

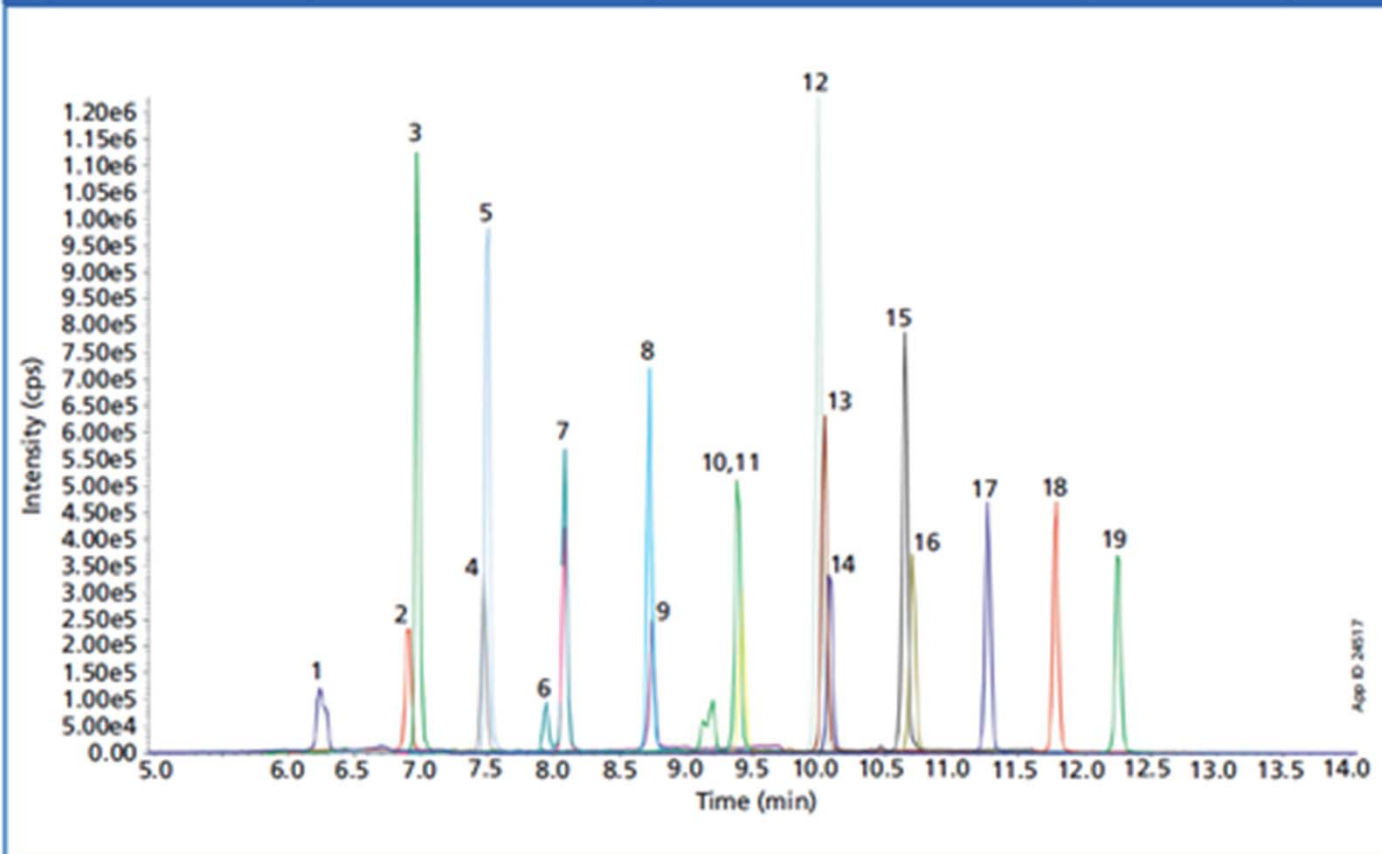
Does PT Data Support the Value of Laboratory Accreditation?

NEMC 2019 – Jacksonville, Florida
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Curtis J. Wood
ERA, A Waters Company



Figure 1: PFAS analysis from sediment using QuEChERS and LC-MS/MS spiked at 1.0 ng/mL.







Users of analytical data

- Municipalities
- Industry
- Property owners
- Remediators
- Regulators
- Citizens

How accurate is the data?
How trusted is the data?

