



Clinical Safety & Effectiveness Cohort # 15

Decreasing Health Disparities for Hispanic Patients with IBD



Educating for Quality Improvement & Patient Safety

The Team

- Members

- Yasmin Alishahi, MD
- Joanna Linsteadt, MD
- Richard Contreras, IT Specialist
- Ellen Gu, IT Specialist
- Karen Aufdemorte, Facilitator

- Sponsor Department:

- Glenn Gross, MD, Chair of the Department of Medicine, Chief of the Division of Gastroenterology
- Tisha Lunsford, MD, Program Director, Division of Gastroenterology

AIM STATEMENT

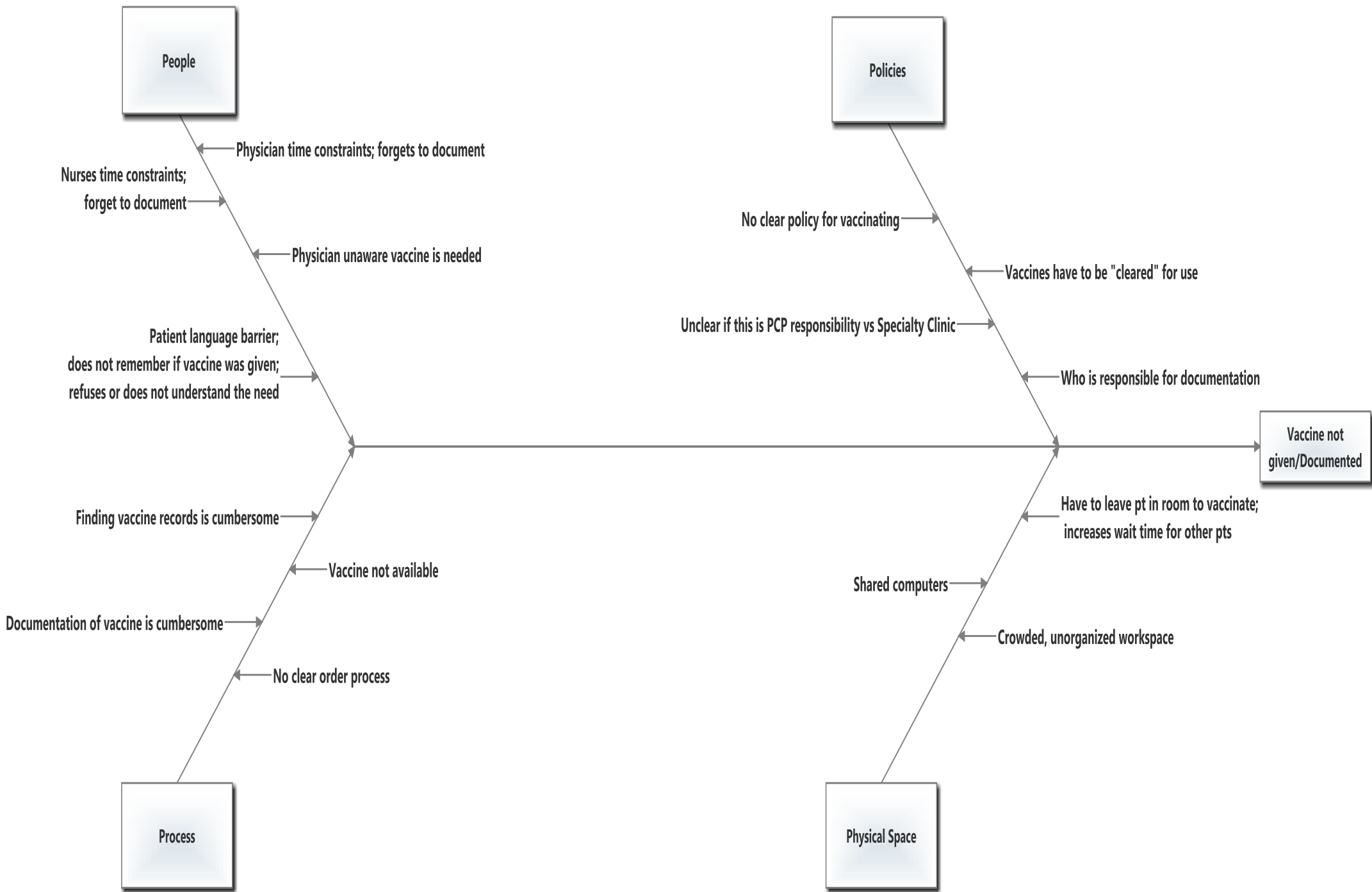
- Improve the pneumococcal vaccine documentation rates in clinic notes for Hispanic population with inflammatory bowel disease seen at the RBG gastroenterology clinic from 32% to 50% by January, 2015.

