CDC/IDSA Clinician Call

Prevention & Treatment of Respiratory Tract Infections in Long-Term Care Facilities: Challenges & Solutions

February 1, 2024

Q&A

This is the Q&A transcript from the Zoom webinar held on Feb. 1, 2024. The views and opinions expressed here are those of the presenters and do not necessarily reflect the official policy or position of the CDC or IDSA. Involvement of CDC and IDSA should not be viewed as endorsement of any entity or individual involved.

1. **What is a hospitalization given that many acute care hospitals do not admit Medicare benes, but keep them for up to a week in "observation" status?**

   Philip Dollard, MPH: Hospitalization in this case is a long-term care resident being transferred from the long-term care facility to a hospital, regardless of admission status.

2. **What measures are taken with homes which repeatedly do not measure up to infection prevention standards?**

   David Gifford, MD, MPH: CMS sends a team of 3-4 inspectors into the facility and if they find non-compliance with infection prevention steps such as consistent handwashing or PPE, they will cite them (typically F-880) and if severe enough they will add in a fine (called Civil Monetary Penalty - CMP).

3. **How are deaths after 30 days post COVID-19 captured? For e.g. deaths from stroke and MIs following a COVID-19 infection**

   Philip Dollard, MPH: The NHSN reporting form asks for "residents who died from COVID-19 or related complications, either in the facility or another location", so the determination is up to the facility.

4. **Are we making progress in terms of improving infection incidence/morbidity/deaths compared to past decades?**

   David Gifford, MD, MPH: I will show trends in all deaths that vary by seasonality which has been rather stable over the past 5 years (except for the impact of COVID-19) but following the pandemic, deaths have declined. I don't know of data on actual rates of infection or hospitalizations from infections.

   Attendee: Thank you, Dr. Gifford. Medical progress is impressive but social/economic/person/institutional barriers are difficult to overcome and a huge obstacle.

David Gifford, MD, MPH: I did not present data but being in a blue or red county based on the last presidential election is a very very strong predictor of vaccination rates but can be overcome as shown by some vaccination rates in ND.

5. **Why are influenza and RSV reporting optional in Nursing Homes?**

   David Gifford, MD, MPH: CMS does not have regulations mandating reporting.

6. **Has the definition of "up-to-date vaccination" changed, considering globally? Can this definition vary by region, continent or country?**

   Hannah E. Reses, MPH: The CDC definition of up to date has changed over time as new vaccines are introduced and recommendations are updated. This document is how NHSN has operationalized the changes in definition over time: https://www.cdc.gov/nhsn/pdfs/hps/covidvax/UpToDateGuidance-508.pdf. Unfortunately, I don't know how the concept of up to date has been implemented in other countries.

7. **Are nursing homes finding that billing for COVID-19 vaccine is a barrier to vaccination with the 2023-24 COVID-19 vaccine? Solutions?**

   David Gifford, MD, MPH: short answer is yes; the reimbursement is adequate but very complicated and confusing and varies by vaccine and by the insurance status of the resident and also if they are there under Part A stay or for long stay. This has resulted in confusion and concern SNFs will not receive reimbursement.

8. **Is there a reason why no data for Utah for Flu or RSV vaccination coverage?**

   Hannah E. Reses, MPH: The data are not shown in the map if there are <5 facilities reporting. I checked the output dataset and only 3 reported flu and RSV vaccination data.

9. **What's the role of asymptomatic infection in the transmission of influenza in LTCFs?**

   Morgan J. Katz, MD, MHS: Likely higher than we know- we have not done a lot of asymptomatic testing for influenza, unlike covid, so there is probably significant transmission that we do not identify due to less testing of exposed individuals (vs. widespread testing for covid exposures).

   Michael L. Barnett, MD: re: COVID-19, we know that identifying asymptomatic or presymptomatic staff cases in SNFs is an important determinant of mortality.

   see: https://www.nejm.org/doi/full/10.1056/NEJMoa2210063

10. **A provider who refuses to consider treatment with Paxlovid UNLESS the patient can express "symptoms"?**

    This is a great question as I know that the recommendations for Paxlovid require a positive covid test AND symptoms. However, I would emphasize again that particularly in nursing home residents, symptoms in the early stages of infection can be as subtle as refusing a meal. Many residents are inappropriately considered "asymptomatic" because they do not have typical respiratory symptoms, however, having a low threshold to identify a resident as high

risk and treat even based on very vague, mild symptoms early in the course of disease can have significant impact on preventing severe outcomes in this population.

11. **Were state outreach efforts considered when distributing the CDC VIS Survey?**

    David Gifford, MD, MPH: I'm not sure I understand the questions as there was not a CDC VIS survey. I was presenting data that AHCA administered to about 2,000 SNFs with about 350 responses, this was done over a 1-week period.

