Improving Adult Immunization Coverage in Post-Acute and Long-Term Care: *The Moving Needles Project*

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August 12-16, 2024
National Immunization Conference and
National Adult and Influenza Immunization Summit

Background

The Post-Acute and Long-Term Care Medical Association: Paltmed (the next generation of AMDA)

- The only medical specialty society representing medical directors, physicians, and other practitioners in post-acute and long-term care (PALTC) settings

- Received a CDC non-research cooperative agreement in Fall 2021 (IP21-2111) which is how the *Moving Needles* project launched

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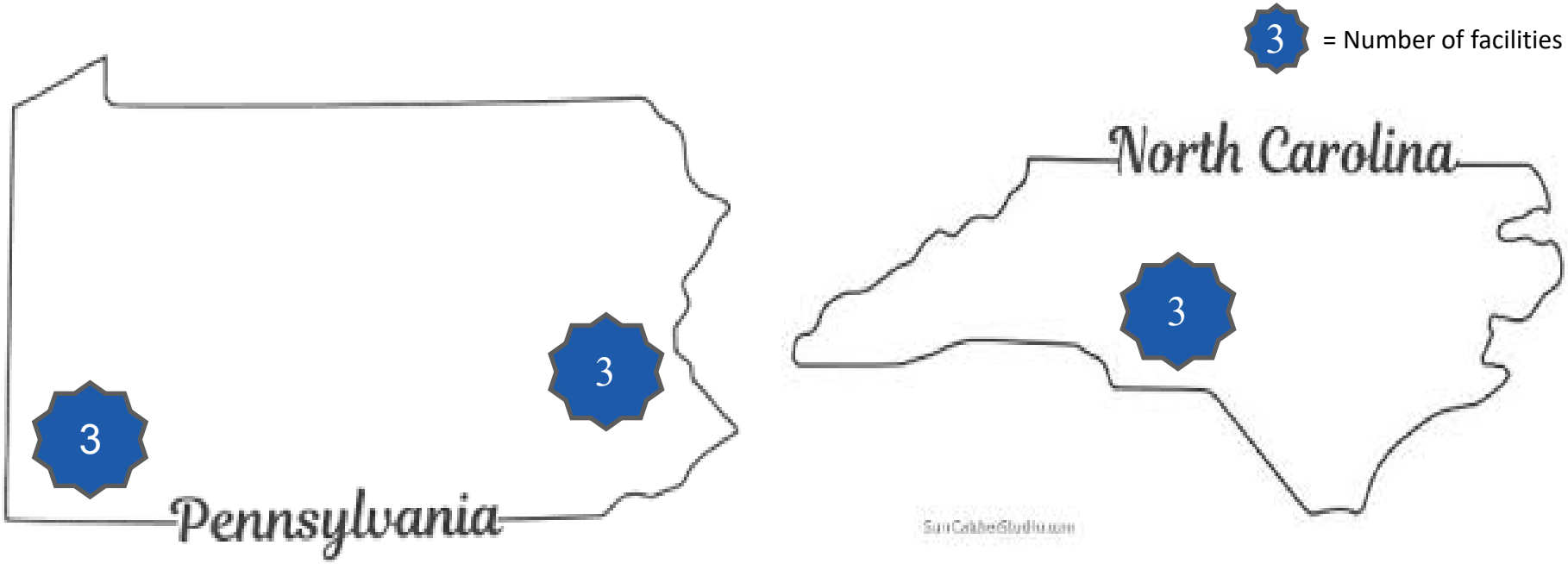
Moving Needles: Overview

- **Goal:**
  - Make routine adult immunizations a standard of care for PALTC residents and an expectation for staff

