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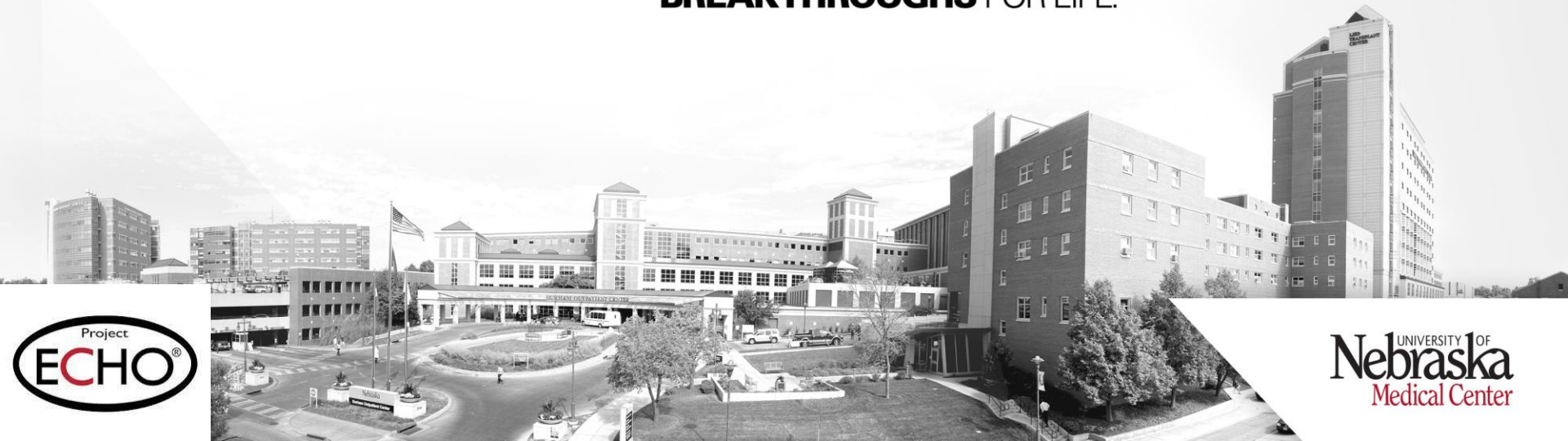
BREAKTHROUGHS FOR LIFE.®



Project ECHO®

University of Nebraska Medical Center

UNMC ID ECHO Project to Reduce COVID-19 Health Disparities Through Quality Improvement

Welcome to Session 11

Project Funded by Nebraska DHHS through a CDC grant

Housekeeping Reminders

- Discussion makes sessions work best!
- Please stay muted unless you are speaking
- We love to see your face!
- Sessions will be recorded and available upon request
- Attendance is taken by filling the survey in the chat

- Reminder: Project ECHO collects registration, participation, questions and answers, chat comments, and poll responses for some ECHO programs. Your individual data will be kept confidential. This data may be used for reports, maps, communications, surveys, quality assurance, evaluation, research, and to create new initiatives.

Subject Matter Experts

Infectious Diseases Team

- M. Salman Ashraf, MBBS
- Erica Stohs, MD, MPH
- Anum Abbas, MD
- Kelly Cawcutt, MD, MS

Quality Improvement Team

- Jeff Wetherhold, QI Consultant
- Gale Etherton, MD
- Mahliqha Qasimyar, MD

Health Equity & Cultural Sensitivity Team

- Nada Fadul, MD
- Mahelet Kebede, HE & CS Consultant
- Shirley Delair, MD
- Jasmine Marcelin, MD
- Andrea Jones, MD
- Precious Davis, Case Manager
- Samantha Jones, Program Manager

CE Disclosures

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UNMC ID Health Equity and Quality Improvement ECHO Project

Topics: SDOH 4/6: Neighborhood and Built Environment and QI Root Causes 5/6: Why are these parts of the process unreliable?

Free Live ECHO Project
April 6, 2022
CID 53867

University of Nebraska Medical Center

TARGET AUDIENCE

This live activity is intended for physicians, APPs, nurses, social workers, case managers, and anyone else interested in learning about health equity in underserved populations.

ACTIVITY DESCRIPTION

Achieving health equity, addressing COVID-19 disparities, and improving the health of all Nebraskans using a quality improvement approach are the goals for our newly launched educational initiative. This COVID-19-focused health equity and quality improvement educational series will use the ECHO model for training healthcare workers.
The course is being offered through the University of Nebraska Medical Center (UNMC) infectious diseases (ID) ECHO program and is funded by the Nebraska Department of Health and Human Services (DHHS) via a CDC grant.

EDUCATIONAL OBJECTIVES

At the conclusion of this live activity, the participants should be better able to:

- Discuss the impact that crime, violence, and environmental conditions have on a person's health outcomes.
- Recognize effective methods for identifying the root cause of potential points of failure or human error in a process.
- Apply these methods to learn about the root causes of unreliability in processes in a facility.

REQUIREMENTS FOR SUCCESSFUL COMPLETION

In order to receive continuing education credit/credits, you must:

1. Participate in the live activity via ZOOM. Your attendance will be tracked by the course facilitator.
2. Complete the overall evaluation
    a. Instructions on how to access the overall evaluation will be provided on a quarterly basis.
    b. Continuing education credits will be issued for activities you attended.

For questions regarding evaluation and attendance, please contact Nuha Mirghani, MD, MBA, HCM at nmirghani@unmc.edu

ACCREDITED CONTINUING EDUCATION

In support of improving patient care, University of Nebraska Medical Center is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

PHYSICIANS/PHYSICIAN ASSISTANTS

The University of Nebraska Medical Center designates this live activity for a maximum of 1.5 *AMA PRA Category 1 Credits*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

NURSES/NURSE PRACTITIONERS

The University of Nebraska Medical Center designates this activity for 1.5 ANCC contact hours. Nurses should only claim credit for the actual time spent participating in the activity.

ACCREDITED CONTINUING EDUCATION

As a Jointly Accredited Organization, University of Nebraska Medical Center is approved to offer social work continuing education by the Association of Social Work Boards (ASWB) Approved Continuing Education (ACE) program. Organizations, not individual courses, are approved under this program. State and provincial regulatory boards have the final authority to determine whether an individual course may be accepted for continuing education credit. University of Nebraska Medical Center maintains responsibility for this course. Social workers completing this live activity receive 1.5 interactive continuing education credits.