12. **Dr Gifford: Thank you for your data. Over 30 years ago I thought we ought to charge parents with child neglect and abuse for refusing vaccinations [measles pertussis for example]. I felt the same with the frail elderly, but it's a slippery slope when we force people to get vaccination even if you argue endangering/exposing the community at large. We seemed to have gone "backwards" in terms of acceptance of vaccines rather than forward. Countermeasures?**

    Michael L. Barnett, MD: Tough question with no easy solution. Some evidence suggests that getting guidance from laypeople can be more persuasive than evidence from experts for those resistant to vaccination.

    https://www.nber.org/papers/w28593

13. **Were the letters sent by medical directors felt to be an effective way of encouraging vaccine acceptance?**

    David Gifford, MD, MPH: Yes, but it is only one of multiple steps in the process. I would say the concept of empathetic persistence was key. Its repeated discussions with family-residents or staff

14. **Can CDC please consider recommending to CMS that reporting via NHSN for all 3 major respiratory viruses (Flu, COVID, RSF) be mandatory by regulation? We need data to drive interventions. Starting this spring, COVID vaccine will no longer be per regulation via CMS (unless I am mistaken) so only Influenza vaccine will be reported......blindness leads to illness.**

    Philip Dollard, MPH: A major consideration when CMS is crafting regulations is reporting burden for facilities, which are often understaffed/experiencing high turnover. We continue to try to find a balance between useful data and achievable reporting.

    Hannah E. Reses, MPH: Thank you for this comment. We agree and are attempting to advocate for this, while keeping the burden in mind.

    Also, to clarify, the CMS requirement to report weekly COVID-19 cases, hospitalizations, and vaccination among nursing home residents and HCP currently extends through the end of 2024.

    I wanted to add that it's incredibly helpful to express this directly to CMS. We are advocating on our end, but CMS hearing from providers directly really helps.

15. **Does none therapy bother you and what realistically be done?**

    David Gifford, MD, MPH: yes, we asked for the last 10 residents with COVID with mild to moderate symptoms (those who should get antiviral therapy) 1/3 of SNFs reported that the 5 or more of 10 residents who did not get antiviral was due to the physician not think symptoms were severe enough. The resident or family having similar concerns was also common.

16. **How many NH in the US are for profit?**

    David Gifford, MD, MPH: currently there are 14,600 certified nursing homes and approx. 10,000 are for profit, 4,000 are not-for-profit and 1,000 are government.

    About 20% are large chains, 30% small medium chains and 50% independent, often second-generation family owned. the average size is 100 beds with only 5% having >200 beds and about 12% have <50 beds.

17. **Would the current COVID vaccine cover the JN.1 and other potential variants?**

    Elizabeth A. Mothershed, MS (CDC): CDC published an MMWR today - https://www.cdc.gov/mmwr/volumes/73/wr/pdfs/mm7304a2-H.pdf
    Early Estimates of Updated 2023–2024 (Monovalent XBB.1.5) COVID-19 Vaccine Effectiveness Against Symptomatic SARS-CoV-2 Infection Attributable to Co-circulating Omicron Variants Among Immunocompetent Adults — Increasing Community Access to Testing Program, United States, September 2023 – January 2024 (cdc.gov)

18. **Why doesn't CDC recommend droplet precautions for RSV in adults, especially older adults?**

    Elizabeth A. Mothershed, MS (CDC): The current CDC Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (2007)'s Appendix A recommends the use of Contact + Standard Precautions for infants, young children, and immunocompromised adults with RSV for the duration of illness. Appendix A of the guideline can be found here: Precautions | Appendix A | Isolation Precautions | Guidelines Library | Infection Control | CDC https://www.cdc.gov/infectioncontrol/guidelines/isolation/appendix/type-duration-precautions.html . In practice, recommendations for infants, young children, and immunocompromised adults are often applied to older adults, given the increased risk of severe RSV disease in the older adult population with comorbid medical conditions residing in congregate long-term care settings. Masks and eye protection should be worn according to Standard Precautions, such as in anticipation of splashes or sprays to the face if a patient/resident is coughing or sneezing. Masks for source control on the patient/resident with a respiratory infection are also recommended as part of Standard Precautions.

    The CDC Guideline for Isolation Precautions is currently being revised; more information is available on the Healthcare Infection Control Practices Advisory Committee (HICPAC) site https://www.cdc.gov/hicpac/IPGU-blog-posts.html.

19. **In Canada, eye protection is not part of airborne or contact precautions. Are you not using eye protection for respiratory virus IPAC in SNFs in the US?**

    The current CDC Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (2007) provides PPE recommendations for healthcare settings. The guideline can be found here: https://www.cdc.gov/infectioncontrol/pdf/guidelines/Isolation-guidelines-H.pdf Eye protection is recommended as a part of Standard Precautions if any potential splashes or sprays are anticipated for all patients/residents in all healthcare settings (e.g., if a patient/resident is coughing or sneezing). Standard Precautions should be used in addition to any Transmission-Based Precautions.