- **Main Components:**

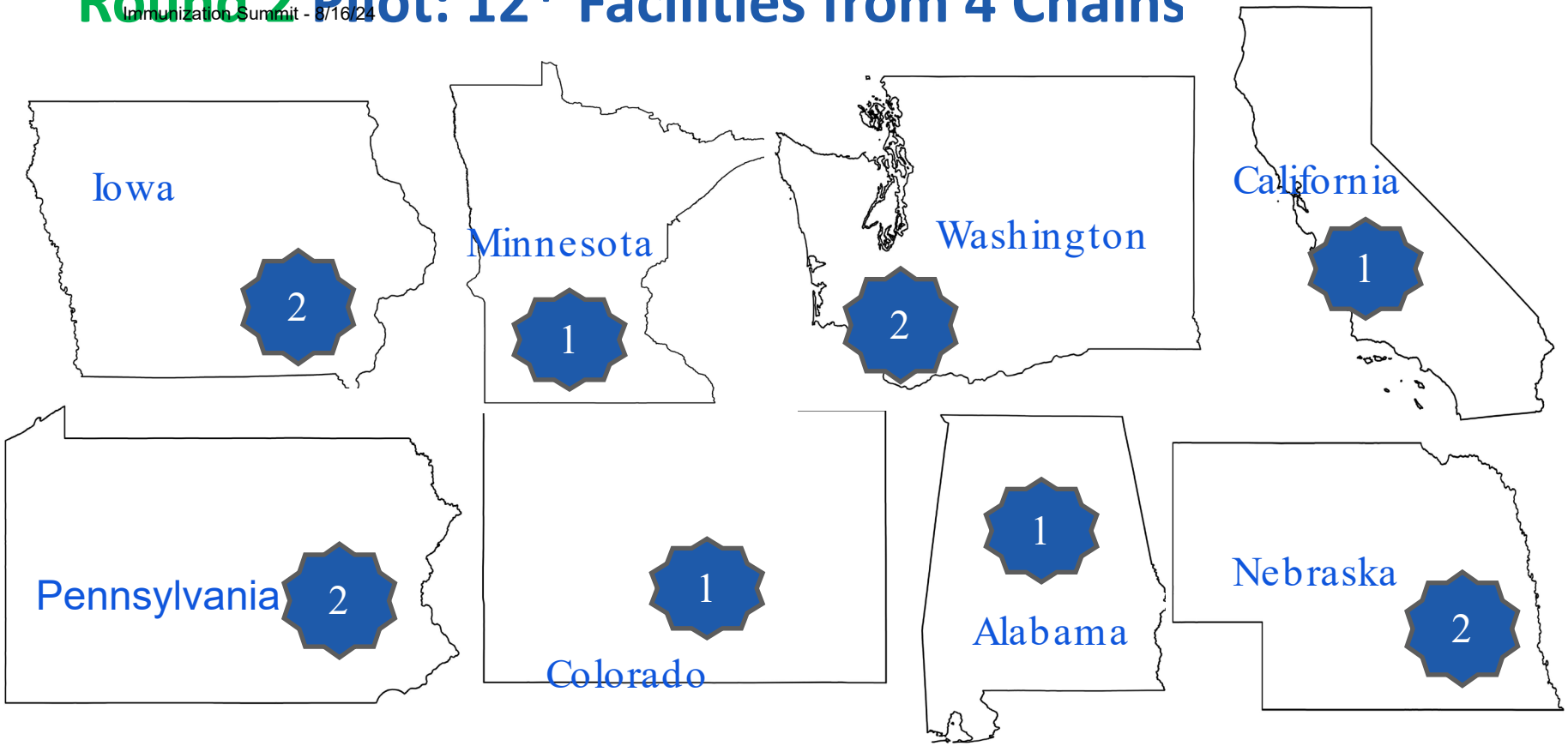
1. Aligning immunization policies and procedures in PALTC
2. Integrating Immunization Information Systems (IISs) into workflows and EHR systems
3. Cost benefits analysis
4. Developing an immunization toolkit
5. **Implementing quality improvement interventions in PALTC pilot sites to improve routine adult vaccination for residents and staff**

