DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION
National Center for Emerging and Zoonotic Infectious Diseases
Division of Healthcare Quality Promotion (DHQP)

Healthcare Infection Control Practices Advisory Committee

March 4, 2021

Atlanta, Georgia

Record of the Proceedings

Table of Contents

Meeting Agenda

Healthcare Infection Control Practices Advisory Committee (HICPAC)

March 4, 2021
Centers for Disease Control and Prevention
Atlanta, GA
Teleconference

Thursday, March 4, 2021

Time	*Topic*	*Purpose*	*Presider/Presenter(s)*
1:00pm	**Welcome and Roll Call**	Information	Hilary Babcock (HICPAC Co-Chair) Lisa Maragakis (HICPAC Co-Chair) Michael Bell (DFO, HICPAC; CDC)
1:10	Division of Healthcare Quality Promotion (DHQP) Update	Information	Denise Cardo (DHQP, CDC)
1:15	Coronavirus Disease Update	Information	Michael Bell (DFO, HICPAC; CDC)
1:25	Project Firstline Update	Information	Elizabeth McClune
1:35	Long-term Care/Post-acute Care Workgroup Update	Information/Discussion	Michael Lin (HICPAC) Joanne Reifsnyder (HICPAC)
2:20	Health care Personnel Guideline Workgroup Update	Information	Hilary Babcock (HICPAC)
2:25	Neonatal Intensive Care Unit Workgroup Update	Information	Judith Guzman-Cottrill (HICPAC_
2:30	Federal Entity Comment	-	-
2:35	Public Comment	-	-
2:45	Summary and Work Plan	Information	Hilary Babcock (HICPAC Co-Chair) Lisa Maragakis (HICPAC Co-Chair)
3:00	**Adjourn**	-	-

List of Attendees

HICPAC Members
Dr. Hilary Babcock, Co-Chair
Dr. Lisa Maragakis, Co-Chair
Dr. Deverick Anderson
Dr. Nicholas Daniels
Ms. Elaine Dekker
Dr. Mohamad Fakih
Dr. Judy Guzman-Cottrill
Dr. Michael Lin
Ms. Michael Anne Preas
Dr. JoAnne Reifsnyder

***ex officio* Members**
Ms. Elizabeth Claverie-Williams, Food and Drug Administration (FDA)
Mr. Jonathan Merrell, Indian Health Service (IHS)
Dr. Tara Palmore, National Institutes of Health (NIH)
Dr. Melissa Miller, Agency for Healthcare Research and Quality (AHRQ)
Ms. Judy Trawick, Health Resources and Service Administration (HRSA)

Liaison Representatives
Holly Carpenter, American Nurses Association (ANA)
Karen DeKay, Association of Perioperative
Registered Nurses (AORN)
Kathy Dunn, Public Health Agency Canada (PHAC)
Kris Ehresmann, Association of State and Territorial Health Officials (ASTHO)
Ashley Fell, Council of State and Territorial Epidemiologists (CSTE)
Allen Kliger, American Society of Nephrology (ASN)
Chris Lombardozzi, America's Essential Hospitals (AEH)
Ronell Myburgh, DNV GL Healthcare
Silvia Quevedo, Association of Professionals of Infection Control and Epidemiology (APIC)
Mark Russi, American College of Occupational and Environmental Medicine (ACOEM)
Robert Sawyer, Surgical Infection Society (SIS)
Christa Schorr, Society of Critical Care Medicine (SCCM)
Keith Kaye, Society for Healthcare Epidemiology of America (SHEA)
Ben Schwartz, National Association of County and City Health Officials (NACCHO)
Hana Hinkle, National Rural Health Association (NRHA)
Eve Cuny, Organization for Safety, Asepsis, and Prevention (OSAP)
Lisa McGiffert, Patient Safety Action Network (PSAN)
Andrea Shane, Pediatric Infectious Disease Society (PIDS)
Pam Truscott, American Health Care Association (AHCA)
Margaret VanAmringe, The Joint Commission (TJC)
Jennifer Meddings, Society of Hospital Medicine (SHM)
Stephen Weber, Infectious Disease Society of America (IDSA)

CDC Representatives

Denise Cardo
Heather Jones
Koo Chung
Elizabeth McClune
Marwan Wassef
Melissa Schaffer
Mike Bell
Nimalie Stone
Rima Khabbaz
Rita Helfand
Sydnee Byrd
Abigail Carlson
Adema
Alex Kallen
Alexandria Fuller
Amanda Clemons
Ameila Keaton
Amy Valderrama
Ana Bardossy
Anita McLees
Ann Godingsauer
Ashley Wadley
Benjamin Park
Brejendra Singh
Bruce Moro
Cecilia Joshi
Chelsea Slicker
Christal Oliver
Christine Olson
Christine So
Christopher Prestel
Danielle Carter
Danielle Scheinman
Denise Leaptrot
Destiny Zom
Devon Okasako
Doug Scott
Eberown Atata
Elizabeth Mothers
Erin Stone
Fernanda Lessa
Hanako Osuka
Iris Alcontera
James Chaman
Jeremy Goodman
Jesenia Angles
Jessica Waechter
Joe Perz
Joyce Thomas
Kiran Perkins
Kathryn Ayres
Kendra Cox
Kwan Reays
Lauri Hicks
Lyn Nguyen
Margaret Anthony
Margaret Paek
Marybeth White-Comstock
Matthew Arduino
Melissa Schaffer
Michael Craig
Porshia Bumus-White
Rebecca Byran
Rebekah Alkis
Rolieria West
Runa Gkhale
Sarah Jones
Sarah Yi
Stefanie Mcbride
Stephanie Booth
Vanessa Cox
Wendy Vance
Wyatt Wilson
Kara Jacobs Slifka

