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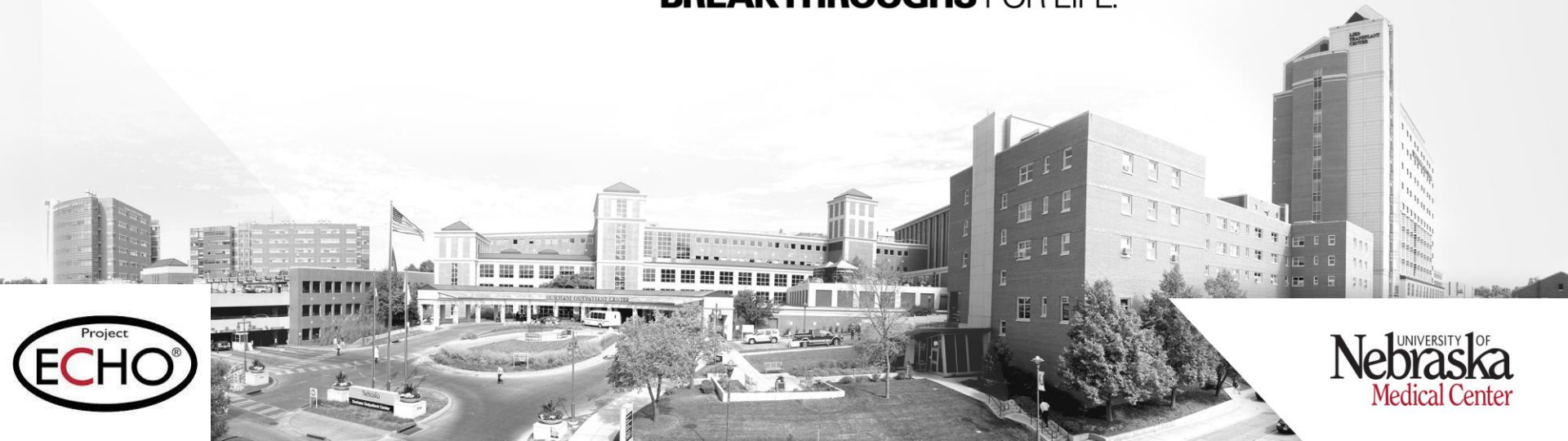

Project ECHO®

University of Nebraska Medical Center

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

Welcome to Session 9

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 2/6: Economic Stability and QI Root Causes 3/6: Where are the known or potential points of failure?

Free Live ECHO Project
March 2, 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:

- Explain how inequities in housing, employment, food security, and income affect health outcomes.
- Recognize effective methods for identifying potential points of failure or human error in a process.
- Identify gaps in a process that may make them vulnerable to error.

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 Credit(s)*™. 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 hour(s). 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: Advanced

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 hour(s).
Activity code: I00049618 Approval Number: 220000462
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*

**Indicates on the planning committee*

Disclosures

PLANNING COMMITTEE

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

Nada Fadul, MD
ViiV Healthcare: Advisory Committee/Board

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

The below planning committee members have nothing to disclose:

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

www.unmc.edu/cce

POLL

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.

Poll Results

Project ECHO®

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Health Equity: Social Determinants of Health – Economic Stability

Presenters: Precious Davis and
Mahelet Kebede, MPH

Project ECHO®

UNMC

Objective

1. Explain how inequities in housing, employment, food security, and income affect health outcomes.

Social Determinants of Health

Refresher

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.

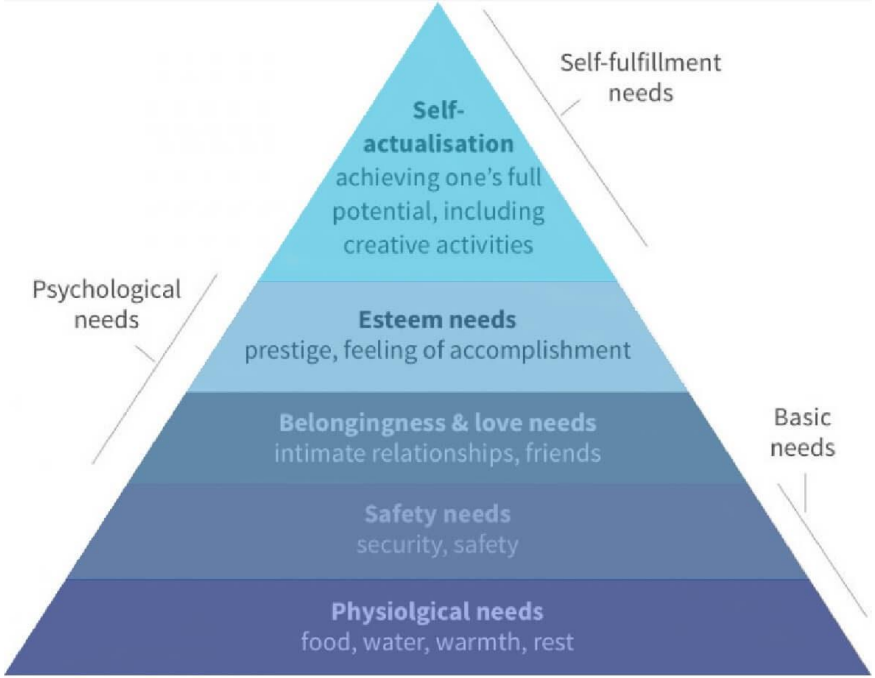
Context Setting

In the United States, 1 in 10 people live in poverty, and many people can't afford things like healthy foods, health care, and housing.

