KPININJA

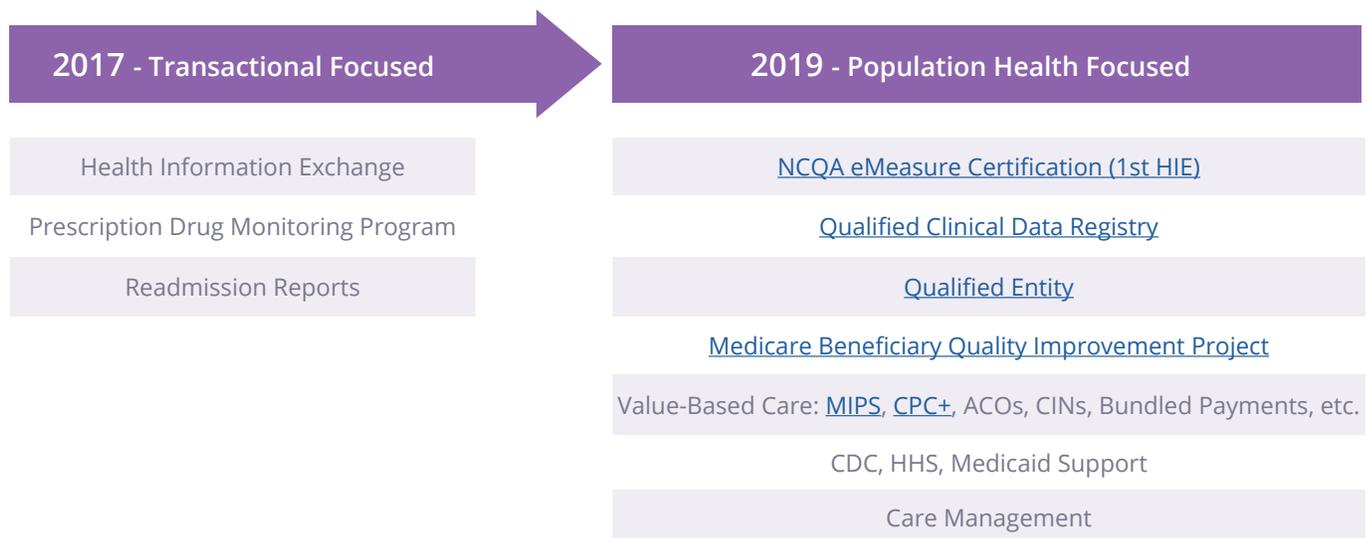# NEHII & KPI Ninja: Building a High-Performance Integrated Population Health Infrastructure

The Nebraska Health Information Initiative (NEHII) has undergone radical transformation in the last 18 months, from a data exchange platform to an organization that is sought out for its ability to provide population health analytics that support value-based care.

Industry trends speak for themselves. Healthcare payments tied to value-based care are up to 34% from 23% in 2015. The Centers for Medicare & Medicaid Innovation Center announced five new payment models to drive value in the primary care setting. With healthcare transitioning from fee-for-service to value-based care, there is an increasing demand from providers and payers on the Health Information Exchanges (HIEs) to support them around the different value-based initiatives. Building a comprehensive population health infrastructure to support the diverse needs of its members require expertise around several value-based programs and a persistent focus on improving data quality. The question is not whether HIEs can support this work but how can HIEs get better and faster at transitioning from transactional data intermediaries to population health utilities?

## TRANSACTIONAL YESTERDAY, POPULATION HEALTH TODAY

Few HIEs can match NEHII's commitment to delivering value. Located in Omaha, Nebraska, it is one of the most advanced HIEs and continues to pioneer new value-add services. NEHII seeks to be an innovator in enabling healthier communities through the exchange of health information. NEHII has embarked on an ambitious journey to change the way it delivers value to member organizations. Below shows a high-level summary of their transition to value-based care.

