CLIMBING TO NEW HEIGHTS, TOGETHER

ANNUAL REPORT 2022

DHIN Delaware Health Information Network

DHIN.ORG

A MESSAGE FROM OUR CEO

As we collectively emerged from the global pandemic, the new reality presented a number of challenges to American businesses, and Delaware Health Information Network (DHIN) was no different: What does today's healthcare and business environment look like for us? Have our customers' needs changed? Do our priorities need to shift accordingly? For guidance, we looked to our core values: Embrace the challenge. Be accountable. Work together. These values are our cultural DNA; they've kept us grounded through previously challenging times, and the post-pandemic environment has been no different. Embracing the challenge meant meeting a new reality head on. As GE Chairman & CEO Jack Welch famously said, "Face reality as it is, not as it was or as you wish it would be." With so many unknowns ahead, the DHIN team focused on what we could control and got to work.

Over the course of FY22, we:

- Added nearly 40 new data sources, including thirty-three skilled nursing facilities, Delaware's Division of Substance Abuse & Mental Health, P3N (the five Pennsylvania health information exchanges collaborative) and Encompass Health, DHIN's first rehabilitation hospital
- Executed more projects in one year than ever before
- Received a Highmark BluePrints grant to continue Delaware Medical Orders and Scope of Treatment (DMOST) registry operations
- Maintained a rolling 12-month Net Promoter Score of 94 ("World Class")

Being accountable required defining what a successful year would look like.

For DHIN, a successful FY22 was one in which:

- We didn't overwork our people
- We completed our workplan within budget
- We hit all of our organizational goals
- We ended the year with a positive net income

And we're proud to say that, working together, we met these challenges — and more! — in 2022.

- The DHIN team kept cumulative overtime across the organization under the 10% threshold
- We kicked off and completed 13 projects valued at more than $1.1 million

We met each of our organizational goals:

- Applied for $5.7M in ARPA grant funding
- Automated internal management reports and apply a user-friendly GUI to enable ease of use across the organization — eliminating at least 100 hrs/month of manual work
- Drafted a new Data Sender Master Agreement that addresses recent legal and regulatory changes, especially the Information Blocking Rule, and circulated to all Data Senders for execution
- Addressed all FY21 HITRUST Corrective Action Plan issues
- Conducted a comprehensive competency review of DHIN staff; developed a plan to close gaps

And, despite beginning FY22 with a projected negative net income, we finished the year in the black, with more than $860,000 in net income and 325 days of operating revenue (exceeding the Board of Directors' annual target by 80%).

In the following sections, you'll read more about the special initiatives undertaken by the DHIN team over the course of the year and the five-year Strategic Plan that continues to be the north star that guides us. Thank you for your continued support of DHIN's mission of empowering data-driven decisions.

Jan Lee, MD, Chief Executive Officer, DHIN

OUR STRATEGIC 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:

1

AUGMENTING OUR DATA by acquiring types and sources to support evolving information needs of our customers

2

STRENGTHENING OUR APPROACH to data governance

3

BUILDING STRONG PARTNERSHIPS and alliances especially with state government

4

MEASURING AND COMMUNICATING VALUE to our stakeholders

5

DRIVING GROWTH OF OUR NEWER SERVICES especially the analytics service line

6

CONTINUOUSLY EVALUATING our cost and pricing structures and adjusting as appropriate

KEEPING OUR COMMITMENTS

At its simplest, DHIN's founding purpose was to facilitate the exchange of electronic health information among healthcare providers in Delaware. While so much in our industry has changed, we stay true to that purpose and honor it with the addition of new data senders, new data types and new use cases for data.

Exchanging Data through DHIN

DHIN's data sender count continues to grow, and in this era of inter-operability, both the face of the traditional DHIN data sender and the types of data exchanged is evolving.

As highlighted in Jan's letter, DHIN welcomed forty new data senders in FY22, including:

- Encompass Health, DHIN's first rehabilitation hospital
- Delaware Digestive Care
- Bear MRI and Imaging
- P4 Diagnostic Labs
- Delaware's Division of Substance Abuse and Mental Health clinic

P3N, the authority over Pennsylvania's five health information exchanges, also joined and is now the third HIE to connect with DHIN. P3N joins CRISP in Maryland and New Jersey's NJSHINE, enabling the sharing of encounter data for Delaware residents seen for treatment in those service areas.

Closing Data Gaps in Delaware

One of the highlights of the year was the progress made connecting skilled nursing facilities (SNFs) with DHIN's statewide network. Through a two-year pilot sponsored by accountable care organizations eBrightHealth and Aledade, 35 facilities have contracted with DHIN, and as of the end of the year, thirty had gone "live," generating Admission/Discharge/Transfer (ADT) notifications and/or sharing care summaries to assist in delivering care to this growing segment of patients.

Improving connectivity with transitions of care in the post-acute care segment has frequently been identified as a pain point for clinicians. This partnership enabled Delaware SNFs who use the PointClickCare electronic health record to join DHIN as data senders, making their data available to healthcare practitioners through the Community Health Record and triggering alerts on patient ADT status for event notification subscribers.

The ongoing addition of data strengthens the Community Health record and helps DHIN fulfill its mission of empowering our partners to make data-driven decisions.