Social work level of content: Intermediate

This program has been pre-approved by The Commission for Case Manager Certification to provide continuing education credit to CCM® board certified case managers. The course is approved for 1.5 CE contact hours.

Activity code: I00050046 Approval Number: 220000892

To claim these CEs, log into your CCMC Dashboard at www.ccmcertification.org.

DISCLOSURE INFORMATION

As a jointly accredited provider, the University of Nebraska Medical Center (UNMC) ensures accuracy, balance, objectivity, independence, and scientific rigor in its educational activities and is committed to protecting learners from promotion, marketing, and commercial bias. Faculty (authors, presenters, speakers) are encouraged to provide a balanced view of therapeutic options by utilizing either generic names or other options available when utilizing trade names to ensure impartiality.

All faculty, planners, and others in a position to control continuing education content participating in a UNMC accredited activity are required to disclose all financial relationships with ineligible companies. As defined by the Standards for Integrity and Independence in Accredited Continuing Education, ineligible companies are organizations whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients. The accredited provider is responsible for mitigating relevant financial relationships in accredited continuing education. Disclosure of these commitments and/or relationships is included in these activity materials so that participants may formulate their own judgments in interpreting its content and evaluating its recommendations.
This activity may include presentations in which faculty may discuss off-label and/or investigational use of pharmaceuticals or instruments not yet FDA-approved. Participants should note that the use of products outside currently FDA-approved labeling should be considered experimental and are advised to consult current prescribing information for FDA-approved indications.

All materials are included with the permission of the faculty. The opinions expressed are those of the faculty and are not to be construed as those of UNMC.

Disclosures

The accredited provider has mitigated and is disclosing identified relevant financial relationships for the following faculty, planners, and others in control of content prior to assuming their roles:

FACULTY
The below faculty have nothing to disclose:

Precious Davis, MSN, BSN, RN*
Gale Etherton, MD, FACP
Mahelet Kebede, MPH*
Mahliqha Qasimyar, MD
Jeff Wetherhold, M.Ed*
Carolyn T. Williamson

**Indicates on the planning committee*

Disclosures

PLANNING COMMITTEE

M. Salman Ashraf, MBBS
Merck & Co, Inc: Industry funded research/investigator

Erica Stohs, MD, MPH
ReViral Ltd.: Industry funded research/investigator

The below planning committee members have nothing to disclose:

- Valeta Creason-Wahl, HMCC
- Nada Fadul, MD
- Samantha Jones, CSW
- Nuha Mirghani, MD, MBA, HCM
- Renee Paulin, MSN, RN, CWOCN
- Bailey Wrenn, MA

www.unmc.edu/cce

Case Study

A 45-year-old female with hypertension, insulin-dependent diabetes mellitus and asthma presents to clinic with chief complaint of knee pain and is accompanied by her young daughter. Upon chart review, you note that she has cancelled her annual physical appointment four times. After addressing her reason for visit, you offer age-appropriate preventive services, including COVID19 vaccine series. She appears to be in a rush and politely declines, promising to get it taken care of when she comes in for her annual physical.

Health Equity: Social Determinants of Health Series – Neighborhood & Built Environment

Presenters: Precious Davis, Carolyn Green, and Mahelet Kebede, MPH

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Objective

Discuss the impact that crime, violence, air and water quality, climate change, and other environmental conditions have on a person's health outcomes

Social Determinants of Health

Define in the chat!

The conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.

Context Setting

The neighborhoods people live in have a major impact on their health and well-being.

Many people in the U.S. live in neighborhoods with high rates of violence, unsafe air or water, and other health and safety risks.

People of color and people with low incomes are more likely to live in places with these risks.

Soil around some Omaha homes may pose lead-exposure risks

Risk especially high for young children and pregnant women

Nebraska

Outrage as regulators let pesticides from factory pollute US town for years

Carey Gillam

@careygillam

Sat 29 May 2021 06.00 EDT

Omaha World-Herald

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LIVE Replay: Watch Ketanji Brown Jackson's Supreme Court hearing as it unfolded today

Six months after trial ended, judge finds Yale Park landlord guilty of 4 out of 89 counts

Alia Conley Sep 23, 2021 Updated Oct 31, 2021 0

The Midwest flooding has killed livestock, ruined harvests and has farmers worried for their future

By Jason Hanna and Marlena Baldacci, CNN

Updated 8:35 AM EDT, Wed March 27, 2019

Context Setting

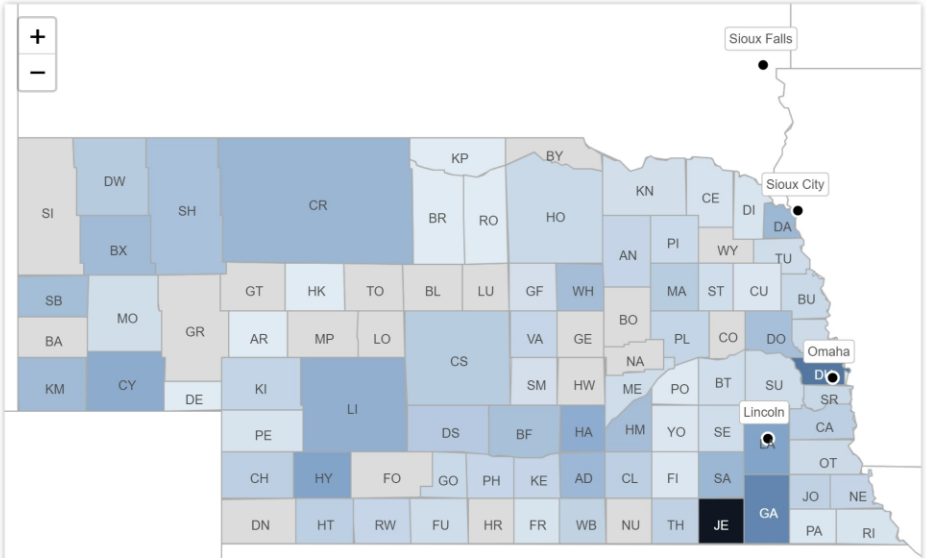
Let's see what Nebraska rates look like!

Violent crime

Number of reported violent crime offenses per 100,000 population.

The 2021 County Health Rankings used data from 2014 & 2016 for this measure.

Map | Data | Description | Data Source | Strategies



Reflection

Enter your response to the question into the chat box.