Project Milestones

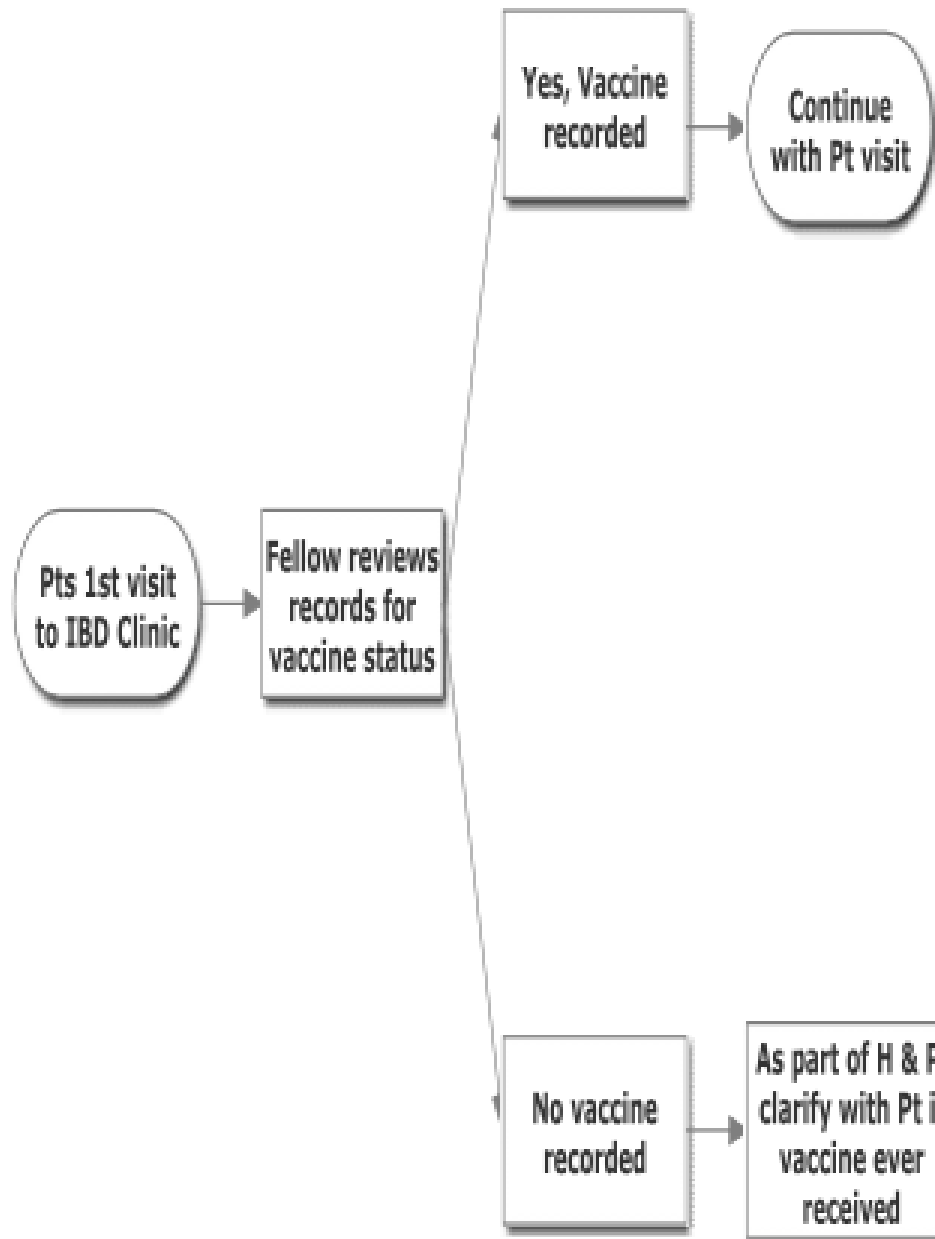
- Team Created August 2014
- AIM statement created August 2014
- Weekly Team Meetings 9/5, 9/11, 9/29, 10/1, 10/3, 11/1, 1/8
- Background Data, Brainstorm Sessions, Workflow and Fishbone Analyses 9/16, 9/29, 10/1, 10/3
- Interventions Implemented 11/2014 - present
- Data Analysis 11/24/2014 – 1/14/2014
- CS&E Presentation 1/23/2014