What do the Nebraska rates or look like? Let's see:

https://www.countyhealthrankings.org/app/nebraska/2021/overview

Maslow's Hierarchy of Needs



Economic Stability

Goal

Help people earn steady incomes that allow them to meet their health needs.

Objectives

- Reduce the proportion of people living in poverty.
- Increase employment in working-age people.
- Reduce the proportion of families that spend more than 30% of income on housing.

Project ECHO

Healthy People 2030

Economic Stability

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

Economic Stability Factor

General Example

https://www.youtube.com/watch?v=tGtaHcqsSE8

Economic Stability Factor

General Example

https://www.youtube.com/watch?v=vM30cS-NZZU

Reflection

Enter your response to the question into the chat box.

What impacts Alex's ability to earn steady income?

How can you address a patient's economic stability if you work in a health care/public health setting?

Economic Stability Factor

COVID-19 Example

A working-class patient living in Cherry County, Nebraska, is currently unemployed. They do not have a car and the nearest COVID-19 vaccination clinic is two hours away.

Quality Improvement: Human Factors

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

Project ECHO

UNMC

Objectives

1. Recognize effective methods for identifying potential points of failure or human error in a process.
2. Identify gaps in a process that may make them vulnerable to error.

Our QI Roadmap

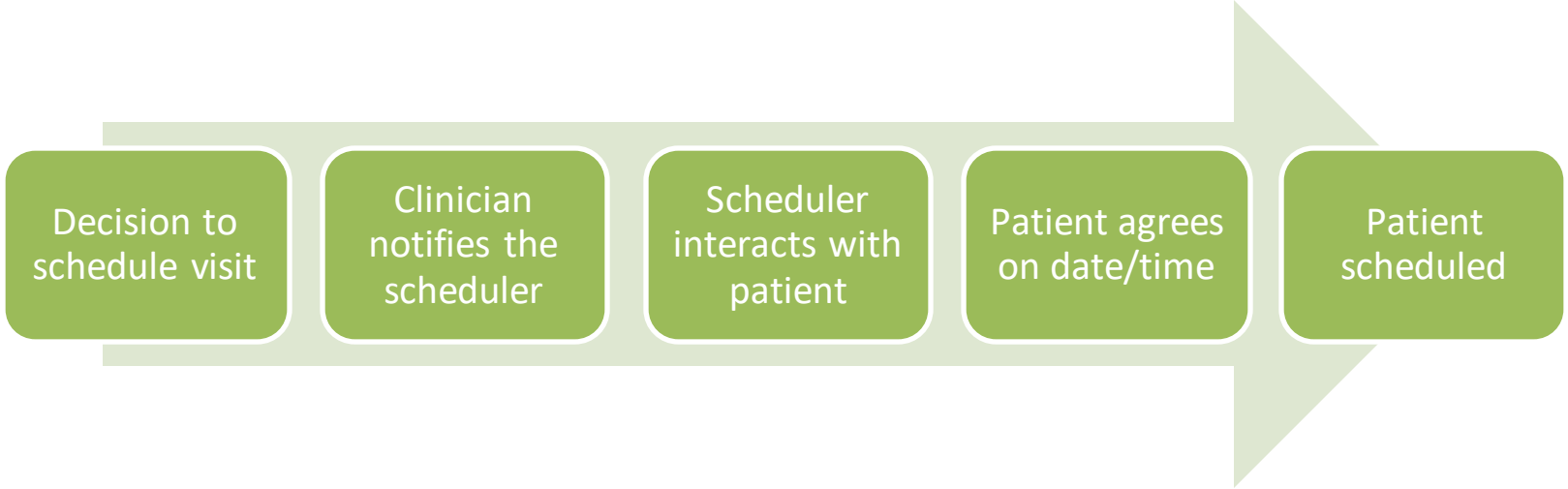
1. Define a problem statement
2. Map your process
3. **Generate a fishbone diagram**
4. Identify root cause(s)
5. Apply potential solutions to the hierarchy of actions and impact/effort matrix
6. Define a SMART aim statement

