Handing Off Handoffs

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AMERICAN ACADEMY OF FAMILY PHYSICIANS

Disclosures

- No disclosures

Objectives

- Understand the untapped potential of engaging Residents in Curriculum Redesign
- Eliminate handoffs in the inpatient setting for your program - decrease miscommunication, increase leadership stability on care teams
- Improve patient safety and decrease near misses/potential for near misses

- This workshop will provide the attendee with a brief summary of why we had to initiate a complete restructuring of our inpatient Family Medicine service and how we approached that daunting task.

- We will delineate how we engaged our residents to do much of the brainstorming and decision making along with us - this resulted in the development of our Continual Crossover concept, which effectively eliminates any handoffs from one team to another - the team is now only ever changing by one person.

- We will outline how our current Chief Residents were able to take this one step further by eliminating 24 hour shifts for all of our residents, not just our interns, which has increased Resident engagement and decreased sleep deprivation (we hope…did it?).

- We were overwhelmed by the idea of this restructure and having gone through such an intense process together as a program, we are stronger, have a deeper understanding all around of the work needed to achieve change, and our residents are commitment to embracing these structural adjustments.

Background Information

Poll Question #1

- How many of you are focused on transitions of care and handoffs at your home institution?
  A. I sure am!
  B. I'd like to be…
  C. Hmm…we should think about that.
  D. Nope no way no how!

Bye Bye, Handoffs!

- Handoffs in the inpatient setting are a dangerous time for near misses and adverse events to occur due to gaps in knowledge around patient care plans by the new teams.

Transitions of Care and Handoffs

- We have been focused on transitions of care, specifically on our inpatient service
  - (as everyone is)
- They TY changes last year forced us to complete restructure our entire inpatient service structure
  - (as it did for many)
- We are fortunate to have just one inpatient service at Wilmington Hospital.

CCHS GME Reduction

- Transitional year program went from 11 to 4 – nice!
- Directly affected our residency program via reducing inpatient floor coverage
- Decreased our intern capacity by
  - a total of 4 blocks on nights
  - 6 blocks of days
- Holy Moly!

- We started with our Rounders and explored ideas…
- Led to exploration with the chiefs….
- Lots of resident concern (of course, right)
- Let to WHIP Town Hall

Town Hall Central

- Allowed us to provide large scale transparency
- Gave tons of updates
- Laid of facts in methodical way
- Intentionally split into two groups
- Let the residents brainstorm solutions…they were the ones that have to do the work, we needed their buy in for whatever the solution was going to be

End Result

- Resident driven solutions for a system driven change
- Adequate buy in
- Appropriate support
- Commitment to working through all aspects together
- Acknowledgment of ‘unknown unknowns’ from the get to

What were our solutions?

- Decreased size of team
- Multiple blocks with 0 interns
  - SubI Service
  - Hospitalist model with Attendings/Upper years
- Continual Crossover
- Eliminated 24 hour calls!
- New Night Float Structure

Continual Crossover Approach

- We were able to create a model where the upper year residents rotate in continually overlapping two week intervals.
- This eliminates the "all new team" approach when a new block starts.
  - This effectively eliminates handoffs!
  - This is safer!
  - This is better for patient care!

What does this look like?

- Looks like:
- Block X Weeks 1 & 2 – Resident A
- Block X Weeks 2 & 3 – Resident B
- Block X Weeks 3 & 4 – Resident C
- Block X Week 4 & Block Y Week 1 – Resident D
- Block Y Weeks 2 and 3 – Resident E
- And so forth

More of a Visual Person?

Here's What We Used to Do

(and where large scale handoffs occurred):

	Block 1				Block 2				Block 3			
	Week 1	Week 2	Week 3	Week 4	Week 1	Week 2	Week 3	Week 4	Week 1	Week 2	Week 3	Week 4
Mike	WHIP	WHIP					WHIP	WHIP				
Jason	WHIP	WHIP							WHIP	WHIP		
Eden			WHIP	WHIP					WHIP	WHIP		
LeeAnn			WHIP	WHIP							WHIP	WHIP
Raema					WHIP	WHIP					WHIP	WHIP
Prium					WHIP	WHIP						
Jeremy							WHIP	WHIP				
Intern	WHIP	WHIP	WHIP	NF								
Intern	NF	WHIP	WHIP	WHIP								
Intern	WHIP	NF	NF	WHIP								
Intern					WHIP	WHIP	WHIP	NF				
Intern					NF	WHIP	WHIP	WHIP				
Intern					WHIP	NF	NF	WHIP				
Intern									WHIP	WHIP	WHIP	NF
Intern									NF	WHIP	WHIP	WHIP
Intern									WHIP	NF	NF	WHIP

What About Nights?

- So REALLY the handoff looked like
  - Outgoing two weeks of daytime
  - Handed off to
  - Incoming new Night Float
  - Who then 12 hours later
  - Handed off to new daytime team
- 3 massive handoffs in 12 hours

	Block 1				Bloc	
	Week 1	Week 2	Week 3	Week 4	Week 1	Week 2
Mike	WHIP	WHIP				
Jason		WHIP	WHIP			
Eden			WHIP	WHIP		
LeeAnn				WHIP	WHIP	
Raema					WHIP	WHIP
Prium						WHIP
Jeremy						
Intern	WHIP	WHIP	WHIP	NF		
Intern	NF	WHIP	WHIP	WHIP		
Intern	WHIP	NF	NF	WHIP		
Intern					WHIP	WHIP
Intern					NF	WHIP
Intern					WHIP	NF
Intern						
Intern						
Intern						

Where are the handoffs?

- There are no more en masse handoffs
  - There are still small scale handoffs
- There is always an upper year who has already been on the team for a week to welcome to new upper year
- Handoffs happen at 7 am/7 pm and afternoon signout to short call…
  - Among people who already know the patients

New Night Float Structure

- Upper years do Night Float Sunday through Friday
- Interns do Night Float Monday through Saturday
- Night Float team consists of two people
- The new night float resident's Sunday night is not done with an intern – the shift is doing by the OUTGOING two week-er – they rotate off by working Saturday day, then Sunday night

What?

	Sunday Night	Monday	Monday Night	Tuesday	Tuesday Night	Wednesday	Wednesday Night	Thursday	Thursday Night	Friday	Friday Night	Saturday	Saturday Night	Sunday	Sunday Night	Monday
Mike		WHIP		WHIP		WHIP		WHIP		WHIP		WHIP		WHIP		WHIP
Jason		WHIP		WHIP		WHIP		WHIP		WHIP			WHIP		WHIP	
Eden	Nights		Nights		Nights		Nights		Nights		Nights					
LeeAnn	Nights															
Raema															Nights	
Prium																
Jeremy																
Intern		WHIP		WHIP		WHIP		WHIP		WHIP		WHIP		WHIP		
Intern		WHIP		WHIP		WHIP		WHIP		WHIP						WHIP
Intern			Nights		Nights		Nights		Nights		Nights		Nights			WHIP

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Anticipated Bonuses to Continual Crossover

- Boosts morale
- Allows for more contact with different people on inpatient, instead of being 'stuck' with the same team for 2-4 weeks.
  - Interns get to experience more upper year teaching styles
  - Teams don't get stuck in ruts
  - Upper years get to work with a larger variety of their peers
- Eliminated 24 hour shifts altogether
- Created a post call Monday

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Anticipated Downsides to Continual Crossover

- Requires basically ignoring the block boundaries for upper years
- Not truly applicable for programs that cannot do that
- Only experimented with one service
  - Not sure how will translate to multiple service programs
- Scheduling chaos on the back end for sure

We Got To Thinking…

- Could this unintentional byproduct of our program wide brainstorming – elimination of 24 hour shifts
  - Decrease fatigue?
  - Improve resident satisfaction?
  - REALLY decrease handoffs?

So we hurried up and surveyed everyone!