Federal Agency

Gary Roselle, VA
Clarence Murray
John Weeks, FDA

Members of the Public
Alice Brewer, TruD Smart UVC
Andrew Wiahon, Sanitize Your Nose
Anne Marie Pettis, APIC
Betty McGinty, Boston Scientific
Bruce Moro, CDC Foundation
Clarence Murray, Federal
Connie Steed, APIC Prisma Health
Demetria Thomas, DST Innovations
Doe Kley, The Clorox Company
Dolly Mistry, BD
Ernst Spannhake, Global Life Technologies
Nancy Hailpern, APIC
Nancy Trick, BD
Rosie Lyles, ABBVE
Sharon Wright, Beth Israel Lahey Health
Sue Cauthen, HCA
Thomas Bender. EAS Carpenters
Denise Winzeler, American Association of Post-Acute Care Nursing
Erin Epson, CA Department of Public Health
Mary-Claire Roughmann, University of Maryland
Robin Jump, Case Western Reserve University
Vivian Leung, CT Department of Public Health
Lisa Tomlinson, APIC
Lori Harmon, Society of Critical Care Medicine
Lynne Batshon, Shea
Margaret Marlatt, San Ysado Health
Maria Rodriguez, Xenex Disinfection Services
Rosie Lyles, ABBVE
Sharon Wright, Beth Israel Lahey Health
Kevin Cabbott, Health Watch USA
Kevin Kavanagh, Health Watch USA
Krity Weinschel, SHEA
Lisa Tomlinson, APIC
Lori Harmon, Society of Critical Care Medicine
Lynne Batshon, Shea
Margaret Marlatt, San Ysado Health
Maria Rodriguez, Xenex Disinfection Services
Michael Bohan, IKORCC
Michael Kwiatkowski, United Brotherhood of Carpenters
Nancy Hailpern, APIC
Nancy Trick, BD
Rosie Lyles, ABBVE
Sharon Wright, Beth Israel Lahey Health
Sue Cauthen, HCA
Jim Arbogast, Gojo
Jocelyn Jones, Infection Control and Prevention
Kaitlin Heath, Public
Keith St. John, PDI Healthcare
Kevin Cabbott, Health Watch USA
Kevin Kavanagh, Health Watch USA
Jayson Karas, United Brotherhood of Carpenters
Jill Kumasaka, University of Washington
James Brooks, PHA of Canada
Janet Prust, 3M Healthcare

Executive Summary

The US Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC) National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) Division of Healthcare Quality Promotion (DHQP) convened a teleconference meeting of the Healthcare Infection Control Practices Advisory Committee (HICPAC) on March 4, 2021. The Designated Federal Officer (DFO) and co-Chairs confirmed the presence of a quorum of HICPAC voting members and *ex officio* members, which was maintained throughout the meeting.

Dr. Hilary Babcock provided an update on the work of the Healthcare Personnel Guideline Workgroup. Elizabeth McClune provided an update on the work of Project Firstline. Dr. Judith Guzman-Cottrill provided an update on the work of the Neonatal Intensive Care Unit Guideline Workgroup. Drs. Michael Lin and JoAnne Reifsnyder provided an update on the work of the Long-term Care/Post-acute Care Workgroup. Drs. Michael Bell and Denise Cardo provided a report on the current status of the COVID-19 outbreak and the Division of Healthcare Quality Promotion.

HICPAC stood in recess at 2:46pm on March 4, 2021.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION
National Center for Emerging and Zoonotic Infectious Diseases
Division of Healthcare Quality Promotion
Healthcare Infection Control Practices Advisory Committee

March 4, 2021

Teleconference

Meeting Summary

The United States Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC), National Center for Emerging and Zoonotic Infectious Diseases (NCEZID), Division of Healthcare Quality Promotion (DHQP), convened a meeting of the Healthcare Infection Control Practices Advisory Committee (HICPAC) on March 4, 2021, via teleconference.

Welcome and Roll Call

The following HICPAC committee members disclosed potential conflicts: Lisa Maragakis received research funding from Clorox. Judith Guzman-Cottrill serves as a consultant to the Oregon Health Authority. Michael Lin received research support in the form of contributed products from Sage Products (Stryker Corporation) as well as investigator-initiated grant from CareFusion Foundation (Becton, Dickinson and Company).

Dr. Babcock announced a new ex-officio agency member Jonathan Merrill from Indian Health Service. He is the Deputy Director for Quality Healthcare and will be formally introduced in the next HICPAC meeting. Hilary announced a replaced ex-officio role. Megan Hayden, Lieutenant Commander, US Public Health Service, is the new Center for Medicaid and Medicare services ex-officio member. Dr. Babcock introduced and gave a brief biography of each replacement liaison representative. Lisa McGiffert is replacing Kevin Kavanagh from the Patient Safety Action Network (PSAN); Kathy Dunn will be rotating off from the Public Health Agency of Canada (PHAC) the official replacement is still being finalized; Darlene Cary will be rotating off from the Association of Professionals of Infection Control and Epidemiology (APIC) the official replacement is being finalized.

DHQP Update

Dr. Denise Cardo, Director, DHQP/CDC

Dr. Cardo states that DHQP is fully engaged in the COVID response domestically and internationally. DHQP focuses on healthcare transmission of infection playing a critical role for the agency as a connection between healthcare and public health. DHQP continues to work closely with federal partners, especially CMS to better align policies and recommendations based on data.

Dr. Cardo continues to speak on NHSN's role with surveillance of healthcare associated infections and infection prevention. DHQP is also involved with COVID-19 vaccinations, with a focus on vaccinations in nursing homes. The division is heavily involved with monitoring vaccine safety through the Immunization Safety Office's (ISO) involvement on the Vaccine Task Force. ISO, in collaboration with partners, monitors potential adverse events to determine if increases in specific adverse reactions have been reported.

