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4-2023

The Intake Jailbreak Evaluation of an admission-focused residency team

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The Intake Jailbreak

Evaluation of an admission-focused residency team

Alex Crist DO PGY-2, Kang Zhang, MD



Accreditation Council for Graduate Medical Education

IV.B.1.c)

Medical Knowledge

Residents must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care. ^(Core)

IV.C.

Curriculum Organization and Resident Experiences

IV.C.1.

The curriculum must be structured to optimize resident educational experiences, the length of these experiences, and supervisory continuity. ^(Core)

Internal Medicine Training in the Inpatient Setting

A Review of Published Educational Interventions

*Lorenzo Di Francesco, MD,¹ Michael J. Pistoria, DO,² Andrew D. Auerbach, MD, MPH,³
Robert J. Nardino, MD,⁴ Eric S. Holmboe, MD⁵*

¹J. Willis Hurst Internal Medicine Residency, Emory University School of Medicine, Atlanta, Ga, USA; ²Internal Medicine Residency, Medical Director, Lehigh Valley Hospitalist Services, Lehigh Valley Hospital, Allentown, Pa, USA; ³Department of Medicine, University of California San Francisco, San Francisco, Calif, USA; ⁴Internal Medicine Residency, Hospital of Saint Raphael, Assistant Clinical Professor of Medicine, Yale University School of Medicine, New Haven, Conn, USA; ⁵American Board of Internal Medicine, Philadelphia, Pa, USA.

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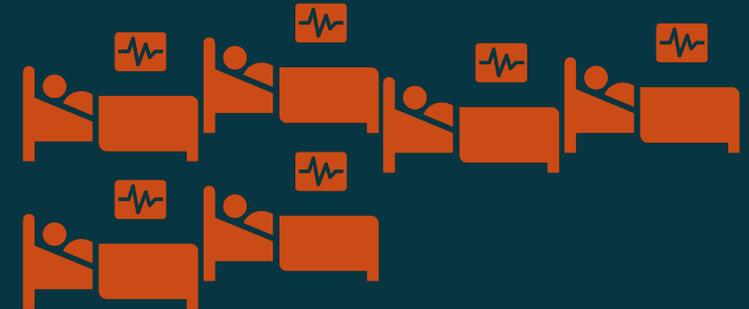
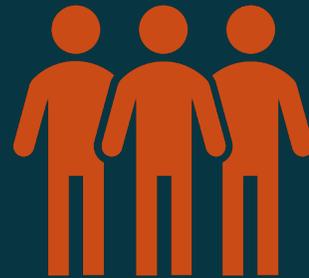
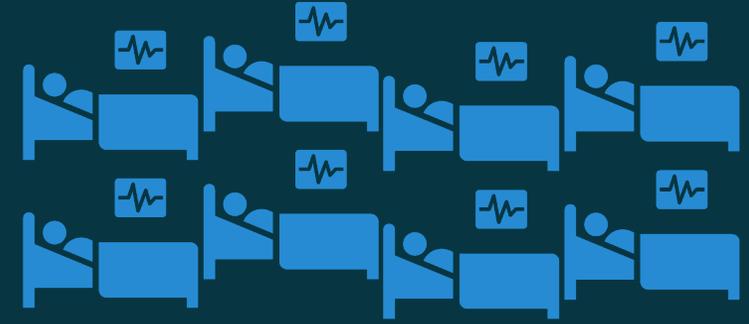
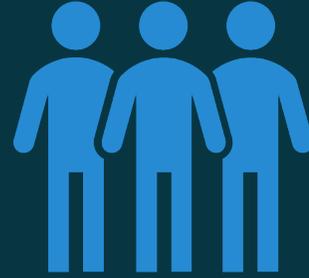
Yale University S

EDUCATIONAL INTERVENTIONS

Thirteen studies met criteria for inclusion in this review (Tables 1–5). All were single institution studies and 3 used a rigorous randomized design. Five studies directly assessed knowledge or skills of the residents and 5 assessed resident satisfaction or self-assessment of competence only. Twelve of the 13 articles reported a positive impact on trainees. Importantly, we found no educational intervention that attempted to evaluate the effects of a “core” inpatient curriculum or the daily experiences of inpatient training.

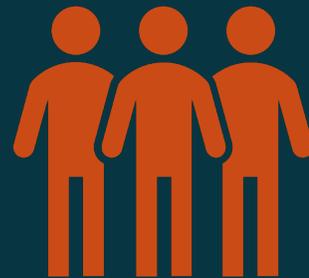
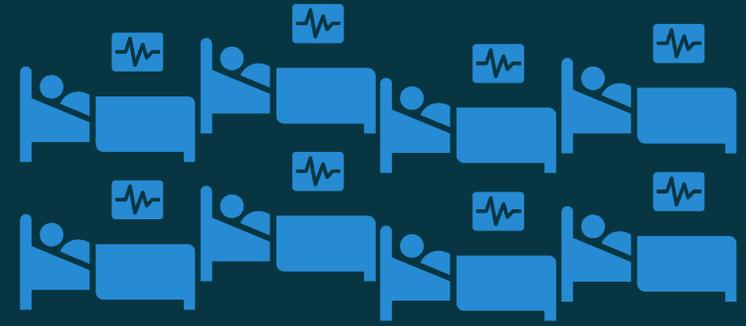
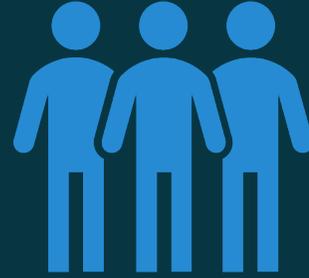
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of Medicine,

A Typical Day



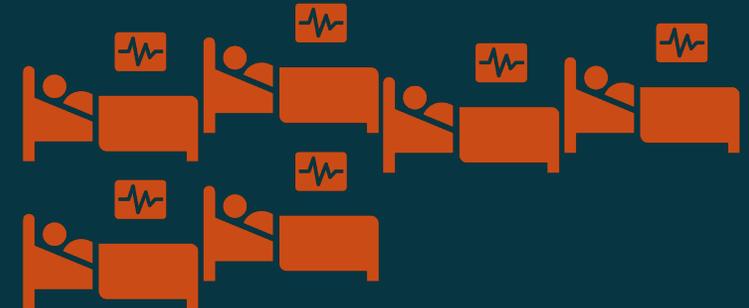
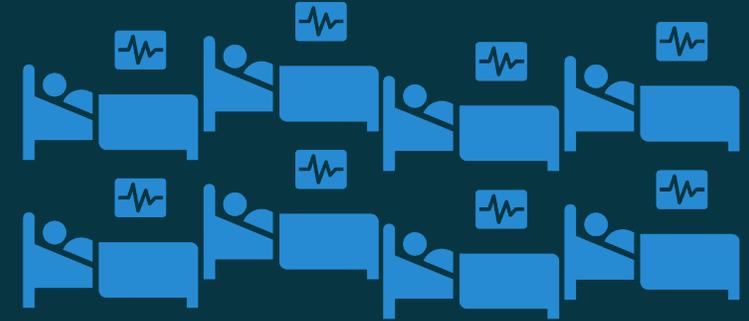
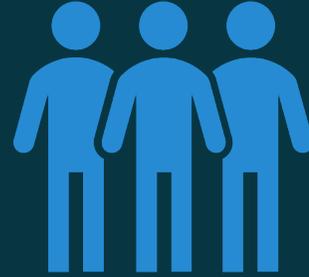
A Typical Day