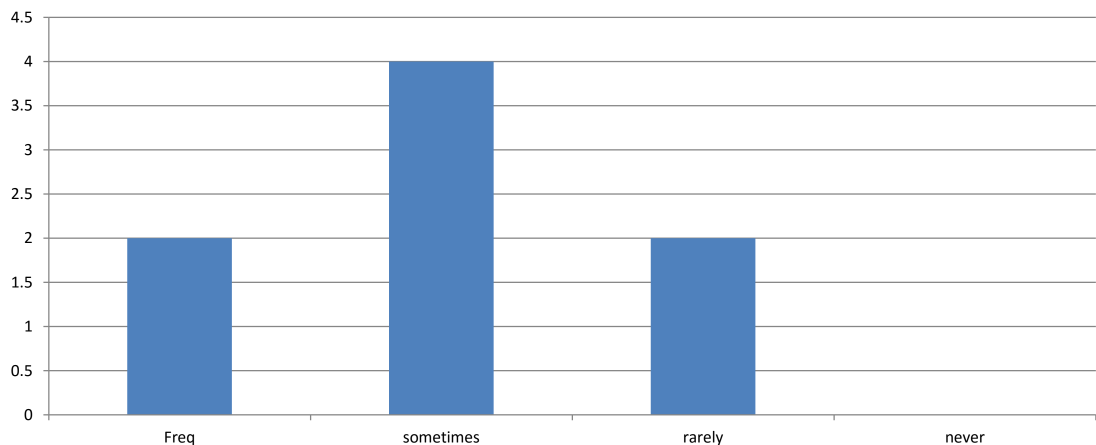
Initial Data – Fatigue, Handoffs

Data - Fatigue

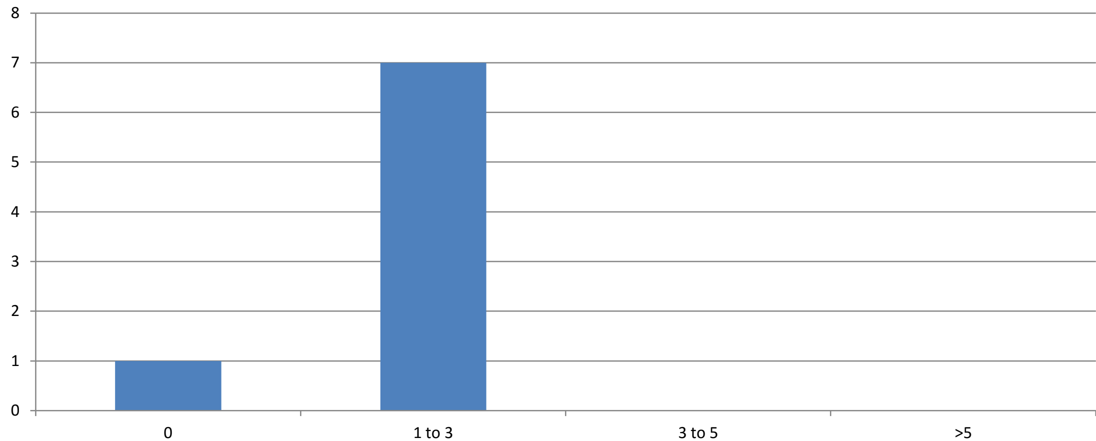
Poll Question #2

- What do you think…are residents more tired on 24s or 16s?
- A. 24s
- B. 16s
- C. these Millenials are tired all the time…

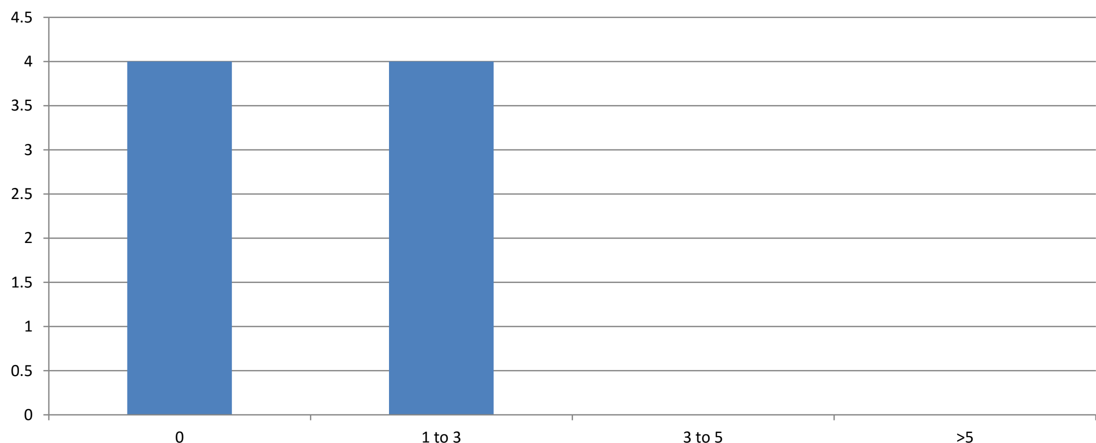
While working a 24 hour WHIP shift, how often is your ability to think critically negatively impacted by lack of sleep?

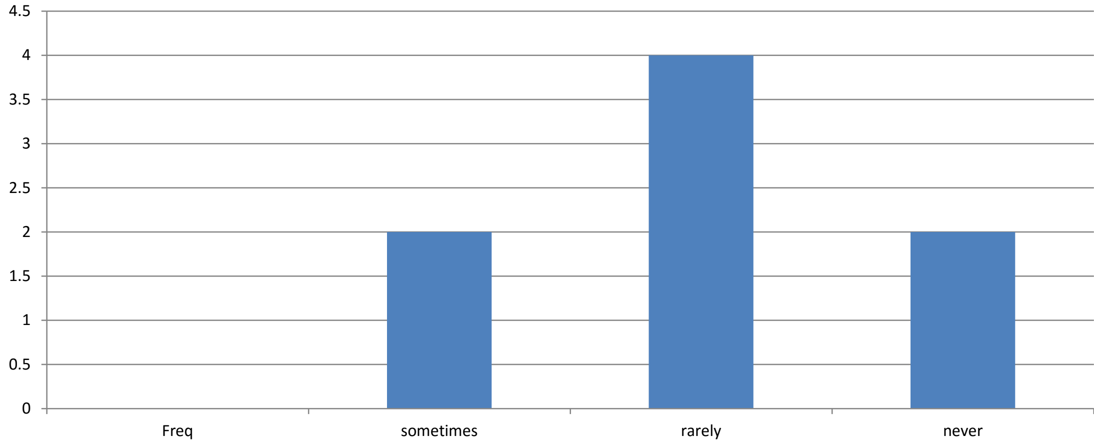


While working a 24 hour WHIP shift, how often have you had a near miss?



While working a 24 hour WHIP shift, how often have you had an adverse or unwanted patient outcome?




