

DELAWARE HEALTH
INFORMATION NETWORK

ANNUAL REPORT

2021

Making critical
health data
useful for today
and tomorrow



FISCAL YEAR 21 AT A GLANCE

Between July 1, 2020, and June 30, 2021, much of the world slowed, but Delaware Health Information Network (DHIN) didn't miss a beat. If anything, our "beat" grew faster because the healthcare community we support needed us even more.

Our team, well-versed in telecommuting, leveraged relationships, technology and creativity to help drive DHIN's evolution — at times, revolution — and delivered an amazing year.

This report delves into how we delivered services in the most challenging health care environment of our 14-year history. Here's a quick view of some of the most meaningful statistics and accomplishments to get you started.



14 Million clinical results delivered annually



3 Million patients represented from all fifty states



One Million event notifications delivered annually



We save our customers more than



\$43
million
annually



71,000

daily Community Health Record chart reviews by clinicians delivering care



HITRUST CSF® Certified



5 Year
strategic plan completed



70% of DHIN employees
progressed to first or at least one
additional ITIL* Certification

*Information Technology Infrastructure Library

A MESSAGE FROM OUR CEO

During this uneasy second year of the pandemic, Delaware Health Information Network (DHIN) has nevertheless had a very busy and successful FY21, thanks to the tireless focus and dedication of our amazing team of employees.

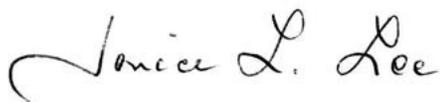
MAJOR ACTIVITIES INCLUDED:

- Ongoing support for the State of Delaware and our stakeholders in meeting ever-evolving data needs in response to the COVID pandemic
- Execution of the annual organizational goals established by our Board of Directors
- Development of a new five-year strategic plan
- Commissioning of an updated value/benefits study by an independent third party
- HITRUST CSF** certification (the "gold standard" in cybersecurity best practices)
- Numerous stakeholder-specific projects
- Numerous internal projects for modernization and improved operational efficiency
- Onboarding new data senders, including the State's Division of Substance Abuse and Mental Health as our first behavioral health data provider
- Ongoing development of the Health Care Claims database, with numerous fulfilled data and/or analytics requests for a mix of federal and state agencies and DHIN data partners, as well as the publication of several public-facing reports on the DHIN website
- Legislation permitting the use of clinical data, as well as claims data, for analytics and public health purposes
- Legislation permitting the State's organ procurement organization, under the proper circumstances, to access DHIN-held data to verify suitability of a donor-recipient match

HIGHLIGHTS WORTH NOTING:

- DHIN services generate \$43 million annually in value to the healthcare ecosystem of Delaware, a 4-to-1 return for every operational dollar DHIN takes in, according to conservative calculations.
- We ended the fiscal year with nearly \$7M in net unrestricted assets, representing over nine months of operational expenses, positioning DHIN for ongoing technology upgrades, as well as buffering the organization against ongoing financial uncertainty as the pandemic rages on.

The following pages expand upon these activities and their outcomes, and you will hear the voices of some of the dedicated people who made it happen. I simply cannot say enough in their praise. It is an honor to lead them, and an honor to serve you together with them. I am convinced that even greater things lie ahead! Please enjoy the following highlights of FY21.



Sincerely,
Dr. Jan Lee, CEO



*HITRUST CSF® Certified: MIRTH Connect and NXT Platforms and SFTP Server

LESSONS FROM A PANDEMIC: A ROUNDTABLE DISCUSSION



When our fiscal year began in July 2020, COVID-19 had been a reality for about six months. Shortages of personal protection equipment and ventilators were starting to stabilize, the sun was shining, the Delaware beaches were open and many were stepping out of their homes to exercise and socialize as carefully as possible.

But in the healthcare field, the exhaustion, frustration and sadness of medical professionals at every level in every facility was clear. At DHIN, our team was often working long days to keep up with the demand on our systems to deliver results, maintain the Community Health Record and report on hot spots and other issues to the State. Looking back at the second half of calendar 2020, our own team's dedication and commitment are equally clear.

What follows are some voices from around the organization, reflecting on the challenges posed by the pandemic, and how DHIN rose to meet them.