Nursing homes are now required by CMS to report to NHSN. Nursing homes are reporting COVID-19 cases and deaths among residents and healthcare personnel. In addition, many nursing homes are voluntarily providing data on testing results, including point-of-care testing, at the individual level, as well as overall vaccination coverage. DHQP is able to collect this data in aggregate using NHSN, which allows DHQP to work with additional data sources to utilize analysis strategies, including modeling, to assess the impact of recommendations and needs for updates.

Dr. Cardo spoke about the COVID-19 pandemic and its impact on other aspects of healthcare including healthcare-associated infections, antibiotic resistance, and antibiotic use. For example, the committee could help address and discuss the increase in central line-associated bloodstream infections (CLABSI) that is currently being observed. This could lead to discussions regarding more sustainable public programs that can withstand the next public health crisis that does not negatively affect prevention efforts related to healthcare-associated infections and antibiotic resistance and use.

Lastly, the COVID-19 pandemic has exposed a critical aspect of healthcare that needs to be addressed – health disparities. This has not yet been addressed as much when discussing prevention strategies for healthcare-associated infections, antibiotic resistance, or overall quality of healthcare.

DHQP Update Discussion
Dr. Maragakis commented on the overarching theme of healthcare sustainability. She asked Dr. Cardo how the committee can help with the work of sustainability.

Dr. Cardo responded with thoughts on how sustaining programs are critical and may require options that have not been considered before. Dr. Cardo spoke on COVID-19 and the importance of infection control across healthcare settings and the need to train all front line staff on the implementation of proper healthcare practices. Dr. Cardo ends with posing questions on how to address the need to implement the basics of infection control and prevention to solve the problem of sustainability.

HICPAC members continued to respond with highlights of COVID-19 practices that may be sustained such as strengthening the ability to prioritize sick leave policies in facilities across the country and the improvement of procedures for screening staff and visitors.

Coronavirus Disease Update

Dr. Michael Bell, Deputy Director, DHQP/CDC

Dr. Bell discussed the essential work being accomplished within DHQP, including ensuring that guidances being developed at the agency do not have an unintended impact on healthcare. He continued to mention post vaccination activities and what the community will do after immunization. Dr. Bell described the missing pieces of vaccination uniformity as two-fold. First, not everyone has been vaccinated. Second, there are vulnerable, but reasonably well people in combination with those who are ill and fragile that healthcare providers will have the additional responsibility of caring for. There is immense caution taken in healthcare due to many people who have yet to be vaccinated leaving many people vulnerable. Dr. Bell also stated that another thing that cannot be controlled is the emerging strains of COVID-19, in which the current vaccine efficacy is unknown.

The second topic Dr. Bell spoke on is the ramifications of the work toward infection control related to COVID-19, but also related to MERS, SARS-CoV-1 and pandemic influenza. Evidence has been developed

that wasn't available a few years ago and published on issues related to respiratory infection transmission. Dr. Bell believes that this will push forward the plan to revise the isolation precautions guideline. He believes that the division now can reformat the isolation guidelines in a way that will be more intuitive and useful. Internal discussion within the division are ongoing to begin planning for updates to the isolation precautions guideline and the division will be reaching out to the committee before the summer conference to set up workgroups for this task. Dr. Bell made clear that the division will not be rewriting a large textbook-like document mirroring the previous guideline. He desires to take a lean approach that will also hold valuable information.

Coronavirus Update Discussion

Dr. Maragakis spoke on behalf of HICPAC expressing that they would be thrilled to be involved in the potential revisiting and revisions of the CDC isolation precautions guideline. She also adds that she is appreciative of the importance placed on the alignment and clarity about the guidance for community settings vs. healthcare settings.

Project Firstline Update

Elizabeth McClune, Policy Analyst, DHQP, CDC

Ms. McClune introduces herself as lead of Project Firstline which is CDC's new 2-year infection control collaborative pilot. This collaborative was born from the COVID-19 pandemic which highlighted gaps in infection control knowledge and practice in healthcare settings nationwide, but the gaps in infection control knowledge predate the COVID-19 pandemic and the gaps are still there. Ms. McClune continued that every individual working in the healthcare community has an important role to play in protecting themselves and patients from the spread of infectious diseases.

Project Firstline was launched to create infection control training designed specifically for frontline healthcare workers. Project Firstline aims to provide every frontline healthcare worker, from environmental services workers to medical doctors to respiratory therapists, infection control training and education that is comprehensive, transparent, and responsive to healthcare workers so that they could understand how to implement this training in their day-to-day activities.

Ms. McClune also acknowledged that many professionals play an important role on the infection control team. Project Firstline's approach is to bring in as many voices from the healthcare community as possible. This effort will ensure that the needs and voices of healthcare workers pertaining to infection control are understood and that the program is built around those needs. Ms. McClune described that Project Firstline is intentional on how adults learn and grounded in what they are doing in adult learning theory. Project Firstline will use dissemination networks both through trusted healthcare workers professional organizations and especially social media. The goal is to bring the information to healthcare workers and not ask them to seek out the information. Project Firstline takes CDC guidance, which is evolving throughout the pandemic, and explains and translates it. Project Firstline also engages with partners to tailor that foundational information to the needs of specific professions. Engaging partners leads to understanding the specific challenges related to healthcare workers in a variety of settings. Project Firstline wants to be responsive to the healthcare community and hear about the many considerations regarding diversity.

The Project Firstline website (https://www.cdc.gov/infectioncontrol/projectfirstline/index.html) includes the initial offerings, including a video blog, *Inside Infection Control*, to explain core concepts in infection control, particularly related to the control of COVID-19 in healthcare facilities. These video blogs explain concepts such as; what is a virus, what is a respiratory droplet, how to do a self-field check on your N95, what does N95 stand for? The goal is to break down important concepts and getting them directly to frontline healthcare workers so they can be applied.

Project Firstline is working with partners that are currently part of the collaborative to engage their professions in training their constituents using Project Firstline's materials, but also to ensure the program is being innovative and grounded in the best educational practices. These trainings were created to help change the culture of healthcare where each person feels ownership and confidence in implementing infection control in their workplace.