What environmental and neighborhood factors impact patients/students in your community?

Neighborhood and Built Environment

Goal

Create neighborhoods and environments that promote health and safety.

- Healthy People 2030

Neighborhood and Built Environment

Violence Example

Neighborhood and Built Environment

Environmental Example

https://www.youtube.com/watch?v=bxl_ZExrYUk

Neighborhood & Built Environment

Figure 1

Social Determinants of Health

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	Quality of care
Medical bills	Playgrounds	Higher education		Stress	
Support	Walkability				
	Zip code / geography				

Health Outcomes

Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

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KFF Henry J Kaiser Family Foundation

Neighborhood & Built Environment

COVID-19 Examples

- Internet service - If the internet goes out or there's no internet reception in certain parts of Nebraska, telehealth visits are not feasible.
- Safety - For people who live in apartment complexes or neighborhoods that are not safe, can't walk which is an important part of healing.
- Home health services - some people are stuck in the hospital because they can't secure home health services in their community.

Quality Improvement: Why are These Parts of the Process Unreliable?

Presenters: Mahliqha Qasimyar, MD; Gale Etherton, MD; Jeff Wetherhold

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Objectives

1. Recognize effective methods for identifying the root cause of potential points of failure or human error in a process
2. Apply these methods to learn about the root causes of unreliability in processes in your facility

Our QI Roadmap

1. Define a problem statement
2. Map your process
3. Generate a fishbone diagram
4. **Identify root cause(s)**
5. Apply potential solutions to the hierarchy of actions and impact/effort matrix
6. Define a SMART aim statement

Cause Analysis

- You have defined the problem, mapped out the process, brainstormed many potential causes to that problem and picked out steps in the process that are not reliable

- The next step is to narrow down the potential causes
    - Bigger problems (higher risk) may need in depth review of potential causes using formal root cause analysis technique
    - Smaller problems may only need quick study of the potential causes as is done using Plan-Do-Study-Act technique
    - Both techniques address the answer to WHY?

Match the Tool to the Need

If our aim is to deeply understand the causes of error:

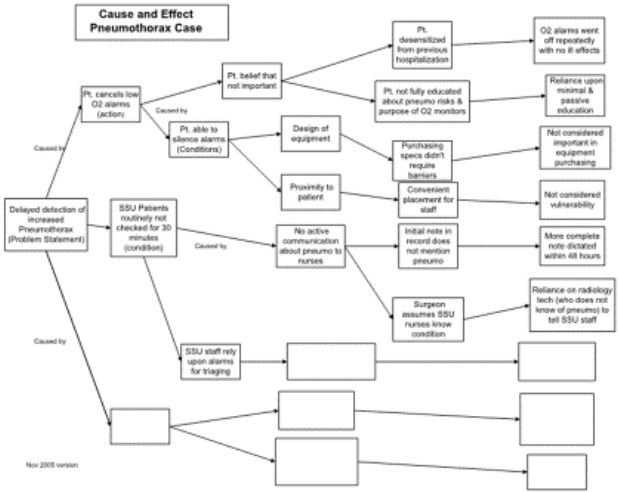
- Asking WHY 5 times leads you to a deeper understanding of the cause of the error
- This is done in Root Cause **Analysis** of the error(s)

If our aim is to learn more about the causes of error quickly:

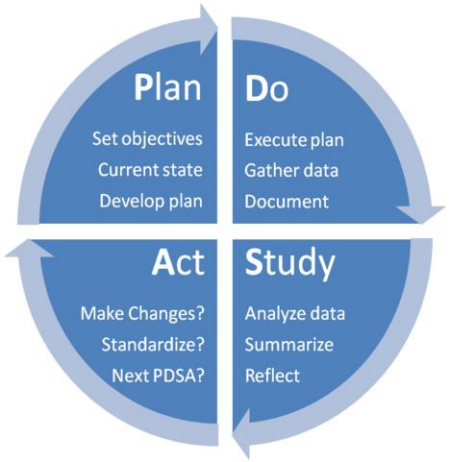
- Observing/studying the process can be used to quickly inform decisions
- Plan-Do-**Study**-Act Cycle is used to quickly inform decisions

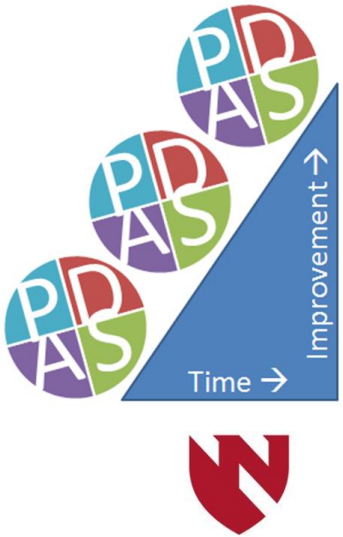
Two Main Types of Error Analysis

Root Cause Analysis (RCA)



Plan-Do-Study-Act (PDSA)





Example RCA

Problem Statement: Some staff don't end up getting tested during orientation

1. Why don't new staff get tested later in the day?	Sometimes they do, but we don't have a reliable system for doing it.
2. Why don't we have a system?	Because there isn't another time when all staff are together.
3. Why isn't there another time when all staff are together?	Because they work in different roles in different departments.
4. Why do some new staff get tested later in the day?	Sometimes a nurse will find them at lunch.
5. Why do some new staff get tested around lunchtime and some not get tested?	Because we don't have a process for reaching out to new staff at lunchtime.
6. Why don't we have a process for reaching out to staff at lunchtime?	Because many new staff have already been tested and we don't know who hasn't.

Potential solution to test: Create an Employee TB Test Log which includes critical information for each new staff member.

