

TABLE 18

- 5:00** Improving Follow Up Rate for 3-year Surveillance Colonoscopies at the Minneapolis VA
- 5:10** Improving Teamwork in Hennepin Continuity Clinics
- 5:20** Quality Improvement: Utility of Repeat Reflex Extractable Nuclear Antigen (ENA) Testing in Patients with a Positive Antinuclear Antibody (ANA) Test at the Minneapolis Veterans Affairs (VA) Health Care Center
- 5:30** Readily Accessible Naloxone at Discharge in the Emergency Department
- 5:40** Understanding and Implementing Safety Reporting and Analysis



Improving Follow Up Rate for 3-year Surveillance Colonoscopies at the Minneapolis VA

Connor Ott

Improving Follow Up Rate for 3-year Surveillance Colonoscopies at the Minneapolis VA

Connor Ott, Taylor Brown, Tyler Radtke, Ryan Singh

Brian Hanson, MD, Susan Lou, MD

Presented by Connor Ott, MS3

Colorectal Cancer Background:

Epidemiology & Incidence

- CRC is the **3rd most common cancer** diagnosed in both men and women.
- It's the **2nd leading cause of cancer-related death** when sexes are combined in the U.S.
- An estimated **153,000 new cases** and approximately **52,000 deaths** annually (American Cancer Society, 2024).

Why Being in the 3-Year Follow-up Group Indicates High Risk: Multiple Adenomas (3–4 adenomas)

Higher likelihood of future adenomas/cancer.

Large Adenomas (≥ 10 mm)

Increased risk of progression to colorectal cancer.

Advanced Histologic Features

Villous or tubulovillous architecture

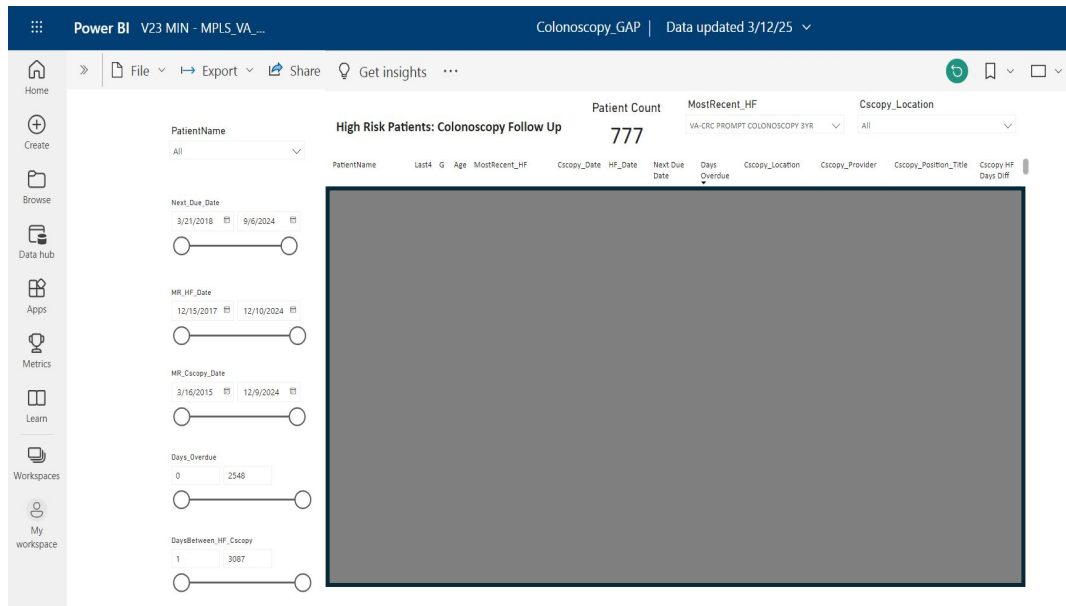
High-grade dysplasia

Sessile Serrated Polyps (SSP)