2017 - Transactional Focused	2019 - Population Health Focused
Health Information Exchange	NCQA eMeasure Certification (1st HIE)
Prescription Drug Monitoring Program	Qualified Clinical Data Registry
Readmission Reports	Qualified Entity
	Medicare Beneficiary Quality Improvement Project
	Value-Based Care: MIPS, CPC+, ACOs, CINs, Bundled Payments, etc.
	CDC, HHS, Medicaid Support
	Care Management

This transformation would not have happened without a bold vision, leadership commitment and state-level partnerships with Nebraska Department of Health and Human Services Public Health and Medicaid & Long-Term Care. NEHII sought to characterize the different use cases, with a strong focus on identifying and tackling pain points related to health information use. As one of the most comprehensive HIEs, NEHII had to partner with a technology company that could assist in converting data into wisdom. NEHII chose KPI Ninja, a best-in-class technology partner who helps solve HIEs' toughest data challenges with industry-leading analytics and innovation. Here we will explain the process NEHII took to creating their population health utility.

Step One: Current State Analysis

To gain an understanding of current state and conceptualize what could be possible, NEHII and KPI Ninja worked collaboratively to complete a comprehensive analysis of existing HIE data and infrastructure. This four-part process included data profiling, quality, cleansing and enrichment. Below is one example of a quality and completeness analysis.
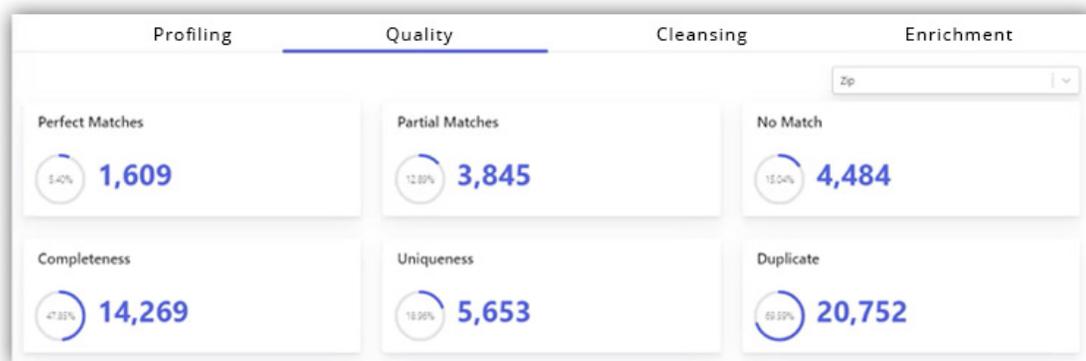

Each of these analyses provided its own insights. Taken collectively, NEHII now had a strong grasp on the current realities of their system and looked to leverage their strengths and close gaps in opportunities. Rather than manage analytic innovation, and data quality and completeness improvements as separate silos, NEHII desired to build linkages between the two to flow value as quickly as possible. But before they could do that, they needed to understand market forces and member organizations' business drivers.

Step Two: Member Organization Needs

Essential to the success of NEHII has been the inclusion of member organizations. To date, NEHII has over 10,000 clinician users, nearly 70% of all acute care data and 100% of patient encounters and medications dispensed in the region. With this degree of comprehensiveness, NEHII employed a systemic approach to identify stakeholders within their macroenvironment and the unique health information needs. This was no small feat, as you can see in the graphic on the next page, the reach and vision of NEHII is extensive.