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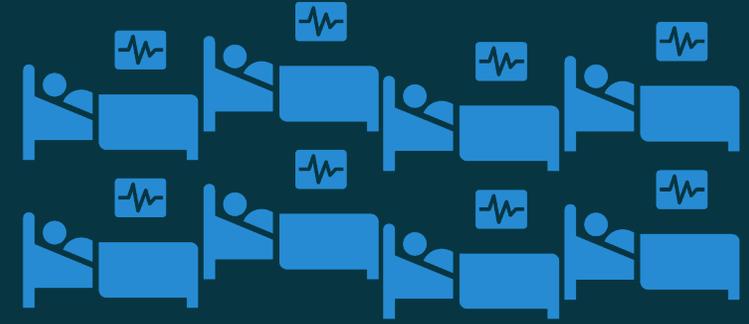
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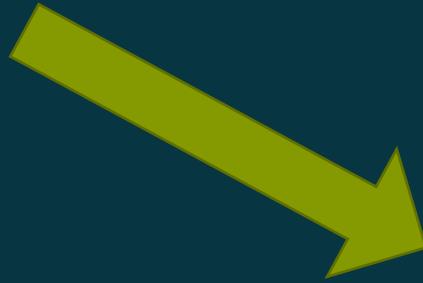
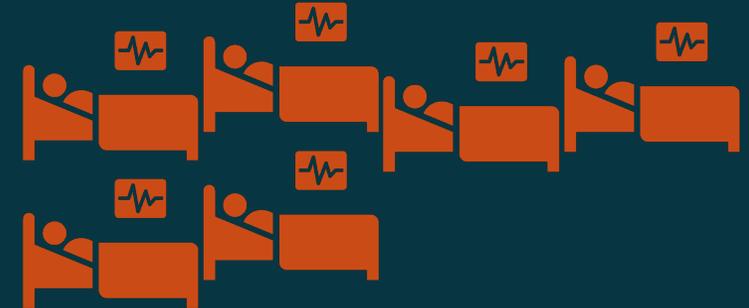
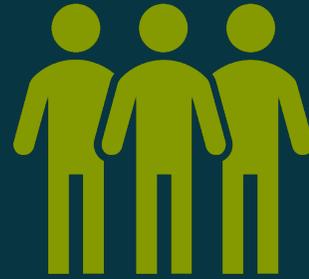


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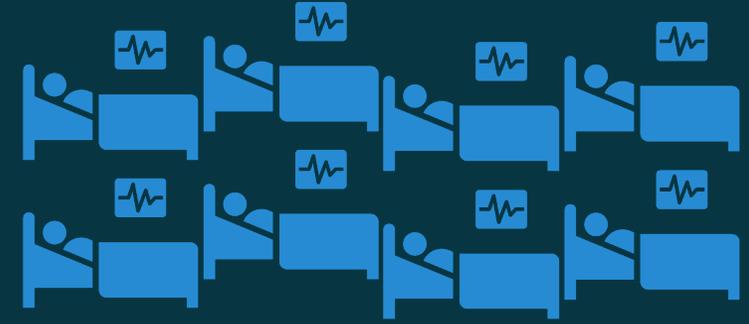


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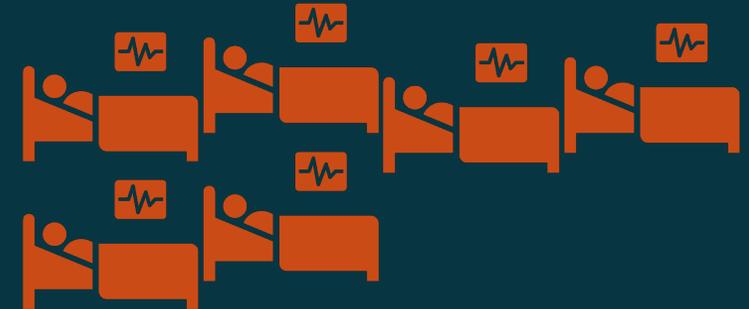


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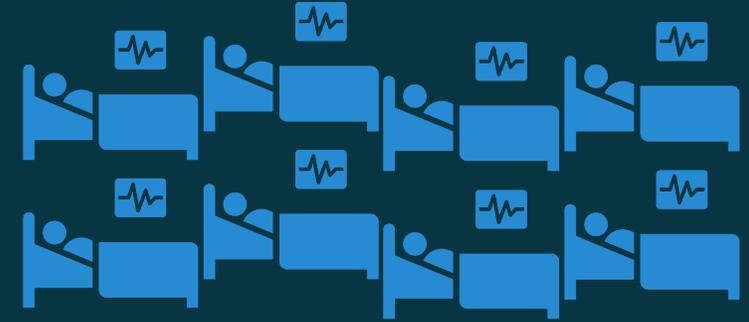
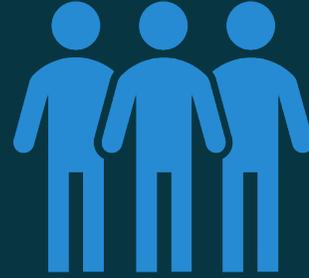


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A Typical Day

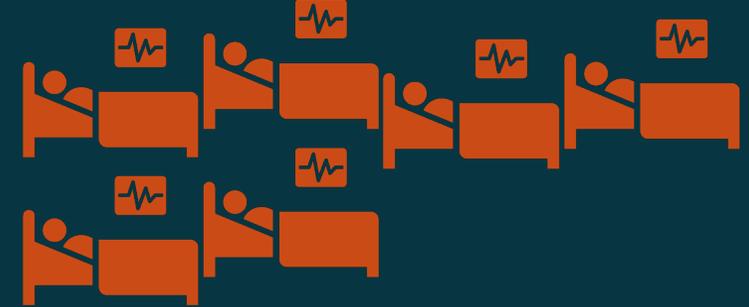
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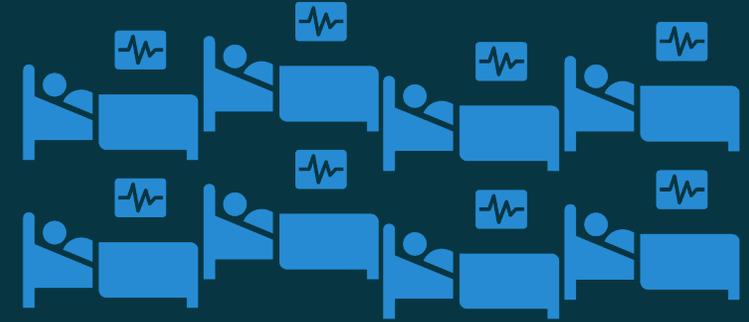
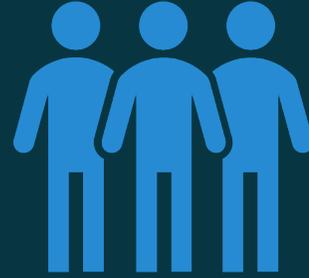


