

# ASCO Quality Training Program

Project Title: Reducing burnout among UVA Hem/Onc fellows

Presenter's Name: Pooja Mehra, MD

Institution: University of Virginia

Date: 12/5/19

# Institutional Overview

- University of Virginia Medical Center is a 612-bed academic hospital with the adjacent NCI-designated Emily Couric Clinical Cancer Center located in Charlottesville, Virginia.
- The Hematology/Oncology fellowship has 9 total fellows, 3 per year.
- 1st year fellows do 7 months of inpatient service rotations, 2nd year fellows do 4 months, and 3rd year fellows do 2 months.
- Inpatient service rotations include Inpatient Malignant Hematology service, Non-malignant Hematology consults, and Oncology consults.
- During each of these service months, fellows have 8-12 call nights, from 5 pm-7 am.
- While on electives, there are no call nights and no weekend coverage.

# Team members

Pooja Mehra, MD: Project Lead and 2nd year Hem/Onc fellow

Trish Millard, MD: Core Team Member and medical oncologist

Richard Hall, MD, MS: Core Team Member, medical oncologist, and fellowship program director

Michael Williams, MD: Project Champion and Chief of the Division of Hematology/Oncology at UVA

QTP improvement coaches: Vedner Guerrier, MBA and Amy Morris, PharmD

# Problem Statement

During the past year, 100% of Hematology/Oncology fellows at the University of Virginia have felt overworked and stressed during in-patient call rotation, which contributes to their feeling of burnout.

# Baseline data summary

Item	Description
Measure:	<i>Call specific survey with questions evaluating time with family, ability to exercise, adequate sleep time, adequate nutrition, time to study, time for going out with friends or family, stress level.</i>
Patient population: (Exclusions, if any)	<i>UVA Hem/Onc fellows</i>
Calculation methodology: (i.e. numerator & denominator)	<i>Likert scale of each survey, each answer is assigned a score 0-10. Maximum score on survey is 120 and higher scores indicate more time/ability to perform the measures listed above.</i>
Data source:	<i>Surveys of UVA Hem/Onc fellows</i>
Data collection frequency:	<i>Surveys prior to the change in call structure and afterwards. We will plan to repeat this survey in the Spring again</i>
Data limitations: (if applicable)	<i>Subject to recall bias, small numbers of participants, confounding factors unrelated to call structure change that could affect the call survey.</i>

# Call Specific Survey

1. In the past month, how often were you able to spend what you consider adequate quality time with a loved one?
2. In the past month, how often were you able to spend what you consider adequate time sleeping?
3. In the past month, how often were you able to spend what you consider adequate time relaxing?
4. In the past month, how often were you able to spend what you consider adequate time studying Hem/Onc or doing research?
5. In the past month, how often were you able to spend what you consider adequate time with each patient encounter?
6. In the past month, how often were you able to spend what you consider adequate time preparing for continuity clinic?