When does the value get questioned?

- When new accreditation programs are suggested
- When tighter requirements are considered
- If fraud occurs or the process fails
- Anytime costs are evaluated

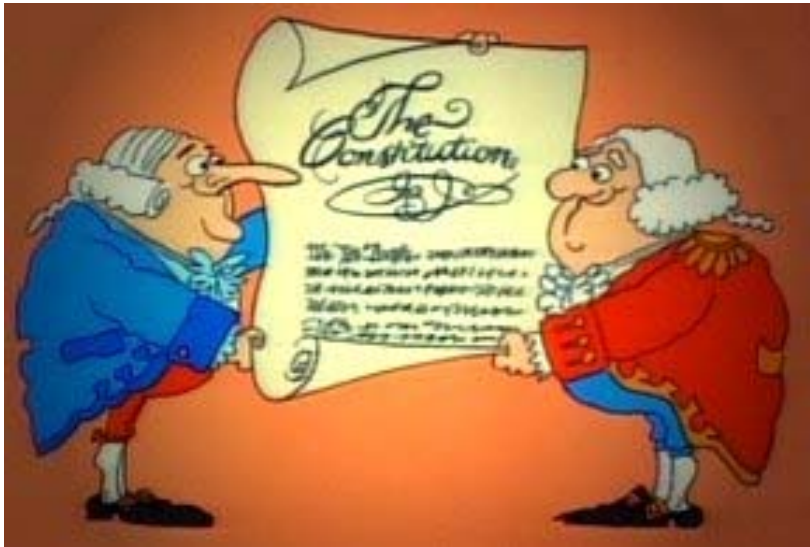
Study Goal

- Answer the question

Does PT Data Support the Value of Laboratory Accreditation?

- Find an objective way to compare PT performance of accredited and non-accredited labs

But How?

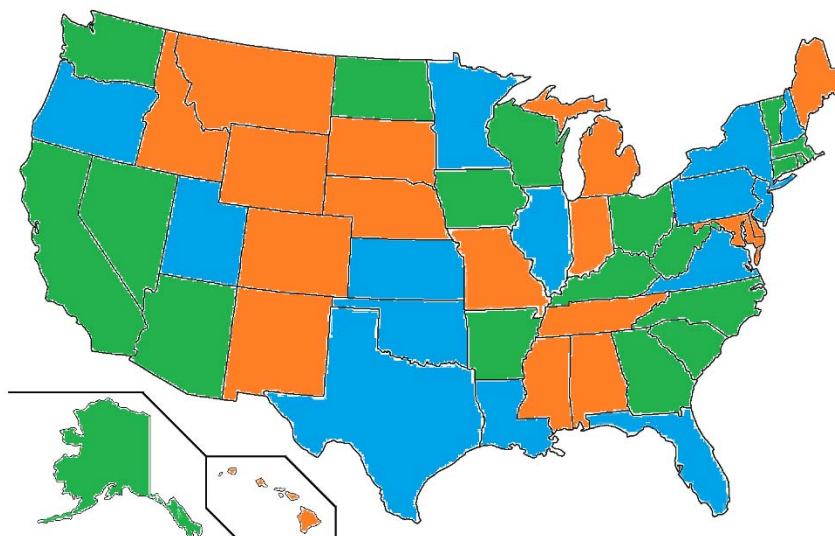


Background

- No US EPA requirement for WP laboratory accreditation
- Some states have no WP laboratory accreditation program
- Many states implemented own WP accreditation programs
- 14 states are NELAP accrediting bodies
- EPA requires PT participation for DMR-QA

NELAP Accreditation

Florida
Illinois
Kansas
Louisiana
Minnesota
New Hampshire
New Jersey
New York
Oklahoma
Pennsylvania
Texas
Utah
Virginia
Washington