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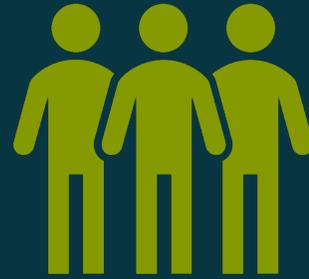


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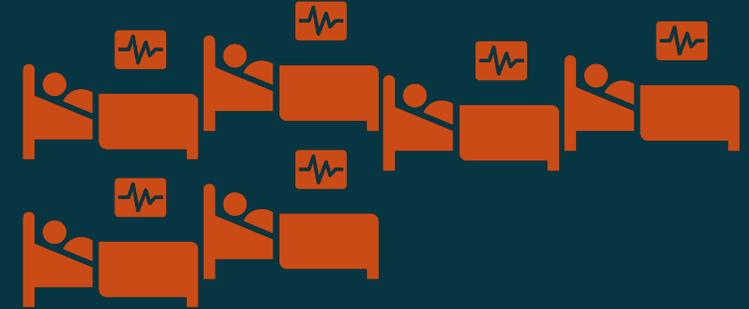
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8:14 am



4:27 pm



Residency education is fragile



CrossMark

Service and Education: The Association Between Workload, Patient Complexity, and Teaching on Internal Medicine Inpatient Services

*Temple A. Ratcliffe, MD^{1,2}, Meghan A. Crabtree, MS³, Raymond F. Palmer, PhD¹,
Jacqueline A. Pugh, MD^{1,2}, Holly J. Lanham, PhD, MBA^{1,2,4}, and Luci K. Leykum, MD, MPH, MSc^{1,2,4}*

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Complexity + Workload → Education time

Residency education is fragile



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Mean teaching: 6 min / day

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Mean teaching: 6 min / day

1 worsened patient → 1-3 min teaching lost

The Intervention

HOSPITAL PRACTICE

2021, VOL. 49, NO. 5, 371–375

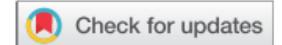
<https://doi.org/10.1080/21548331.2021.1985316>



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CLINICAL FEATURE

ORIGINAL RESEARCH



Focusing hospitalist roles on either admitting or rounding facilitates unit-based assignment and is associated with improved discharge efficiency

Evan Coates, Eli Quisenberry, Barbara Williams  and Craig Blackmore 

Virginia Mason Medical Center, Seattle, WA, USA

The Intervention

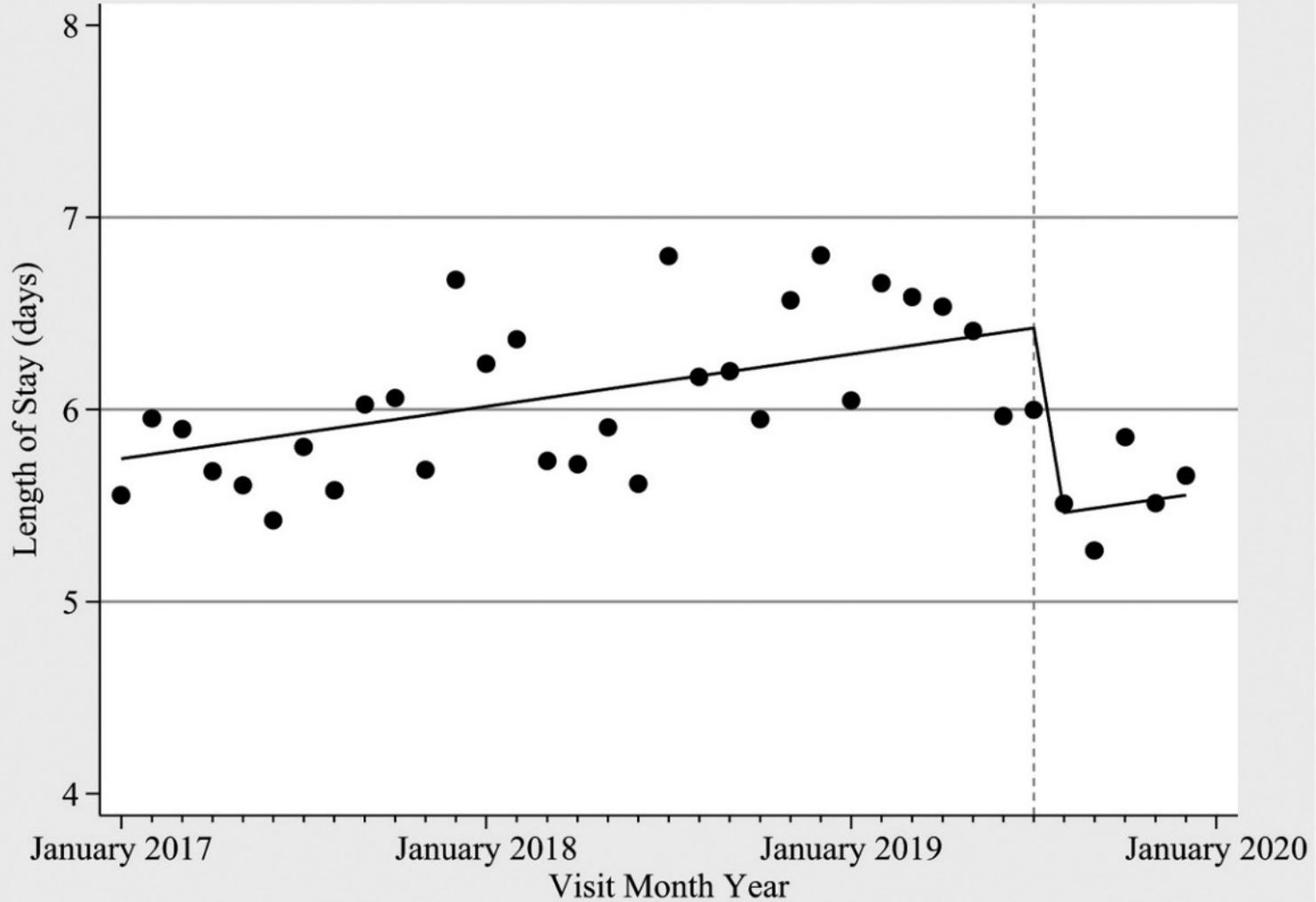
HOSPITAL PRACTICE
2021, VOL. 49, NO. 5, 371–
<https://doi.org/10.1080/215>