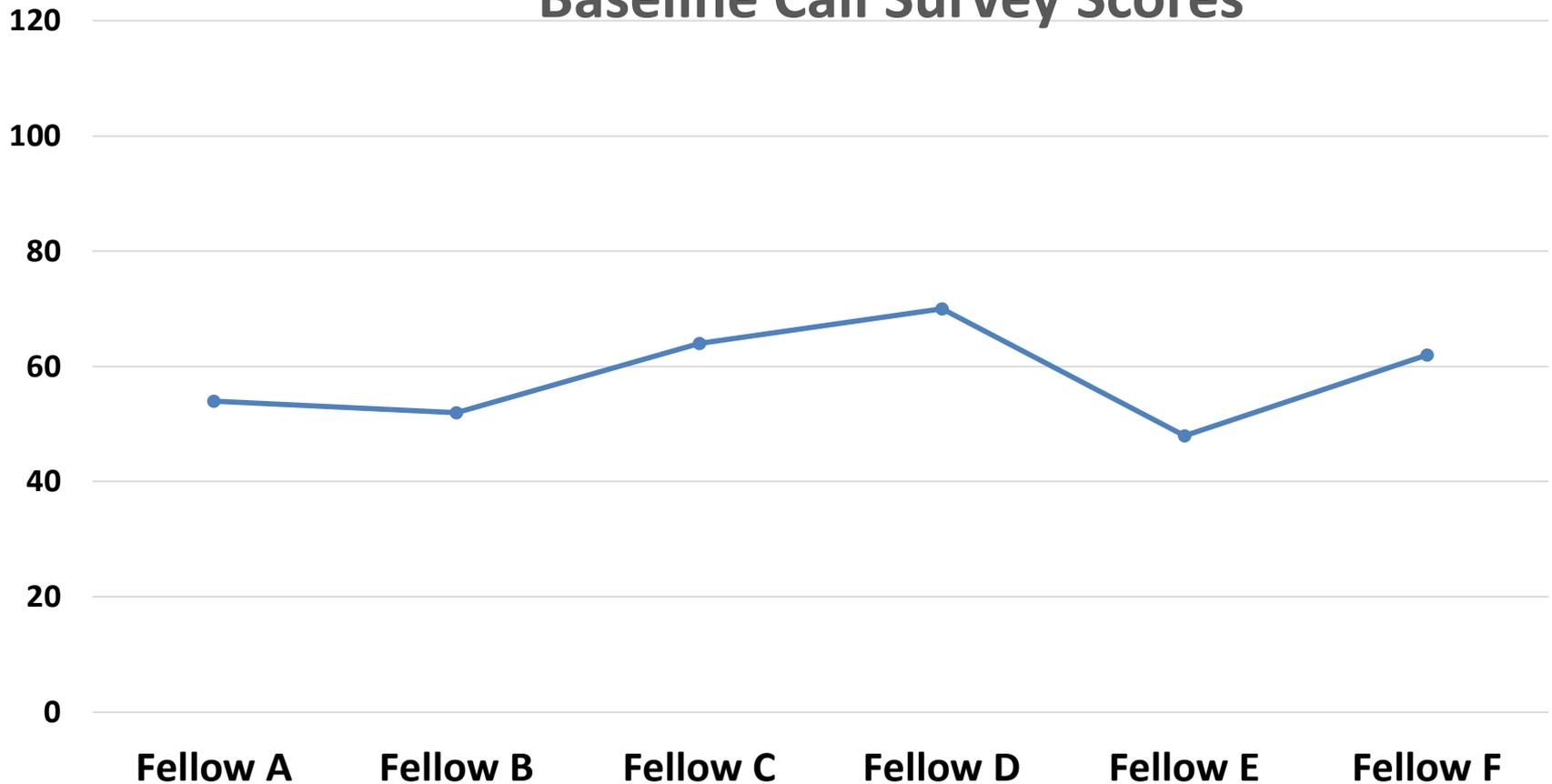
# Call Specific Survey

7. In the past month, the frequency of evening call in a given week left me enough time to complete my personal and professional tasks adequately.
8. In the past month, how often did you feel that you had the ability to comfortably handle the volume of work on call?
9. In the past month, how often did you feel well-rested at work?
10. In the past month, how often were you able to exercise three times a week?
11. In the past month, how often were you able to eat healthy meals when desired?
12. In the past month, how often did you feel you were truly helping a patient?