    We believe the question asked during the presentation was in the context of SARS-CoV-2. HCP who enter the room of a patient with suspected or confirmed SARS-CoV-2 infection should adhere to Standard Precautions and use a NIOSH Approved particulate respirator with N95 filters or higher, gown, gloves, and eye protection (i.e., goggles or a face shield that covers the front and sides of the face), as described in Infection Control: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) | CDC https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html .

20. **A critical message to the NH staff and residents is how much prevention of spread can be offered by vaccines and by treatment (for COVID-19 please discuss Paxlovid)**

    David Gifford, MD, MPH: preventing spread has actually backfired. Staff, residents, and family all say, they see others and themselves getting infected despite being vaccinated and the triggers for outbreak and infection prevention practices are applied equally to those vaccinated and unvaccinated/not up to date. So, they say, there is no benefit and that preventing spread is not true.

    Michael L. Barnett, MD: Just want to add that our group has shown that proactive testing DOES prevent spread and lowers mortality in SNFs. So, it's not just a theoretical benefit.

    Attendee Response: perhaps educational outreach can use another, less politically loaded pathogen for vaccine effectiveness and benefits to individuals and communities. This fundamental knowledge seems lost in the last 10 years, that vaccination was never 100% effective in preventing all infection, but protected from disease and the community, and that some/partial immunity is generally beneficial to everyone. While the community has learned much about epidemiology in the last 4 years, the actual understanding of many concepts is not very good!

21. **Need for serious academic detailing for physicians treating SNF residents.**

    Michael L. Barnett, MD: Agreed. Also, the message that indications for Paxlovid do NOT include symptom severity is very important to communicate.

    Attendee Response: Physicians are burnt out, so more academic detailing?

David Gifford, MD, MPH: Physician reluctance to treat is significant reason we hear from nursing homes.

Attendee Response**:** What are the reasons for reluctance?

Michael L. Barnett, MD: @Vivian - burnout is an issue but also there aren't many other avenues to increase prescribing besides SNF clinicians.

Attendee Response: problem being that not all facilities have the capacity to do this. We are also seeing positive test results after day 5 when tested for new symptoms on days 7-10.

Michael L. Barnett, MD: I don't think we know what drives reluctance, but David Gifford shared elsewhere that many clinicians think mild symptoms make Paxlovid unnecessary. I have seen this a lot anecdotally.

Attendee Response: Was there a recent publication where antiviral does not reduce risk of long COVID? I guess there is that also. @Michael - appreciate your responses. I understand no other options, but it is the reality, burnout is real. Physicians and pharmacists are unionizing also…

22. **What type of test was being used in the facilities?**

    David Gifford, MD, MPH: for COVID-19 the most frequent test used are binax now or other antigen POC testing provided free by HHS to all nursing homes and assisted living.

23. **In the scenario where you tested early in the NH, can you comment on the across the hallway spread in that particular wing? This seems very much linked to lack of positive air pressure in the hallway, allowing room air to cross contaminate across the hallway.**

    Morgan J. Katz, MD, MHS: This is very possible, also many of these residents were ambulatory so did venture in other resident rooms. I do think ventilation absolutely impacts transmission in the nursing home.

24. **What does transmission based precaution mean? Aerosol or droplets?**

    Morgan J. Katz, MD, MHS: Typically, droplet, once confirmed covid airborne/contact.

25. **With very low rx rates how about require an ID consult, in both nursing homes and urgent care. Patients are not sufficiently counseled about repeat testing. I say based on my experience with my patients at routine follow up appointments.**

    Michael L. Barnett, MD: Very few nursing homes have relationships with specialists outside the facility, I think particularly infectious disease. It's a big care gap and there's no payment incentive on either side to make this happen.

26. **Thanks for your time and the JAMA article. Looking thru supplementals…Can I ask did medical director presence hrs/wk, FT/PT status correlate with M/P use? Thanks.**

    Michael L. Barnett, MD: We didn't look at medical director hours per week, that's an interesting idea and actually possible to do with the crazy detailed data available on SNF staffing. Another variable to consider is whether SNF clinicians are MDs or NPs.

Attendee: Our academic state affiliated LTCF has a full-time Med Director plus geriatricians on staff, offer three days remdesivir etc. Cannot imagine how other facilities without such valuable resources manage.

Michael L. Barnett, MD: Yes, there is a complex relationship between staffing and COVID spread. More people in and out of the facility is not good, but other studies show that better staffed SNFs have better outcomes.

27. Can you clarify: how is NHSN data used to track COVID treatments in SNFs?

Michael L. Barnett, MD: NHSN required SNFs to self-report volume of treatment given in a week. I think those questions have dropped off the survey.

