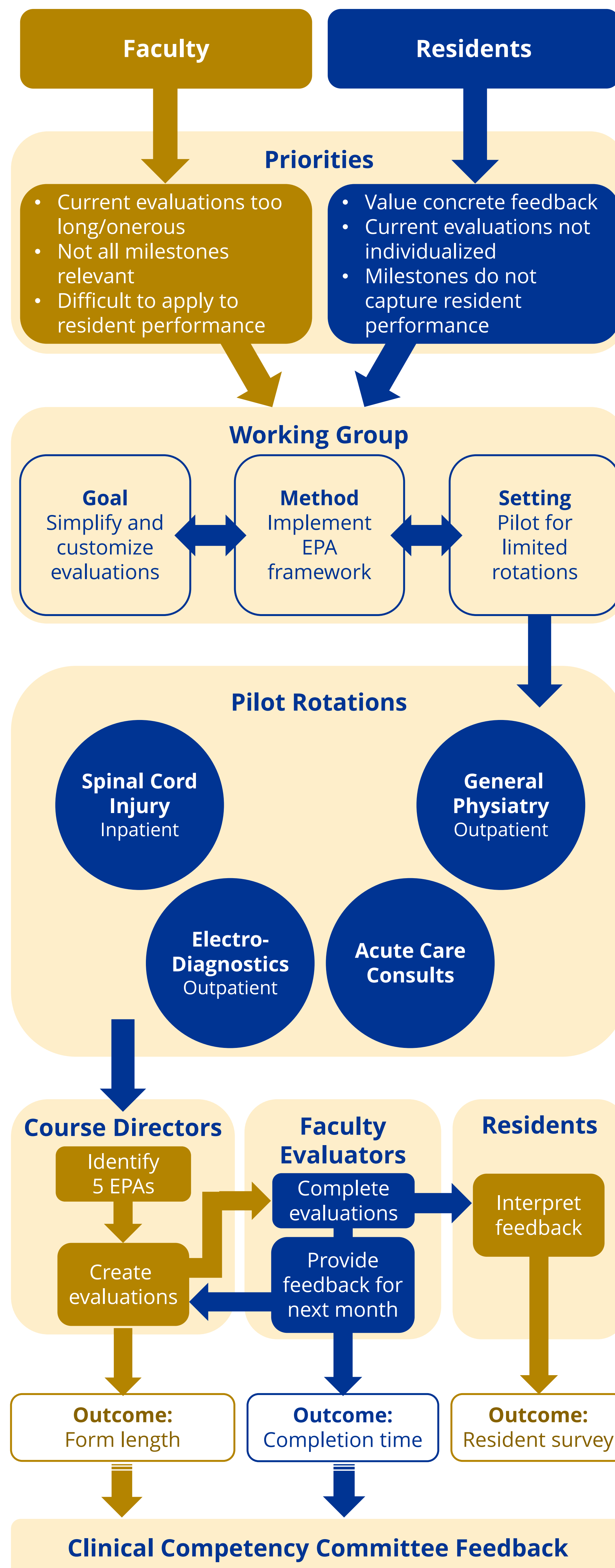
Enter the Entrustable Professional Activity (EPA). EPAs are discrete clinical activities that embody the essence of our practice as physiatrists and are the core of what we seek to teach our trainees. Used more frequently in other medical specialties, represent an opportunity to develop evaluations that do better to address the above concerns.