CLINICAL FEATURE
ORIGINAL RESEARCH

Focusing hos assignment a

Evan Coates, Eli Q

Virginia Mason Medica



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Check for updates

nit-based

The Intervention

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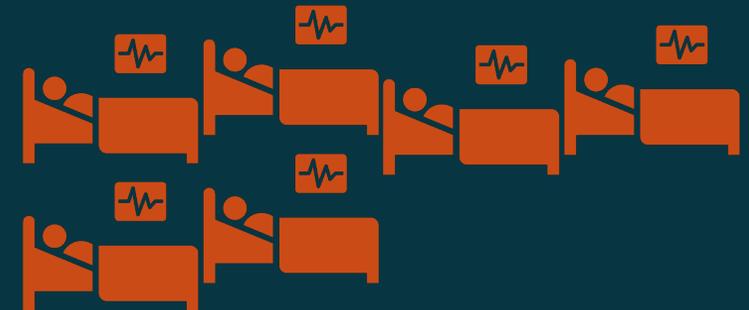
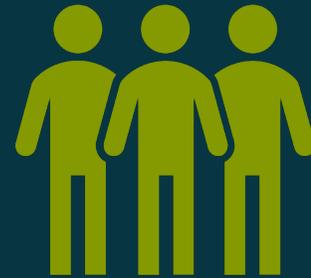
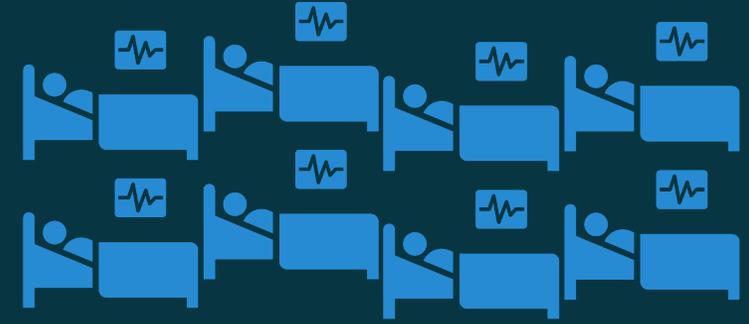
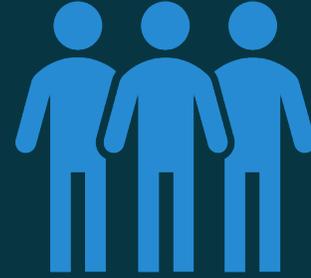
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Virginia Mason Medical Center, Seattle, WA, USA

↓ 7% encounters per admission
LOS ↓ 1d

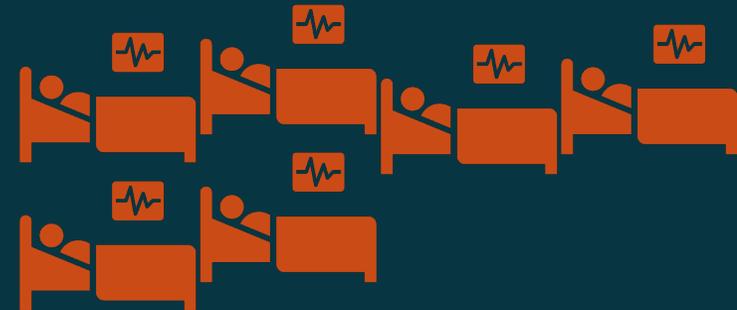
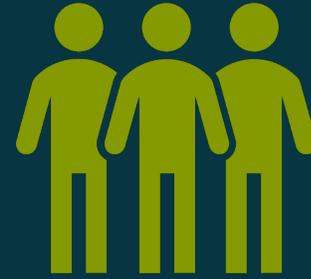
The Intervention

Before:

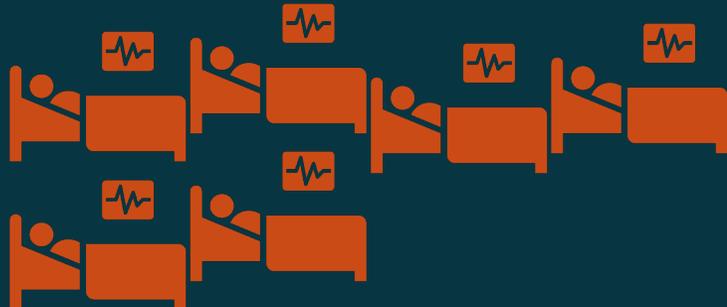
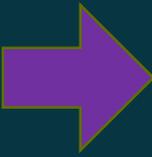


The Intervention

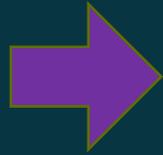
After:



