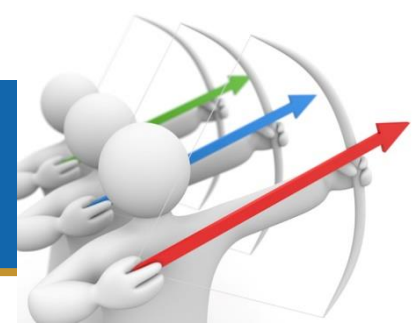


DHIN – Innovative Solutions That Make Health Data Useful



Jan Lee, MD
Chief Executive Officer
12.07.2017

Supporting the Triple Aim: DHIN Services



Core Services

- **Clinical Results Delivery**
 - EHR integration
 - Inbox on provider web portal
 - Autoprint
- **Community Health Record (CHR)**

Longitudinal patient record crossing time, geography, and care settings

NOTE: DHIN is transitioning to new vendor partners for these services

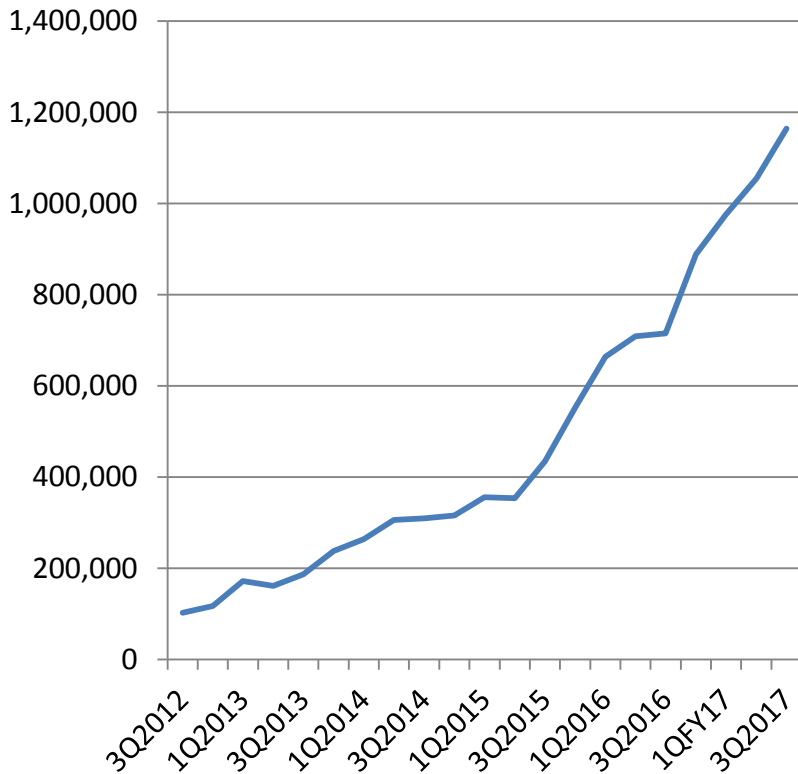
Additional Services (not a complete list)

- Public Health Reporting
(ELR, Syndromic Surveillance, Immunization, newborn hearing screening)
- **Care Summary Exchange**
- Medication History
- Image Sharing
- Specimen location for research
- **Event Notification Service**
- DMOST Registry (in dev.)
- Analytics/Reporting Service
- Fraud Detection
- **Common Provider Scorecard**
- **Patient Portal / PHR**
- **Health Care Claims Database** (in dev.)
Better Communication for Better Healthcare