Round 1 Pilot: 9 Facilities from 3 Chains



Data collected from July 2022 to May 2023

Round 2 Pilot: 12* Facilities from 4 Chains



*3 of the 12 sites did not have data available for this presentation (2 from Nebraska and 1 from Iowa)

Data collected from July 2023 to May 2024

About the Sites and Vaccines Tracked During the Project

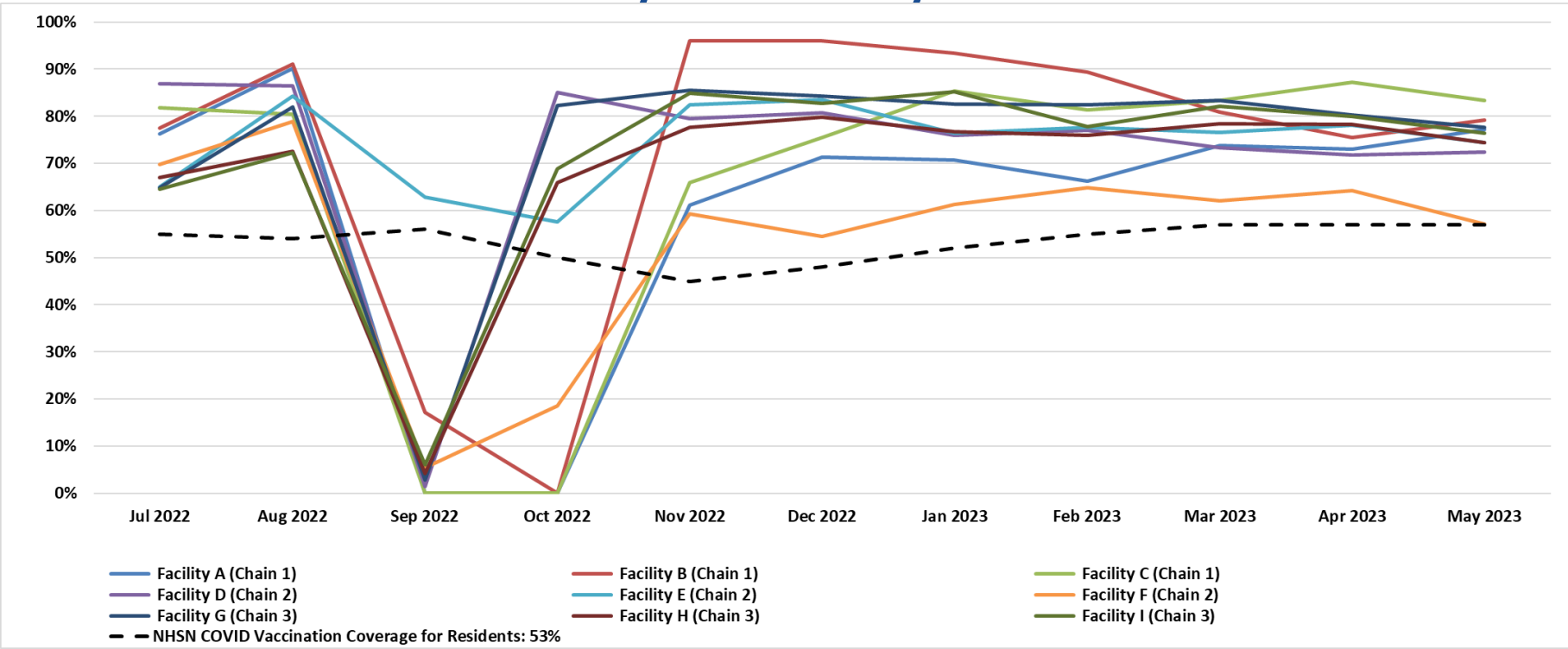
- **Facility size**:
  - 45 – 530 beds
  - 35 – 245 staff

- **Resident Vaccinations:**
  - COVID-19
  - Influenza
  - Pneumococcal
  - Tdap
  - Shingles