SSP ≥ 10 mm or SSP with dysplasia

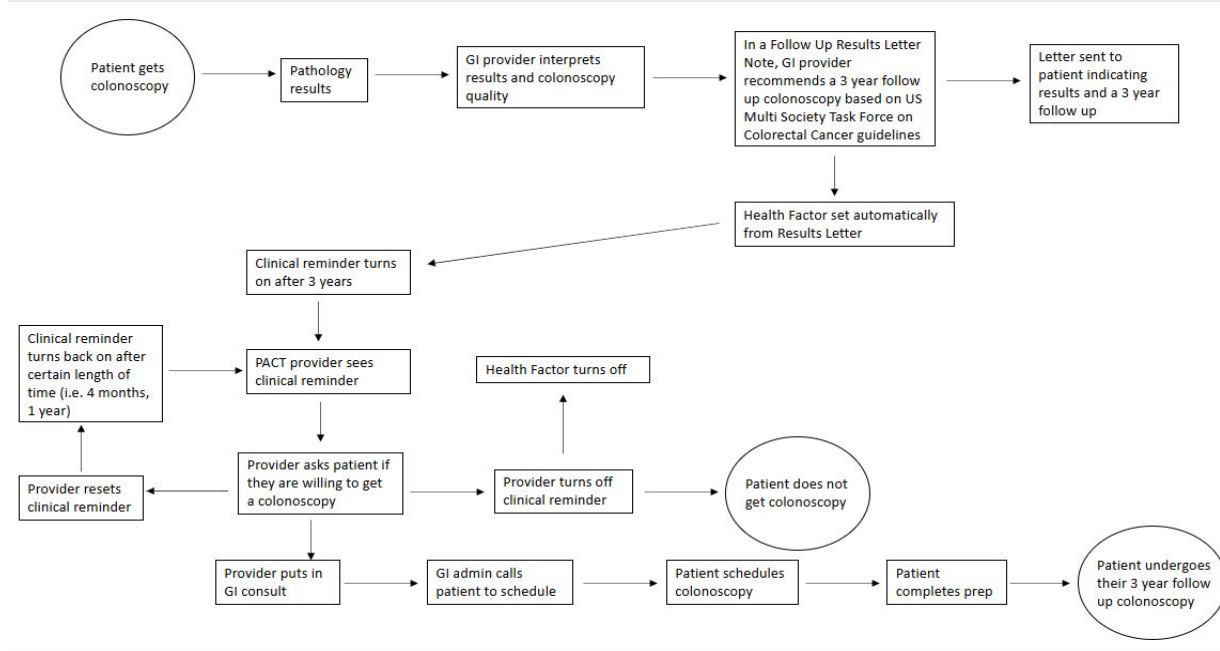
Increased likelihood of rapid progression to cancer.

Takeaway: Shorter interval (3 years) allows early detection and removal, significantly reducing the risk of progression to cancer.

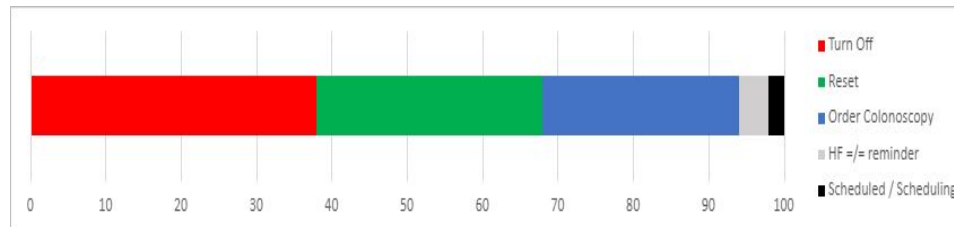


Existing unfiltered VA database of high-risk patients overdue for follow-up colonoscopy

Current Process Map For 3-Year Colonoscopy Follow-ups



Return on Investment
Analysis of 100 patients



Combined 1-3 yr
30% Reset
38% Turn Off
26% Order colonoscopy

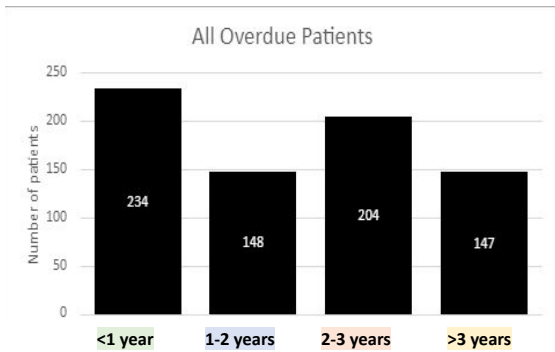


Figure 1. How long are they overdue (time beyond the 3 year scheduled period)

