Interoperability MATTERS

an initiative of The Sequoia Project

Ready, Set, Action: A Roadmap to Advancing Interoperability in Public Health

April 7, 2026

the sequoia project

How to Participate Today

Your Participation

Open and close your control panel

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Submit questions and comments via the Questions panel

Note: Today's presentation is being recorded and will be provided

Problems or Questions? Contact us at:

InteropMatters@sequoiaproject.org

Introducing Today's Panelists

Debbie Condrey
The Sequoia Project

Nora Cox
Texas eHealth Alliance

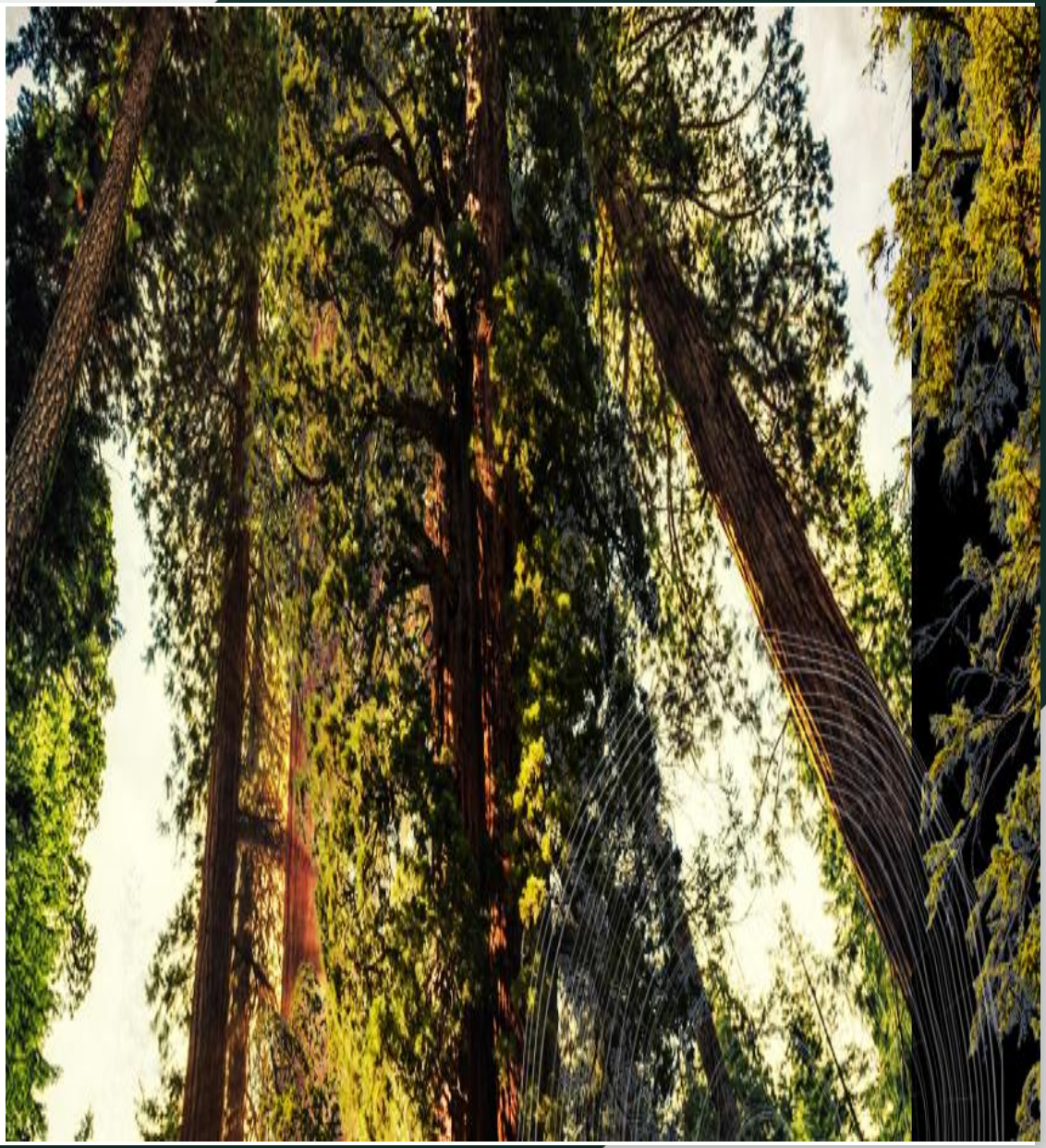
Chris Baumgartner
WA State Dept of Health

