

# National Centralized Repository for Alzheimer's Disease and Related Dementias (NCRAD) Updates

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National Centralized Repository for  
Alzheimer's Disease and Related Dementias

# Topics

- DNA and GWAS
- Plasma, Biomarkers and UDSv4

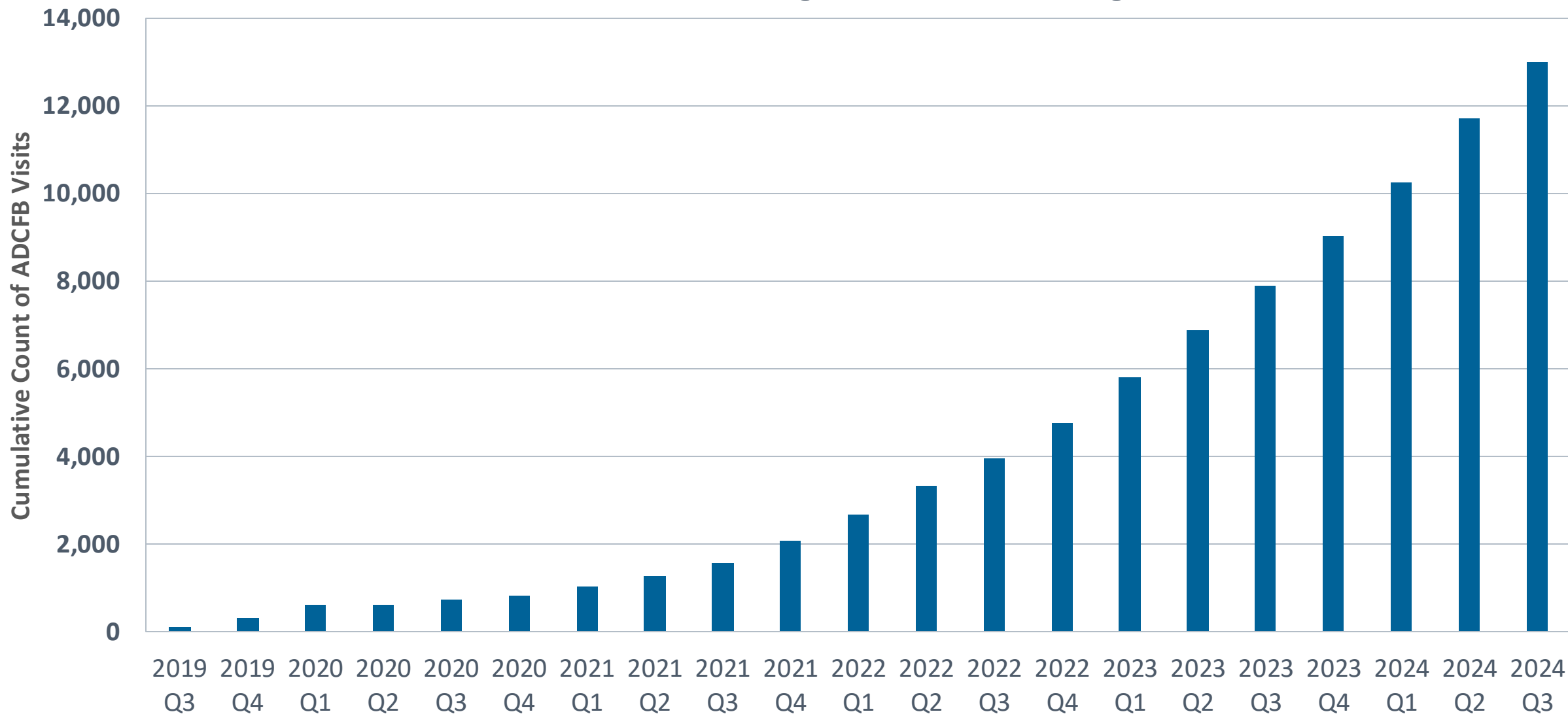
# ADRC GWAS Data Update

- **37,614 ADRC Participants GWAS'd to date!**
- NCRAD historically sent 1-2 **annual** shipments of DNA for GWAS
  - Starting May 2024, NCRAD has been sending **monthly** shipments of samples
    - 4,046 samples shipped since May 2024
    - Nearly 4,000 additional samples planned to ship by Q1 2025
- NACC, NCRAD, ADGC, and NIAGADS have been working to streamline the return of genetic data (GWAS and WGS) to the ADRCs