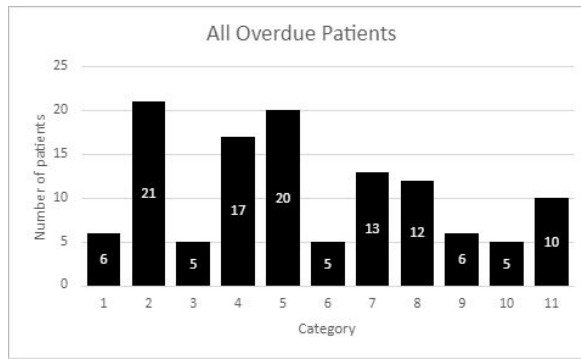


Figure 2. Why are they overdue

CATEGORY KEY

1. health event
2. Colonoscopy at outside facility
3. Failed scheduling attempts
4. No longer at MSP VA
5. Offered and declined, HF not updated
6. Colonoscopy scheduled
7. Risk outweighs benefits, HF should be disabled
8. HF turned on since last PACT appt
9. Unclear
10. HF incorrect
11. Colonoscopy completed since data pulled

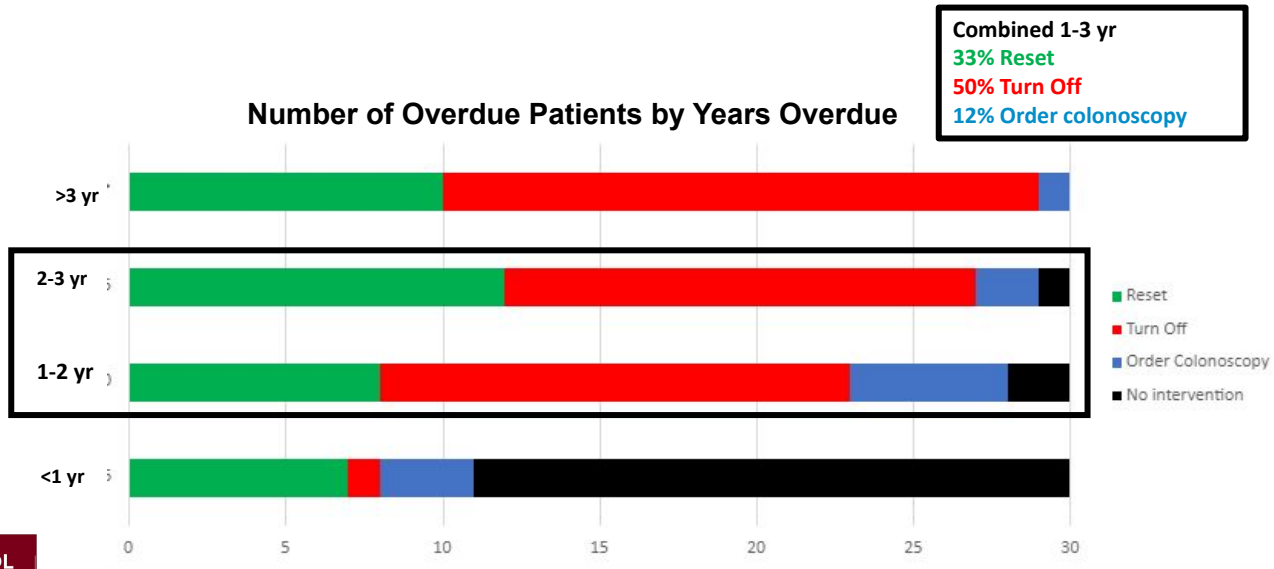


Figure 3. Why are they overdue grouped by time period

Proposed Intervention 1: PACT

- Custom lists of overdue patients for each PACT (primary care) provider
 - CAN score included
- PCP would determine if the patient was a candidate for another colonoscopy and if so would place the order

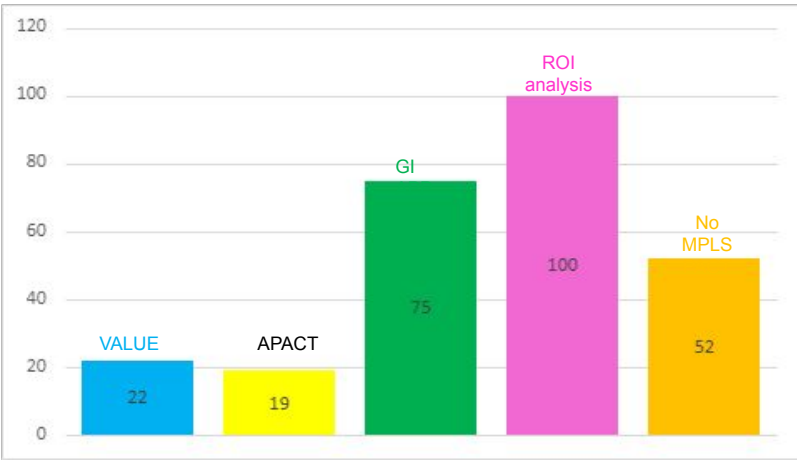
OLSON, KIMBERLY W									
kimberly.olson@va.gov									
PATIENTS 1-3 YEARS OVERDUE									
Patient Name	Last 4	Age	Last Colonoscopy	Due Date	CAN score		Hospitalized Flag		
					cHosp_90d	cMort_90d			
Doe, John	1234	77	09/27/2020	10/01/2023	60	55	0		

