



# **Clinical Decision Support in Uncertain Times: *Insights from the Immunization Calculation Engine***

Marcey Propp, Erin Roche  
AIRA National Meeting  
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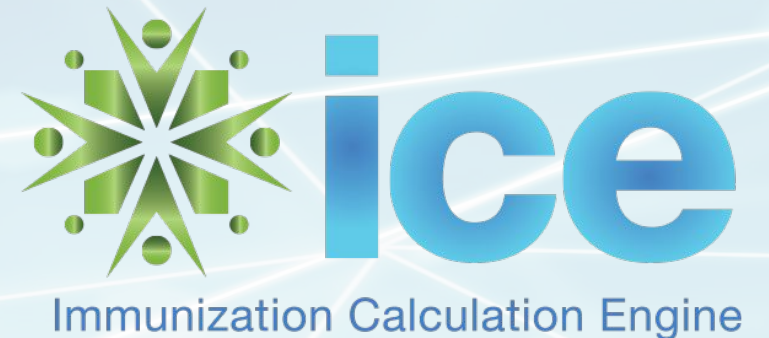
# Welcome! Let's talk about immunization CDS

- **Following up** from the AIRA CDS session
- **Core function** of IIS
- **Broad reach:** Used across systems, settings, and stakeholders - public health, clinicians, schools, consumers, etc.
- **Significant impact:** A critical tool for patient and population health



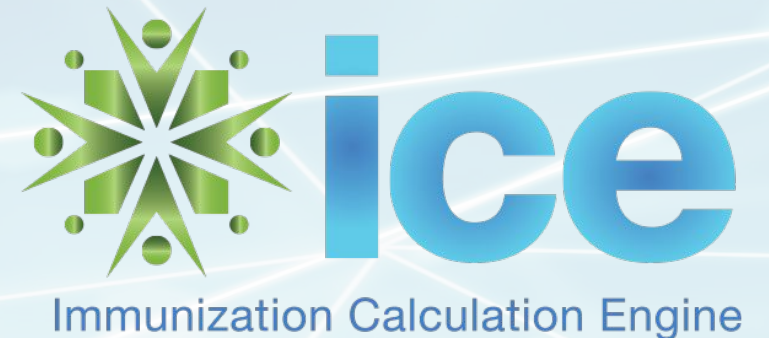
# About the Immunization Calculation Engine

- Immunization evaluation and forecasting software and logic specification
- Open-source, freely available for download
- Deployed and used in IIS, EHRs, consumer access applications, and school health systems
- Maintained by HLN Consulting, with over 15 years of use and refinement



# About the Immunization Calculation Engine (cont'd)

- Default schedule with support across 22 vaccine groups
- Reflects collaborative development
  - HLN Consulting
  - NYC Dept. of Health & Mental Hygiene
  - AL Department of Public Health
  - University of UT, Department of Biomedical Informatics (OpenCDS)
  - Subject matter expert workgroup