Background

- Gastroenterology society guidelines state that ALL patients with IBD should be vaccinated with the pneumococcal vaccine
- Literature shows that vaccination rates are variable
 - No standardization of the practice
 - No policies
- Importance of vaccination
 - Patient safety: protection from preventable illness
 - Reimbursement: meeting PQRS standards may prevent deduction in payment





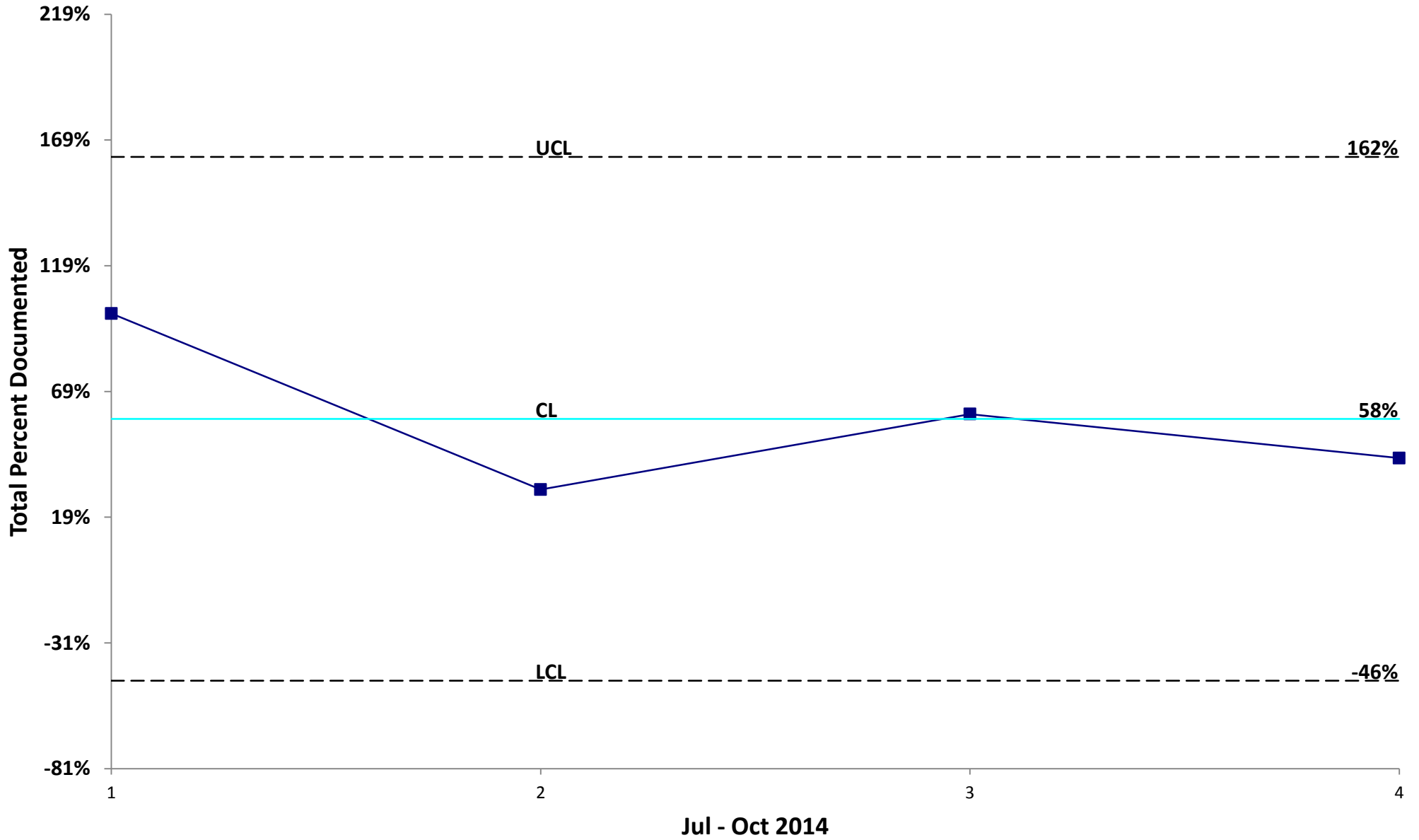




Pre-intervention Data

- Collected data through Sunrise EMR and IDX
 - Used ICD-9 codes to identify our group of patients
 - Vaccination data was collected through Immunization manager
 - Documentation data was collected by chart review
- Overall vaccination documentation rate pre-intervention showed an average of 32%
 - Calculations were performed using the total number of vaccines documented divided by the total number of vaccines given
 - The data points on the SPC charts represent these ratios over time

Vaccine Documentation Rate Prior to Intervention



PLAN: Intervention

- Problem identified: variation of the documentation of the pneumococcal vaccine in the traditional GI clinic note for IBD patients
 - Difficult to tell who has been vaccinated and who has not
 - This leads to delays in vaccination or possible inappropriate re-vaccination
 - Difficult to capture data on vaccine rates
- Intervention: Implementation of a standardized note template in order to make it easier to identify those in need of a vaccine
 - This is a re-design of the standardized Gastroenterology Initial Clinic Visit note

Intervention Design

Note title: Gastroenterology Clinic IBD
Note

New "Plan" section

Structured Notes Entry - UHSTEST, ORANGE - TEST Gastroenterology Clinic IBD Note (SD)

CREATE Preview Date of Service: Nov - 20 - 2014 Time: 12:45