Proposed Intervention 2: Divide the List

- Blue (22 patients): VALUE medical students+preceptors
- Yellow (19): IM resident panels
- Green (75): GI Department advanced practice provider
- Pink (100): Already covered in earlier ROI analysis
- Orange (52): No assigned Minneapolis VA PCP, deemed difficult to reach

Challenges with the PACT Intervention

- PCPs already have a ton on their plate to accomplish during a short annual visit
- In the community this task is often handled by GI groups, so why did it have to fall to PACT in this case?
- Getting a list of patients outside of a scheduled appointment would create even more work because the provider would have to either do extensive chart review, call the patient, or both to determine if they were a candidate for another colonoscopy
- Morale and staffing were at an all-time low in PACT at this time



Conclusions:

- Discovered that there are less patients than we presumed that are actually in need of a 3-year follow-up colonoscopy
- Calculated a return on investment analysis to sell the value of this process in the future
- Tried a trainee approach (medical students and residents) that when combined with work from a GI department advance practice provider will help clean up the remaining list of overdue patients
- Developed and optimized methods of using the data for future interventions (e.g., how to refine the data, how lists can be made for specific providers / clinics)

Future Directions:

- Continue following the intervention to evaluate success (2 surveillance colonoscopies already scheduled in the first 2 weeks of implementation)
- Education on clinical reminders at the VA for trainees, including residents in primary care clinics
- GI Clinic to own the scheduling of 3-year surveillance colonoscopies, with a specific person in the department tracking overdue patients
- Harnessing Health Factor tools in the VA's electronic medical record (CPRS) to automate reminders for overdue surveillance colonoscopies directly to the patient

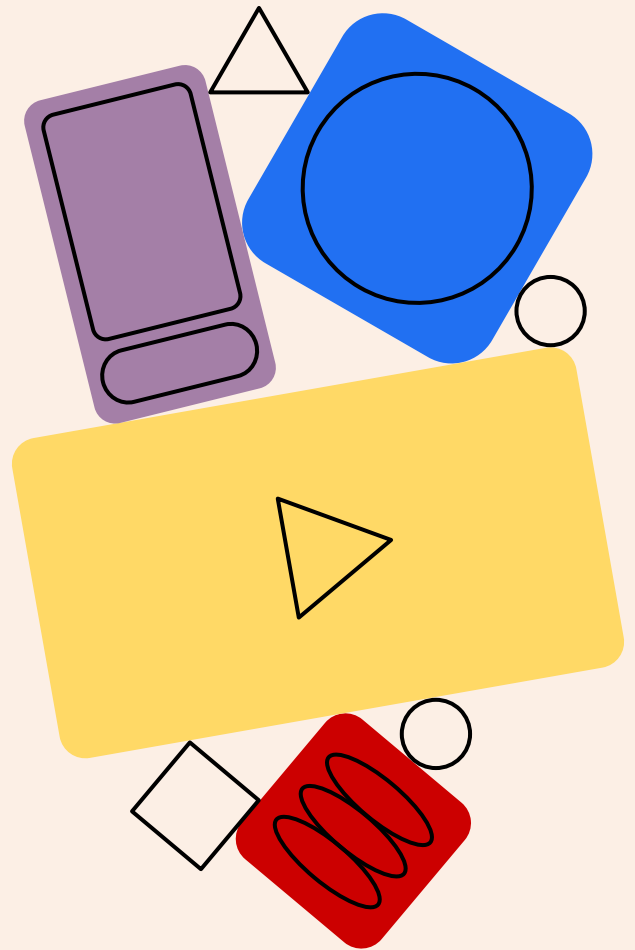


Improving Teamwork in Hennepin Continuity Clinics

Aaron Ackerman, Bilal Jawed

Improving Teamwork in Hennepin Continuity Clinics

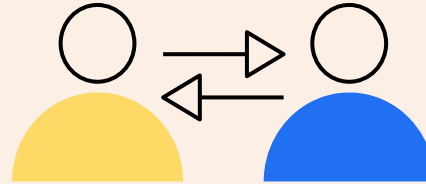
Alex Chong, Aaron
Ackerman, Margurite
Jakubiak, Bilal Jawed