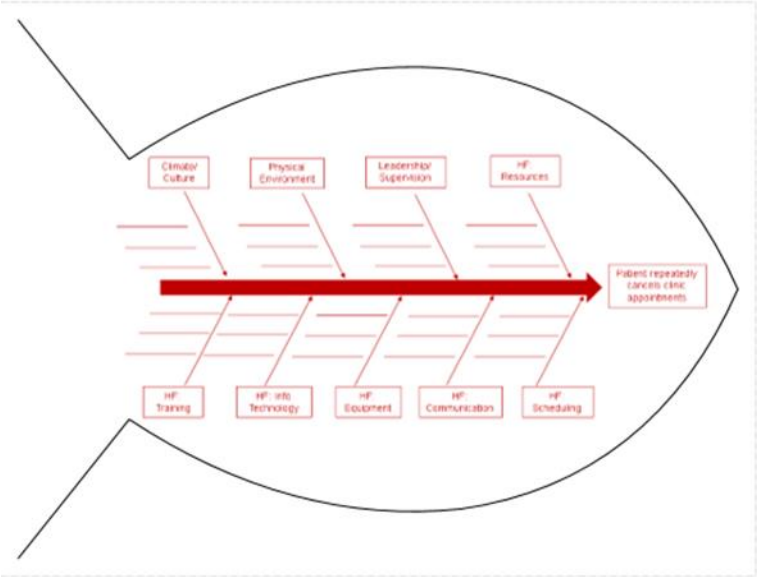
Example PDSA

Problem Statement: Some staff don't end up getting tested during orientation

1. Why don't all new staff get tested during their orientation session?	Because sometimes the nurses are in huddle and don't answer the phone.
2. Why don't the nurses answer the phone?	Because nobody is assigned to it during huddles.

Potential solution to test: Assign a staff member to the phone during nurses' huddles.

Getting to the Why



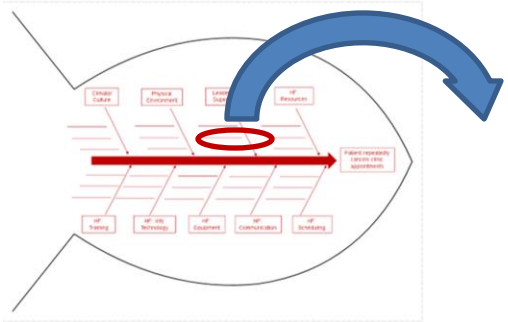
- Think back to the last time you had this problem
- <u>Ask those who do the work:</u>
  - What makes them worried, creates a bad day or is the most difficult issue when addressing the problem?
  - What do they think is contributing to the problem?

Listen to the Front-line Workers for…

- Patterns in decisions
- Processes or structures that are driving decisions
- Broad generalizations (“That’s just how we do it”)
- Non-answers (“I don’t know”)
- New information (”Say more…”)
- Solutions (plural!)

Narrowing Down the List

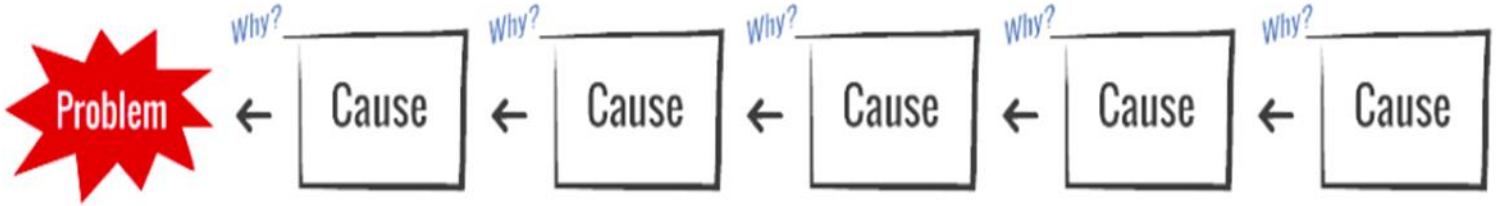
- The answers to these questions help identify unreliable processes
- Focus on the unreliable process and ask why
- Based on the input provided, what potential cause on the fishbone differential makes the most sense to try to fix?



- Select the category most likely contributing to the problem based on your interviews with front line workers
- Use this as a starting point to ask why….

The Five Whys

- Tool to help understand the true root cause of the problem



5 Whys Example

Problem Statement: Only 706 of 2223 passengers survived the sinking of the Titanic	Why is that?
Help did not arrive quickly enough	Why is that?
The nearest ships did not respond to the Titanic's signals for help	Why is that?
The captain of the nearest ship thought the signal flares were part of the celebration for the Titanic's maiden voyage	Why is that?
The Titanic's signals for help were misunderstood	Why is that?
There were no international conventions for distress signals at sea	Root Cause

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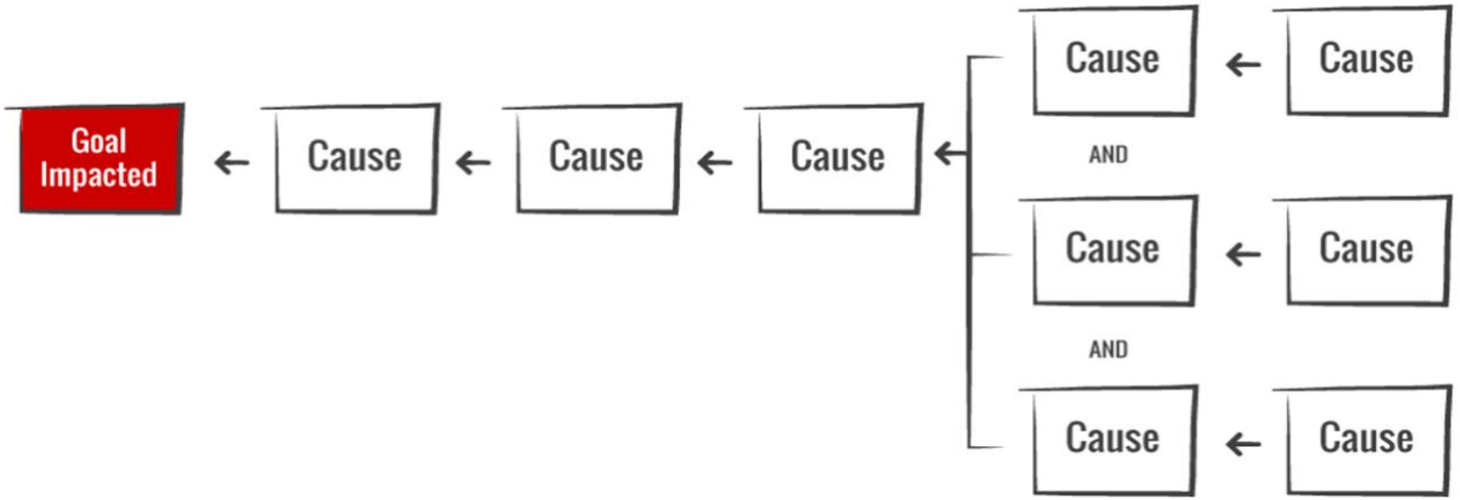
Multiple Root Causes