# Baseline data

Survey  
Score

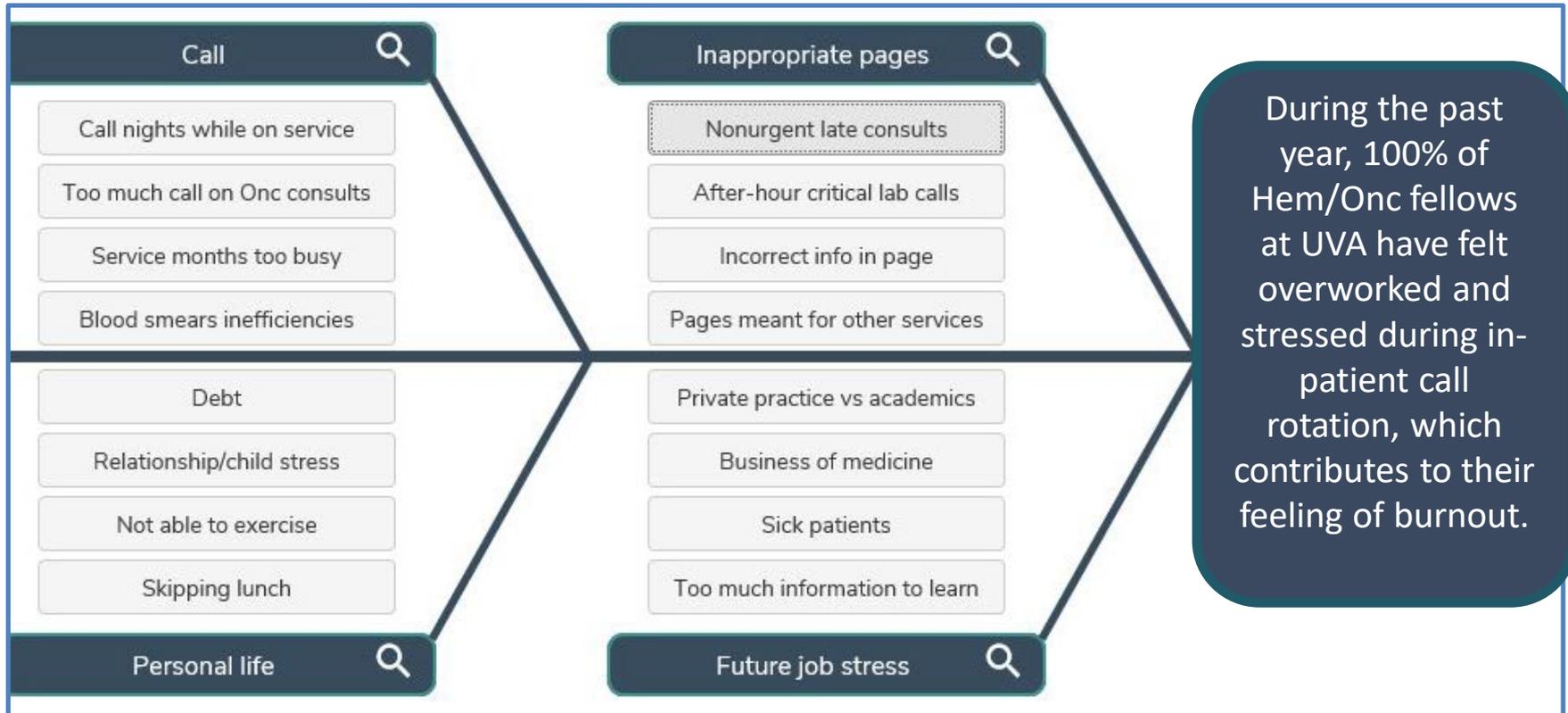
## Baseline Call Survey Scores



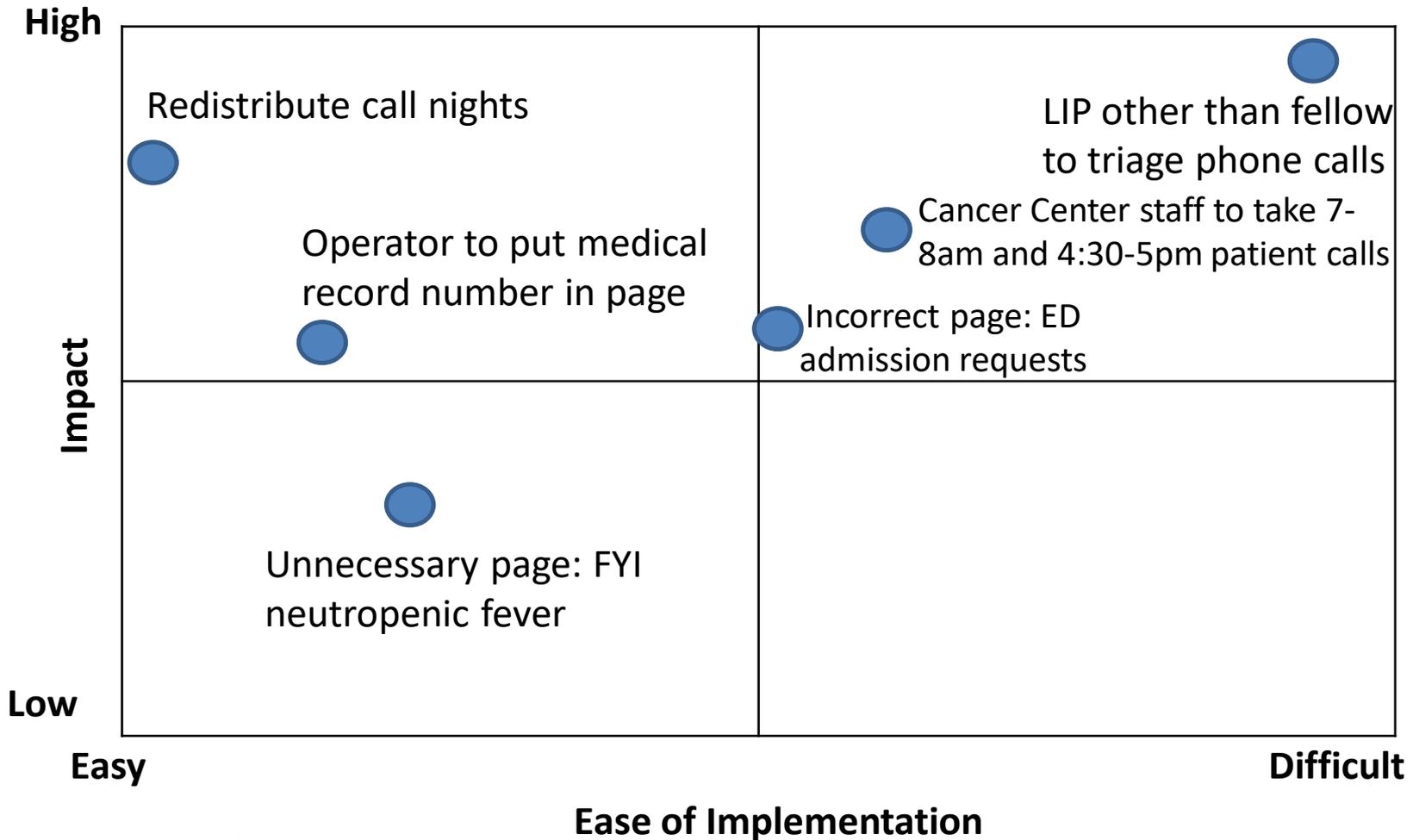
# Aim Statement

By 12/5/19, we plan to reduce the rate of University of Virginia Hematology/Oncology fellows feeling overburdened while on inpatient rotations by 33%.

