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INCREASING INFLUENZA VACCINE RATES USING A PDSA QUALITY IMPROVEMENT APPROACH

Leilanie Perez Ramirez, MD/ MS

Pediatric Allergist and Immunologist

Children's Nebraska Hospital and Medical Center

University of Nebraska- Assistant Professor

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LEARNING OUTCOMES

- Discuss the Steps to Start and Complete a Cycle of a Quality Improvement Project using the PDSA methodology.

- Review an example of a Quality Improvement Project Aiming to Increase the Rate of Influenza Vaccine Administration in an Outpatient Clinical Setting.

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WHAT IS QUALITY IMPROVEMENT IN HEALTHCARE?

- A systematically approach to improve care.

- Seeks to standardize processes to:
  - Achieve predictable results
  - Improve outcomes for patients and healthcare systems

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PDSA METHODOLOGY

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WHAT IS PDSA METHODOLOGY

- One of the most common tools used in health quality improvement projects.

- A four-step model that provides a Structured Experimental Approach to:
  - Improve a process
  - Test changes on a small scale
  - Learn as quickly as possible if an intervention works

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PDSA METHODOLOGY (PLAN-DO-STUDY-ACT)

- Plan
- Implementation (Do)
- Review Findings (Study)
- Adopt, Modify or Discard the Intervention/s(Act)
- Repeat Cycle

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PLANNING

- Enlist Team Members
- Stakeholder Mapping
- Identify the Process to Improve
- Determine the Intervention/s
- Set up Aim
- Choose an Outcome Measure

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ENLISTING TEAM MEMBERS

- Team Leader

- Clinical/System Leader

- Technical Experts or QIP Champions

- Improvement Advisor

- Executive Sponsor

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STAKEHOLDER MAPPING

- Individuals or Organizations

- Anyone who has an interest in the project and can influence the success or failure of the project

- Patients or Patient's Organizations can be included

- Consider to Include resistors

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IDENTIFY THE PROCESS TO IMPROVE AND DETERMINE THE INTERVENTION

Identify the problem or process to improve.

Identify current barriers.

Develop Solutions and/or Intervention.
- Guide points: survey, team members' ideas, evidence theory.
- Determine intervention(s)
- Assign Tasks to the members

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SET UP AIM

What are we trying to accomplish?

- Be Specific (What, Who, Where, When?)
  - Goal
  - Population
  - Setting
  - Timeframe

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CHOOSE OUTCOME MEASURE

- Measurable Outcome

- Determine the metrics to measure the success

- Determine how data will be collected

- Collect Baseline data and Predict the Outcome (Goal)

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DO: IMPLEMENTATION PHASE

- Plan is implemented

- Document relevant data that identify success, problems or expected outcomes.

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STUDY

- Data and Results are analyzed.

- Results are compared to those predicted and to previous cycles.

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ACT

- Adopt, Modify or Discard the Intervention/s

- Repeat Cycle?

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INCREASING INFLUENZA VACCINE ADMINISTRATION RATE AT PEDIATRIC ALLERGY OUTPATIENT CLINICS

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PLANNING

- Enlist Team Members
- Stakeholder Mapping
- Identify the Process to Improve
- Determine the Intervention/s
- Set up Aim
- Choose an Outcome Measure

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ENLISTING TEAM MEMBERS

- Team Leader – Physician Leader

- Clinical/System Leader – Head Nurse

- Technical Experts or QIP Champions – Physician; Epic team

- Improvement Advisor – Physicians

- Executive Sponsor: Clinic Management Supervisor

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STAKEHOLDER MAPPING

- Individuals or Organizations :
  - Director of Department of Allergy

  - Supported by the Department of Pediatrics and Department of Infectious Disease

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IDENTIFY THE PROCESS TO IMPROVE

Problem or process to improve:

- Low Administration Rate of Influenza Vaccine (From Sept 2019 to February 2020): 5% (Data collected from Epic- using All encounters from patients seen at allergy clinics)

Identify current barriers/Gaps:

- Need for Improvement of:
  - The process of screening for influenza vaccine need in allergy clinics
  - The process of ordering and administering influenza vaccine in allergy clinics

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DETERMINE THE INTERVENTION

Develop Solutions and/or Intervention/s.

- Incorporate a MA-Physician influenza vaccine screening and administration model.

- Educate staff about MA-physician model to facilitate influenza administration.

- Reinforcement via email reminders:
  - Providing updated data of the immunization rate for each month.

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SET UP AIM

What are we trying to accomplish?

- Increase the influenza vaccine administration rate From 5% (Season 2019-2020) to 15% (Season 2020-2021).

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SET UP AIM

Be Specific (What, Who, Where, When?)

- Goal: Increase the influenza vaccine administration rate to 15%

- Population: Patients

- Setting: outpatient allergy clinics

- Timeframe: Influenza season (Sept 2020 to February 2021)

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CHOOSE OUTCOME MEASURE

- Determine the Metrics to Measure Outcome:

  Number of Orders for Influenza Vaccine

  All encounters

- Determine how data will be collected:
  - Epic data collection (non-identified)

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DO: IMPLEMENTATION PHASE

- Plan is implemented.

- Document relevant data that identify success, problems or expected outcomes.

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STUDY- RESULTS

- Data and Results are analyzed.

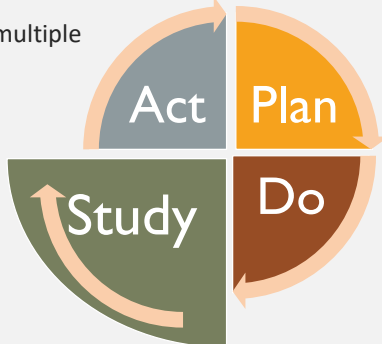- Results are compared to those predicted and previous cycles:

526 immunized patients (vaccine orders) = 8.9% (Previous= 5%)
      5883 total of encounters   (Goal= 15%)

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IMPLEMENTATION- BARRIERS

- Patients being seen more than one time – count toward multiple encounters.

- There is a Need for additional patient/family education:
  - Difficult to change family perceptions in one visit.
  - Restricted time to educate family.

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ACT

- Adopt, Modify or Discard interventions (Act):
  - MA-Physician influenza vaccine screening and administration model was Adopted.

- PDSA Cycle was Repeated- (From 2021 to 2022)

Act | Plan
Study | Do

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CONCLUSIONS

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TAKE HOME MESSAGE

- Quality Improvement Projects are a quick way of testing an intervention.

- When enlisting the team: It is important to include team members with different responsibilities in the intervention/process.

- Before starting the implementation phase: Set up a clear 1) Goal 2) Intervention and 3) Outcome.

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TAKE HOME MESSAGE

- When achieving only a slight improvement: Repeat Additional Cycles.

- Sometimes you need to repeat more than one cycle to increase the adaptation and/or improvement of an intervention.

- Do not Get Discourage if an intervention does not lead to a successful outcome. Negative results are important as well.

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