Case Study

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Case Study

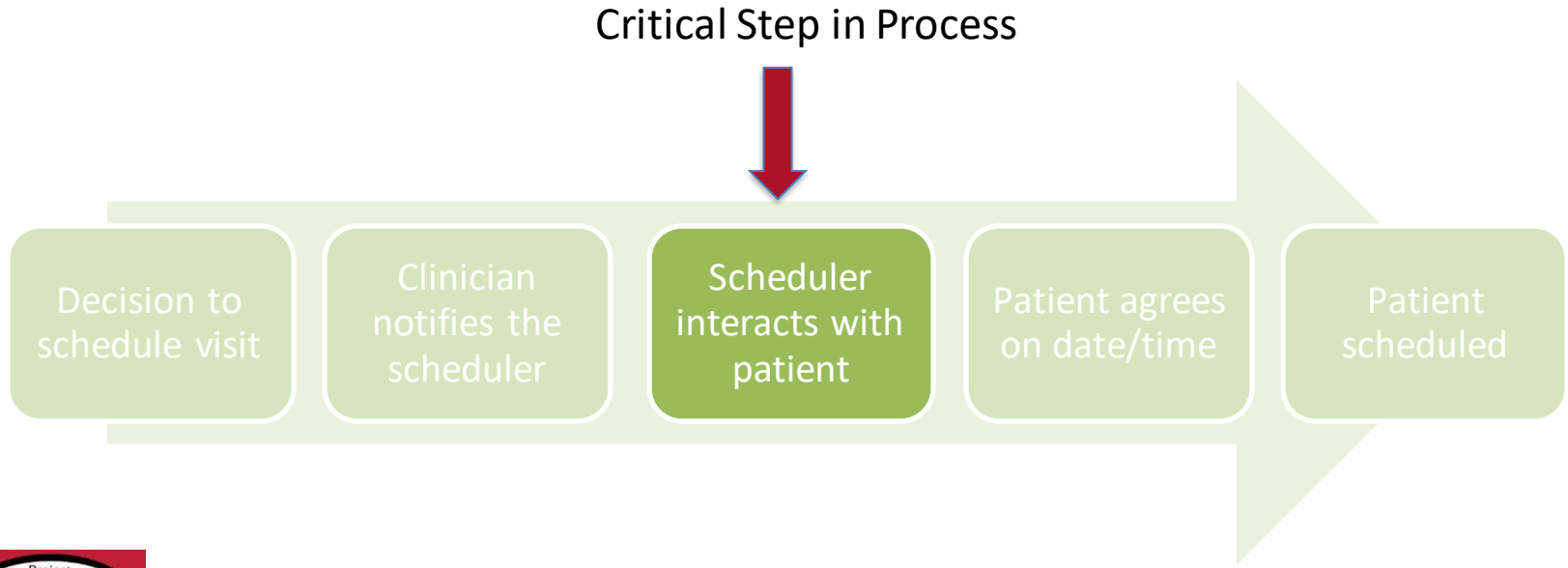
A 45-year-old female with hypertension, insulin-dependent diabetes mellitus and asthma presents to clinic with chief complaint of knee pain and is accompanied by her young daughter. Upon chart review, you note that she has cancelled her annual physical appointment four times. After addressing her reason for visit, you offer age-appropriate preventive services, including COVID19 vaccine series. She appears to be in a rush and politely declines, promising to get it taken care of when she comes in for her annual physical.

Case Study (continued)

Our patient lives in Western Nebraska with her elderly mother and her 2 y/o daughter who has Down Syndrome. She is a single parent who supports her daughter and mother by working 2 part time jobs in town. Her current transportation is unreliable and there are very limited public transportation options. Despite working 2 jobs, she still has difficulty making ends meet. Missing work means she does not get paid. She is apprehensive about the healthcare system due to a prior complicated skin infection after her Caesarean following the birth of her daughter.

Problem Statement: Patient repeatedly cancels clinic appointments.

Our Process Map for Scheduling



Fishbone Diagram

Healthcare Access & Quality

- Lack of health insurance
- Discrimination or other negative experiences
- Inadequate health insurance coverage
- Limited clinic hours or scheduling
- Lack of interpretive services

Neighborhood & Built Environment

- Lack of transportation
- Redlining
- Limited access to technology, wifi
- Infrastructure

Social & Community Context

- Lack of access to childcare
- Lack of support system
- Lack of social services
- Incarceration