While working a 24 hour WHIP shift, how often has lack of sleep negatively impacted your ability to operate effectively in an RRT or code?
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Freq
sometimes
rarely
never
35
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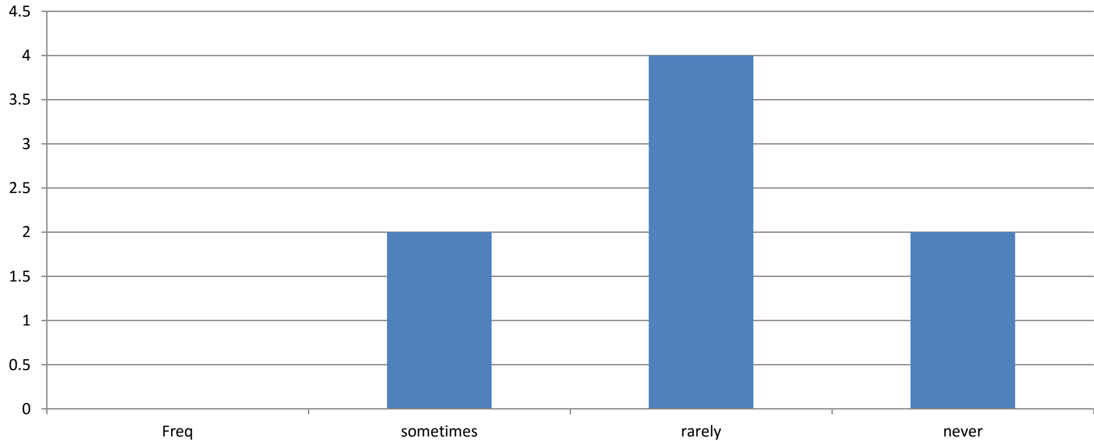
While working a 24 hour WHIP shift, how often has lack of sleep negatively impacted you ability to efficiently complete an admission for a common inpatient diagnosis?
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Freq
sometimes
rarely
never
36
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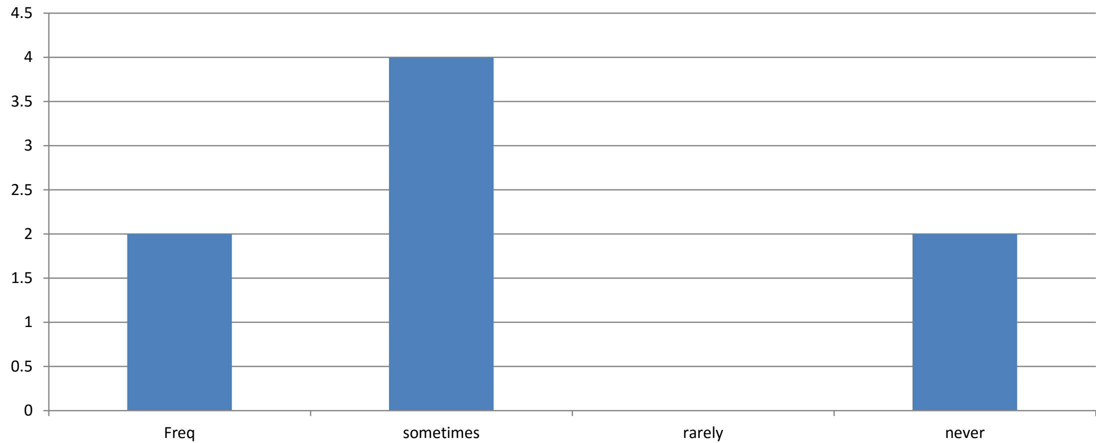
How often after completing a 24 hour WHIP shift has lack of sleep made you concerned about your ability to safely operate a car for your commute home?
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Freq
sometimes
rarely
never
37
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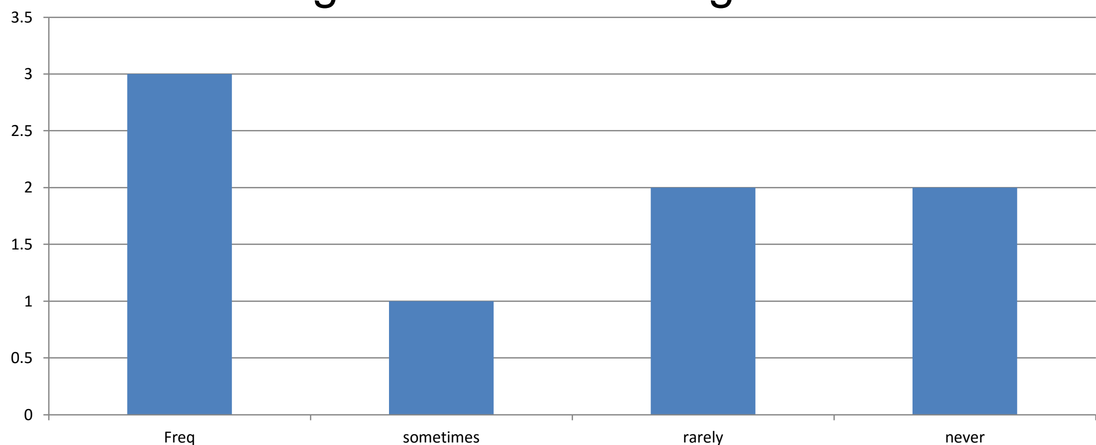
How often after completing a 24 hour WHIP shift has lack of sleep negatively impacted your ability to give an effective signout?
3.5
3
2.5
2
1.5
1
0.5
0
Freq
sometimes
rarely
never
38
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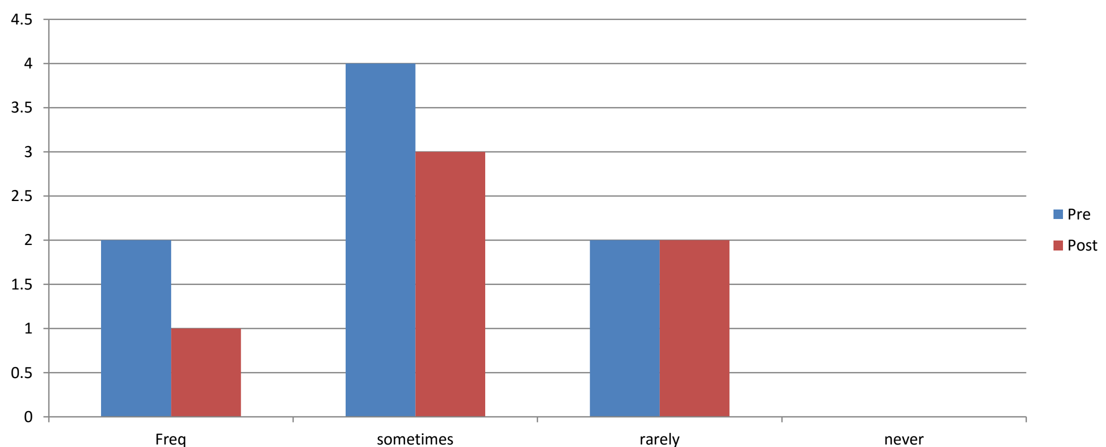
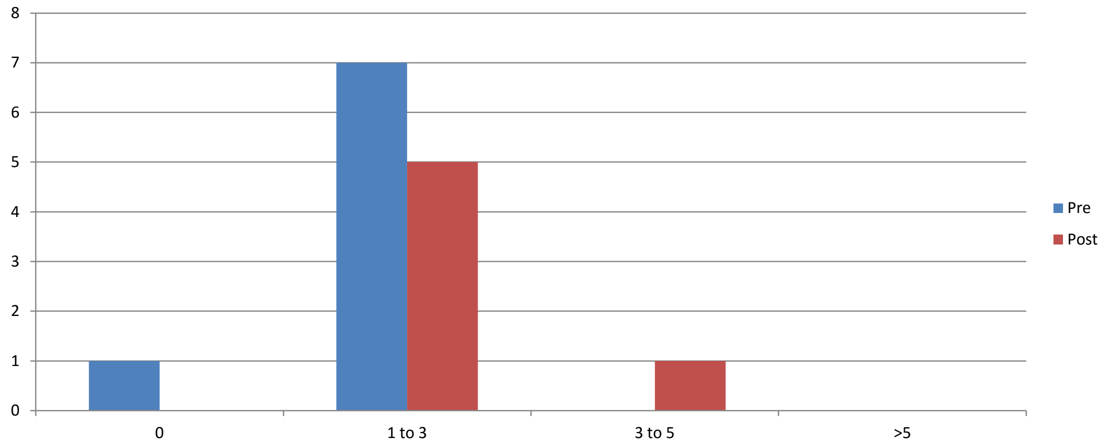
Now for Post - Intervention

While working a 24 hour WHIP shift, how often is your ability to think critically negatively impacted by lack of sleep?





While working a 24 hour WHIP shift, how often have you had a near miss?
8
7
6
5
4
3
2
1
0
0
1 to 3
3 to 5
>5
Pre
Post
41
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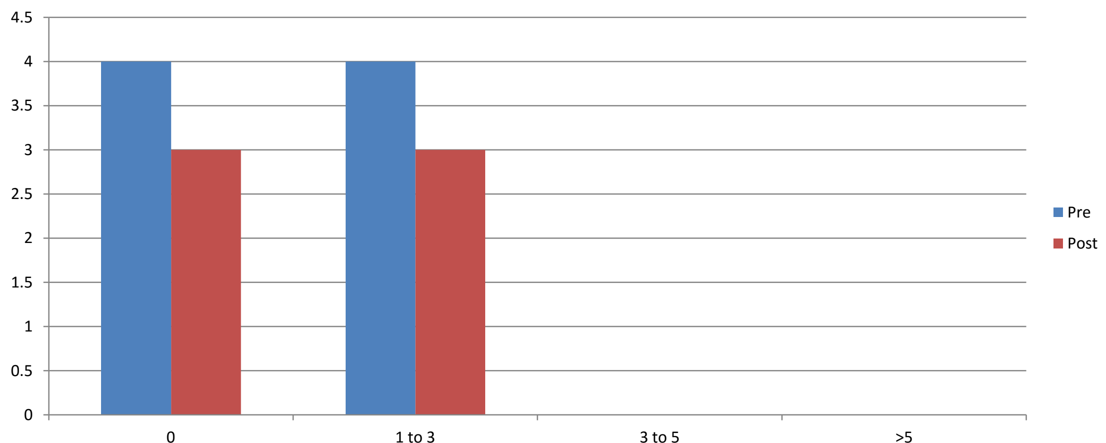