# Cause and Effect diagram



# Countermeasures



# Diagnostic Data summary

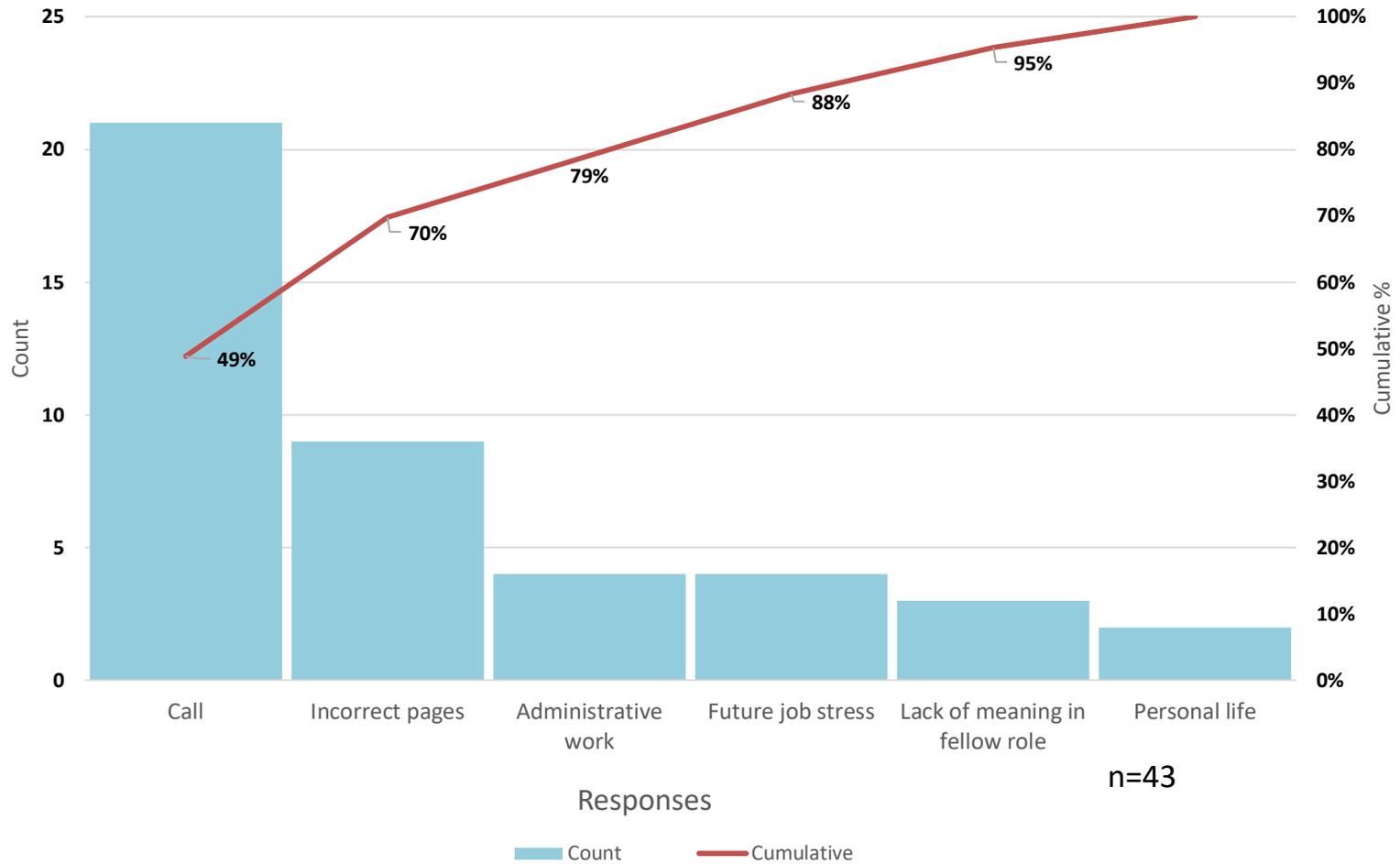
Item	Description
Measure:	Number of pages with medical record number (MRN) missing
Patient population: <i>(Exclusions, if any)</i>	Pages to the UVA Hem/Onc fellow
Calculation methodology: <i>(i.e. numerator &amp; denominator)</i>	Calculate total number of pages for August and September with missing MRNs and then calculate the number of pages for November and December
Data source:	Paging log
Data collection frequency:	Will collect data in January 2020
Data limitations: <i>(if applicable)</i>	N/A

# Diagnostic Data summary

Item	Description
Measure:	Inappropriate pages: Emergency room pages sent to Hem/Onc fellow instead of to Oncology resident for admission requests
Patient population: <i>(Exclusions, if any)</i>	UVA Hem/Onc fellows
Calculation methodology: <i>(i.e. numerator &amp; denominator)</i>	Paging log review, pages say “Consult for admission” when they are meant for the admitting resident
Data source:	Paging log
Data collection frequency:	Will review in January 2020 as change not implemented by ER chief resident yet.
Data limitations: <i>(if applicable)</i>	ER chief resident to discuss whether change in order in Epic will make these errors less frequent. ER chief to stress to rotating residents to use the appropriate paging number