# ADRC GWAS Data Update

- **To receive GWAS data from these rapid shipments, it is imperative to have data reported to NACC!**
  - NACC IDs are key to receive data!
  - Any IDs unable to be linked to NACC IDs will cause delays in data reporting to the ADRCs
- NCRAD will send each site a list of IDs that cannot be linked to NACC IDs for troubleshooting

# ADCFB Sample Receipt



**Received nearly 4,000 visits thus far in calendar year 2024!**

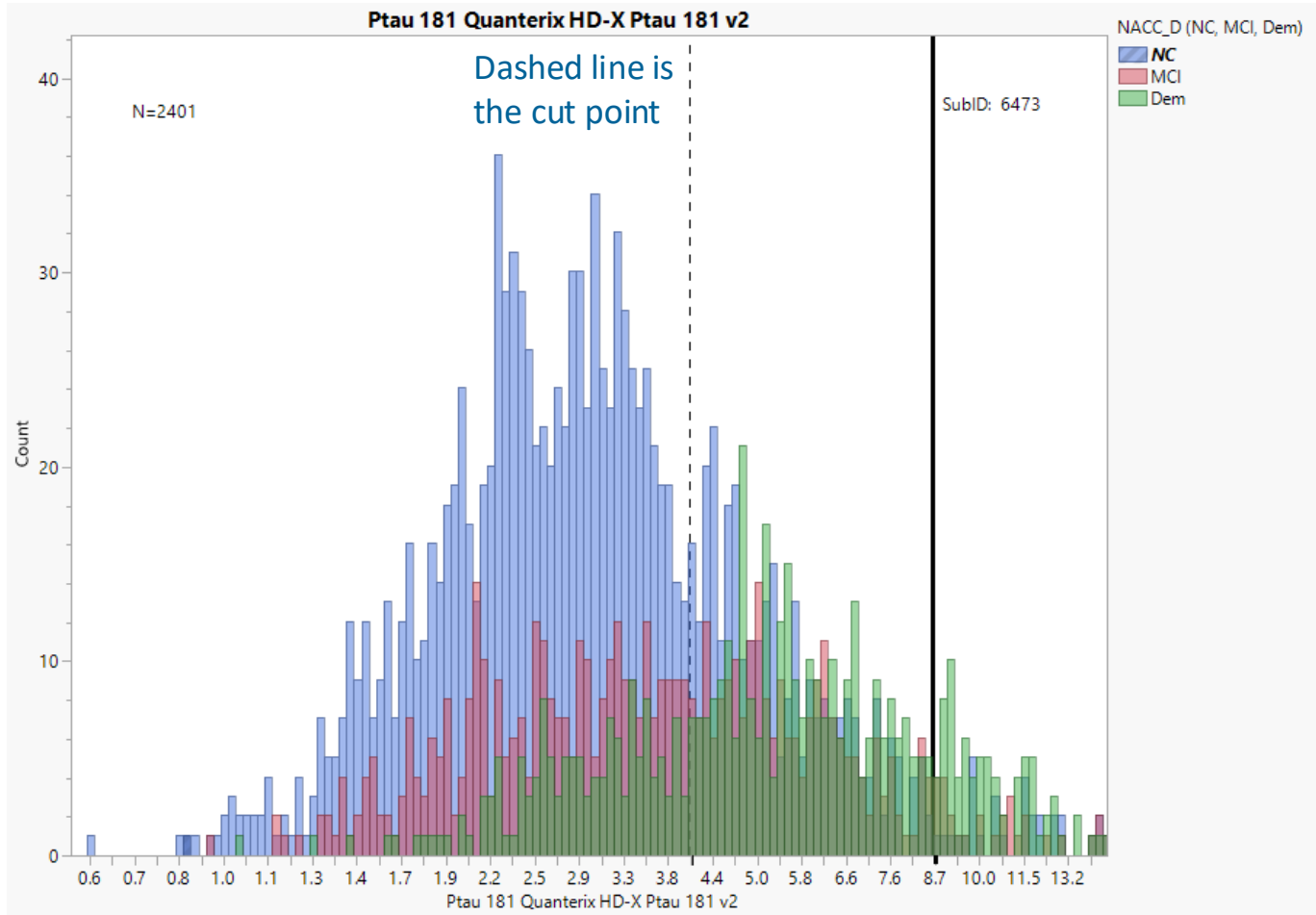
# 2024 ADCFB BAL Assays

Assay Kits	Biofluid	Platform	Biomarkers
Neurology 2-Plex B (N2PB) Kit	Plasma	Quanterix Simoa HD-X	NfL, GFAP
pTau 217 Alzpath Kit	Plasma	Quanterix Simoa HD-X	pTau 217
Lumipulse G $\beta$ -Amyloid 1-42 Kit	Plasma	Fujirebio Lumipulse	Abeta 42
Lumipulse G $\beta$ -Amyloid 1-40 Kit	Plasma	Fujirebio Lumipulse	Abeta 40

With plasma biomarker data being returned to the ADRCs, we want to be sure we are making these data as useful as possible.