While working a 24 hour WHIP shift, how often have you had an adverse or unwanted patient outcome?
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
0
1 to 3
3 to 5
>5
Pre
Post
42
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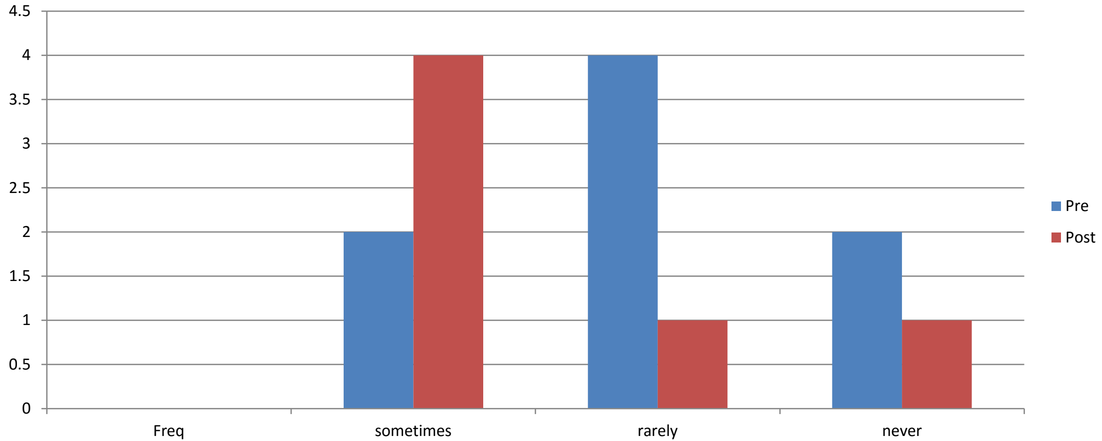
While working a 24 hour WHIP shift, how often has lack of sleep negatively impacted your ability to operate effectively in an RRT or code?



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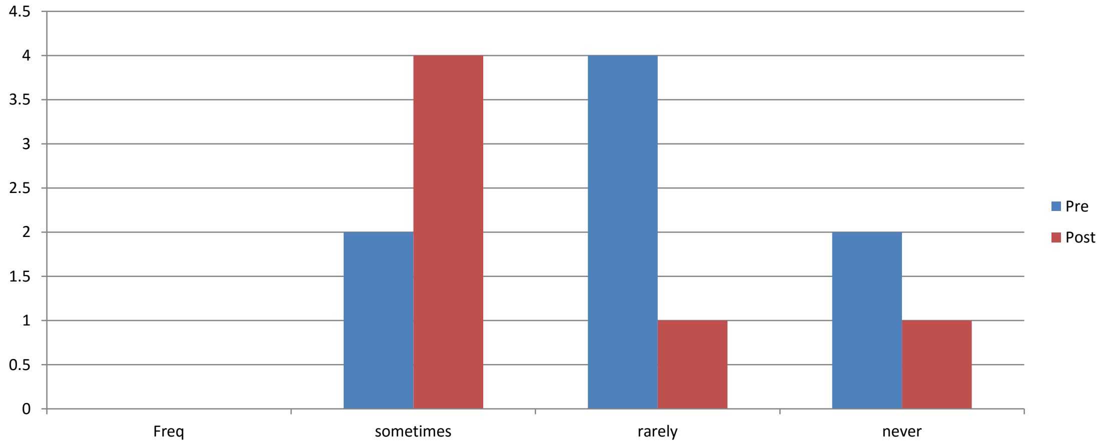

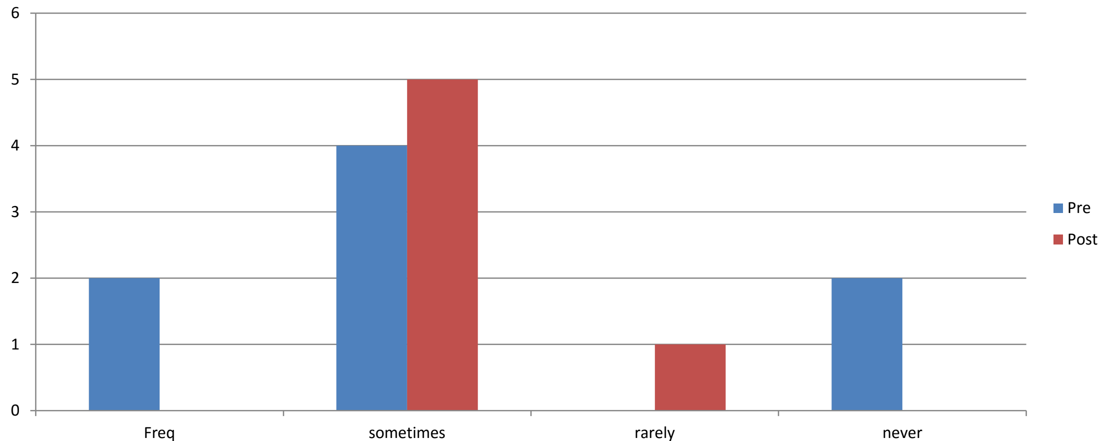
How often after completing a 24 hour WHIP shift has lack of sleep made you concerned about your ability to safely operate a car for your commute home?
6
5
4
3
2
1
0
Freq
sometimes
rarely
never
Pre
Post
45
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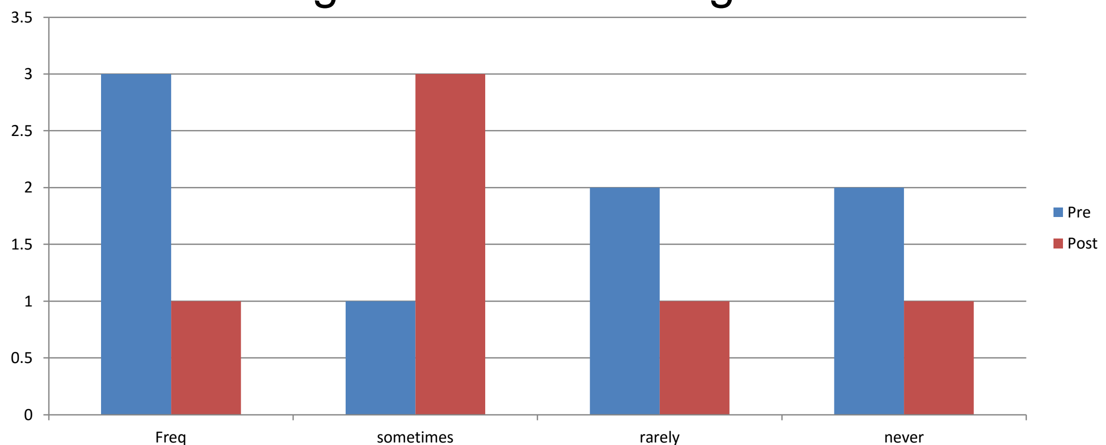
How often after completing a 24 hour WHIP shift has lack of sleep negatively impacted your ability to give an effective signout?
3.5
3
2.5
2
1.5
1
0.5
0
Freq
sometimes
rarely
never
Pre
Post
46
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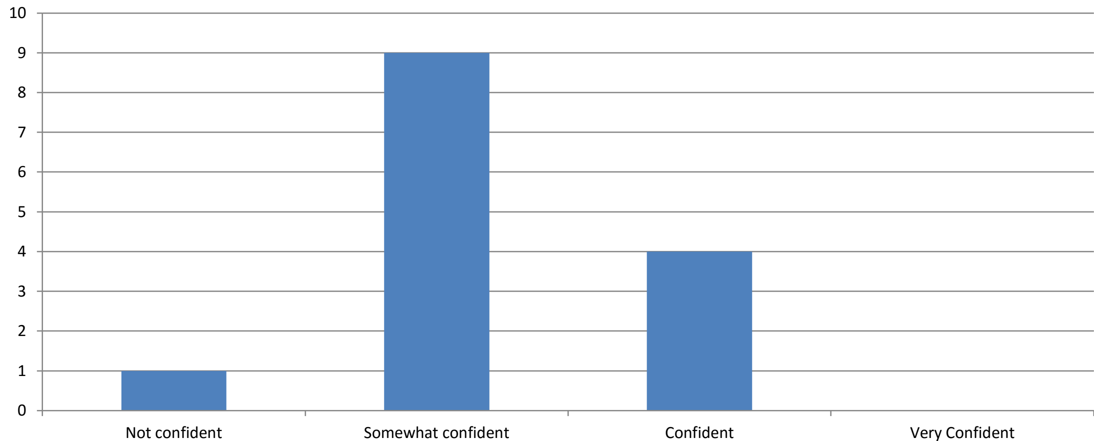
Themes about Fatigue

