

To Teach or Not to Teach: Incentives and Barriers Impacting Clinical Preceptorship in Family Medicine

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Abstract

Background and Objectives: Clinical preceptors serve a vital role in medical education. Recruiting and retaining clinical preceptors, especially in family medicine, is a growing challenge for US medical schools. This study aimed to investigate the incentives and barriers family physicians at the University of Colorado School of Medicine (CUSOM) face when deciding to serve as clinical preceptors, and to explain why these physicians become, remain, and/or stop serving as preceptors.

Method: A cross-sectional survey was distributed to 376 family physicians associated with CUSOM who were active clinical teachers, had been clinical teachers in the past, or were associated with practices that historically had taken medical student learners, with a 60.6% response rate. We calculated descriptive statistics for single-choice, closed-ended survey questions. For the open-ended questions, we adopted a thematic analysis.

Results: The results revealed that intrinsic motivators, such as a love for teaching (76.6%), a sense of duty to the profession (67.8%), and relationships with students (58.5%) were the primary reasons that preceptors chose to teach clinically. Conversely, time (an extrinsic factor), was the largest barrier to teaching that current (80.0%) and potential (51.3%) preceptors faced.

Conclusions: Our results indicate that family physicians largely balance intrinsic motivators against extrinsic barriers when deciding whether to clinically precept medical students. While a longitudinal integrated clerkship model can amplify the impact of these intrinsic motivators, addressing the preceptor shortage may require focus on the motivators that preceptors report as most meaningful and minimizing the impact of the time burden of teaching.

Introduction

Clinical rotations are critical for medical education.^{1,2} It is essential to have physician teachers (preceptors).² US medical schools are experiencing increasing difficulty recruiting⁴ and retaining preceptors.⁴ Family medicine is an important component of most institutions' clinical rotations.^{5,6} The University of Colorado School of Medicine (CUSOM) switched to a longitudinal integrated clerkship (LIC) with the class of 2025. Students have a

half day of family medicine clinic weekly during their clinical year.¹⁷ We sought to understand motivations of current, past, and potential family medicine preceptors to ensure we maintain necessary clinical sites. We planned to use this data to guide discussions surrounding recruitment and retention of preceptors.

Methods

A cross-sectional survey on teaching perspectives was distributed to 376 family medicine physicians associated with CUSOM who were active or past preceptors, or were associated with practices that historically had taken students. There were no parameters set on how long ago a site or provider may have taken learners to be included. The survey was distributed by the Dean of Education via email in May 2024 and closed in July 2024. After receiving institutional review board exemption (#23-1127), we administered this survey (Table 2) in Qualtrics using skip logic to tailor questions to teaching status. Response scales included check-one response, check-all-that-apply, and open-ended comments. The survey was reviewed by family physicians and two expert reviewers.

For single-choice, closed-ended survey questions, we calculated descriptive statistics. For the open-ended questions, we adopted a thematic analysis approach. Two study leads created themes matching responses. They compared theme definitions and appropriateness for the first 10 free-response questions to ensure standardization. Three leads then matched each free-text response to appropriate themes, and we then analyzed the data for the thematic frequency.

Results

A total of 228/376 (60.7%) family physicians completed the survey (Table 1). Practice scope and practice affiliation of the survey participants varied as is reported in Table 1. The majority (75.0%) of survey participants were current preceptors. Twenty-eight participants (12.2%) were former preceptors and eleven (4.8%) had not been preceptors.

Intrinsic factors were the most common motivators for preceptors (Table 3). Of those currently teaching, the most common motivations include “love for teaching/enjoyment” (76.6%), “sense of duty to the profession” (67.8%), and “relationships with students” (58.5%). A significant percentage (41.5%) of current preceptors had considered no longer clinically teaching. A free-response question explored what could motivate preceptors to continue teaching. A summary of the response themes is shown in Table 4. Dedicated time for teaching without impacting productivity was the most common theme (80.0%). One participant stated:

“Carved out time. A full, busy clinic day is too difficult to manage while also taking good, necessary time to teach and guide a student.”