1. Define a Problem Statement

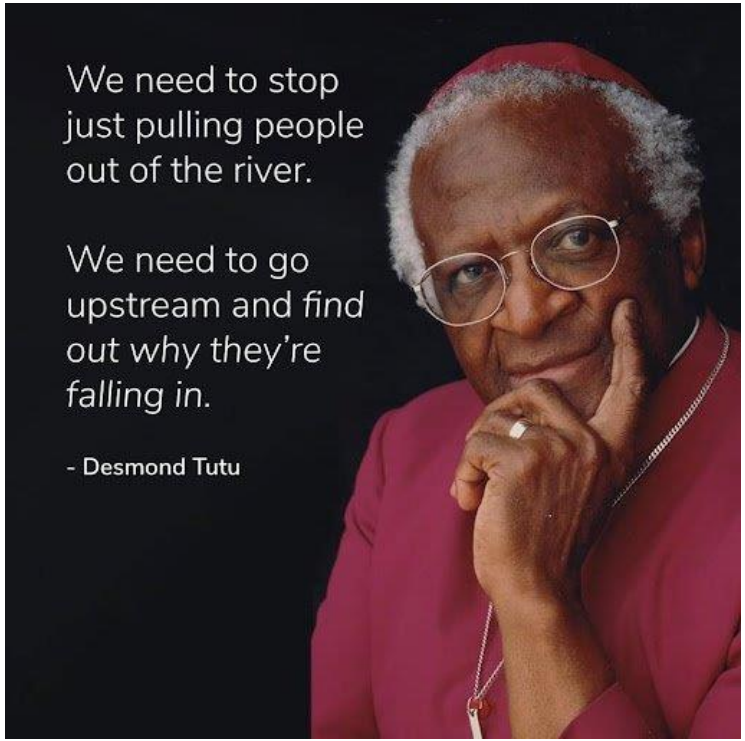
A 45-year-old female with hypertension, insulin-dependent diabetes mellitus and asthma presents to clinic with chief complaint of knee pain and is accompanied by her young daughter. Upon chart review, you note that she has cancelled her annual physical appointment four times. After addressing her reason 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.

Problem Statement: Patient repeatedly cancels clinic appointments.

2. Map the Process



System-Based Thinking is Upstream Thinking

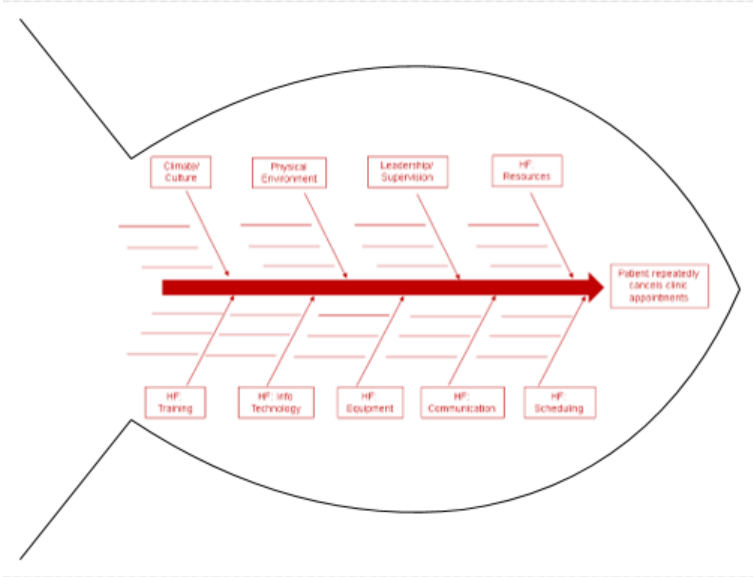


3. Generate a Fishbone Diagram

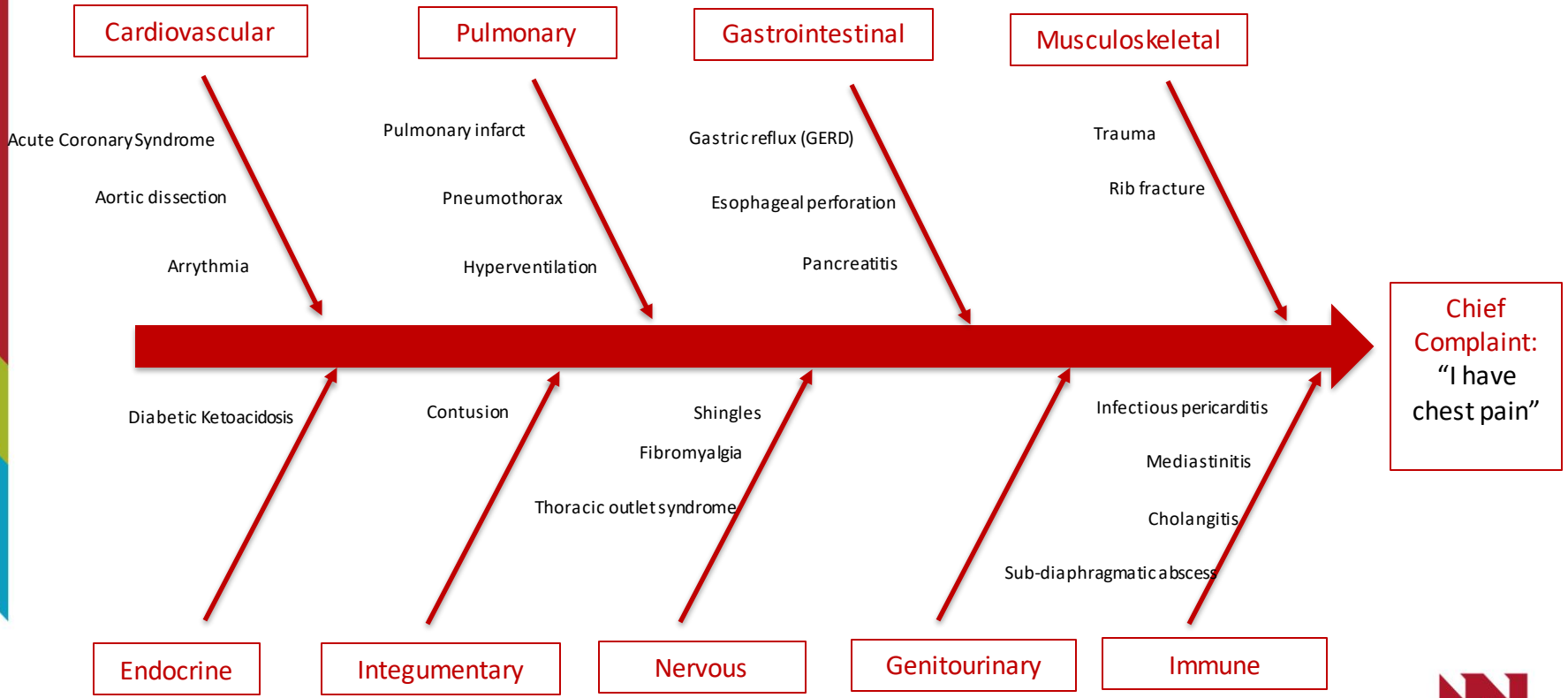
- Also called a Cause-And-Effect diagram
- Used to generate a list of potential causes (aka “differential diagnosis”) for the problem (aka “chief complaint”) statement
- Prompts you to organize your brainstorming session into common categories of system error, not an individual’s decision-making