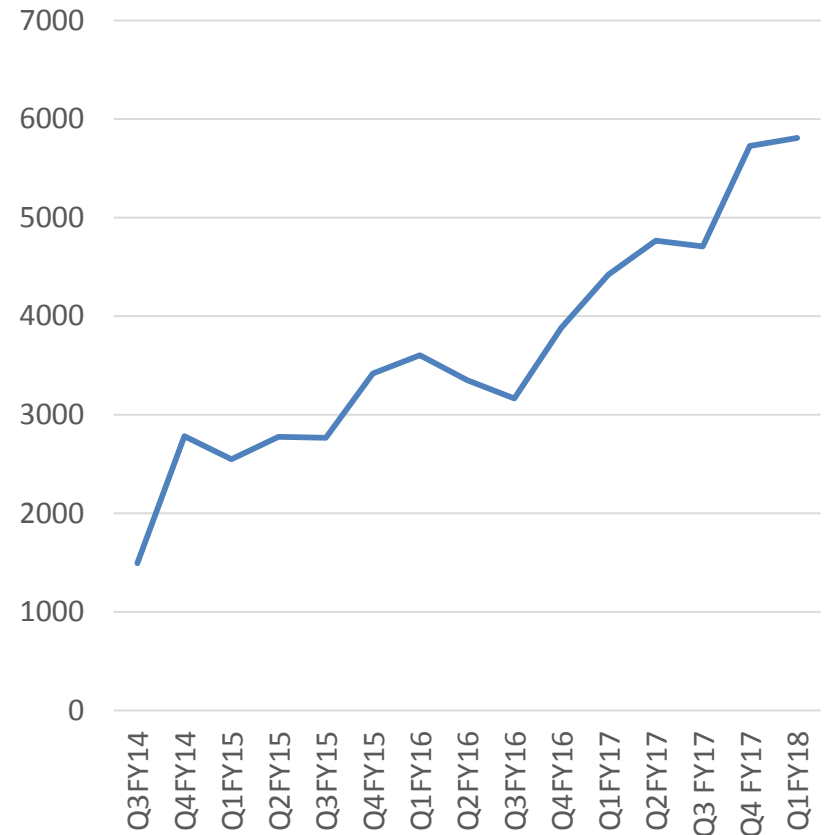
Growing Utilization of the CHR



CHR Chart Views by Ambulatory Entities



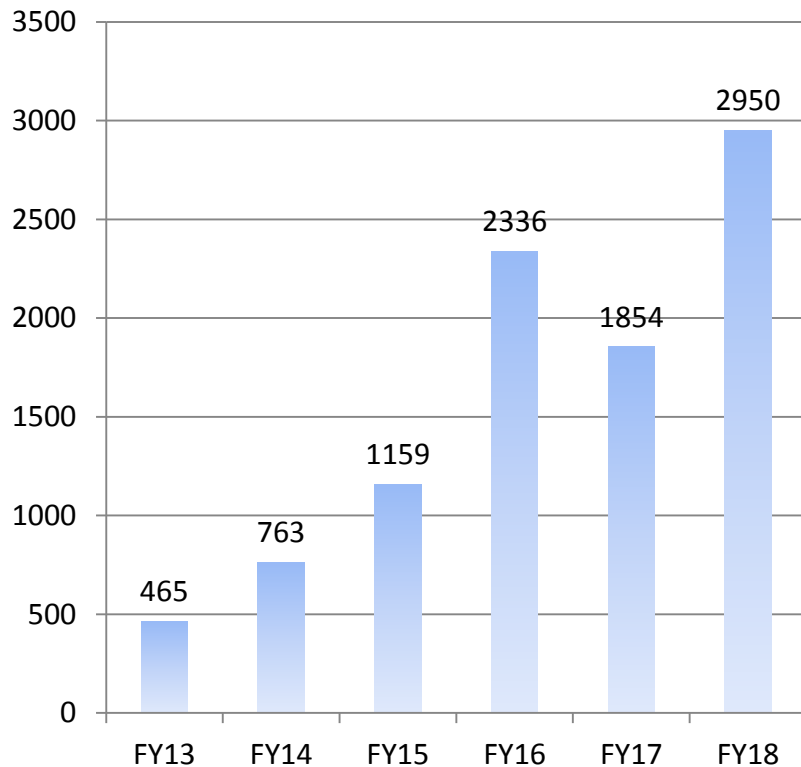
CHR Chart Views in ED Setting



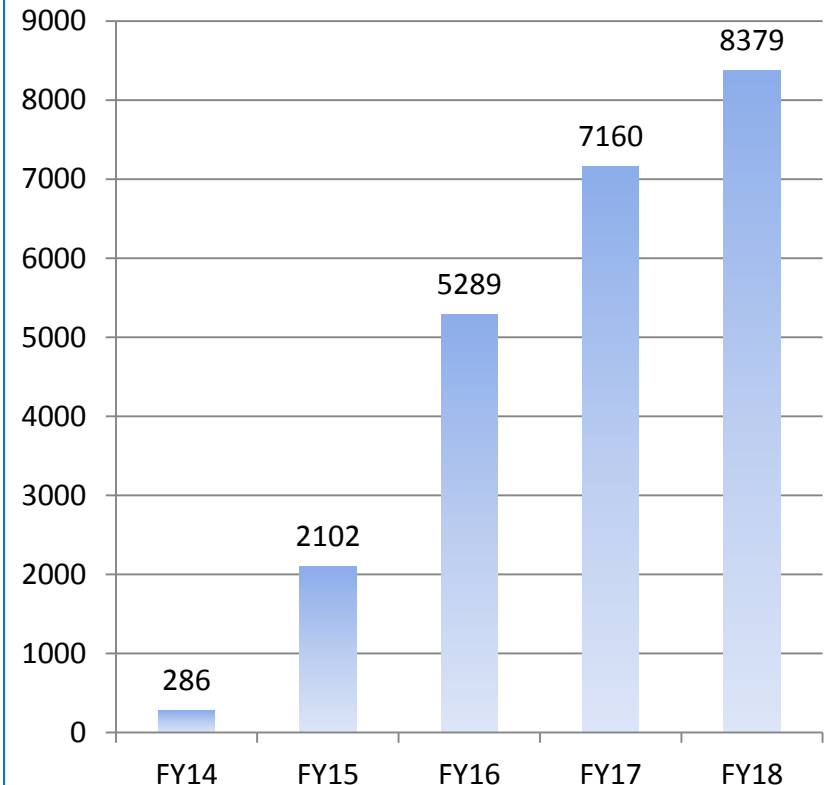
CHR Chart Views: Special Constituencies



