



Effects of 2- vs 4-Week Attending Physician Inpatient Rotations on Unplanned Patient Revisits, Evaluations by Trainees, and Attending Physician Burnout

A Randomized Trial

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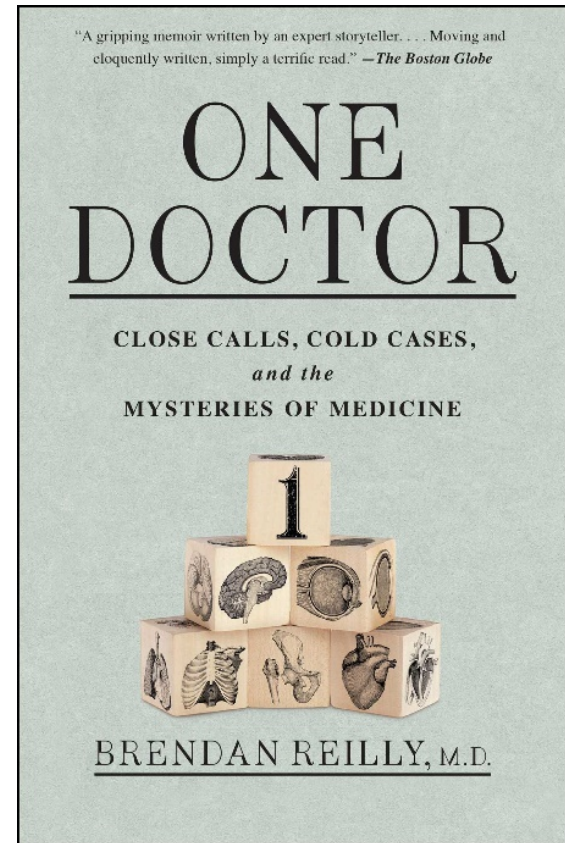
JAMA, December 5, 2012



2009



4 WEEKS!





Observational Data Supporting 2-Week Rotations

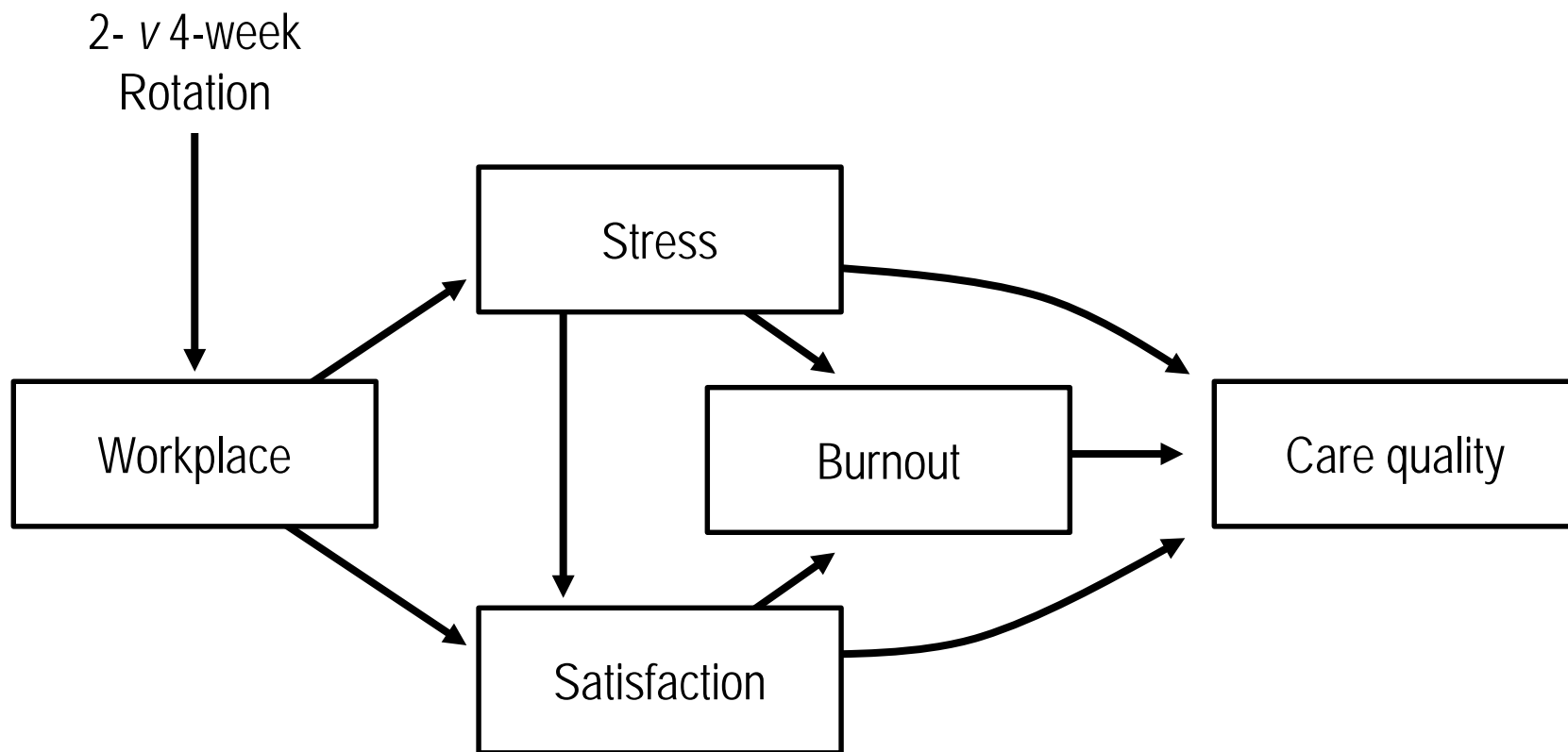
attending physicians think 2-week
rotations improve their private lives
(Akl et al 2004)



2 weeks?