Our event notification system, which alerts practices when patients have been admitted, discharged or transferred from DHIN-participating facilities, can be the only way clinicians have nearly-real-time notice of a change in a patient's status. The importance of this service, for care coordinators at hospitals, ACOs, practices and insurance companies became even more apparent during the pandemic, **solidifying ENS as one of DHIN's four core services.**

- **Randy Farmer**, Chief Operating Officer



Contract tracing was a key focus for Delaware's Division of Public Health, and the volume was crushing. Data took multiple routes and was often missing key elements necessary for prompt outreach by tracers. In addition to enriching this data with the missing fields, our team also used an identity management tool to **reduce duplicates, delivering more complete information to the contact tracing teams.**

- **Erica Hutchinson**, Director of Architecture & Development



The value of health data is on the rise and as such, health information exchanges have become a target for cybercrime. **We saw a need for DHIN to hire a fulltime professional dedicated to our organization's cybersecurity.**

Denise Bowie, who came to us from a large pharmaceutical company where she headed up Information Security, has raised the bar for our whole organization.

- **Jeff Reger**, Chief Technology Officer

Please note: Photos featuring DHIN team members were taken when the State of Delaware mask mandate had been lifted and social distancing guidelines relaxed for vaccinated individuals.



DHIN contributes to Delaware's financial health because we not only move data, we generate it.

We provide the State with reports that help to identify COVID hotspots, provide clarity about the cost of common procedures and identify cases of potential fraud. Everything we have learned this year has made our organization stronger.

- **Mike Sims**, Chief Financial Officer



The close of the last legislative session marked **the passage of two bills**, later signed into law by the Governor, which **expanded DHIN's capabilities to both share and use clinical data for public health purposes.** In the coming year, DHIN

will champion additional measures to close gaps in healthcare data, particularly with justice-involved individuals and long-term post-acute care facilities.

- **Stacey Haddock Schiller**, Director of External Affairs



The Business Relationship

Management team had to get creative. We added tools such as Zoom and teamed up with customers and our Service Desk for in-depth discussions regarding results delivery and open service

tickets. We offered educational webinars and through our **podcast, 'DHINCast,'** our customers heard from members of Delaware's healthcare community and DHIN staff.

- **Mike MacDonald**, Sr. Business Relationship Manager



Our people worked so hard during the pandemic, and because it has not stopped, they continue to go above and beyond. **We live and work in this state**, and as a unit, we believe we must do this to support our fellow citizens.

- **Dr. Jan Lee**, Chief Executive Officer



DHIN

FY21 MILESTONES

From July 2020 to June 2021, DHIN ran flat out, hired new team members, created and deployed dozens of initiatives and provided thousands of reports, millions of results, and together ended the year with 280 days of financial reserves — about 100 days above the minimum set by our Board of Directors.

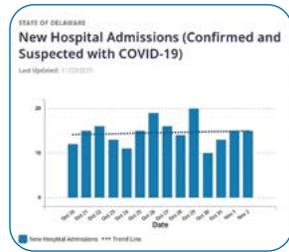
Here are more of our major milestones during that time.

QUARTER 1

Deployed a unique collaboration with a medical data sharing organization, WOMBA, to provide, at patient direction, clinical information for insurance underwriting purposes



Partnered with Delaware Division of Public Health to share COVID-19 test results in existing online personal health record, Health Check Connect



QUARTER 2

Enrollment in Health Check Connect spiked, connecting 12,000+ Delawareans to DHIN's personal health record



Then U.S. Deputy Secretary Eric Hargan made the first visit to a health information exchange — Delaware Health Information Network



QUARTER 3

Health Care Claims Database grew to include claims data for more than 720,000 patients, representing 60% of Delaware residents



New data sender Curative joined DHIN



"Curative is committed to continuously improving access to COVID-19 testing and other services targeted at ending the pandemic. We look forward to the continued partnership with the State of Delaware and Delaware Health Information Network in providing convenient, painless access to testing at no cost to patients."

- Fred Turner, CEO, Curative



QUARTER 4

Mobile app for Health Check Connect launched, enrollment grew to more than 18,000 Delawareans



HITRUST CSF® Certification achieved, recognizing DHIN's Best Practices in cybersecurity



Two key Delaware Senate bills passed:

- SB 88 – Permitted use of clinical data for analytics and public health purposes
- SB 87 – Provided State's organ procurement program with access to data to determine the suitability of a match



OUR STRATEGIC PLAN AND BEYOND

2017 2018 2019 2020 2021 2022 2023...