Objectives

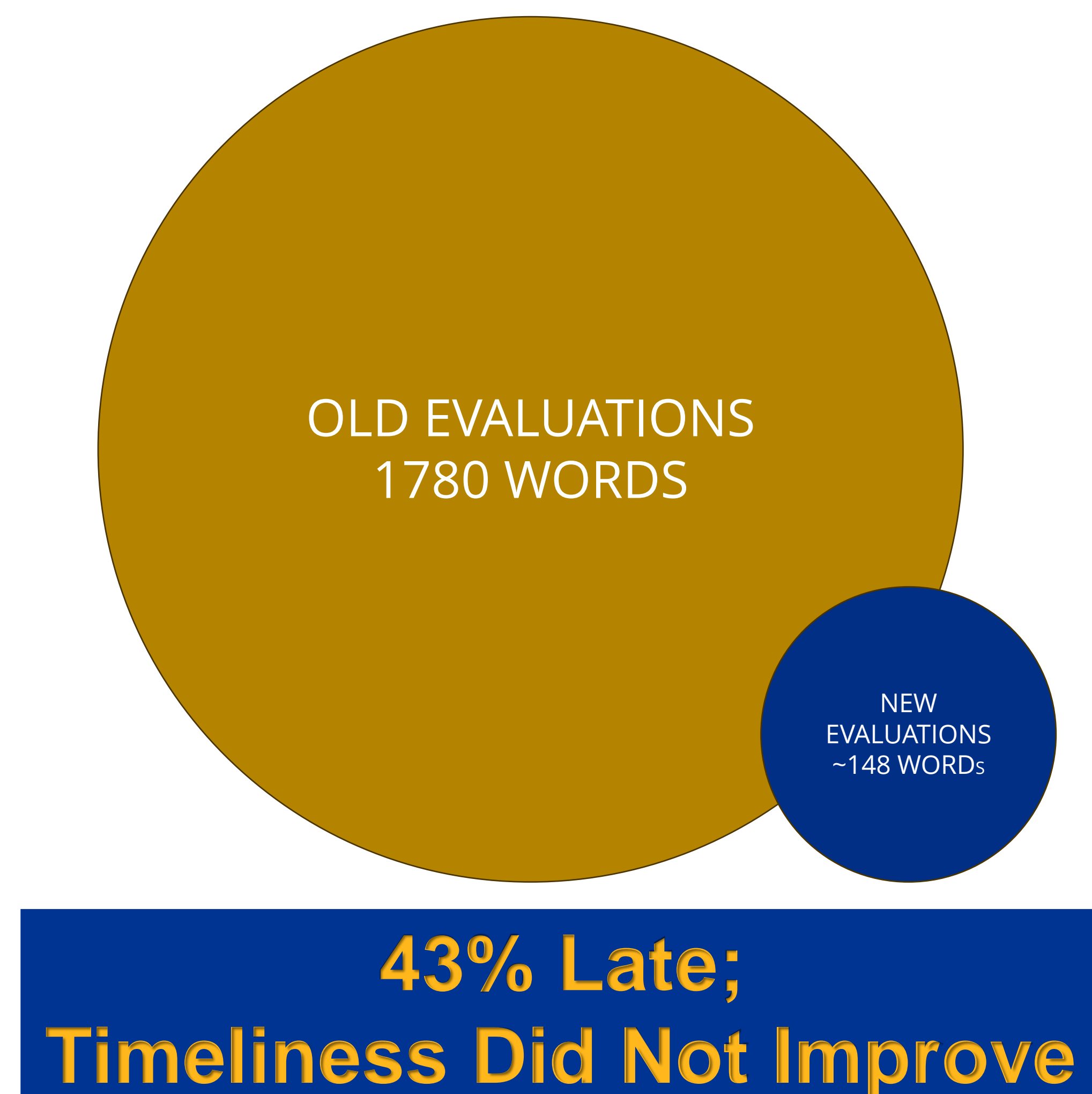


Methods

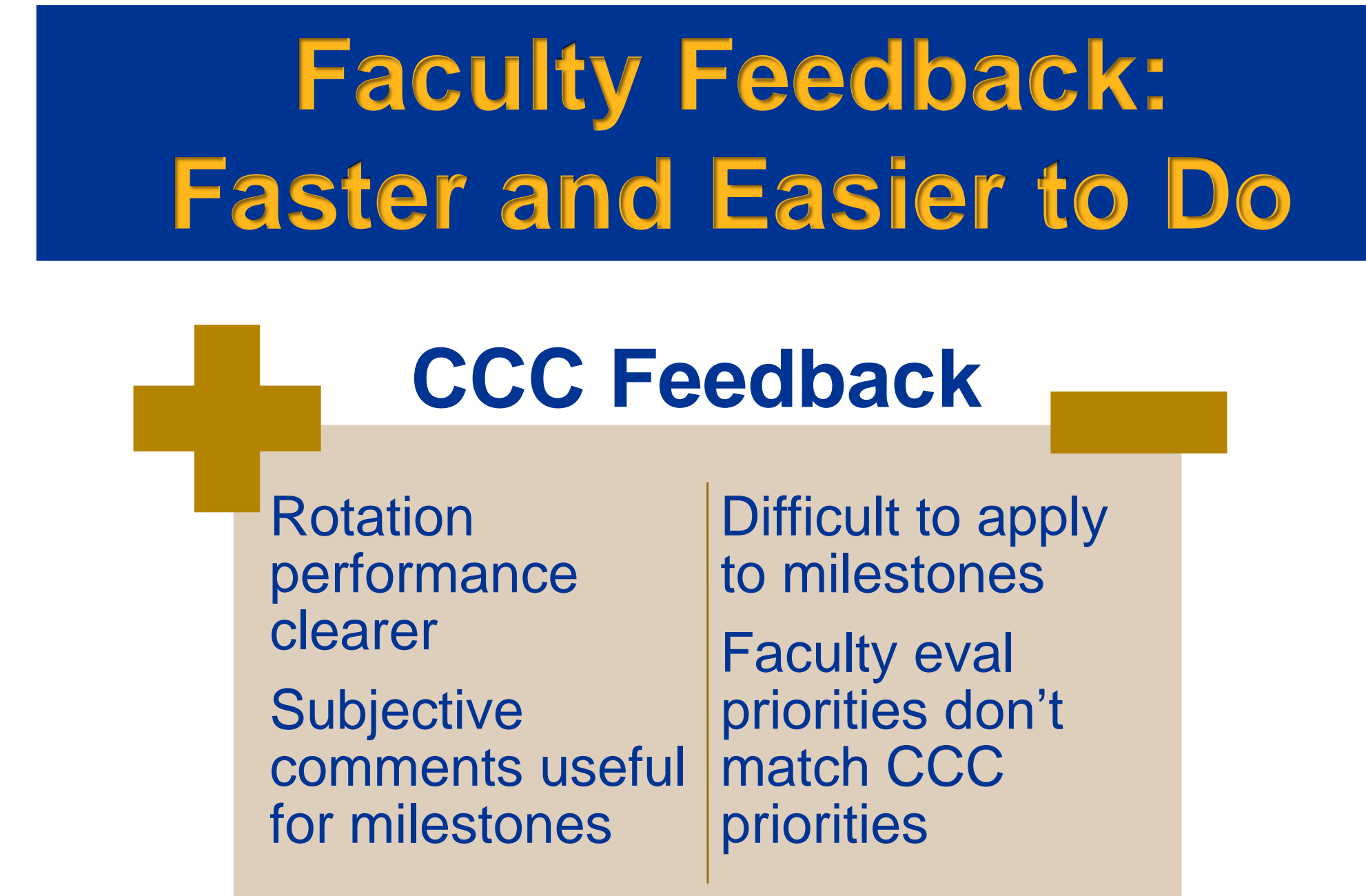
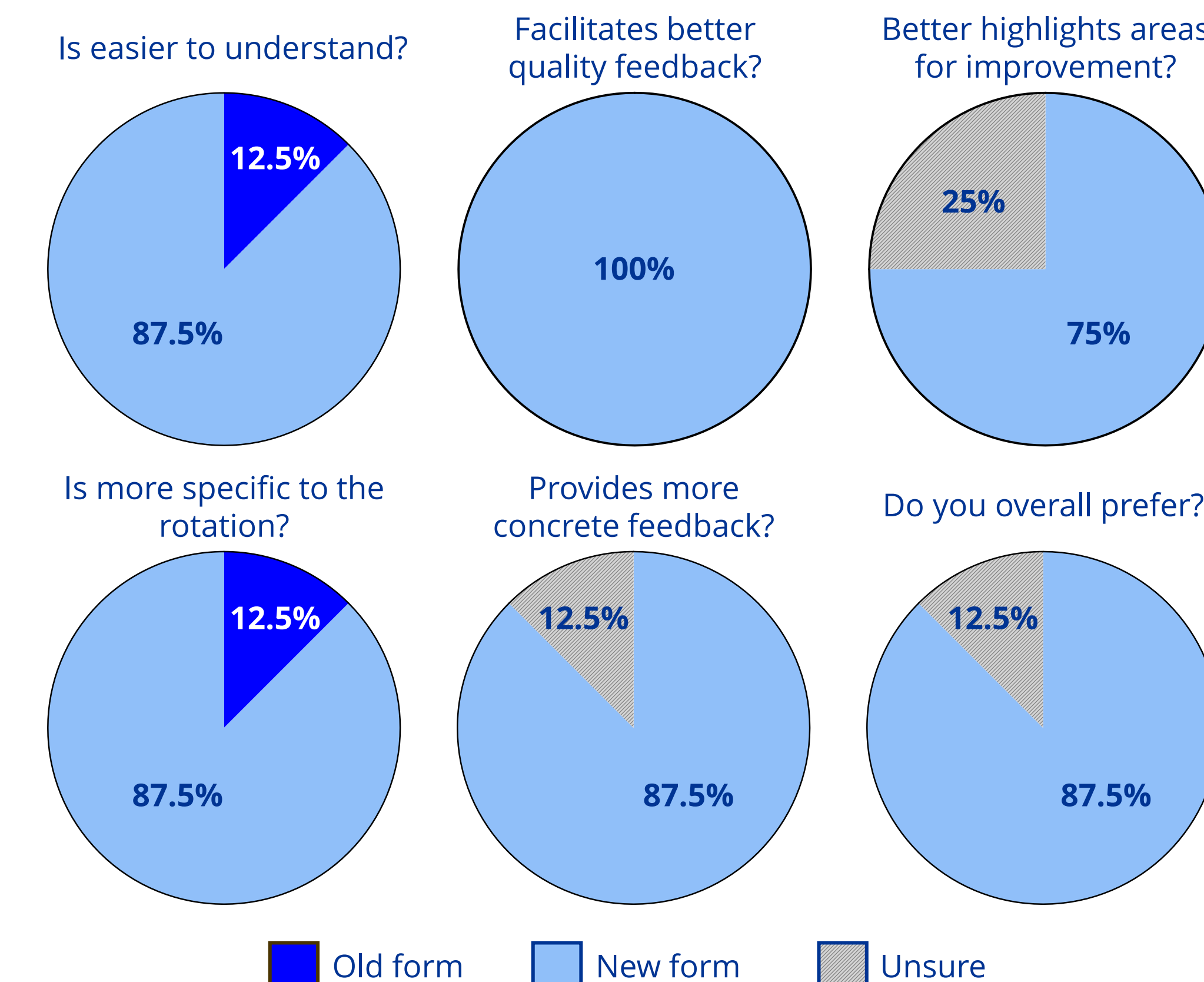
This project has been approved by the UPMC Quality Improvement Review Committee (Project ID 4776)



Results



Resident survey: "In your opinion, which form..."