No Accreditation Program

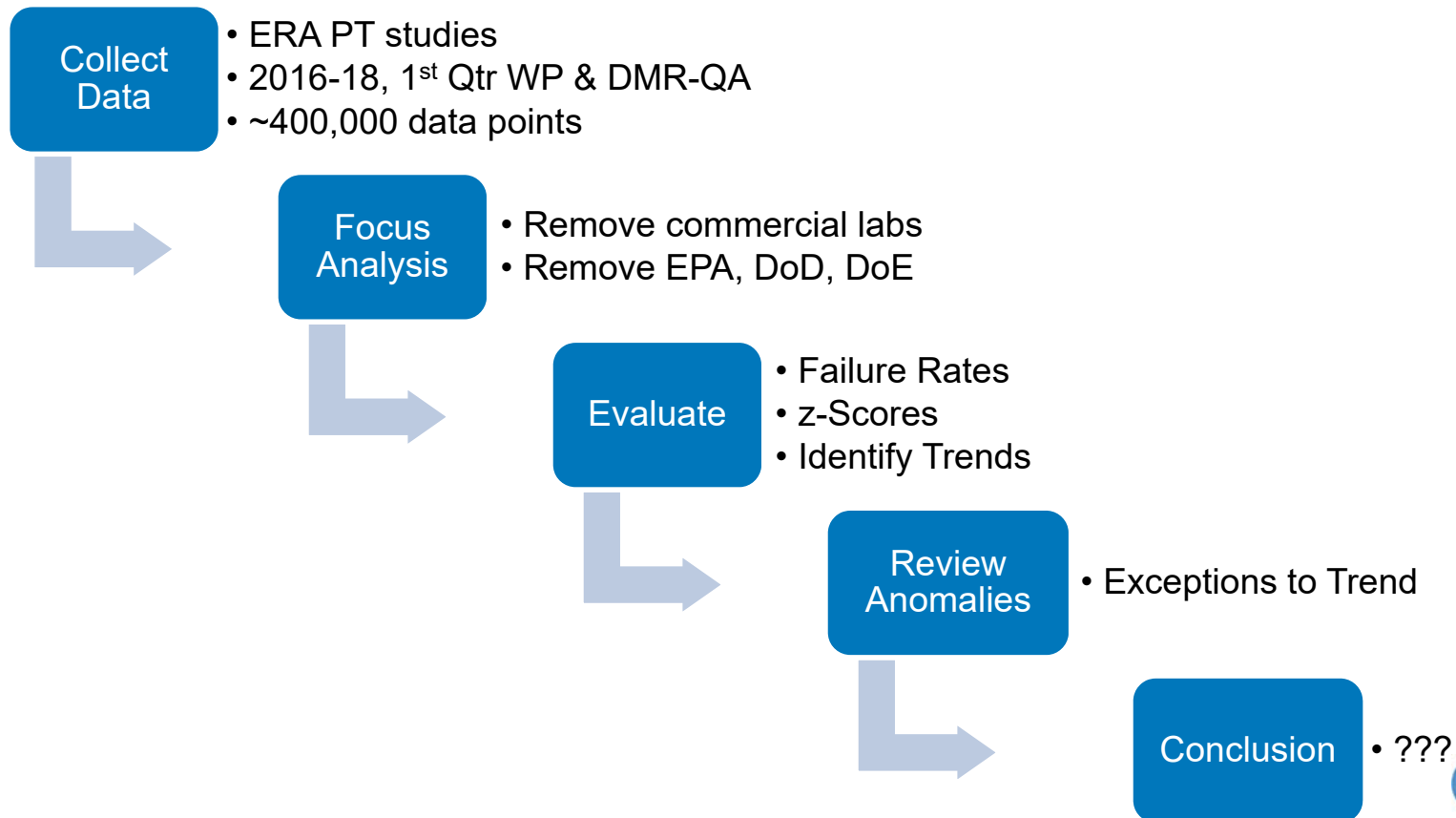
Alabama
Colorado
Delaware
Hawaii
Idaho
Indiana
Maine
Maryland
Michigan
Mississippi
Missouri
Montana
Nebraska
New Mexico
New York
South Dakota
Tennessee
Wyoming

State Accreditation Program

Alaska	Georgia	North Carolina	Vermont
Arizona	Iowa	North Dakota	Washington
Arkansas	Kentucky	Ohio	West Virginia
California	Massachusetts	Rhode Island	Wisconsin
Connecticut	Nevada	South Carolina	