Collecting New Data

Patients who have been or are currently in treatment for a substance use disorder (SUD) can now choose which healthcare providers may access those records. As a natural extension of its personal health record platform, Health Check Connect, in FY22, DHIN launched a personalized consent tool giving patients the ability to set — and change — their preferences at a granular level.

While healthcare practitioners can view their patients' clinical records through DHIN's Community Health Record, SUD information is not included. As a result, a provider may not know a patient was being treated for SUD — a fact that could be problematic if the provider were to prescribe medication that would be contraindicated in someone with substance use disorder. It is critical that providers have complete visibility into treatment within this space to avoid putting patients at risk.

It is also important that patients get to choose who has access to their SUD treatment records. Previously, the patient had to consent to share information with a healthcare team and that decision was binding until the time period expired. With this new feature, patients can update their consent as often as they wish, and automated reminders will notify enrollees to renew their selections prior to the consent expiration.

"This tool is embedded in the Personal Health Record, giving patients the ultimate control. This benefits patients on two levels: 1) It gives them direct, immediate and real-time ability to make decisions and change their minds as often as they choose; and 2) It gives them the ability to choose with whom their information is shared. If patient data was viewed at any time, we need to be able to see that it was covered under the patient's consent at the time it was viewed."

– Dr. Jan Lee, Chief Executive Officer

The patient protections surrounding the Health Insurance Portability and Accountability Act of 1996 (HIPAA) have traditionally guided the sharing of protected health information. While there is no obligation to share some conditions as spelled out by HIPAA, the privacy law does specify certain conditions under which protected health data may be shared without patient consent.

Certain sensitive information, however, falls under stricter rules than HIPAA. For example, Title 42 of the Code of Federal Regulations Part II (known as "Part 2") — the Confidentiality of Substance Use Disorder Patient Records — goes to great lengths to protect the privacy of those who have been treated for substance use disorder. It states that Part 2 data may not be shared with anyone except to save a life unless a patient affirmatively grants consent to share.

Participating provider partnerships are in the works, given the robust nature of this patient consent tool that ensures privacy and provides flexibility.

Leveraging Data for New Purposes

Highmark Blue Cross Blue Shield Delaware joined DHIN as a subscriber to care coordination services, with the goal of enhancing patient care and lowering costs. Through this collaboration, DHIN provided real-time alerts to Highmark on its commercial program members, thereby activating its clinician resources to engage patients immediately following a hospital or emergency department discharge.

Formerly, the insurer was notified about patient events when a claim was received, which was often well after the incident had occurred. By receiving near real-time notification of discharge activities and the corresponding clinical results, Highmark can provide more timely support to patients, helping them through the recovery process and potentially avoiding related emergency department visits and hospital readmittance.

"The pilot with Highmark was just a great opportunity for us to see how our services can make a difference," noted Randy Farmer, DHIN's Chief Operating Officer.

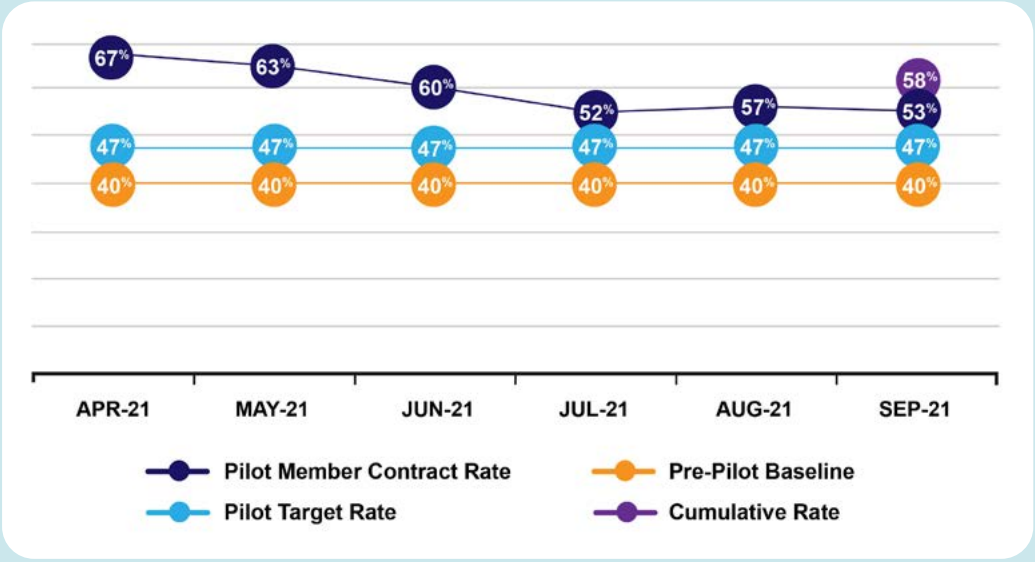
Care coordination efforts are shown to result in a smoother and much less expensive path to full recovery. An emergency department visit for non-urgent care, for example, averages more than $1,600 for a commercially-insured individual under the age of 65, according to Consumer Health Ratings (2019).

Hospital readmission costs can be staggering. The Agency for Healthcare Research and Quality estimates that in 2018, there were 3.8 million hospital readmissions within 30 days of a hospital discharge, with an average cost per readmission of $15,200. (The cost varies with case complexity, and cardiovascular and organ transplant readmissions cost more than double the average.)