SNF Average Monthly CHR Chart Views



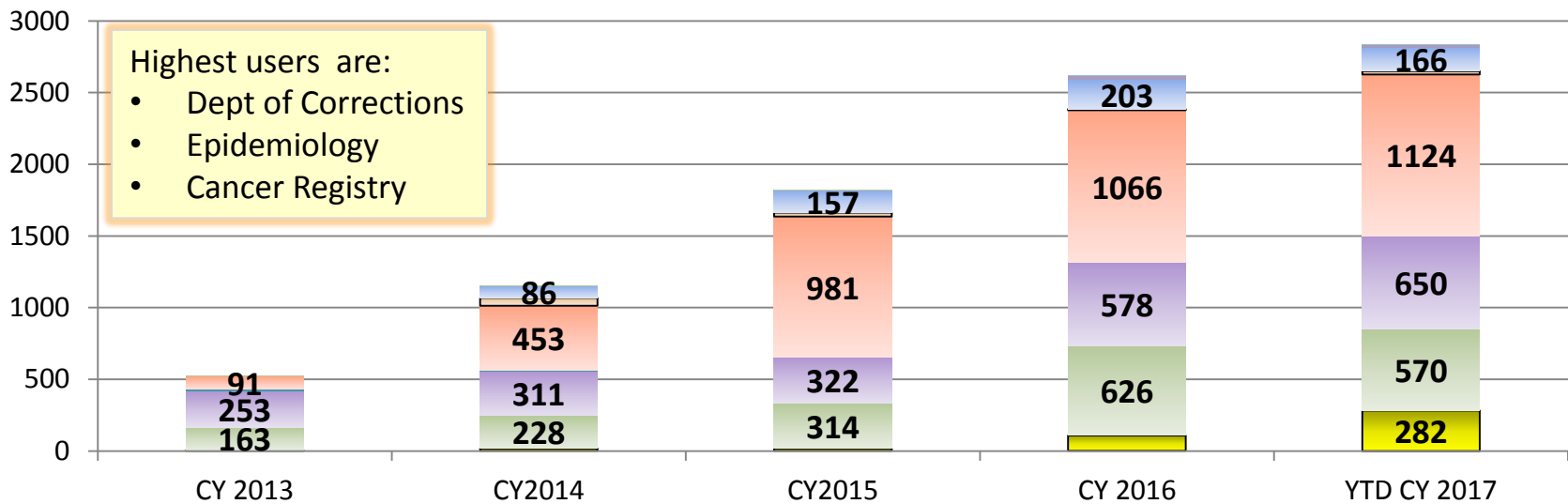
Behavioral Health Average Monthly CHR Chart Views



Utilization of the CHR by State Agencies



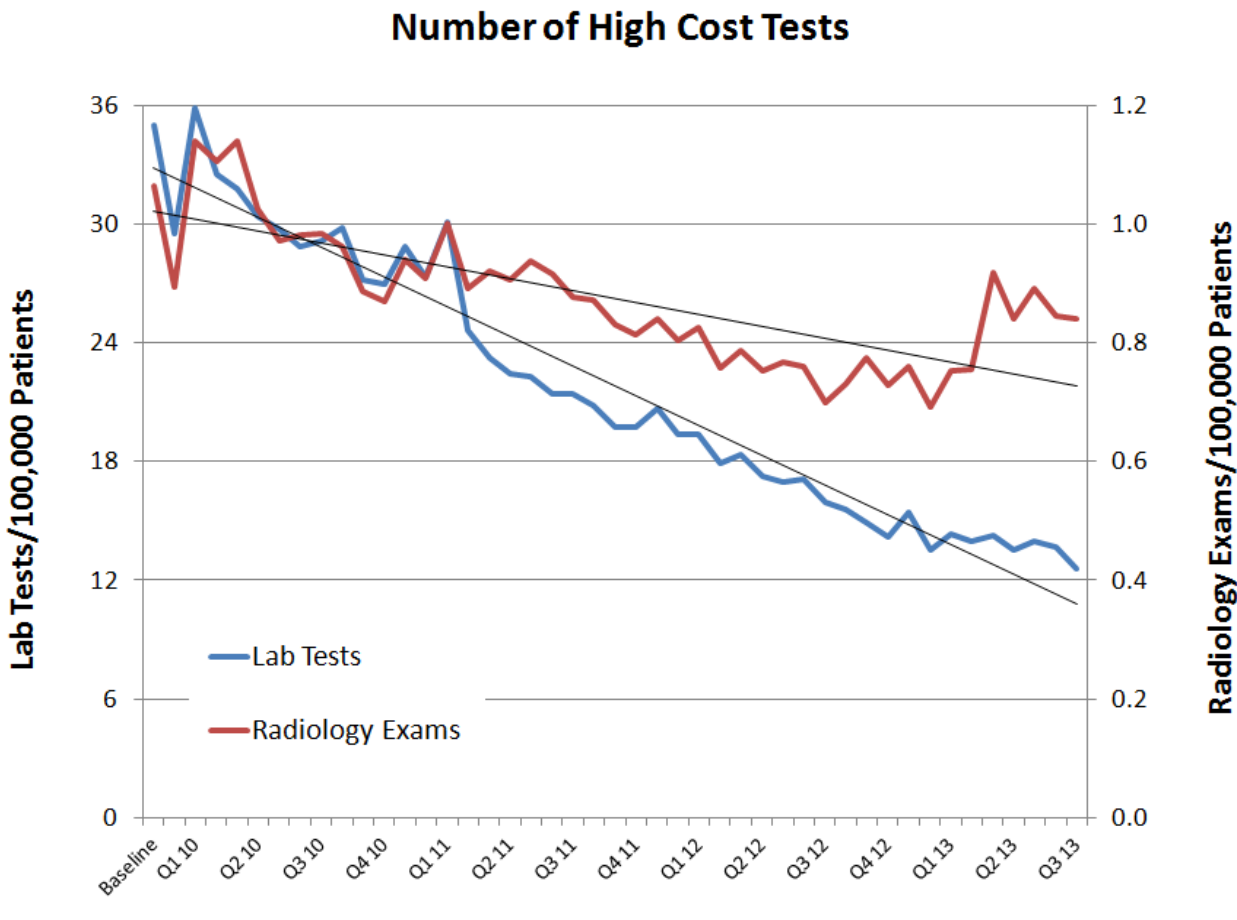
Average Number of Charts Viewed per Month