“We always thought our brand reputation was very strong in the healthcare community, and that was borne out by Maestro Strategies’ findings. This was both gratifying and invigorating.”

– Dr. Jan Lee, CEO

A DEEP DIVE

IN FY21, DHIN took deep dives into hard data and human input to develop a comprehensive Five-Year Strategic Plan.

One of our first steps was to update our mission and vision statements so that they would best reflect how DHIN makes a difference in Delaware, today and tomorrow.

“Mission” is what an organization comes to work to do each day. Over 17 years, our mission has evolved as healthcare and technology have evolved. Today we are a data analytics provider, something we could not have even imagined two decades ago. **We make healthcare meaningful, useful and dynamic for our stakeholders.**

OUR MISSION

is to empower public and private partners to make data-driven decisions through innovative health data services.

“Vision” is what an organization desires to achieve — the impact it wants to make. Much of our vision remains the same as it did Day One: to be highly trusted; to save time, money and lives. It has also progressed as the world we can envision continues to expand.

OUR VISION

To be the preferred, highly trusted provider of health data services, enabling healthcare transformations that promote health equity, facilitate quality care and save time, money and lives.

Logically, our new Strategic Plan is a direct outgrowth of our Mission and Vision. It was also greatly influenced by the continued robust adoption of our Core Services: The Community Health Record, Results Delivery, Event Notification Service (ENS) and Clinical Gateway.



THE STRATEGIC PLANNING PROCESS IDENTIFIED FOUR MAJOR THEMES THAT WILL GUIDE OUR WORK IN THE COMING YEARS:

1

MAINTAIN OUR RELEVANCE in a market that is increasing driven by value based care.

2

STRENGTHEN OUR TIES TO THE STATE through public private partnership.

3

STRENGTHEN BUSINESS SUSTAINABILITY through strategic partnerships, cost control, a value based fee structure and a compelling value story for each customer segment.