Fishbone Diagram

- Head: Problem statement
- Ribs: The standard categories of Root Causes with both primary and secondary causes
  - Primary cause: Leads directly to the outcome
  - Secondary cause: Leads to primary cause, but does not directly lead to the end effect
- Each industry has different buckets that are standardized for grouping the causes



Example - Human Systems



Human Factors

- Defined as the study of how humans interact with a system
- Necessary because relying on human beings to do the right thing is a poor design assumption
- Hanlon's Razor: "Never attribute to malice that which can be adequately explained by neglect." (For our purposes, let's replace "neglect" with "overwork" or "exhaustion")

ERROR CLASSIFICATION

ENVIRONMENT	
Climate/Culture	**Physical Environment**
• Attitudes and actions allow unsafe acts • Overconfident or underconfident	• Concentration, vision, hearing or movement impaired

LEADERSHIP	
Operational Planning	**Supervisory Ethics**
• No provision for adequate training » Role/responsibilities not defined » Rule/policies and/or procedure not defined • Failure to correct known and/or identified problems • Employees not fully aware or capable of work to be done • No formal team training provided	• Permits workers to perform tasks outside of scope and licensure or qualification

ERROR CLASSIFICATION

HUMAN FACTORS			
Information Technology	**Equipment**	**Scheduling**	**Resources**
• Computer hardware or software problems • EMR issues • Information security issues	• Usability issue • Warning system or automated system issues • Biomed interface problems: hardware or software	• Fatigue • Rushed or delayed necessary action • Task overload • Competing priorities	• Failure to use available resources • Appropriate resources not available when needed • Appropriate resources not purchased, funded • Failure to remove defective resource

HUMAN FACTORS		
Training	**Training**	**Failure Mechanism of Communication**
• Improper use of equipment • Inadequate report provided • Inadequate maintenance of equipment	• Procedure or checklist not followed • Wrong procedure or tool chosen for task • Team training failure (Team trained but failed) » Poor team dynamics » Team specific coordination failures » Team specific communication failures (Occasion | Audience | Content | Purpose)	• Confidentiality lost • Conveyance poor (written, electronic or verbal)

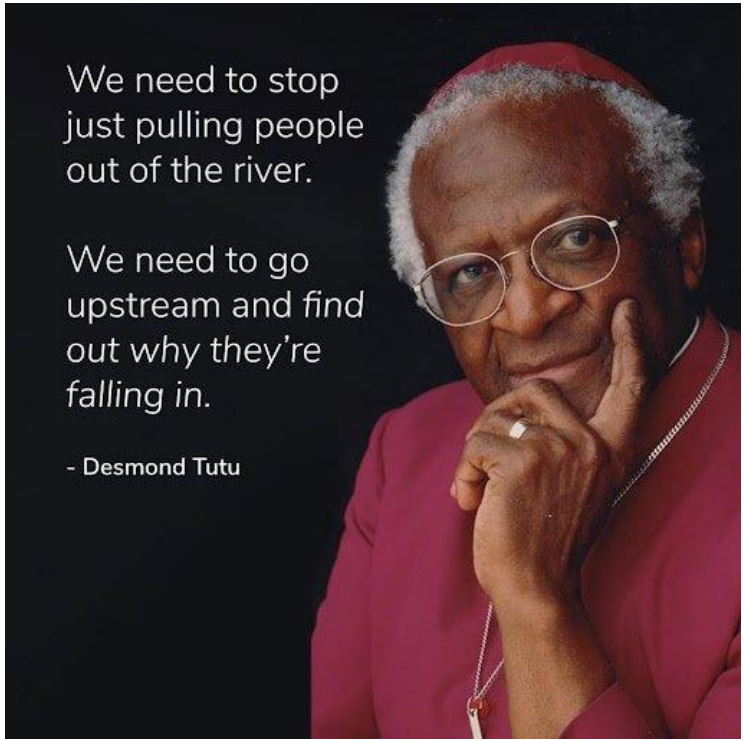
Social Determinants of Health

Healthcare Access and Quality	Education Access and Quality	Social and Community Context	Economic Stability	Neighborhood and Built Environment
• Access to healthcare • Access to primary care • Health insurance coverage • Health literacy	• Early childhood education and development • Graduation from high school • Enrollment in higher education • Language, literacy	• Cohesion within community • Civic participation • Discrimination • Workplace conditions • Incarceration	• Poverty • Employment • Food security • Housing stability	• Housing quality • Access to transportation • Availability of healthy foods • Air and water quality • Neighborhood crime and violence