- **Staff Vaccinations:**
  - COVID-19
  - Influenza
  - Hepatitis B

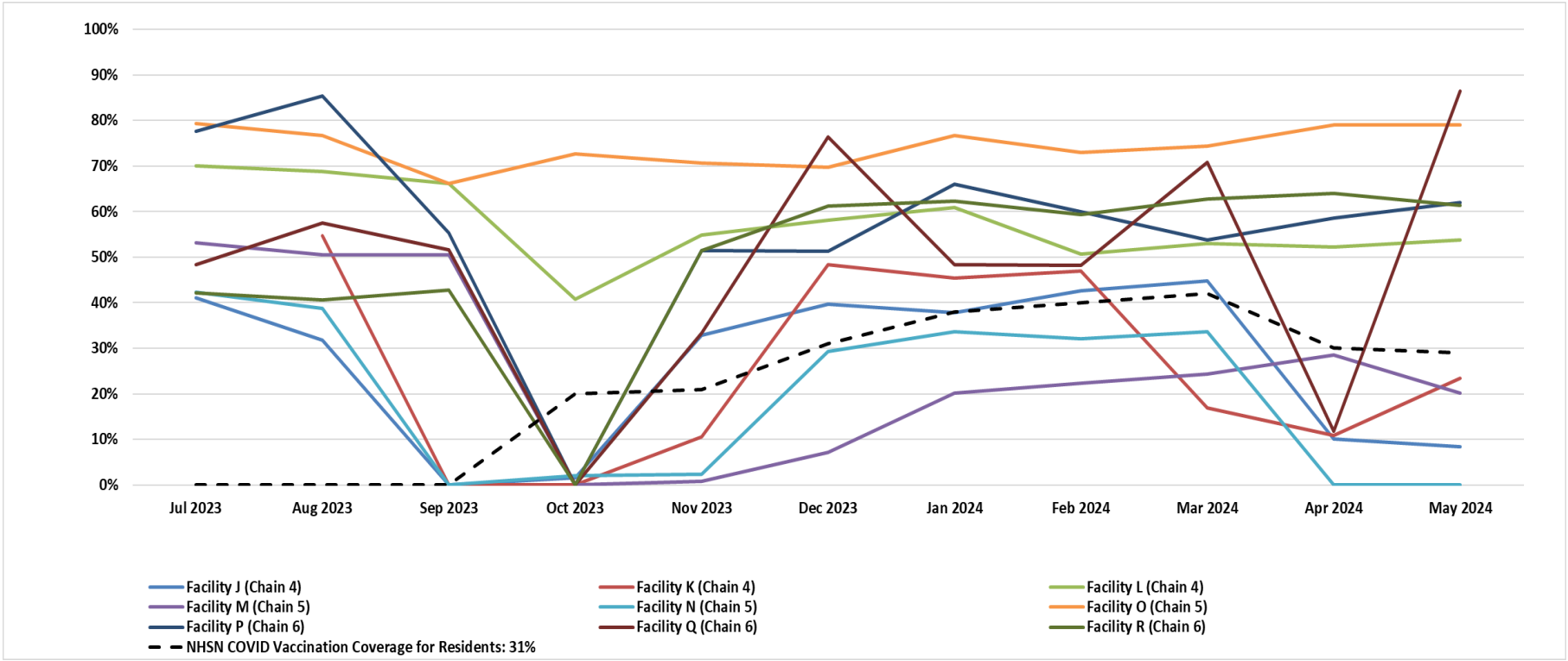
Resident COVID-19 Vaccination Data

Residents in Round 1 Sites: COVID-19 Vaccination Coverage Percentages July 2022 to May 2023



- Most facilities got back to or exceeded their pre-bivalent booster numbers within 1-2 months of the bivalent introduction in Sept 2022
- All facilities exceeded National Healthcare Safety Network (NHSN) vaccination coverage for residents

Residents in Round 2 Sites: COVID-19 Vaccination Coverage Percentages July 2023 to May 2024