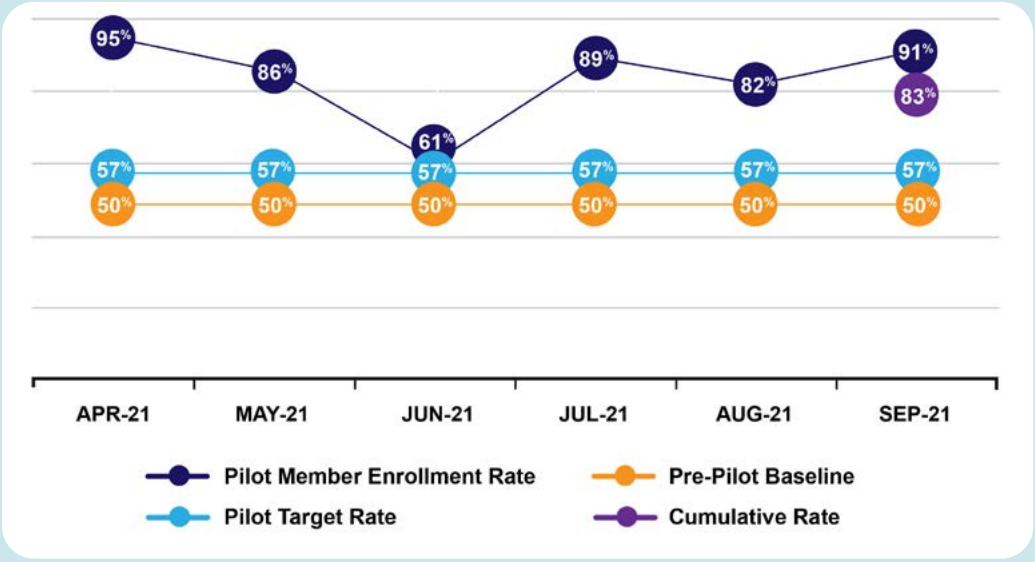
See next page

SIX-MONTH PILOT WITH HIGHMARK COMMERCIAL

PILOT ENGAGEMENT RATE TRENDS



ENROLLMENT RATE TRENDS



RESULTS

- Member engagement rate increased from 40% to 59%
- Care Coordination enrollment increased from 50% to 82%
- Enrollment in total care coordination program grew by 143%
  - –Increase of 238 compared to non-Pilot run rate (166)

$1,600 Avg. ER Visit*

$15.2K Avg. Inpatient**

$7,500 Pilot Cost

*Source: For a commercially insured individual under the age of 65, Consumer Health Ratings (2019)

**Source: Agency for Healthcare Research and Quality (2019)

DELIVERING VALUE THROUGH CLINICAL DATA

How DHIN Reduces Healthcare Costs, Streamlines Services and Improves Outcomes for Providers and Patients in Delaware

Delaware Health Information Network isn't just a health information exchange, but an organization that directly impacts change in healthcare. By working to bring down rising healthcare costs, reduce hospital utilization and eliminate inefficiencies, DHIN consistently delivers value to the State and our partners throughout the healthcare ecosystem. We do this through our innovative work and our four core service offerings: The Community Health Record, Results Delivery, Event Notification Service and our Clinical Gateway.

Community Health Record

Saved providers over $17.7 million annually

Results Delivery

Saved Providers and the State over $9.1 million in technology and labor costs

Event Notification Services

Saved Delaware $7.5 million in reduced ED visits for Medicaid patients

Clinical Gateway

Saved more than $4.2 million in care management and coordination costs

DHIN SAVES DELAWARE MONEY

These core services deliver over $43 million in value annually, a $4 return for every $1 spent on DHIN's operating budget.

Delivering Value and Future Opportunity

Since becoming the nation's first operational statewide health information exchange, Delaware Health Information Network (DHIN) has played a vital role in many areas of the healthcare space. As the central nervous system for health care data, DHIN serves all of Delaware's acute care hospitals, and nearly all of the state's medical providers. With over 18 million clinical results and reports delivered through DHIN each year, adoption of our services has significantly grown since our inception. With that growth and adoption, comes expanded service offerings that allow us to bring significant value to Delaware's healthcare space. That value is predominantly delivered through our core four service offerings, which include:

- Community Health Record
- Results Delivery
- Event Notification Services
- Clinical Gateway

These core service offerings deliver over $43 million in value annually to the state and our partners, a $4 return for every $1 spent on our operating budget. **DHIN's core services directly help to reduce healthcare spending, reduce hospitalizations and Medicaid emergency department visits, improve patient outcomes and eliminate inefficiencies.**

As a public instrumentality, we are proud of the public service we provide, but also know there are far more opportunities for us to provide value and savings across our core services. **This is especially true for State agencies who, per our enabling statute, do not need to utilize the State procurement process to contract with DHIN, saving valuable time and limited resources.**

How We Deliver Value and Savings to Delaware

1 COMMUNITY HEALTH RECORD

DHIN's Community Health Record (CHR) provides secure and timely access to health records for three million patients (nearly all Delawareans, as well as individuals from all fifty states). The CHR's "360-degree" view aggregates patient data across time, geography and care settings and is accessed over 71,000 times daily by providers across the state. **By eliminating the need to request information from multiple sources or waiting for provider office hours, clinicians save time and access a comprehensive patient record, which leads to better clinical outcomes, better coordination of care and direct savings for the patient and provider.**

In 2021, Maestro Strategies, an independent healthcare consulting firm, estimated that DHIN's CHR saved providers upwards of 710,000 hours, resulting in $17.7 million in annual cost savings.

