nebraska
healthcare
collaborative

Key Terminology

Data governance – the process of oversight of the use of data focused on privacy and appropriate ethical use of data

Health information exchange (HIE) – a source of vital health information often fed from electronic health records (HealthIT.gov, 2019)

Interoperability – "ability of different information systems, devices and applications ('systems') to access, exchange, integrate and cooperatively use data in a coordinated manner, within and across organizational, regional and national boundaries, to provide timely and seamless portability of information and optimize the health of individuals and populations globally" (HIMSS, 2020)

Population health - the health outcomes of a group of individuals, including the distribution of such outcomes within the group (Kindig & Stoddard, 2003)

Prescription drug monitoring program - electronic database that tracks prescriptions (CDC, 2017)

Social determinants of health - Social determinants of health include factors like socioeconomic status, education, neighborhood and physical environment, employment, and social support networks, as well as access to health care. Addressing social determinants of health is important for improving health and reducing longstanding disparities in health and health care. (Artiga, & Hinton, 2018).

nebraska
healthcare
collaborative

First, let's talk about CyncHealth

CyncHealth will empower healthier communities through the steadfast pursuit of:

- **ADVANCING INTEROPERABILITY**

- **BRINGING DATA DEMOCRATIZATION TO CONSUMERS AND PROVIDERS**

- **CULTIVATING ECONOMIC VALUE**

- **DELIVERING A POPULATION HEALTH UTILITY**

Latest Accomplishments

- Passing of LB 1183
  - Establishes HIT Board – PDMP data
- NEHII and IHIN join forces to become regional HIE
- Transformed to CyncHealth
- Expanded team (45 of 67 employees hired in the last year)
- Recognized as QCDR
- Unite Nebraska, community data exchange, with expansion to other states (Iowa, Missouri, South Dakota, North Dakota, Kansas, and Minnesota)

nebraska
healthcare
collaborative

Cync Health

- Data sharing to NEHII (HIE)
- Prescription Drug Monitoring Program (PDMP)
- Public health-supported initiatives
- Other DHHS-supported initiatives
- Opt-in/opt-out and consent management
- Hospital/provider onboarding
- User provisioning
- Training and education on HIE and PDMP
- Consumer/patient access

nebraska healthcare collaborative

- Academic affiliate
- Other non-data sharing (i.e. QIN-QIOs)
- Research requests
- Quality improvement requests
- Measure development
- CMMI alignment
- Competitive grant partnerships
- Health data science competency

Cync Health Shared Services

Standard Participant Offering
Available to NEHII data-sharing participants (included in subscription fees)