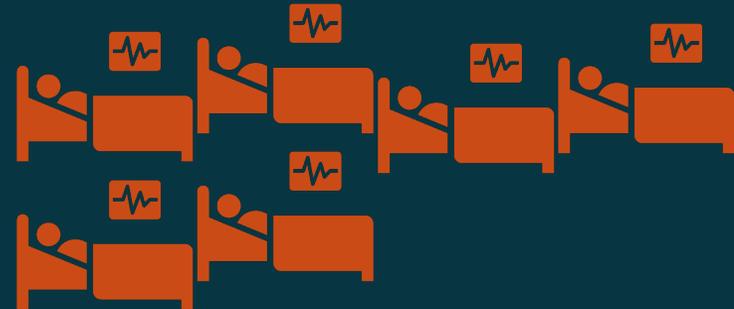
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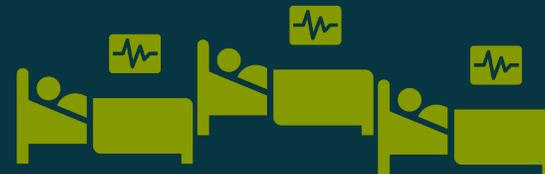
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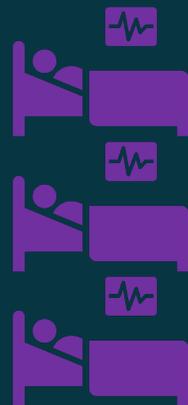
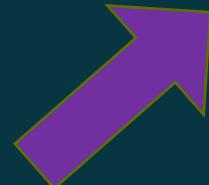
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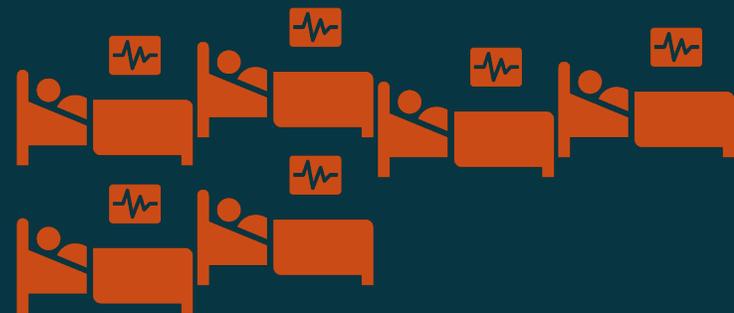
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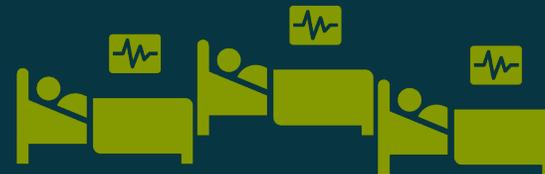
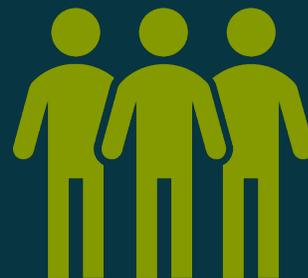
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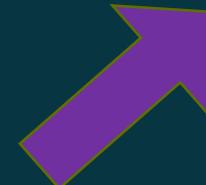
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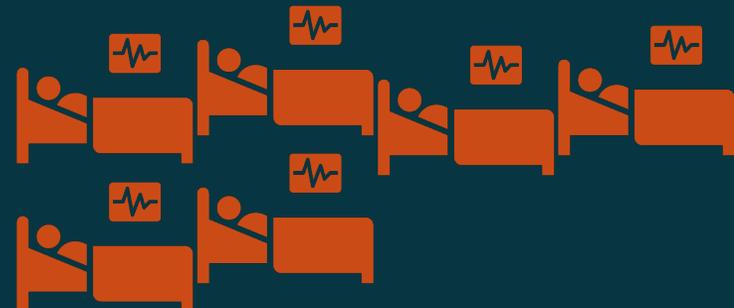
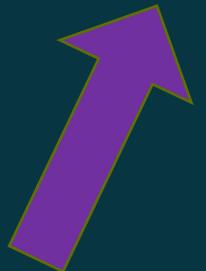
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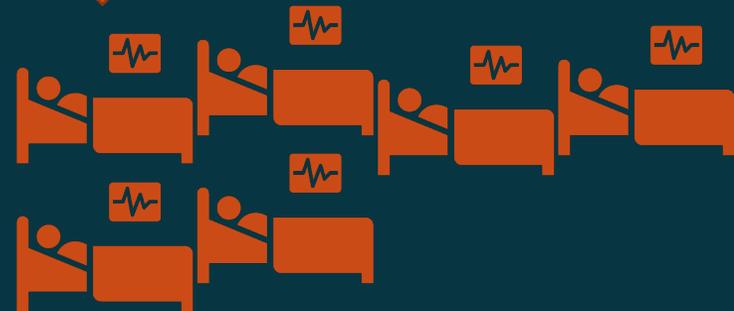
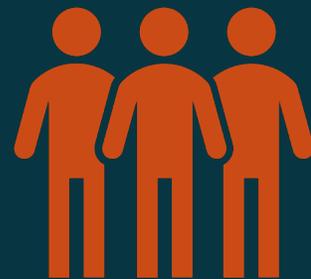
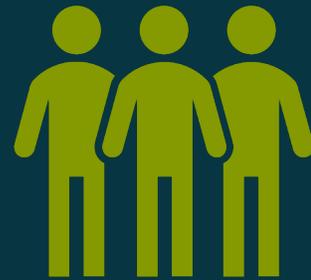


4:27 pm





“Purple” =
Admitting Team



Trial of admitting service

- Admitting team started at end of 2021 academic year
- Survey sent out Feb-Mar 2023

1. What year are you?

[More Details](#)

1. What year are you?

More Details

- R1
- R2
- R3

6
8
8



2. How valuable do you feel the Purple service is/was to your education?

[More Details](#)

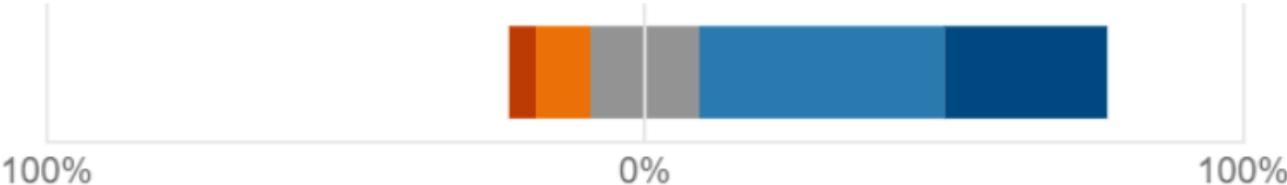
■ Waste of time ■ ■ ■ ■ Extremely valuable

2. How valuable do you feel the Purple service is/was to your education?

[More Details](#)

■ Waste of time ■ ■ ■ ■ Extremely valuable

Please choose from these options:



3. Would you prefer to **keep Purple** or return to three separate teams which admit **and** round on patients?

[More Details](#)

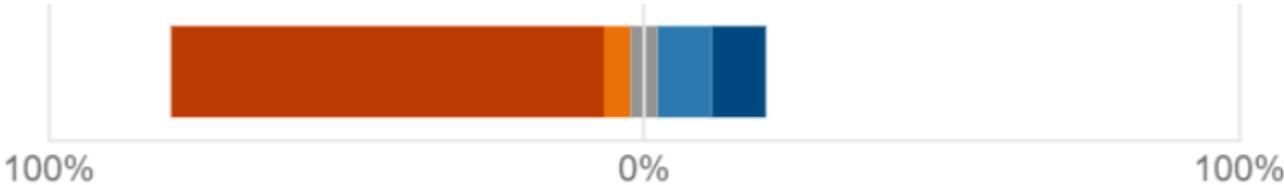
■ Much prefer Purple ■ Option 2 ■ No preference ■ Option 4 ■ Much prefer 3 admitting & rounding teams

3. Would you prefer to **keep Purple** or return to three separate teams which admit **and** round on patients?

[More Details](#)

■ Much prefer Purple ■ Option 2 ■ No preference ■ Option 4 ■ Much prefer 3 admitting & rounding teams

Please choose from these options:



4. In your opinion, how much is patient care affected by the transition from admitting to rounding team?

(i.e., missed follow-up labs, missed plan details)

[More Details](#)

- No effect on care
- Minimal effects on care
- Occasional effects on care
- Frequent effects on care
- Severe and concerning effects on care

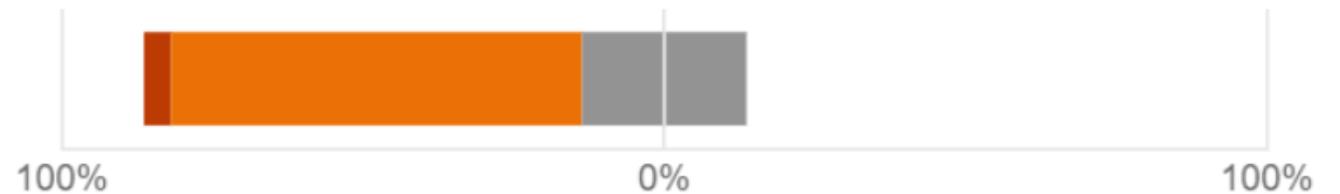
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[More Details](#)

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- Occasional effects on care
- Frequent effects on care
- Severe and concerning effects on care

Please choose from these options:



Shift composition

Estimate average time spent on the following activities during a typical weekday Purple shift:

Please give numeric answers where possible; e.g., "30 minutes", "1-2 hours", etc.