- ? Improved ability to think clearly
- ? Fewer near misses…or more?
- Improved functioning with RRTs/Codes
- Improved ability to perform admissions for common diagnoses
- Less sleepy driving
- Improved communication during signout

Data - Handoffs


When coming onto the WHIP service as a new team member, how confident are you with knowing the patient's current care plan after a sign out?
10
9
8
7
6
5
4
3
2
1
0
Not confident
Somewhat confident
Confident
Very Confident
49
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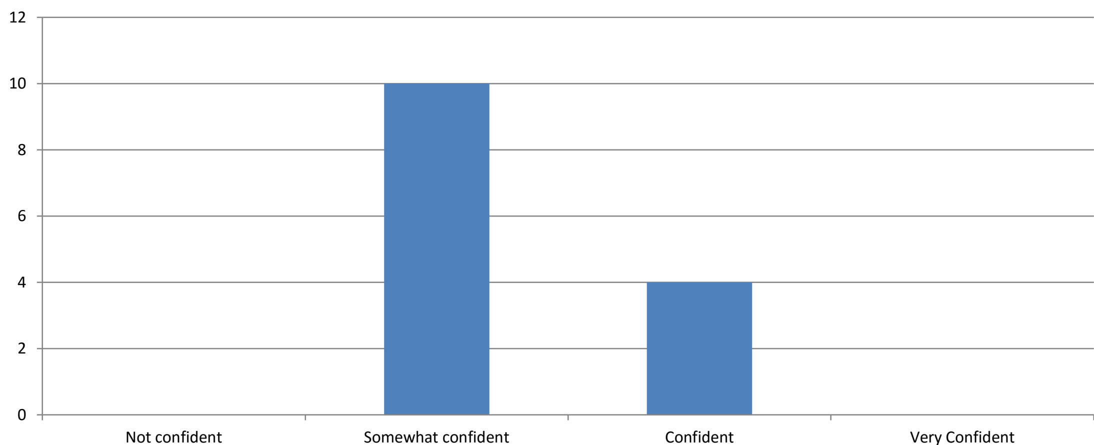
after having had sign out and assuming care for the whip service, how confident are you that you would effectively address an RRT or code on the patients?
12
10
8
6
4
2
0
Not confident
Somewhat confident
Confident
Very Confident
50
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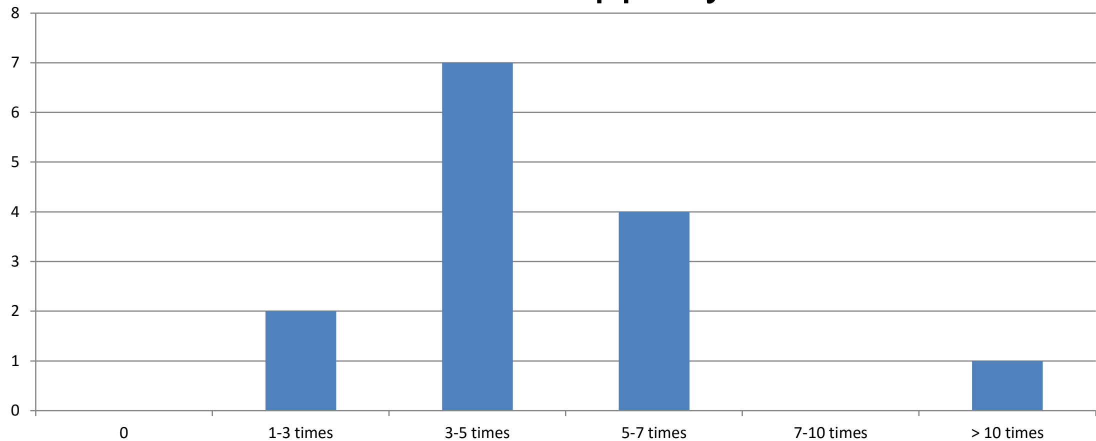
how many time in the last academic year did you hand off (sign out) the WHIP service to a brand new team of upper years
8
7
6
5
4
3
2
1
0
0
1-3 times
3-5 times
5-7 times
7-10 times
> 10 times
51
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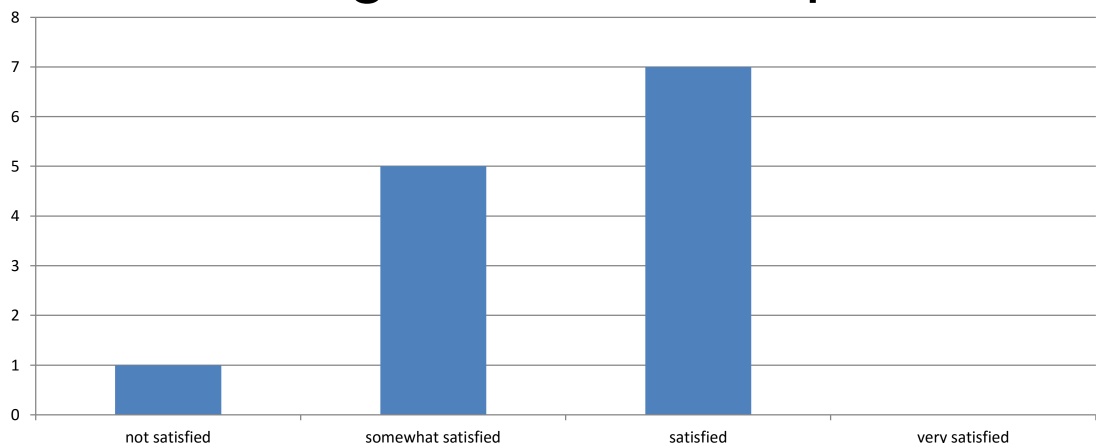
how satisfied are you with the current sign out/handoff process
8
7
6
5
4
3
2
1
0
not satisfied
somewhat satisfied
satisfied
very satisfied
52
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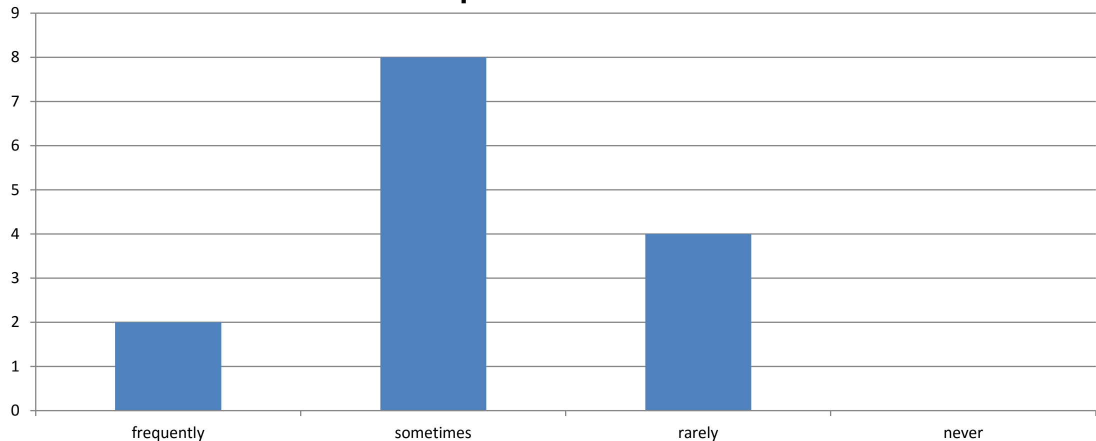
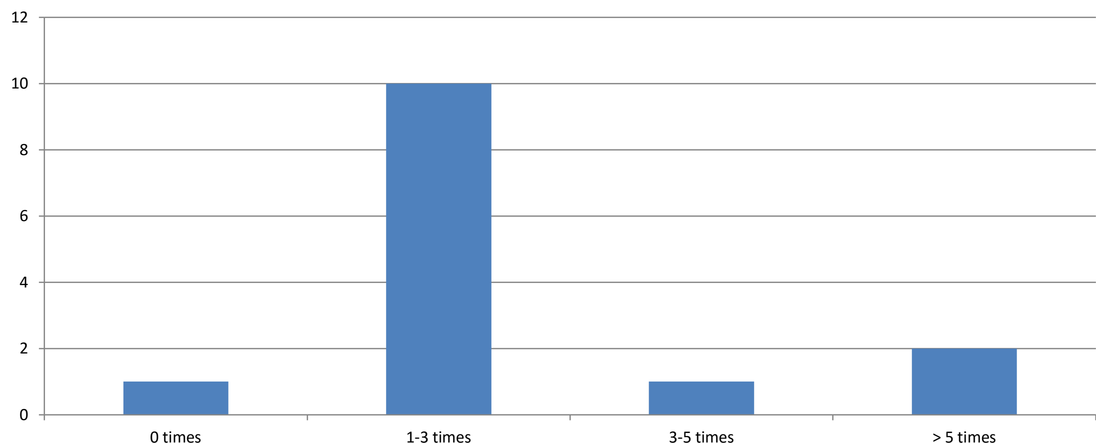
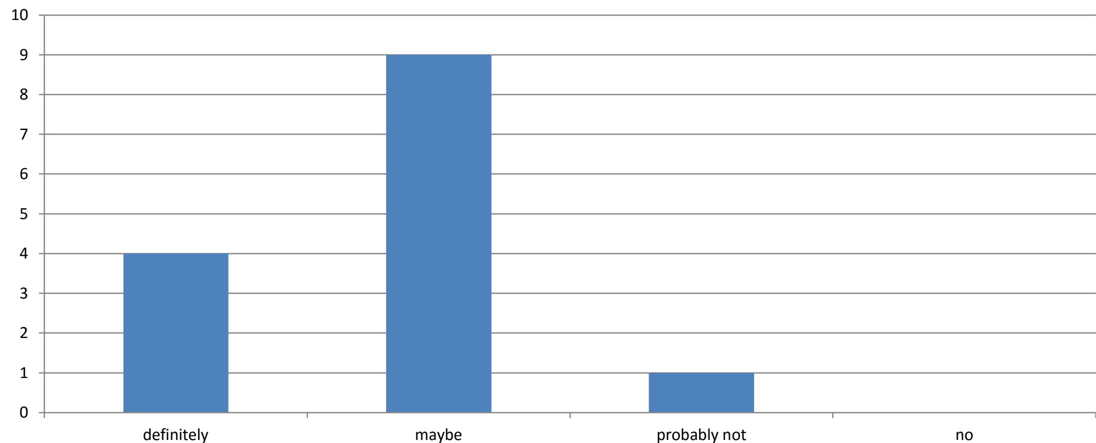