- 5 of the 8 sites were above the national average by May 2024 for both doses (1st dose was introduced in Sept 2023 and 2nd dose was introduced in April 2024)

Resident COVID-19 Vaccines: The Stories Behind the Graphs

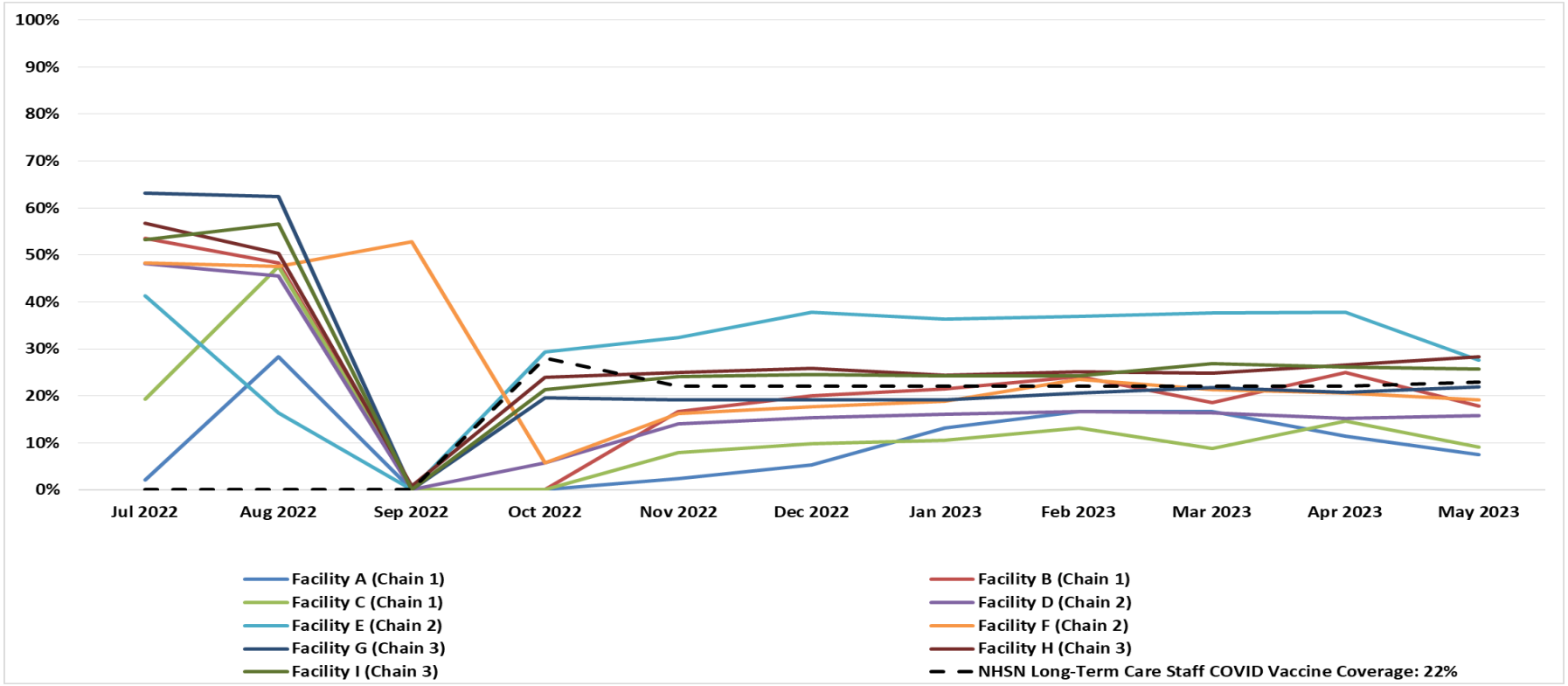
- **Standard Operating Procedures, including:**
  - Using IIS for finding vaccination histories
  - Reviewing data at Quality Assurance and Performance Improvement meetings
  - Introducing a multi-vaccine consent form on admission
  - Work well for residents, but can be hard to maintain with staffing turnover