- Longitudinal health record: User interface to clinical and claims data
- Applications powered by aggregate data (care management, event notification, ePrescribing)
- Analytics powered by aggregate data (dashboard development, data engineering, medication analytics)
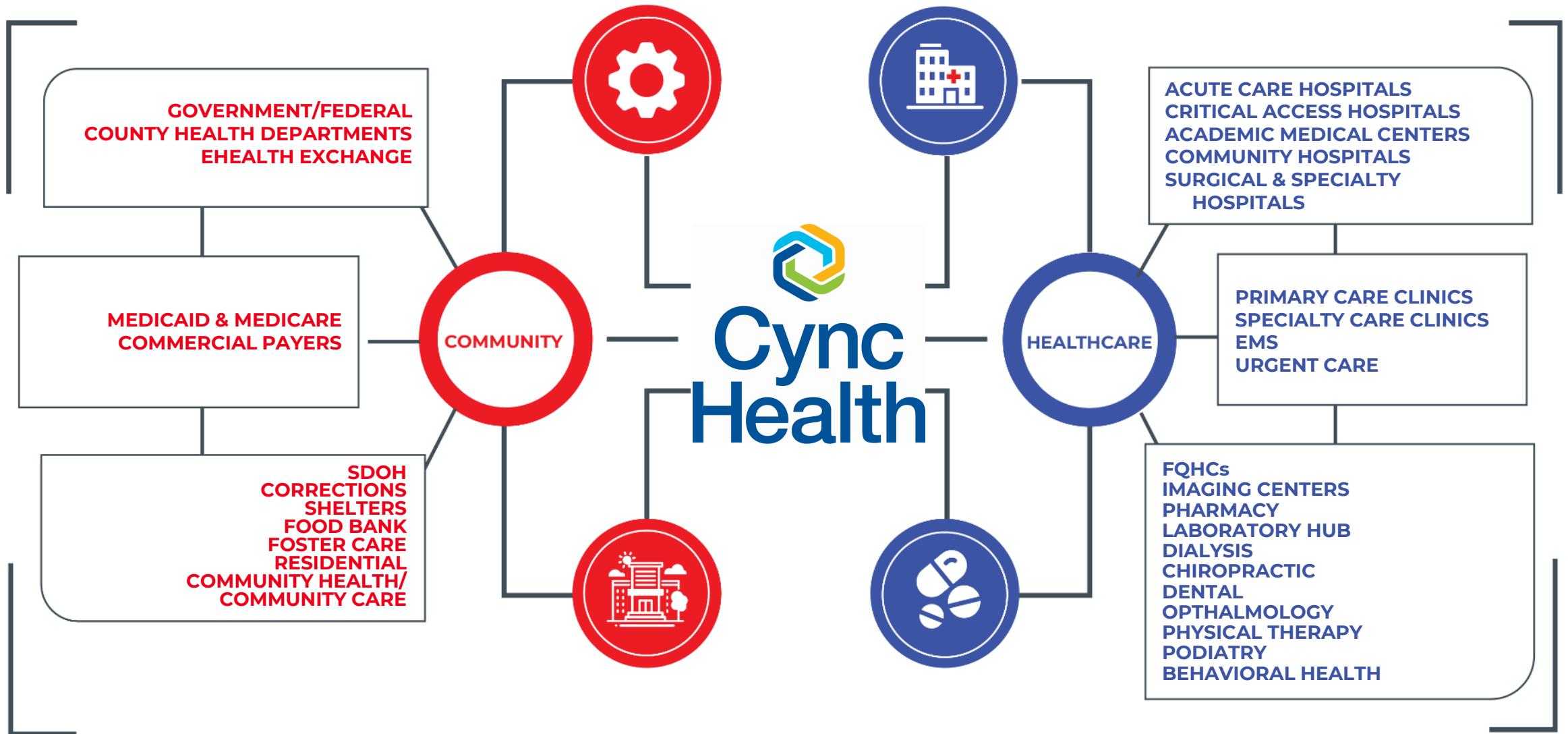- Other services (workflow integration, reporting services)