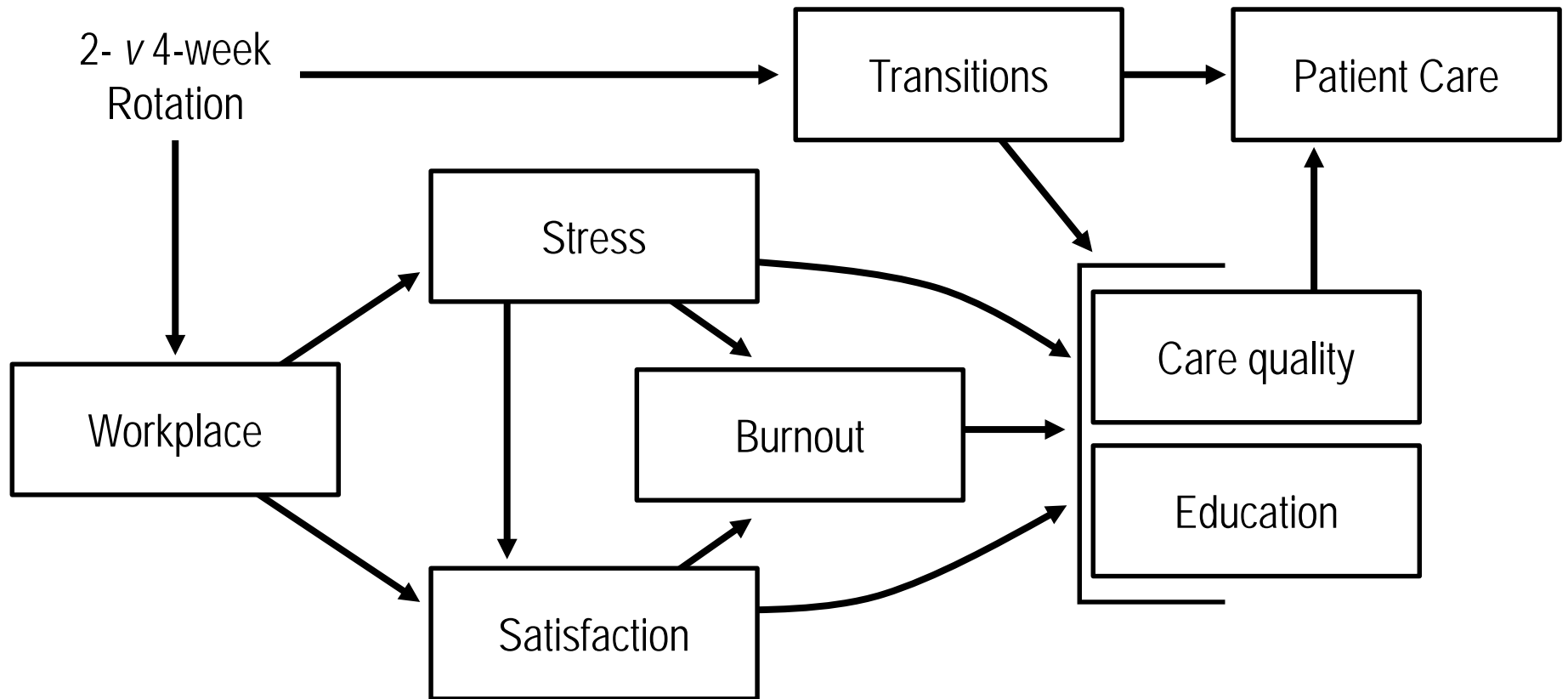


Conceptual Model



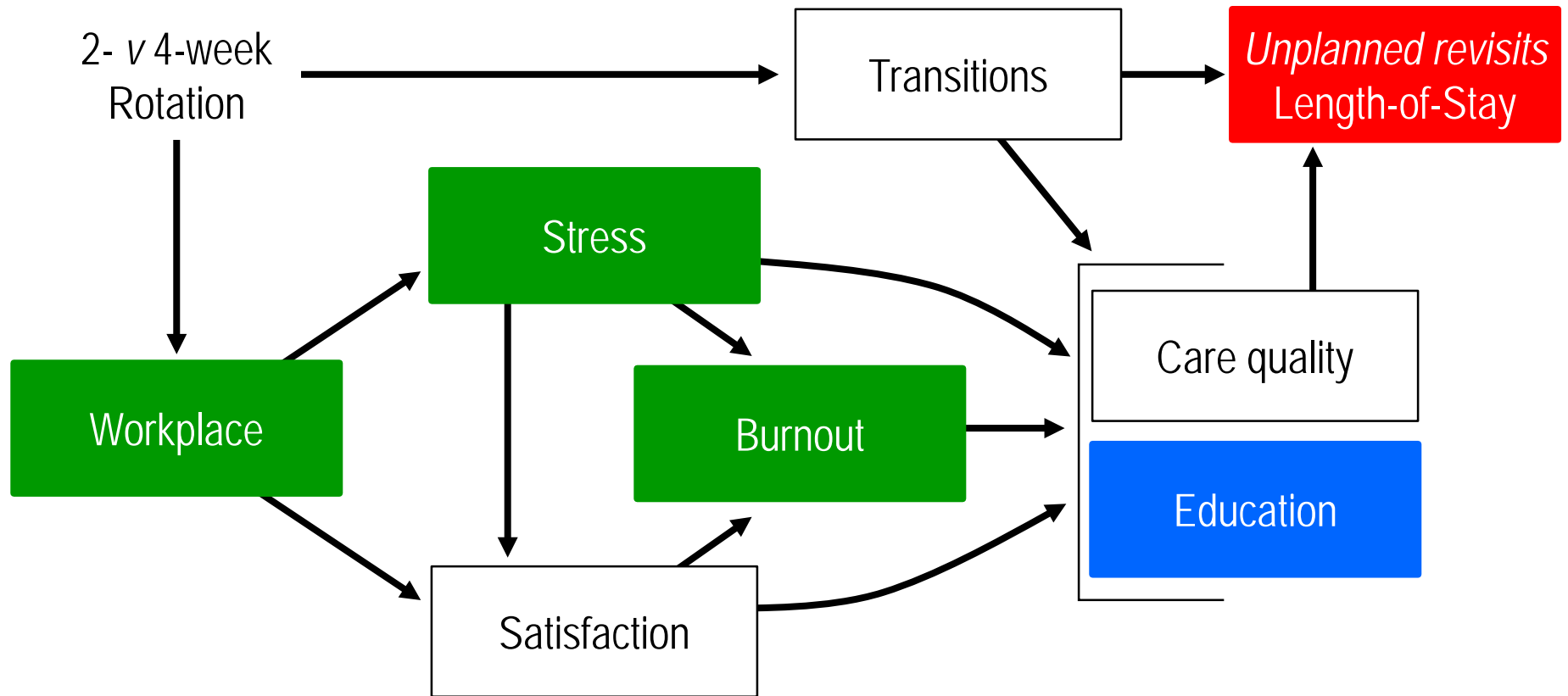


Expanded Conceptual Model





Outcomes studied



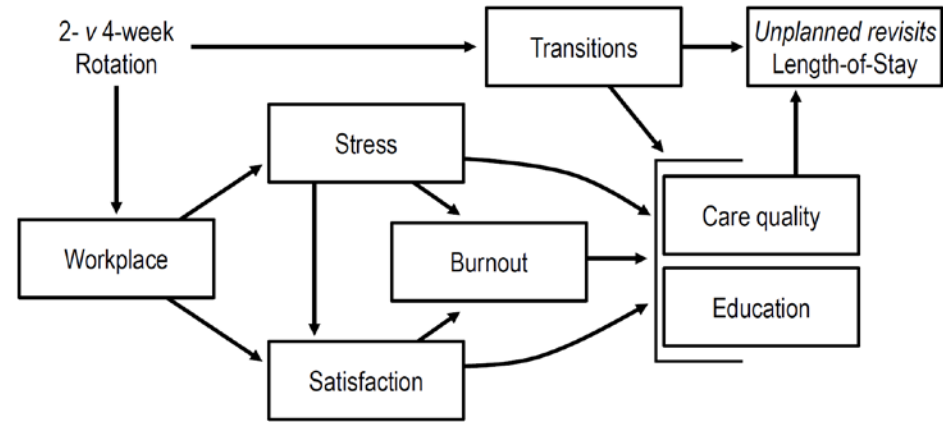


80 staffed the general medicine wards

18 scheduled < 6 total weeks

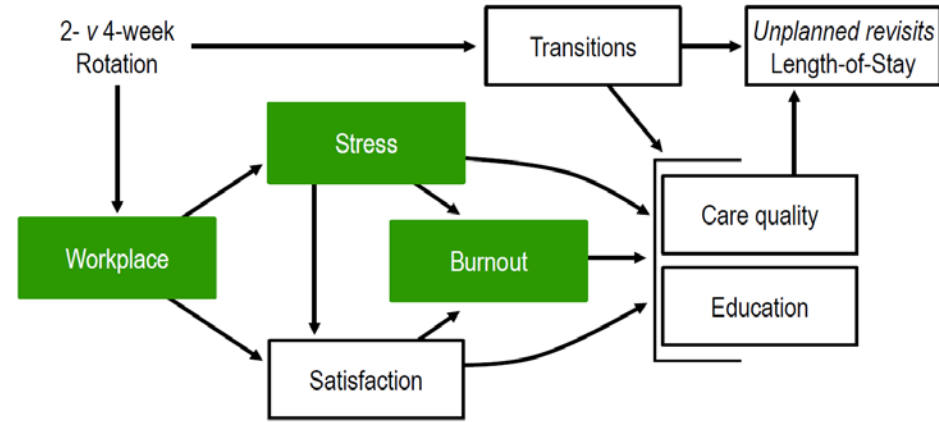
62 assigned to random sequence of 2- and 4-wk rotations

Attending Physicians (<i>n</i>)	Rotations (<i>n</i>)	Sequence (rotation durations in weeks)	Total Ward Weeks in Year
10	2	2-4	6
9		4-2	6
14	3	4-2-2	8
12		2-2-4	8
1		2-4-4	10
4	4	4-2-2-2	10
1		2-2-4-2	10
1		2-2-4-4	12
1		4-2-2-4	12
1	5	4-2-2-2-2	12
3	6	2-2-4-2-2-4	16
1		2-2-4-4-2-2	16
1		4-2-2-2-2-4	16
1		4-2-2-4-2-2	16
1	7	4-2-2-2-2-4-4	20
1	8	2-2-4-4-2-2-2-2	20