# Diagnostic Data

## UVA Fellowship Burnout Contributors



## *Test of Change*

# PDSA Plan

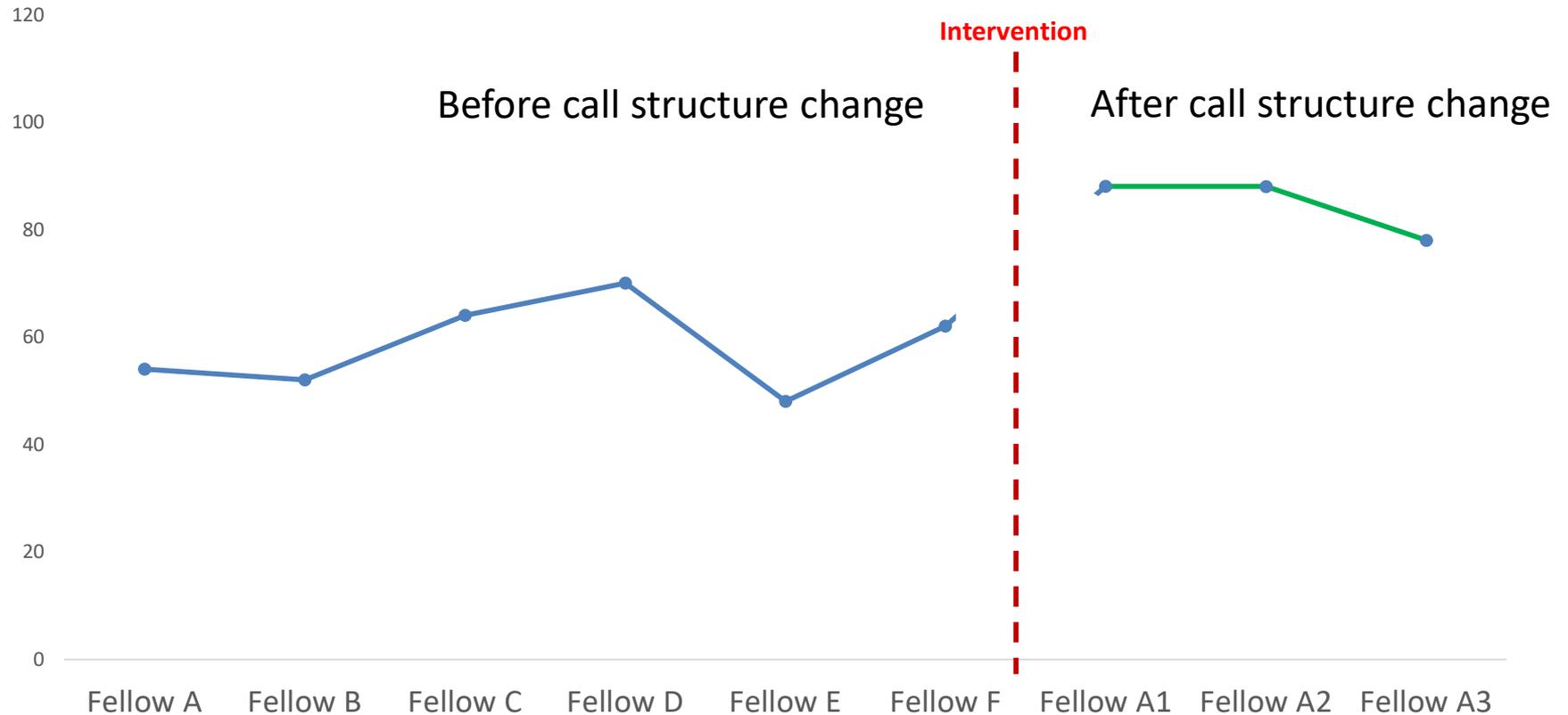
Date	PDSA Description	Result
9/23/19-12/2019	Call structure change	Survey scores (albeit small numbers) suggest the new call structure is less stressful
9/23/19-1/2020	Ask call sheet operators to include medical record numbers in pages	We have baseline data for Aug/Sept but need data for Nov/Dec.
1/2020	Meet with ER chief resident discuss changing name of admission request in the Epic order to make it clearer	Pending
2/2020-4/2020	Call structure change	Pending

# Outcome Measure

## Change data

### Call Survey Scores of UVA Hem/Onc Fellows from September through November

Survey Score



*Next steps*

# Sustainability Plan

Next Steps	Owner
Repeat call structure change from February to April 2020	Pooja Mehra Trish Millard
See whether operators are putting medical record numbers in pages	Richard Hall
Meet with ER chief resident about changing order in Epic to make it clearer for the ER residents and to reduce the number of inappropriate pages we get.	Pooja Mehra