Premium
Available at an additional fee

- Risk stratification (PMPY)
- Predictive modeling
- Ad hoc/custom reports
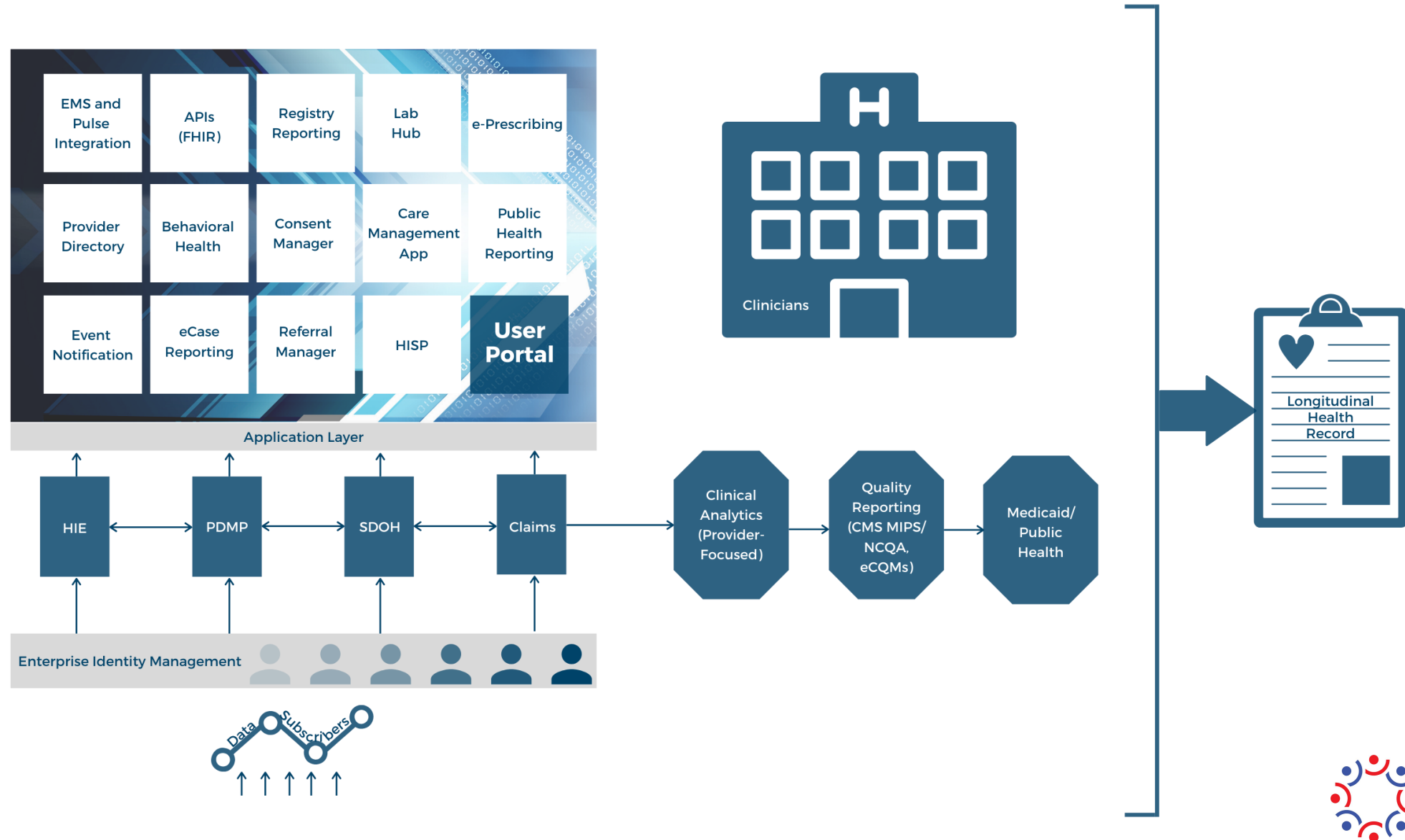
nehii foundation

- Focus on community engagement and philanthropic interests
- Enabler of NEHII Inc. and the Nebraska Healthcare Collaborative

Community data points

GOVERNMENT/FEDERAL
COUNTY HEALTH DEPARTMENTS
EHEALTH EXCHANGE

MEDICAID & MEDICARE
COMMERCIAL PAYERS

SDOH
CORRECTIONS
SHELTERS
FOOD BANK
FOSTER CARE
RESIDENTIAL
COMMUNITY HEALTH/
COMMUNITY CARE

COMMUNITY

Cync Health

HEALTHCARE

ACUTE CARE HOSPITALS
CRITICAL ACCESS HOSPITALS
ACADEMIC MEDICAL CENTERS
COMMUNITY HOSPITALS
SURGICAL & SPECIALTY
HOSPITALS