Burnout-related



<u><i>n</i></u>	
62	attending physicians
74	4-week surveys
<u>128</u>	2-week surveys
202	Total Surveys

Favors 2-wk Rotations | Favors 4-wk Rotations

Burnout Contributors

Poor workplace control
Stress

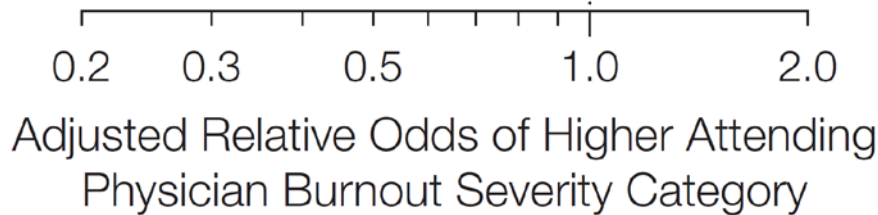
Burnout Measurement

Single-item
Emotional exhaustion

Instrument

MEMO
Cohen PSS

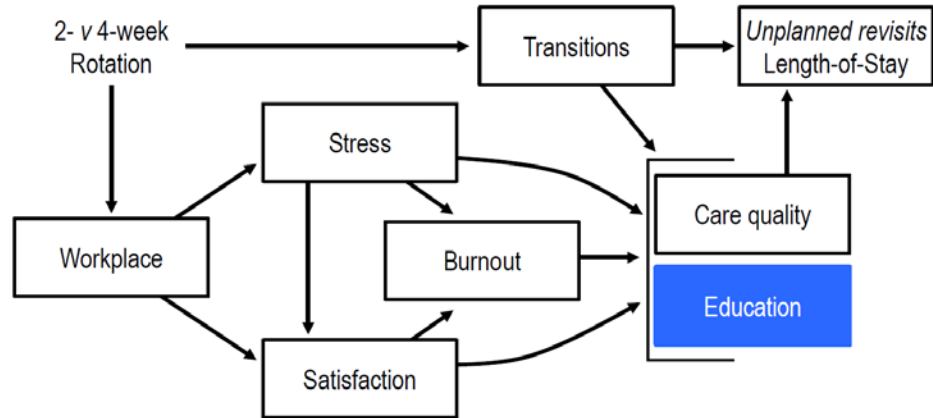
NJBS
Maslach HSS





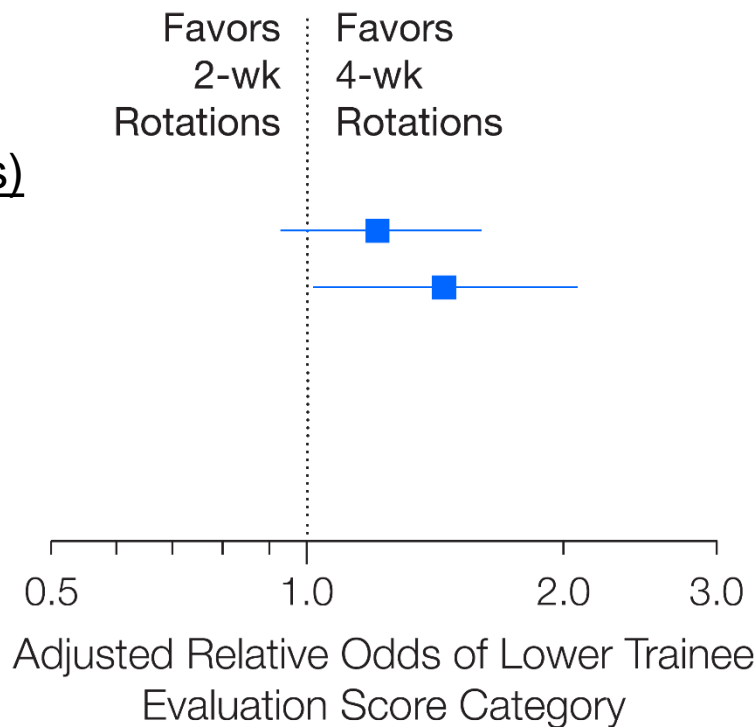
Education

<i>n</i>	
150	house staff
250	medical students
690	house staff surveys
490	medical student surveys
1180	Total Surveys



Summary (5 domains)

