



Data Modernization INITIATIVE

Stories from the field



Communication
strategies



Funding



Public-private
partnerships



Celebrate wins

FORGING A NEW PATH FOR DATA IN “THE LAST FRONTIER”

Alaska’s planning efforts provide a clear picture of systems, goals and actions

Alaska, a state of small population and immense size—bigger than Texas, California and Montana combined—initially contained the spread of COVID-19 well. That changed as the pandemic progressed, even spreading to remote villages in rural areas.

Like many other jurisdictions, Alaska’s Division of Public Health struggled to get comprehensive information about people who tested positive for COVID as the sheer volume of cases and lab results increased exponentially—beyond what the Division typically supported. Lab testing was being performed at new non-traditional locations (e.g., rural villages) that lacked the technology to report results in efficient electronic formats, vaccine administration data were entered into new databases, additional case surveillance interview questions were needed, as were timely informative data outputs for public and federal consumption. Jurisdictions nationwide struggled to meet these demands and leverage data for action, and Alaska’s challenges were even spotlighted in a [New York Times](#) article.

By the time the article came out, Alaska’s Department of Health—which encompasses Medicaid, public health, public assistance, behavioral health services and programs, and senior disability supports and services—had already been envisioning a different path for accessing and sharing data, and they had begun serious planning for modernizing their data systems. Guided by leadership from Chief Medical Officer Dr. Anne Zink, Commissioner Heidi Hedberg, and Division of Public



Promising Practices

- Conduct surveys and interviews with key partners to understand pain points for accessing and sharing data.
- Create a strategic plan for data modernization to outline and align goals across your organization.
- Communicate regularly to staff and partners about the benefits of data modernization. Communication can take the form of a summit, informal lunch presentation or one-on-one conversations.
- Explore public-private partnerships to enhance staffing and fill in gaps.
- Consider working with national public health organizations for funding and paid fellowships.
- Celebrate your wins and know that progress is achieved with consistent, small steps.



Many rural Alaskan villages like Hoonah can only be reached by ferry or bush plane, creating unique challenges for healthcare delivery in the state of Alaska.

Health Deputy Director Christy Lawton, the Division of Public Health received funding from CDC's Data Modernization Initiative (DMI) to focus on improving core data systems for public health. The Department of Health also hired a new Chief Health Informatics Officer to serve as an executive sponsor for this work and be a strategic leader in envisioning transformation—not just within the Division of Public Health, but across the entire agency.

Understanding perceptions and the current state

To launch the DMI project, Alaska began gathering information from staff to understand perceptions and pain points for accessing and combining data. The team sent online surveys to section chiefs and system administrators in the Division of Public Health, and then followed up with in-depth interviews. In June 2022, the Alaska DMI team hosted a Data Summit with a wider audience of staff including information technology (IT) and other divisional and departmental leaders. Carrie Paykoc, the Chief Health Informatics Officer at the time, facilitated the Data Summit and says data modernization “is an opportunity to modernize not just public health informatics, but informatics across the enterprise.”

Building support for data modernization

To create momentum for data modernization efforts,

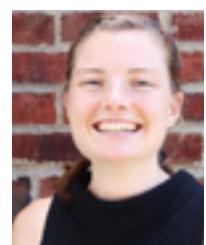


Carrie Paykoc

the Department of Health and Division of Public Health began building an informatics team. They turned to paid fellowships from the CDC Foundation, and the Council of State and Territorial Epidemiologists (CSTE) and eventually hired Tracy Tobin, a former CDC Foundation staffer as a contractor, and matched her with Eliza Ramsey through the CSTE fellowship program. These supplemental positions allowed Alaska to initiate DMI work as the state hired additional IT and public health staff including a DMI Director.

To complement the funding provided through CDC's Data Modernization Initiative, Alaska Department of Health sought additional grants through ASTHO and ONC to support broader informatic and capacity building efforts including participation in learning communities. This funding supported Tobin's role and was critical to aligning overall Department efforts with the DMI work in the Division of Public Health.

By braiding the DMI funding from CDC with the additional resources from the ASTHO IDEAS and ONC grants, Alaska's Department of Health and Division of Public Health were able to hire the consulting firm BerryDunn to help with assessing and prioritizing activities related to DMI and broader informatics



Eliza Ramsey

strategy. The focus was on first completing the strategic plan for Division of Public Health as is required by the CDC DMI grant, and then beginning to develop a roadmap for the Department overall.

With BerryDunn's involvement, the team conducted additional research:

- First, DPH sent an all-staff survey to better understand what kind of tools and support people needed. Later, this survey was extended to the Division of Behavioral Health.
- An external survey was sent to tribal, local, health information exchange (HIE), healthcare, and social services partners to understand the boundaries for data exchange.
- BerryDunn also conducted interviews with other state jurisdictions, which gave the team insight on how other states subsidized public health informatics work and addressed data modernization challenges.