PRIMARY CARE CLINICS
SPECIALTY CARE CLINICS
EMS
URGENT CARE

FQHCs
IMAGING CENTERS
PHARMACY
LABORATORY HUB
DIALYSIS
CHIROPRACTIC
DENTAL
OPTHALMOLOGY
PHYSICAL THERAPY
PODIATRY
BEHAVIORAL HEALTH

nebraska
healthcare
collaborative

Person-centered Interoperability: Reducing the Burden of HIT

EMS and Pulse Integration	APIs (FHIR)	Registry Reporting	Lab Hub	e-Prescribing
Provider Directory	Behavioral Health	Consent Manager	Care Management App	Public Health Reporting
Event Notification	eCase Reporting	Referral Manager	HISP	**User Portal**

Application Layer

HIE ↔ PDMP ↔ SDOH ↔ Claims → Clinical Analytics (Provider-Focused) → Quality Reporting (CMS MIPS/ NCQA, eCQMs) → Medicaid/ Public Health

Enterprise Identity Management

Data Subscribers

Clinicians

Longitudinal Health Record

nebraska healthcare collaborative

1.13.20

HIE

- HIE includes data from facilities with Participant Agreement or Business Associates Agreement with NEHII.
- Includes the following data elements - demographics, procedures, vitals & lab orders/results, diagnoses/problem list, allergies, encounters (Inpatient, Emergency, Outpatient, etc.)

PDMP

- A direct data feed of 100% of dispensed prescriptions from all pharmacies in Nebraska, administered through RxGov
- Most comprehensive medication reconciliation tool

Analytics

- Repository of data collected in HIE and medication platforms
- Integration with care management platform
- Opportunity to perform quality improvement and research for policy recommendations
- Quality metrics related to value-based payments

nebraska healthcare collaborative

Equality

Equity

© 2017 Robert Wood Johnson Foundation. May be reproduced with attribution.

Social Determinants of Health

nebraska healthcare collaborative

Who is the Collaborative?

Vision: To transform the health of our population.

Mission: To facilitate cross-sector collaborations of diverse stakeholders optimizing health care delivery through teams that study and propose solutions to improve population health.