Project Firstline also has a stable of academic partners who help them better understand how Frontline healthcare workers think and perceive infection control tasks and how to develop training that meets those needs. This helps with identifying ways to harness new technologies, including artificial intelligence, to help support the frontline workers in getting responsive and adaptive infection control training. Ms. McClune recognizes the difficulty of asking a population that is responding to a pandemic to learn new things while in a crisis. With that in mind, Project Firstline is looking forward to a new collaboration with community colleges and American Hospital Association colleagues, amongst others, to reinfuse infection control training into formal education for health professionals. If the healthcare workforce has a solid understanding of infection control through formal education, they would be better trained to adapt in crisis situations to protect their patient's safety as well as themselves. This type of work is what we hope to expand as the program continues to grow.

Ms. McClune acknowledged the specific challenges of rural healthcare communities. Project Firstline has been working to engage members of the healthcare community to understand their specific challenges. The Project Firstline team wants to make sure that information, education, and training approaches meet the needs of this specific community.

Project Firstline is also working with CDC's network of public health departments on using the program's materials, specifically focusing on training health departments on being effective trainers themselves by arming them with knowledge about adult education and learning. This will hopefully create more innovation on ways to approach the needs of their local healthcare workforce in a more meaningful way.

Project Firstline looks forward to adding to their approaches as they learn from the healthcare workforce. The team is truly dedicated to understanding all the needs of the millions of people in the healthcare community and that comes with listening, partnering, and being responsive.

Project Firstline Discussion

Sarah Smathers, the APIC liaison, stated that Project Firstline is great and useful for infection prevention. Similar work is being done in her healthcare facilities. Ms. Smathers believed that Project Firstline could be a way to take the work that is already being done to the next level. She wanted to know if there was an opportunity to build this resource in a way that could help healthcare workers understand what infection prevention is and that it exists within their facilities.

Ms. McClune responded that the goal of Project Firstline is to prepare healthcare professionals with that foundational knowledge as well as answer any questions that they may have in that area. Ms. McClune also stated that the best research and learning that healthcare professionals can participate in are the infection prevention opportunities that are in their own facilities. Project Firstline recognizes the more people get engrossed in this field the more they may want to continue their studies and certifications. Ms. McClune believes that there is a way for Project Firstline and APIC to work together to make the field stronger.

Ms. Dekker stated that she does infection control in San Francisco and she complimented the Project Firstline website. Ms. Dekker asked if one of the goals of Project Firstline was to translate the webpage information into other languages so that this information can reach more people.

Ms. McClune responded that Project Firstline is working with their partners to be as responsive as possible. She stated that one of their partners is the Asia Pacific Islander American Health Forum (https://www.aanhpiprojectfirstline.org/), and they are working with Project Firstline to translate the "Fight Infection Control" videos into common Asian languages. Another thing Project Firstline has done is providing sister websites with links, knowing that sometimes Healthcare Professionals don't go to the CDC first. The program intends to have all resources available in Spanish, with voiceover for videos and expand to other languages.

Dr. Babcock encouraged everyone to go visit the Project Firstline website. Dr. Babcock continued by saying there are many resources with great information. Internally to her facility, there have been discussions about potentially leveraging some of that material for the kind of situations that were mentioned in the beginning with Dr. Cardo. She continued by saying if we have rapidly deployed new nurses or agencies that have not had as much experience or in-depth training in infection prevention that the Project Firstline resources would be of good use. Dr. Babcock then asks if there are any more questions.

Dr. Anderson asked what Project Firstline's strategy is for prioritizing what types of topics will be first on the list versus those that will have to be delayed for subsequent consideration.

Ms. McClune responded that Project Firstline's first approach is to make sure that they were receiving all COVID-19 related information from their partner organizations. Some of the content that was prioritized had to do with multi-dose vials. This was a priority because as we started to move towards vaccination, some of the partners in the collaborative noted that most of these vaccines are multi-dose vials. Many vaccinators were nursing students or new staff which also brought up safety considerations. She continued to say that a lot is being informed by partners and the healthcare community to make sure we are being responsive to those needs. Ms. McClune believes that as we move beyond COVID-19 that Project Firstline's engagement with partners and with the healthcare community at-large will come into play to make sure that the program is prioritizing and responsive to any urgent need. Healthcare workers can be empowered and critical thinkers with infection control. Project Firstline is working on a post COVID-19 strategy to be sure that it is staying responsive to the questions that are coming from the field.

Dr. Bell added to what Ms. McClune stated by saying that there is a long list of topics that Project Firstline can pursue, but Dr. Bell believes historically there has been a lack of attention to the rationale behind why we ask people to do things. Dr. Bell believes Project Firstline is an opportunity to bring people up to speed so that the day-to-day of infection preventionist is a little bit easier. By bringing the

people up to speed, infection preventionist will not be a cold or completely confused audience, but instead healthcare staff will be a little closer to understanding the "why's" and therefore more likely able to support important practices.

Ms. McClune added to what Dr. Bell said by saying, the program is shying away from the "just do it" approach with their training. It wants to get away from checklists and help people understand the science and rationale behind these recommendations, the program wants training to become real and to connect to what people know is the intrinsic motivation of all healthcare workers which is to help their patients get better. She continued saying, in the next few weeks the program will have a toolkit on their website that will help infection preventionist, charge nurses, and outpatient staff trainers that will provide training material, a facilitator's guide on how to make the most of intrinsic learning moments. It will even provide 10-minute sessions that can be added to a huddle and 20-minute sessions that could be a weekly team meeting. Project Firstline is looking to provide materials to the field that can help healthcare workers to be more effective trainers.