The payoff of planning

From all the data collection, the team better understood the existing ground state, where their data were and what the data governance gaps were. With their consultants' help, the team created a prioritization assessment that outlines challenges, opportunities, goals and, perhaps most importantly, actionable steps. The assessment helped the team create the strategic

“Having a data strategy and approach to how information is shared and what systems are in place is really helpful because we get out of the individual issues and putting out fires, and into a more coordinated and strategic approach.”

- Carrie Paykoc

plan for the Division of Public Health, which has now been submitted to CDC.

While the team is now entering the implementation stage, Paykoc underscores the importance of the planning stage. She says, “If you don’t have a plan, you can’t align on the purpose. A plan helps gain consensus and buy-in...it also gives legislators a clear picture of gaps and systems and why they’re important to health and security.”

Ramsey says the plan helps people across the Division of Public Health see themselves in data modernization. The plan breaks down complex information into digestible pieces for staff. “A lot of times people ask ‘What is this?’ and ‘What does it mean to me?’ The plan says these are the opportunities, these are the challenges, these are the goals.”



A Health Information Exchange (HIE) Summit in January 2023 facilitated a wider community-based conversation around data.



Public health nurses planning community activities in the Kenai Health Building, courtesy of Alaska DoH.



“This is not just a one-time project, but it’s really an approach and a commitment to having the data systems, the people, the connections, the relationships, the management in order to serve communities across Alaska, across the U.S.”

- Eliza Ramsey

Aligning goals across Alaska

The planning stage has also helped align efforts across Alaska's Department of Health. The surveys and interviews revealed that various sections within the Division of Public Health had been doing various components of modernization already, but all on their own. The plan recognizes these efforts and inspired thinking about how to be more strategic—and how to connect and collaborate with other teams across the Department of Health.

Streamlining internal processes and communications

Through this planning process, the team began to understand what kind of technology was needed, but IT had specific processes and wasn't initially invested—nor had capacity—to engage in the DMI project. To ease communications, the team set up 30-minute check-ins every other week to allow space to float ideas and ask questions.

The DMI team continues to regularly communicate to staff and partners, emphasizing that the purpose of data modernization is to provide support and structure to critical and innovative public health activities, alike. In January 2023, they hosted their first Health Information Exchange (HIE) Summit for a wider community-based conversation around data. Paykoc and other team members also presented at the Alaska Public Health Association Conference to discuss the value of informatics and data modernization and what that could mean for people working across Alaska's state and tribal agencies.

Innovating despite a limited workforce

The DMI effort has been championed by top leadership in Alaska, which has been critical for staff collaboration and buy-in. Additionally, Paykoc says staff like Tobin and Ramsey working throughout the organization have sparked interest in data modernization and have helped build trust.



Dr. Anne Zink, Alaska's Chief Medical Officer, demonstrates how much the state had been relying on manual systems.

However, while all jurisdictions are challenged with finding informaticists and data scientists, Alaska is up against even more hurdles. The state has strict residency requirements and Alaska is largely rural with a small population. Paykoc says the DMI grant funding from CDC wasn't sufficient to cover the staffing required for the vision of data modernization. Fellowships and alternative funding sources have helped but she hopes the unique staffing needs of a large rural state will be considered more in the future.

Staff in Alaska's Department of Health tend to wear multiple hats. The agency is also thinking about restructuring traditional roles—organizing teams around technical themes versus specific health issue areas. The Division of Public Health has been able to hire a DMI Director and the new position is intentionally situated in IT. Paykoc says it was important to have a direct connection and partnership with IT, and help support IT's capacity to do data modernization work. The team is also thinking about hiring other roles that go across the IT lifecycle, such as security analysts and cloud engineers.

Benefits of data modernization

Paykoc says all their work toward modernization means that Alaskans or any U.S. citizen has access to information that they need to keep their families safe and healthy. "Getting information to people is the first priority. Second is making sure it is more sustainable and coordinated, as well as making sure our state and federal partners get the information they need to steer locally and nationally."

Ramsey adds that modernization is a continuous process: "This is not just a one-time project, but it's really an approach and a commitment to having the data systems, the people, the connections, the relationships, the management in order to serve communities across Alaska, across the U.S."

Key takeaways

- Alaska's Division of Public Health conducted multiple surveys and interviews with partners and staff to learn its ground state and gaps for sharing and accessing data.
- Informatics positions were supported through grants and fellowships from multiple public health organizations.
- A consulting firm was hired to enhance efforts and conduct interviews with other state jurisdictions. The interviews offered insights on how other states subsidized positions and addressed data challenges.
- Consistent communication is critical to building support for data modernization. Alaska's Division of Public Health set up regular check-in meetings with key staff and hosted larger summits with external partners.
- A good plan can connect teams, recognize data modernization efforts already occurring across a jurisdiction and align goals.

Related reading

[Treinen, Lex. After early success in containment, there's now rapid coronavirus spread in rural Alaska. Alaska Public Media, October 14, 2020.](#)

[LaFraniere, Sharon. 'Very Harmful' Lack of Data Still Blunts U.S. Response to Outbreaks. The New York Times, September 20, 2022.](#)

[Stremple, Claire. Lack of data blunted Alaska's COVID response, New York Times investigation shows. KTOO, September 27, 2022.](#)