Discussion

There was ample faculty and resident enthusiasm to improve the resident evaluation process. This appetite for meaningful change led to a scope expansion beyond the initial goal to get them done on time. Most feedback from all stakeholders was positive, although some CCC members expressed difficulty working with the new evaluations.

This project was limited by the size of the pilot, resulting in no statistical significance for any outcomes or measures. Moreover, the highly personal approach that we took in creating customized rotation evaluations for each rotation director necessitated an inherently irregular and unsystematic approach that certainly added elements of bias or inconsistency to the process.

Conclusions

While we successfully made reductions in the length of resident evaluations and made them easier to use and more meaningful to trainees and faculty alike, the intervention was not enough to change the timeliness of their completion. In discussion with individual faculty about the challenges of completing evaluations on time, it was clear that while surmounting the evaluation itself was significant, there were other social and professional barriers that were equally problematic, namely clinical and other service demands.

References

- Mallow M, Baer H, Moroz A, Nguyen VQC. Entrustable Professional Activities For Residency Training in Physical Medicine and Rehabilitation. Am J Phys Med Rehabil. 2017 Oct;96(10):762-764. doi: 10.1097/PHM.0000000000000741. PMID: 28925925.
- Taylor CM 2nd, Baer H, Edgar L, Jenkins JG, Harada N, Helkowski WM, Zumsteg JM, Francisco GE, Sabharwal S, Hamilton RG, Mallow M. Improving the Assessment of Resident Competency: Physical Medicine and Rehabilitation Milestones 2.0. Am J Phys Med Rehabil. 2021 Feb 1;100(2S Suppl 1):S45-S50. doi: 10.1097/PHM.0000000000001650. PMID: 33252467.
- Warm EJ, Mathis BR, Held JD, Pai S, Tolentino J, Ashbrook L, Lee CK, Lee D, Wood S, Fichtenbaum CJ, Schauer D, Munyon R, Mueller C. Entrustment and mapping of observable practice activities for resident assessment. J Gen Intern Med. 2014 Aug;29(8):1177-82. doi: 10.1007/s11606-014-2801-5. Epub 2014 Feb 21. PMID: 24557518; PMCID: PMC4099463.

Acknowledgements

We cannot express warmer gratitude for the support and cooperation of Wendell Robinson, Wendy Helkowski, Kerry DeLuca, Mary Ann Miknevich, Angela Garcia, Ella D'Amico, Michelle Eventov, and Kristen Milleville.

Innovating Education: Improving Electrodiagnostic Medicine Learning for PGY2 & PGY3 Residents

¹ Erik Hoyer, MD, ¹ Tracy Friedlander MD, ² John Norbury, MD

¹ PM&R, Johns Hopkins University School of Medicine, Baltimore, MD; ² PM&R, Texas Tech University Health Sciences Center, Lubbock TX

Introduction

Electrodiagnostic and neuromuscular medicine is pivotal in PM&R, yet it often receives limited focus in early residency training. Traditional teaching methods have proven insufficient in covering the breadth and depth required in this specialty. Hence, we leveraged the capabilities of the CANVAS online learning platform, integrating digital resources with interactive learning techniques. This initiative aligns with the growing need for adaptable, asynchronous, technology-driven education in medicine, ensuring residents are well-equipped for their clinical roles.

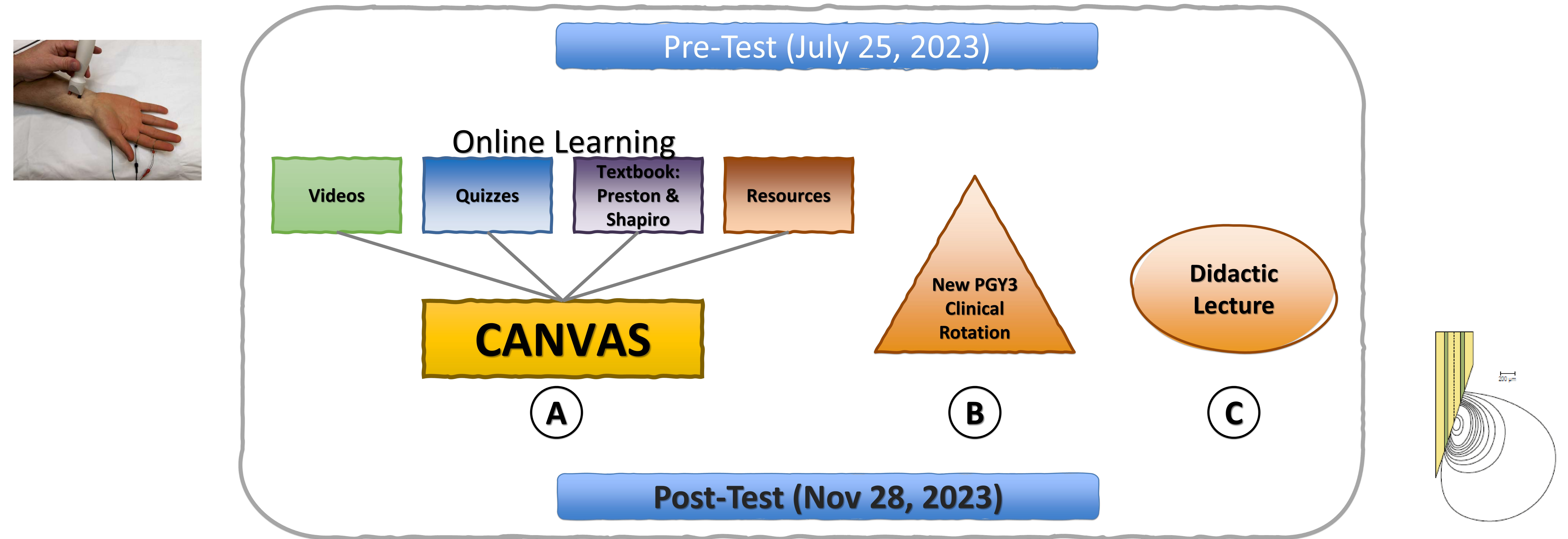
Objectives

To develop a curriculum that provides foundational knowledge and practical skills in electrodiagnostics for PGY2 and PGY3 residents.