Eleven of the 39 participants who are not currently teaching have never taught. Their reasons for not teaching included extrinsic barriers (Table 3). The most common was lack of time (51.3%).

Participants who stated that they had stopped teaching clinically were queried regarding their reasoning. A thematic summary of the responses is shown in Table 4. The time demands of teaching was the most cited reason (50.0%). One participant explained:

“Having medical students takes significant time. On days that I had a student, I found myself either being behind, not finishing notes, not doing inbasket, or doing a very poor job teaching ...”

Participants who had never taught were asked what could motivate them to teach (Table 4). Time dedicated to teaching without impacting productivity was the most common theme (69.2%). The other common themes were direct financial compensation (26.9%), changes in the way students or preceptors are scheduled (11.5%),

faculty development on efficiency (11.5%), and job logistics (11.5%).

Discussion

Our study evaluated the motivations of family physicians when deciding whether to serve as preceptors. The love of teaching was the most frequently-cited reason for teaching followed by duty to the profession, and relationships. These motivators may also be influenced by the pool of physicians being those who were or had been affiliated with teaching. Financial incentives ranked last as a motivating factor (2.9%), differing from current literature.^{7,12,20} However, 32.3% of current preceptors said that financial compensation would motivate them to continue teaching, 33.3% of nonpreceptors noted the lack of financial compensation as a factor in their decision not to teach, and 26.9% listed it as a potential motivating factor to begin teaching.

Our finding that time is the greatest barrier to preceptor recruitment and retention aligns with current research.^{4,7,13} Dedicated time for teaching was mentioned by 80% as a motivating factor to continue teaching, 50% as a reason they stopped teaching, and 69% as a potential motivating factor to begin teaching.

While 60.6% of survey recipients completed the survey, there is the potential for nonparticipation bias. We have considered that those who did not respond may be those most constrained by time or possibly less invested in the mission of the school. The number of respondents that selected specific themes limits our ability to assess differences based on demographic variables such as gender and age or practice settings with statistical significance. While we anticipate that the LIC model reduces time burden on preceptors who previously had students daily, this survey was completed just after a curriculum transition which makes positive and/or negative impact difficult to assess and limits our study's generalizability to other medical schools. Given the broad scope of family medicine, there may be limited generalizability to other specialties.

Conclusion

Recruiting and retaining family medicine preceptors is a challenge for medical schools across the country. Our findings align with existing research that physicians largely balance intrinsic motivators with extrinsic barriers, however our study showed less emphasis on financial incentives. The largest motivator is the love of teaching, and the largest barrier is lack of time. Literature on efficient precepting is growing from bedside teaching and broadening student responsibilities to creative patient scheduling.¹⁹ We plan to work closely with department leadership to discuss opportunities to reduce the time barrier placed on family medicine preceptors.

Tables and Figures

Table 1: Participant Characteristics, N=228

Characteristic	n (%)
Age	42 years (37, 49) ¹
Did not answer	53
Gender	
Female	122 (53.5)
Male	56 (24.6)
Nonbinary/third gender	2 (0.9)
Did not answer	48 (21)
Practice location	
Rural	62 (27.2)
Urban	122 (53.5)
Did not answer	44 (19.3)
Practice scope	
Outpatient medicine	173 (75.9)
Prenatal care	71 (31.1)
Inpatient medicine	63 (27.6)
Deliveries	42 (18.4)
Urgent care	20 (8.8)
Other	15 (6.6)
Do you teach medical students in a clinical setting?	
Yes	171 (75.0)
Previously, but no longer	28 (12.2)
No	11 (4.8)
Did not answer	18 (7.9)

¹Median (IQR)