The Sequoia Project Vision

To make the right health information accessible at the right place and time to improve the health and welfare of all

Connected We Stand

Sequoias are among the oldest, tallest trees on earth. Individually, they cannot reach the great heights of giant sequoias. Together, their complex, interconnected root system helps them withstand nature's forces and flourish.
Only connected can they reach great heights.



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an initiative of The Sequoia Project

A public-private cooperative that solves high-impact challenges to enable nationwide health information exchange

We bring together diverse stakeholders in health IT and healthcare to create a community of practice.

National-level issues

Maximum stakeholder engagement

Real-world implementation

Interoperability Matters & Public Health Workgroup

- Overview
  - The Public Health Workgroup brings together public health, health IT, and policy leaders to address STLT interoperability barriers.
  - The Workgroup develops practical, consensus-driven recommendations to improve nationwide public health data exchange.

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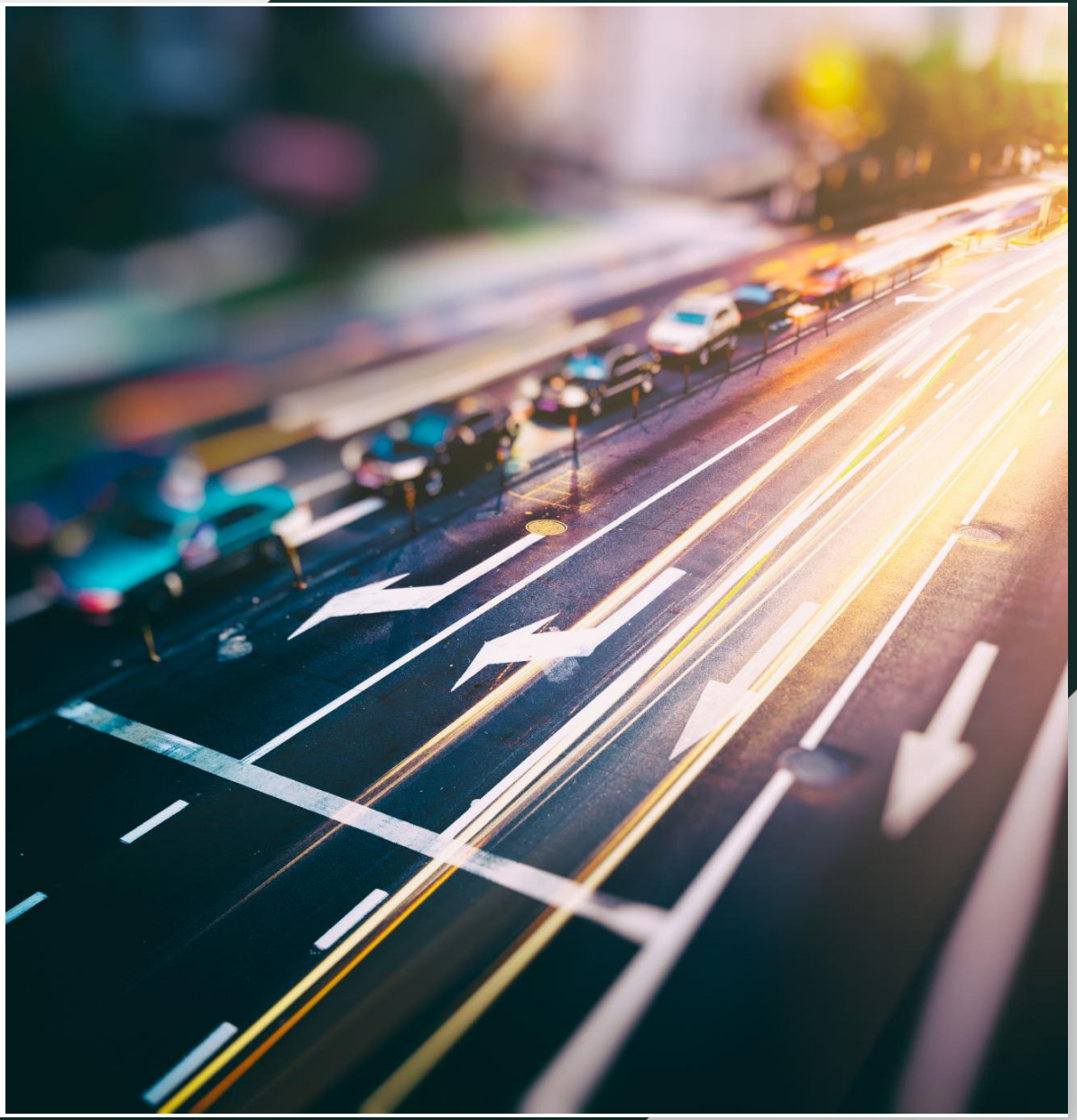
Public Health Interoperability Policy Roadmap Basics