Patient repeatedly cancels clinic appointments

Education Access & Quality

- Limited language proficiency/literacy
- Lack of access to quality education

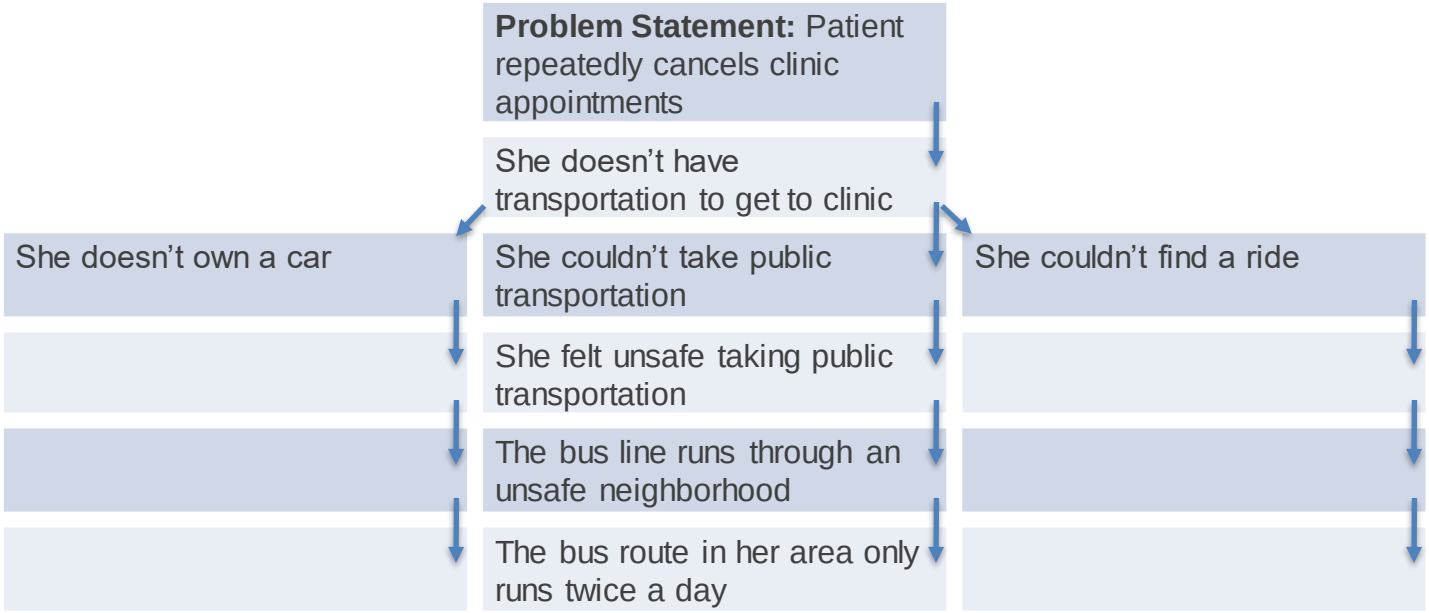
Economic Stability

- Limited time off from work
- Lack of funds/limited income
- Lack of stable employment

Let's Practice: 5 Whys

Problem Statement: Patient repeatedly cancels clinic appointments	Why is that?
She doesn't have transportation to get to clinic	Why is that?
	Why is that?
	Why is that?
	Why is that?
	Root Cause

Case Study: 5 Whys



Let's Reflect

At what step of the "5 Whys" can your facility address this root cause? How?

QI Projects

Timeline

April

- Project submission is open!

May

- We will share examples and be available to answer questions

June Onward

- Project coaching can begin

Project Information

1. What problem are you trying to address?

2. What data or information lead you to believe that this is a problem?

3. What change can you make to address this problem?

4. What can you measure to know if you are successful? Or what can you begin measuring to inform future changes?

What is the problem statement you are trying to address?	Our clinic has higher no-show rates for patient appointments than we did prior to COVID-19
What data or information leads you to believe that this is a problem?	Appointment acceptance and no-show rates
What change can you make to address this problem?	Develop and implement a revised process for reminding patients in three low-SES neighborhoods about appointments and providing information on transportation services
What can you measure to know if you are successful?	Number of patient outreaches initiated, number of patients reached, patient demographic info, appointment rate, no-show rate
What elements of COVID-19 management are relevant to this project?	Preventive care and disease management Non-health care services related to COVID-19
In what ways will this project address cultural sensitivity and/or the health equity factors of the community members you work with?	Racial/ethnic identity Neighborhood/physical environment Economic stability Social and community context Cultural sensitivity

COVID-19 Management

Projects should address at least one of the following

- Vaccination and vaccine support
- Testing
- Contact tracing
- Case investigation
- Quarantine and isolation
- Preventive care and disease management
- Long-term impact of COVID-19
- Personal protective equipment (PPE)
- Non-health care services related to COVID-19 (i.e., transportation, food assistance)
- Evidence-based policies or systems (i.e., risk assessment, screening, visitation)
- Environmental strategies (i.e., cleaning or disinfection)
- Navigation and support services to address COVID-19 risk and prevention
- Communications about COVID-19 risk and prevention
- Plans for countermeasures and adaption services
- Other COVID-19 mitigation and prevention resource (Please describe)

Cultural Sensitivity and Health Equity

Projects should address at least one of the following

- Racial/ethnic identity
- Gender identity
- Sexual orientation
- Neighborhood/physical environment (e.g., air/water quality, housing, violence)
- Economic stability (e.g., employment, poverty)
- Citizenship/immigration status
- Education access, quality, and literacy level
- Health care access, quality, and health literacy level
- Social and community context (e.g., discrimination, family support, community support)
- Cultural sensitivity (e.g., religious sensitivity)

Additional Information

1. Optional: Are there additional ways in which your project will address the social conditions of the community members you work with? If so, please describe.