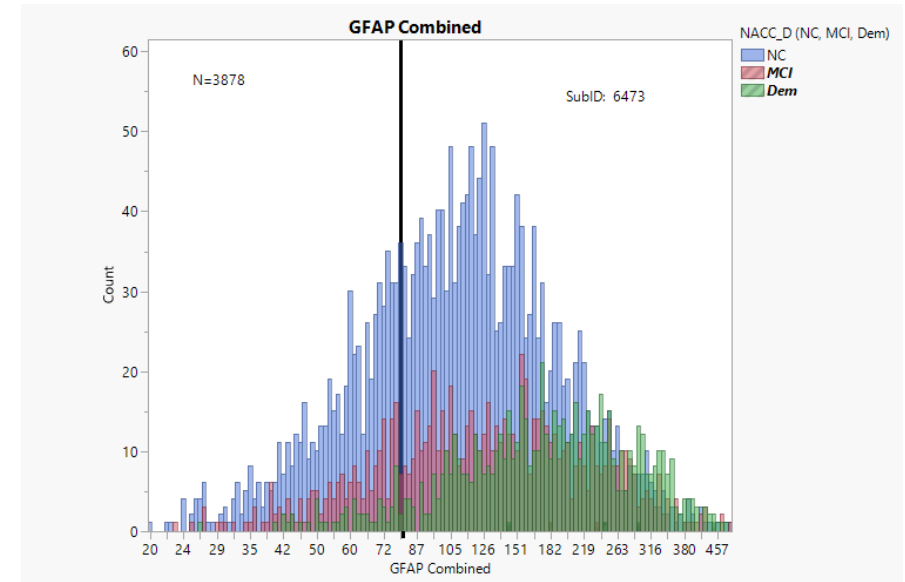
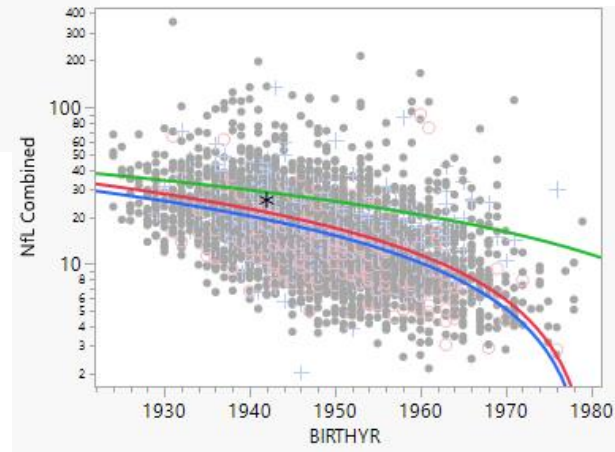
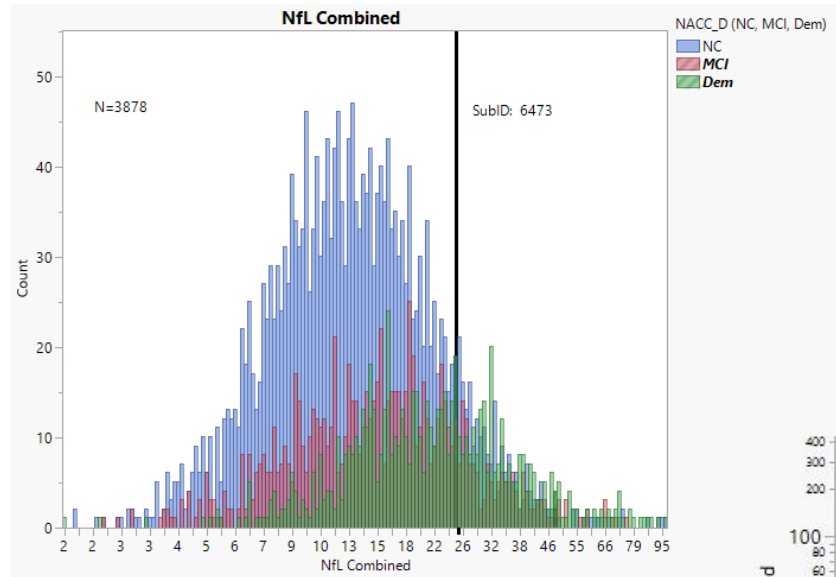
- Cut points available for pTau217 and pTau181 for use with ADCFB data
- Met with the ADRC Fluid Biomarker WG to ask how they anticipated the ADRCs would use these data
- Being able to visualize where a participant results fall as compared with other participants is valuable
- For UDSv4, having a cut point for pTau181 and pTau217 is valuable