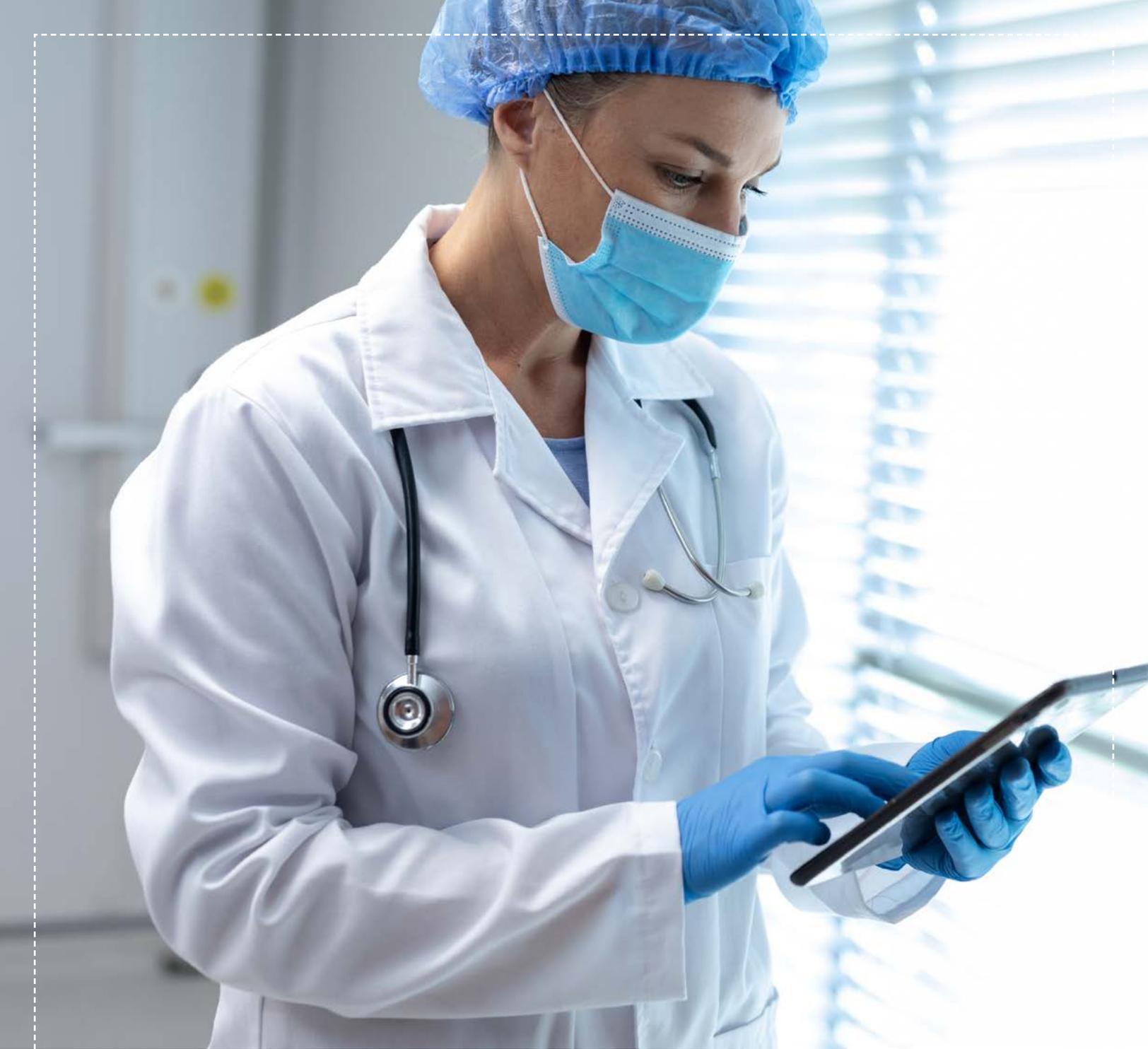
4

MAINTAIN OUR CURRENT STRENGTHS and advantage as a trusted neutral not-for-profit existing to provide a public good.

BEGINNING WITH OUR FY22 WORK PLAN, each strategic initiative requires financial and human investment and supports our desire to serve as Delaware's unbiased community trustee for health data.

THE INITIATIVES WE WILL TAKE TO ACHIEVE SUCCESS INCLUDE:





DHIN SECURES HEALTH DATA **24/7/365**

WE VIEW OUR TECHNOLOGY IN TWO DISTINCT WAYS: First, we must safeguard it so that patients, practices and partners know that personal information is secure. Second, we maximize it, using tools and processes that can provide members with critical information about the health and wellbeing of individuals and of our state.

Our biggest technological achievement in FY21 was earning our HITRUST certification.

The process took months of work and involved nearly every department. It included a rigorous self-assessment followed by an equally rigorous third-party audit. At the core, this certification shows we use the strictest requirements to protect data. While we are very proud of it, the real benefit is for senders and users of this data to know there are extra layers of protection.

Some of our other technological achievements for FY21 included:

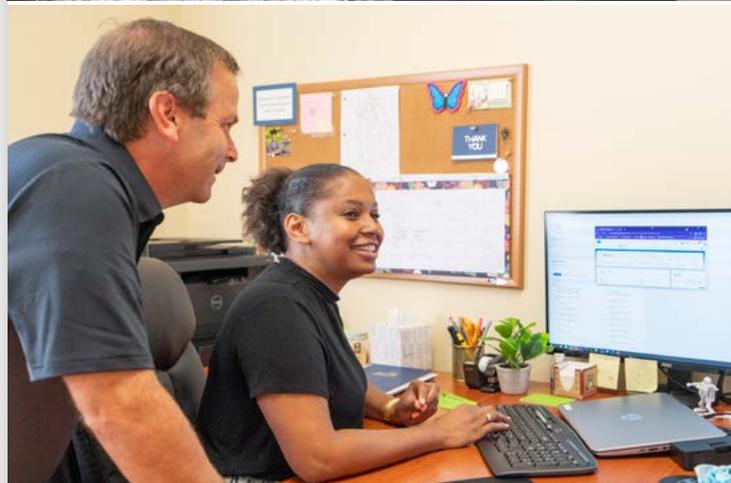
- Continuing the migration of DHIN's core infrastructure to the Cloud which has paid dividends in performance and stability. DHIN has not had a system outage since completion in February 2021.
- Partnering with the State of Delaware on COVID-19, transitioning from a response to a global health emergency to an ongoing component of what we do: providing the State with information and tools it needs to make decisions related to the pandemic and enriching data to make it more useful for contract tracers.
- Putting data to work for payers (e.g., health insurers) through reports allowing them to see patterns in both care and coverage across the state.
- Completing a total of 32 technology projects — a 60% increase over FY20 — many of which were even more critical because of the pandemic.
- Delivering more than 1,000,000 Event Notifications.
- Growing our technical staff to 10 people (from 7), including the hiring of a Director of Information Security.