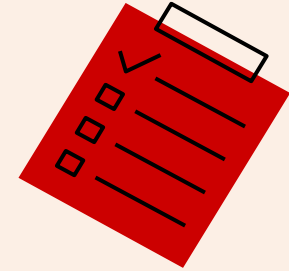
Goals



WHO: Hennepin Healthcare pediatric resident continuity clinic staff, including resident physicians and medical assistants (MAs).



WHY: In summer 2024, several MAs at Hennepin Healthcare voiced concerns about continuity clinic inefficiencies, including late order entry, visit type discrepancies, and communication difficulties between residents and MAs.



WHAT: Our goal was to better understand the barriers to efficiency, streamline MA-resident communication with a formal workflow checklist, and assess MA and resident satisfaction before and after the implemented checklist.

WORKFLOW CHECKLIST	
1	Pre-clinic Huddle Introduction, review visit types and anticipated needs
2	Prior to Patient Visit Review visit type and pend orders
3	During Visit Discuss labs and vaccines at beginning of visit and sign orders
4	After Visit Update dot in EPIC

Figure 1. Schematic representation of proposed resident workflow

Methods

A “pre-survey” was sent out prior to implementation of workflow. The surveys asked residents and MAs to rate their satisfaction with communication, efficiency, and how enjoyable continuity clinic is from 1-5. The survey also included free-response questions allowing for MA and resident input. Based on responses, a workflow checklist was developed and implemented in continuity clinics from December 2024–March 2025. In April 2025, residents and MAs were again surveyed and asked to rate the communication, efficiency, and enjoyableness of continuity clinic. The “post-survey” also included questions on the workflow itself.

Results & Discussion



Table 1. Pre-Intervention Survey Results. Results expressed as means rounded to nearest tenth.

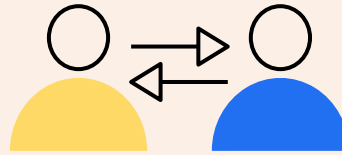
	Communication	Efficiency	Fun	Comments
Residents (n=10)	3.2/5	3.2/5	3.9/5	Barriers to efficiency: MAs being short staffed at the end of the day, patients being roomed out of order, and difficulty finding MAs to do any sort of verbal hand-off/communication.
MAs (n=4)	2.5/5	2/5	2.8/5	Barriers to efficiency: placing orders late or changing orders after they have been ordered, lack of communication

Table 2. Post-Intervention Survey Results. Results expressed as means rounded to nearest tenth.

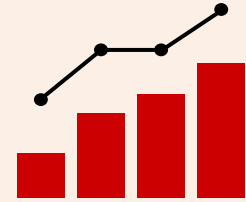
Residents (n=11)	3.5/5	3.3/5	3.5/5	Difficult to do pre-huddle due to time constraints; inconsistent use of workflow.
MAs	--	--	--	--

Future Directions

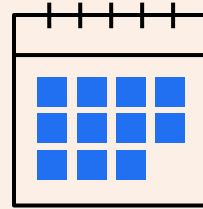
We plan to continue trying to improve the communication and teamwork between residents and MAs at Hennepin Healthcare. These are some proposed methods of improving communication next year.



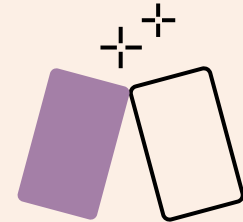
Shorten pre-clinic education to allow time for huddles



Further standardize EPIC dot use across clinic staff



Address MA staffing shortages to maintain clinic flow



Introduce secure messaging between MAs and residents



**Quality Improvement: Utility of Repeat
Reflex Extractable Nuclear Antigen (ENA)
Testing in Patients with a Positive
Antinuclear Antibody (ANA) Test at the
Minneapolis Veterans Affairs (VA) Health
Care Center**