# ADCFB Data Visualization



- New visualization tool to be added to NCRAD website
- Utilizes clinical diagnosis and biomarker distribution
  - Pttau181, Pttau217, AB42 and AB40 anticipated this year
    - Pttau217 results can be used in completing the UDSv4
    - NfL and GFAP under development
      - Neither are part of UDSv4 data collection

# NfL and GFAP



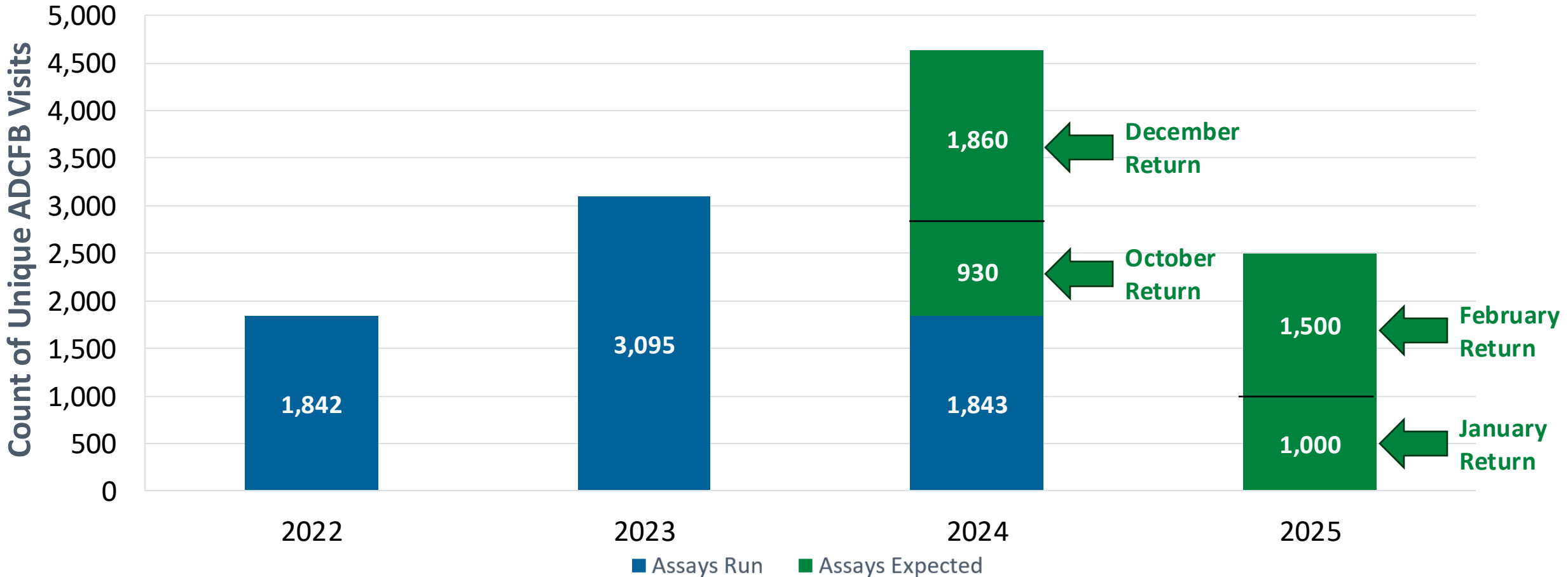
Note age effects on both biomarkers. Neither are part of the UDSv4 data collection



# NCRAD Survey

- We want to better understand how and when the ADRCs want to use NCRAD biomarker data.
  - When do ADRCs use the biomarker data from NCRAD?
    - Consensus conference? How long is that from the participant visit? Will there be NACC data entered by the time of the consensus conference?
  - Does NCRAD need to develop a faster return of biomarker results?
    - What is the timeline we are trying to attain once NCRAD receives the sample?

# NCRAD BAL: ADCFB Unique Visits with Plasma Assays Returned



- Will have caught up on ADCFB backlog by end of February 2025
- Receiving 100-150 ADCFB kits per week: current workflow keeps up with these on intake

# Questions...



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