

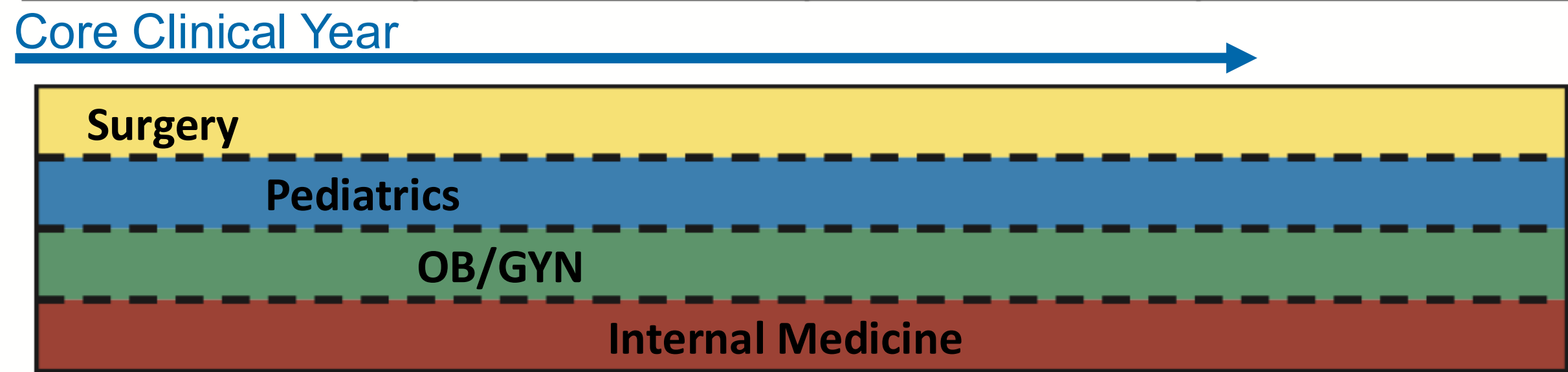
## Background

- Disparities in assessment are well established in clinical education (citation)
- Efforts to mitigate bias and disparity in clinical education have mostly focused on eliminating tiered grading (citation)
- Fostering meaningful faculty-student relationships may mitigate clinical assessment disparities
- Longitudinal Integrated Clerkships (LIC) allow students to develop strong relationships with their preceptors over the course of an entire year while also completing brief inpatient block experiences (immersions)
- The University of Colorado School of Medicine transitioned to an all-LIC curriculum beginning in 2021 creating a unique opportunity to test the proposal that meaningful relationships mitigate disparities in assessment

### Sequential Discipline-specific



### Longitudinal Integrated



## Aim

- To determine if students perceive assessment bias and accuracy differently between longitudinal and immersion assessors