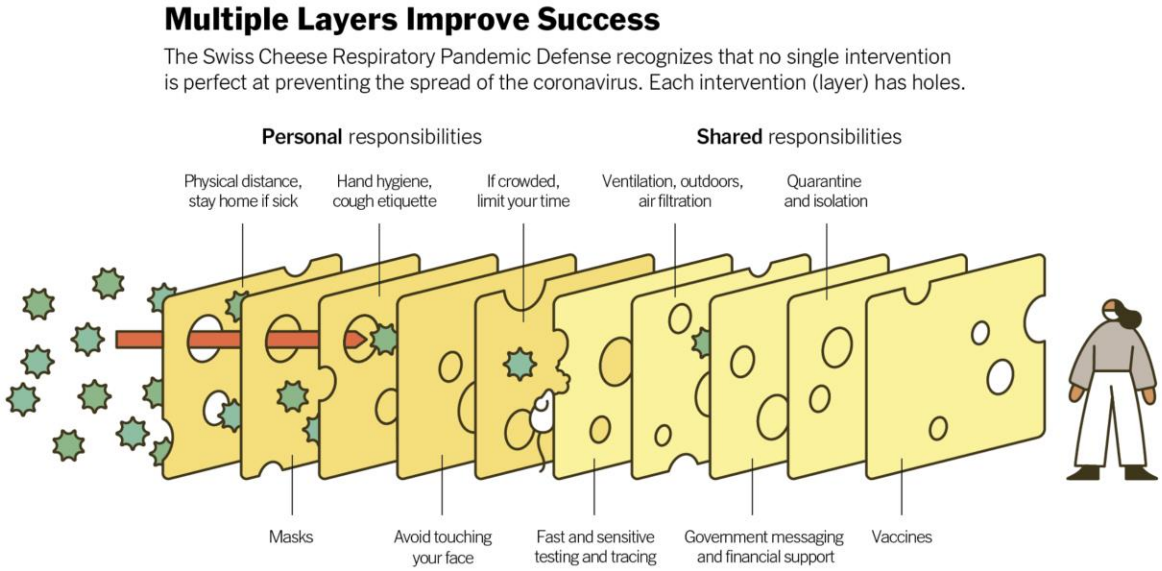
SDOH and Human Factors

Human Factors: Information Technology & Equipment	Human Factors: Scheduling	Human Factors: Communication	Human Factors: Resources	Human Factors: Training	Environment: Climate & Culture	Environment: Physical Environment	Leadership
• Access to reliable data sources • Home computer/ technology access • Preferred language reflected in EMR	• Public briefings held during work/school hours • Vaccine clinics scheduled during work/school hours • Access outside 9a-5p M-F • Special needs accommodation • Limited time off from work	• Information not provided in preferred format or language	• Multiple data sources potentially conflicting • Healthcare access • Interpretive services access • Financial resources • Home healthcare resources • Child/adult care • Support system(s)	• Health literacy • Cultural competency of healthcare workers	• Individual freedoms v public health • Religious beliefs • Individual v family or community-oriented decision making • Implicit and explicit biases	• Vaccination sites not locally accessible • Workplace conditions	• Inconsistent messages from CDC, others • Clear, complete & updated info not provided • Historical mistreatment by US govt and healthcare system

System-Based Thinking is Upstream Thinking



Swiss Cheese Model



Source: Adapted from Ian M. Mackay (virologydownunder.com) and James T. Reason. Illustration by Rose Wong