Public Health Interoperability Policy Roadmap

- Development Approach
  - The Roadmap was developed through a multi-stakeholder process initiated in 2024.
  - Input was gathered from public health agencies, policy experts, and implementers with real-world experience.
  - A formal public comment period ensured the recommendations reflect operational realities and community feedback.



Policy Challenges Addressed

- The Why
  - Inconsistent policies across jurisdictions create barriers to efficient and scalable data exchange.
  - Privacy and security concerns reduce trust and participation in interoperability initiatives.
  - Fragmented collaboration, outdated infrastructure, and limited funding models inhibit progress.
  - Modernization requires aligning policy, governance, and technology across the public health ecosystem.

Public Health Interoperability Policy Roadmap and Recommendations (Priority Order)

1	ANALYZE DATA SHARING REGULATION
2	CREATE/UPDATE DATA SHARING POLICIES
3	CREATE A TECHNOLOGY NEEDS ASSESSMENT & INTEROPERABILITY/DATA SHARING
4	ESTABLISH A GOVERNANCE FRAMEWORK
5	ADOPT AND IMPLEMENT STANDARDS

6	DEVELOP DATA SHARING AGREEMENTS
7	TRAIN PUBLIC HEALTH & IT STAFF
8	CONSIDER AN INTEROPERABILITY TESTING PROGRAM
9	IMPLEMENT DATA QUALITY & DATA HARMONIZATION PROCESSES
10	ESTABLISH MONITORING & EVALUATION MECHANISMS

11	ENGAGE PARTNERS & FOSTER COLLABORATION
12	DEVELOP & IMPLEMENT SECURITY MEASURES
13	IDENTIFY & SCALE SUCCESSFUL MODELS
14	ENGAGE IN CONTINUOUS INNOVATION
15	COMMUNICATE PROGRESS & BUILD PUBLIC TRUST

Roadmap Recommendation #1: Analyze Data Sharing Regulation

1

Documenting what already exists is an essential first step in determining which regulations to keep, change or eliminate.

- federal (HIPAA, HITECH, etc.), state and local laws
- existing internal policies and data sharing agreements
- consent processes, data security protocols, and cross-border data sharing restrictions

2

Consult with stakeholders to determine which regulations are out of date or barriers to effective public health.

3

Use findings to propose reforms, update frameworks and develop strategies that support public health data exchange.

Roadmap Recommendation #2: Create/Update Data Sharing Policies

The Why:

Updating laws through government bodies can be a time-consuming process, so focusing on policy can accelerate adoption

Internal documents need to be aligned with national standards: data use agreements, workflows, templates, and legal review procedures

Improve standardization and reduce administrative burden by syncing up with the CDC's Common Data Use Agreement

Roadmap Recommendation #2: Create/Update Data Sharing Policies

The How:

1

Review the relevant legal framework

2

Determine if legislation is needed to remove barriers to data sharing

3

If legislation is needed, include as many relevant public health laws as possible

4

If you are a public health entity that cannot lobby, you can still:

- Act as a subject matter expert,
- Share insights on evidence-based practices, and
- Collaborate with lawmakers

Roadmap Recommendation #3: Create A Technology Needs Assessment & Interoperability/Data Sharing

The Why:

Most public health entities already have a technology needs assessment covering data exchange and interoperability.

