

# Improving Resident Continuity Clinic Efficiency

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#### **BACKGROUND**

- **Problem Statement:** In the Department of Neurology Resident Continuity Clinic, the time spent providing subspecialty care within this General Neurology clinic may highly vary and extend beyond a standard 60-minute patient encounter, in part due to staffing with specific subspecialty providers, the time spent counseling and use of interpreter services. Improving the current staffing process to better pair subspecialist attendings with patients who have complex medical issues may improve overall clinic flow and clinic retention.
- **Project AIM:** By May 2022, the Neurology Resident Continuity Clinic will improve the times to start staffing patients by 20%.

#### METHODS / INTERVENTIONS

- **Methods:** Time sheets completed by resident physicians over a four-month span (January through April 2022) were completed and analyzed.
- Intervention: Implemented a visible queue (white board) for resident provider staffing with option to designate subspecialty attending preferences
- **Data:** Tracked times to complete a history and physical exam, to find a staffing attending, to staff a patient, to have attending evaluate a patient and make recommendations, and to wrap up a visit. Other variables assessed were interpreter use, white board use, and subspecialist type
- **Data Analysis:** Basic descriptive data were analyzed (Mean, Median, Range, Standard Deviation, Interquartile Range) through IBM SPSS software (v28.0.0.0).

### PLAN

Time sheets collected for baseline times to staff (2 clinic dates)

# DO

White board queue created; education session with residents to address the issue and review the intervention

# **STUDY**

Implemented white board queue with improved notation, organization and orientation

# ACT

Feedback on white board intervention gathered and implemented

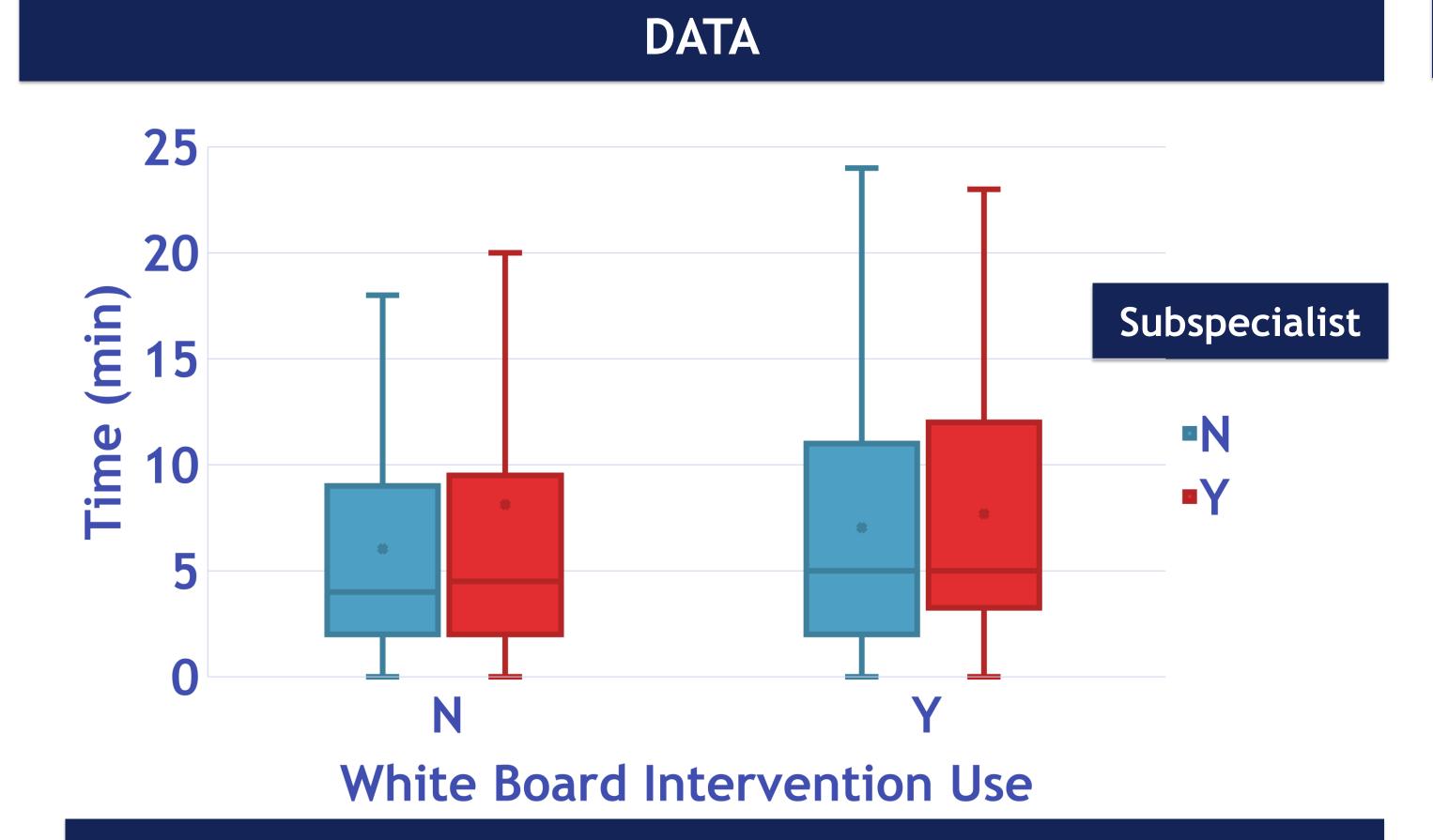


Fig 2. Similar Time Spent to Start Staffing with White Board and with Subspecialist