Additionally, use of the CHR has reduced repeat lab tests and imaging studies by up to 10%; this avoidance of duplicate testing netted a $4.6 million savings for payers and patients. Not only is the CHR efficient, timely and secure, but it directly reduces healthcare costs in Delaware.

2 RESULTS DELIVERY

DHIN's ability to send lab and imaging results, discharge summaries and testing data to various care settings across the state eliminates the need for hospitals, practices and the Division of Public Health to individually create and replicate these services on their own. By streamlining results delivery across the healthcare spectrum, DHIN delivered nearly 12 million results in Fiscal Year 2020.

To put this in perspective: Without DHIN's results delivery platform, 900+ individual interfaces would be required to connect hospitals, practices, labs and Delaware's Division of Public Health (DPH). Maestro Strategies estimates that DHIN's leading role in facilitating results delivery has saved providers and the State over $9.1 million in technology and labor costs.

3 EVENT NOTIFICATION SERVICES

DHIN's data delivery is critical to improving clinical outcomes, enhancing care planning and reducing readmissions for Delawareans. Through our Event Notification Service (ENS), providers can be alerted real-time when a patient has been admitted, discharged or transferred from a participating hospital.

More than one million event notifications were generated by DHIN in FY20, supporting providers, accountable care organizations (ACOs) and payers in better coordinating and managing patient care, reducing ED visits and preventing readmissions.

ENS provides the opportunity to reduce healthcare spending for all payers, especially Delaware's Medicaid population. In fact, state health information exchanges offering ENS report up to a 10% reduction in ED visits for Medicaid patients.

Maestro Strategies estimates that DHIN has saved the State at least $7.5 million in reduced ED visits by Delaware Medicaid patients. With Delaware's Medicaid population on the rise, ENS continues to be a critical tool in managing costs.

4 CLINICAL GATEWAY

DHIN's Clinical Gateway service provides a real-time clinical feed of patient data to payers, ACOs and clinicians. By sending the data associated with patients on a provided "watch list," clinicians and staff are better able to coordinate care for a patient quickly and efficiently. This data can also be used to improve population health, care coordination and chronic disease management efforts.

Between October 2019 and January 2021, over 7.6 million results were transmitted through Clinical Gateway, with Maestro Strategies estimating the service has saved more than $4.2 million in cost avoidance through care management and coordination.

Delivering Value into the Future

DHIN is uniquely positioned to more than double the value it provides to state agencies, healthcare providers and Delaware residents in the coming years. As the focus on value-based care grows, so too will the role of health information exchange. Data attributed to individual patients will need to incorporate various social determinants of health, as well as behavioral health measures and other population health-based metrics.

DHIN's current five-year strategy aims to accomplish this by growing partnerships, expanding service offerings and building upon current claims data. In doing so, DHIN will play a greater role in care coordination, improving clinical outcomes and lowering the cost of healthcare across the state.

STEPPING UP IN THE FIGHT AGAINST COVID

COVID-19 caused unprecedented challenges for our state, the healthcare system and our communities. As those challenges evolved, so did we. DHIN put data to work to serve our state, our healthcare partners and our neighbors in the fight against a global pandemic.

"During the early months of the COVID-19 pandemic, the Department of Health and Social Services knew one of the most important things we needed to guide our community response was data. Early on, we needed robust and accurate demographic information about the people that tested positive and who we were reaching for testing. The Delaware Health Information Network (DHIN) helped provide us that information, which was critical in establishing COVID testing sites in communities that were disproportionately impacted by the disease. From there, DHIN became an integral partner, helping us to track daily hospital admission statistics and develop data quality integrations within our contact tracing and electronic reporting system. We are truly thankful for their team's dedication and hard work as we delivered crucial health information to Delawareans throughout the pandemic."

– Cabinet Secretary Molly Magarik, Delaware Department of Health and Social Services

When COVID-19 reached Delaware in March 2020, it brought with it several unprecedented challenges and uncertainties for communities and providers across Delaware. Information and data changed quickly, and Delaware health systems were working hard to stay ahead of the curve, fighting exhaustion and burnout. Under the leadership of Governor John Carney's Administration, the State enacted measures that protected hospital bed availability, increased clinical staffing capacity and prevented further spread of the virus. These actions saved lives and protected vulnerable Delawareans. At DHIN, we knew we also had a critical role to play in fighting the pandemic. From the start, we pushed beyond our limits and stepped up to the challenge by joining forces with Delaware's Division of Public Health to supplement demographic data, streamline the communication of test results and support contact tracing efforts. This partnership underscores one of many ways we can combine efforts with the State to save lives and serve our communities.

HEALTH CHECK CONNECT

As the spread of COVID-19 continued through the summer of 2020, testing was in high demand and already-stretched State resources were pushed to the brink. To help ease the administrative burden, we partnered with DPH to promote the availability of test results through our personal health record, Health Check Connect. This innovative platform, which leverages DHIN's identity proofing and matching capabilities, sped up patient communication, replacing the need for mailed testing results and freeing up desperately needed Public Health resources. The rapid growth of this relatively new platform required investment of both time and resources —well-worth it to support the State in taking on the pandemic at its most critical point.