Many organizations started this process during the pandemic.

The workgroup encourages the use of the PHII Informatics Savvy Assessment tool or the use of another DMI assessment to help inform this work and align it with national standards.

Roadmap Recommendation #3: Create A Technology Needs Assessment & Interoperability/Data Sharing

The needs assessment should address:

1. **Capabilities & Gaps**

   Identify strengths and areas of improvement

2. **Stakeholder Needs**

   Ground interoperability and modernization in the day to day lives of end users

3. **Goals & Objectives**

   Set clear measurable goals

4. **Timeline & Milestones**

   Create a timeline with specific milestones for key activities

5. **Infrastructure**

   Consider purchasing new IT systems that can meet multiple business needs

6. **Funding & Resources**

   Identify necessary funding and resources (both human and financial) needed to support the initiative

Roadmap Recommendation #3: Create A Technology Needs Assessment & Interoperability/Data Sharing

The How:

1. Align new activities with previous modernization initiatives to streamline the process.
2. Access expertise in national organizations with deep experience in public health informatics and shared services like the Association of Public Health Laboratories (APHL).
3. The availability of resources (funding, staffing) is a key constraint, so this process needs to be as efficient as possible.

Roadmap Recommendation #4: Establish A Governance Framework

The Why:

Governance roles and responsibilities must be clearly defined, including public health officials, IT staff, providers, and other stakeholders.

Establishing a governance structure ensures that:

Representatives from key stakeholder groups are included, there are clear processes for making decisions, resolving conflicts, and working on alignment with key goals, and efforts are enterprise or agency-wide to avoid silos.

Roadmap Recommendation #4: Establish A Governance Framework

Executive RACI – Public Health Interoperability

Key Activity	PH Leadership	Program Leads	Legal / Privacy	IT / Interop	Partners
Set strategy & priorities	A	C	C	I	I
Define public health use cases	C	A	I	R	C
Establish policies & agreements	A	C	R	C	I
Implement & operate exchange	I	C	I	A	R
Ensure privacy & security	C	I	A	R	I

R = Responsible | A = Accountable | C = Consulted | I = Informed

Roadmap Recommendation #5: Adopt and Implement Standards

The How:

Selecting relevant standards is a key first step:

1. TEFCA requirements, the ASTP Interoperability Standards Advisory, and CDC implementation guides
2. HL7 Fast Healthcare Interoperability Resources (FHIR) for data exchange, ICD 10 for disease classification, and LOINC for laboratory data to align with providers and labs and reduce customization.
3. Avoid open-ended standard selection, which is inefficient and can cause fragmentation and duplication.

Roadmap Recommendation #5: Adopt and Implement Standards

Standardized data models and terminologies should be used whenever possible. Foundational data sets include:

1. Public health common data models-such as OMOP and Sentinel
2. Standardized terminologies such as SNOMED CT (Systematized Nomenclature of Medicine), LOINC (Logical Observation Identifiers Names and Codes), and ICD (International Classification of Diseases)
3. U.S. Core Data for Interoperability (USCDI) and USCDI+ for Public Health

Roadmap Recommendation #5: Adopt and Implement Standards

The How:

Review and modernize legacy systems to support standards:

1. This may mean upgrading or replacing legacy public health systems.
2. Prioritize replacing outdated technologies, reducing technical debt, and adopting scalable architectures that can evolve.
3. This approach improves data quality, reduces variability in reporting, and supports more efficient onboarding of new data flows.

Roadmap Recommendation #5: Adopt and Implement Standards

The How:

Create alignment among HIEs, public health agencies, providers, and federal partners through clear expectations, performance metrics, and incentives:

1

Health Information Exchanges (HIEs) are critical for sharing data across organizations, and investments in their functionality, sustainability, and reach will broaden their benefits for public health needs.

2

Interoperability solutions should be integrated with existing public health platforms, such as immunization registries, disease surveillance systems, and electronic health records (EHRs).