2. Yes/No: Are you open to sharing your project with another team that has a similar project?

Current State of COVID-19 in Nebraska

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NE COVID-19 Updates

Cases

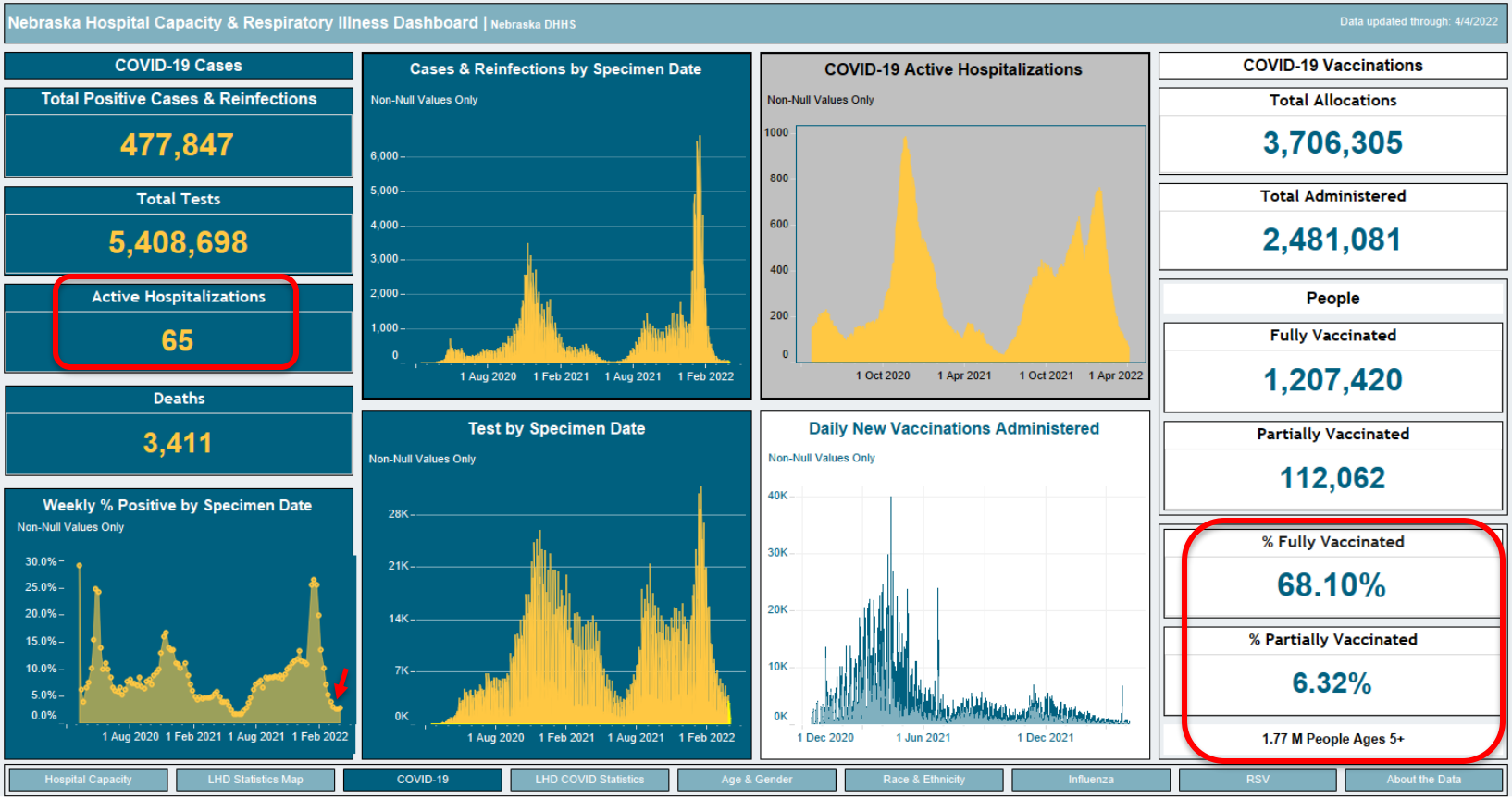
DAILY NEW CASES
• 5.6 PER 100K

INFECTION RATE
• 1.11

POSITIVE TEST RATE
• 3.5%

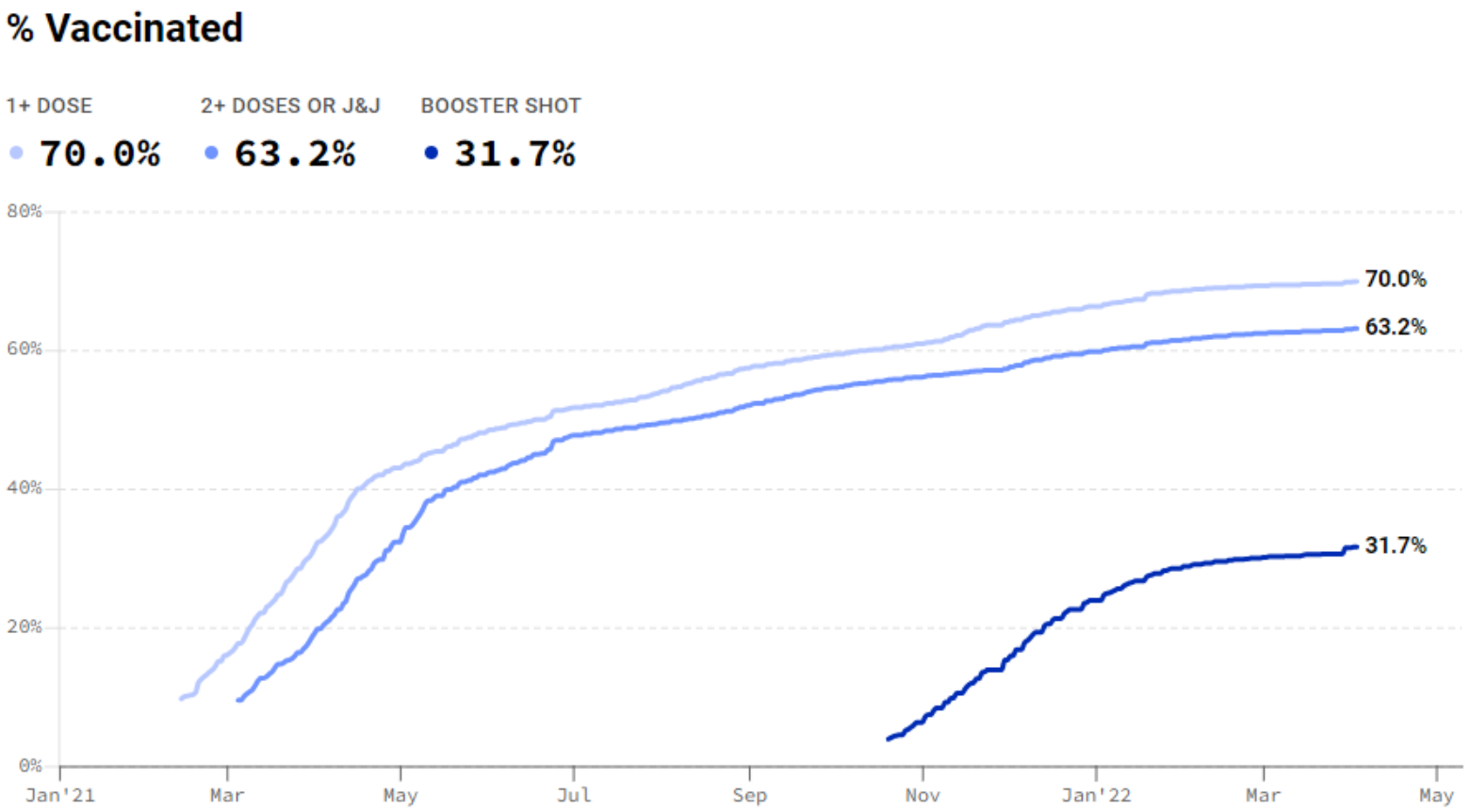
https://covidactnow.org/us/nebraska-ne/

NE COVID-19 Updates



https://datanexus-dhhs.ne.gov/views/Covid/1_DailyCharts?%3AisGuestRedirectFromVizportal=y&%3Aembed=y