DHIN team members (from top)
Brent Gaines, Mike Procak, Ashley Green

LOOKING FORWARD

We laid the groundwork for a major work plan in FY22, which includes nearly 70 planned, pop up and “would like to do” projects. Among the high-priority initiatives underway is the further enhancement of the consent management tool we launched in FY21. This tool enables patients to indicate whether they are willing to share data pertaining to their Substance Use Disorder with other providers involved in their care. The enhancements planned for FY22 will enable the patient to grant or withhold consent to share at the level of individual providers or practices — a granular level of consent management.

This consent management tool, along with DHIN's HITRUST CSF® certification and our commitment to maximizing technology to improve the services we offer, continues to both protect and secure Delawareans' health data.





CREATING CHANGE THROUGH ADVOCACY

While advocacy happens year-round, the heart of the cycle runs from January to June when Delaware's General Assembly is in session. In FY21, we focused our efforts on passing several pieces of legislation in the best interest of Delawareans, while completing our Sunset Committee Review.



DHIN reaped the benefits of the **Sunset Committee** process. It highlighted areas in which we can better fulfill our mission, whether through statutory amendments or new partnerships.

For instance, one of the things the process revealed was a gap created by a statute that prevented the use of clinical healthcare data in the way in which we were using healthcare claims data for analytics and population health. Senator Kyle Evans Gay and Representative Sherry Dorsey Walker co-sponsored Senate Bill 88, which permits this sharing, following an application process and review and approval of requests by an oversight committee.

We expect that this will have a tremendous impact on DHIN's ability to use clinical data in the same way we do claims: to provide better analytics for population healthcare. The bill also allows the use of data for research on healthcare trends that will benefit state and federal organizations.

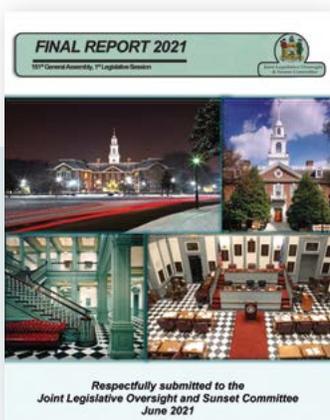
We also worked on a piece of legislation we've titled the "Gift of Life Bill" (Bill 87). Gift of Life is the State-approved organ procurement program, and the clinical information DHIN holds on more than three million patients would be tremendously useful for identifying potential matches for organ transplantation.

Conceptually, all the parties involved in this process agreed that Gift of Life should have access to DHIN data for patient matching purposes, but they were not included in the DHIN statute. Bill 87 stipulated that access be given as it will help save lives.

We are thrilled to report that both bills were signed into law by Governor Carney.

Two other bills for which DHIN advocated did not make the vote in FY21, and it is our hope they will be resurrected FY22. One focuses on sharing the healthcare records of justice-involved individuals, and the other is focused on patient records at long-term post-acute care facilities.

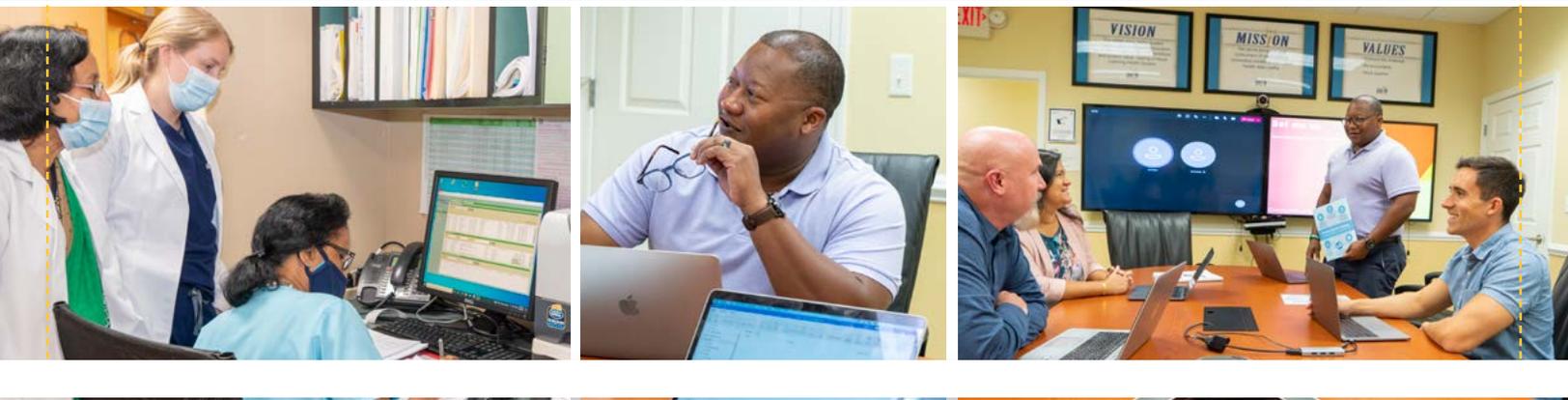
Above, Dr. Jan Lee and Stacey Schiller at Legislative Hall in Dover