Tagline: Cultivating collaborative, informed, and creative solutions for health

nebraska healthcare collaborative
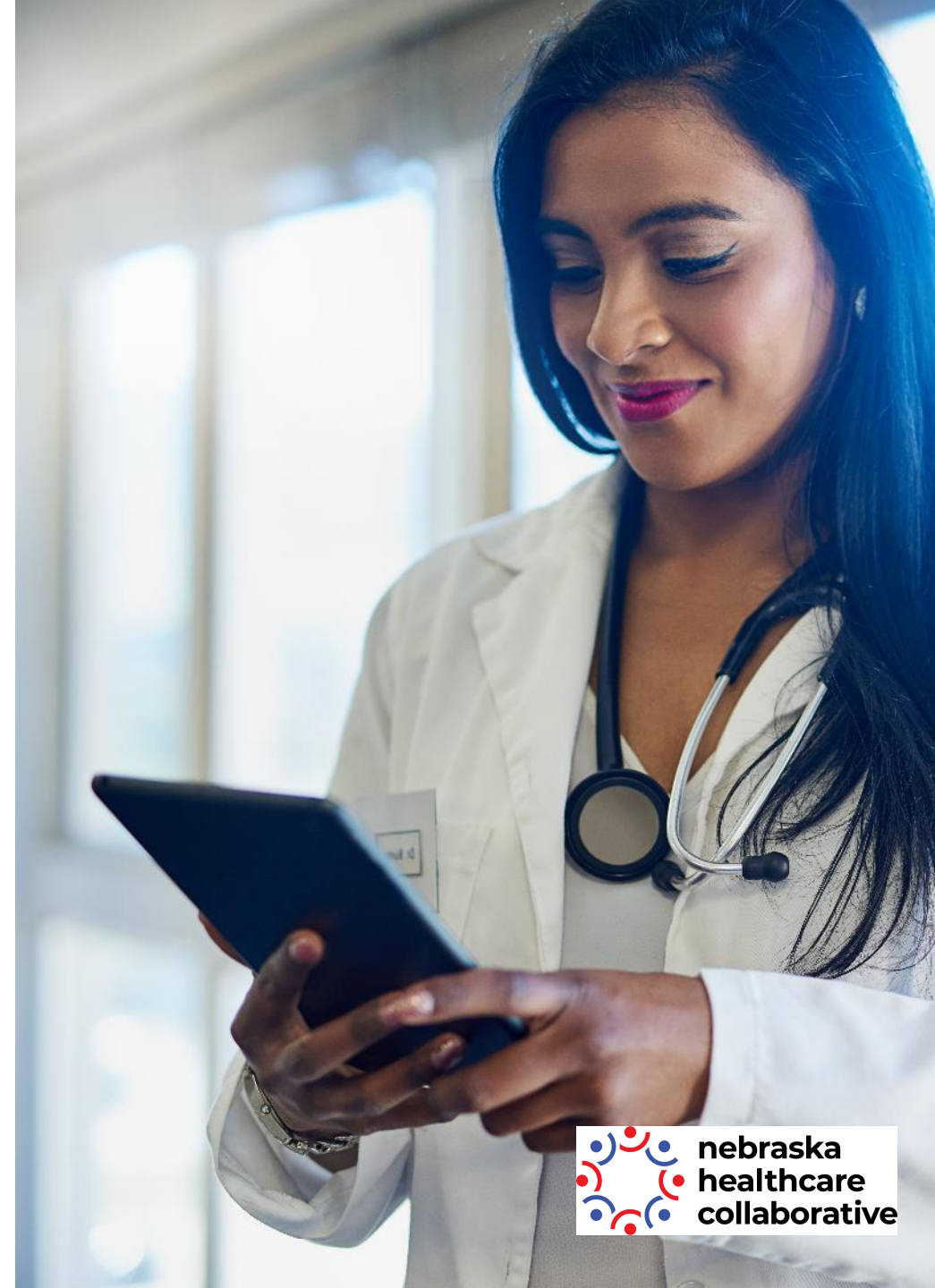
Our Values

Collaboration is our core – Solving complex problems and societal issues requires collaboration across sectors and industries. No one can do it alone, and we engage our collaborators to tackle challenges and develop solutions related to population health.

Diverse perspectives solve complex problems – Complex problems have many potential solutions, and we value diverse expertise to generate questions and solutions that drive us towards clarity and enhancements.

Data drives decisions – Data exists in many forms and from many sources in today's healthcare landscape. Addressing current challenges requires turning disparate data into actionable information. We design and implement projects using data from comprehensive and reliable data sources that inform our decisions in population health.

Learning and teaching focused – The current and future workforce needs assistance managing the multiple complexities of health data to improve cost, quality and experience of patients and providers. We support collaborations that promote learning and teaching across sectors both for teams and individuals to transform health care education and delivery.

nebraska
healthcare
collaborative

Our Team

Ann Polich, MD, MBA, MPH
Chief Medical Officer
Executive Director, Nebraska Healthcare
Collaborative & NEHII Foundation

Tom Frette, MA
Chief Development Officer
Vice President, Development

Joy Doll, OTD, OTR/L, FNAP
Chief Academic Program Officer
Vice President, Academic Programs

Larra Petersen-Lukenda, M.A., Ph.D.
Chief Population Health Officer
Vice President, Population Health

Jossy Rogers, MPA
Director of Population Health

Alissa Wood, BSN, RN
Population Health Advisor

Laurie O'Byrne, MHA, BSN
Population Health Advisor

Cindy Arnold, MSN, RN
Senior Performance Measure
Specialist

Emily Pritchard
Technical Writer

Board of Directors

- **Michael White, MD, Chair**
  Chief Medical Officer, Valleywise Health

- **Jeanette Wojtalewicz, Secretary**
  Senior Vice President & Chief Financial Officer, CHI Health