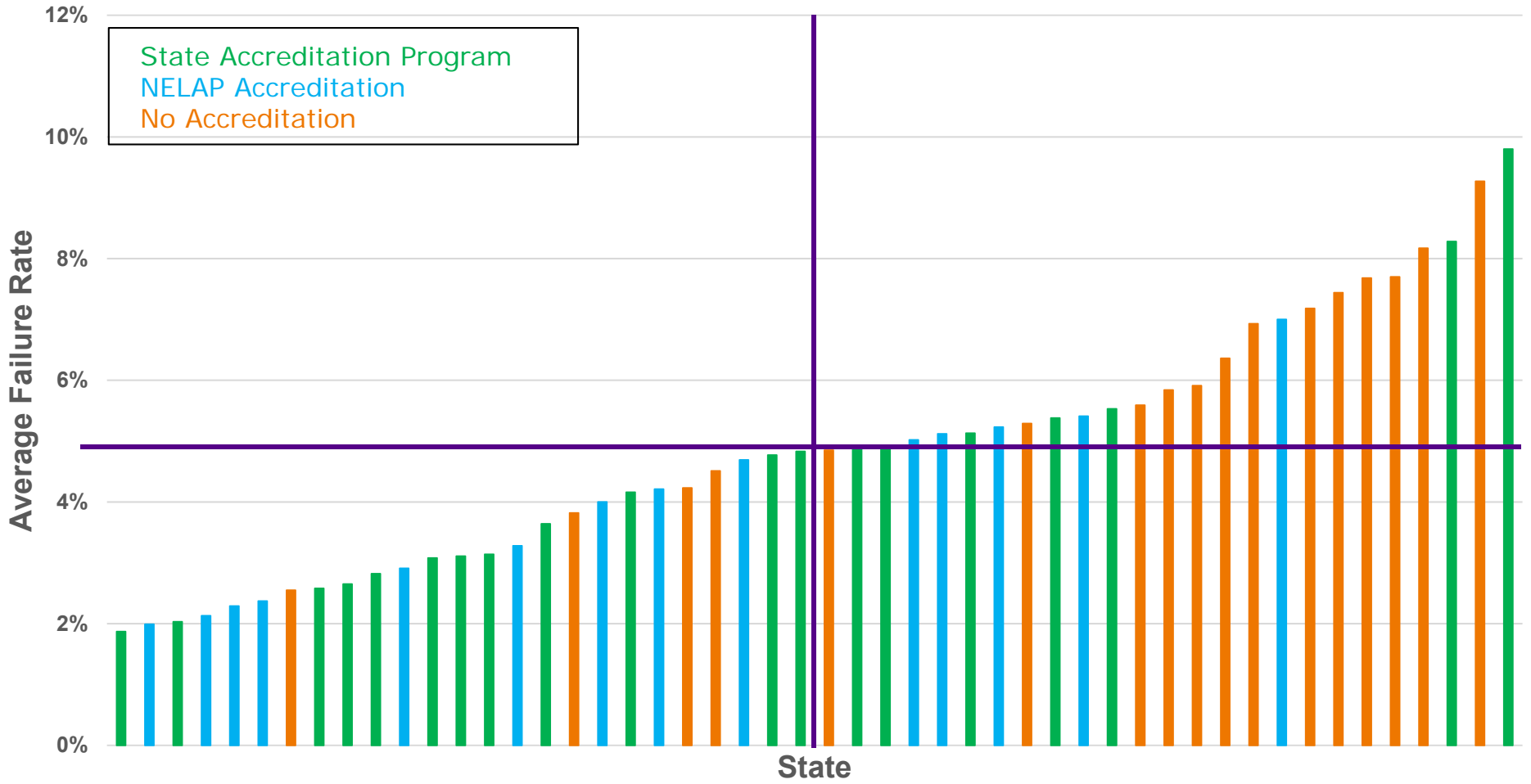


Process

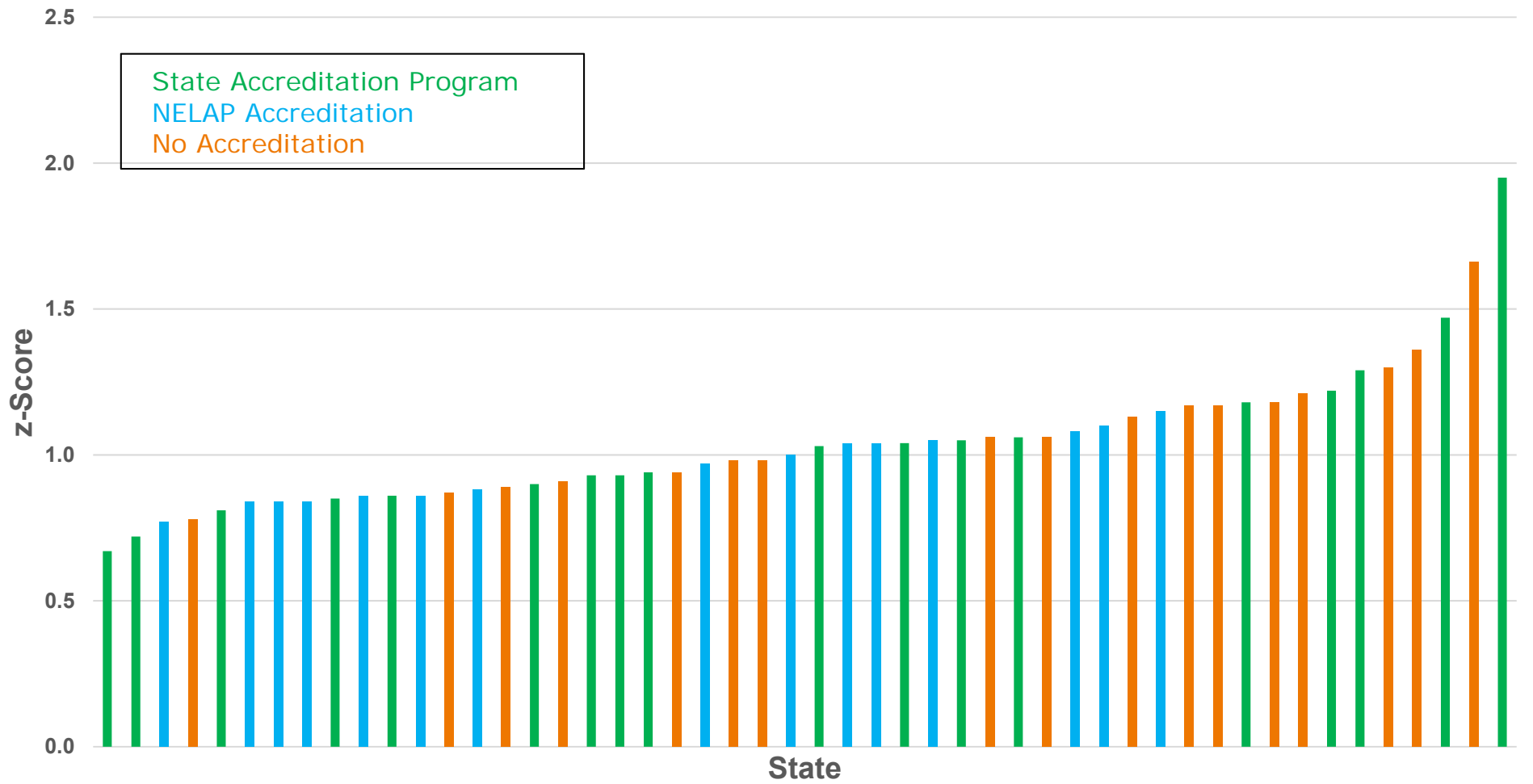


CW1