Long-term Care/Post-acute Care (LTC/PAC) Workgroup Update

Dr. Michael Lin, MD, MPH, HICPAC Member
Dr. JoAnne Reifsnyder, PhD, MBA, MSN, HICPAC Member

Dr. Babcock introduced Dr. Lin and Dr. Reifsnyder to give an update on the LTC/PAC workgroup. Dr. Lin stated the goal of the presentation was to present the draft white paper for use of enhanced barrier precautions in skilled nursing facilities. Dr. Lin expressed a disclaimer which stated the finding and conclusions herein are draft and have not been formally disseminated by the Centers for Disease Control and Prevention and should not be construed to represent any agency determination or policy.

The LTC/PAC workgroup was established in November 2019 with the goal of informing HICPAC on optimal strategies to prevent HAIs in long-term care and post-acute care settings. The initial charge was to provide recommendations to HICPAC on the care of nursing home populations and the implementation and scope of enhanced barrier precautions. Residents in skilled nursing facilities are disproportionately affected by multi-drug resistant organism (MDRO) infections. MDRO colonization problems among residents at skilled nursing facilities is estimated at over 50%. Resident-to-resident pathogen transmission occurs in part by healthcare personnel who may acquire, carry, and spread MDROs via their hands or clothing during resident care activities. The draft white paper notes that self-contamination increases during care for residents with wounds or indwelling medical devices.

Dr. Lin stated that standard precautions are inadequate to prevent MDRO transmission in part because standard precautions are generally geared towards blood and body fluid exposure. Contact Precautions are typically used for residents in the long-term care setting for short-term pathogen specific infections. It is impractical to keep patients confined within their room which is a part of Contact Precautions.

In 2019, CDC introduced Enhanced Barrier Precautions (EBP) as a personal protective equipment option for skilled nursing facilities in the care of residents. The approach falls between standard and contact precautions. It recommends gown and glove use for certain residents during specific high contact activities including dressing, bathing, transferring, providing hygiene or toileting care, changing linens or device and wound care. In this approach, room restriction is not required.

The 2019 interim guidance recommended EBP as a part of a containment response for novel or targeted MDROs. Specifically listed on the interim guidance was pan-resistant organisms, carbapenemase producing organisms, and *Candida auris*. Dr. Lin thought it was important to mention that the existing guidance is really focused on residents who are colonized with these novel or targeted MDROs or residents with wounds or indwelling medical devices who stay on units where containment efforts for those specific needs are occurring.

The LTC/PAC workgroup has been reviewing scientific evidence to potentially expand EBP beyond novel or targeted MDROs to more common MDROs. It was found that routine use of EBP for residents with wounds or indwelling devices may reduce transmission of *Staphylococcus aureus* (*S. aureus*) or other MDROs. Dr. Lin wanted to mention that this includes both methicillin-susceptible and methicillin-resistant *S. aureus*.

In a randomized clinical trial, routine use of EBP among residents with indwelling medical devices reduced acquisition of MDROs including methicillin resistant *S. aureus* and catheter associated urinary tract infections. In a quasi-experimental study, routine use of EBP during high risk care of residents with wounds or indwelling medical devices was associated with significant decrease in acquisition and transmission of both methicillin susceptible and methicillin resistant *S. aureus*. Other evidence that is more circumstantial was reviewed that related to transfer of MDROs from resident to healthcare personnel during resident care and potential differential risk of self-contamination. Reviewing that evidence also informed some of the expert opinion that will be in the draft white paper.

Dr. Reifsnyder presented the expert opinion from the workgroup and the considerations for applying EBP in skilled nursing facilities. EBP may be applied when contact precautions do not otherwise apply to residents with wound or indwelling medical devices regardless of MDRO colonization status and, secondly, infection or colonization with an MDRO. The considerations will include implementation, cost considerations, considerations during shortages of gown and gloves, and lastly, several unresolved questions that were beyond the scope of the draft white paper.

Dr. Reifsnyder described the four implementation considerations specifically addressed in the white paper. First, routine care of residents with indwelling devices or wounds require that staff participate in both initial and ongoing training on the facilities expectations about hand hygiene and gown and glove use, along with proof of competency regarding the appropriate use (donning and doffing). Second, facilities should develop a method to identify residents with indwelling devices or wounds, and post clear signage outside of resident rooms. Third, gowns and gloves should be available outside of each room, and alcohol-based hand rub should be available for every resident room. Fourth, facilities with rooms containing multiple residents should provide staff with training and resources to ensure that they change their gown and gloves and perform hand hygiene in between care of residents in the same room.

Dr. Reifsnyder presented three cost considerations. First, implementation of routine EBP will incur costs related to PPE, staff time to don and doff PPE, and signage materials. Second, the potential savings would include avoidance of infections and hospitalizations. Lastly, an economic analysis of a randomized controlled trial involving the use of EBP in a bundle to prevent catheter-associated urinary tract infections estimated net savings of approximately $15,000 per year per facility. It is important to note that savings would accrue to payers while costs accrue to the facilities. Centers for Medicare and Medicaid Services and private insurers and commercial plans may need to consider the implementation and cost of EBP in payment models.

Facilities may encounter shortages of gowns and gloves. Neither extended use nor re-use of gowns and gloves is recommended for mitigating shortages in the context of EBP. To optimize PPE supply, facilities can consider substituting disposable gowns with washable cloth isolation gowns that have long sleeves with cuffs. Next, facilities can identify where PPE overuse is occurring. For example, overusing gloves to assist or care for residents who are not on transmission-based precautions to eat or during bed making or transporting bagged linen or trash. Lastly, when there are not enough gowns and gloves for implementation of EBP as recommended, facilities may temporarily prioritize EBP for residents with wounds over residents with medical devices alone. Risk of healthcare personnel self-contamination with *S. aureus* and MDROs is higher during care of residents with wounds, compared to residents with medical device alone. Facilities implementing EBP based on residents MDRO colonization or infection status may also prioritize EBP for novel or targeted MDROs over other MDROs. It has been noted that facilities should include procedures for PPE shortages in their emergency preparedness plan and/ or facility assessment. During PPE shortages, facilities should document all actions taken to remedy the shortage.