COVID-19 NE Updates



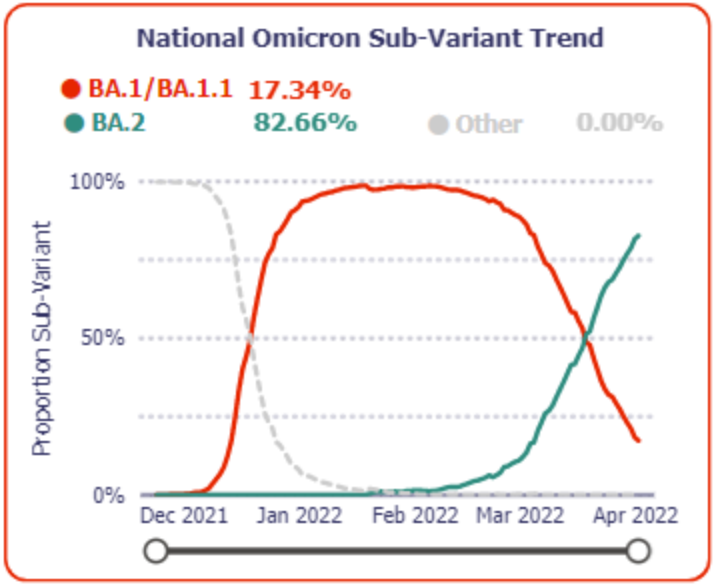
Nebraska Statistics

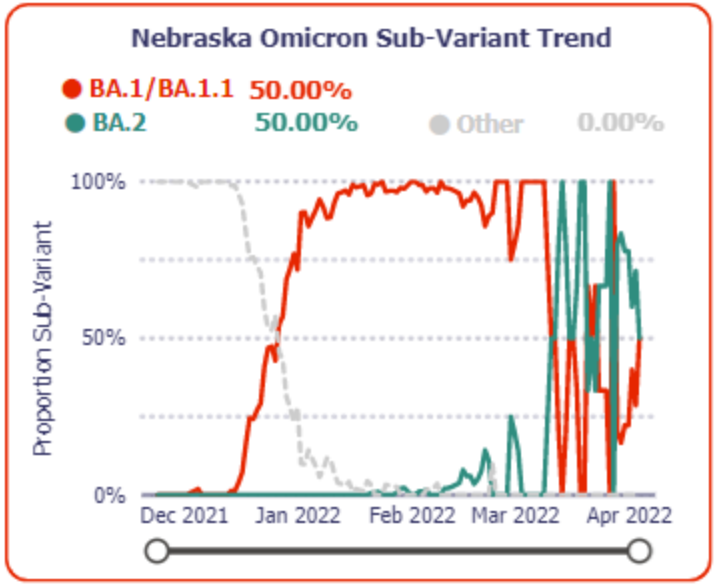
Week	Daily New Cases/ 100K	Infection Rate	Positive Test Rate	Number of Hospitalizations	ICU Capacity Used	*Vaccinated 1+
11/01/21	29.6	1.03	12.8%	413	80%	61%
11/15/21	44.0	1.15	14.8%	455	86%	62%
12/1/21	38.1	0.94	17.6%	545	80%	64%
12/15/21	47.4	1.01	16.2%	637	85%	65%
1/5/22	89.7	1.30	25.1%	532	84%	66.7%
1/19/22	209.6	1.33	35.4%	643	82%	67%
1/31/22	165	1.02	34.5%	754	92%	69%
2/16/22	26.7	0.41	15.6%	459	79%	69%
2/28/22	7.1	0.39	9.5%	279	72%	69%
3/16/22	4.8	0.73	6.0%	152	66%	69%
4/6/22	5.6	1.11	3.5%	65	71%	70%

*Percent of the entire state population vaccinated, regardless of eligibility/age.

https://covidactnow.org/us/nebraska-ne/?s=24951410
https://datanexus-dhhs.ne.gov/views/Covid/1_DailyCharts?%3AisGuestRedirectFromVizportal=y&%3Aembed=y

COVID-19 Omicron subvariant BA.2





- National and state sequencing & wastewater surveillance
- FDA pulled sotrovimab emergency use authorization yesterday (4/5/22)

https://www.walgreens.com/businesssolutions/covid-19-index.jsp
https://covid.cdc.gov/covid-data-tracker/#wastewater-surveillance
https://www.fda.gov/drugs/drug-safety-and-availability/fda-updates-sotrovimab-emergency-use-authorization

CDC COVID-19 Vaccine Updates

Fully Vaccinated vs Up to Date

Fully vaccinated: A person is considered fully vaccinated 2 weeks after receiving all recommended doses in the primary series of their COVID-19 vaccination.

Up-to-date: A person is considered "up-to-date" if they have received all recommended doses in the primary series AND one **booster** when eligible.

Immunocompromised: active treatment for solid or heme malignancy, solid organ transplant, stem cell transplant, CAR-T, moderate-severe primary immunodeficiency, advanced/untreated HIV, receipt of immunosuppressive medications (including high dose, prolonged steroids)

https://www.cdc.gov/coronavirus/2019-ncov/vaccines/stay-up-to-date.html
https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html#immunocompromised

CDC COVID-19 Vaccine Updates

Table 2. COVID-19 vaccination schedule for people who are **not** moderately or severely immunocompromised*

Primary series vaccine manufacturer	Age group	Number of doses in primary series	Number of booster doses	Interval between 1st and 2nd primary doses	Interval between primary series and booster dose
Pfizer-BioNTech	5–11 years	2	NA	3 weeks	NA
Pfizer-BioNTech	12 years and older	2	1†	3-8 weeks‡	At least 5 months†
Moderna	18 years and older	2	1†	4-8 weeks‡	At least 5 months†
Janssen	18 years and older	1	1†	NA	At least 2 months†

Table 3: COVID-19 vaccination schedule for people who are moderately or severely immunocompromised*

Primary vaccination	Age group	Number of primary vaccine doses	Number of booster doses	Interval between 1st and 2nd dose	Interval between 2nd and 3rd dose	Interval between 3rd and 4th dose
Pfizer-BioNTech	5–11 years	3	NA	3 weeks	At least 4 weeks	NA
Pfizer-BioNTech	12 years and older	3	1*	3 weeks	At least 4 weeks	At least 3 months*
Moderna	18 years and older	3	1*	4 weeks	At least 4 weeks	At least 3 months*
Janssen	18 years and older	1 Janssen, followed by 1 mRNA	1*	4 weeks	At least 2 months	NA*

*People ages 12 years and older may choose to receive a second booster dose using an mRNA COVID-19 vaccine if it has been at least 4 months after the first booster dose.

https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html#immunocompromised

Wrap-Up

1. You will receive today's presentation, in addition to a one-page key-takeaways document and next session's agenda through email.

2. Next session will be on April 20th on:

- **HE Social Determinants of Health (5/6): *Healthcare Access & Quality***
- **QI Root Causes (6/6): *What Would Success Look Like? (Aim Statements)***

Thank You!