- **Stephanie Daubert, Treasurer**
  Chief Financial Officer, Nebraska Medicine

- **Tim Meyers**
  President, WellCare of Nebraska

- **Susan Fritz, PhD**
  Executive Vice President & Provost, University of Nebraska

- **Mardell Wilson, EdD**
  Provost, Creighton University

- **Jaime Bland, DNP, RN**
  Chief Executive Officer, Nebraska Health Information Initiative

- **Angeline Larson, MBA**
  Chief Operating Officer, Charles Drew Health Center

- **Lindsey Rai Kortan**
  Chief Executive Officer, Ronald McDonald House Charities in Omaha

- **Scott Ptacnik**
  President, CHI Health Partner

Our Strategic Goals

ENDOWED CHAIRS

LEARNER EXPERIENCES

PROJECTS THAT INFORM POPULATION HEALTH

nebraska healthcare collaborative
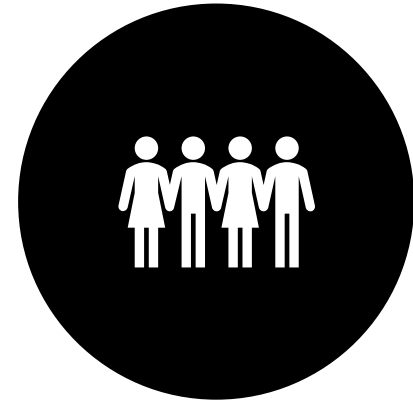
Intent of Chairs

Endowed Chairs

- Please share!

- The University of Nebraska at Kearney is hiring for the newly formed Cyber Systems Department at the University of Nebraska at Kearney (UNK). UNK is seeking applications from highly qualified candidates for a newly created position entitled the [Nebraska Healthcare Collaborative Chair of Population Health.](#)

- Creighton University is hiring this endowed position [Nebraska Health Information Initiative (NEHII) Population Health Endowed Chair and Executive Director, Center for Interprofessional Practice, Education, and Research](#).

nebraska
healthcare
collaborative

Learner experiences

Focus on workforce development

An informed workforce on health data
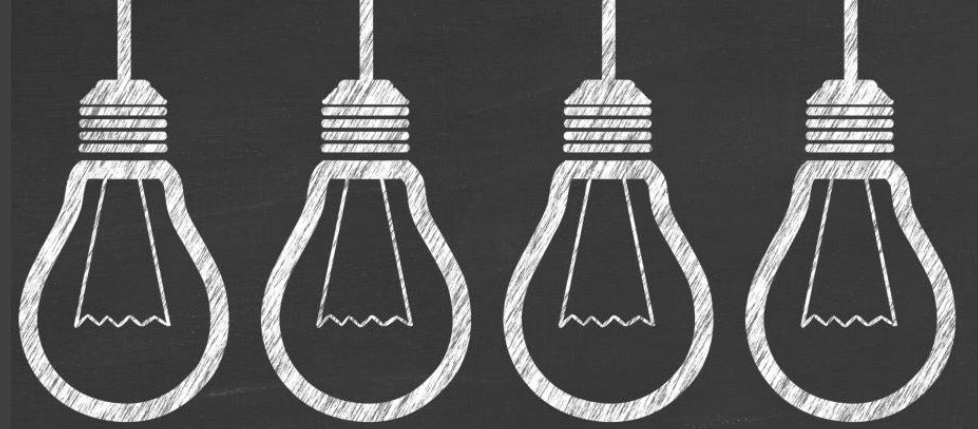
Learner Experiences

- Clinical learning experiences
- Creighton University, Clarkson College, Methodist College, Metropolitan Community College, Midlands University, University of Nebraska Kearney, University of Nebraska Omaha, Western Nebraska Community College
- Member of Omaha STEM Ecosystem
- Partner with Code for Nebraska
- Future state: internships; potential data competition

nebraska
healthcare
collaborative

Lifelong Learning

- Curriculum development including continuing education

- Guest lectures

- Presentations

- Consulting services

- Plans to develop a Fellow/Scholar program

Projects that Inform Population Health

Why Partner with NEHII?