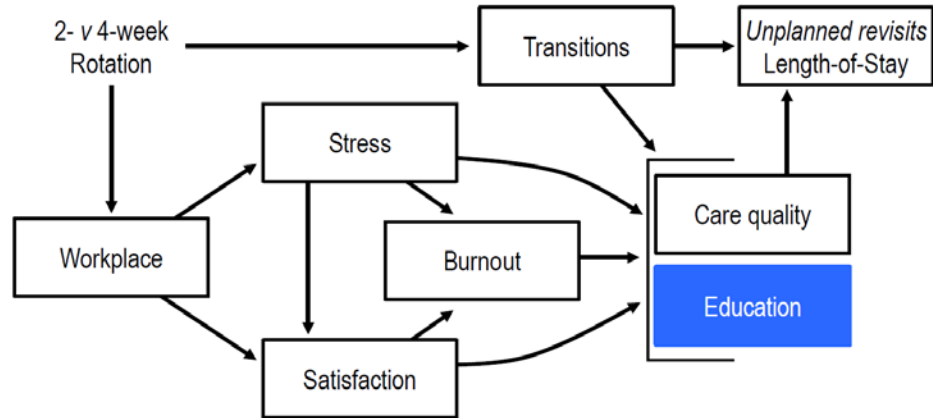
House staff
Medical Students





Education

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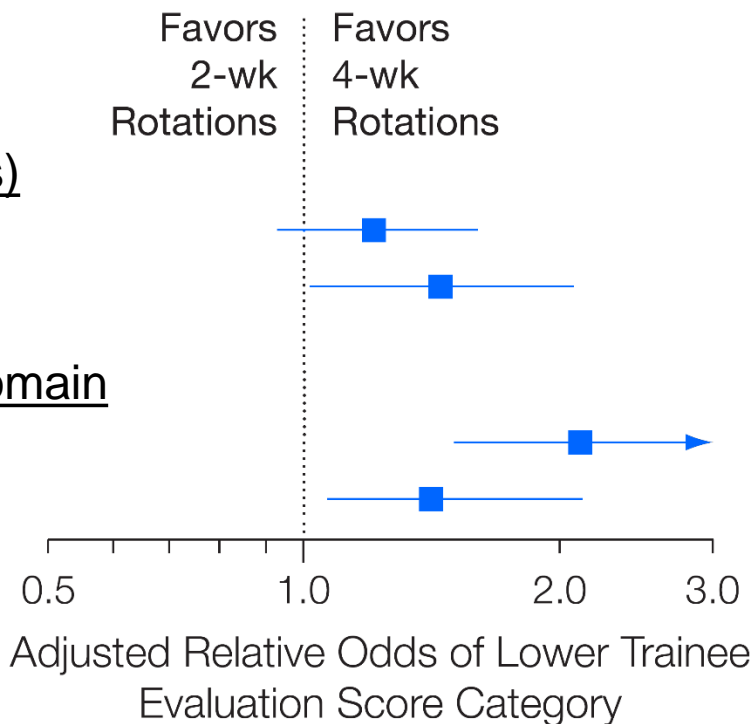


Summary (5 domains)