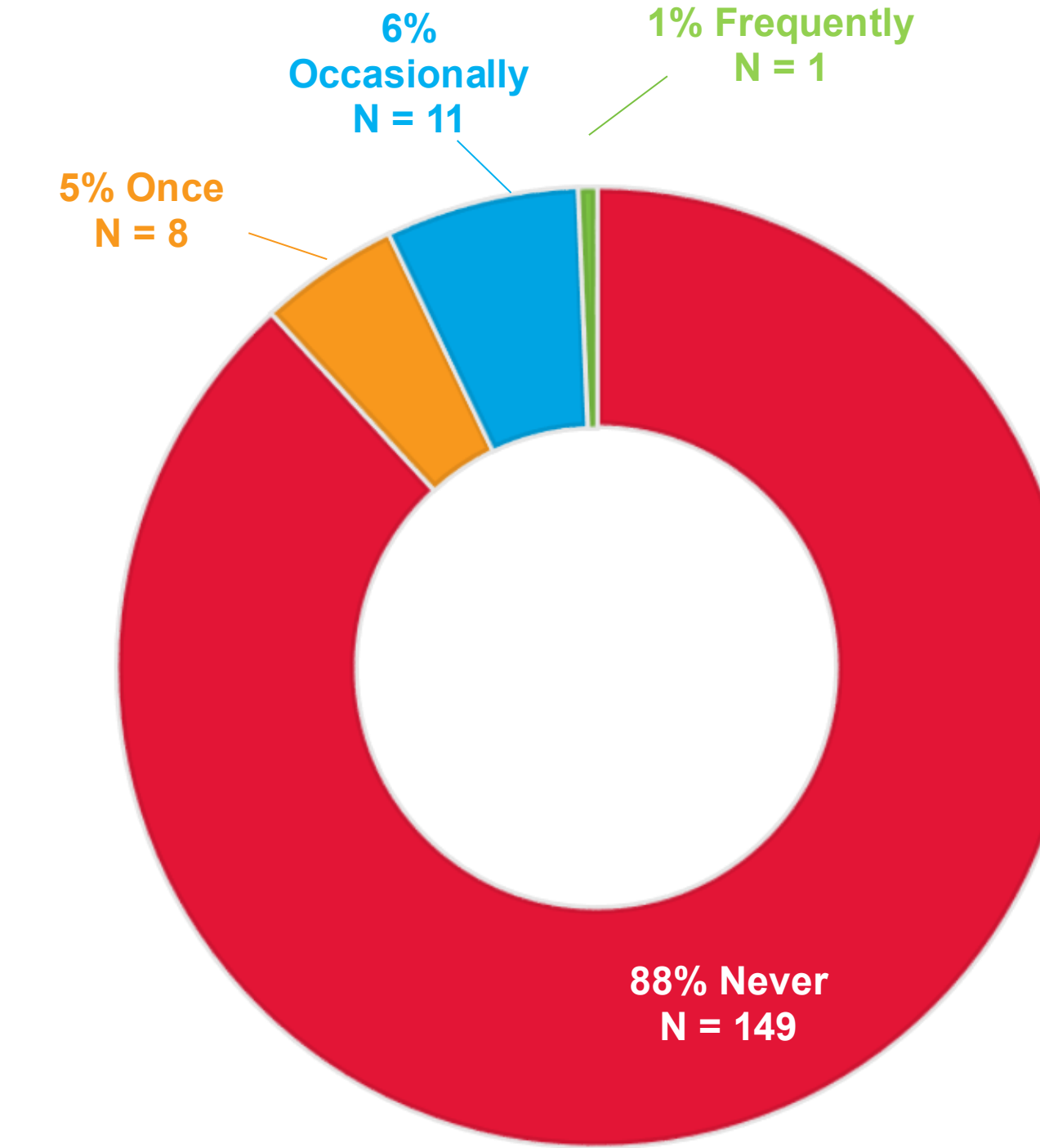
## Methods

- Two specific questions were added to an existing survey administered to second year medical students at the end of their core clerkship year prior to release of final clerkship grades
- How often do you believe you may have experienced bias in your assessments related to your social identity characteristics (e.g., race, gender)?
- How accurate were your assessments in describing your clinical skills?
- Students were asked to answer both questions twice – once referring to assessment from their longitudinal preceptors and once referring to their immersion preceptors
- A follow-up open-ended question was provided if students did endorse bias asking them to describe how they believed their social identity characteristics impacted their assessments.
- We compared differences between longitudinal and immersion preceptors using Wilcoxon Signed Rank test
- We analyzed free text responses with inductive thematic analysis
- We compared the total number of honors grades (0-6) between students who reported bias and no bias using Wilcoxon Signed Rank test.