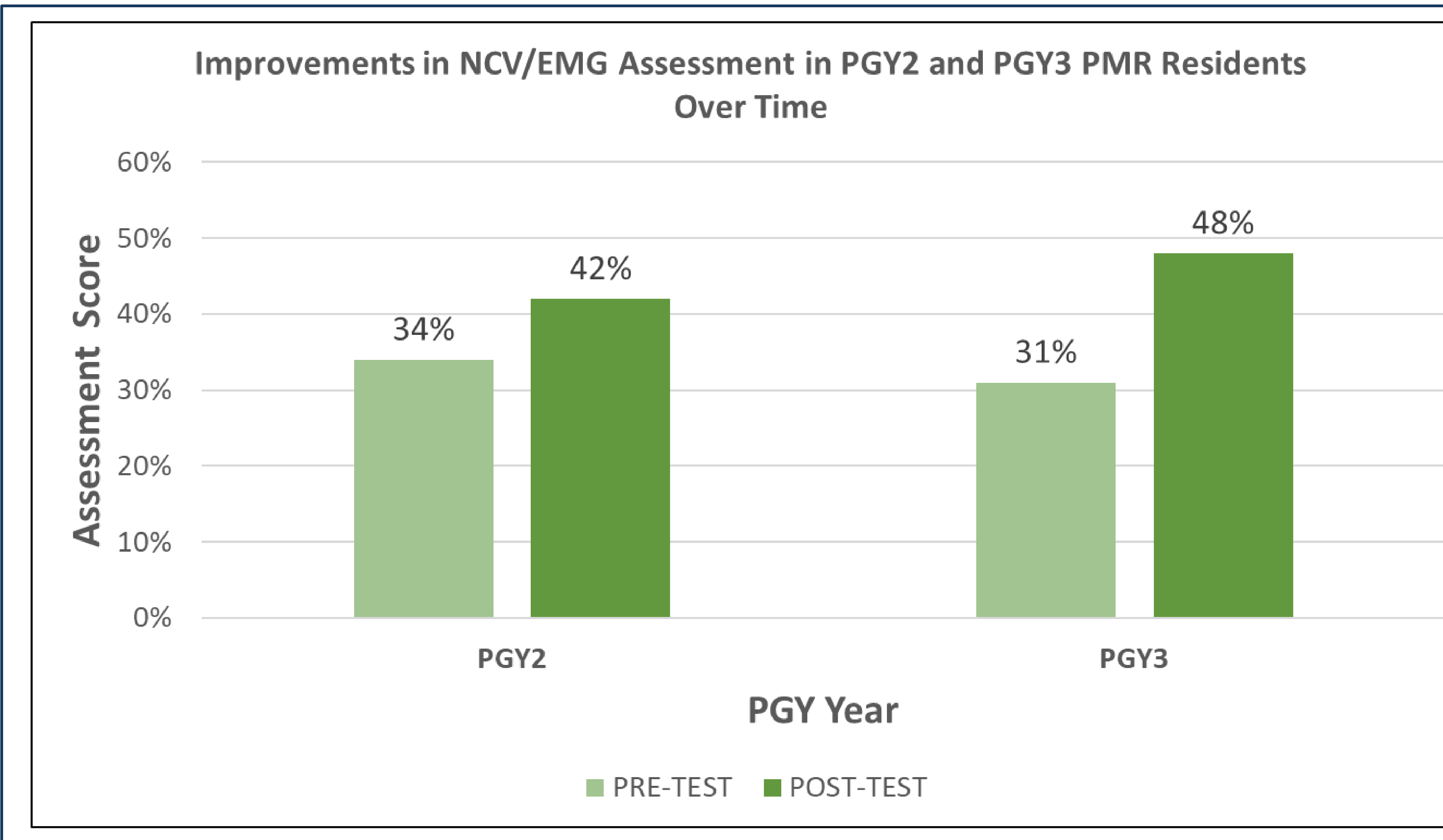
Methods

- 3 strategies were implemented to improve foundational knowledge:
- CANVAS is an online learning platform equipped with features that facilitate the creation and delivery of online courses. It provides customizable course templates, tools for creating multimedia content like videos and discussion forums, and assessment tools including quizzes and assignments.
- Online learning platform using CANVAS included: videos, reading materials, reference materials and quizzes that focus on chapters from the textbook written by Preston and Shapiro and anatomy modules (A)
- New weekly PGY3 EMG clinic rotation as part of prior existing rotation, for early exposure (B)
- Didactic lecture outside of normal electrodiagnostic module focusing on basics in nerve conduction studies (C)
- In July 2023, all residents participated in an initial assessment test. This multiple-choice test established a baseline for their knowledge and skills. Following this, the same assessment was administered in November 2023. This approach aimed to gauge the progress and improvements made by the residents over this period. This 38 question test was based on content from Dr. London at the University of Michigan (2017).

Summary of Overall Study Design



Results



Improvements in PGY2 and PGY3 Scores

- Overall improvement: 12% (95%CI, 4% to 20%, $p < 0.05$), for both PGY2 and PGY3 years
- PGY2: 8% (95%CI, -6% to 23%) **not significant
- PGY3: 17% (95%CI, 6% to 28%) **significant

- The approach to improve foundational electrodiagnostic knowledge using the online CANVAS platform, additional clinical exposure for PGY3 residents, and an additional didactic lecture led to significant improvement in assessment test scores. This improvement was notable for PGY3's.
- This more flexible approach may align better with the expectations of modern learners and empower residents with the foundational knowledge necessary to get the most out of their clinical rotation.

Improving Feedback in the Physical Medicine & Rehabilitation (PM&R) Residency Program at Baylor College of Medicine (BCM)

Donna Huang, M.D.^{1,2}; Rochelle Dy, M.D.²

¹Spinal Cord Injury Care Line
Michael E. DeBakey VA Medical Center, Houston, TX

²H. Ben Taub Department of Physical Medicine and Rehabilitation
Baylor College of Medicine, Houston, Texas

ABSTRACT

Objectives: Evaluate, standardize, and improve feedback provided to residents in the BCM PM&R residency program

Design: Process improvement project

Setting: BCM PM&R residency program

Participants: PM&R residents and faculty

Interventions: Tracking of feedback in resident evaluations of faculty, re-organization of resident resources to augment accessibility of rotation goals and objectives, Tuesday Teaching Tips faculty development program

Main Outcome Measures: Feedback needs assessment and satisfaction pre- and post-survey administered to residents, tracking of frequency and quality of feedback on resident evaluations of faculty, participation in Teaching Tuesday Tips

Results: After the interventions above, a higher proportion of residents reported that goals and objectives were reviewed at the start of rotations (44% vs 27%). A greater proportion of residents felt that feedback received helped them understand what they were doing well and how they could improve (88% vs 63%), and a higher proportion of residents reported asking their attendings for feedback (67% vs 45%). A higher proportion of faculty were reported to give face-to-face feedback during rotations (96% vs. 87.5%). After implementing a mandatory asynchronous faculty development program on feedback best practices, 51% of teaching faculty participated in the first nine weeks of the 12-week series.

Conclusions: After initiation of the feedback process improvement project, there were promising trends in reported resident satisfaction with faculty feedback as well as improvement in reported frequency with which face-to-face feedback is being given.

INTRODUCTION

In residency training, feedback, defined as “specific information about the comparison between a trainee’s observed performance and a standard, given with the intent to improve the trainee’s performance,”¹ is a critical component of the education process. For three consecutive academic years (2019-2020, 2020-2021, and 2021-2022), the physical medicine and rehabilitation residency program at Baylor College of Medicine has scored below our benchmark compliance of 70% on resident satisfaction with faculty members’ feedback on the annual Accreditation Council for Graduate Medical Education (ACGME) resident survey. To address this, a process improvement project was undertaken.

PLAN

Prior to the commencement of this project, the academic chief resident had been tracking the proportion of residents who received mid-point and end-of-rotation feedback during the February, March, and April 2023 rotation blocks via informal anonymous polls to begin to objectively characterize the reports of feedback occurring with inconsistent frequency across rotations from residents. Of the 16 responses over the three months, 87.5% of the responses confirmed they had received face-to-face feedback during the rotation. Due to low response rate and the polls not accounting for quality of feedback, a need for more detailed characterization of the frequency and quality of feedback was identified.

