Increasing the Pneumococcal and Influenza vaccination hospitalized patients

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TEAM

• PHYSICIANS
  Hospital Medicine – Robyn Poteet

• FACILITATOR
  Amruta Parekh, MD, MPH

• NURSING

• PHARMACY

• SOCIAL WORK

• TECH/STATISTICAL SUPPORT
  Wayne Fischer, MS, PhD
LIST OF CUSTOMERS

• PATIENTS

• PROVIDERS

• NURSING

• PHARMACY

• HOSPITAL ADMINISTRATION
BACKGROUND

- Literature...
AIM STATEMENT

To increase the rate of Pneumococcal and Influenza vaccination by 20% over a period of 4 months in patients hospitalized with Pneumonia
Preintervention data for Influenza Vaccine

Only 10% of eligible patients were receiving the vaccine on discharge!
Preintervention data for Pneumococcal Vaccine

Only 30% of eligible patients were receiving the vaccine on discharge! There was a lot of variation too.
Intervention

- Team discussed the process
- **Found out:**
  - Too cumbersome
  - Missed some of the patients due to lack of immunization records on charts
  - Delay in getting vials form Pharmacy led to delayed discharge or even patient refusal
- **Action taken**
  - Have immunization data on electronic medical record (EMR) on admission.
  - Have vaccine vials on patient floors
PROCESS FLOW - Post Intervention

Patient Admitted with Pneumonia

Admission data entered into EMR by nursing and physician including vaccination history

Decision to discharge patient made by doctor

EMR automatically prompts for appropriate vaccination

Patient gives Consent?

Yes

Vaccine available on floor

No

Nurse gives vaccination

Nurse documents in EMR

Patient Discharged
Comparison of Pre and Post intervention Influenza Vaccination in patients

Preintervention

Postintervention
Comparison of Pre and Post intervention Pneumonia Vaccination in patients

Percentage of patients vaccinated

Preintervention

Post intervention

CL 0.300

UCL 0.861

CL 0.300

UCL 0.861
RESULTS

• **Influenza vaccination**: Increased number of immunized patients from 10% to 70%

• **Pneumococcal vaccination**: Increased number of immunized patients from 30% to 64.5%

• More streamlined process

• Faster ..as vaccine available on floor

• Less duplication of work as EMR captured data
RETURN ON INVESTMENT

We put in…

• Cost of vaccine on floor
• Start-up cost = $
• could include storage??
• Yearly cost = $

We hope to achieve…

• Approx ?? medicine admissions/month
• Average ?? Get vaccinated per month

• $ generated
WHERE ARE WE GOING?

Other possible interventions:
PERTINENT POINTS FROM LITERATURE
CONCLUSIONS

• Baseline process was extremely complicated and involved lot of steps.

• Critical evaluation of the process enabled us to identify simple solutions that made a big difference.

• Seeing the variability in the SPC chart before and after intervention showed surprising but reassuring results.

• Knowledge of basic tools was integral to visualizing the goal and achieving the aims.
QUESTIONS?
Thank You