Dr. Reifsnyder explained some unresolved questions. First, the presence of wounds or indwelling medical devices is readily identifiable by healthcare personnel and thus is a practical criterion for identifying nursing home residents at risk for MDROs. However, further studies are needed to address risk scores based on functional status or other resident characteristics that can more efficiently identify residents without wounds or indwelling medical devices who would benefit from EBP. Next, the contribution of EBP to the prevention of respiratory virus transmission is unknown. Appropriate use of gown and gloves can interrupt fomite-related transmission of some predominantly respiratory pathogens (e.g., adenovirus and possibly SARS-CoV-2), but healthcare personnel should continue to follow PPE guidance for the care of residents with suspected or confirmed COVID-19. Lastly, other approaches to MDRO control in skilled nursing facilities may include universal decolonization strategies. At this time, there are no studies comparing the effectiveness of EBP versus a universal decolonization approach; multiple approaches may be needed for optimal MDRO control.

Dr. Reifsnyder ended with the executive summary. First, MDRO transmission is common in skilled nursing facilities, contributing to significant morbidity and mortality for residents and increased costs for the health care system. Second, EBP is an approach of targeted gown and glove use during high contact resident care activities, designed to reduce transmission of *S. aureus* and MDROs. Third, EBP may be applied (when Contact Precautions do not otherwise apply) to residents with any of the following: (1) wounds or indwelling medical devices, regardless of MDRO colonization status and (2) infection or colonization with an MDRO. Lastly, effective implementation of EBP requires staff training on the proper use of PPE and the availability of PPE with hand hygiene products at the point of care.

Long-Term Care/ Post-Acute Care Discussion

Dr. Mohamad Fakih believed the recommendations are much more targeted on the high-risk population. He continued by saying that Dr. Lin and Dr. Reifsnyder mentioned that there may be an increase use of PPE such as gowns and gloves. Dr. Fakih said that instead of increased use, it may streamline contact precaution work due to the variation in contact precautions within the nursing homes. Dr. Fakih asked, what organisms should merit the use of contact precautions within nursing homes or should be assessed on the national level? Dr. Fakih believes that this could give more access to patient care, more engaging healthcare workers and a better quality of life for residents. Dr. Fakih continued with two additional questions: Would you comment on the PPE? and Could this address those

that have high-risk MDROs? Dr. Fakih continued by explaining that he was not aware of any standard for isolation within nursing home facilities.

Dr. Lin specifically wanted to comment about the risk for MDROs. Dr. Lin believes that an important consideration when the workgroup discussed residents who have either wounds or indwelling medical devices, that they may be at risk of already being colonized with an MDRO. Using EBP could prevent the transmissions of MDROs from that colonized resident to healthcare personnel and then to another resident. Dr. Lin expressed that those are also the same residents that are at risk for acquisition. Residents may come into the facility not being colonized, but because of their increased needs, for example, wounds and devices, may be at risk for new acquisition of MDROs. Dr. Lin believes that the risk of MDRO transmission and acquisition makes identifying the right use of enhanced barrier precaution appealing.

Ms. Preas asked if there are any thoughts on the fact that many of our facilities are still on significant allocation especially for gloves? She appreciated the idea of the reusable gowns, but she often hears from long-term care partners and even acute care hospitals, that they have concerns for allocation of supplies. Ms. Preas believes that supply allocation is a short-term barrier for many.
Dr. Reifsnyder responded to Ms. Preas by saying the workgroup thought it was important to discuss the variation in PPE availability. She continued saying by prioritizing patients with wounds for EBP rather than those with only medical devices could be one way to conserve during a time when there are shortages of one or more items.

Ms. Dekker asked if is it possible to let manufacturers know that guidelines are in proposal and coming so they can ramp up their production? She anticipated an increase in demand of supplies and wanted to potentially avoid short-term shortages. Ms. Dekker continued with two more comments. First, would it be possible to consider having gowns available inside or outside based on facility design? Ms. Dekker explained that corridor egress can be challenging in older facilities and are frequently challenging with fire safety code requirements. The last input Ms. Dekker gave was about nasal sanitizing. She stated that she has received a lot of questions about nasal sanitizers. She asked why the workgroup picked povidone iodine over the other type of sanitizers that are available.

Dr. Lin responded to Ms. Dekker's last comment. Dr. Lin believes that nasal sanitation was meant to be an example of a potential approach to nasal decolonization. This has been studied and some data has already been presented at a national conference. The setting for this data was for nursing home residents in a study led by Dr. Susan Huang. Dr. Lin continued to say that this example could be more generic when talking about a variety of potential approaches.

Dr. Lin made a specific point that the white paper is not a guideline. This presentation provides an option for nursing homes to be able to find an approach that is in between standard precautions and contact precautions. Dr. Lin states that if and when this is adopted as an updated interim guidance, that it should not be prescriptive about which MDROs need to be targeted. Specifics were intentionally not included and were left for local epidemiology and public health priorities to dictate what is considered an MDRO that is important enough for this approach.

Ms. Dekker responded that over the years she has learned that the state will take guidance documents and turn them into guidelines by using the exact language from the guidance. Dr. Reifsnyder responded by commenting on Ms. Dekker's point about guidance being applied in a different way than it was

intended by the states. She went on to make a note about the trash containers being used outside or inside of nursing home rooms.

Healthcare Personnel Guideline Workgroup Update

Dr. Hilary Babcock, MD, MPH, HICPAC Co-Chair

Dr. Babcock introduced herself for the Healthcare Personnel Guideline Workgroup Update. Dr. Babcock stated that draft sections of four pathogens have been approved by the committee and have gone through clearance; diphtheria, Group A streptococcus, meningitis and pertussis were posted for public comment right as the pandemic reached the United States. Not surprisingly, the workgroup did not receive any comments on those draft sections. Dr. Babcock says that the four pathogens will be reposted for comment. The other work for the workgroup remains on hold and will start back up when the workgroup members and CDC supports have a little more bandwidth. Dr. Babcock asked for questions and then introduced Dr Judith Guzman-Cottrill for the NICU guideline update.