- **Commercialization**
  - Part A stay residents can only have Part B vaccines billed by the facility, not the pharmacy, which some facilities struggle with. This can create workflow challenges and barriers to offering vaccine on admission

- **Vaccine Fatigue**
  - Did not seem to be a major factor

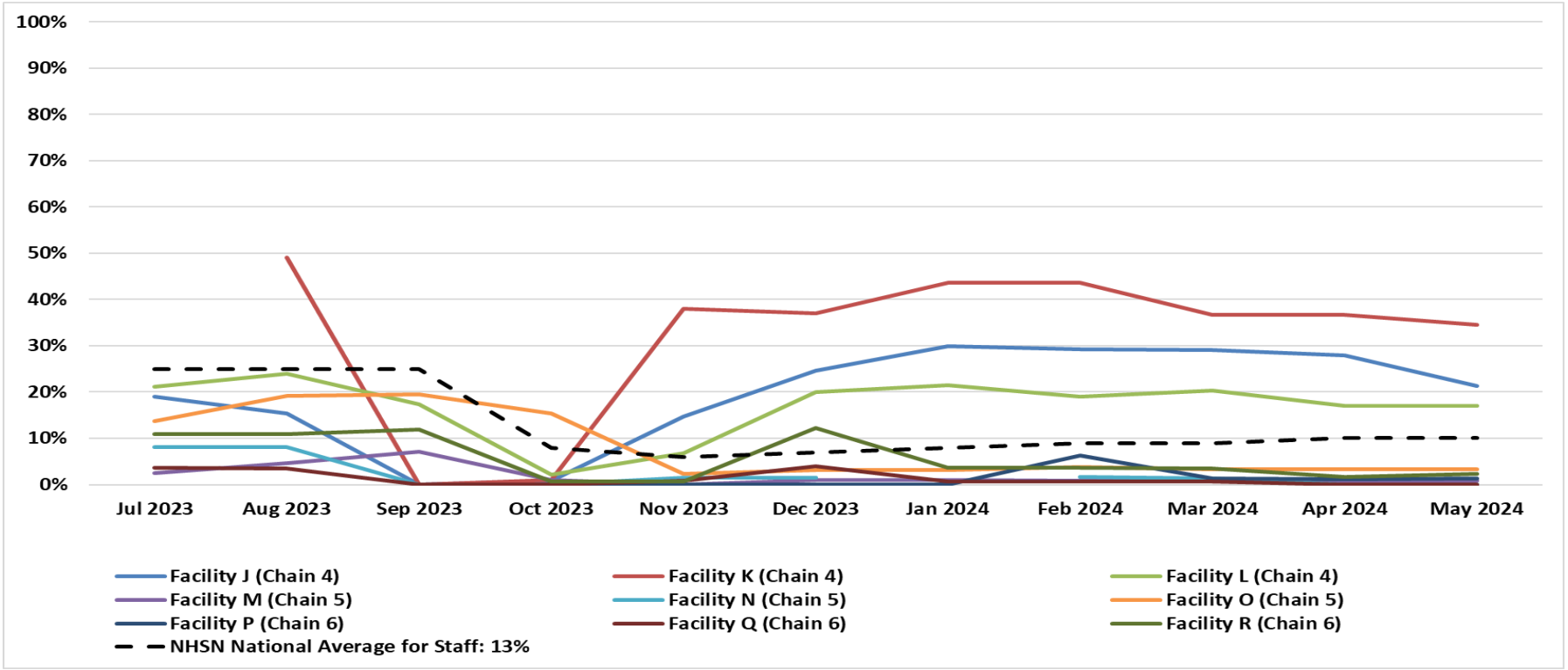
Staff COVID-19 Vaccination Data

Staff in Round 1 Sites: COVID-19 Vaccination Coverage Percentages July 2022 to May 2023



- Bivalent booster introduced in September 2022
- Staff reflect the communities from which they come. Coverage was low but exceeded local averages