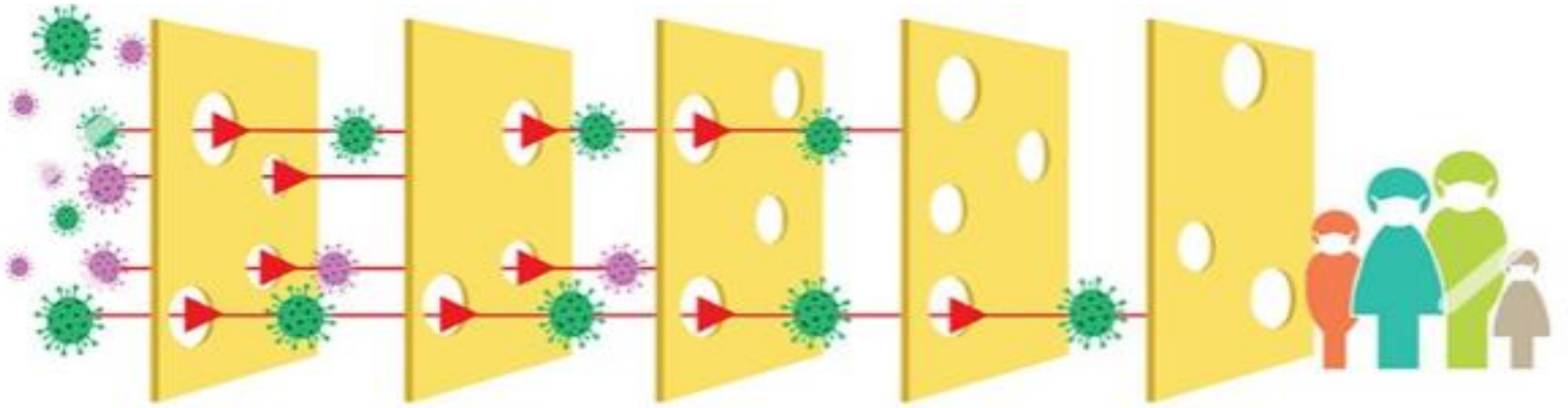
NA

By Siobhan Roberts

Published Dec. 5, 2020 Updated Dec. 7, 2020

Swiss Cheese and Socioecological Models

Policy | Community | Organizational | Interpersonal | Individual



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.

Let's Practice

- Problem Statement: "Patient repeatedly cancels clinic appointments."

*What questions related to **economic stability factors** do you want to ask to learn more about why this patient has repeatedly canceled clinic appointments?*

Healthcare Access & Quality

Neighborhood & Built Environment

Social & Community Context

Patient repeatedly cancels clinic appointments

Education Access & Quality

Economic Stability

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 (public) transportation

Redlining

Limited access to technology, wifi

Infrastructure

Social & Community Context

Lack of access to childcare

Incarceration

Lack of support system

Lack of social services

Patient repeatedly cancels clinic appointments

Limited language proficiency/literacy

Lack of access to quality education

Education Access & Quality

Limited time off from work

Lack of funds/limited income

Lack of stable employment

Economic Stability

More Information From Our Patient

Our patient lives in Cherry County, 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.

Reflection

- Did you make any assumptions about this patient before getting the additional information about her situation?
- If yes, how did this impact your ability to think through all the possible causes of her repeatedly cancelling her clinic appointments?

QI Projects

Timeline

- **March:** We will share information on project scoping and support.
- **April-May:** You can submit project topics. We are available to answer questions and will share examples during sessions.
- **June:** Projects and coaching can begin.

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)

Current State of COVID-19 in Nebraska

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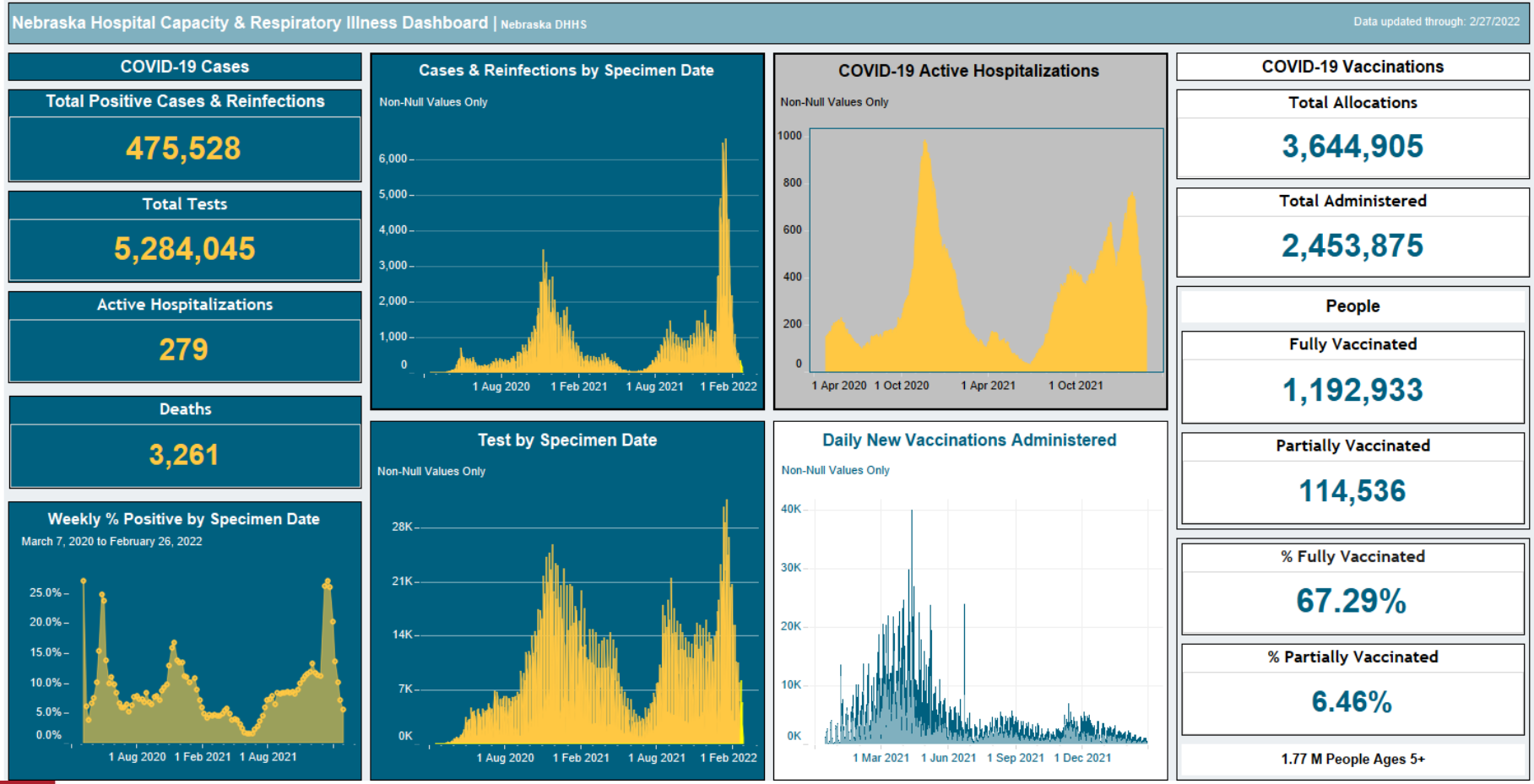
COVID-19 Updates