- Adult Protective Services
- DPH DE Cancer Registry
- DSAMH Community Mental Health Centers
- DSAMH DE Psych Cntr
- DMMA
- OD Fatality Review Comm.

- DPH Communicable Dz Gp
- DPH Epidemiology
- DOC Providers
- Div of Dev Disability Svcs
- DHSS Child Dev Watch

Lowering the Cost of Care



- Nominal cost savings per test: \$250
- Potential annual savings across the state: \$5,979,864

Supporting Care Coordination – Event Notification Service



Supported “events” include:

- Hospital or ED admissions or discharges
- SNF admissions or discharges
- Telehealth encounter
- Walk-in clinic visit
- Receipt of a Care Summary

Configuration Options:

- Events to be notified
- Channel for sending notifications (SFTP drop of CSV file, message into EHR, web portal)

How it Works:

- Subscriber provides roster of patients (or “auto-subscribe”)
- Incoming ADTs are compared to that roster
- A “match” generates a notification that an “event” occurred

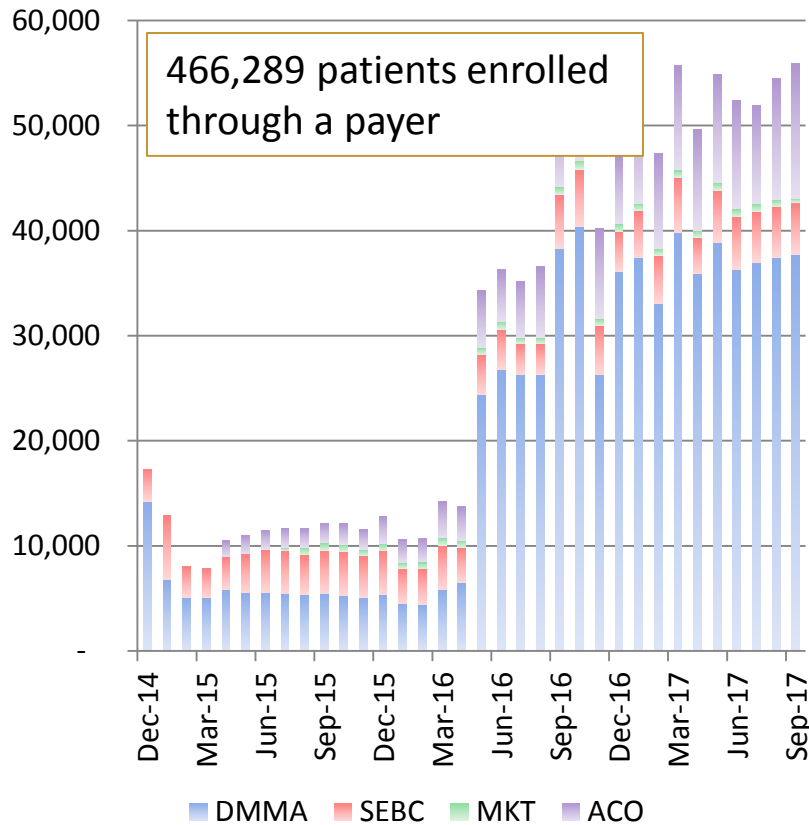
On the horizon:

- Notification of abnormal labs
- Care Summary transmission

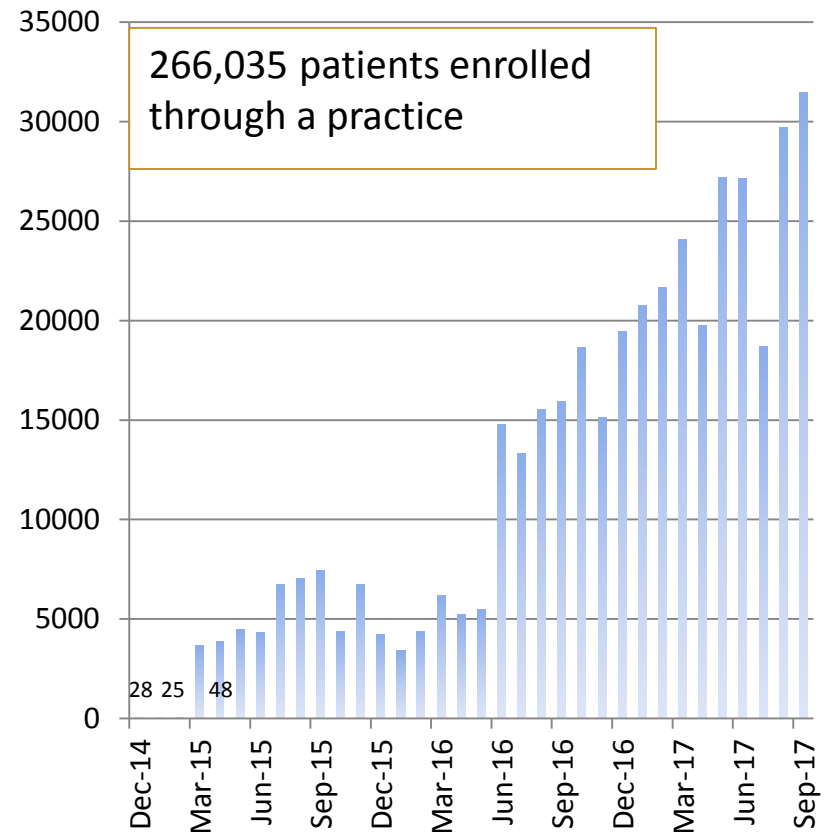
Event Notification –

- 87.3K notifications in Sep 2017
- 2-13 % from out-of-state sources
- 2-8 % from urgent care/walk-