Neonatal Intensive Care Unit (NICU) Guideline Workgroup Update

Judith Guzman Cottrill, DO, HICPAC Member

Dr. Cottrill reminded everyone that the NICU guideline workgroup has a total of four deliverables. First, is the systematic review that was completed in 2018. Second, is the recommendations for prevention and control of S. *aureus* infections in NICU patients that was released in September 2020. Third, bloodstream infections in NICU patients is currently in the clearance process and once cleared it will post to regulation.gov with a public comment period of 60-days. Fourth, NICU respiratory infection prevention systematic review is our workgroup's current focus. The literature review was recently updated, and the conclusions are currently being drafted. Once completed, the document will then be reviewed by our entire workgroup members and then the workgroup will move forward. Lastly, Dr. Cottrill wanted to add an important note on the respiratory infection guidance. She stated that the prevention guideline will not include SARS- CoV-2 recommendations because neonatal-specific guidance for COVID-19 is currently available on the CDC website.

Dr.Maragakis asked for comments or questions about the NICU Workgroup update and after hearing none the committee proceeded to Federal Entity for comment.

Federal Entity and Public Comment

Gary Roselle, VA, Federal Comment

Gary Roselle from the VA stated that he was pleased to see in the long-term care guidelines "the addition of the permission for using enhanced barrier precautions for colonized persons in long-term care, that it was not in the recommendations before. I think that has been a good enhancement. Clearly, transmission can occur from colonized patients, maybe not with the same intensity as with wounds. The VA has been using enhanced barrier precautions for years, that along with the bundle has been successful. Now you mentioned sustainability, that is my favorite topic. Do you keep things in good condition once you have them? COVID-19 has made a major impact because not everybody was doing everything including VA during the height of the pandemic. But if this only occurs, a pandemic, every

hundred years that wouldn't be so bad." Dr. Roselle thinks there must be a systematic way of making sure that even when you have to delay certain components of the sustainable item in infection control, there has to be a way to restart. He continued saying because there's usually resistance in restarting because it's easier to not be doing things, the best way to support doing it would be with data. Can you show that while you change things there was an increase in detection? There may not be a way to link it, but there may be and that just requires more work. The resistance will be best met by data to support the practices that may have not been rigorously applied during the height of the disaster.

Demetria Thomas, Public Comment

Are there any incentives given to hospitals and clinics for providing additional infection control protection during the pandemic? Hospital purchasing agents are reluctant to purchase products that will help with cross-contamination because of budgeting. Are there any financial grants or incentives for hospitals to participate in to increase their interest in infection control products?

Dr. Spannhake, Public Comment

Dr. Spannhake, Chief Science Officer of Global Life Technologist Corporation and professor emeritus at Johns Hopkins School of Public Health states that he is part of a group of infection prevention experts and medical professionals who have joined to raise awareness about the benefits of nasal decolonization as a vital component of infection prevention programs. The nose is a recognized reservoir for infection-causing pathogens and, as such, acts as a portal for disease transmission. It was proposed that nasal decolonization also called sanitizing the nose should be recommended not only within the healthcare industry, but also for the public by CDC and other agencies to help protect against the harmful spread of pathogenic germs. Currently, nasal decolonization is recommended by the CDC for healthcare settings and is in use by thousands of hospitals to reduce infection risk for surgical patients and others at high risk. He states that it has been demonstrated in numerous cases that implementing broad nasal decolonization protocols in the healthcare setting has reduced patient morbidity and mortality, and length of stay due to infection-related complications as well as hospital readmissions. Additionally, he states that nasal decolonization has been shown to reduce secondary bacterial infections associated with influenza infection and, in some cases, COVID-19 infection.

There are now over-the-counter FDA regulated topical nasal antiseptics included alcohol-based nasal antiseptic proven to kill germs on the skin of the nasal vestibule in the same manner as hand sanitizer kills organisms on the hands. Agencies such as CDC have a pivotal role in educating the public on the science behind infection prevention practices like nasal decolonization. Hand sanitizers are now widely accepted as an important infection prevention tool and the CDC plays a critical role in building that acceptance. Sanitizing your nose should follow in the steps of such historic agency health initiatives. Community-associated and secondary bacterial infections continue to pose a significant risk and we are faced with the greatest strain our healthcare system has felt in a generation. We, as subject matter experts, and advisors for the sanitize your nose campaign sponsored by Global Life Technologist Corporation believe it is in the best health interest of the public to expand CDC guidelines to recommend sanitizing the nose as a critical component of standard infection prevention.

Kevin Kavanagh, Public Comment

Dr. Kavanagh is from Health Watch USA. Health Watch USA has been active in infectious disease policy for over a decade. In 2017, we warned that MRSA rates were not falling and we needed to do more such as surveillance for carriers in isolation. In 2019, we warned that nursing home infection prevention standards were almost nonexistent. CDC's proposed guidelines do not provide adequate resident protection.

During the last year, policymakers were encouraged to focus on what it takes to prevent disease spread and not on the politics of what resources facilities and business owners are willing to provide. For example, if enhanced barrier precautions stop the spread of dangerous pathogens, they then should be used in all types of facilities. If they do not, they should not be used in any including nursing homes. A different approach would be to determine a resident's microbiome and either modify their microbiome or reside the residents with others having microbiome compatibility. Political pressure into demand for absolute certainty has led to inaction and distorted science. We have not adopted universal reporting and surveillance of carriers as a strategy to stop all endemic dangerous pathogens. This culture has set the stage for the United States COVID-19 response disaster. In October of 2020, the same distorted decision making processes appeared to have inhibited AHRQ from advocating for mask usage in a COVID-19 report which concluded given these limitations the strength of evidence on mask versus no use of masks in healthcare settings for prevention of SARS-CoV -2 infection was assessed as insufficient.