Kari Falaas

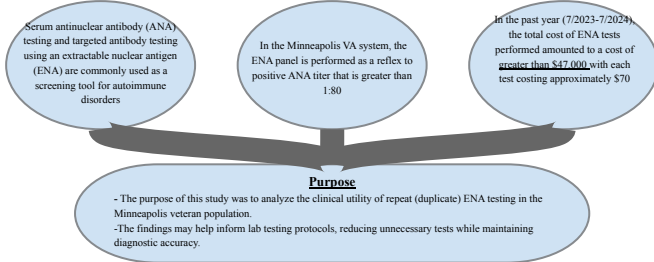


Kari L. Falaas MD^{1,2}, Caitrin Coffey MD¹
1. Minneapolis Veterans Hospital 2. University of Minnesota

Abstract

- **Background:** The purpose of this study was to analyze the clinical utility of repeat (duplicate) ENA testing in the Minneapolis veteran population
- **Methods:** Data was obtained through a local program analyst by searching lab test records for patients who have had one or more ANA and reflex ENA tests performed, between July 1, 2023 and July 1, 2024
- **Results:** Among 34 veteran patients with repeat ENA testing on separate days within one year (7/1/2023-7/1/2024), there were no changes in ENA serology
- **Discussion:** Based on this limited data set, repeat ENA testing in patients would not be recommended within a year unless a substantial clinical change occurred. This is congruent with prior studies that state that repeating ENA serologies rarely changes or results in a new diagnosis of an ANA-associated rheumatic disease (AARD)(1,2).

Introduction

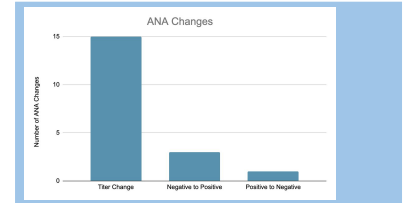
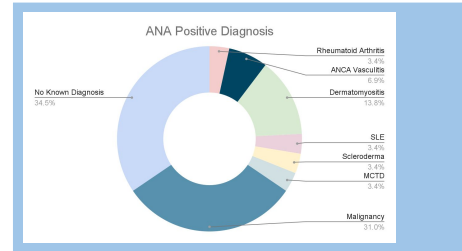


Methods

- As this project is intended to improve the Minneapolis VA Health Care System processes and not to expand the knowledge base of a scientific discipline, IRB approval was not required
- Data was obtained through a local program analyst by searching lab test records for patients who have had one or more ANA and reflex ENA tests performed, between July 1, 2023 and July 1, 2024
- The search was narrowed to patients who had repeat testing within this time period
- Tests repeated on the same day were thought to represent ordering error, and were excluded from analysis
- Presumed Diagnosis for positive ANA, changes to ANA results, changes to ENA results, and reasons for repeat testing were extracted for analysis

Results

- Repeat ENA tests were completed in 47 patients
- 3 patients had 3 repeat tests performed
- Average of 113.7 days between repeat tests



ENA Analysis

- 0 of 34 patients had clinically meaningful change in repeat ENA tests
- 0 of 37 repeat ENA tests demonstrated change in serologies
- 2 of the 37 repeat (5.4%) ENA tests demonstrated changes in titers that were not clinically significant
- **Reasons for Repeat ANA and reflex ENA testing**
- 5 patients with clinical symptom change (0 ENA changes)
- 6 patients had repeat testing for serologic monitoring (0 ENA changes)
- No discernable reason for repeat testing in 23 (67.6%) patients.

Discussion

- Among 34 veteran patients with repeat ENA testing on separate days within one year (7/1/2023-7/1/2024), there were no changes in ENA serology
- Based on this limited data set, repeat ENA testing in patients would not be recommended within a year unless a substantial clinical change occurred
- This is congruent with prior studies that state that repeating ENA serologies rarely changes or results in a new diagnosis of an ANA-associated rheumatic disease (AARD)(1,2)
- Further investigation would need to be completed to determine if there is any utility for repeat ENA testing over longer follow-up intervals

Limitations-

- Small sample size

References

1. Yeo AL, Leech M, Ojaimi S, Morand E. Utility of repeat extractable nuclear antigen antibody testing: a retrospective audit. *Rheumatol Oxf Engl.* 2023 Mar 1;62(3):1248–53.
2. Raissi TC, Hewson C, Pope JE. Repeat Testing of Antibodies and Complements in Systemic Lupus Erythematosus: When Is It Enough? *J Rheumatol.* 2018 Jun;45(6):827–34.



