

BACKGROUND

- The widespread implementation of the electronic medical record (EMR) has solved some problems and created others
- Issues with not clutter and misuse of copy-forward functions have led many to question the reliability of notes
- If high quality documentation is necessary for high quality care, then improving documentation is an important component of improving clinical care
- We hypothesized that an **educational intervention** about writing high-quality progress notes and a suggested **note template** would improve the perceived quality of daily resident physician progress notes

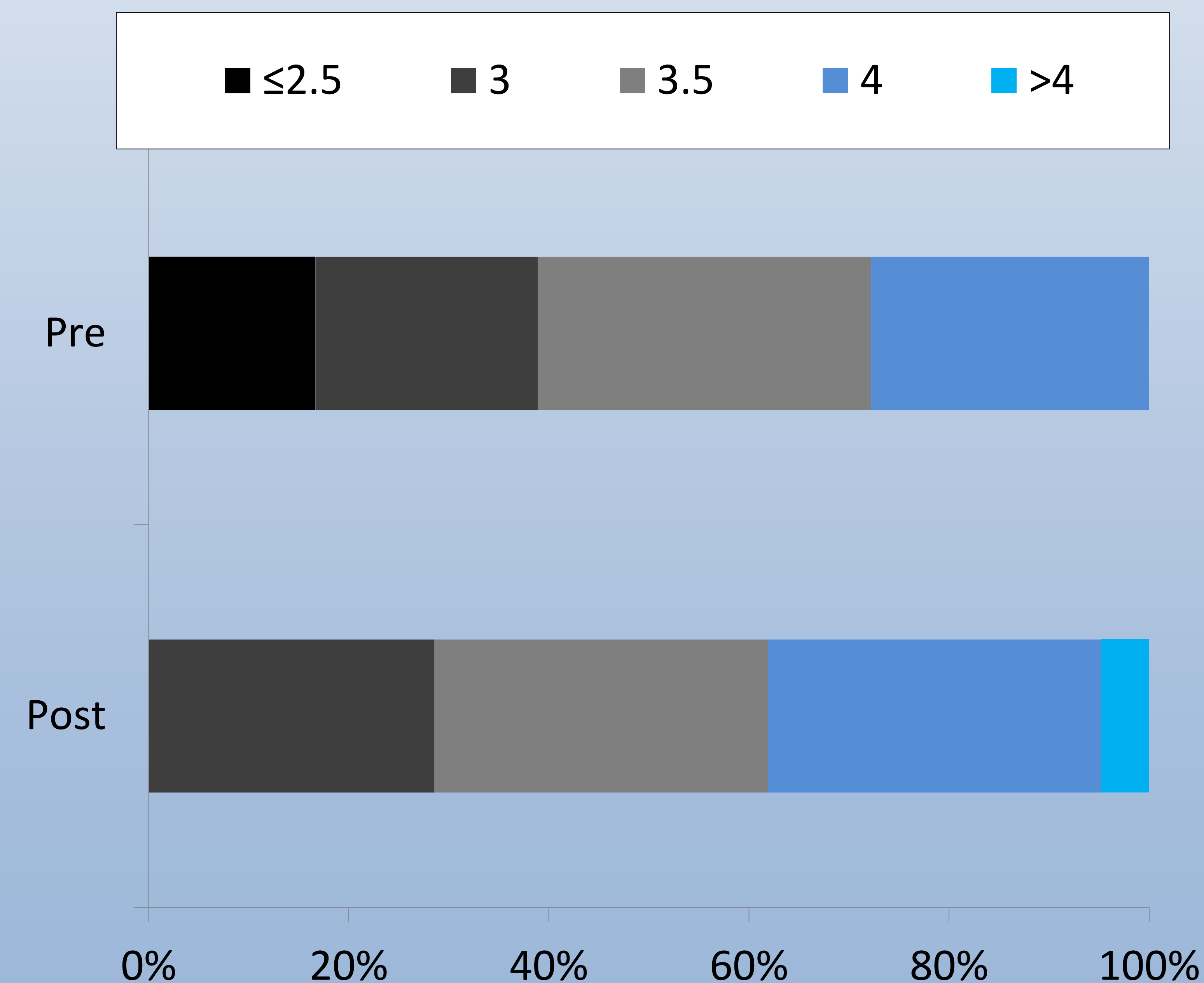
INTERVENTION

- The note template and educational intervention were developed based on available literature and consensus from local experts
- The project was presented at an internal medicine residency program meeting with deliberate emphasis placed on **reducing progress note length** and **focusing purely on the communication** function of progress notes
- The above goals were presented as being superior to other functions of progress notes such as billing, medico legal, or longitudinal record-keeping
- Residents on ward services received a brief reminder of the above goals as well as assistance as needed with using the recommended template
- Baseline notes were obtained prior to any intervention
- After the interventions were launched, notes were sampled at recurring intervals
- All included notes were evaluated using a tool formulated from previously published tools*** and one internally derived and validated at Feinberg School of Medicine (publication pending)
- 2 scorers evaluated each note and their scores were combined for data analysis
- 20 baseline and 25 intervention notes were evaluated

POST-INTERVENTION IMPROVEMENT

Variable	Improvement	P-value
Problems associated with brief, clear plans	21.4%	0.048
Reasoned	13.8%	0.035
Updated	13.7%	0.11
Truthful	12.6%	0.016

INTERVENTION RESULTED IN HIGHER QUALITY NOTES



RESULTS

- Likert scores for overall quality trended toward improvement (3.42 intervention v. 3.175 baseline, P=0.25).
- When rated on a 5-point Likert scale, intervention notes rated higher for being:
 - truthful (mean 4.2 v. 3.6, P=0.016),
 - reasoned (mean 3.6 v. 3.2, P=0.035),
 - updated (3.6 v. 3.25, P=0.11)
- The first 3 items of the assessment and plan (A&P) on intervention notes were more likely to contain brief, clear plans (mean 2.64 out of 3 problems post-intervention v. 2.18 out of 3 baseline, P=0.048)
- The intervention had no significant effect on overall quality or line length (113 intervention v. 109 baseline, P=0.73)

LESSONS LEARNED

- When baseline and intervention notes were combined, notes with brief summary statements atop the A&P and those with prioritized problem lists trended toward higher scores for overall quality (3.42 for notes with a summary statement v. 3.11 without, P=0.16; and 3.42 for those with prioritized problems v. 2.71 without, P=0.07).
- Higher quality scores correlated with notes containing higher scores for brief clear plans ($\beta=0.42$, $R^2=0.19$) and changes to the text within the A&P ($\beta=0.26$, $R^2=0.11$).
- Line-length was inversely correlated with Likert-score for quality ($\beta=-0.01$, $R^2=0.25$)
- We believe these areas are probably prudent targets for future attempts to improve progress notes

REFERENCES