A needs assessment survey regarding feedback was distributed to residents and core faculty to understand identified needs and areas for improvement on both sides of the feedback interaction. The residents identified that goals and objectives of rotations could be more clearly communicated, and that feedback could be more consistent across rotation sites/preceptors as well as timelier and more specific. Faculty reported feeling knowledgeable about best practices for feedback and felt comfortable giving feedback. However, some faculty did report that opportunities to discuss and share ideas on how best to give feedback with other faculty members might be helpful.

DO

To better characterize the frequency and nature of feedback that is occurring, mandatory attestations regarding feedback with optional fields to comment on types and quality of feedback were implemented in resident evaluations of faculty administered at the end of each monthly rotation.

In response to resident feedback that rotation goals and objectives could be clearer, rotation site directors were asked to describe to the residency program director and assistant program directors how residents are oriented to each rotation including how rotation goals and objectives are shared. A reorganization of residency resources was implemented such that rotation goals and objectives will be found in a standardized and accessible shared drive. Additionally, goals and objectives will ultimately be transferred onto MedHub, our institution’s evaluation management platform and linked to the corresponding rotation.

A faculty development program entitled Tuesday’s Teaching Tips,² adapted from the University of Florida’s department of pediatrics, was deployed and made mandatory for all BCM PM&R faculty. Teaching Tips Tuesday is a 12-week program consisting of weekly e-mailed tips reviewing best practices for feedback drawing on adult learning theory to encourage practice and carry over.

STUDY

A satisfaction and needs assessment survey regarding feedback was administered to residents in July 2023 and December 2023, before and after the described interventions, respectively. In the pre-survey, only 3 out of 11 (27%) respondents reported that rotation goals and objectives were reviewed at the start of more than half of their rotations. In the post-survey, 4 out of 9 (44%) of respondents reported rotation goals and objectives were reviewed at the start of more than half of their rotations. A greater proportion of respondents (88%) in the post-survey strongly agreed or agreed that feedback they received helped them understand what they were doing well and how they could improve compared to 63% on the pre-survey. One respondent in the pre-survey disagreed that feedback they received helped them understand what they were doing well and how they could improve while no respondents disagreed or strongly disagreed with this statement on the post-survey. Six out of 9 (67%) of respondents on the post-survey reported asking their attending for feedback on more than half their rotations compared to 5 out of 11 respondents (45%) on the pre-survey.

As in the pre-survey, residents continued to emphasize that specificity and timeliness of feedback could be improved in the post-survey. A new theme identified in the post-survey compared to the pre-survey included continuing to encourage a culture of feedback to improve feedback. Time constraints and discomfort around asking for feedback continued to be identified as barriers from the residents from the pre-survey to the post-survey.

On review of resident evaluations of faculty from 7/1-12/31/23, there were a total of 41 teaching faculty evaluated. Faculty members had a mean of 3.6 and median of 3 (range 1-14) evaluations per faculty during this period. Residents reported on average that faculty provided feedback 96% (range 50-100%) of the time, an improvement compared to the 87.5% estimated in more informal prior polling. When residents provided comments on what forms or aspects of feedback they found most helpful, they commented on specificity, demonstration during patient encounters, balancing constructive and positive feedback, and feeling that faculty tailored feedback to their personality or needs.

Participation in Tuesday’s Teaching Tips was tracked for the duration of this process improvement project. On average, 21 faculty per week confirmed receipt of each week’s teaching tip over the first nine weeks of the 12-week series, representing approximately 51% of teaching faculty.



Figure 1. Resident satisfaction with feedback pre- and post-intervention

ACT

After initiation of the feedback process improvement project, there were promising trends in reported resident satisfaction with faculty feedback as well as improvement in reported frequency with which face-to-face feedback is being given. Future directions of this work include:

- Complete the ongoing Tuesday’s Teaching Tips faculty development program and gather faculty feedback regarding the experience
- Complete uploading of rotation goals and objectives to MedHub to increase ease of accessibility to residents
- Roll out additional faculty development regarding feedback including in-person workshop and town-hall style discussion to allow for ideas sharing and brainstorming as requested by faculty, planned for summer 2024
- Continue to explore different methods for encouraging consistent feedback, including continuing to foster an environment in which residents feel comfortable asking for feedback



REFERENCES

1. van de Ridder JM, Stokking KM, McGaghie WC, ten Cate OT. What is feedback in clinical education?. *Med Educ*. 2008;42(2):189-197. doi:10.1111/j.1365-2923.2007.02973.x
2. Kalynych C, Edwards L, West D, Snodgrass C, Zenni E. Tuesday’s Teaching Tips—Evaluation and Feedback: A Spaced Education Strategy for Faculty Development. *MedEdPORTAL*. 2022;18:11281.

ACKNOWLEDGEMENTS

Internal mentor: Rochelle Dy, MD; BCM PM&R Residency Program Director

External mentor: Cliton Faulk MD; Professor and Chair ECU PM&R

Improving Emotional Intelligence and Identifying Trends in Strengths Among PMR Resident Learners-Pilot Feasibility Study

Mentors: Christopher Visco MD and Hassan Monafred MD

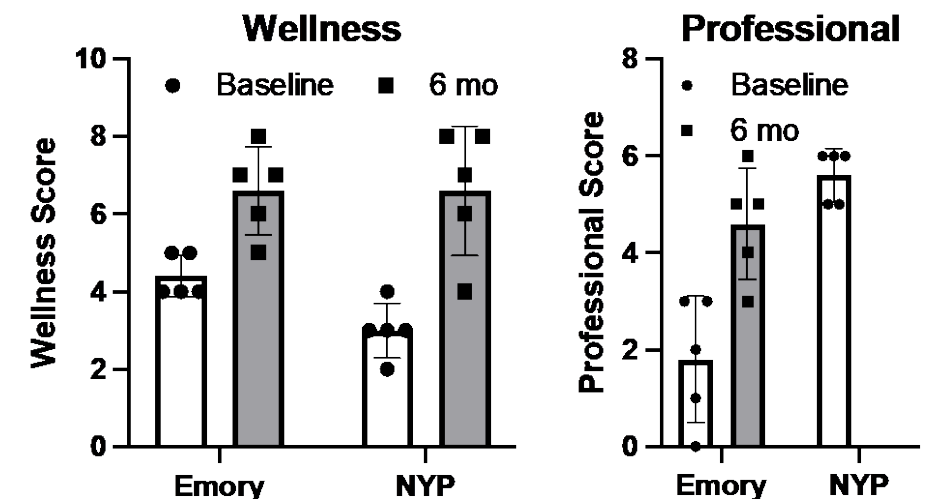
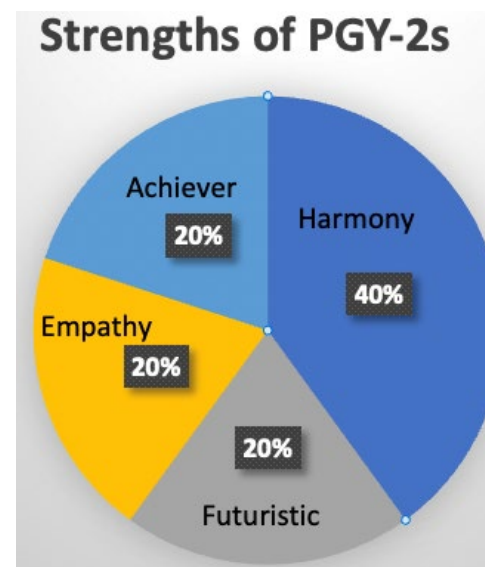
Objective: To quantify the strengths and traits of PMR residents within two PMR residency programs (Emory and Cornell/Columbia) using an externally validated assessment (Strength Finders 2.0)

Background: An unmet need in residency programs is identifying learners' strengths and how that impacts residency training goals.