Shift composition

Estimate average time spent on the following activities during a typical weekday Purple shift:

Please give numeric answers where possible; e.g., "30 minutes", "1-2 hours", etc.

5. Admissions *

Shift composition

Estimate average time spent on the following activities during a typical weekday Purple shift:

Please give numeric answers where possible; e.g., "30 minutes", "1-2 hours", etc.

5. Admissions *

6. Recieving/giving teaching *

Shift composition

Estimate average time spent on the following activities during a typical weekday Purple shift:

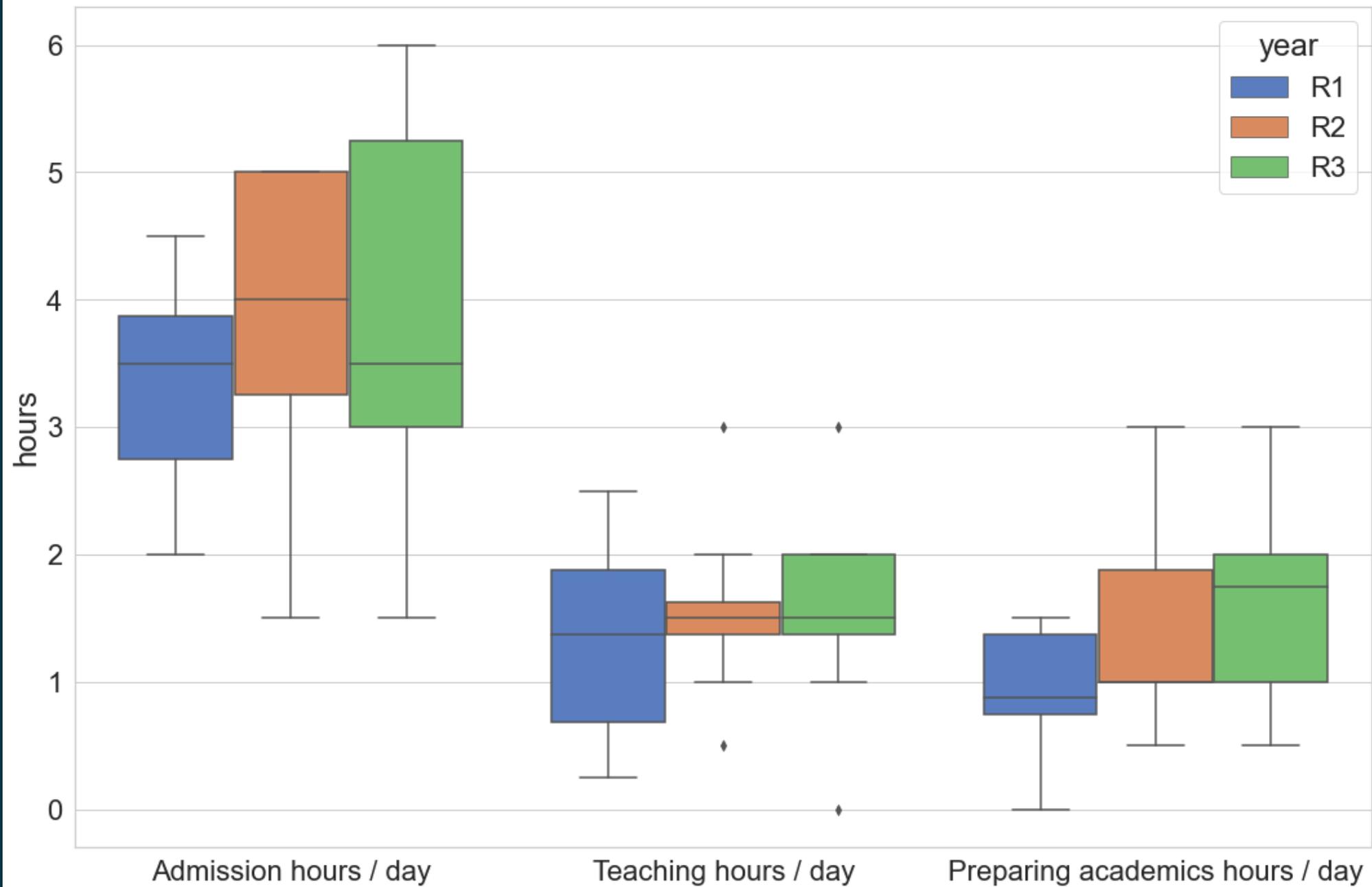
Please give numeric answers where possible; e.g., "30 minutes", "1-2 hours", etc.

5. Admissions *

6. Recieving/giving teaching *

7. Preparing for weekly presentation *

Time Allocation



8. How could the rotation be improved?

Please consider the following ideas which have been suggested:

- Senior-specific education about admissions, i.e., how and when to decline admissions from ED
- Establishing formal expectation of daily teaching
- Changing hours/days to cover more reliable admission periods
- Use of Purple team as auxiliary procedure team