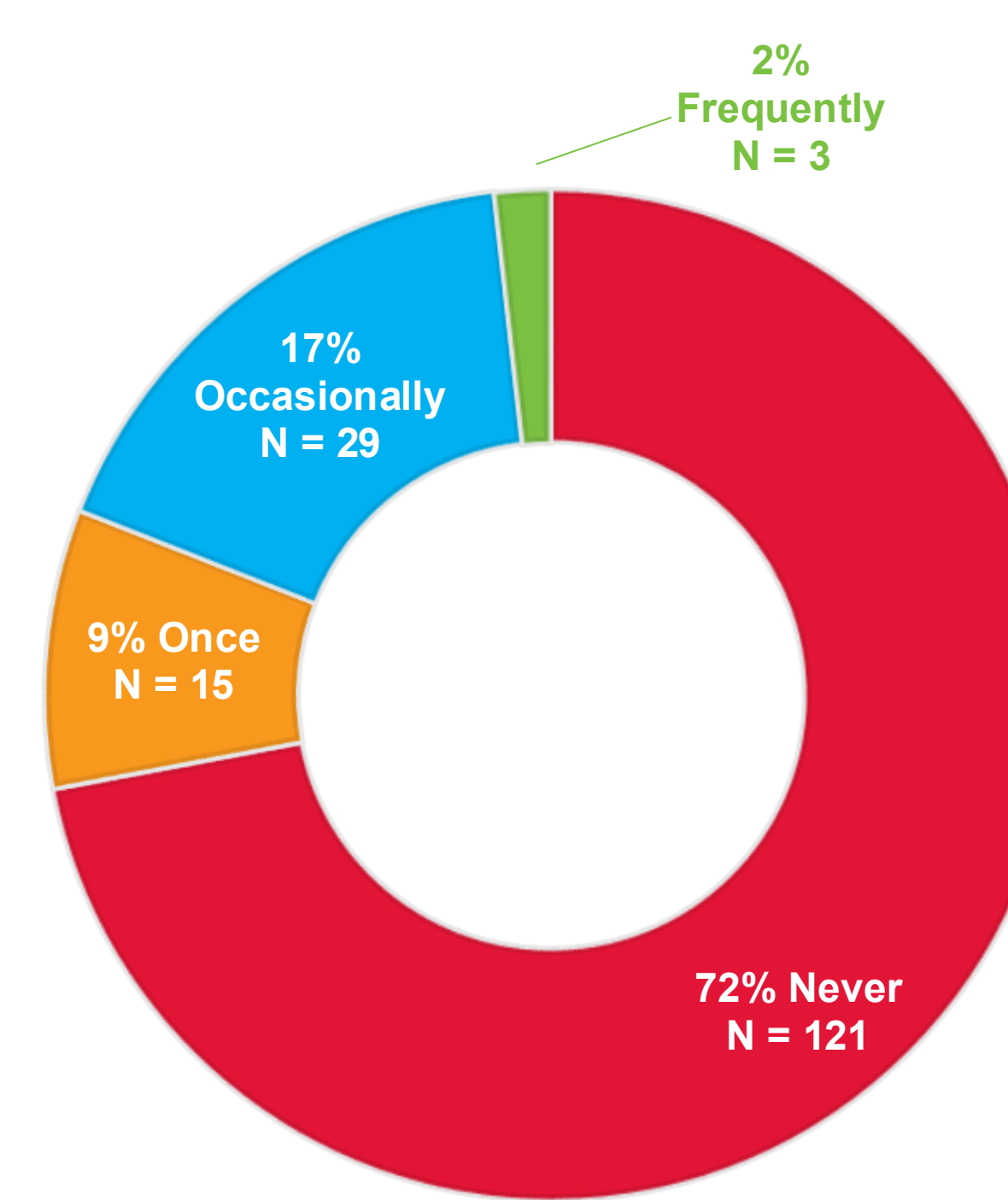
## Thematic Analysis

- Gender is the most common identity characteristic that students felt impacted their assessments
  - “Being a woman made them feel comfortable making comments on my personality that were completely unrelated to my clinical skills.”
- Students identifying as women or non-binary experienced bias in multiple specialties
  - I am non-binary but did not feel comfortable revealing this to my preceptors due to several disparaging comments I heard about transgender patients.
- Students identifying as men only experienced gender bias in OB/GYN experiences
  - “Being male in OB/GYN limited my ability to perform medical student duties due to (mostly) patient discomfort or (occasionally) provider disinterest in advocating for learning”
- Student comments on bias mostly refer to spoken comments or assessor behaviors rather than written assessments

## FREQUENCY OF BIAS DURING LONGITUDINAL CLERKSHIPS



## FREQUENCY OF BIAS DURING INPATIENT BLOCK EXPERIENCES



## Results



## Discussion

- Medical students experienced significantly less bias with longitudinal preceptors compared to inpatient block preceptors**
  - There is no correlation in rates of reported bias and the number of honors grades received
- Students perceive gender, specifically identifying as a woman or non-binary, as the most frequent reason they experience bias in clinical experiences

## Implications

- The Longitudinal Integrated Clerkship model may be an effective way to improve student perceptions of assessment bias**
  - Gender is an important factor in medical students' perception of bias in clinical education

## Limitations

- Survey of single class at single institution
- Students completed immersions at different times of the year in different health systems
- Results represent student perspective of what they experienced
- Voluntary completion, maybe fear of retaliation due to grades not be finalized

## Future Directions

- Comparison of rates of bias between LIC sites
- Assessment of student perception of bias before and after receiving final grades