Introduction

Serum antinuclear antibody (ANA) testing and targeted antibody testing using an extractable nuclear antigen (ENA) are commonly used as a screening tool for autoimmune disorders

In the Minneapolis VA system, the ENA panel is performed as a reflex to positive ANA titer that is greater than 1:80

In the past year (7/2023-7/2024), the total cost of ENA tests performed amounted to a cost of greater than \$47,000 with each test costing approximately \$70

Purpose

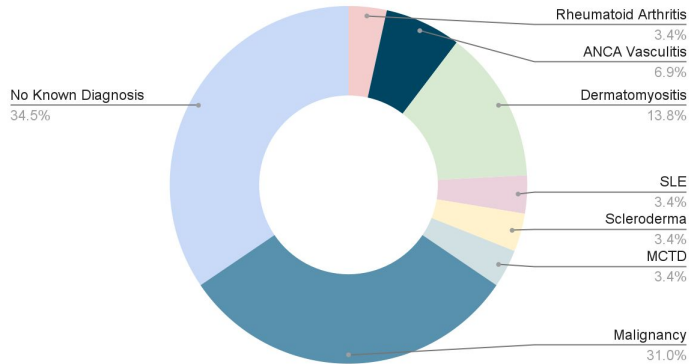
- The purpose of this study was to analyze the clinical utility of repeat (duplicate) ENA testing in the Minneapolis veteran population.
- The findings may help inform lab testing protocols, reducing unnecessary tests while maintaining diagnostic accuracy.

Methods

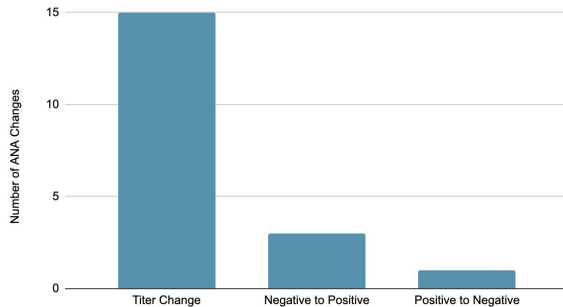
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- Tests repeated on the same day were thought to represent ordering error, and were excluded from analysis
- Presumed Diagnosis for positive ANA, changes to ANA results, changes to ENA results, and reasons for repeat testing were extracted for analysis

Results

ANA Positive Diagnosis



ANA Changes



- Repeat ENA tests were completed in 34 patients
 - 3 patients had 3 repeat tests performed
 - Average of 113.7 days between repeat tests

ENA Analysis

- 0 of 34 patients had clinically meaningful change in repeat ENA tests
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 - 2 of the 37 repeat (5.4%) ENA tests demonstrated changes in titers that were not clinically significant

Reasons for Repeat ANA and reflex ENA testing

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Discussion

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2. Raissi TC, Hewson C, Pope JE. Repeat Testing of Antibodies and Complements in Systemic Lupus Erythematosus: When Is It Enough? *J Rheumatol*. 2018 Jun;45(6):827–34.



Readily Accessible Naloxone at Discharge in the Emergency Department

Jamie O'Flaherty, Caleb Rossin

Readily Accessible Naloxone at Discharge in the Emergency Department

Caleb Rossin, DO | Jamie O'Flaherty, MD

Department of Emergency Medicine Hennepin County Medical Center | Minneapolis, Minnesota



Quality Issue

Naloxone (Narcan) should be provided to all patients with an opioid related chief complaint in the ED. Asking patients to go to the pharmacy to fill this prescription adds an extra barrier to obtaining a lifesaving medication.

Specific Aim

Increase rate of discharge naloxone prescriptions by creating a popup banner to remind providers as soon as patient arrives with opiate use as chief complaint.

Tests of Change

Look at the percentage of patients that arrive with opiate use as a chief complaint to the Emergency Department and how many left with naloxone before and after the intervention of adding pop ups to suggest ordering Naloxone.



Discussion

The goal of this study would be to increase the amount of naloxone in the hands of our patients, specifically those at risk of overdose based on past medical history. Further studies could be performed to assess patients on preference of IM vs IN routes. Limitations of this QI project would be provider comfortability in prescribing, Pharmacy availability and efficiency in providing medications, and infrastructure roadblocks such as EPIC integration.

Results

This quality improvement project is aimed at looking for an increase of naloxone prescriptions for patients who arrive with the chief complaint of opiate use. Primary outcomes to measure would be amount of patients that leave with a prescription for naloxone, secondary outcomes would be patients who have it prescribed but do not take it, and patients who refuse a prescription.