DAILY NEW CASES
• 7.1 PER 100K

INFECTION RATE
• 0.39

POSITIVE TEST RATE
• 9.5%

COVID-19 Updates



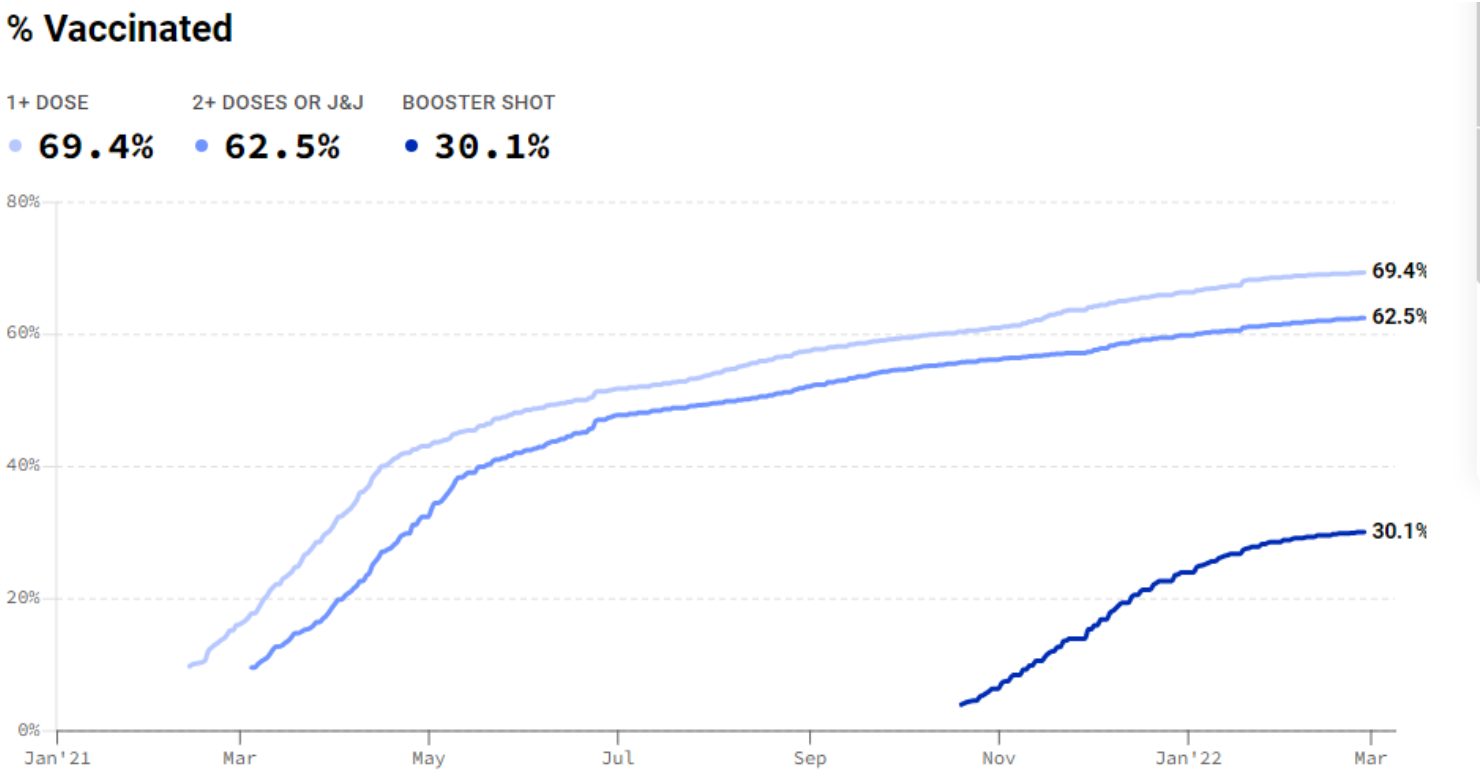
Nebraska Statistics

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%

*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 NE Updates



In Nebraska, 1,341,771 people (69.4%) have received at least one dose, 1,208,423 (62.5%) have received at least two doses or a single Johnson & Johnson dose, and 582,257 (30.1%) have received a booster shot. Anybody who is at least 5 years old is eligible to be vaccinated. Fewer than 0.001% of people who have received a dose experienced a severe adverse reaction. See more vaccine resources and FAQs.