Staff in Round 2 Sites: COVID-19 Vaccination Coverage Percentages July 2023 to May 2024



- The 2023-24 vaccine introduced in September 2023
- Only 3 of 9 facilities exceeded national average – all 3 facilities offered the vaccine onsite to staff

Staff COVID-19 Vaccines: The Stories Behind the Graphs

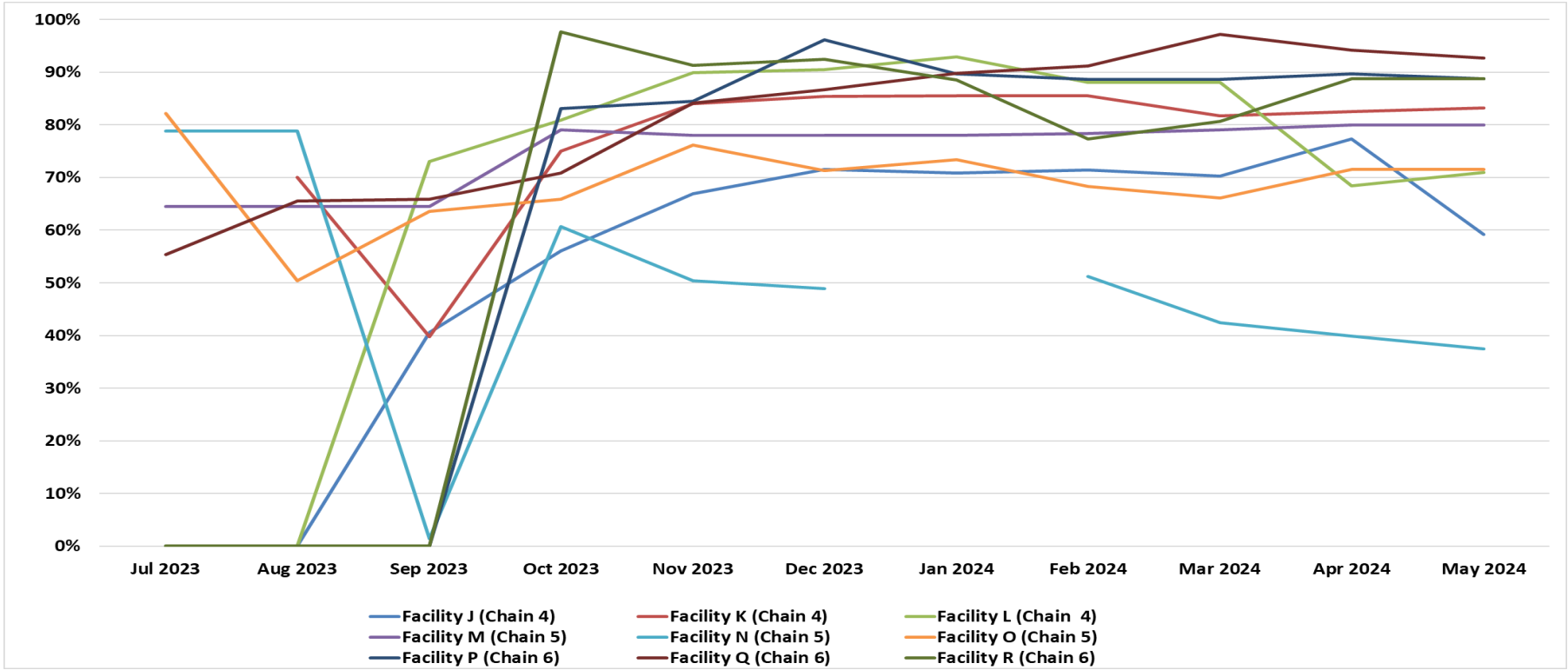
- **Standard Operating Procedures**
  - Checking status on hire works well, as does having a peer champion
  - Offering vaccine outside of normal clinic times, more than once, to all shifts
  - Offering vaccine multiple times to staff who are resistant can push them further from the goal

