

# Barriers and Facilitators to the Effective Use of EHR:

A case study of strategies that facilitate providers closing their notes

Anita Pierre-Antoine

Northwestern University Feinberg School of Medicine  
Jackson-Hinds Comprehensive Health Center  
Jackson, Mississippi



# Acknowledgements

GE-National Medical Foundation

Jackson-Hinds Comprehensive Health Center  
leadership, providers, and staff

Luretta Martin  
Site Mentor

Jasmine Chapman DDS  
CEO, Site Supervisor

Thais B. Tonore MD  
UMC Faculty Advisor



# Background

- Significant government support
- Mandates & Funding
- Evidence of Benefits
- Problem
  - Some physicians and providers have **difficulty closing notes** within 48hour period:
  - Negatively impacts patient care
    - Increased likelihood of medical error if record incomplete before next patient visit and increases risk of malpractice
  - Limits organizational ability to meet government mandates
    - Meaningful use , UDS
  - Negates the cost effectiveness of point-of-care use of EHR
    - Backs up billing
    - **Limits sustainability** of organizational products: staff benefits, retirement fund, raises
- Objectives
  - Determine **barriers and facilitators** to effectively closing notes in the EHR by providers
  - Implement a solution using the **Deming Model** of Quality Improvement

# Methodology: Plan

## PDSA: Determine performance measures

- Research Design
  - **Qualitative prospective case study of electronic health records users' barrier and facilitator to effective use of the eClinical as measured by the ability to close their clinical notes**
- Data Collected
  - Conducted **9 focused, semi-structured interviews**
  - **Providers:** physicians and nurse practitioners
  - **Specialties:** family medicine, adult medicine, pediatrics, and obstetrics/gynecology
  - **Locations:** 3 clinic sites at Jackson-Hinds Comprehensive Health Center in Jackson, Mississippi

# Preliminary Assessment

## Barriers

- No administrative time
  - 6-12hrs/wk from home
- Patient flow
  - 2x-3x booked appts.
  - Walk-in hours
- Patient loads over 20
- Data entry requirements



# Preliminary Assessment



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## Facilitators

- Effective use of tools
  - Templates
  - Order-sets
  - Tablets
- Accountability to patients
- Patient loads under 20
- Professionalism

# Methodology: Do

## PD SA: Implement change on a small scale

- Selected a measurable facilitator as a solution and accessed its effectiveness
  - 1 additional hour of administrative time per day for 3 days
  - 1 provider
- Expected Outcome
  - After intervention is implemented on a small scale, productivity—as measured by the ability to close notes—is expected to increase by at least 5%.

## Results: Study

**PDSA:** Test and record changes to learn about challenges, opportunities, and achievements

There was **11.9% change in productivity** as measured by notes closed during the three day study period

## Discussion: Study

**PDSA:** Create structural change objectives to make adjustments to the original plan

- Day 1: appointments were reschedule to allow for additional hour for administrative time **BUT** patient flow remained high not allowing the time to be used for administrative purposes
- Day 2: patient flow was addressed; **no note were closed**
- Day 3: 5 patients present; **5 notes closed**

# Recommendations: Act

- PDSA: Implement structural change and standardize policies and procedures to support broad, systemic improvement
- Address patient flow issues
  - Scheduling
    - Hire more staff
    - Train ancillary staff to do more data entry
- EHR Training
  - Provide quarterly and new provider training
  - Encourage peer-to-peer training
- Administrative Time
  - Provide 4 hrs/wk of addition time for patient loads greater than 20
- Accountability
  - Provider incentives for closing >90% notes
  - Provider penalty for not closing >50% notes

# Conclusion

- Potential **solutions were generated by the users** of the Electronic Health Record
- Clinical leadership can make an **informed decision** about the most effective approach to increasing productivity as measured by notes closed **from providers prospective**.
- Addition administrative time at the end of a work day produced **no change in productivity** as measured by notes closed.
- Consider **repeating the study** with provides that typically take notes home
- Consider addressing **patient flow** as an alternative PDSA