IDENTIFYING DEMOGRAPHIC DATA AND TACKLING HEALTH INEQUITIES

Reliable data was critical to identifying COVID hotspots and enabling contact tracing efforts. DHIN helped DPH meet this need by enriching lab results with race and ethnicity data from the Community Health Record; providing daily reports on new COVID hospital admissions; and creating a data pathway to the Delaware Contact Tracing Database.

We also provided de-identified data on underlying conditions in COVID deaths, which had not been previously done. Without this data, it would have been significantly more difficult to identify concentrated areas of spread and determine the social determinants of health that were disproportionately impacting minority communities in Delaware.

Additionally, the DHIN team ramped up our Event Notification Service to provide real-time information on the status of COVID patients to providers who needed it. The data we were able to generate and provide to the Division of Public Health was critical to caring for COVID patients and better allocating resources during the height of the pandemic.

TRANSFORMING HEALTHCARE THROUGH ADVOCACY

Keeping up with an ever-changing healthcare environment that meets the needs of those we serve means advocating for transformative and innovative policy change that help us stay ahead of the curve to improve outcomes and deliver value to those who need it most.

Gift of Life Legislation

Improving the ability to match an organ donor with someone in need of a transplant quickly and efficiently is critical to improving clinical outcomes and saving lives. That's why we worked with the General Assembly to pass Senate Bill 87 (Gift of Life Bill). SB 87, which was signed into law by Governor Carney in 2021, allowed DHIN to partner with Gift of Life, the State-approved organ procurement program, to use Community Health Record data to identify potential matches for organ transplantation.

While all parties involved agreed that Gift of Life should have access to DHIN data for patient matching purposes, that permission was not granted by the DHIN statute. That important gap has been closed and, hopefully, many more lives will be saved through organ donation.

Sunset Committee Process

Through participation in the Joint Legislative Oversight and Sunset Committee (JLOSC) review process several years ago, we identified key areas to help DHIN deliver value for payers, providers, researchers and State entities. The JLOSC review resulted in Senate Bill 88, signed into law in 2021, which allows DHIN to use clinical data in the same way in which we do claims data for analytics and population health purposes. This new law will allow us to better identify healthcare trends and will have a significant impact on population health, giving payers and providers access to better clinical data on some of Delaware's most vulnerable populations.

Continued Advocacy Needs

DHIN recognizes the importance of championing innovative and transformative change to stay ahead of an ever-changing healthcare landscape. Establishing data integrations with the following areas will improve the State's ability to better serve Delawareans, particularly those considered at-risk:

- **Incarcerated Delawareans**

  Improved care coordination for individuals in custody of the Department of Correction (DOC) has been a long-standing need. There is a lack of data sharing and data access that is critical to non-DOC providers. Establishing a bi-directional interface with DHIN will greatly improve the ability of healthcare providers to treat justice-involved individuals, regardless of incarceration status. When these individual return to the community, many receive ongoing care through Medicaid. The ability of Medicaid providers to access clinical data from the period of incarceration through the Community Health Record would greatly improve their ability to provide the best care in a timely manner.

- **Dental Health Needs**

  Although dental health is essential to physical health, the Health Care Claims Database statute exempted dental insurers from providing data. Requiring dental insurers to report to the HCCD will help us close key gaps in care and assist the State in advancing its *Triple Aim Plus One* initiative to improve health care quality, patient and clinician experience and reduce health care costs.

- **Long-term Post-Acute Care Settings**

  DHIN has made some progress with enrolling skilled nursing facilities through a partnership with Delaware's ACOs, but this is still an area of tremendous opportunity for the exchange of healthcare data. Required participation with DHIN would give clinicians access to the information needed to render care when patients are seen at the hospital and help to ensure care coordination when they return to the LTPAC setting.

PUTTING CLAIMS DATA TO WORK FOR DELAWARE

As Delaware's Health Care Claims Database (HCCD) enters its fifth year, it has become an indispensable tool to the State of Delaware on its journey to value-based healthcare. Powered by DHIN, the database has produced substantive work for numerous State agencies, as well as a significant number of public reports, helping to correlate the investment in and quality of healthcare services.

HCCD REPRESENTS OVER 60% OF DELAWAREANS

The purpose of the HCCD is to facilitate data-driven, evidence-based improvements in access, quality, and cost of healthcare and to promote and improve the public health through increased transparency of accurate claims data and information.

The HCCD now contains claims records for 720,000 unique persons, representing more than 60% of Delaware residents. This includes Delaware Medicare, Medicaid and some commercial health plans, with data spanning 2013 through 2021.

Provide meaningful data to advance the triple aim of improved health, healthcare and lower costs

Promote population health research and analysis (e.g.disease prevalence)

Promote value-based and alternative payment arrangements

Support provider risk-sharing arrangements

PAYER SOURCES OF CLAIMS DATA

The breadth and depth of these data make measurement and analysis possible, whereas prior to the database, externally-sourced data — and not necessarily specific to Delaware — would have been necessary for these types of projects, potentially rendering the results less reliable for Delaware's population.