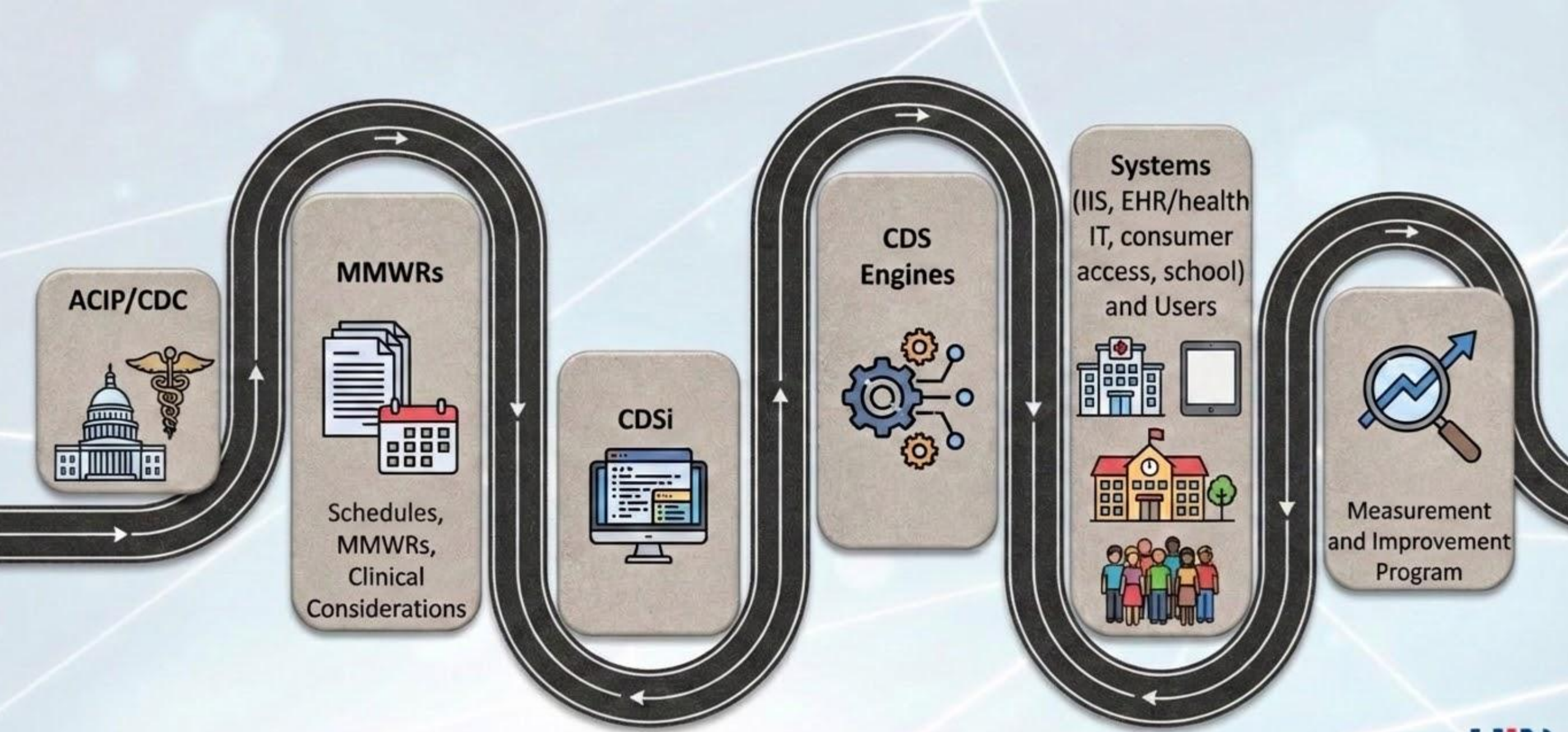


# Today's discussion

- Insights from our response to changes in federal immunization policy
- Charting a new course:
  - Assessing the headwinds
  - Working together towards a shared destination
  - Navigating the journey ahead
- Wrap up and close