Research with electronic health records has demonstrated the following (Rudin, et al., 2020):

Improved clinical decision making

Increased and improved collaboration among health care teams
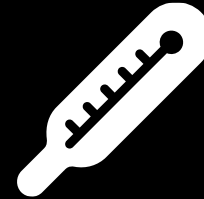
Automation which helps with burden reduction

Enhanced triaging of care

nebraska healthcare collaborative

Projects Fall into 3 Categories

RESEARCH

QUALITY
IMPROVEMENT

PROGRAM
EVALUATION

nebraska
healthcare
collaborative

What is research?

A research project seeks to answer a defined question with rigor and methods established through best practices in scientific inquiry.

Research projects with NEHII typically use aggregate, limited data sets from NEHII's population health utilities including the health information exchange (HIE), prescription drug monitoring program (PDMP) and social determinants of health (SDOH) platform.

What is quality improvement?

A quality improvement (QI) project focuses on an organization's current performance in a specific area using an attribution or eligibility profile and intended to lead to improved health care delivery or positive impact on the health of patients or populations in that organization.
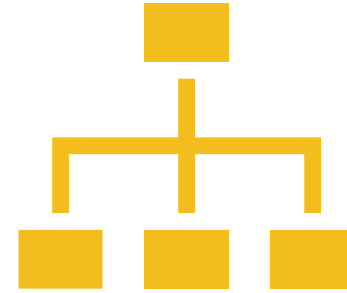
QI projects follow a plan, study, do, act process (i.e. PDSA cycle).
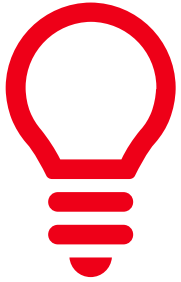
What is program evaluation?

Program evaluation is a process to demonstrate the outcomes and effectiveness of a program.

The format and approach of program evaluation varies based on the type of program.

What kind of project can I do?

First, choosing the project type for your idea is important

The Nebraska Healthcare Collaborative is here to help!

Set up a time to chat through your idea to see if it is a fit

HIE Data – what you need to know

HIE includes data from facilities with Participant Agreement or Business Associates Agreement with NEHII.

- General Acute Care Hospitals
- Critical Access Hospitals
- Children's Hospitals
- Specialty Hospitals
- Clinics and Ambulatory Care Setting
- Long-Term Post-Acute Care Facilities

Data elements:

- Patient Demographics
- Procedures
- Vitals & Lab Orders/Results
- Diagnoses/Problem List
- Allergies
- Encounters (Inpatient, Emergency, Outpatient, etc.)

Data use must follow NEHII Policy & Procedures, Data Governance, Data Use Agreements

PDMP Data – what you need to know

- Dispensed prescription information reported by pharmacies
- Types of drugs
    - Controlled substances beginning January 1, 2017
    - Noncontrolled substances beginning January 1, 2018
- Includes data on
    - Patient
    - Pharmacy
    - Prescriber
    - Prescription (i.e. dosing, name, etc.)
- Data governance process
    - Projects must be de-identified from patient, pharmacy and prescriber
    - Multi-phase data governance process
    - Data use must follow NEHII Policy & Procedures, Data Governance, Data Use Agreements

SDOH Data – what you need to know

- The SDOH platform is being built and rolled out beginning September 2020. It includes:
  - client records on SDOH and community-based organizations who meet SDOH needs
  - data from facilities with Participant Agreement or Business Associates Agreement with NEHII.
- Data elements
  - SDOH screener results
  - Number of specific SDOH barriers per type and sub type of barrier
  - Number of referrals made by each user type or group of users
  - Number of referrals made to each community resource
  - Number of referrals each community resource accepted, rejected, or referred on to other community resources
  - Patient satisfaction
  - User satisfaction (i.e. community-based organizations, care coordinators, etc.)
  - Number of referrals closed, closed loop referral system
- Data use must follow NEHII Policy & Procedures, Data Governance, Data Use Agreements

What to know about health data....