House staff
Medical Students

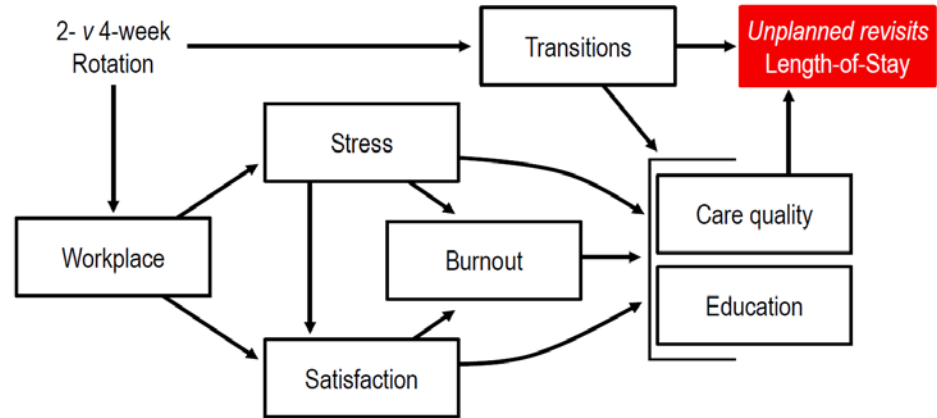
Ability to Evaluate Domain

Housestaff
Medical Students

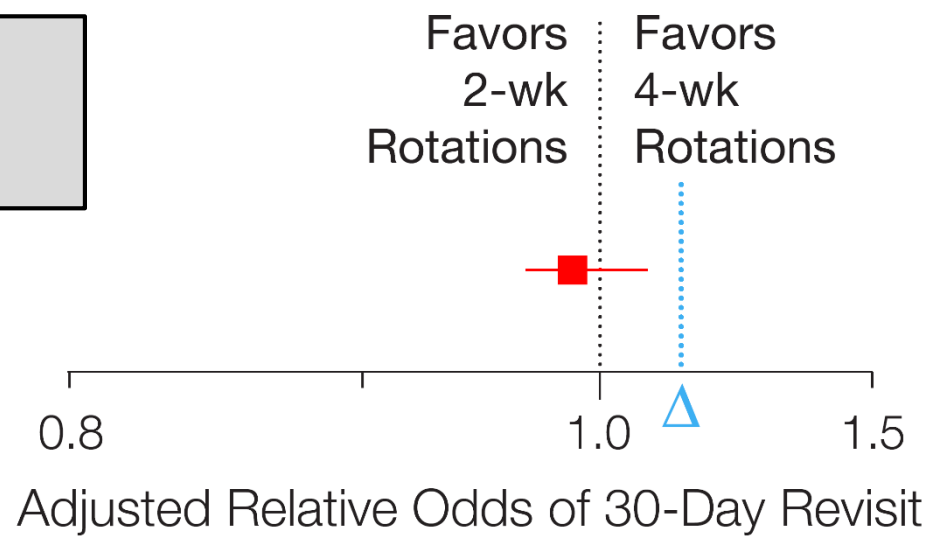




Patient care

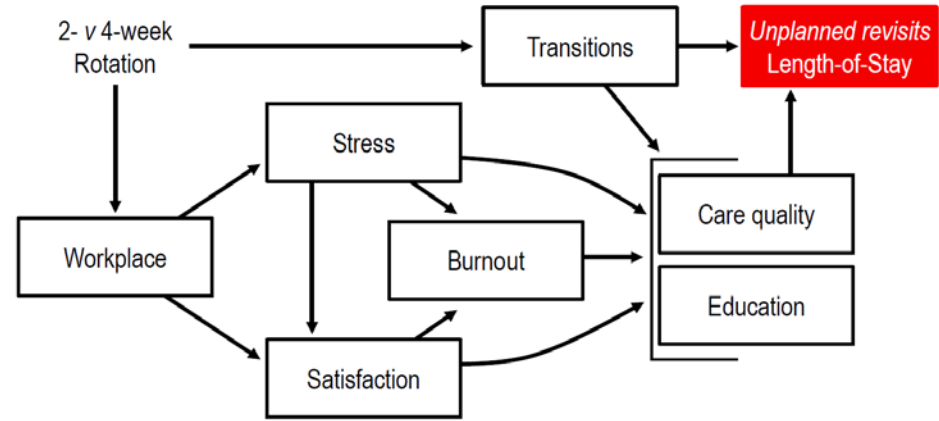


30-day Revisits
n
11,405 hospitalizations

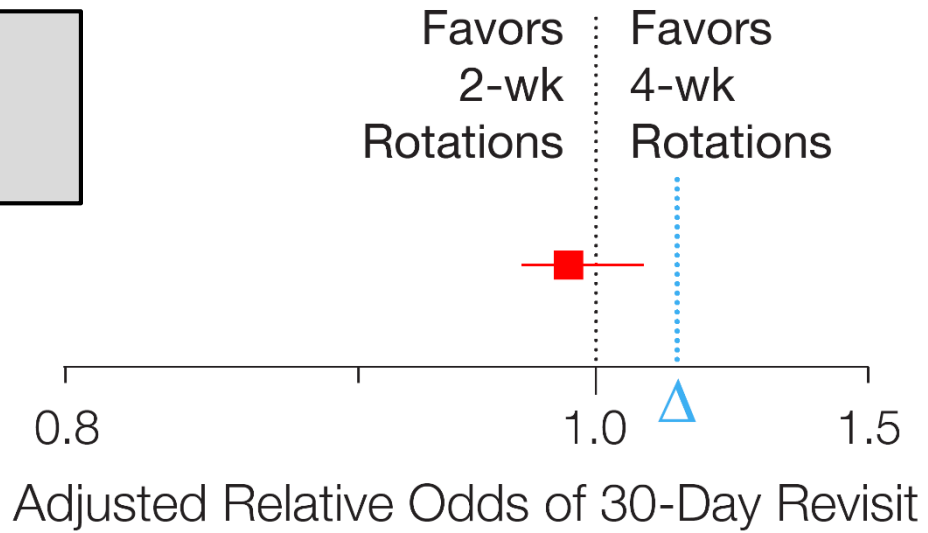




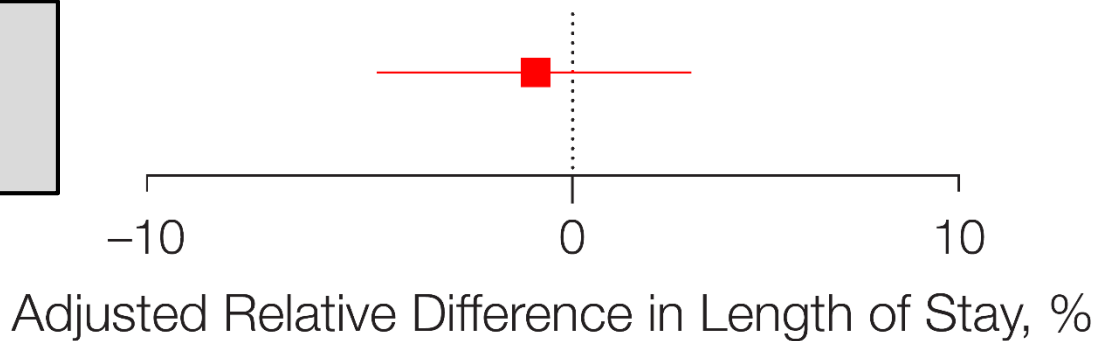
Patient care



30-day Revisits
 $\frac{n}{11,405}$ hospitalizations

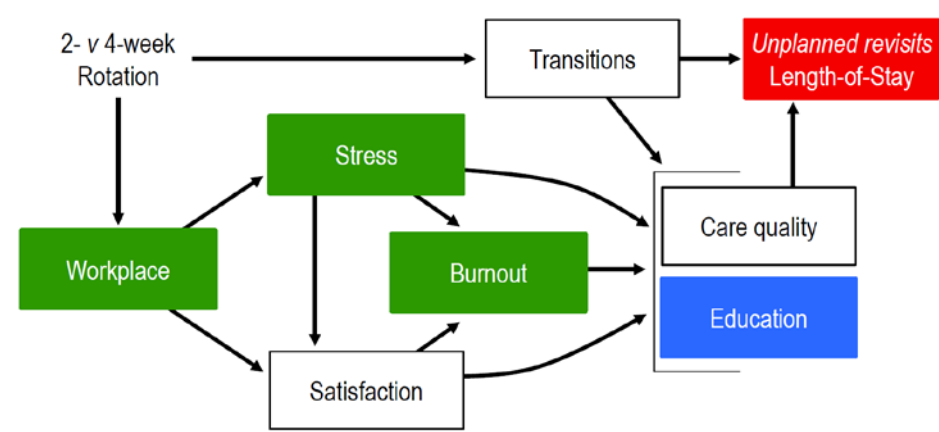


Length of Stay
 $\frac{n}{12,042}$ hospitalizations





Limitations



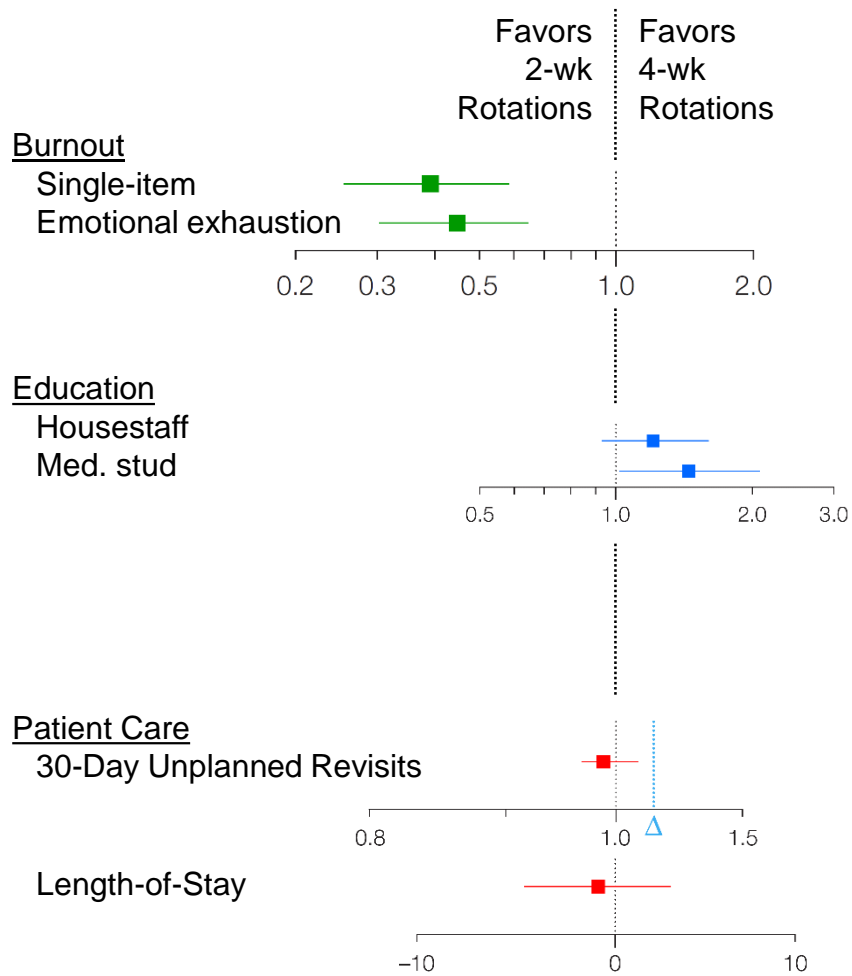
Burnout-related
Unblinded

Education

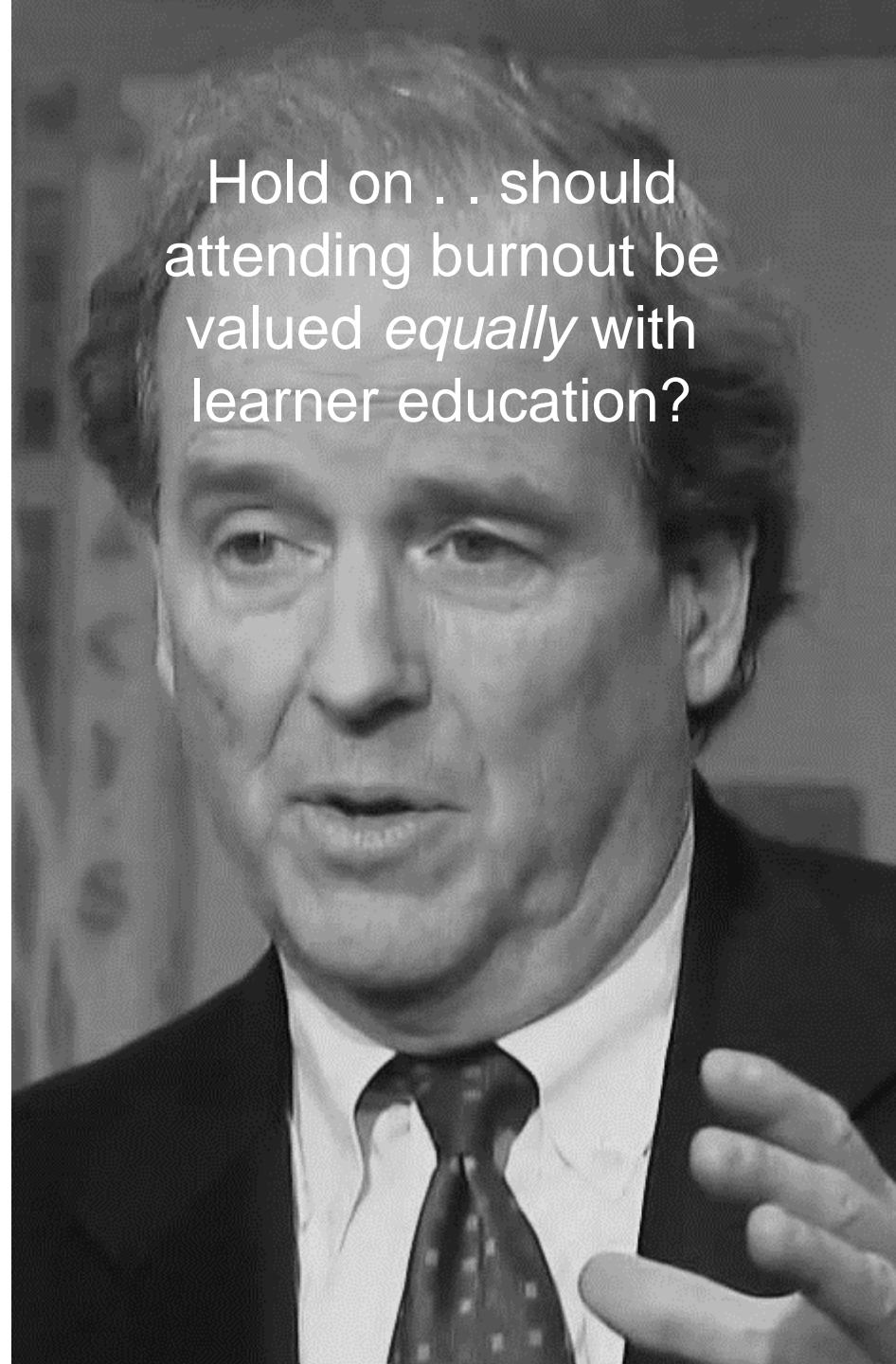
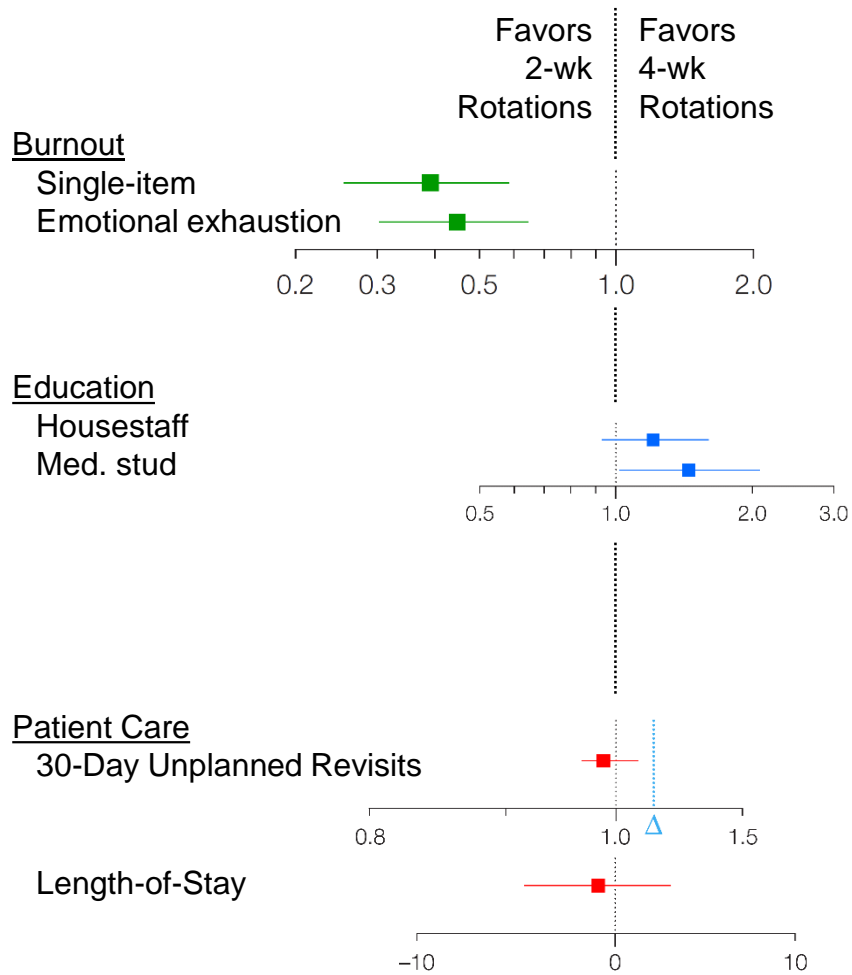
Trainees' perceptions, actual performance of attendings not measured

Patient-care

Only 10% of patients are effected