# Conclusion

- Preliminary results suggest that the change in call structure improved overall scores on our call survey, suggesting we may have a change that will reduce a component of burnout among UVA Hem/Onc fellows.
- We lack validated surveys to assess burnout in trainees.
- There are many confounders that influence survey scores, making it hard to extrapolate whether the call structure change is what actually is influencing the surveys.
- Making a systemic change requires buy in from all parties involved (for example, we asked the operators to change their work flow a little bit, which would help us, but the change was not done)
- It's hard to fix the system without having extra resources (personnel or money), when one of the main problems is overwork or doing work that could be done by someone else.

# Reducing burnout among UVA Hem/Onc fellows

ASCO Quality Training Program July 2019- December 2019

**AIM:** By 12/5/19, we plan to reduce the rate of University of Virginia Hematology/Oncology fellows feeling overburdened while on inpatient rotations by 33%.

## INTERVENTION:

- We elicited sources of burnout among UVA Hem/Onc fellows and found that call was the most frequent source of burnout, so we changed the call structure so that we do not do all of our calls during our busy service months. We redistributed calls to the elective months, which are less stressful and busy overall.
- We created a survey with pertinent questions (time with family, eating, sleeping, exercising) to assess whether spreading out the call structure improved these metrics that would be associated with burnout and gave surveys before and after this call structure change to see if there was any benefit.

## TEAM:

Pooja Mehra, MD, Hem/Onc fellow

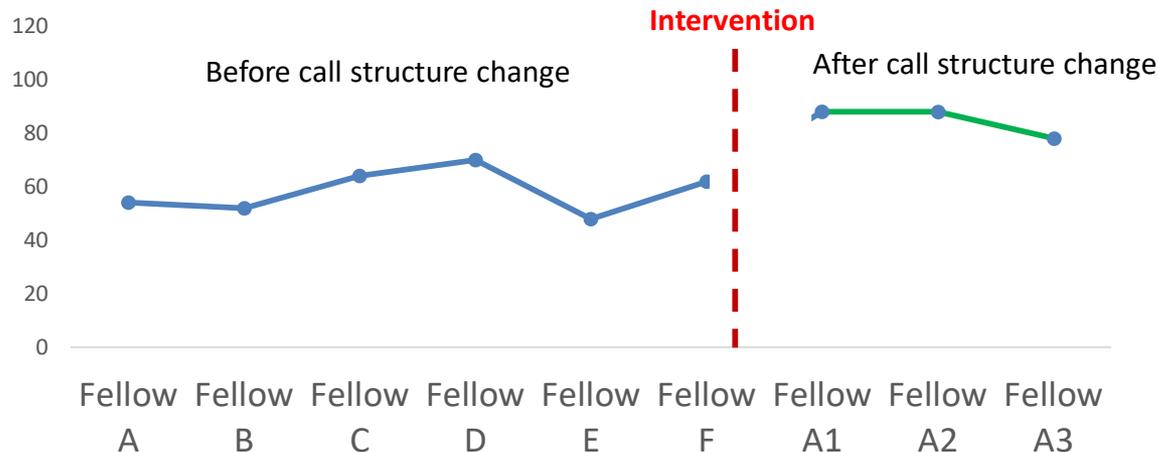
Trish Millard, MD, Oncologist  
Richard Hall, MD, Oncologist  
University of Virginia

## PROJECT SPONSORS:

Michael Williams, MD, University of Virginia

## RESULTS:

### UVA Hem/Onc fellow call survey scores before and after call structure change



**CONCLUSIONS:** Preliminary results suggest that the change in call structure improved overall scores on our call survey, suggesting we may have a change that will reduce a component of burnout among UVA Hem/Onc fellows.

## NEXT STEPS:

We plan to repeat this call structure change again in the Spring to see if it yield similar results. If it does, then we may change the call structure for next academic year.

We will discuss with operators about how to reduce the number of pages without MRNs.

We will discuss with the ER residents how to reduce the number of inappropriate pages we get.