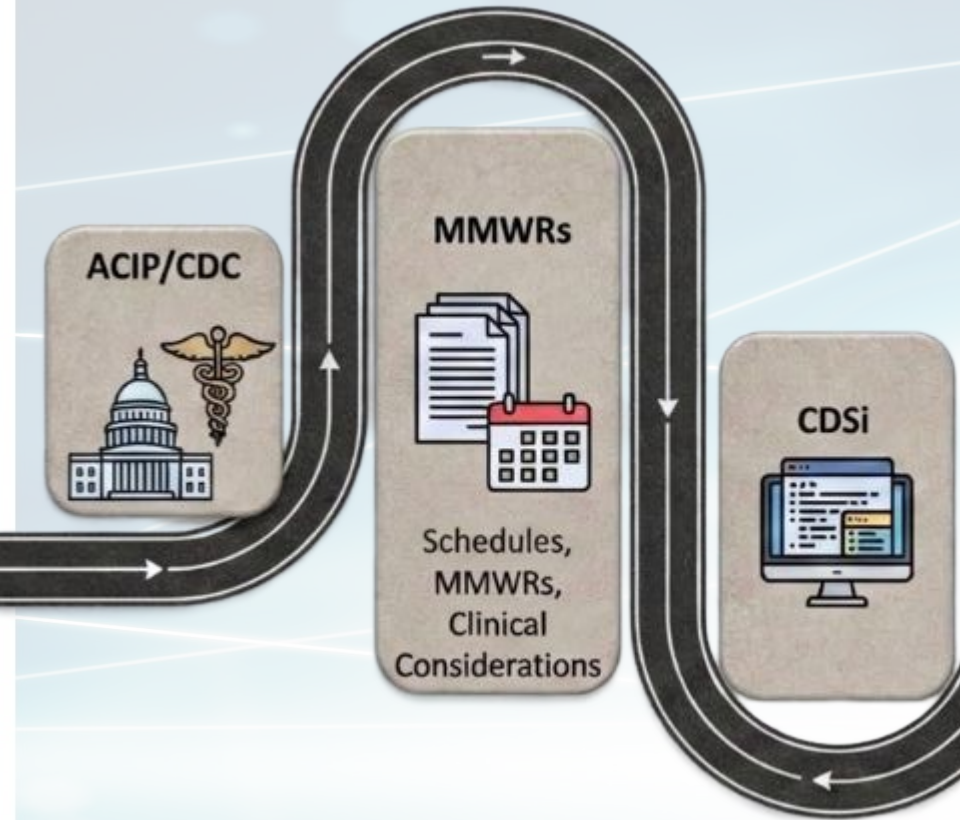


# Responding to Changes in Federal Immunization Policy: Insights from ICE

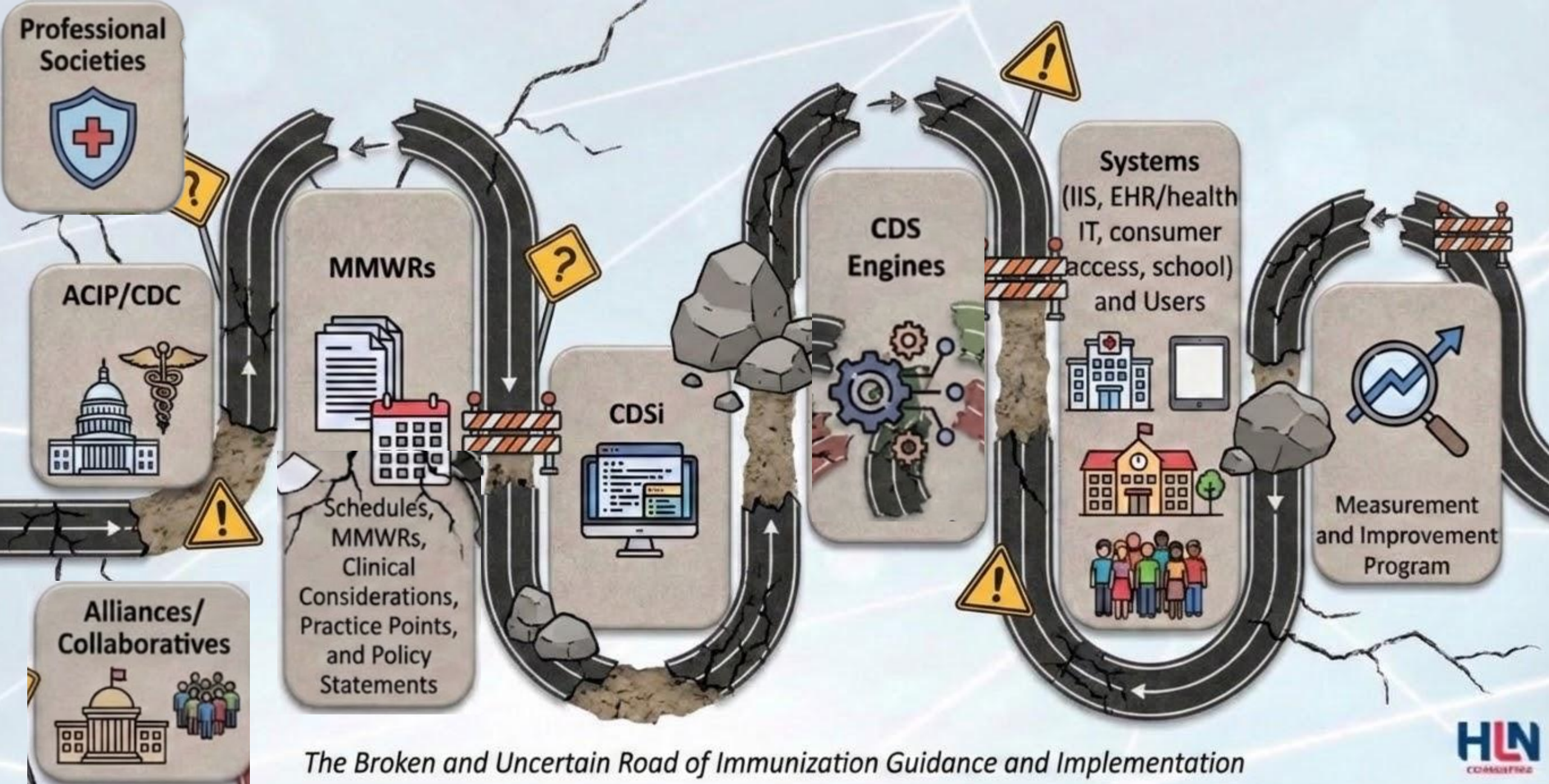


*The Paved Road of Immunization Guidance and Implementation*

# Changes in federal immunization policy



- ACIP membership, composition, and decision-making protocol
- Emphasis on potential vaccine harms, away from prevention of infection, disease, and death
- Definition and application of key terms
- New channels for updates
- Lags in availability of detailed guidance