Intervention: Pre-assessment of PGY-2 residents wellness and professional domains followed by Strength Finders Assessments, with paired group meetings followed by Post Intervention assessment.

Comparative Group: Emory site will undergo group pairing and NYP site will not have any group pairing

Hypothesis: Trainees who were matched into peer groups with similar strengths scored higher in their assessment domains than their baseline and control groups.





Improving Resident Comfort, Confidence and Competence with Quality Improvement: A QI on QI

Internal Mentor: Flora Hammond, MD

Sheryl Katta-Charles, MD

External Mentor: Chris Garrison, MD

Introduction

Background: Quality Improvement is a core ACGME competency under Practice-Based Learning. Further Quality improvement is an important skill for ABPMR maintenance of certification.

Root Cause: A SWOT analysis revealed our residents are not being adequately trained to lead and complete QI projects.

Statement of need: No resident-led quality improvement projects were noted in the past 5 years. Residents reported low confidence, comfort and competence.

Data to support the problem: We administered the SQI TAT which showed poor scores in self-efficacy, application and knowledge. (See “Before” in results)

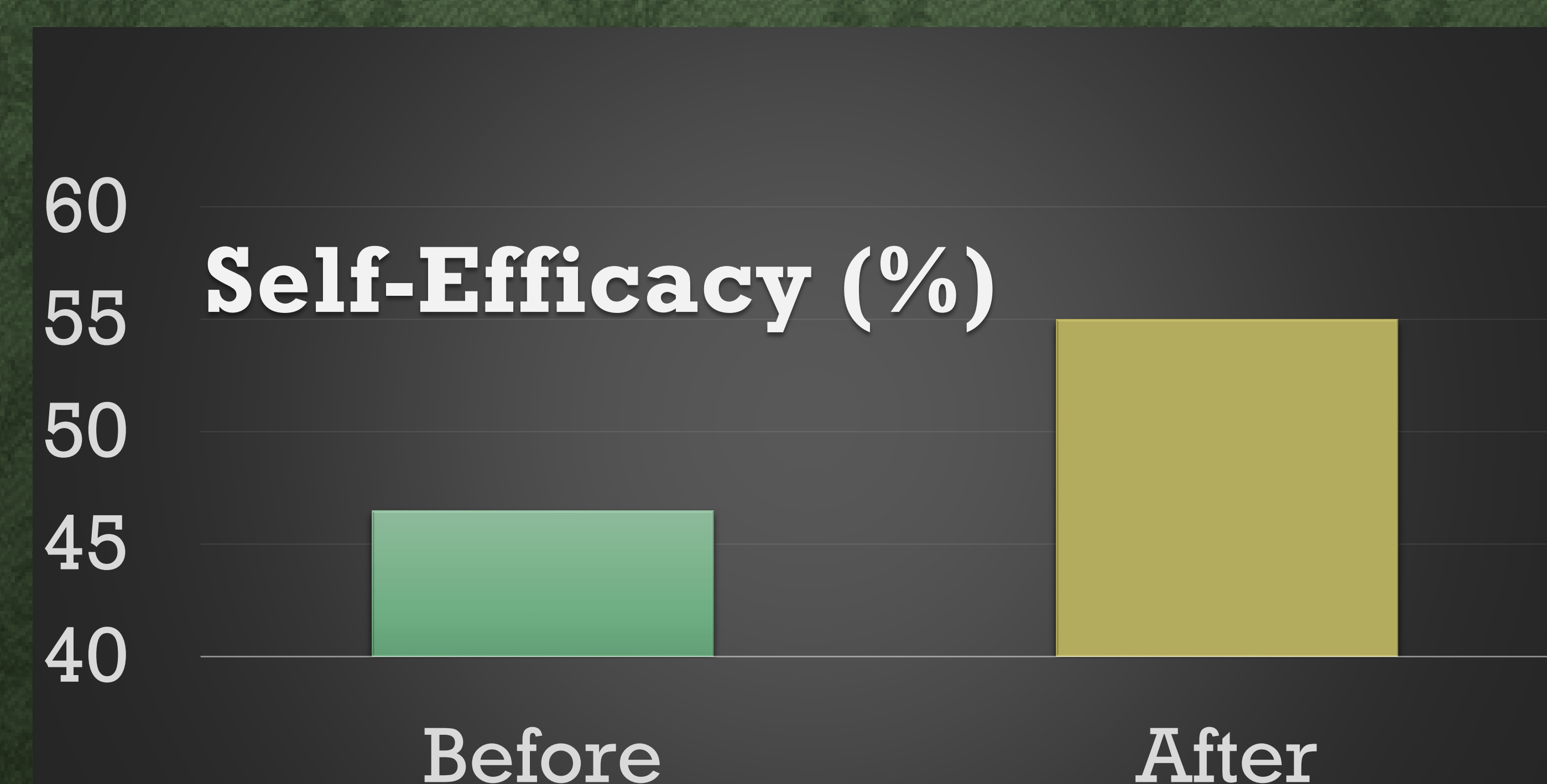
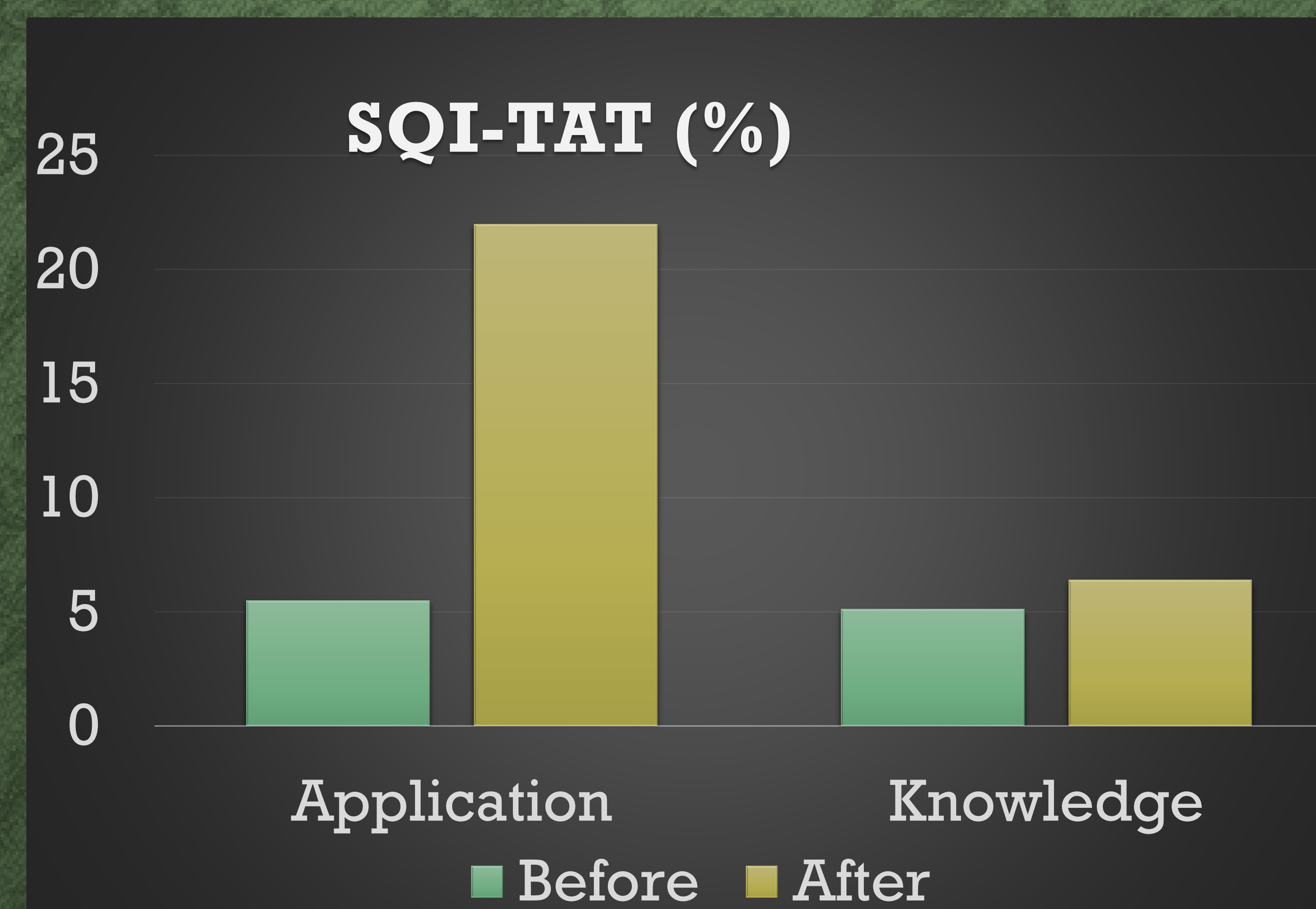
Identify a solution: To provide the residents education on QI principles