Data submitters include 8 commercial health plans and 2 public payers, who submit data for the following lines of business:

1. State Employee and Retiree Plans *(2 submitters, 1 PBM)*
2. Qualified Health Plans doing business on Exchange *(2 submitters)*
3. Medicare Advantage Plans *(4 submitters, 1 PBM)* and Medicare FFS Plans *(1 submitter)*
4. Medicaid MCO Plans *(3 submitters, 1 PBM)* and Medicaid FFS plans *(1 submitter)*
5. Submitting voluntarily since Summer 2019

	State Employee	QHP	Medicare Advantage	Medicaid MCO	Medicare FFS	Medicaid FFS	Other Commercial
Aetna	X	X	X				X
AmeriHealth				X			
Cigna			X				X
CVS Caremark			X	X			
Express Scripts	X						
Highmark	X	X		X			X
Humana			X				X
United			X				X
DMMA				X		X	
CMS					X		

HCCD Highlights

COSTAWARE

In spring of 2022, the State of Delaware launched a new website, CostAware, to compare the variation between hospitals in average costs for different episodes of care and medical services based on actual medical claims in Delaware. Developed by the Delaware Division of Health & Social Services and the Health Care Commission in collaboration with DHIN, the site features analyses using HCCD data, designed to help Delawareans better understand how their healthcare dollars are spent across care settings.

CostAware compares hospital costs for five common episodes of care at six hospital systems:

- Cardiac procedures
- C-section births
- Emergency Department visits
- Knee and hip replacements
- Vaginal deliveries

The costs across five accountable care organizations are also compared for seven common services: Blood counts, colonoscopies, doctor visits, hemoglobin A1c tests, head CTs, lumbar spine MRIs and screening mammography. The rates are based on 2019 HCCD medical claims and reflect the actual amounts paid by consumers and insurers.

Quality measures are provided, as well, including the readmission and utilization rates, and patient satisfaction scores, all from the Centers for Medicare and Medicaid Services as part of its Hospital Compare and Medicare Shared Savings Program initiatives. Each episode of care and service can be filtered further by the type of insurance: commercial, Medicare Advantage and Medicaid.

At least two more phases are planned for the CostAware initiative, using updated claims data for analysis and including new measures for comparison.

EXTERNAL PROJECTS

While projects for the State of Delaware account for the majority of HCCD work, the DHIN analytics team continues to seek opportunities with customers from the federal government, private industry and non-profit and grant-funded organizations, like Delaware INBRE.

As an affiliate member of INBRE, a collaborative network of academic, healthcare and research institutions, DHIN leverages the HCCD and analytics services to help members expand research activities and increase Delaware's competitiveness for federal biomedical research funding.

A list of project applications received to date can be found at

https://dhin.org/healthcare-claims-database/

PUBLIC REPORTS

In addition to projects for customers, the DHIN team continues to develop and publish public reports, made available on the public portal found on dhin.org. Twelve reports (not including CostAware analyses) are now available, including the latest evaluating trends in pharmacy spending. Previously released reports include:

- Chronic Disease & Health Care Utilization
- ED Visits – COVID-19
- ED Visits
- ED Visits – Opioids
- EPI Pen
- Opioid Prescriptions / ED Utilization
- People at Higher Risk for COVID-19
- Top Rx
- Top Diagnoses
- Summary of Data by Payer
- Telehealth Utilization / Impact of COVID-19

Upcoming Opportunities

CLINICAL AND CLAIMS DATA PARTNERSHIP

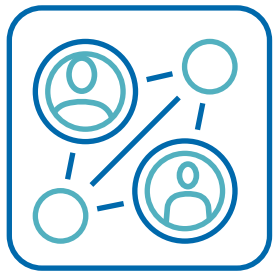
The passage of SB 88 in 2021 permitted DHIN to use clinical data for analytics purposes, in concert with established permissions around the usage of claims data. The ability to marry clinical and claims data for enriched findings is uncommon and as such, expected to be a game-changer for DHIN's analytics services.

Before that data can be accessed for analytics purposes, regulations regarding the use of this data were required, and DHIN's master data agreements revised and accepted by the data sending organizations. With the paperwork complete, we expect to begin receiving requests for review and approval by the HCCD Committee.

MAESTRO STRATEGIES PLAN

DHIN's initial strategic vision for data analytics was developed in 2020 as part of a three-year plan. While the vision was a good start for a nascent service, it lacked a connection to DHIN's overall strategic plan, introduced in 2021, and focused solely on the database, not the larger service offerings.

Following a competitive procurement process in early 2022, DHIN selected Maestro Strategies to conduct a comprehensive marketplace assessment and analysis of current service offerings. Final recommendations will guide DHIN in marketing its services.



OUR FINANCIAL OVERVIEW

As outlined in previous updates, DHIN has and continues to pursue longer-term funding strategies to support the Health Care Claims Database. We have researched the sustainability models of other state All Payer Claims Databases (APCDs) and developed a fee structure that will permit some cost recovery through that channel as non-State entities request access to data or reports derived from the data.

It is important to note that no APCD in any state is thus far sustainable through the sale of data products alone. All receive some combination of state, federal and grant funding.