how often do you feel that there have been "near misses" or errors using the current sign out process?
9
8
7
6
5
4
3
2
1
0
frequently
sometimes
rarely
never


how many times has an important piece of patient information not been clearly communicated during a handoff and resulted in an adverse or unwanted patient outcomes?
12
10
8
6
4
2
0
0 times
1-3 times
3-5 times
> 5 times

do you think that having a standardized signout/handoff process would improve the whip signout process?



Post Survey Data → Handoffs

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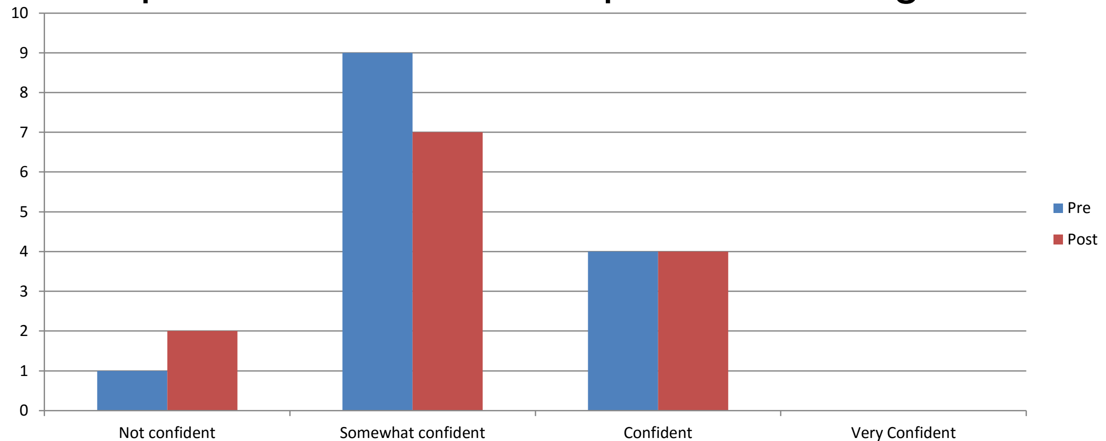

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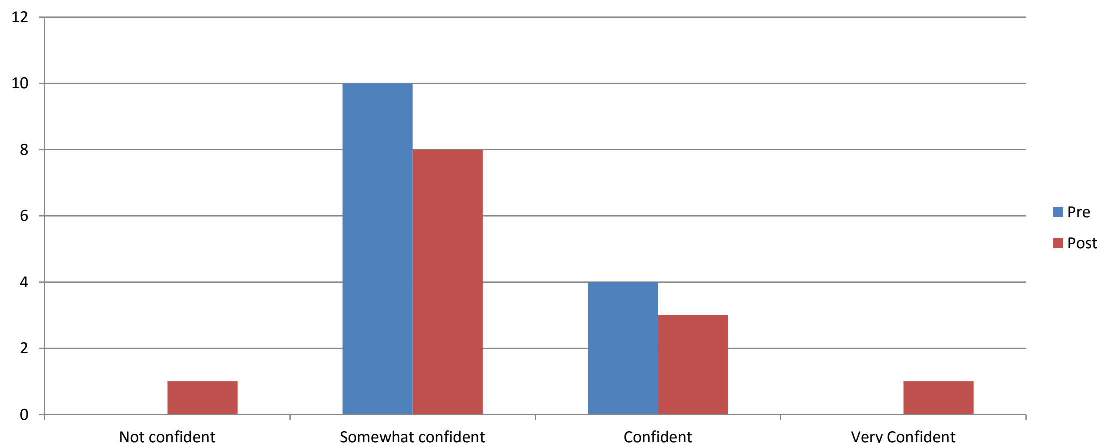

