The National Nurse-Led Care Consortium (NNCC) is a non-profit membership organization that supports nurse-led care and nurses at the front lines of care.

NNCC, in partnership with the CDC, works to support efforts to build COVID-19 vaccine confidence among nurses and the communities they serve.

Learn more at NurseLedCare.org
Free 2-part learning collaborative series for nurses on areas relating to COVID-19 and rural community health.

The series second session will take place on **August 25th**.

1.5 CEU will be offered for each session attended live. An evaluation will be sent out to attendees following each session, complete the brief questionnaire to receive CEU credit. Learn more [here](#).

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This project was funded in part by a cooperative agreement with the Centers for Disease Control and Prevention (grant number NU50CK000580). The Centers for Disease Control and Prevention is an agency within the Department of Health and Human Services (HHS). The contents of this resource center do not necessarily represent the policy of CDC or HHS, and should not be considered an endorsement by the Federal Government.
EXPECTATIONS FOR THE SERIES

- To complete the pre-series survey and post-series surveys.

- Through this session, we intend to create a space where we can facilitate supportive conversations and learning across the nursing community.
Session Reminders

1. Share your video during breakouts.
2. Snacks and lunch are okay!
3. Take breaks when you need
4. Respond and participate to breakout discussions.
AGENDA

- NNCC Welcome/introduction
- Didactic Presentation
- Breakout Discussion
- Discussion and Q+A
- NNCC Wrap-up
Rachel Foster  
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Rural COVID-19 Program Manager  
PA Office of Rural Health
Maureen Boardman

MSN, FNP-C, FAANP

Clinical Research Director, Dartmouth CO-OP PBRN
Overcoming Vaccine Hesitancy in Rural Northern New England

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CLINICAL ASSISTANT PROFESSOR OF COMMUNITY AND FAMILY MEDICINE DARTMOUTH GEISEL SCHOOL OF MEDICINE

CLINICAL RESEARCH DIRECTOR OF THE NORTHERN NEW ENGLAND CO-OP PRACTICE & COMMUNITY BASED RESEARCH NETWORK

DIRECTOR OF CLINICAL QUALITY LITTLE RIVERS HEALTH CARE FEDERALLY QUALIFIED HEALTH CENTER
Rural COVID-19 Vaccine Hesitancy

- In March of 2021 a poll by Kaiser Family Foundation found that vaccine hesitancy was highest in rural communities with 21% of all rural US residents said that they would “definitely not” be immunized against COVID-19 compared with 10% of urban residents.
- COVID-19 incidence and mortality are higher in rural than urban communities.
- A report in Morbidity and Mortality weekly from March 4, 2022 showed that vaccination coverage with the first dosage of the primary vaccination series was lower in rural areas (58.5%) compared to urban counties (75.4%) disparities have increased more than twofold since April 2021.

Addressing barriers to vaccination in rural areas is critical to achieving vaccine equity, reducing disparities and decreasing COVID-19 related illness and death in the United States.
Rural COVID-19 Vaccine Hesitancy

- Rural populations tend to be older (aged >65 years)
- More likely to be uninsured
- More likely to have underlying medical conditions
- Live farther away from tertiary medical care placing them at higher risk for adverse COVID-19 outcomes
Rural COVID-19 Vaccine Hesitancy Contributing Factors

- Access to health care remains challenging in rural counties
- Variation in views regarding the seriousness of COVID-19 infection
- Vaccine hesitancy has been historically higher in rural than urban areas for routine vaccines
Sacopee Valley Health Center

- FQHC with 1 office, Porter Maine
- 90.4% Statewide have received at least one dose
- 79.5% Statewide have received two vaccinations
- 44.4% have received 1 Booster dosage
- 78.5% in Oxford County have received at least one dose
- 63.6.26% in Oxford County have completed two doses
- 36.1% have received 1 Booster dosage
Coos County Family Health Services

- 3 offices 2 in Berlin and 1 in Gorham
- 73.7% Statewide have received at least one dose
- 63.7% Statewide have received second vaccination
- 29% Statewide have received Booster dosage
- 65% in Coos County have received at least one dose
- 57.6% in Coos County have received second dose
- in Coos County have received Booster
Little Rivers Health Care

- 4 offices Bradford, East Corinth, Newbury and Wells River
- 88% Statewide have received at least one dose
- 82% Statewide have received two doses of vaccination
- 68% have received Booster dosage
- 81% in Orange County have received at least one dose
- 75% in Orange County have received two doses
- 65% in Orange county have received booster dosage
Study Design

- Survey patients age 25-65 at all 3 FQHC’s who are vaccine hesitant. Goal is to survey 200 patients from each FQHC system. Patients will receive a $25 dollar Amazon gift card for completion of survey.