Impact diluted by the trainees



OK, fine.
2 weeks



Hold on . . . should attending burnout be valued *equally* with learner education?



Details about our instruments: Burnout contributors

Poor Workplace Control: 8-items from MEMO Study.

1 out of 8: Over the last rotation, how much control did you have over the allotment of additional time for difficult-to-help patients?

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1	2	3	4
slight/none	some	moderate	great

Perceived Stress: 4-items from Cohen's Perceived Stress Scale

1 out of 4: Over the last rotation, how often have you felt that difficulties were piling up so high you could not overcome them?

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
0	1	2	3	4
never	almost never	sometimes	fairly often	very often



Details about our instruments: Burnout measurements

Burnout: Single item from National Job Burnout Survey

Using your own definition of burnout, please choose one.

- I enjoy my work. I have no symptoms of burnout.
- Occasionally I am under stress, and I don't always have as much energy as I once did, but I don't feel burned out.
- I am definitely burning out and have one or more symptoms of burnout, such as physical and emotional exhaustion.
- The symptoms of burnout that I'm experiencing won't go away. I think about frustrations at work a lot.
- I feel completely burned out and often wonder if I can go on. I am at the point where I may need some changes or may need to seek some sort of help.

Emotional Exhaustion: Maslach Human Services Survey, Intensity Scale

1 out of 9: I feel emotionally drained from my work