- De-identified data - data set which has identifying information removed and is often considered low risk by data governance and an institutional review board.

- Limited data set - data set that is stripped of certain direct identifiers specified in the HIPAA Privacy Rule. A limited data set may be disclosed to an outside party without a patient's authorization only if the purpose of the disclosure is for research, public health, or health care operations purposes and the person or entity receiving the information signs a data use agreement (DUA) with the covered entity or its business associate.

Project Eligibility

- All project proposals must align with the values and mission of NEHII. The individual or team submitting a project must be:
  - A Nebraska Health Information Initiative participant
  - An employee and/or student of a community-based organization, academic institution and/or health system whose mission aligns with the mission of NEHII

Project Cost

NHC does not charge for health information data from any of the platforms

Data extraction and statistical analysis has cost associations

NHC offers an hourly rate for services

Project Review and Approval Process

Defining Data Governance

- **Data Governance Committee**: This committee reviews projects that require access to any NEHII repository data. Individuals also submit their Data Request Form to an Executive Steering Committee if the request includes DHHS data and the HIT Board if all data requested is exclusively in the HIE. Collectively the committees review business, legal, and technology project components and will provide feedback on the request or approve for use.

- **Health Information Technology (HIT) Board**: This board will review a project that requires the use of DHHS data. They will submit their review projects using the Data Request Form and processes congruent with the Data Governance Committee. In addition to approval of DHHS data requests, the HIT Board may issue any policies related to projects and CyncHealth data governance.

Exemplar Project

- Medical Respite for the Homeless
  - Health and Housing Coalition
  - Funded by CHI Mission & Ministry Grant
  - Partners: CHI Health, Wellbeing Partners, MAACH
  - Focus on health status of homeless to establish need for medical respite in greater Omaha

Exemplar Project

- Financial First Program
  - Financial Hope Collaborative
  - Longitudinal study on health status of low-income single mothers after receiving Financial First training

Exemplar Project

- A critical examination of the incidence of Neonatal Opioid Exposure in Rural Nebraska

- Description: This team hypothesizes that the rural Nebraska incidence of intrauterine opioid and substances of abuse exposure is under recognized and therefore treatment opportunities are under resourced for the population. In Aim 1 of this project we will use innovative methods with NEHII (Nebraska's Health Information Initiative) to enumerate opioid prescriptions to women during pregnancy and compare those rates with local diagnoses of NOWS. After identification of highest risk rural areas, we will provide one year of evidence based educational interventions (using Model of Improvement methodology) to those areas through the Nebraska Perinatal Quality Improvement Collaborative (NPQIC). At the end of the study we will again survey statewide prescription and diagnosis data to evaluate rates of opioid prescriptions and diagnoses of NOWS in control and intervention areas. A successful intervention will be measured as decreased rates of prescriptions and/or increased rates of diagnoses.
- Funding Source: Rural Drug Addiction Research (RDAR) pilot funding through an NIH grant

FAQs

- Who do we reach out to with questions?
  - Contact us at anytime at collaborative@nehii.org
- What do we do if we are not sure our project is a fit with NEHII?
  - Set up a consultation meeting to discuss your project with our team
- How do we know where our project is in the review process?
  - Each project will be tracked. Contact our team to find out the status.
- Where do we find information on project requirements?
  - The Project Manual is the best resource for this information.

Contact us!

Website: https://nehii.org/about/nebraska-healthcare-collaborative/

Email: Collaborative@nehii.org

nebraska
healthcare
collaborative