




Introduction to Infection Prevention and Control (IPC) Open Call Series

#2 What Does the Data Mean and What Do I Do with It?

Diane Dohm MT, IP, CIC, CPHQ
MetaStar



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Disclaimer

***These calls are not meant to be a substitute for “completing specialized training in Infection Prevention and Control” (as required in Phase 3 of Final Rule).



They are meant to introduce the basic concepts of Infection Prevention and Control and discuss common questions and issues found during the survey process.

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Reminder

- Questions can be asked in Chat Box during call
- We will open it up at end for you to call in with questions
- Time permitting, we will cover any questions received and not answered from previous call
- All questions and answers will be compiled after completion of call series and made available.

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Objectives

- Analyze your data in a timely manner
- Determine actions needed as indicated by your data
- Distribute data to appropriate stakeholders

Data analysis

Infection Prevention and Control Plan “includes ongoing analysis of surveillance data, and review of data and documentation of follow-up activity in response”

Data

Facility data should drive your program and actions

- Helps with prioritization of your improvement efforts.

How do you know how well you are doing?

- Surveillance (discussed on last call)
- Compare your current data to past data (baseline)
- Analyze in **timely manner**
 - Depending on what you are looking at, this might mean daily, monthly, or quarterly

Baseline

Internal (Infection Logs)

External

- Certification and Survey Provider Enhanced Reporting (CASPER)
- Other facilities in your "group" or corporation
- National Healthcare Safety Network (NHSN)
- Literature

Historically, there has been a lack of national baseline data for Long Term Care (LTC).

Analyze Data

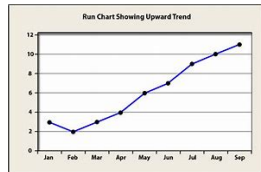
Compare current data to baseline to detect

- Unusual or unexpected occurrences
- Sentinel (serious) event
- Trends
- Clusters
- Non-compliance with policy / protocols

Analyze Data

Trend:

- Underlying pattern of your data points in a time series of data
- Rising, falling or steady?
- Run Chart



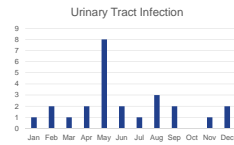
Cluster

A **cluster** is when data is centered or located around one particular value or location.

- Specific floor or ward
- Specific provider

Increase in Number of Infections

- Surveillance process should quickly identify an increase in infections (waiting till year end is not helpful)



- What actions do you need to take now?
 - Review of process/protocols
 - Competency / training

Prevalence vs. Incidence

Prevalence: is a measure of total cases

$$\frac{\text{Total number of cases at a given time}}{\text{Total population at risk at given time}}$$

Similar but Different

Incidence: is a measure of **new** cases arising in a population over a given period (month, year)

Number of new cases of a disease in a time period
Population at risk of disease in a time period

Root Cause Analysis (RCA)

Goal: prevent future harm

- Learn from adverse event and **take action** to prevent recurrence, monitor for compliance to changes
- Not used to punish or discipline
- Identify system issues so they can be mitigated or eliminated

<http://www.stratishealth.org/providers/rcatoolkit/index.html>

Changes in Prevalent Organisms or Resistance

- Common pathogens found in the urinary tract: E.coli (40 percent), Klebsiella, Proteus, Providencia, Morganella
 - Change in pathogens should be an alert
 - Increase in unusual organism
- Resistance Patterns
 - Increase in Methicillin Resistant Staph Aureus (MRSA)
 - Carbapenem-resistant Enterobacteriaceae (CRE)
 - Increase in quinolone resistance

Data Drives Actions Needed

Protocols/process identified (Infection Prevention and Control Plan)

- Keep general vs. specific
 - Identify threshold / trigger (action limit)
 - Identify control measures to be instituted
- Who to notify – how quickly?
 - Medical director
 - Quality Assurance committee
 - Division of Public Health

Unique to your organization

Date Drives Actions Needed

- Identify infection control issues - make recommendations for corrective action
- Short and long range planning educational activities
- Helps to prioritize actions

Document these assessments

Who do you Present Data to?

- Governing Board
- Infection Prevention and Control Committee
- Quality Assurance Committee

What Data do you Present to your Quality Assurance Committee?

- Relevant data
 - Increase in Urinary Tract Infection (UTI), inappropriate antibiotic usage versus just total number of infections
 - Actionable data
- Changes from baseline
- Actions already taken and results of those actions
- Additional actions planned
- Request assistance/guidance with system changes needed

Who else Needs this Data?

- Medical Director – Providers
 - Infection rates
 - Antibiotic Utilization
- Staff
 - Infection rates
 - Hand hygiene rates
 - Audit results
- Resident council when appropriate

Data Dissemination Methods

Once you determine what information they need, you will have to determine the best way to provide information.

- Provider newsletter
- Staff meetings
- Graphs displayed in staff areas

Next Call

March 6, 2018 1:00 CT
Outbreak Recognition and Management

<https://www.lsqin.org/event/infection-prev-series-3/>

Resources

**Infection Preventionists Guide to
LTC Association for Professionals in Infection
Control (APIC)**

<https://rise.apic.org/web/apic/Resources/Store/apic/EStore/MyStore.aspx?hkey=8351e67f-e04b-472e-a30d-37fcd8eac518&id=SLS6008>

Lake Superior Quality Innovation Network

<https://www.lsqin.org/>

Certificate of Attendance

Certificate of Attendance will be provided after you complete the evaluation.

Questions?

Diane Dohm MT, IP, CIC, CPHQ
Project Specialist – Nursing Home Quality

ddohm@metastar.com

608-441-8263

www.lsqin.org

www.metastar.com

All questions and answers will be compiled into a Q & A document after completion of series.



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