Sections

- FAMILY HISTORY
- PRESENT MEDICATIONS
- SOCIAL HISTORY/ RISK ASSESSM
- **ALLERGIES
- REVIEW OF SYSTEMS
- VITAL SIGNS
- FLOW SHEET DATA
- PHYSICAL EXAM
- PHYSICAL EXAM
- LABORATORY RESULTS
- RADIOLOGY RESULTS
- OTHER RESULTS
- ASSESSMENT
- PLAN**
 - Immunization Manager
 - Wellness Manager
 - Plan
- PROBLEM LIST/ORDERS/RX
- FACULTY ATTESTATION

Immunization Manager

Reminders:

UHSTEST, ORANGE is due for the following events:

Event	Due Date	Order
<input checked="" type="checkbox"/> Influenza	Sep-15-2014	
<input type="checkbox"/> Hepatitis A	Oct-10-2014	
<input type="checkbox"/> Hepatitis B	Oct-10-2014	
<input type="checkbox"/> Meningococcal	Oct-10-2014	
<input type="checkbox"/> MMR	Oct-10-2014	

Near Due: *There are no 'Near Due' reminders.*

Charted Data:

Event Description	Dose #	Age at Event	Action Date/Time
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Retrieve Last Charted Values

Insert Default Values

Clear Unsaved Data

Immunization Manager

Health Manager - UHSTEST, ORANGE

UHSTEST, ORANGE 16595012 / 100072813 16y (May-16-1998) M

01
Allergies: No Known Allergies

Options Panel

Filters

- Pending Status:
- Due now
- Near due
- Future pe
- Ordered
- Charted S
- Done
- Not done
- Invalid
- Deleted
- Discontin
- Inactive
- Age Out

Schedule: No Schedule

Event Category: No Event Cat

Display Sty

Display View: Summary Working

Column Select: Standard 7-18

Sort By: Scheduled Oc

Need Help?

Historical Entry - UHSTEST, ORANGE

Event	Vaccine	Performed Date	Information Source	Not Given	Historical	Actions
<input type="text"/>	<input type="text"/>	Full Partial (M/Y)	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	Details

Add to List Clear New

Group by event Include non-historical Show new entries only Include deleted

Submit Close

Need Help?