Measure

- The System Quality Improvement Training and Assessment Tool (SQI TAT) is a validated questionnaire for residency programs.
- It is a tool to evaluate and provide feedback on self-efficacy, knowledge, and application.
- The tool has four parts: Application, Attitudes, Self-Efficacy and Knowledge.
- The provided rubric helps score the answers in a standardized manner.

Results

Residents’ application skills and perceived self-efficacy with QI principles improved significantly.



- Knowledge did not improve.
- Data on Attitudes were not analyzed
- More than half of the residents who took the SQI-TAT survey both times reported completing all 5 modules.

Methods

- The residents were asked to complete five free hour-long online modules from Institute for Healthcare Improvement (IHI) independently
 1. Introduction to Health Care Improvement
 2. How to Improve with the Model for Improvement
 3. Testing and Measuring Changes with PDSA Cycles
 4. Interpreting Data: Run Charts, Control Charts, and Other Measurement Tools
 5. Leading Quality Improvement
- The modules are a combination of text, real-life examples, and videos aimed to keep the interest of various learners.

Summary

- IHI modules are free, high-quality, easy to administer and complete. For these reasons, we plan to continue using them.
- In the future, we plan to enforce number of modules completed. Further, we will analyze data on Attitudes towards QI.
- We anticipate an increase in the number of resident-led QI projects in the coming years.

References

1. Lawrence RH, Tomolo AM. Development and preliminary evaluation of a practice-based learning and improvement tool for assessing resident competence and guiding curriculum development. J Grad Med Educ. 2011 Mar;3(1):41-8. doi: 10.4300/JGME-D-10-00102.1. PMID: 22379522; PMCID: PMC3186261.
2. Abraham C, Johnson-Martinez K, Tomolo A. A Scoring Rubric for the Knowledge Section of the Systems Quality Improvement Training and Assessment Tool. MedEdPORTAL. 2022 Dec 13;18:11290. doi: 10.15766/mep_2374-8265.11290. PMID: 36605542; PMCID: PMC9744987.
3. IHI.org <https://www.ihi.org/resources/tools/quality-improvement-essentials-toolkit>



Introducing Spasticity Entrustable Professional Activities and Entrustment Rating Quality Improvement Project

Mariam Keramati, DO; Melanie Brown, MD; Vu Nguyen, MD*; Lucretia Wilson, MA.

Sinai Hospital of Baltimore Sinai Rehabilitation Center

*University of Alabama School of Medicine



ABSTRACT

It is likely our specialty will be moving towards competency based medical education (CBME) with the addition of entrustable professional activities (EPA) ratings. A spasticity EPA rating looking at neurotoxin injection entrustment was incorporated into two 3-month rotations starting July 2023. Pre- and post-surveys were performed of the residents and attendings. A rating above 2 could not be designated for our residents since they are required to have supervision for injections. It was noted that EPA rating was feasible to obtain, but was not a meaningful assessment tool. For our institution, a more nuanced rating scale would provide more meaningful assessment.

INTRODUCTION

The ACGME is going to be reassessing program requirements for PM&R in the next couple years. The other specialties that have undergone this process have moved towards competency based medical education (CBME) with entrustable professional activities (EPA) ratings. The shift is projected to be relying more on entrustment to determine readiness for independent practice rather than duration of residency training or number of procedures performed. Entrustment ratings can also provide additional information to the Clinical Competency Committee as the EPA can be mapped onto different Milestones.

Currently, our program utilizes end of rotation evaluations and 360 evaluations. The end of rotation evaluations consist of scoring using the Milestones 2.0 pertinent to that rotation as well as providing a narrative evaluation. The 360 evaluations are performed by patients, co-residents, therapists, nurses, social workers to assess professionalism and interpersonal communication skills. We do not formally assess entrustment nor designate entrustment ratings for our residents.

Mallow et al. published *Entrustable Professional Activities for Resident Training in Physical Medicine and Rehabilitation* in the American Journal of Physical Medicine and Rehabilitation in 2017. Via modified Delphi process, they published 19 EPAs. It is likely some or all these proposed EPAs will be included in the new ACGME PM&R residency program requirements.

This project’s goal is to incorporate one spasticity EPA into a couple pilot rotations and determine feasibility and quality of evaluation.

METHODS

One spasticity EPA was selected to be assessed:

“Uses neurotoxins, including appropriate injection guidance (ie. Ultrasound, electric stimulation, electromyography), to treat problematic spasticity.”

Two outpatient rotations in which frequent botulinum toxin injections were performed were selected. Pre-surveys of residents and attendings on the rotation from January-June 2023 were performed. During July-November 2023, the attendings for the two outpatient rotations were asked to submit at least one EPA rating per month. Post-surveys of residents and attendings who participated in the July-November 2023 rotations were completed.

The attendings were asked to use the following entrustment ratings scale:

- 1.Observation only
- 2.Direct supervision
- 3.Indirect supervision (attending not in the room)
- 4.No supervision required
- 5.Ready to supervise others

Resident Survey:



Attending Survey:



The surveys consisted of Likert scale responses and answer choices that were ranges. The average was calculated for Likert scale survey answers. The below designation was used for answer choices that were ranges:

0 = 0 times per rotation

1 = 2 or less times per rotation block

5 = 3-7 times per rotation block

8 = 8 or more times per rotation block

Chart 1.