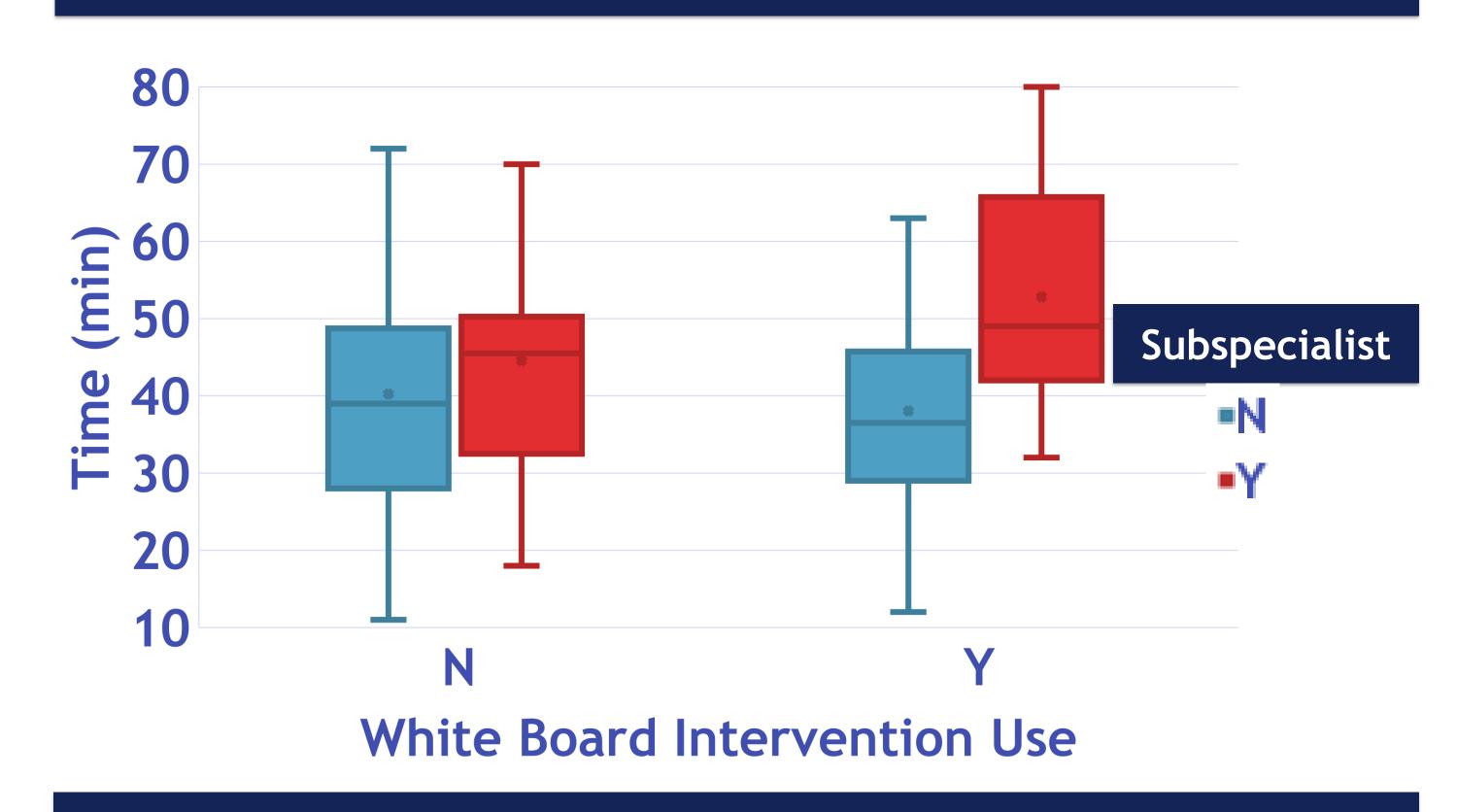


Fig 3. Similar Total Time Spent on Patient Care with White Board and with Subspecialist