Close

Vaccination Documentation

Historical Entry - UHSTEST, ORANGE

Event	Vaccine	Performed Date	Information Source	Not Given	Historical	Actions
<input type="text" value="Pneumococcal"/>	<input type="text" value="pneumococcal polysaccharide PPSV23"/>	<input type="text" value="Nov-20-2014"/>	<input type="text" value=""/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="button" value="Details"/>

Full

- Guardian
- Parent
- Patient
- Personal Vaccine Record
- Physician office/hospital record**
- Spouse
- Vaccine Registry Program

Group by event Include non-historical Show new entries only Include deleted

[Need Help?](#)

Vaccination Documentation

Historical Entry - UHSTEST, ORANGE

Event	Vaccine	Performed Date	Information Source	Not Given	Historical	Actions
<input type="text" value="Pneumococcal"/>	<input type="text" value="pneumococcal polysaccharide PPSV23"/>	<input type="text" value="Nov-20-2014"/> <input type="button" value="Full"/> <input type="button" value="Partial (M/Y)"/>	<input type="text" value="Physician office/hospital record"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="button" value="Details"/>
<input type="button" value="Add to List"/> <input type="button" value="Clear New"/>						
<input type="text" value="Pneumococcal"/>	<input type="text" value="pneumococcal polysaccharide PPSV23"/>	<input type="text" value="Nov-20-2014"/>	<input type="text" value="Physician office/hospital record"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="button" value="Details"/> <input type="button" value="Delete"/>

Group by event Include non-historical Show new entries only Include deleted

[Need Help?](#)

Documentation complete

Structured Notes Entry - UHSTEST, ORANGE - TEST Gastroenterology Clinic IBD Note (SD)

CREATE Preview Date of Service: Nov - 20 - 2014 Time: 12:45

Sections

- FAMILY HISTORY
- PRESENT MEDICATIONS
- SOCIAL HISTORY/ RISK ASSESSM
- **ALLERGIES**
- REVIEW OF SYSTEMS
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 - Immunization Manager
 - Wellness Manager
 - Plan
- PROBLEM LIST/ORDERS/RX
- FACULTY ATTESTATION

Immunization Manager

Reminders:

UHSTEST, ORANGE is due for the following events:

Due Now:			Near Due:
Event	Due Date	Order	
<input checked="" type="checkbox"/> Influenza	Sep-15-2014		<i>There are no 'Near Due' reminders.</i>
<input type="checkbox"/> Hepatitis A	Nov-20-2014		
<input type="checkbox"/> Hepatitis B	Nov-20-2014		
<input type="checkbox"/> Meningococcal	Nov-20-2014		
<input type="checkbox"/> MMR	Nov-20-2014		

Charted Data:

Event Description	Dose #	Age at Event	Action Date/Time
<input checked="" type="checkbox"/> Pneumococcal Con...	1	16y6m4d	Nov-20-2014 00:00

ALLERGIES:
ALLERGIES:
• No Known Allergies
Electronic Signatures:
Linstead, Joanna R (MD) (
Authored: ALLERGI)
Last Updated: Nov-20-2014

Retrieve Last Charted Values
Insert Default Values
Clear Unsaved Data

Need Help? Mark Note As: Results pending Priority Incomplete Calculate after save Save/Forward Save Cancel