*The Broken and Uncertain Road of Immunization Guidance and Implementation*

# Community response to federal policy changes



AIRA's Menti question: Where is your jurisdiction/organization in discussing your immunization CDS?

- 21 - discussions had/decisions made
- 22 - no discussion to no decision

# ICE response to federal policy changes



- **Strategy:** Re-visited founding guiding principles
- **Governance:** Launched cross-sector ICE Advisory Group
- **Standards:** Re-affirmed commitment to evidence-based guidelines
- **Transparency:** Improved visibility into decision-making and ICE operations
- **Flexibility:** Added service start-up configurability
- **Integration support:** New FHIR ImmDS interface, new CDS Insight demonstration and testing tool

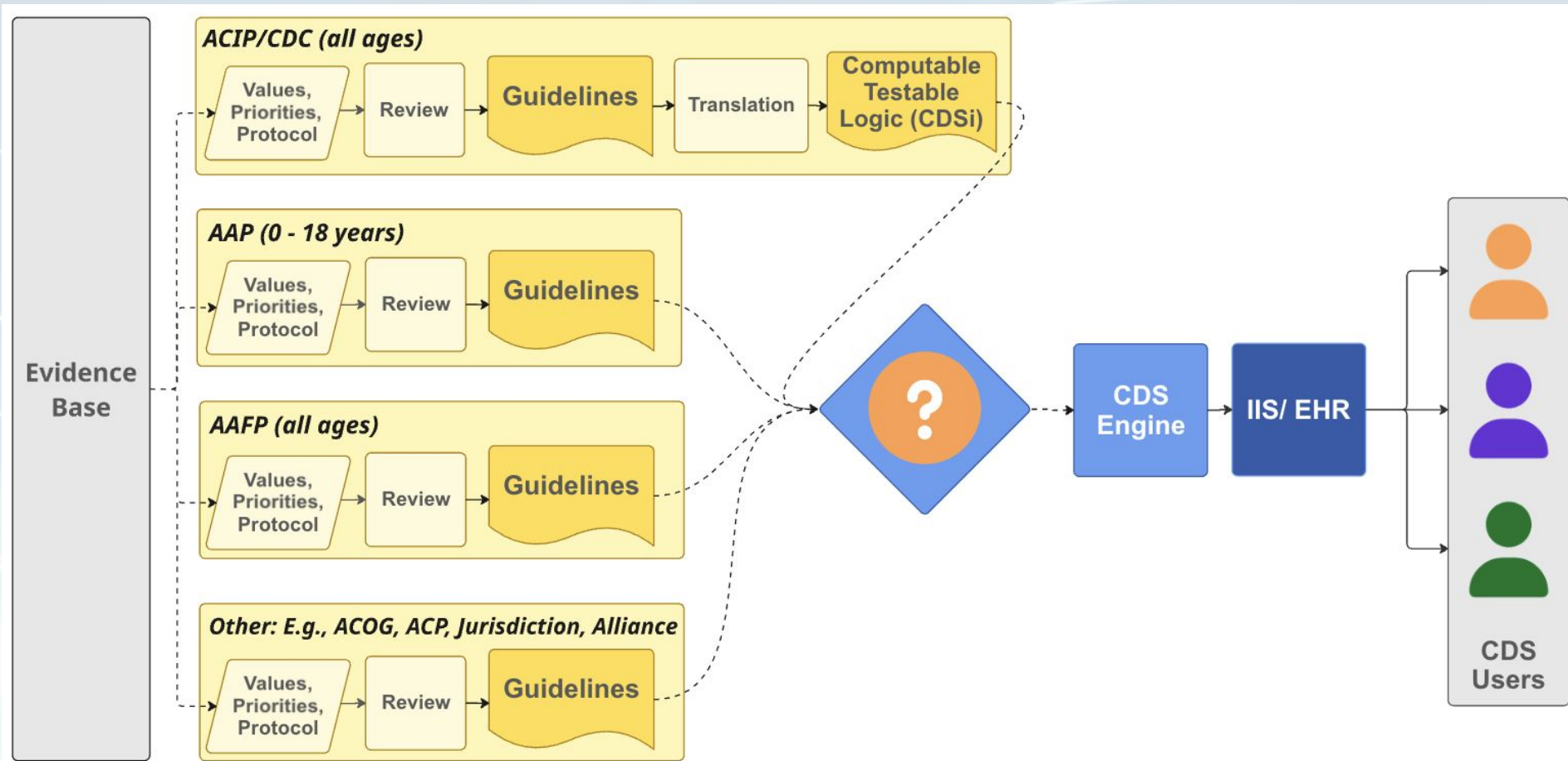
# Issues we're grappling with...