Notifications to Payers



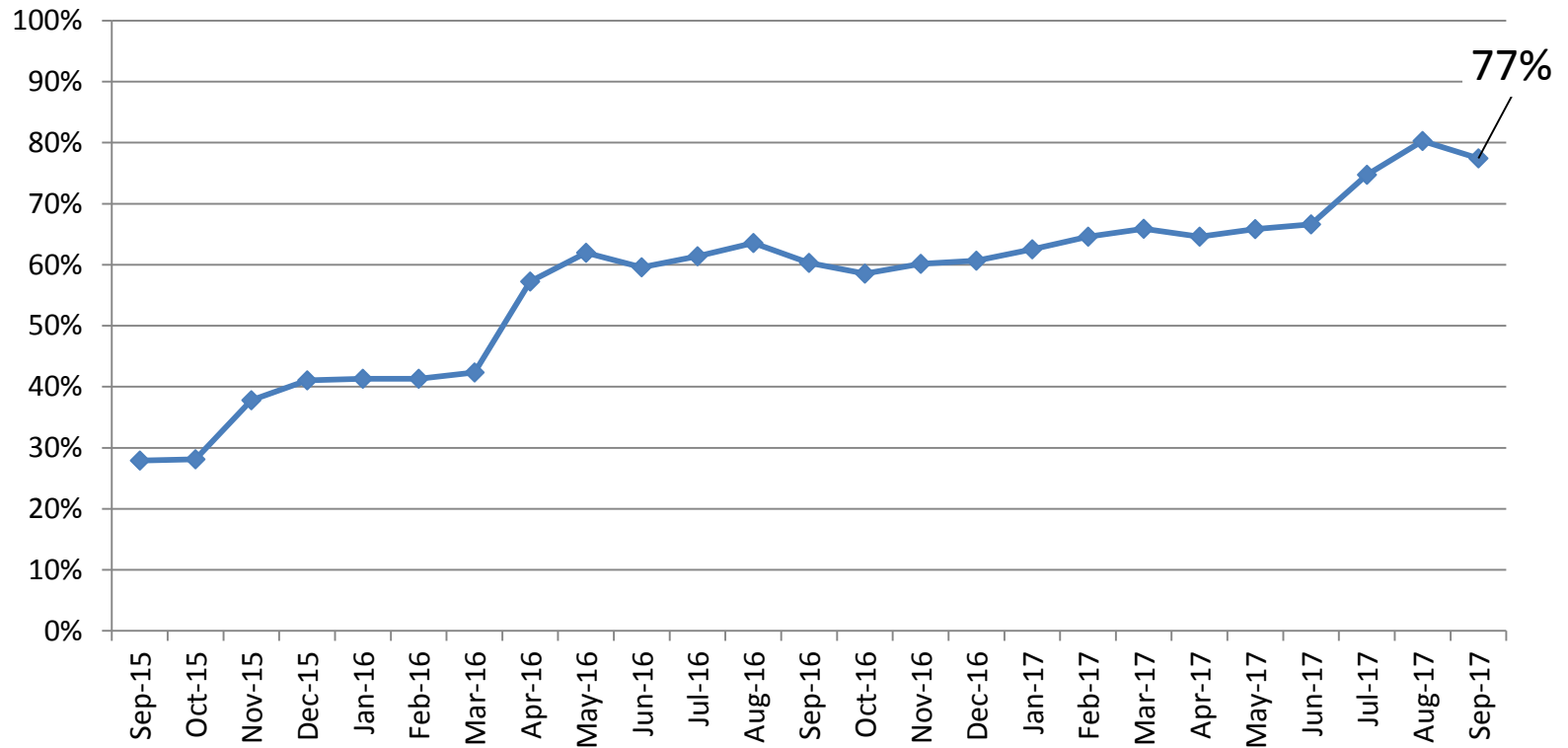
Notification to Practices



Event Notification



% DE Residents Covered by Notification Services



Growth in Data Senders Enriches Both CHR and ENS



“Traditional” Data Senders

- Hospitals – 100%+
- Laboratories -- ~100%
- Imaging Groups -- ~95%

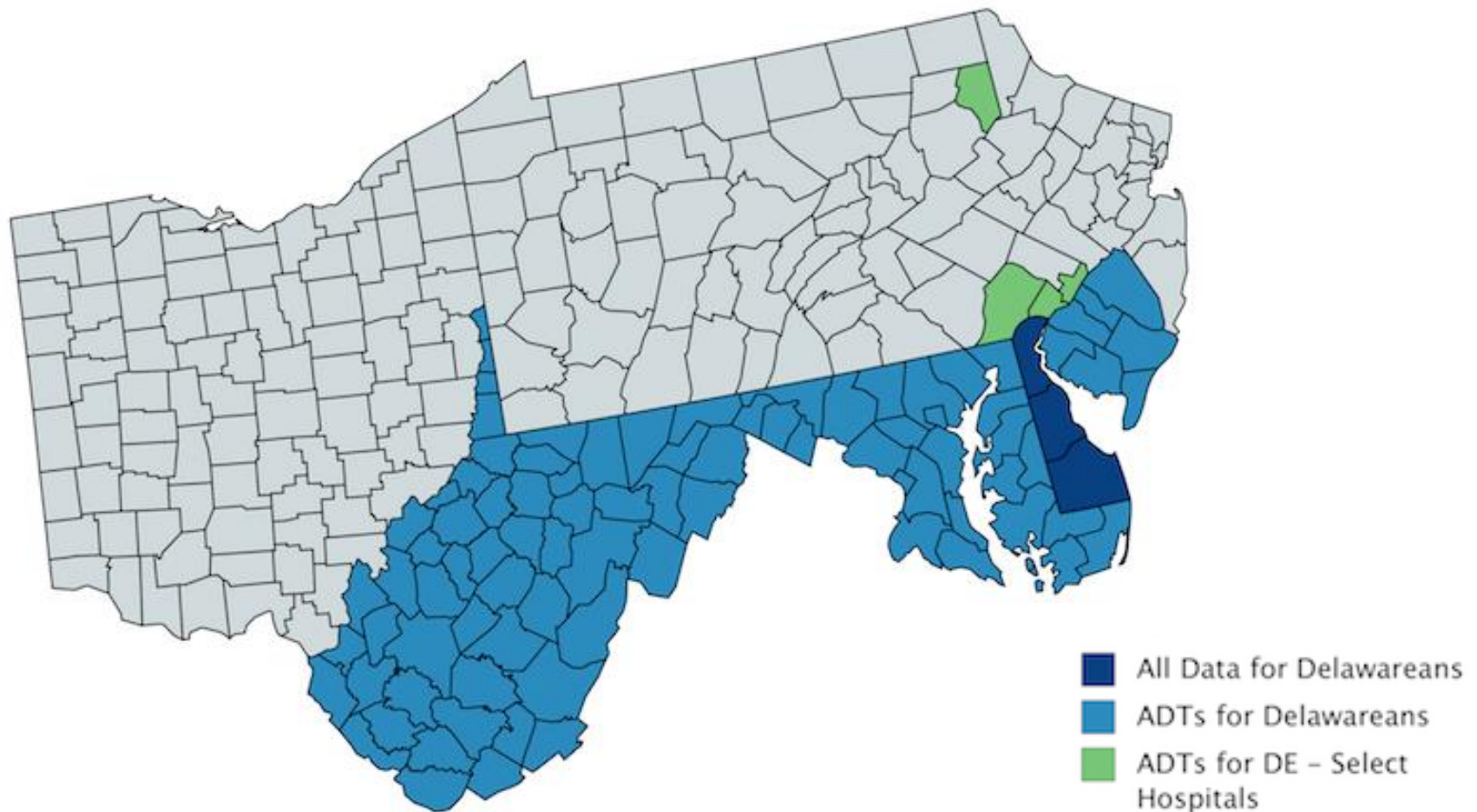
End Users

- Ambulatory/ED/ Inpatient Providers – 100%+
- FHQCs – 100%
- School clinics – 100%
- SNFs – 100%
- Behavioral Health – 47%
- State agencies