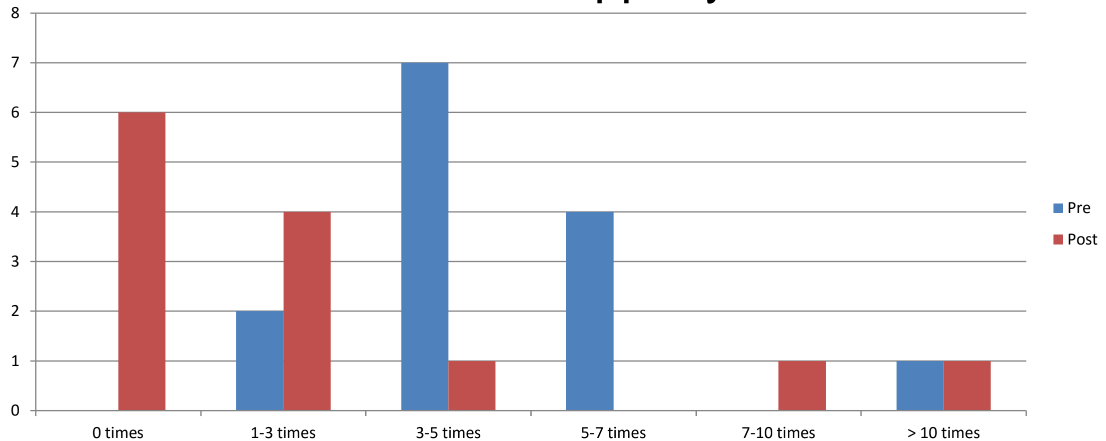
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6
5
4
3
2
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0
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1-3 times
3-5 times
5-7 times
7-10 times
> 10 times
Pre
Post
59
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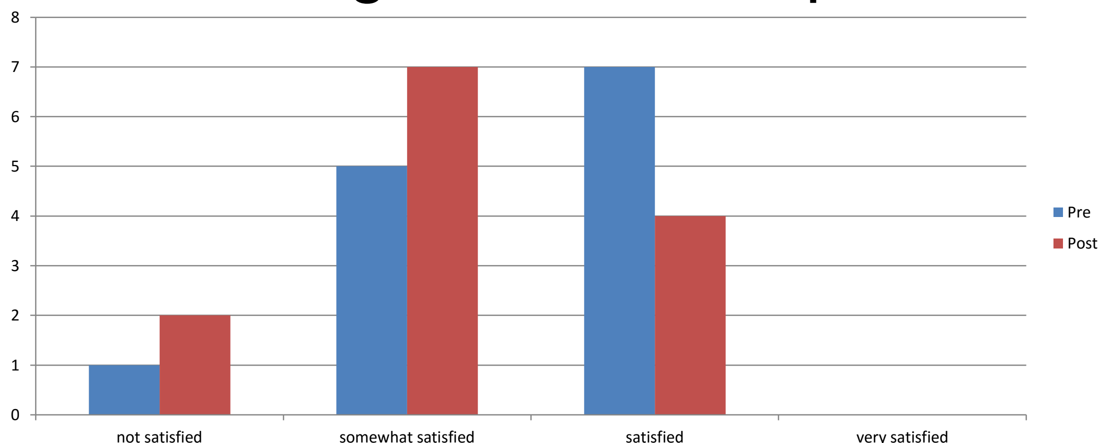
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8
7
6
5
4
3
2
1
0
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somewhat satisfied
satisfied
very satisfied
Pre
Post
60
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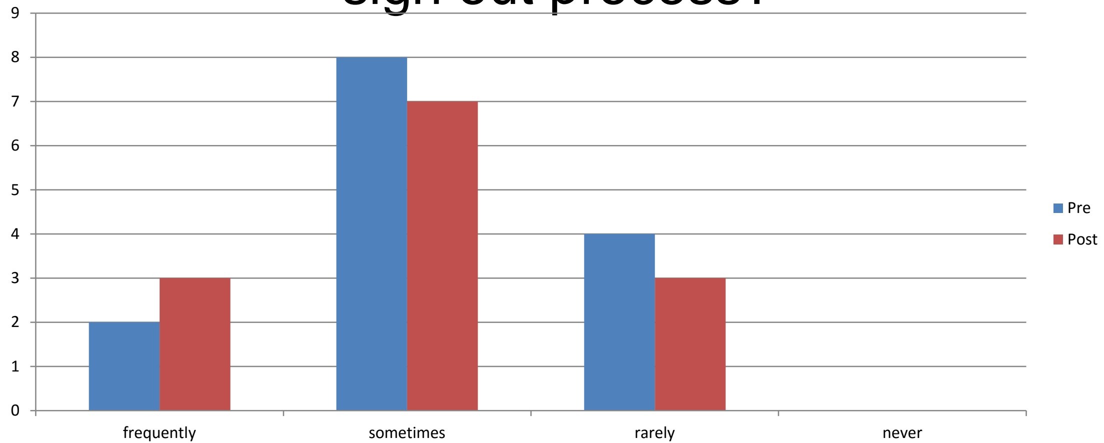
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9
8
7
6
5
4
3
2
1
0
frequently
sometimes
rarely
never
Pre
Post
61
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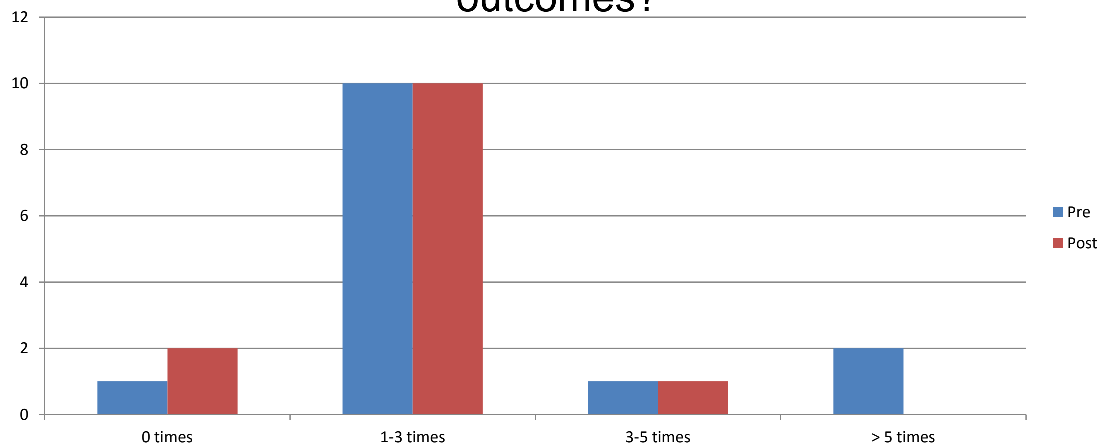
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12
10
8
6
4
2
0
0 times
1-3 times
3-5 times
> 5 times
Pre
Post
62
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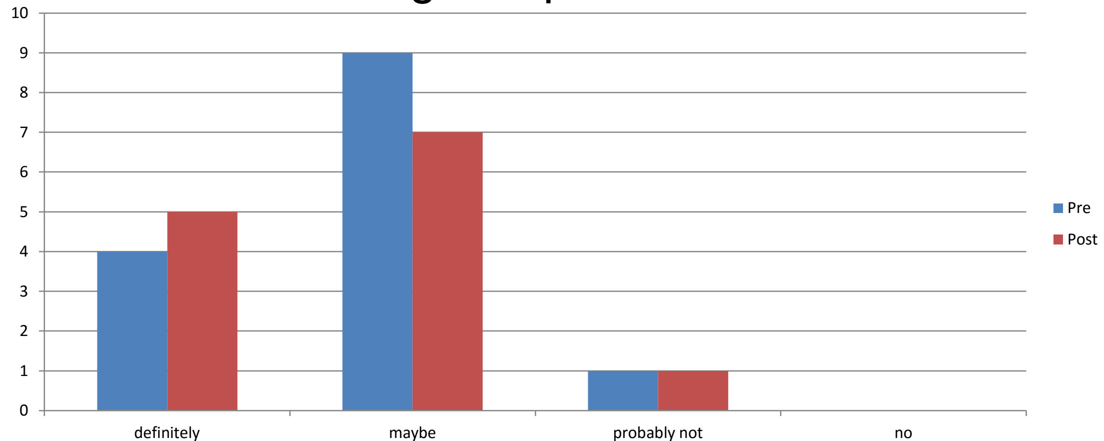
do you think that having a standardized signout/handoff process would improve the whip signout process?



Themes about Handoffs

- Slight shift to being more confident about patient's care plan and running RRT or code
- Fewer 'en masse' handoffs
- No change in satisfaction
- Possible trend towards increased communication

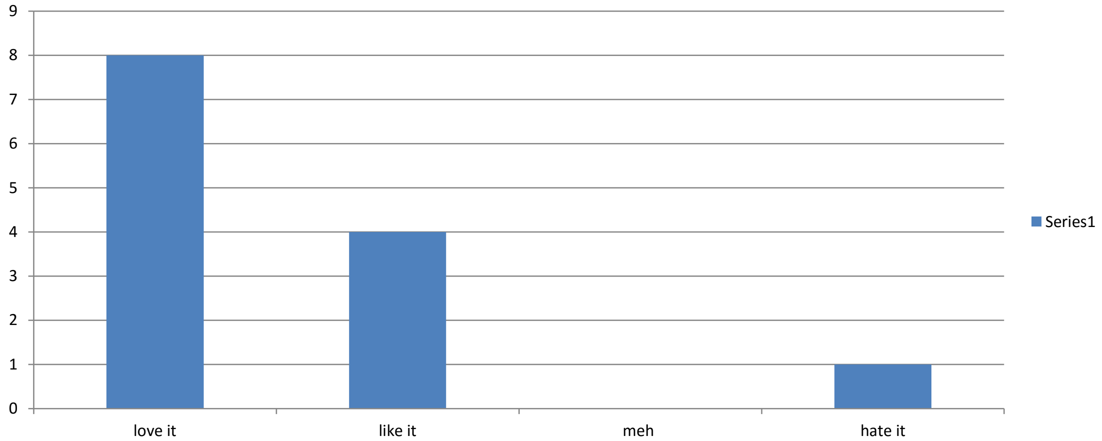
- This is a huge area of focus for ACGME
- We restructured our entire inpatient schedule…and didn't see a shift
- What does that mean to you?

Thoughts about Continual Crossover

Poll Question #3

- Continual Crossover…sparking any interested for you?
- A. OMG I want to use it let's meet in the bar after this talk to discuss
- B. Interesting…
- C. This is weird…what is happening in your program?