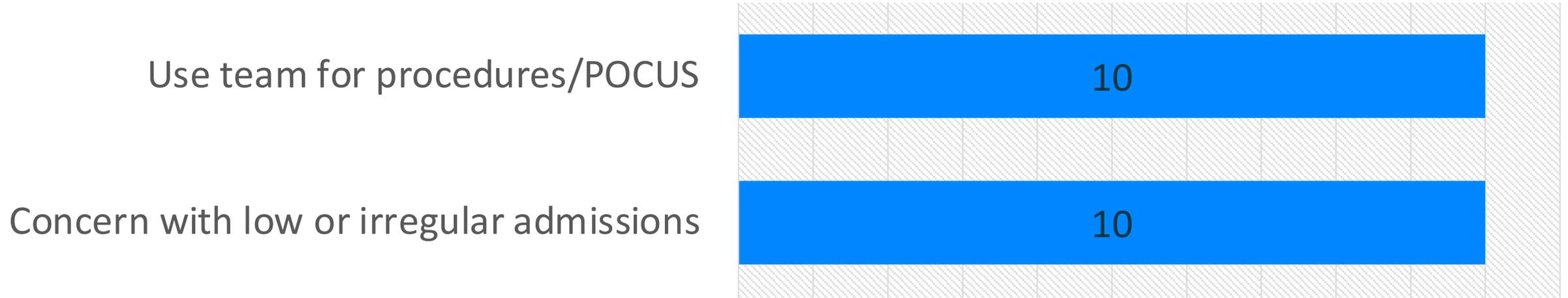
Admitting Team Feedback - Top 5

Admitting Team Feedback - Top 5

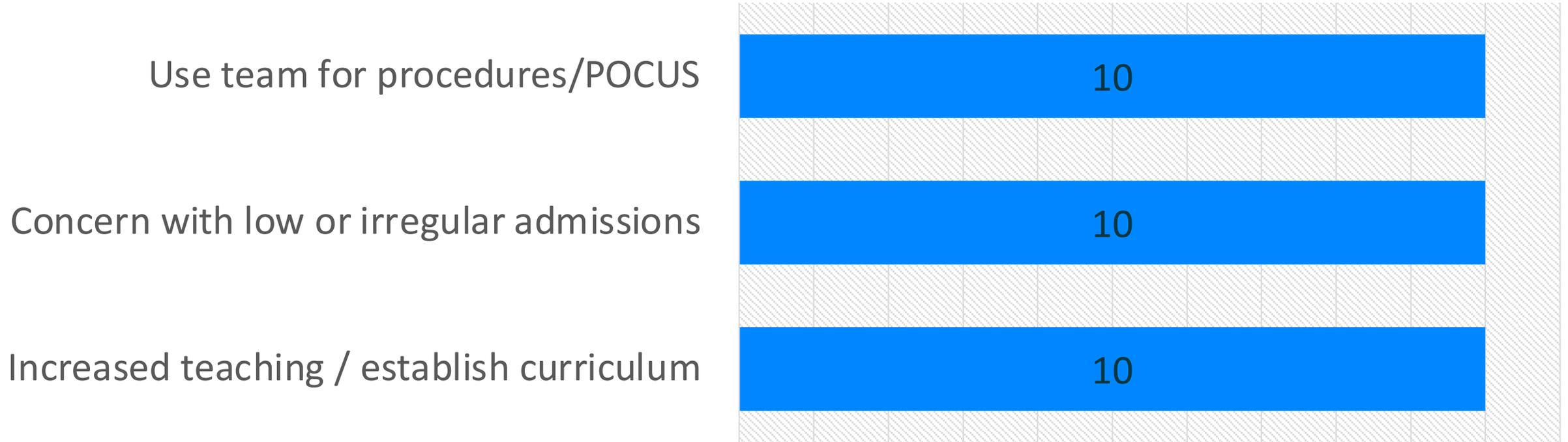
Use team for procedures/POCUS



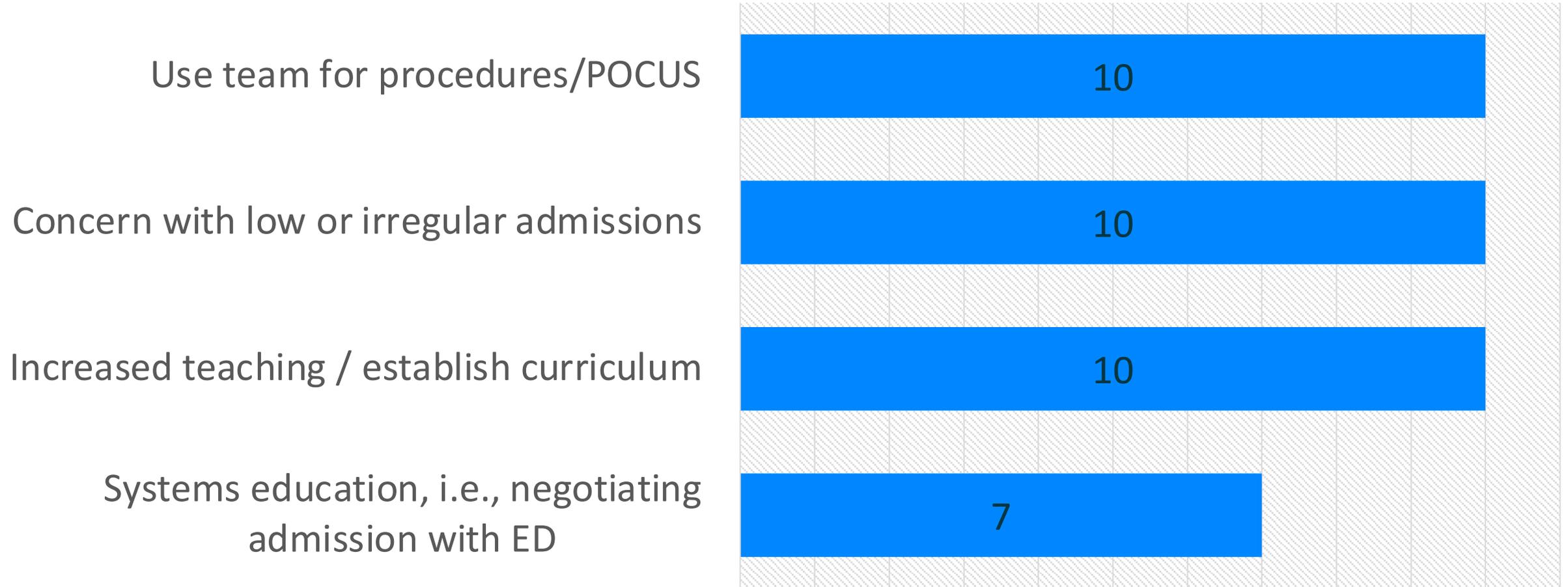
Admitting Team Feedback - Top 5



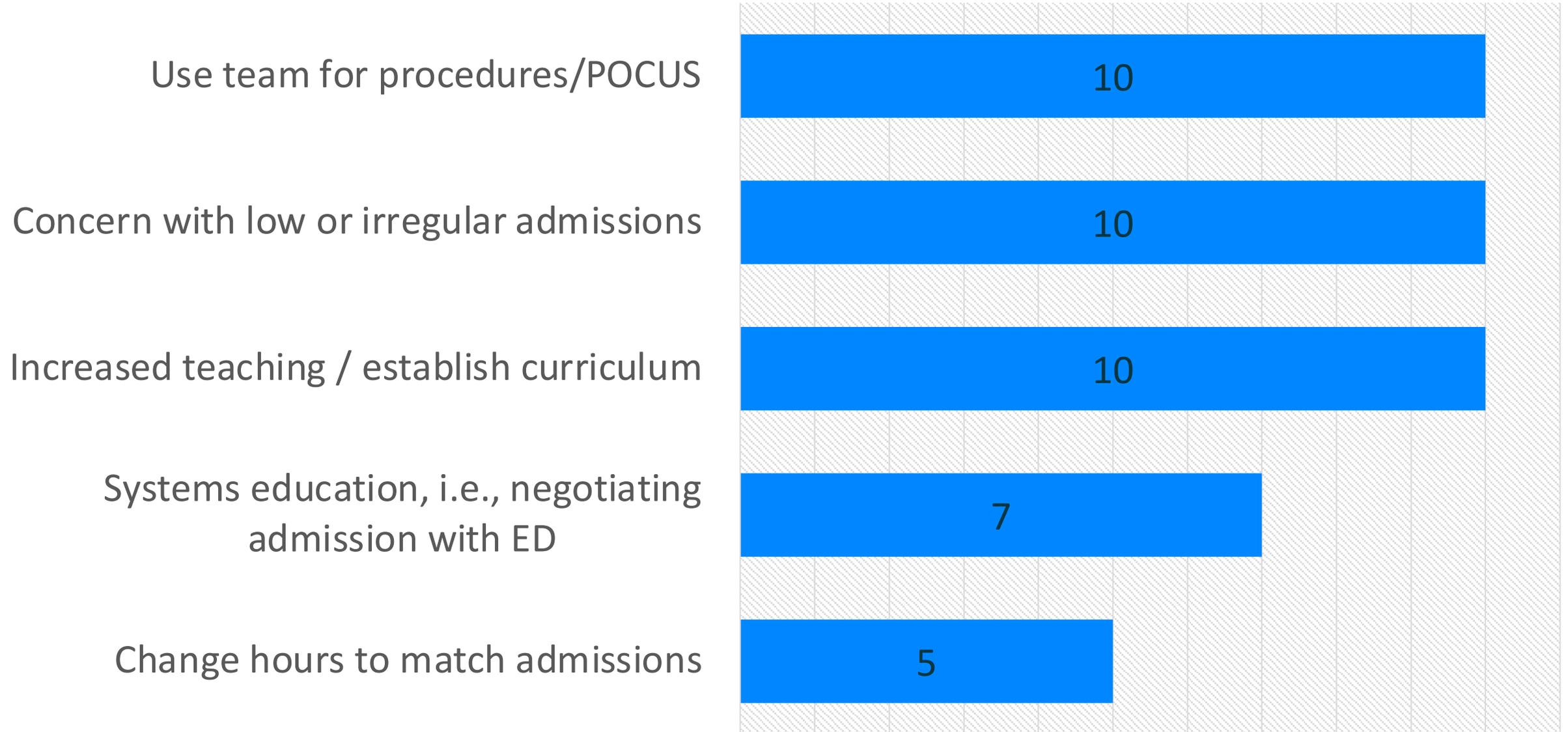
Admitting Team Feedback - Top 5



Admitting Team Feedback - Top 5



Admitting Team Feedback - Top 5



Pairwise Correlations

			Correlations				
			Admitting Hours / day	Teaching Hours / day	Academic Preparation Hours / day	Preference Towards Admitting Team	Percieved Negative Effect on Care
Kendall's tau_b	Admitting Hours / day	Correlation Coefficient	1.000	-.223	-.035	.463*	-.321
		Sig. (2-tailed)	.	.186	.838	.010	.084
		N	22	22	22	22	22
	Teaching Hours / day	Correlation Coefficient	-.223	1.000	.103	-.028	.034
		Sig. (2-tailed)	.186	.	.551	.881	.858
		N	22	22	22	22	22
	Academic Preparation Hours / day	Correlation Coefficient	-.035	.103	1.000	.082	-.292
		Sig. (2-tailed)	.838	.551	.	.657	.125
		N	22	22	22	22	22
	Preference Towards Admitting Team	Correlation Coefficient	.463*	-.028	.082	1.000	-.364
		Sig. (2-tailed)	.010	.881	.657	.	.075
		N	22	22	22	22	22
	Percieved Negative Effect on Care	Correlation Coefficient	-.321	.034	-.292	-.364	1.000
		Sig. (2-tailed)	.084	.858	.125	.075	.
		N	22	22	22	22	22

*. Correlation is significant at the 0.05 level (2-tailed).

Pairwise Correlations

Correlations		Preference Towards Admitting Team
Admitting Hours / day	Correlation Coefficient	.463
	Sig. (2-tailed)	.010
	N	22

Conclusion

- We will continue the admitting service
- Working to incorporate feedback
- Happy to discuss implementation details:
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References

1. Accreditation Council for Graduate Medical Education. ACGME program requirements for graduate medical education in internal medicine. In: ACGME Program Requirements. ; 2022:1-35. http://www.acgme.org/acgmeweb/Portals/0/PFAssets/2013-PR-FAQ-PIF/140_internal_medicine_07012013.pdf
2. Francesco L Di, Pistoria MJ, Auerbach AD, Nardino RJ, Holmboe ES. Internal medicine training in the inpatient setting: A review of published educational interventions. *J Gen Intern Med.* 2005;20(12):1173-1180. doi:10.1111/j.1525-1497.2005.00250.x