If you are unfamiliar with a "Sunset Committee," it is a bipartisan and bicameral committee in the legislature that evaluates state agencies and makes recommendations for improvements and funding.

OPERATIONS & FINANCE UNDERPIN OUR PROGRESS

It is estimated that one connection to DHIN by each participating organization does the work of 1,152 point-to-point interfaces for hospitals, practices, public health, labs and imaging centers.



DHIN brings order to the chaos that is healthcare data. Each data point we provide to a clinician or decision-maker empowers them to make the best decisions for the patient.

An independent, third-party assessment by Maestro Strategies valued our four core services — The Community Health Record, Results Delivery, Event Notification Services (ENS) and Clinical Gateway — as providing **more than \$43 million in annual savings to our customers.**

IN ACCOMPANYING RESEARCH CONDUCTED DURING OUR VALUE ASSESSMENT, MORE THAN 95% OF OUR STAKEHOLDERS AGREED THAT:



- 1** Our services and the data provided are useful, timely and of high quality
- 2** The Community Health Record has a positive impact on patient care
- 3** They (stakeholders) received good value for this service

DHIN SAVINGS BY THE NUMBERS

Each year, DHIN provides services to eight hospitals and health systems, dozens of commercial labs and radiology centers, 30+ electronic medical records systems and hundreds of practices. This secure, centralized system makes results delivery more efficient and cost-effective, and **every \$1 generated in operating revenue drives \$4 in value.**

\$ 4.6 MILLION



It is an amazing return on investment. As has been recognized many times over the years by both users and senders of data, as well as third parties, the **adoption of DHIN services** drives down the cost of healthcare and creates sustainability in the system. **It saves tremendous, often life-saving time, valued by Maestro at \$17.7 million a year. The avoidance of duplicate testing saves an estimated \$4.6 million annually.**

\$ 9.9 MILLION



DHIN's results delivery system alone saves \$9.9 million in point-to-point connections — the effort that would be required by each stakeholder to communicate with other stakeholders manually in human hours and technology.

\$ 4.2 MILLION



Further, the Clinical Gateway saves an estimated \$4.2 million in care management and coordination.

As difficult as FY21 was for the Delaware medical community and the people it serves, DHIN is proud of the progress we have made, the efficiencies we have created, the savings we have provided, and, by existing, the lives that have been saved for the use of it.

(Top left) Kaza Pediatric Associates is one of many practices that relies on DHIN for clinical results delivery; members of the DHIN staff brainstorm (l to r) Ed Seaton, Kevan Browne, Jamie Rocke and Mike MacDonald

DELAWARE HEALTH INFORMATION NETWORK

Statements of Net Position

June 30, 2021 and 2020

	2020	2021
ASSETS		
Unrestricted Cash	\$ 4,723,770	\$ 5,885,390
Restricted Cash	\$ 1,249,408	\$ 1,459,174
Receivables		
Trade	897,207	641,631
State	425,234	295,160
Federal		
Prepaid Expenses	150,126	230,472
Other Assets	6,979	6,979
Property and Equipment - Net	41,544	25,782
TOTAL ASSETS	\$ 7,494,268	\$ 8,544,587
LIABILITIES		
Accounts Payable	\$ 966,589	\$ 1,161,919
Accrued Expenses	282,819	297,255
Deferred Income	535,747	107,263
TOTAL LIABILITIES	1,785,155	1,566,437
NET ASSETS		
Restricted	\$0	\$0
Unrestricted	5,667,569	6,952,368
Invested in Capital Assets, Net of Related Debt	41,544	25,782
TOTAL NET ASSETS	5,709,113	6,978,150
TOTAL LIABILITIES AND NET ASSETS	\$ 7,494,268	\$ 8,544,587

- Restricted Accounts Receivable includes payments due from payers for per member per month fees as well as receivables from DHIN's data senders for results delivery services performed.
- Accounts Payable represents payment due for the development of a historical database, Personal Health Record license fees and year-end performance incentives for DHIN staff.