Healthcare worker acquisitions of other dangerous pathogens has also gone largely unreported and unnoticed. Even for COVID-19, there is not mandatory reporting of frontline worker acquisitions which has allowed accurate tallying of the true toll. Nor are there adequate frontline worker safeguards in place such as requiring N95 masks for all patients and patient contacts regardless of COVID-19 status. The same standard should be true for bus drivers, grocery workers, and other frontline personnel. Protection from aerosols needs to be better incorporated into CDC advisements for the prevention of SARS-CoV-2 spread. There appears to be conflicting guidance on this topic and there is a lack of attention regarding complete air exchanges, air sanitization, and use of N95 masks in retail establishments and schools.

There is also an unacceptable continuation of emergency stop-gap guidance such as sterilization of N95 masks. We must protect patients, nursing home residents, and all frontline workers with harmonized standards based upon what is needed to stop the spread rather than what we have at hand or are willing to provide. As a side note, I'd just like to comment. When I hear the enhanced barrier precautions and what we have to do to try to make life a little better, this is the same excuse that we're hearing from politicians on why we need to open up the economy now in face of SARS-CoV-2. Our primary concern should be stopping the spread of dangerous pathogens. Thank you.

Sue Coffin, Public Comment

Hello, I am a member of the healthcare community working in infection prevention for a large, post-acute facility which includes home health. I would like to ask that you please consider reviewing, updating and finalizing the HICPAC surveillance definitions for home health that were drafted in 2008. Thank you.

Bill Stanheg, Public Comment

Bill Stanheg of Global Life Technologies commented saying he didn't want to repeat anything that has been submitted in writing in our written comments with regard to nasal decolonization. But was pleased to hear Dr. Lin's clarification of the fact that this represents guidance and not guidelines. Particularly for long-term care facilities where the selection of the nasal decolonizing agent is critical with regard to its acceptability to patients and so forth in a daily use kind of environment. The option to leave open the selections is an important component of the guideline.

Summary and Work Plan

Lisa Maragakis, MD, MPH, HICPAC Co-Chair

Dr. Maragakis provided and overview summary of the call which included presentations from Dr. Cardo about the work that DHQP continues to do specifically on issues around sustainability of infection prevention intervention and addressing health disparities. Dr. Maragakis continued to speak on presentations by Dr. Michael Bell on the coronavirus disease and response update and Elizabeth McClune on Project Firstline. Dr. Maragakis mentioned the long-term care post-acute care workgroup presentation and the good work being done despite the difficult circumstances.

Dr. Maragakis stated that the HICPAC work plan is to continue working with CDC on projects including Project Firstline and the examination of the isolation precautions. The three workgroups that presented will continue their work. The public comments for the Healthcare Personnel Guideline will be examined and their work will continue. Upon last requests for public comment, the call adjourned at 2:46pm ET.

Certification

I hereby certify that, to the best of my knowledge and ability, the foregoing transcripts of the March 4, 2021, meeting of the Healthcare Infection Control Practices Advisory Committee, CDC are accurate and complete.

_____ _____

Date Lisa Maragakis, MD, MPH
Co-Chair, Healthcare Infection Control Practices
Advisory Committee, CDC

_____ _____

Date Hilary Babcock, MD, MPH
Co-Chair, Healthcare Infection Control Practices
Advisory Committee, CDC

Attachment #1: Abbreviations and Acronyms

Abbreviation/ Acronym	Expansion
AAKP	American Association of Kidney Patients
ACOEM	American College of Occupational and Environmental Medicine
AEH	America's Essential Hospitals
AHCA	American Health Care Association
AHRQ	Agency for Healthcare Research and Quality
ANA	American Nurses Association
AORN	Association of periOperative Registered Nurses
APIC	Association of Professionals of Infection Control and Epidemiology
ASN	American Society of Nephrology
ASTHO	Association of State and Territorial Health Officials
ASPR	Assistant Secretary for Preparedness and Response
C. difficile	*Clostridioides difficile*
CDC	Centers for Disease Control and Prevention
COVID-19	Coronavirus Disease 2019
CRE	Carbapenem-resistant Enterobacteriaceae
CSTE	Council of State and Territorial Epidemiologists
CMS	Centers for Medicare and Medicaid Services
DFO	Designated Federal Official
DHQP	Division of Healthcare Quality Promotion
EOC	Emergency Operations Center
FDA	(United States) Food and Drug Administration
HAI	Healthcare-associated Infection
HHS	(United States Department of) Health and Human Services
HICPAC	Healthcare Infection Control Practices Advisory Committee
HRSA	Health Resources and Services Administration
ICU	Intensive Care Unit
IDSA	Infectious Disease Society of America
MRSA	Methicillin-resistant Staphylococcus aureus
NACCHO	National Association of County and City Health Officials
NCEZID	National Center for Emerging and Zoonotic Infectious Diseases
NHSN	National Healthcare Safety Network
NICU	Neonatal Intensive Care Unit
NIH	National Institutes of Health
NRCC	National Response Coordinating Center
OSAP	Organization for Safety, Asepsis, and Prevention
PCR	Polymerase Chain Reaction
PHAC	Public Health Agency of Canada
PIDS	Pediatric Infectious Disease Society
PPE	Personal Protective Equipment
SARS-CoV-2	Severe acute respiratory syndrome coronavirus 2
S. aureus	*Staphylococcus aureus*
SCCM	Society for Critical Care Medicine

Abbreviation/ Acronym	Expansion
SHEA	Society for Healthcare Epidemiology of America
SHM	Society for Hospital Medicine
SIS	Surgical Infection Society
Tele-ICAR	(Telephone) Infection Prevention and Control Assessment Tool
TJC	The Joint Commission