28. What about using HEPA cleaners in care facilities and HVAC adjustments when Influenza and/or SARS are in the facility?

David Gifford, MD, MPH: air flow is probably more important than we realize but data and variation in filters and location of them has made good evidence lacking on effectiveness. DR Jha before he left the white house recommended that the goal was to get indoor air out and outdoor in. During an outbreak recommended putting an HVAC on continuous and make sure it was pulling in new air as many HVAC in winter and summer recirculate air.

29. What are the financial disincentives to using PCR testing for SNF patients? In outbreaks, many SNFs do not want to use PCR testing over RAT.

David Gifford, MD, MPH: The main disincentive for using PCR testing is the turnaround time to get results since most SNFs do not have access to point of care PCR testing. Also, they receive free RAT tests from the federal government. The financial disincentive mainly falls to using it among Medicare beneficiaries during their Part A stay due to consolidated billing. In other words, the facility is financially responsible for all tests, medications, etc. for Medicare beneficiaries during a part A stay, so CMS has created a financial incentive to use the least expensive test (and medication too) for this population. For MA plan beneficiaries, it varies as to how tests are handled during the rehab stay. For long stay residents, there is no major financial disincentive since the laboratory bills the insurance for the test.

30. How early do you test for Covid-19 after recovery from a previous Covid-19 infection?

Morgan J. Katz, MD, MHS: Typically wait 30 days from previous infection prior to re-testing, and only use PCR in these instances if a resident has new symptoms.

31. Please bring us up to date on prevention of spread in the NH by vaccine use for the 3 virus illnesses and how much prevention of spread is seen with Paxlovid use for COVID-19 infection.

Morgan J. Katz, MD, MHS: Re: Paxlovid and its effect on transmission- Early use of Paxlovid leads to earlier and significant reduction in viral load, which directly impacts risk of transmission (lower/negative viral loads lead to less viral shed).

I could not find any publications directly assessing transmission rates with Paxlovid in humans (although there are several modeling studies and some human animal models that show this effect)- linked below:
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9880690/
https://pubmed.ncbi.nlm.nih.gov/37550333/

Pragna Patel, MD MPH (CDC): There are no data about whether Paxlovid reduces transmission. However, it probably does by reducing viral load and earlier clearance of virus (as other antivirals and antiretrovirals do). Also, COVID-19 antivirals are for patients with mild to moderate COVID-19 not asymptomatic persons. Please see MMWR about Paxlovid use among vaccinated vs unvaccinated persons that showed it is still effective at reducing hospitalizations.

Paxlovid Associated with Decreased Hospitalization Rate Among Adults with COVID-19 — United States, April–September 2022 | MMWR (cdc.gov)

For the pediatric population, remdesivir is the best option. Paxlovid is still under EUA from 12-17 year olds.

32. Why do you think molnupiravir as an alt. therapy has been used much more in public health response than one would anticipate?

Michael L. Barnett, MD: Not sure how much one might expect. But I think the ease of prescribing molnupiravir is a big bonus for people. Basically, zero contraindications to worry about.

Attendee: FDA also authorizes it to be given via enteral tubes, which is an advantage over Paxlovid.

33. Have you seen rebound using Paxlovid?

David Gifford, MD, MPH: CDC MMWR addressed rebound nicely
https://www.cdc.gov/mmwr/volumes/72/wr/mm7251a1.htm

34. Remdesivir usage is very low because patients have to be admitted, difficult to find outpatient rx options even in Los Angeles. Recommend working on this.

Michael L. Barnett, MD: Also, a 3 day infusion regimen is very burdensome for everyone. Infusion centers are not everywhere, and they are also often quite busy.

35. Risk of Paxlovid Rx with renal dz?

Michael L. Barnett, MD: I don’t have the information off the top of my head but there is renal dose guidance that you can find on the package label.

Attendee: Paxlovid half dose- if eGFR 30 mL/min - 59.9 mL/min/1.73 m2: nirmatrelvir & ritonavir therapy pack

36. What is the best treatment for the residents of facilities that we cannot get Remdesivir in, but that are crushed with medications? Is Molnupiravir the only option?

Michael L. Barnett, MD: According to the FDA, molnupiravir cannot be crushed. So, the only option is remdesivir. This is probably a good reason why one might need to use remdesivir.

Attendee: How would you recommend attempting to get it in facilities if it's really only available at the hospital near you?

Michael L. Barnett, MD: That's a very good question! I think you need to advocate to health system leaders and public health authorities in your area about this important gap in care. Our health system should be able to address this.

37. **Without reporting, there is no accountability. Without data, we can't improve what we don't know is happening or is not happening.**

    Hannah E. Reses, MPH: We completely agree and are advocating for continuation of the reporting in nursing homes.