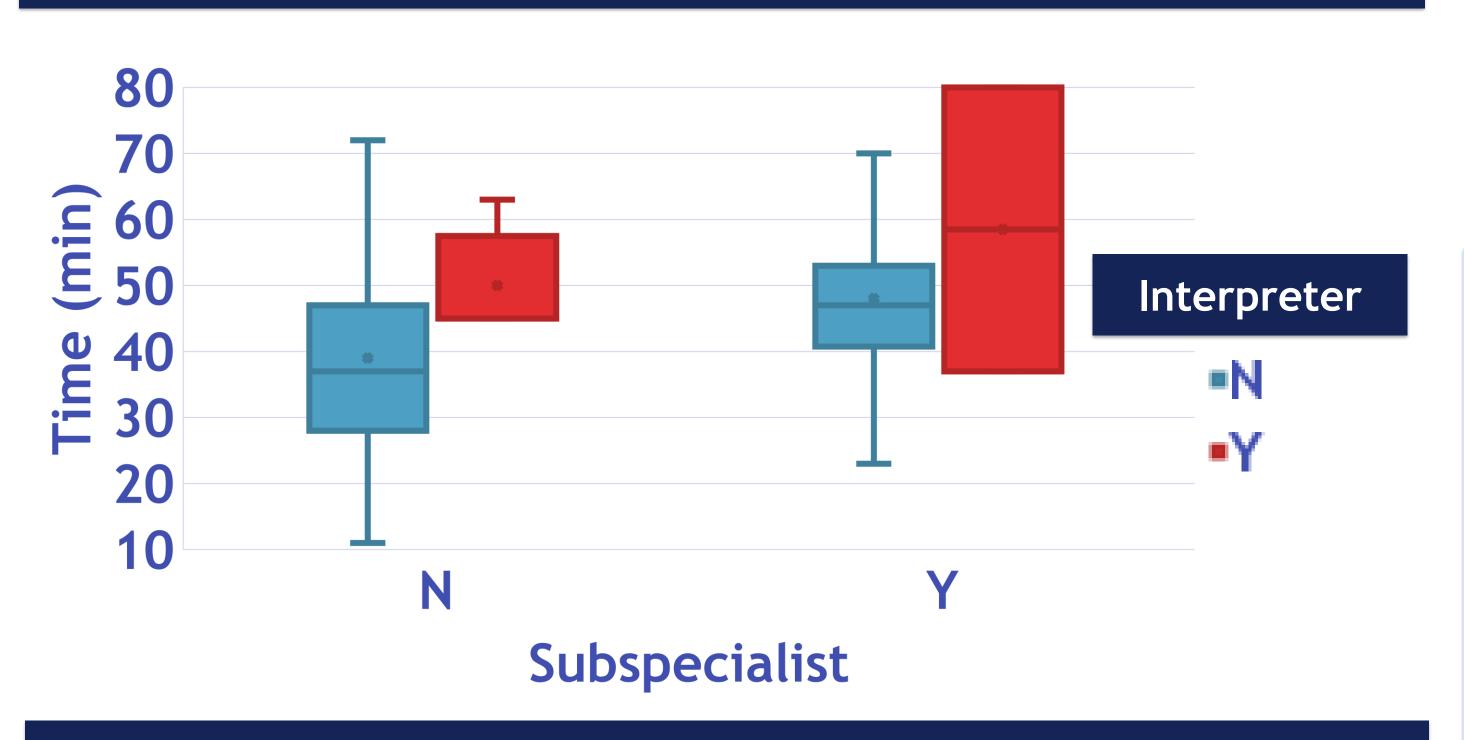


Fig 4. Increased Total Time Spent on Patient Care with Subspecialist and with Interpreter

#### RESULTS

- White board use did not impact time to staffing with attendings (N 4 vs Y 5 min) (Fig 2) nor total times spent on direct patient care (N 39 vs Y 37 min) (Fig 3).
- Total time spent on patient care with subspecialist was higher (47 vs 37 min) (Fig 4).
- Interpreter use increased the total time spent on patient care, with average 10 min higher (Fig 4) (mostly in the history/physical, data not shown)

# Scan QR for Supplemental Data

Total Time Spent on Patient Care:

- Established vs New Patient Visits: 35 / 50 min (sFig 1)
- In-person vs Phone vs Telemed video: 42 / 25 / 29 min (sFig 2)
- PGY2 vs PGY3 vs PGY4: 42 / 39 / 37 min (sFig 3)

## CHALLENGES AND LESSONS LEARNED

- Implementation of a white board works best in a centralized location based on clinic design and social distancing protocol
- Familiarity and participation with the intervention varies given constant rotation of residents and attendings each week
- Data collection from residents during clinic can add time to various charting factors
- Limited total n for interpreter use, no data on interpreter use collected prior to white board intervention

## **FUTURE DIRECTIONS**

- Implement a larger board and broader orientation with faculty
- Track clinic efficiency and coordinate with ancillary staff for rooming patients
- Improve coordination with interpreter services (inperson/phone/iPAD)

## LINKAGE TO HEALTHCARE DISPARITIES

- Tracking data for interpreter usage and time spent staffing patients
- Tracking longitudinal data on whether improved clinic staffing times leads to improved follow-up retention rates in Resident Clinic, especially for patients requiring subspecialty care, and how this differs from Attending clinics

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