Share

CDC COVID-19 Updates

What Prevention Steps Should You Take Based on Your COVID-19 Community Level?

Low	Medium	High
• Stay up to date with COVID-19 vaccines • Get tested if you have symptoms	• If you are at high risk for severe illness, talk to your healthcare provider about whether you need to wear a mask and take other precautions • Stay up to date with COVID-19 vaccines • Get tested if you have symptoms	• Wear a mask indoors in public • Stay up to date with COVID-19 vaccines • Get tested if you have symptoms • Additional precautions may be needed for people at high risk for severe illness

People may choose to mask at any time. People with symptoms, a positive test, or exposure to someone with COVID-19 should wear a mask.

https://www.cdc.gov/coronavirus/2019-ncov/your-health/covid-by-county.html

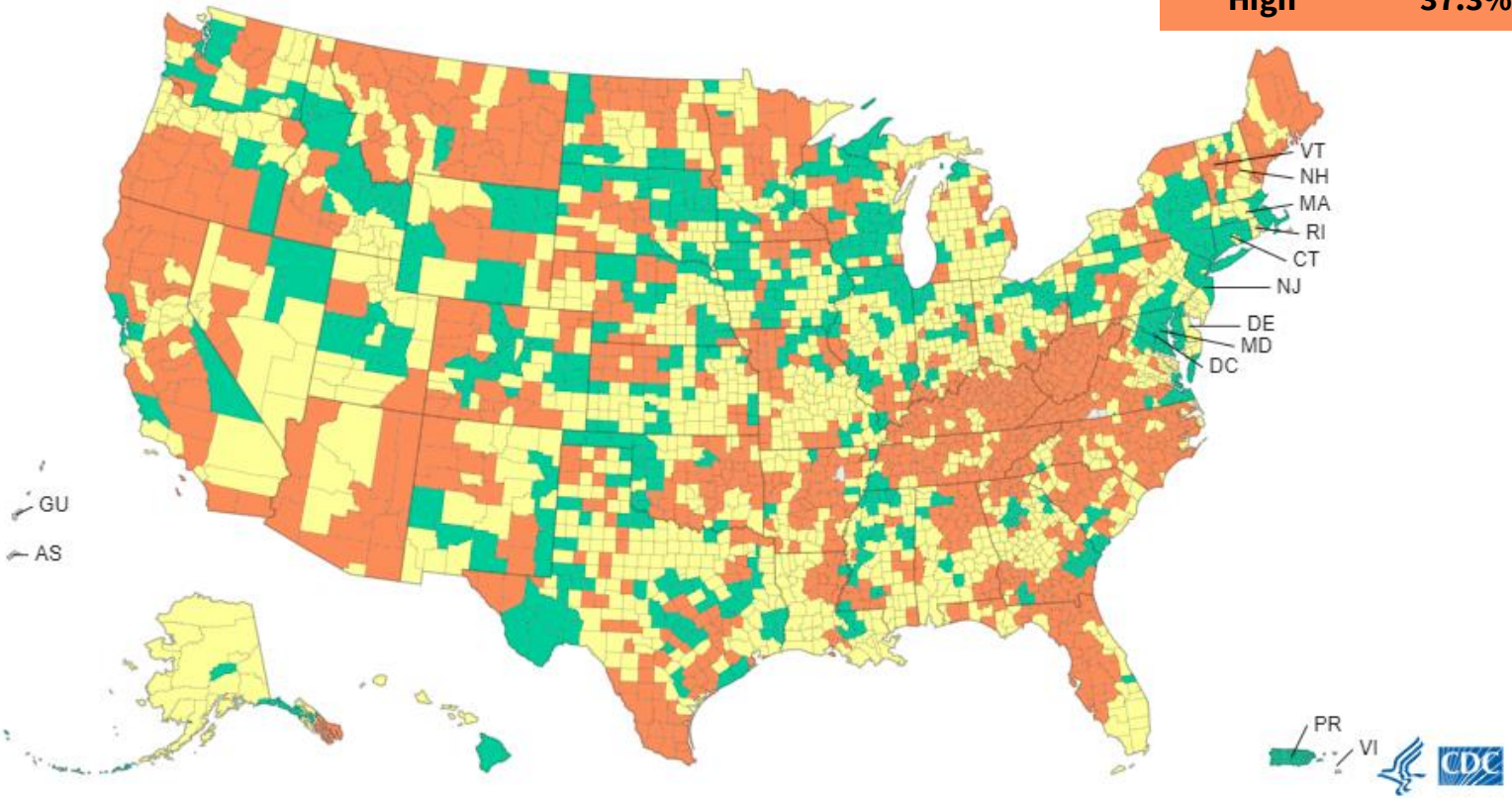
U.S. COVID-19 Community Levels by County

Data provided by CDC

Updated: Feb. 24, 2022

https://www.cdc.gov/coronavirus/2019-ncov/your-health/covid-by-county.html

	% of Counties	% of Pop.
Low	**23.0%**	**29.5%**
Medium	**39.6%**	**42.2%**
High	**37.3%**	**28.2%**



POLL

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 March 16th on:
   - ***Social Determinants of Health (Part 3/6) - Education Access & Quality***
   - ***Quality Improvement Root Causes (Part 4/6) - How Will You Know Your Process is Reliable?***

Poll Results

Thank You!