3. Wells M, Coates E, Williams B, Blackmore C. Restructuring hospitalist work schedules to improve care timeliness and efficiency. *BMJ Open Qual.* 2017;6(2):e000028. doi:10.1136/bmjopen-2017-000028
4. Coates E, Quisenberry E, Williams B, Blackmore C. Focusing hospitalist roles on either admitting or rounding facilitates unit-based assignment and is associated with improved discharge efficiency. *Hosp Pract (1995).* 2021;49(5):371-375. doi:10.1080/21548331.2021.1985316
5. Butcher L. Should you split your service into rounders and admitters? *Today's Hospitalist.* Published 2007. <https://www.todayshospitalist.com/should-you-split-your-service-into-rounders-and-admitters/>
6. Lamba R, Schapira MM, Singh S, Fletcher KE. Defining and measuring the effort needed for inpatient medicine work. *J Hosp Med.* 2012;7(5):426-430. doi:10.1002/jhm.1004
7. Smith GR, Ma M, Hansen LO, Christensen N, O'Leary KJ. Association of hospital admission service structure with early transfer to critical care, hospital readmission, and length of stay. *J Hosp Med.* 2016;11(10):669-674. doi:10.1002/jhm.2592

References

8. Crumlish CM, Yialamas MA, McMahon GT. Quantification of bedside teaching by an academic hospitalist group. *J Hosp Med.* 2009;4(5):304-307. doi:10.1002/jhm.540
9. Ratcliffe TA, Crabtree MA, Palmer RF, Pugh JA, Lanham HJ, Leykum LK. Service and Education: The Association Between Workload, Patient Complexity, and Teaching on Internal Medicine Inpatient Services. *J Gen Intern Med.* 2018;33(4):449-454. doi:10.1007/s11606-017-4302-9
10. Ritter E, Malik M, Qayyum R. Impact of a Hospitalist-Run Procedure Service on Time to Paracentesis and Length of Stay. *J Hosp Med.* 2021;16(8):476-479. doi:10.12788/jhm.3582
11. Wang ES, Velásquez ST, Smith CJ, et al. Triage of Inpatient Admissions: an Opportunity for Resident Education. *J Gen Intern Med.* 2019;34(5):754-757. doi:10.1007/s11606-019-04882-2
12. Wang ES, Velásquez ST, Mader M, et al. Triage of Admissions: A Survey of Internal Medicine Resident Experiences and Perceptions and Recommendations on Inpatient Triage Education. *Am J Med.* 2022;135(7):919-924.e6. doi:10.1016/j.amjmed.2022.03.023
13. Hager DN, Chandrashekar P, Bradsher RW, et al. Intermediate care to intensive care triage: A quality improvement project to reduce mortality. *J Crit Care.* 2017;42:282-288. doi:10.1016/j.jcrc.2017.08.002