Data – Continual Crossover


what do you think of the continual crossover component of the whip redesign?
9
8
7
6
5
4
3
2
1
0
love it
like it
meh
hate it
Series1
69
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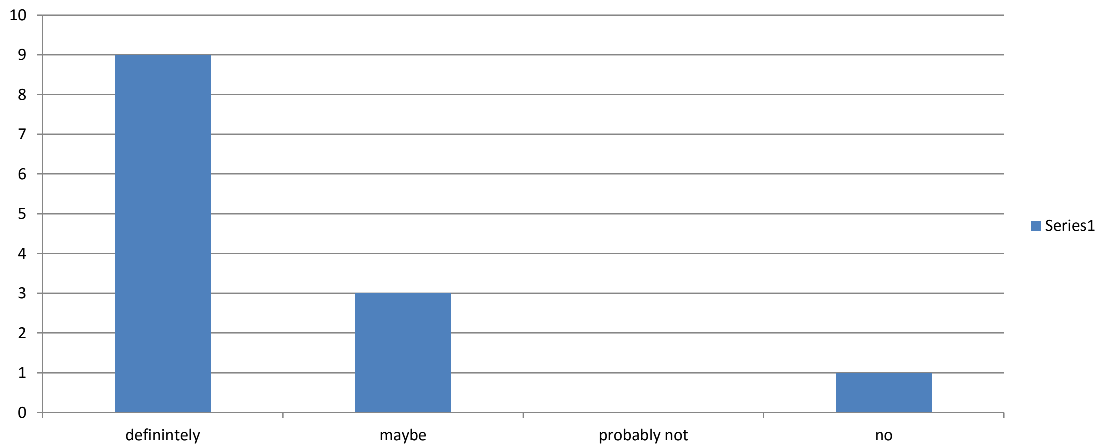
do you think that having a continual crossover process for whip has improved patient care?
10
9
8
7
6
5
4
3
2
1
0
definintely
maybe
probably not
no
Series1
70
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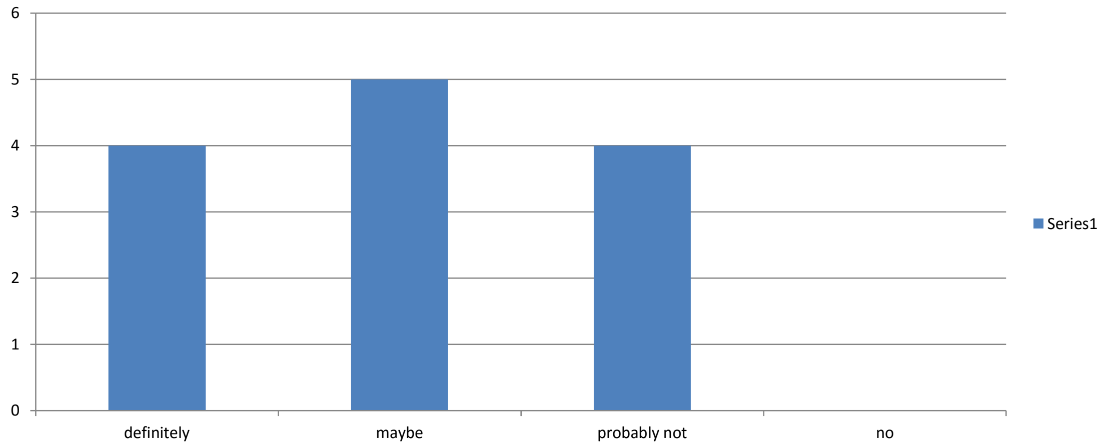
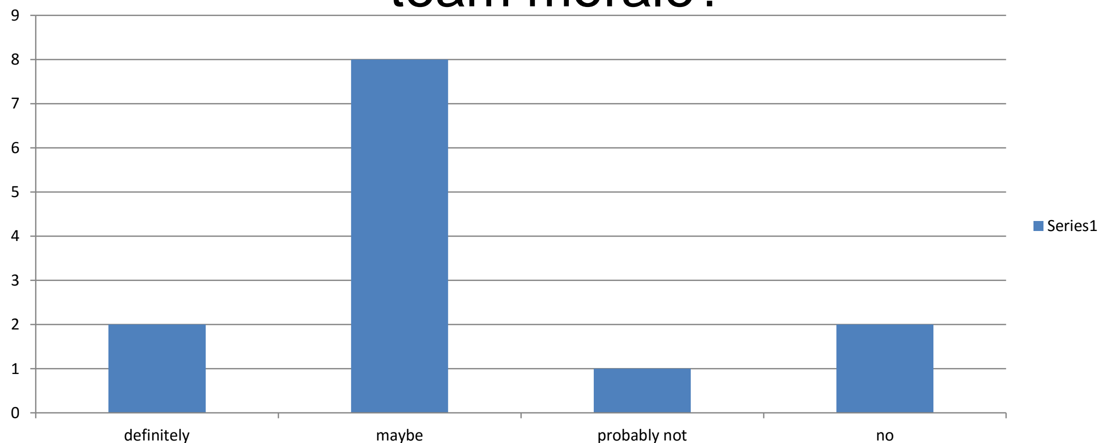

do you think that having a continual crossover process for whip has decreased hand offs?
6
5
4
3
2
1
0
definitely
maybe
probably not
no
Series1
71
AMERICAN ACADEMY OF FAMILY PHYSICIANS


do you think that having a continual crossover process for whip has improved team morale?
9
8
7
6
5
4
3
2
1
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definitely
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probably not
no
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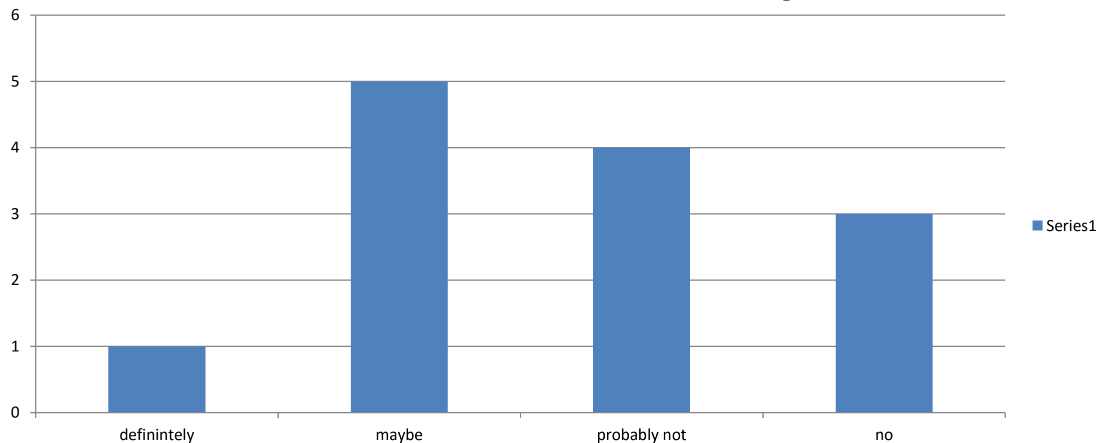
would you change anything about the continual crossover process?



What Would You Change?

- Shorter sign-out. more time updating sign-out and less actual signing out
- Sign-out needs improvement. There is too much superfluous detail that makes it hard to jump right in.

What Would You Change (con't)

- More people on service so people can work less days in a row
- Working those 14 days straight with no days off on whip is really difficult and it takes a toll on the team. People who are normally pleasant and happy end up miserable and it effects the way we work together as a team. There has to be a way to incorporate one day off or some kind of change in the total hours over the two weeks that can improve our mental well being while on whip and prevent the burnout that we all inevitably feel while we are on service.

What Would You Change (con't)

- I need one day off in the middle :)
- I would bring back 24s to decrease upper year hand offs
- Not sure if doing 24 hour shifts would be beneficial...some seniors/grads seem to think so

So, how did we do?

Did we decrease fatigue?

Did we improve satisfaction?

Did we decrease handoffs?

Sooooo…

- We did a project for transitions of care…
- But the more compelling (of the very small sample size) data is about fatigue
- Do we keep doing it this way?
- Do we go back to 24s?
- Rules have relaxed…

- Better for patient care to have less en masse handoffs
- Somehow need a day off in between…

Poll Question:

Enter your email address to be included in any follow-up communication from the presenter(s).

Social Q & A

Mucho Credit to our Chief Residents

Jeremy Cristol, MD
Jason Koch, DO
Mike Maloney, MD

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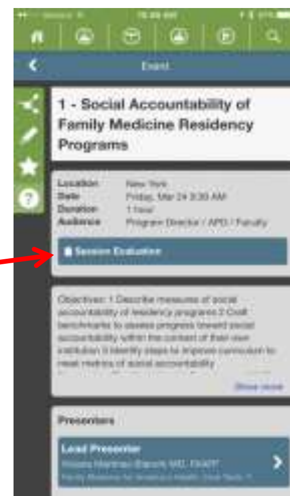
Please…

Complete the session evaluation.



Thank you.

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