Table 2. Survey Items

Q1: Do you teach medical students in a clinical setting? (Select one: yes, no, previously, but no longer)
If answer to Question 1 is "Yes":
Q2: How many years have you been teaching medical students in the clinical setting as an attending physician? (Free-text answer)
Q3: Why do you teach medical students in the clinical space? (Select all that apply)
Love of teaching/enjoyment
Sense of duty to the profession
Financial incentives
For promotion
For Maintenance of Certification (MOC) IV credit
Improvement in my clinical skills
Adds variety to my day/my practice
Relationships with students
Staying involved with the University of Colorado School of Medicine (SOM)
It is a requirement or expectation for physicians where I work
Other (free text answer)
Q4: In the last year, have you thought about no longer teaching medical students in the clinical space? (Select one: yes, no)
If answer to Question 4 is "Yes":
Q5: What would encourage you to continue teaching medical students in the clinical space? (Free-text answer)
If answer to Question 1 is "Previously, but no longer":
Q6: Why did you stop teaching medical students in the clinical space? (Free-text answer)
If answer to Question 1 is either "Previously, but no longer" or "No"
Q7: Why do you choose not to teach medical students clinically? (Select all that apply)
Lack of time
Lack of financial incentives
Lack of space to accommodate a student
Lack of support for teaching from my employer
Impact on the patient experience
Obligations outside of work
Lack of confidence in teaching
Burnout
Other (free-text answer)
Q8: What would encourage you to begin teaching medical students in the clinical space? (Free-text answer)
Q9: Age (Free-text answer)
Q10: Gender (Select one: male, female, nonbinary / third gender, prefer not to disclose)
Q11: Practice location (Select one: urban, rural)

Table 2: Continued

Q12: Practice scope (Select all that apply)
Outpatient medicine
Inpatient medicine
Prenatal care
Deliveries
Urgent care
Other (free-text answer)
Q13: Practice affiliation (Select all that apply)
Private practice
FQHC
Membership-based practice (eg, Direct Primary Care or Concierge)
University of Colorado School of Medicine
Denver Health
Residency program
Other (free-text answer)

Abbreviation: FQHC, federally-qualified health center.

Table 3. Survey Results: Reasons for Teaching and Avoiding Teaching Medical Students

Preceptor reasons for teaching medical students	N=171 ¹
Love of teaching/enjoyment	131 (76.6)
Sense of duty to the profession	116 (67.8)
Relationships with students	100 (58.5)
Adds variety to my day/my practice	72 (42.1)
Staying involved with the University of Colorado School of Medicine (SOM)	59 (34.5)
Improvement in my clinical skills	47 (27.5)
It is a requirement or expectation for physicians where I work	40 (23.4)
For promotion	28 (16.3)
For Maintenance of Certification (MOC) IV Credit	6 (3.5)
Financial incentives	5 (2.9)
Other	7 (4.1)
Participants motivations for avoiding teaching medical students	N=39 ²
Lack of time	20 (51.3)
Lack of financial incentives	13 (33.3)
Lack of space to accommodate a student	8 (20.5)
Lack of support for teaching from my employer	6 (15.4)
Impact on the patient experience	6 (15.4)
Obligations outside of work	3 (7.7)
Lack of confidence in teaching	7 (17.9)
Burnout	7 (17.9)
Other	5 (12.8)

¹ Number of participants who selected "Yes" to survey Q1.

² Number of participants who selected "No" and "Previously, but no longer" to survey Q1

Table 4. Survey Results Related to Preceptor Motivations

Reasons that would motivate preceptors to continue teaching, N=65 ¹	n (%)
Time	52 (80.0)
Financial compensation	21 (32.3)
Relationships	11 (16.9)
Course change	2 (3.1)
Burnout recovery	2 (3.1)
Preceptors' motivations for stopping teaching, N=20 ²	n (%)
Time	10 (50.0)
Practice change	6 (30.0)
Difficulty	3 (15.0)
Financial compensation	2 (10.0)
Exclusively telehealth	2 (10.0)
Pandemic	1 (5.0)
Unknown	1 (5.0)
Potential motivators for preceptors to begin teaching, N=26 ³	n (%)
Time	18 (69.2)
Financial compensation	7 (26.9)
Scheduling	3 (11.5)
Efficiency training	3 (11.5)
Documentation training	3 (11.5)
Employment responsibilities	1 (3.8)
Unknown	1 (3.8)

¹ Number of participants who answered survey Q5.

² Number of participants who answered survey Q6.

³ Number of participants who answered survey Q8.

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