Reference

- [The Effect of Overdose Education and Naloxone Distribution: An Umbrella Review of Systematic Reviews.](#) Razaghizad A, Windle SB, Fillon KB, et al. American Journal of Public Health. 2021;111(8):1516-1517. doi:10.2105/AJPH.2021.306306a.
- [Management of Suspected Opioid Overdose With Naloxone in Out-of-Hospital Settings: A Systematic Review.](#) Chou R, Korthuis PT, McCarty D, et al. Annals of Internal Medicine. 2017;167(12):867-875. doi:10.7326/M17-2224.
- [Evidence-Based Guidelines for EMS Administration of Naloxone.](#) Williams K, Lang ES, Panchal AR, et al. Prehospital Emergency Care. 2019 Nov-Dec;23(6):749-763. doi:10.1080/10903127.2019.1597955.



Understanding and Implementing Safety Reporting and Analysis

Tonera Chiume

Understanding and Implementing Safety Reporting and Analysis

A Quality Improvement Project for Physical Medicine and Rehabilitation (PM&R) Residents

UNIVERSITY OF MINNESOTA

Driven to DiscoverSM

Tonera Chiume, MD

Objective:

Recognizing the importance of safety reporting and participating in safety needs analysis. Build confidence of PM&R residents through a mock workshop focused on conducting a safety needs analysis. Goal is to apply existing knowledge and enhance residents involvement in safety needs analysis at PM&R sites they are rotating.

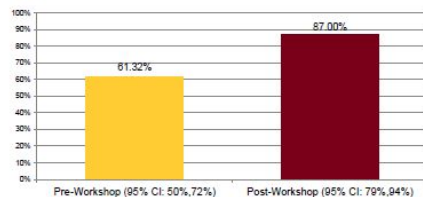
Design:

A two-hour mock quality improvement workshop held by a senior PM&R resident during the PM&R didactic session.

Key Core Competencies:

- Recognizing the importance of safety reporting: National patient safety foundation (NPSF)
- Understanding components to include in a safety report and needs safety analysis
- Identifying who is involved in a safety needs analysis Action Hierarchy
- Understanding the components of developing a safety need using SAFEST acronym
 - Participate in a mock needs safety analysis investigation
- Identify principles behind the philosophy of safety reporting analysis

Knowledge Assessment Scores



The workshop involved a two-part one-hour session. The first hour was focused on **active learning through** PowerPoint presentation, involved discussion and participation by residents.

The second hour involved two case based scenarios that happen on an inpatient rehabilitation unit which was participated in groups of 4. This involved **inquiry-based learning and role-playing, with eventual comparison of cases amongst all participants.**

Lecture: Understanding the flow of safety reporting, SAFEST Rubric for Safety

Pre and Post Test: Varying grades questions completed



Results:

Knowledge assessments questionnaires were completed pre and post test immediately during the workshop. Questions were in a multiple-choice format with varying difficulties to assess confidence of the topic reviewed. Assessments was scored out of 100%.

Differences from pre-test and post test was analyzed using a classical paired T-Test, using each test taker as a unit of observation.

Knowledge assessment scores significantly improved: **The pre-test summary scores were average 61.32%, 95% CI (50%,72%). The post-test summary score average 87%, 95% CI (79%,94%). The difference was always ≥ 0 with summary average of 25%, 95% CI (13%, 38%). Paired two tailed T-test $p=6.2 \times 10^{-4}$ which was significant.**

Overall showing improvement in score was likely real and the workshop was effective at improving test scores.

Mock Simulation: Typical case-based scenarios on the PM&R inpatient unit

Resident role play by leading an Interdisciplinary team conducting a root cause analysis meeting on the case

Investigating and formulation of solutions for implementing change: creating an initial flow design

Cases:

- Baclofen Toxicity incident in a patient with end stage renal disease
- Fall incident in a patient with Guillain Barre Syndrome



Conclusion:

Effective safety reporting is crucial for identifying and preventing potential accidents in the workplace. Residents participation in a simulation-based, active learning rehabilitation-focused scenarios on quality reporting, helps them understand how to implement key components of safety analysis, understand how to improve safety measures effectively. This helps them learn how to complete a safety analysis report and participate/ lead an interdisciplinary team during a safety analysis meeting. It resulted in increased knowledge and confidence in this topic. Adhering to core principles of safety reporting can significantly enhance a hospitals safety culture, foster safer environment for patients and staff.

QR Code For
Knowledge
Assessments &
Simulation/Lecture
Materials