- Meeting varied user needs across systems, settings, and stakeholders
- Where should flexibility be introduced - and to what extent?
- What guardrails are needed to enable acceptable variation while preserving alignment with core intent and our guiding principles?



**Let's Hear From You!**

# Fall is coming...What guidelines will you look to follow for the upcoming respiratory season?



# Small Group Discussion + Menti Report-Out

- For each question:
  - Discuss as a small group
  - Have 1 person share key themes in Menti
  - Large group reflection

# Q1: How do you define the purpose of immunization CDS today? Has it changed?

- Forecasting and recommendations
- Ditto. No.
- Supporting clinicians in clinical care; science based/evidence based sources have changed
- Inform, educate and recommend. No change yet
- Used for both individual and populations
- We define the tool to help define and determine the next steps in determining what vaccines are necessary or eligible for
- It's gotten more complicated
- The function is still the same. How people access it is the same. What recommendation body is being used is less clear
- Consistent or standardized recommendations
- Standardization is still the purpose. Evaluations for previous immunizations and recommendation for what's needed.

## Q2: Share one key tension or gap between ideal and real-world decision-making.

- Everyone would have an opinion
- Staff turnover
- School regulations
- Tension from providers, when the course isn't clear
- Not valid on a record. It has got a lot harder during/ after Covid. They treat now more like report card. We get more pushed back. They want it fixed.
- 1. Politics 2. Insurance coverage 3. PCPs/Pediatricians providing differing levels of guidance/recommendations
- Lack of complete information and time
- Time it takes to make decisions can be harder than expected
- Level of details needed to make a decision
- IIS schedules can't forecast high-risk schedules
- Providers may question recommendation because schedule nuances are scattered among the CDC documents. Doesn't factor in social behaviors where providers may want to immunize early.