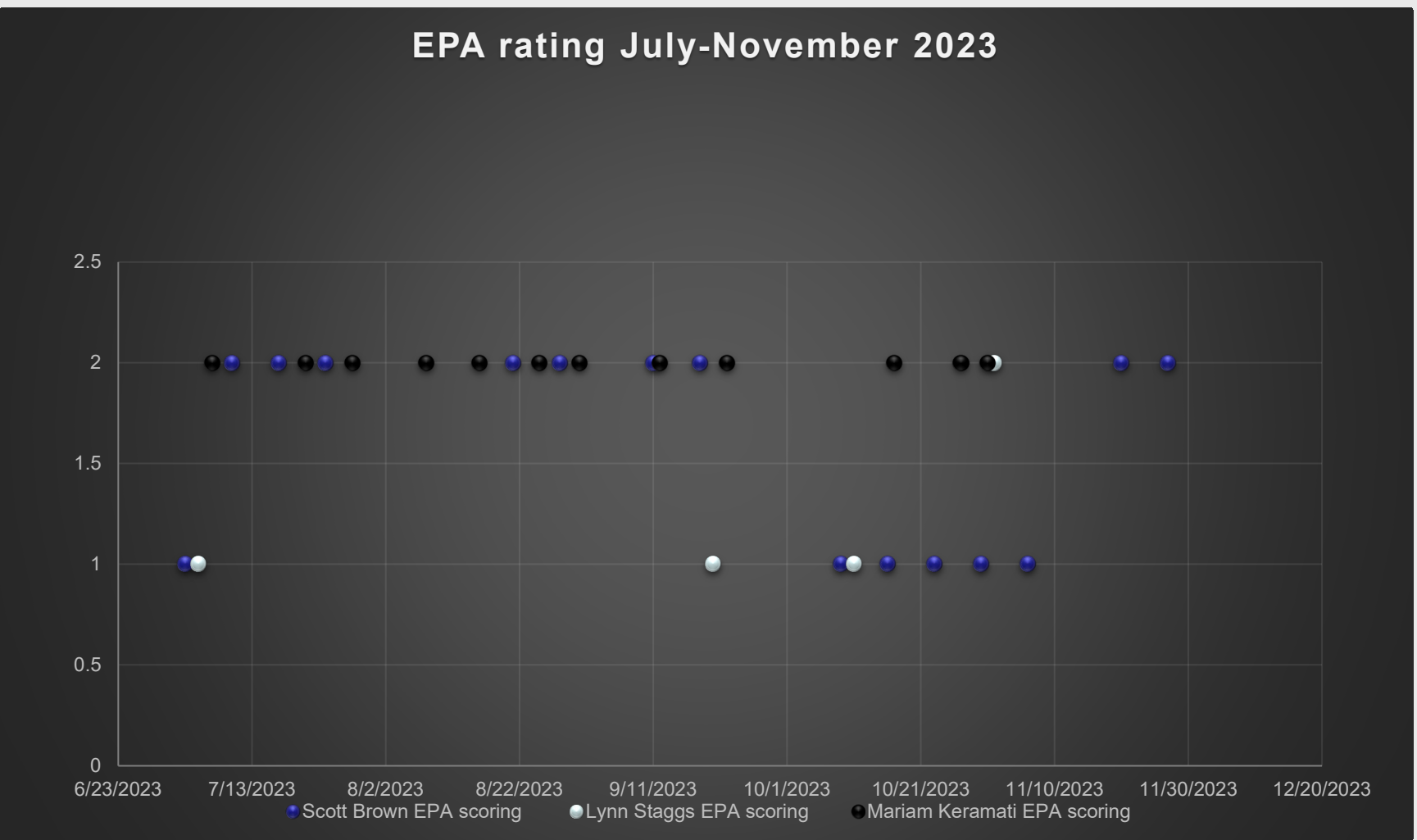


Table 1. Resident Responses

	Pre-project Survey (n=3)	Post-project Survey (n=3)
Expectations for learning and skill development is transparent on this rotation	4.67	4.67
I am receiving feedback	5.67	7
The feedback I receive is meaningful	4.33	5
I am being evaluated for level of competence	3.67	4.67
Feedback on competence level is meaningful	4.33	4.33
I understand how much supervision I need	4.67	4.67
The feedback and evaluations corresponded to the content of the rotation	4.67	4.67
I am satisfied with the current why I am being evaluated	4	4.67

Table 2. Attending Responses

	Pre-project Survey (n=4)	Post-project Survey (n=5)
I am able to explain skill development expectations	3.25	4
I am providing feedback	6.5	6.2
I am evaluating level of competence	5.5	6
Evaluating competence level is meaningful and allows me to better assess the resident	3.75	3
Resident evaluations corresponded to the content of the rotation	4	3.8
I am satisfied with the current method of evaluating residents	3.25	3.5

RESULTS

Chart 1 depicts the EPA ratings by each attending during the July- November 2023 time frame. No ratings higher than 2 were given to the residents. Due to low number of participants, statistical analysis was unable to be performed and statistical significance could not be calculated. As illustrated in Tables 1 and 2, comparing resident pre- and post-surveys, there was a perceived increase in quantity of feedback; which, comparing to attending survey responses, were closer to reports from the attendings. When comparing pre- and post- resident and attending surveys on frequency of competency evaluations, the residents noted more frequent evaluations on the post-survey, but this was less frequent than reported by the attendings. Table 2 also indicated that attendings felt that evaluating competence level was less meaningful on the post-survey compared to pre-survey.

Data on barriers for feedback/evaluation were also gathered:

- Resident pre-survey barriers: additional clinical duties, limited exposure to procedure, lack of time
- Attending pre-survey barriers: lack of time, clinical setting not conducive to performing assessment, additional administrative duties, resident time away from rotation (post call, vacation, etc), resident post call often or away
- Resident post-survey barriers: lack of time, additional clinical duties
- Attending post-survey barriers: lack of time, additional administrative duties, limited scheduled procedures to observe resident performance

DISCUSSION/CONCLUSION

Due to small sample size, statistical analysis was not able to be performed to provide more objective data.

As mentioned, the goals of this project were to incorporate one spasticity EPA into a couple pilot rotations and determine feasibility and quality of evaluation. In regards to feasibility, the EPA rating were able to be performed with sufficient frequency and ease. However, quality of the evaluation was questionable; the attendings found rating EPA to be less meaningful on the post-survey compared to the pre-survey. This is likely due to limitations of the rating system since none of our residents could be scored above a 2 due to requiring supervision for injections. The residents evaluated were PGY-2s and PGY-3s and it could be argued that for their level of training, this would be an appropriate EPA rating. However, PGY-4s would also require supervision at our institution and would not be able to receive a score above a 2 using this rating system. For our institution, adjusting the wording for the EPA ratings might allow for a more meaningful evaluation.

In regards to Milestone 2.0 mapping, this EPA would map to Patient Care 4. The more nuanced verbiage used in Milestones would allow a resident requiring supervision to receive up to a level 3 score. The verbiage for the EPA might benefit from more detailed verbiage closer to that on the Milestones. It was noted that this project may have made residents more aware of receiving feedback and competency ratings, thus their perception of feedback frequency was more in line with reports of feedback and competency rating frequency reported by the attendings.

In conclusion, it was noted to be feasible to incorporate this one spasticity EPA rating as part of resident assessment, however a more nuanced rating systems should be considered for our institution that would be more meaningful and be more easily mapped against the Patient Care 4 Milestone 2.0.

REFERENCES

Mallow, M., Baer, H., Moroz, A., & Nguyen, V. (2017). Entrustable professional activities for residency training in physical medicine and rehabilitation. American Journal of Physical Medicine and Rehabilitation, 96(10), 762-764.