Federal grants funded the planning and implementation of the Delaware HCCD, including nearly $2 million in federal support from the "Advance Interoperable Health Information Exchange" grant awarded by the Office of the National Coordinator and the State Innovation Model Test grant awarded to the Delaware Health Care Commission by the Center for Medicare and Medicaid Innovation. The 149th Delaware General Assembly recognized the need for continued capitalization to allow the HCCD to mature and granted a one-time appropriation of $2 million to support the work.

This $2 million was also leveraged as the State's match for the Implementation Advanced Planning Document (IAPD) federal funding, applied for — and received — in partnership with the Division of Medicaid and Medical Assistance (DMMA). The Centers for Medicare and Medicaid Services approved the IAPD in May 2019, and the State signed an agreement with DHIN in December 2019 to carry out the IAPD activities.

At the time, the $2 million appropriation was expected to sustain the HCCD through June 2020. **Instead, through careful management, the $2 million State appropriation stretched an additional two years. We expect to exhaust the appropriation in August 2023, two months into the beginning of FY24.**

To support the ongoing operations of the State's HCCD, DHIN has requested a $3 million appropriation, which is expected to last through State FY28/Federal Fiscal Year 2028.

As per the initial appropriation, the requested $3 million will help fund the State's 10% match, unlocking nearly $18MM from federal sources.

DELAWARE HEALTH INFORMATION NETWORK
Balance Sheet
As of June 30th, 2022

ASSETS	
Restricted Cash	$ 960,529
Unrestricted Cash	$ 6,441,390 [1]
Restricted Accounts Receivable	$ 1,660,510 [2]
Prepaid Expenses - Restricted	$ 215,161 [3]
Equipment - Restricted	$ 15,398
Other Assets	$ 6,979
TOTAL ASSETS	**$ 9,299,966**
LIABILITIES AND NET ASSETS	
Accounts Payable	$ 960,529 [4]
Deferred Income	$ 235,829 [5]
Unrestricted Net Assets	$ 8,103,608 [6]
TOTAL LIABILITIES AND NET ASSETS	**$ 9,299,966**

[1] Includes $3,014,450 of funds held in a Vanguard investment account, per April 2021 BOD approval. See Investment Income reporting section below.
[2] Restricted Accounts Receivable includes $459k due from Payers, $882k owed from DHIN's data senders, and $197k related to claims database IAPD reimbursements. All funds are expected to be collected.
[3] Includes amounts paid up front according to contract terms, with expenses still to be recognized evenly over the course of the 12 month period including those for end of life orders registry services, cyber-security liability insurance, business liability insurance, and analytics software.
[4] Accounts Payable includes incurred expenses for DHIN's data management and HCCD project management vendors as performance incentives for DHIN staff.
[5] Deferred Income includes cash received from practice subscriptions whose revenue are amortized over the life of the subscription.
[6] Equates to 325 days of operating expenses.

Investment Income Reporting	$$$	% of Total
DHIN MMDA*	$3,550,478	54%
DHIN Vanguard Investment Account	$3,014,450	46%
Total	$6,564,928	100%

Investment Account Mix of Assets		% of Total
S&P 500 fund	$1,523,934	50.6%
Total Bond fund	$1,490,516	49.4%
Total	$3,014,450	100%

**Does not include $1,660,510 in Accounts Receivable which will be deposited in the MMDA upon receipt. Including those receivables changes the mix to 63% MMDA/37% Investment Account.*

Amount Deposited in Investment Account (May 2021)	$3,300,000
Investment Account Balance - 6.30.2022	$3,014,450
Gain/(Loss) since May 2021	($285,550)

DELAWARE HEALTH INFORMATION NETWORK
Profit and Loss Statement
FOR THE PERIOD ENDING June 2022