- **Commercialization**
  - Due to the high cost of COVID-19 vaccine, most facilities were unable to offer vaccines to staff, despite many who were willing to be vaccinated if offered onsite
    - $120 for COVID vs. $18- $30 for influenza vaccine
  - LTC pharmacies contract with Medicare; staff who have insurance are considered out of network
  - The end of the Bridge Access Program further complicated access

Staff COVID-19 Vaccines: The Stories Behind the Graphs (continued)

- **Fatigue**
  - Many logical reasons are given for refusal
    - e.g., staff are still getting sick even with being vaccinated so don't want to be out with both vaccine side effects and COVID-19
  - However, vaccine fatigue among staff has not impacted Hep B or influenza vaccination coverage

Staff in Round 2 Sites: Influenza Vaccination Coverage Percentages July 2023 to May 2024



- Using influenza vaccination as a COVID-19 comparator, fatigue may not be the issue
- Only 3 facilities have a flu vaccine mandate (facilities P, Q, & R in chain 6)

Systems, Culture, and Leadership

Systems Challenges

- **Data**
  - Manual processes (Excel sheets) are often needed to track vaccinations
  - Historical data hard to verify, and IISs vary in usefulness or allowing access
  - Consent processes are dependent on LTC chain requirements
- **Staffing**
  - Many facilities rely on a single person to lead vaccination efforts, making it hard if they turnover or are on leave
  - Understaffing makes it difficult to focus on vaccination efforts
- **Prioritization**
  - Immunizations compete with many other immediate health needs

Culture

- Vaccine culture among healthcare personnel has been focused on mandates throughout the pandemic, leading to concerns about lost jobs, lack of choice, etc.

- Through the pilots, we saw the importance of **building trust and community**
  - Incentives work in the context of building community and shifting to positive associations – t-shirts, barbeques with the night shift before a vaccination clinic, etc.

Leadership

Having strong leaders at the chain level, in the facility, or ideally both can substantially improve outcomes

Available Resources

Available Resources

www.MovingNeedles.org

- Staff in-service and supervisor training
- EHR/IIS interoperability documents
- Newsletter (email movingneedles@paltc.org)
- Posters/fact sheets
- Billing guide

Acknowledgments

- **AMDA/Paltmed Team**
  - Elizabeth Sobczyk
  - Heather Roney
  - David Casey
  - Chris Laxton
  - Ellen Schultz

- **Participating LTC and Assisted Living Facilities**

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

Backup Slides

Vaccine Delivery in Long-Term Care

- Vaccines are traditionally offered through 2 workflow patterns:
  - **On admission**
  - **In clinics**

- Long-term care (LTC) pharmacies are important partners that procure and store the vaccine

- Facilities can order vaccine and many administer it, breaking up the traditional model of payment for product and administration

Vaccine Delivery in Long-Term Care

- Medicare generally pays for first 30 days of stay in a facility through Part A, then residents pay privately or through Medicaid
  - Part A provides a global bundled payment for all services during this part of the stay.
  - However, vaccines can be carved out; the facility must bill Part B or the pharmacy must bill Part D

- After the Part A stay, the facility or the pharmacy can bill Part B. The pharmacy remains the only one that can bill Part D

- **Challenges**
  - Some facilities are not well equipped to bill Part B
  - Some facilities do not have electronic systems that support ordering Part D vaccines
  - LTC electronic health records were left out of Meaningful Use incentives and are further behind in public health connectedness and functionality

Beneficial Leadership Activities

Set a vision

Acknowledge and encourage efforts

Provide operational and problem-solving support

Be visible and supportive to facility staff

Develop standardized guidance and processes

Support use of data in decision making and quality meetings

Summary

Residents:

- Primary challenge for vaccinating residents is the complicated billing

Staff:

- Sites with vaccine access onsite (at no cost to the staff) have higher vaccine coverage than those without onsite vaccines
- Vaccine fatigue is limited to COVID-19 vaccine