DELAWARE HEALTH INFORMATION NETWORK

Statements of Revenues, Expenses and Changes in Net Position
Years Ended June 30, 2021 and 2020

	2020	2021
<u>Operating Revenue</u>		
<u>Core Services</u>		
Results Delivery	\$ 4,687,287	\$ 4,655,315
Community Health Record (CHR)	3,077,767	3,296,431
Total Core Services	7,765,054	7,951,746
<u>Value-Added Services</u>		
CCD Exchange by Providers	4,083	4,467
CHR – Viewing by Providers	115,116	140,892
Medication History Access	22,870	18,250
Encounter Notification Services	79,258	116,414
Image Viewing	14,619	29,589
Professional Services	200,417	200,032
Claims Database – Operational Revenue	124,380	207,027
Sub-Grant Income	0	0
Total Value-Added Services	560,743	716,670
Total Operating Revenue	8,325,797	8,668,416
<u>Non-Operating Revenue</u>		
Grant Revenue	0	294,211
Medicaid FFP (HCCD)	870,370	1,942,394
State Appropriation for HCCD	506,423	215,822
Investment Income	0	69,226
Interest	38,347	7,114
Total Non-Operating Revenue	1,415,140	2,528,767
Total Revenue	\$9,740,937	\$11,197,183
<u>Expenses</u>		
Personnel	\$4,463,601	\$5,056,772
Administration	\$547,614	\$577,834
Operations	\$0	\$0
Depreciation	\$63,420	\$15,763
Contractual (Non-Technical)	\$663,529	\$889,711
Marketing	\$113,767	\$139,080
Ongoing License & Maintenance	\$2,858,129	\$3,040,094
New Functions	\$90,021	\$704,051
New Functions Maintenance & License	\$0	\$0
Technology Refresh	\$10,715	\$0
Total Expenses	\$8,810,796	\$10,423,304
Net Income	\$930,141	\$773,880

LEADERSHIP & SUPPORT

BOARD OF DIRECTORS

- Joey Bonano, Highmark Blue Cross Blue Shield Delaware
- Michael Cole, Aetna
- Jason Clark, State of Delaware, Delaware Department of Technology
- Steven Costantino, State of Delaware, Director of Health Care Reform
- Randall Gaboriault,* Christiana Care Health System
- Jeffrey E. Hawtof, MD, FAAFP, Beebe Medical Center
- A. Richard Heffron* (Retired), Delaware State Chamber of Commerce
- Randeep Kahlon, MD, Christiana Care Health System
- Jonathan Kauffman, DO,* Bayhealth Medical Center
- William Kirk, III, Esq.* (Retired), Highmark Blue Cross Blue Shield Delaware
- Stephen Lawless, MD,* Nemours/Alfred I. du Pont Hospital for Children
- Troy McDaniel, State of Delaware, Division of Medicaid and Medical Assistance
- Kathleen S. Matt, PhD, University of Delaware, Dean of the College of Health Sciences
- Faith Rentz,* State of Delaware, Director of Statewide Benefits
- Meredith Stewart-Tweedie,* Christiana Care Health System

*Executive Committee Member

STAFF

- | | | |
|------------------|-------------------|-----------------------|
| Denise Bowie | Mark Jacobs | Michele Ribolla |
| Kevan Browne | Gurpreet Kaur | Jamie Rocke |
| Ali Charowsky | Jan Lee, MD | Ed Seaton |
| Brian Cohen | Michael MacDonald | Elise Scheidel |
| Amanda Cottman | Tina McGriff | Stacey Schiller |
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| Brent Gaines | TerriLynn Palmer | Pier Straws |
| Andy Gillan | Scott Perkins | Jonathan Val |
| Ashley Green | Michael Procak | Krishna Sai Vasireddy |
| Erica Hutchinson | Jeffrey Reger | |

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