*Accrual Basis

	Quarter to Date Actual	Quarter to Date Forecast	Variance	Year To Date Actuals	Year To Date Forecast	Variance	Full Year Forecast
Operating Revenue							
Core Services							
Data Sender Bundle	$1,340,594	$1,334,894	$5,700	$5,342,117	$5,330,930	$11,187	$5,330,930
Payer Bundle	$933,187	$883,954	$49,232	$3,621,390	$3,568,088	$53,302	$3,568,088
Total Core Services	$2,273,781	$2,218,848	$54,932	$8,963,506	$8,899,018	$64,489	$8,899,018
Value Added Services							
CHR - Viewing by Providers	$37,592	$28,450	$9,142	$131,475	$126,075	$5,400	$126,075
Medication History Access	$8,800	$25,300	($16,500)	$24,850	$41,350	($16,500)	$41,350
Encounter Notification Services	$51,071	$25,610	$25,462	$146,867	$107,161	$39,706	$107,161
Image Viewing	$3,742	$3,742	$0	$14,970	$22,557	($7,587)	$22,557
CCD Exchange	$1,117	$1,100	$17	$5,083	$6,152	($1,068)	$6,152
Claims Database - Earned Revenue	$56,900	$54,000	$2,900	$67,100	$66,200	$900	$66,200
Professional Services	$13,322	$9,123	$4,199	$170,232	$163,006	$7,226	$163,006
Total Value-Added Services	$172,544	$147,325	$25,219	$560,577	$532,500	$28,077	$532,500
Total Operating Revenue	$2,446,324	$2,344,944	$80,151	$9,524,083	$9,431,518	$92,565	$9,431,518
Non-Operating Revenue							
Medicaid FFP (HCCD)	$355,976	$431,289	($75,313)	$1,959,442	$1,842,962	$116,479	$1,842,962
State Appropriation for HCCD	$44,725	$47,921	($3,196)	$218,820	$204,774	$14,047	$204,774
Cost Aware / Total Cost of Care Funding	$73,996	$97,070	($23,074)	$243,993	$287,930	($43,936)	$287,930
Investment Income	($366,418)	($24,524)	($341,895)	($354,776)	$150,000	($504,776)	$150,000
Interest	$429	$300	$129	$1,511	$1,304	$206	$1,304
Total Non Operating Revenue	$108,708	$552,057	($443,348)	$2,068,990	$2,486,970	($417,980)	$2,486,970
Total Revenue	**$2,555,033**	**$2,897,001**	**($341,968)**	**$11,593,073**	**$11,918,488**	**($325,415)**	**$11,918,488**
Expenses							
Personnel	$1,750,097	$1,709,813	$40,284	$5,851,814	$5,826,117	$25,697	$5,826,117
Administration	$171,369	$311,919	($140,550)	$678,465	$836,928	($158,464)	$836,928
Operations	$0	$0	$0	$0	$0	$0	$0
Depreciation	$411	$411	($0)	$10,384	$9,481	$902	$9,481
Contractual (Non-Technical)	$326,380	$582,587	($256,207)	$1,021,676	$1,279,072	($257,396)	$1,279,072
Marketing	$56,954	$45,085	$11,869	$150,237	$150,000	$237	$150,000
Ongoing License & Maintenance	$694,223	$686,212	$8,011	$2,915,868	$2,885,282	$30,586	$2,885,282
New Functions	$38,959	$88,957	($49,999)	$102,296	$146,957	($44,661)	$146,957
New Functions Maintenance & License	$0	$0	$0	$0	$0	$0	$0
Technology Refresh	$0	$0	$0	$0	$0	$0	$0
Total Expenses	**$3,038,393**	**$3,424,984**	**($386,591)**	**$10,730,739**	**$11,133,837**	**($403,098)**	**$11,133,837**
Net Income	**($483,360)**	**($527,983)**	**$44,623**	**$862,334**	**$784,651**	**$77,683**	**$784,651**

Explanation of Budget Categories

> Data Sender Bundle Revenue represents electronic delivery of clinical results as well as 7 other services for DHIN's 31 data contributors.

> Payer Bundle Revenue represents funding from the various payers for access to the Community Health Record, Event Notification Services, and a Clinical Information Gateway feed — each of which allows for enhanced care management.

> CHR - Viewing by Providers allows provider access to DHIN Community Health Record.

> Encounter Notification Services comprises of revenue derived from Practices as well as Payers/ACO's who do not subscribe to the Payer Bundle.

> Claims Database - Earned Revenue is for revenue received from paying customers and does not include IAPD or State Appropriation Revenue.

> Medicaid FFP (HCCD) and the State Appropriation for HCCD line items provide a continuation of funding support for the HCCD from a CMS IAPD funding source in partnership with DMMA which provides a combination of 90%/10% funding through September 2022.

> Personnel expenditures are for DHIN people-related expenses. DHIN headcount will grow by 1 due with the hiring of a Network Operations team member to meet an aggressive work plan.

> Administration expenses are for non-people related overhead expenses (lease, ITIL training, computer support, supplies, etc.).

> Contractual expenses include HCCD project management and analytics expenses as well as contracted work to meet an aggressive work plan.

> Marketing expenditures are for new product promotion, ongoing website and social media marketing development, and consumer marketing campaigns.

> Ongoing License and Maintenance expenses are related to existing DHIN functionality, including the HCCD.

> New Functions expenses are for expansion of DHIN's connectivity to a national exchange network and development costs for a Consent Registry which will meet ONC Consent Management requirements for Mental Health and Substance Abuse data.

Year To Date Key Variance Explanations

> Payer Bundle revenue is higher than plan due to higher Medicaid enrollments, driven by an extended national state of emergency due to COVID-19.

> Event Notification Services revenue is higher than planned due to the addition of 6 CCHS related practices via the Point Click Care EMR.

> Investment Income is below forecast due to lower equity and bond returns driven by rising rates to offset national inflation, as well as the war in Ukraine.

> State Medicaid FFP (HCCD) and State Appropriation - Overall revenue and corresponding expenses are increasing due to a newly approved IAPD contract which provides funding for 2 new staff members, which is offset in the Personnel budget category.

> Cost Aware / Total Cost of Care Funding — revenue is below plan due to a delay in implementing vendor work until FY23.

> Personnel expenses are higher than planned due to a newly approved IAPD contract which provides funding for 2 new staff members. Expense is offset by higher State Medicaid FFP (HCCD) and State Appropriation revenue.

> Administration expenses are lower than planned due to reduced legal support, computer hardware, people education, and meal expenses.

> Contractual expenses are lower than planned due a delay to FY23 in implementing the ability to view the DHIN CHR using Single Sign On capability with the EPIC EMR environment, lower HCCD analytic and CostAware support from DHIN's principal project management contractor, and lower HITRUST contracting expenses.

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