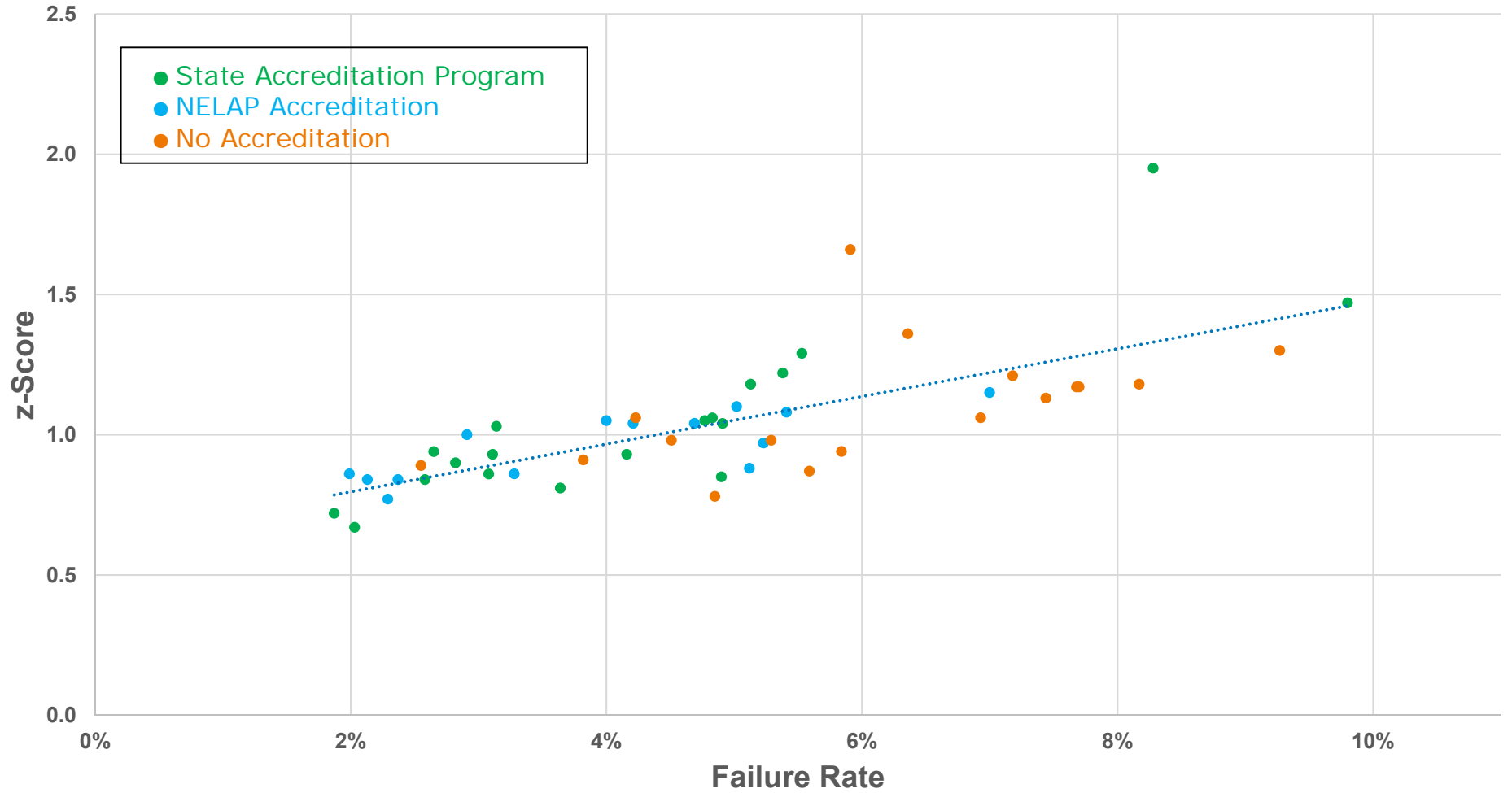
Average WP Failure Rate by State



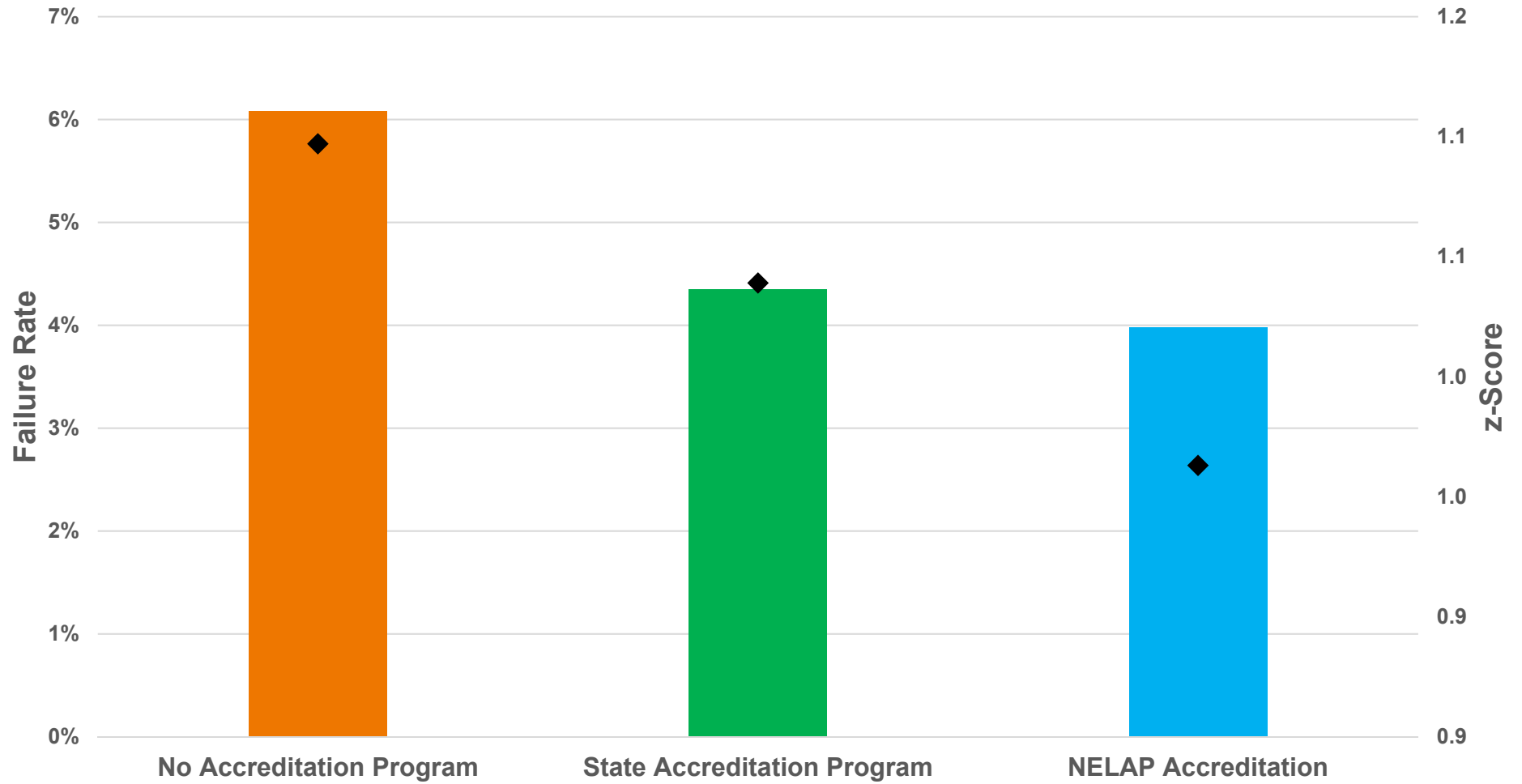
Average z-Score by State