- Survey clinicians in the three Northern New England States via the Dartmouth, Northern New England Primary Care research network list serv and the Northern New England CTR list serv. Goal is to survey 200 clinicians from each of the 3 states. Clinicians will receive a $25 Amazon gift card for completion of survey.
Building on Previous Research

- Planned intervention changed based on a NNE-CTR pilot grant "Development of Messaging to Encourage COVID-19 Vaccine Uptake among Rural Americans" performed by Dr. Elizabeth Jacobs, MD, MPP and Kathleen Fairfield, MD, MPH, DrPH in the summer of 2021 looking at rural vaccine hesitancy in Maine.

- Based on their data which showed vaccine hesitant patients distrustful of anything branded from the CDC or other government agencies we changed the intervention from an information video citing CDC data on the importance of COVID-19 Vaccinations to testimonials from Health Center Staff members physicians, nurses, front desk staff regarding why they chose to be vaccinated.
**Testimonial From Coos County Family Health Services**

***Cindy Charest, RN, QA/QI Director***

> I got the vaccine because I believe in and trust science. I got the vaccine to protect my 17 month old son who is not able to protect himself. I got the vaccine because I want my community and workplace to be safe, and for us all to be present for one another.

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***Brianna Teaboldt, MD***

> For me, it’s not a choice—it’s an obligation.

As a physician, mother, wife and friend. As a member of my community and larger society. It’s not about me—it’s about all of us.

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***Jeanette Hook, MLADC***

> I was vaccinated to help protect the health of my community, my family, and more importantly to be able to continue providing behavioral health clinical services to patients.

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***Patricia Shute, APRN***

> As a health care provider, it is my duty, responsibility, and privilege to care for others.

Getting vaccinated helps protect me, my family, my co-workers, my patients, and my community. There is no higher calling or command than to protect others and that is what getting vaccinated does. It was so exhilarating and exciting to get vaccinated because I could finally DO something to fight this terrible disease.

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***Valerie Harell, RN, COO***

> I got vaccinated for my grandson who has cystic fibrosis and is not old enough yet to become vaccinated himself. He is very high risk and I can’t imagine my life without him.
Preliminary Patient Survey Results

- Patient ages 35 to 64
- Average age 48
- 80% Female and 20% Male
- 100% Caucasian
- 70% Had not received any COVID-19 vaccinations
- 30% had received initial COVID-19 vaccinations but had not received any/all of the recommended boosters for their age and medical conditions
What is your reason for being hesitant to receive a COVID-19 vaccination?

- Rapid development of the vaccine: 100%
- Side effects: 100%
  - a) Short term side effects; fever, chills, headache, body aches, nausea: 0%
  - b) Long term side effects; fertility issues, blood clots, allergic reaction: 40%
  - c) Both A and B: 60%
- Young and healthy therefore I don’t need to be vaccinated: 20%
- Have already had COVID-19 and therefore I don’t need to be vaccinated: 0%
- Religious reasons: 20%
- Other (specify): 40%
Preliminary Patient Survey Results

- If you have received your initial COVID-19 vaccination(s) are you hesitant to receive the current recommend booster dosage?
  - 100% said yes

- Why are you hesitant to receive the COVID-19 booster after receiving the initial vaccination(s)?
  - Side effects from the initial vaccine 85%
  - Declining numbers of COVID-19 cases 15%
  - Concerns about long term effects of multiple vaccine dosages 57%
  - It hasn’t been mandated by my employer 0%
  - Other: (Specify) 0%
Preliminary Patient Survey Results

- If answering No to hesitancy to receive booster dosage(s)
- I am not due for the booster dosage yet
- The booster dosage has not been easily available for me to receive
- Other (Specify)
Do you have concerns regarding the safety of other vaccines that are recommended for your age group? (Tetanus, HPV, Pneumonia, Shingles)

- Yes 30%
- No 70%
- Unsure 0%
<table>
<thead>
<tr>
<th>Source of Information</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Mainstream television news broadcast: ABC, CBS, NBC, PBS</td>
<td>44%</td>
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<tr>
<td>News channels: CNN, Fox News, CNBC</td>
<td>11%</td>
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<tr>
<td>Local newspaper either print or online</td>
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<td>Social media sites: Facebook, Twitter</td>
<td>11%</td>
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<tr>
<td>Government Websites: CDC, state or local health department websites</td>
<td>67%</td>
</tr>
<tr>
<td>Friends and Family</td>
<td>22%</td>
</tr>
</tbody>
</table>
Preliminary Patient Survey Results

Who would you seek advice from regarding whether or not to receive the COVID-19 vaccine or booster?