Newer Data Senders

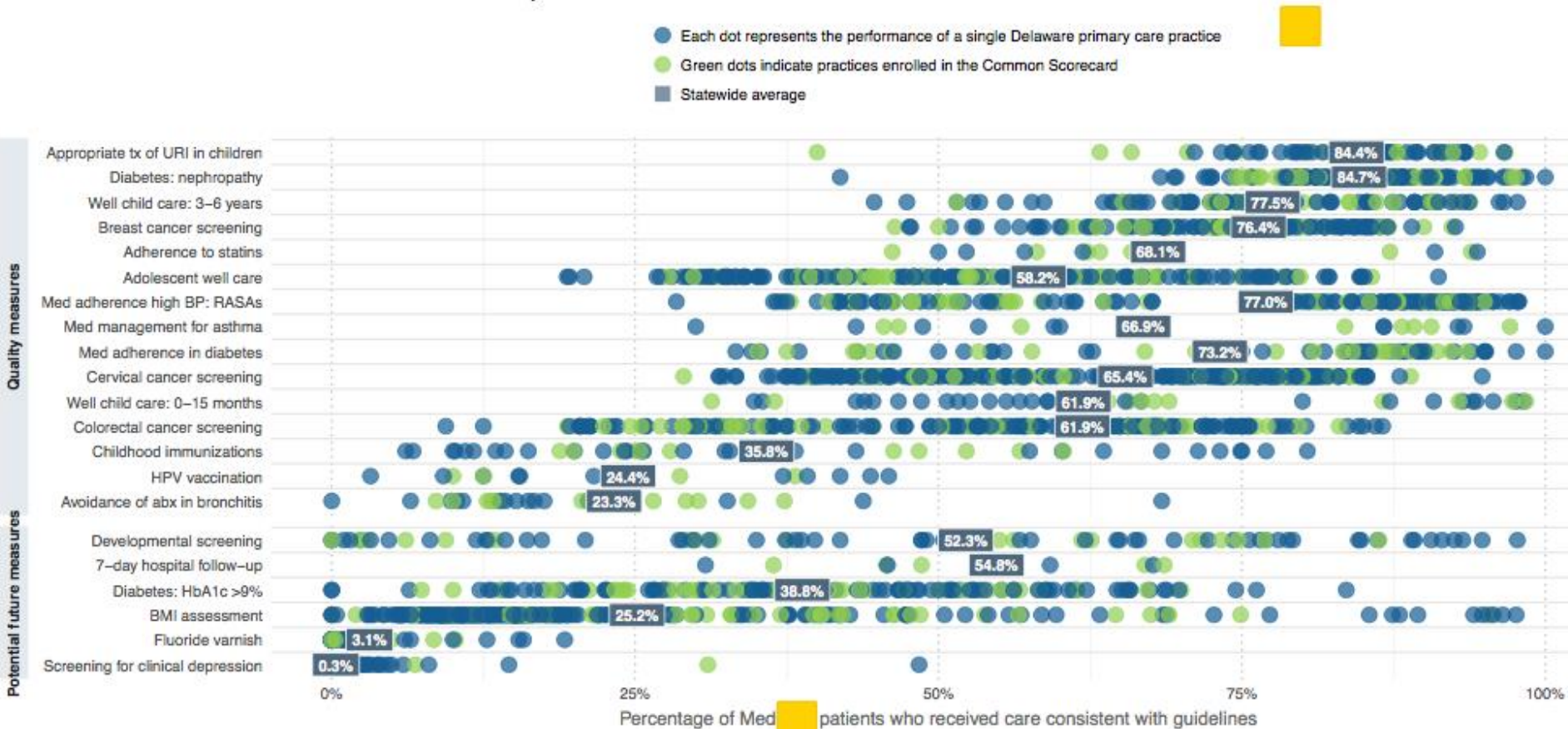
- Walk-in/Urgent Care Clinics -- 7
- Telehealth Providers -- 2
- Ambulatory Practices -- 135
- Nursing Homes -- 5
- Other State HIEs -- 5
- Sleep Center -- 1
- Dialysis Center -- 1

Geographic Sources of DHIN Data



Common Provider Scorecard

Common Scorecard Quality Measures



Health Care Claims Database



Legal Framework

- Jul '16 – SB 238 established HCCD under DHIN
- Oct '17 – Data Collection Reg
- Dec '17 – Data Access Reg posted for 45 days of public comment
 - (Send comments to info@dhin.org)
 - Sub-regulatory companion documents are posted to www.dhin.org
- Expect final Data Access Regulation in March '18
- Earliest date DHIN can expect to begin receiving data is April '18

Parallel Activities

- Staffing plan
- Reporting plan
- Evaluate technology platform and tools (possible procurement)
- Secure Data Sharing and Use Agreement with reporting entities

16 Del. C. Ch 103, Subchapter II



- § 10311(4)(c) The DHIN, assisted by the Department of Health and Social Services and the Delaware Health Care Commission as necessary, shall administer a centralized health-care claims database, known as the "Delaware Health Care Claims Database."
- § 10314(a)(2) The DHIN shall, in consultation with the Delaware Health Care Commission, promulgate rules and regulations regarding the appropriate form and content of an application to receive claims data, providing examples of requests for claims data that will generally be deemed consistent with the purposes of this subchapter.

Consumer Engagement: A Suite of Complementary Services



- Telehealth subscription
- Drs can access CHR
- Televisit summary is sent to the CHR

MDLive

DHIN24seven

- Interactive consumer web site
- Powered by IBM Watson

Health Check Alert

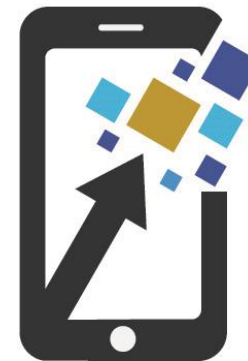
- Full-featured PHR

Health Check Connect

- Notification for consumers --
- Who's looking?
- What's new?