Roadmap Recommendation #5: Adopt and Implement Standards

The How:

Leveraging national capacity-building is another avenue to improving standards adoption:

1

CDC has funded the Association of State and Territorial Health Officials (ASTHO), the National Network of Public Health Institutes (NNPHI), and the Public Health Accreditation Board (PHAB) to establish Public Health Data Modernization Implementation Centers that provide technical assistance, training and implementation support. This is on hold right now but is a potential future resource for public health agencies.

Roadmap Recommendation #5: Adopt and Implement Standards

The draft HTI-5 Rule proposes reductions in standardization requirements for certified health IT when compares to earlier proposals that required standards-based public health reporting:

1

This may produce greater variability in the data being received by public health entities and STLTs and would shift standards enforcement to public health to mitigate any variabilities.

2

This direction is inconsistent with the Roadmap, which emphasizes the need for consistent, standards-based exchange to reduce burden and improve data quality.

Roadmap Recommendation #6: Develop Data Sharing Agreements

The Why:

- Public Health Agencies Data Sharing Ecosystem — Federal, State, Tribe, Local, Territorial
- Public Health also shares data with many other partners — Clinicians, researchers, the public, etc…
- Laws/Rules are the top layer in authorizing sharing across the Ecosystem and with partners
- Data Sharing Agreements are often required to help get from the authority to share to the how sharing will occur

Roadmap Recommendation #6: Develop Data Sharing Agreements

The How

1	Partner	Partner with the right SMEs: •Legal, Privacy, IT
2	Develop	Develop standard templates for sharing data for each partner type
3	Leverage	Leverage an umbrella agreement with appendices for each data source/type to limit the total number needed with each partner
4	Utilize	Utilize modern technology from Data Mod work to automate/improve how the data is shared, governed and protected
5	Consider	Consider centralizing data sharing processes/functions

Roadmap Recommendation #7: Train Public Health & IT Staff

The Why:

- Data modernization is providing the opportunity to advance our tools such as:
  - FHIR
  - AI
  - Cloud Analytics
- These tools can help us move from reactive to proactive
- Frees up staff time to focus on their most critical work
- Staff will need to know how to use these tools to become more effective

Roadmap Recommendation #7: Train Public Health & IT Staff

The How:

1

Leverage free trainings already out there

https://services.phf.org/data_science_training/

https://phinterop.org/

https://phii.org/

2

Invest in trainings where possible and in creating space/time for the training

3

Create training programs for staff based on the skills their positions need

4

Leverage funding opportunities like PHIG

WA DOH has a Data Mod Workforce Coordinator

Roadmap Recommendation #8: Encourage Interoperability Testing/Pilot Program

The Why:

- Technology moves more quickly today than ever which is a challenge for government
- There is often not a way to test and try out new tools effectively
- Federal policies and programs make changes to requirements for interoperability
- National initiatives drive this type of testing/innovating forward
  - FHIR Accelerators like Helios
  - HL7 Connect-a-thon events

Roadmap Recommendation #8: Encourage Interoperability Testing/Pilot Program

The How:

1. Partner with an Academic University
2. Encourage IT to create sandboxes and other R&D areas
3. Provide staff with time to explore/innovate
4. Participate in national opportunities like Helios, HL7, HIMSS Showcase, etc.
5. Explore use of pilots and agile development to try out and iterate on new ideas

Roadmap Recommendation #9: Implement Data Quality & Data Harmonization Processes

The Why:

While structure of the data coming in is important, content validation is also critical

Public health cannot be proactive and responsive if the data cannot lead to actional decisions

Staff spending too much time on cleaning data instead of using it

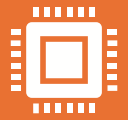
Roadmap Recommendation #9: Implement Data Quality & Data Harmonization Processes

The How:

1. Ensure use of national standards like HL7 whenever possible to cut down on quality issues with structure
2. Harmonize the value code sets you use across your systems to allow for easier integration
3. Adopt automated processes to check for content validation informed by SMEs
4. Participate in national efforts to improve data quality
   - EX: APHL eCR Data Quality Workgroup

Roadmap Recommendation #10: Establish Monitoring & Evaluation Mechanisms

The Why:



The volume of incoming data is already high, with data modernization it will only increase