- Family 11%
- Friends 0%
- Co-workers 0%
- Religious leader 22%
- Health Care clinician 100%
- All of the above 0%
- Other (Specify) 22%
Preliminary Patient Survey Results

- Do you believe that having a discussion with your health care clinician about receiving the COVID-19 vaccine would be helpful in your decision regarding whether or not you should receive the vaccine or booster?
  - Yes 20%
  - No 70%
  - Unsure 10%

- The Death of Expertise by Tom Nichols
  - “These are dangerous times. Never had so many people had access to so much knowledge and yet been so resistant to learning anything”
Do you believe that your health care clinician is a trusted and reliable source who will help you make an informed decision regarding COVID-19 vaccination or booster?

- Yes 100%
- No 0%
- Unsure 0%
Preliminary Clinician Survey Results

- Clinicians surveyed from Maine, New Hampshire and Vermont
- Target clinicians MD’s, DO’s, NP’s, PA’s and CNM’s
- Breakdown of demographics of respondents
- Average age 54
- Female 72%  Male 28%
- Physician  48%
- Nurse Practitioner  37%
- Physician Assistant  2%
- Other  13%
Preliminary Clinician Survey Results

- Care Setting of Practice
  - Family Medicine 54%
  - Internal Medicine 24%
  - Pediatrics 4%
  - Women’s Health 0%
  - Other 18%
- Does your site offering COVID-19 vaccinations/boosters to your patients ages 25-65?
  - Yes 69%
  - No 31%
Preliminary Clinician Survey Results

- Have you been vaccinated for COVID-19?
  - Yes  98%
  - No   2%
Preliminary Clinician Survey Results

- Do you or your staff routinely ask all patients ages 25-65 when they present to practice for care if they have been vaccinated for COVID-19?
  - Yes 80%  No 20%

- Is your current site offering COVID-19 vaccinations/boosters to your patients ages 25-65?
  - Yes 69%  No 31%

- What vaccination/booster does your site offer?
  - Moderna 14%  Pfizer 16%  Combination of both boosters 70%
Preliminary Clinician Survey Results

- Do you as a clinician have a preference over which COVID-19 vaccine/booster your patients receive?
  - Yes  22%  No  78%

- Which vaccine do you prefer for your patients
  - Moderna  50%  Pfizer  50%

- If your clinician site does not offer COVID-19 vaccinations/boosters to your patients do you have a staff member that can assist patients in finding a vaccination site?
  - Yes  76%  No  6%  Unsure  18%
Preliminary Clinician Survey Results

- If you were the clinician talking with a patient ages 25-65 who have not received the COVID-19 vaccine which of the following statements best describes how you would talk to the patient above getting a COVID-19 vaccine

- I would strongly recommend the COVID-19 vaccine  87%
- I would recommend the COVID-19 vaccine but not push for vaccination today  9%
- I would not mention/discuss COVID-19 vaccination  4%
Preliminary Clinician Survey Results

What percentage of your patient population ages 25-65 do you estimate is COVID-19 vaccine hesitant?

- 0-20% 37%
- 20-40% 42%
- 40-60% 17%
- 60-80% 4%
- Over 80% 0%
What are the most common reasons your patients ages 25-65 express COVID-19 vaccine hesitancy?

- Rapid COVID-19 vaccine development: 68.5%
- Concerns about side effects: 68.5%
- Young and healthy therefore they don’t need to be vaccinated: 35%
- Have already had COVID-19 and therefore they don’t need to be vaccinated: 44%
- Religious concerns: 9%
- Other: 16%
Please specify side effects

a). Short term side effects: fever, chills body aches, N&V 3%

b). Long term side effects: fertility, blood clots, death 40%

c). Both A & B 57%
Are any of your COVID-19 vaccine-hesitant patients age 25-65 also hesitant to receive other vaccines recommended for their age group? (TDAP, Pneumococcal, Shingrix, HPV)
- Yes 48%
- No 33%
- Unsure 19%

Approximately what percentage of your COVID-19 vaccine-hesitant patient population are also to receive the other vaccines recommended for the 25-65 age group:
- 0-20% 31%
- 20-40% 23%
- 40-60% 23%
- 60-80% 15%
- Above 80% 8%
Preliminary Clinician Survey Results

Do you feel that your vaccine hesitant patients ages 25-65 have or will come to you as a trusted reliable source who will help them make an informed decision regarding the COVID-19 vaccine?

- Yes 56%
- No 5%
- Unsure 39%
Preliminary Clinician Survey Results

- Do you have patients that receive the initial COVID-19 vaccinations that are hesitant to receive the booster dosage?
  - Yes 75%  No 25%

- What are the reasons your patients are hesitant to receive the COVID-19 booster dosage?
  - Side effects from the initial COVID-19 vaccine(s) 69%
  - Declining COVID-19 cases 44%
  - Concerns about long term effects from multiple vaccination dosages 49%
  - Not employer mandated 26%
  - Other 18%
1. What was your key take away for today’s session?

2. What has been your own experience with rural COVID-19 vaccine/booster hesitancy?

3. Are there strategies that you have found to be successful in addressing COVID-19 vaccine/booster hesitancy with rural patients?