Health Alert

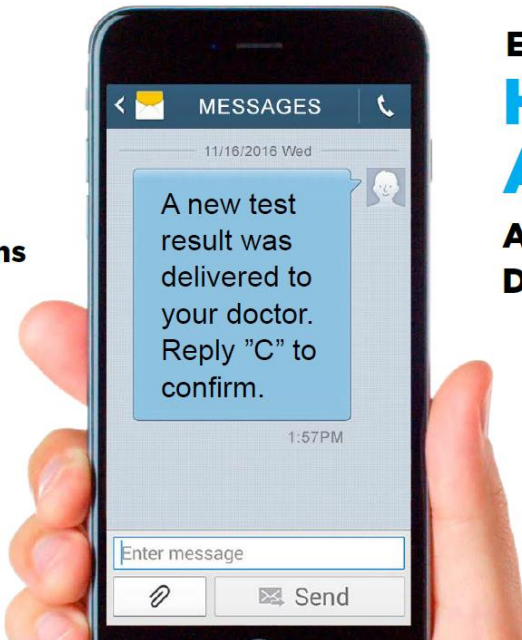
POWERED BY DHIN



PROTECT YOUR HEALTHCARE & YOUR IDENTITY

Did You Know...

**Nearly 2.5 Million Americans
Have Been The Victims of
Healthcare Fraud***



**Enroll Today In
Health Check
Alert**

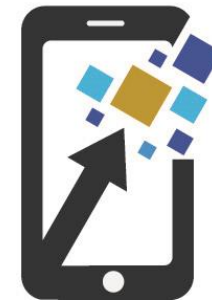
**A FREE Service from
Delaware Medicaid**



8.50 x 11.00 in

Health Connect

POWERED BY DHIN



The screenshot shows a patient dashboard for COLIN CHAPMAN, 46 years old. The interface includes a navigation sidebar on the left with options like My Dashboard, Health Timeline, Health Profile, My Health Files, My Messages, My Appointments, To Do's, Directory Services, My Apps & Devices, and History. The main content area displays various health metrics in a grid:

- Blood Pressure:** 120/80 mm[Hg], recorded Jul 11, 2013.
- Heart Rate:** No Heart Rate recorded.
- Respiratory Rate:** No Respiratory Rate recorded.
- Medications:** Ascriptin Maximum St...
- Weight:** 195 lb 0.00 oz, recorded Jul 11, 2013.
- Temperature:** No Temperature recorded.
- Allergies:** penicillin G benzathine, with a severity slider.
- Lab Results:** Creatine, Whole Blood, 1 mg/dL, recorded May 23, 2013.
- Conditions:** No impairment, with a severity slider.
- Health Files:** 170.314(b)(7)AMB_Pati..., recorded Nov 29, 2016.

Additional features include a search bar for patient education, a settings menu, a user profile dropdown (COLIN), and a health tip from WebMD Health: "Chef Ernest Quansah Tells How He Cured His Type 2 Diabetes". A message on the right indicates "There is no zip code for your address".

Goal for the End State:



Consumers can access all of their health data across geography, time, and care settings through a single login – they see the same data their provider sees

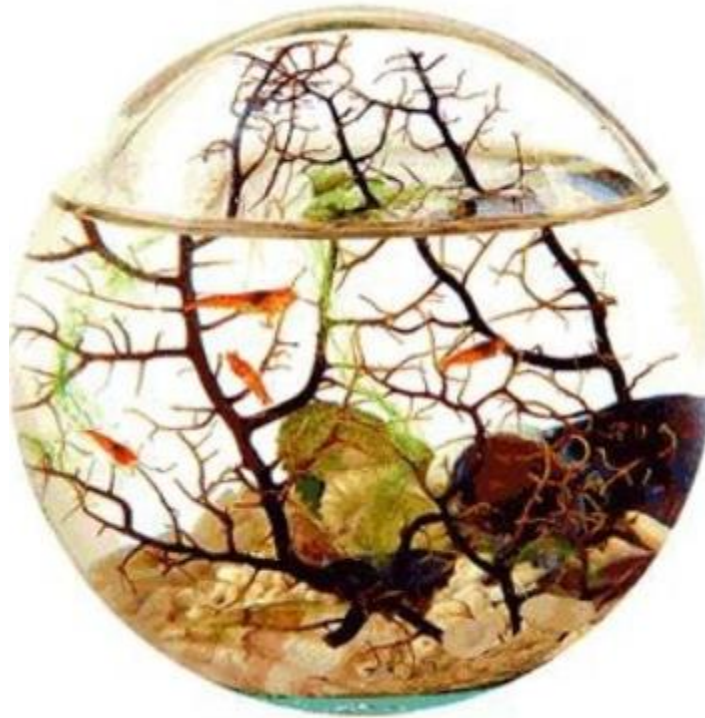
- An existing patient portal can call data from the DHIN data repository via API
- A practice without a portal can use a practice-branded instance of the PHR (must be sending CCDs to DHIN in order for patient to see the practice's data)
- A DHIN-branded instance of the PHR will be provided for patients with no other option

Summary:



- DHIN is fulfilling its statutory purpose
- The value of DHIN grows with increasing participation
- Ideally, all participants should both receive and contribute value
- DHIN is an important tool in achieving the "Triple Aim" of better care, healthier people, and lower costs
- Technology is an enabler, not an end in itself...
- ...But you can't do transformation without technology
- DHIN stands ready to provide additional tools and services as demand dictates and funding enables

A Health Information Ecosystem...



**... in which all participants both
contribute and receive value**