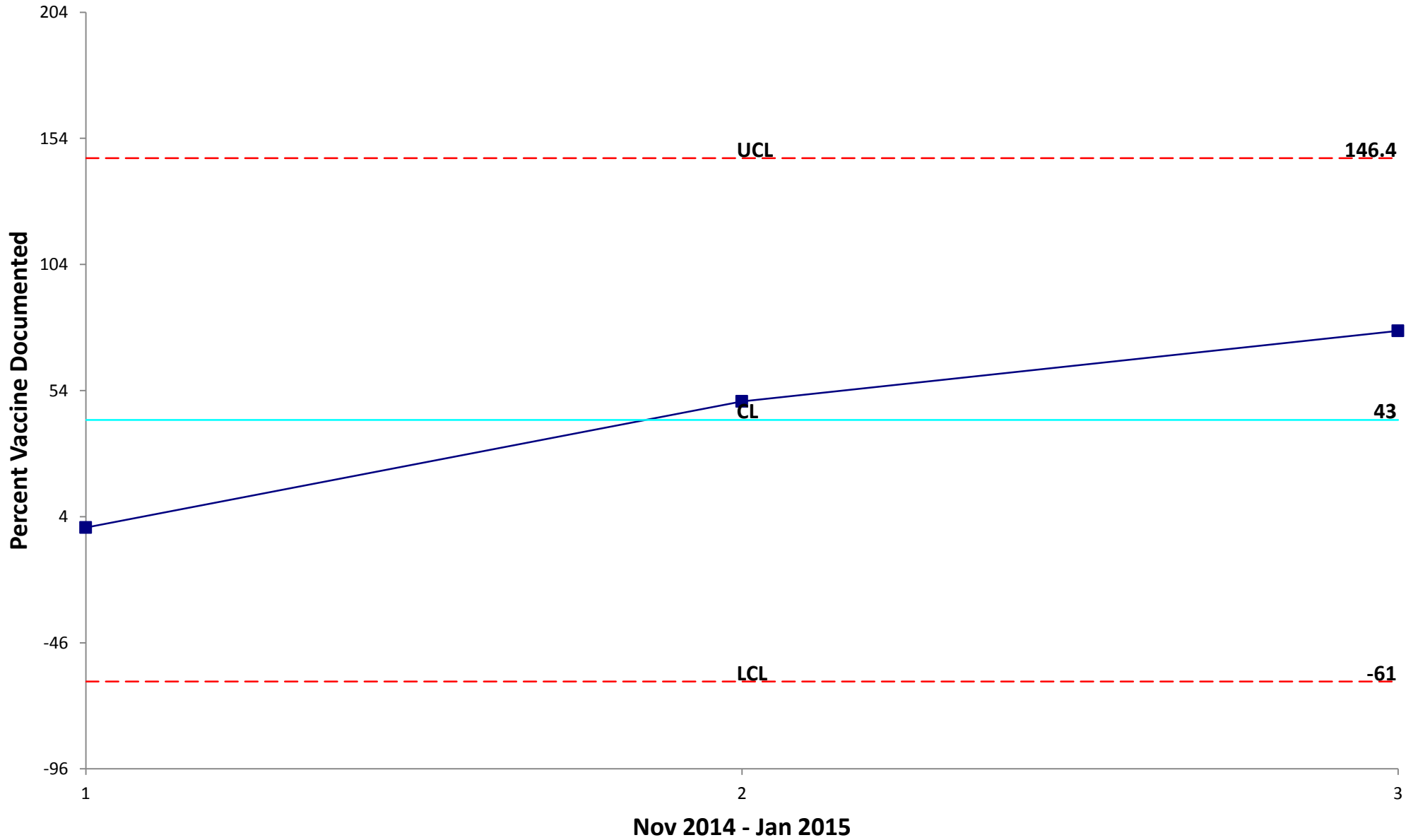
DO: Implementing the Change

- Note template created and revised
- Divisional meeting informing the faculty and staff of the new standardized note and when to use it
- Email instructions were sent with step-by-step screenshot instructions of when and how to use the new note
- Live note implemented on 11/24/2014

CHECK: Results/Impact

- The average rate of vaccine documentation increased to 55% overall
 - There were not enough data points to show a clear improvement but the trend was towards improvement as time progressed
 - The data points on the SPC charts represent the ratios of the vaccine documentation rate divided by the actual vaccination rate over time
 - The number of patients vaccinated (not necessarily documented) improved from 50% pre-intervention to 74%

Vaccine Documentation Rates Post-Intervention



ACT: Sustaining the Results

- The biggest barrier seemed to be difficulty changing habit in the use of the old note template
 - Medical assistants usually start the note and they are not sure which patients this note can be used for
 - This caused a delay in seeing the true impact of the intervention
- We plan to have medical assistants start the patient visit with “Med Clinic Intake Note” rather than starting the actual note template
- Use of the note will become standard information in orientation of new fellows

Return on Investment

- Direct ROI:
 - Cost of the pneumococcal vaccine: \$41.49
 - Reimbursement for administration: \$77.85
 - Increase in revenue per vaccine billed: \$31.36
- Indirect ROI:
 - Potential penalty avoidance through CMS PQRS reporting: -2% for not reporting
 - Follow up visit: $\$108.76 \times 556 \text{ visits/year} = \$60,035.52$
 - -2% penalty = \$1,200.71
 - New visit: $\$164.96 \times 108 \text{ visits/year} = \$17,815.68$
 - -2% penalty = \$356.31

What's Next...

- Continue the use of the standardized note template with the goal of increasing our pneumococcal vaccination and documentation rate
 - Implement further IBD PQRS into the standardized note template for improved patient care, documentation and billing
- This type note template could possibly be used among other departments for documentation of health maintenance parameters

Thank you!



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