We saw how strained systems became during the pandemic

We need ways to show improvement and that outcomes are met

Roadmap Recommendation #10: Establish Monitoring & Evaluation Mechanisms

The How:

1

Establish key metrics as part of your systems

system uptime, # of errors, data sharing partners

2

Leverage modern tools to monitor and provide feedback on those metrics

3

Use partner tools where available to improve your systems overtime

APHL dashboard

4

Report progress to leadership

Roadmap Recommendation #11: Engage Partners & Foster Collaboration

The Why:

- Public health data exchange depends on strong coordination across diverse stakeholders.
- Fragmented communication leads to misalignment, duplication, and inefficiencies.
- Engaging patients and the public is critical to building trust and transparency.

Roadmap Recommendation #11: Engage Partners & Foster Collaboration

The How:

1. Establish regular communication channels across agencies, providers, and partners
2. Create forums for collaboration, shared learning, and knowledge exchange
3. Engage public and patient communities in data sharing discussions
4. Leverage partnerships to align priorities and accelerate interoperability progress

Roadmap Recommendation #12: Develop & Implement Security Measures

The Why:

- Public health data includes sensitive information that must be protected to maintain trust.
- Increasing data exchange expands the potential risk surface for cybersecurity threats.
- Strong security practices are foundational to sustainable interoperability.

Roadmap Recommendation #12: Develop & Implement Security Measures

The How:

1. Implement robust cybersecurity protocols across all systems and data flows
2. Ensure encryption of data both in transit and at rest
3. Establish strict access controls and identity management processes
4. Conduct regular audits, updates, and workforce training to address evolving threats

Roadmap Recommendation #13: Identify & Scale Successful Models

The Why:

- Public health agencies often reinvent solutions rather than building on proven approaches.
- Scaling successful models accelerates progress and reduces duplication of effort.
- Shared success stories help drive national consistency and adoption.

Roadmap Recommendation #13: Identify & Scale Successful Models

The How:

1. Expand successful pilots across additional programs, partners, and jurisdictions
2. Encourage broader participation from providers, payers, and public health entities
3. Share best practices and lessons learned nationally
4. Promote standardization to ensure sustainability and scalability

Roadmap Recommendation #14: Engage in Continuous Innovation

The Why:

- Health IT and data exchange capabilities are evolving rapidly.
- Public health must continuously adapt to leverage new technologies effectively.
- Innovation is necessary to keep pace with emerging data needs and expectations.

Roadmap Recommendation #14: Engage in Continuous Innovation

The How:

1. Explore emerging technologies such as AI, machine learning, and advanced analytics
2. Pilot new capabilities in controlled environments before scaling.
3. Invest in research and development through partnerships
4. Leverage shared infrastructure and national platforms to support innovation

Roadmap Recommendation #15: Communicate Progress & Build Public Trust

The Why:

- Public trust is essential to sustaining data sharing and interoperability efforts.
- Stakeholders require visibility into progress and outcomes.
- Transparency helps demonstrate value and maintain support for investments.

Roadmap Recommendation #15: Communicate Progress & Build Public Trust

The How:

1. Regularly report progress, metrics, and outcomes to stakeholders
2. Ensure transparency in how data is shared, accessed, and protected
3. Engage the public through outreach, dialogue, and feedback mechanisms
4. Use communication strategies to reinforce trust and long-term sustainability

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Q&A

Closing Keynote

WHILE TECHNOLOGY IS THE "FUN" PART OF DATA MOD TO MANY…

POLICY IS A CRITICAL FOUNDATIONAL PIECE

MANY DATA MODERNIZATION PROBLEMS ARE NOT A "TECHNOLOGY" ISSUE

CONSIDER WAYS TO MODERNIZE LAWS/RULES IN A WAY THAT ENSURES THEY FALL OUT OF DATE LESS QUICKLY

EMBRACE A CULTURE WHERE DATA IS AN ASSET!

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Thank you!

If you have any questions, please contact interopmatters@sequoiaproject.org

Call to Action!

Public Health Interoperability Policy Roadmap

the sequoia project

Oct 28-29

Annual Meeting

Lost Pines Resort & Spa

2026

carequality

Registration

Now Open!