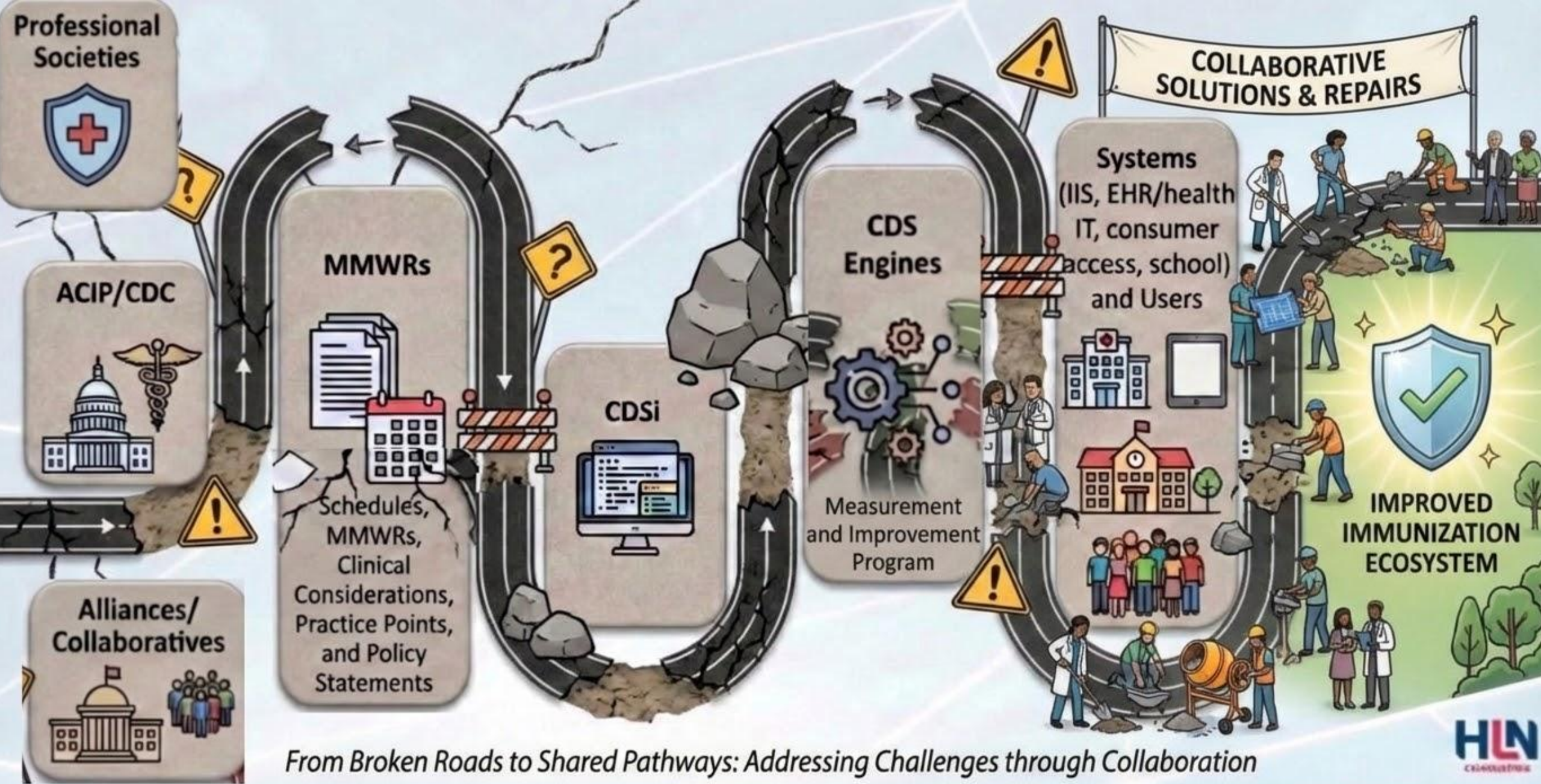
# Q3: What factors should drive decisions on the guidelines you'll follow for the upcoming respiratory season? (Rank your top factors.)

1. Evidence-based/literature
2. Professional organizations (e.g., AAP, AAFP)
3. Jurisdictional/organizational laws, regulations, and policy
4. Jurisdictional/organizational leadership direction
5. Federal recommendations (e.g., ACIP/CDC)
6. Operational/technical capability
7. Other?

# Q4: What resources or coordination would most increase your confidence in decision-making?

- Standardization
- Evidence based decisions
- Agreement and unification among all professional organizations
- Consensus from professional organizations on one schedule
- Clarity and specifics
- Unified recommendations among professional organizations within jurisdictions
- Unified
- Unified recommendations
- Government funded research
- Proactive approach
- Tool allowing for comparison of options against available decisions
- Local leadership support and legal backing

# Wrap Up and Close



*From Broken Roads to Shared Pathways: Addressing Challenges through Collaboration*

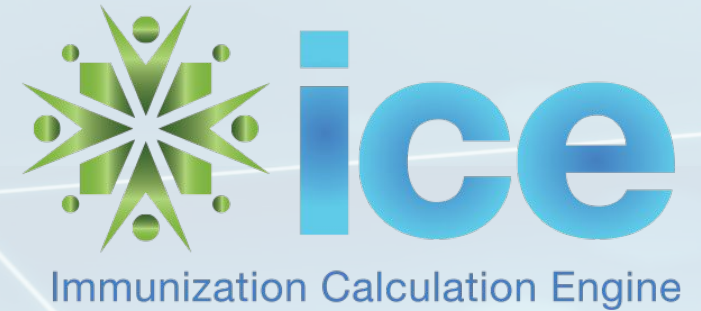
# Acknowledgements

- You!
- HLN ICE team and colleagues
- ICE Advisory Group
- ICE users
- AIRA



# For more information

- Stop by our HLN Consulting booth!
- Access resources:
  - Visit our website: [www.hln.com/ice](http://www.hln.com/ice)
  - Review detailed documentation & access software downloads on the [ICE wiki](#)
  - Try ICE using [CDS Insight](#), a simple tool for seeing evaluation and forecasting results for a given scenario
- Reach out to us at [ice@hln.com](mailto:ice@hln.com)





Erin Roche  
[eroche@hln.com](mailto:eroche@hln.com)  
651-354-6484



Marcey Propp  
[mepropp@hln.com](mailto:mepropp@hln.com)  
856-266-3175