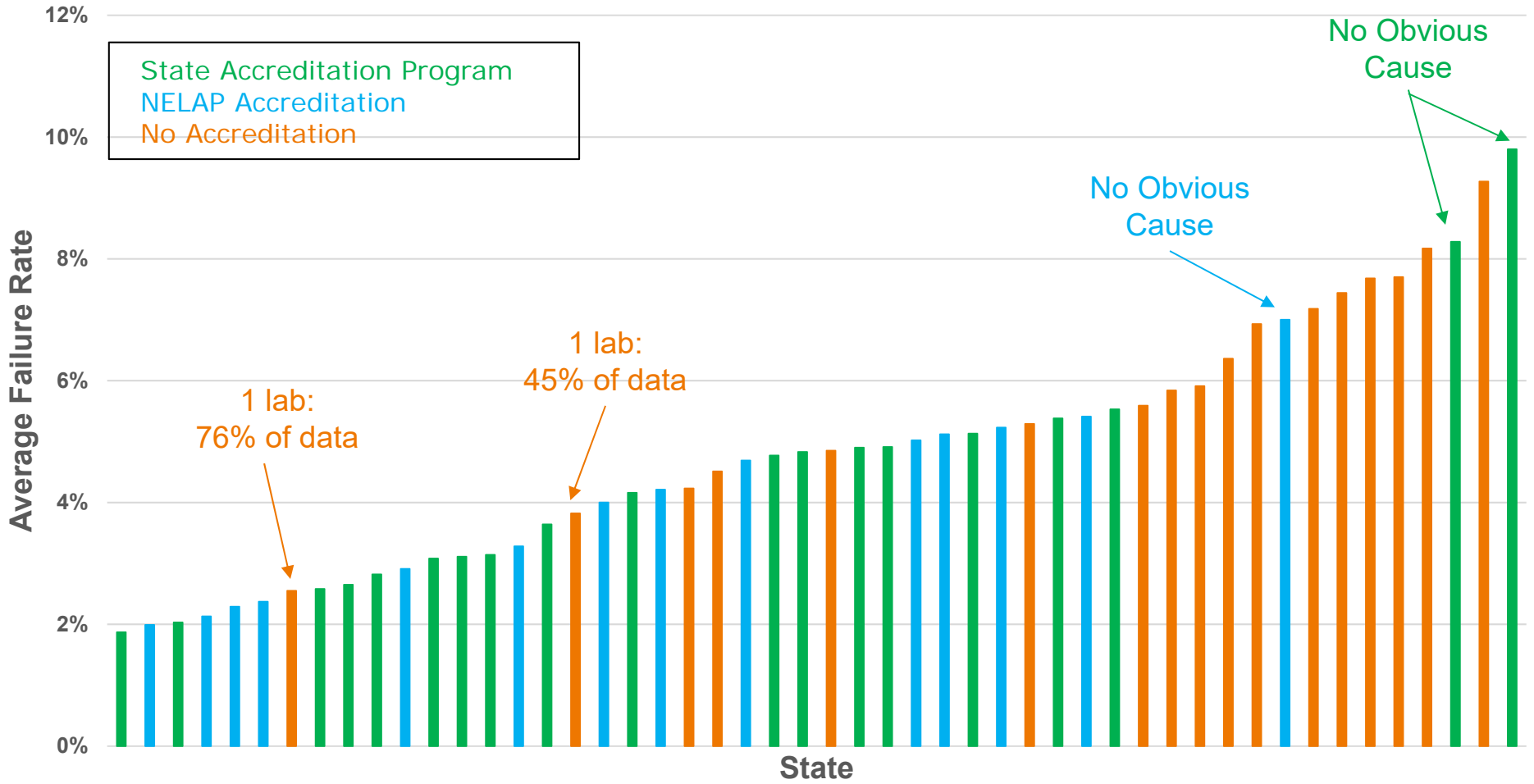
z-Score vs. Failure Rate



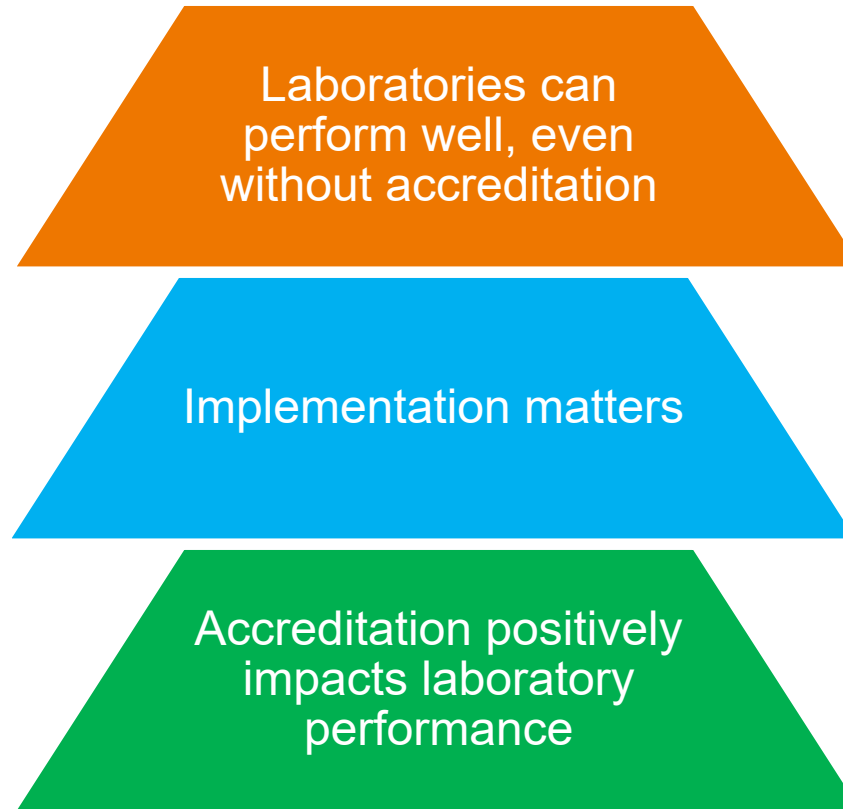
Failure Rates and z-Scores by Group



Average WP Failure Rate by State



Conclusions



Any Questions?

Thank You!

Curtis J. Wood
Curtis_wood@waters.com

Image Sources

■ Slide 3

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