Open exploration and transparent feedback were the hallmarks of learning the member organizations' needs. With this, NEHII learned of the need to drive all aspects of value, including the need to maximize data that is used for proactive clinical care, population health and quality reporting.
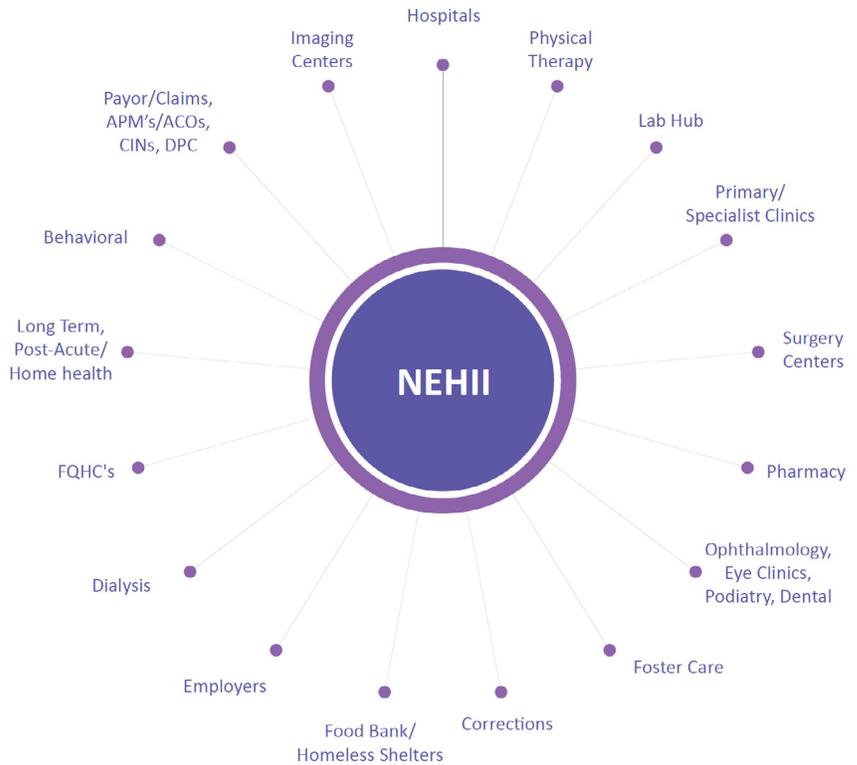
Step Three: Organizational Strategy

To differentiate themselves and develop a population health infrastructure, business priorities were determined through multi-stakeholder meetings and voting on strategic plan. CEO, Jamie Bland knew this type of redesign, developing a platform that could meet the large number of unique use cases, would require careful deployment of a well-thought out plan. In January of 2018, NEHII launched a formal strategic plan for transforming their value-proposition. This strategy included aligning to CMS initiatives like MIPS, CPC+, NCQA Recognition, and more local initiatives like ACOs, Medicaid, Department of Health and Human Services, Office of Rural Health, etc. A critical part of this process was prioritizing initiatives while considering alignment to regulations, accreditation, financial incentives, project feasibility, and member organization satisfaction.

While much of the strategy was outward facing, it is important to note that NEHII had to make significant internal changes as well. If the strategy to become a population health utility went as planned, NEHII would need to align talent and recruit new teams committed to the mission ahead. The team would need to be committed to the hard work of transformation, in addition the team characteristics would require knowledge of technology, healthcare operations, quality measurement, care management and other advanced skills to deliver on the initiatives put forward. The strategy also included modernization of internal processes, including one of the most important, refining data governance. The data governance process not only ensured continuity of service and adherence to organization policy but for the modernization of policies, data management and stakeholder engagement necessary to embark on large scale transformation.

Step Four: Scientific Thinking

With strategy in hand, NEHII took a data-driven, structured approach to translate plans into tangible, business results. As HIEs serve a distinct purpose and operate in dramatically different ways than traditional health care settings, it was vital that NEHII created a learning environment by openly discussing opportunities with member organizations. From there, NEHII sought out high performing, early adopters in each of the primary member organization groups.

Initial projects explored modest problems and piloting technology solutions in small scale to closely monitor impact. While each proof of concept had its own objective and context, at a high-level there was one variable that did not change, the structured approach to navigating the unknown. The following displays the primary steps that were used:

Aggregate · Analyze · Measure · Validate · Improve

The rapid success of these solutions quickly gained attention from others in the region. With it, the focus on spreading established solutions and exploring new, more complex proof of concepts exponentially increased.

IMPACTFUL OUTCOMES

"We applaud the Nebraska Health Information Initiative as the first HIE organization to hold itself to the highest standards of eMeasure testing the industry has to offer."- Rick Moore, Chief Information Officer, NCQA

By creating a HIE infrastructure that could meet the diverse and complex needs of HIE member organizations, NEHII has significantly improved its value proposition. Previously, data was used for reactionary, transactional care purposes. Now, the platform delivers near real time clinical and operational insights for proactive population health that align with value-based payment initiatives and advanced payment models.

As value-based care continues to evolve, NEHII plans to further expand its reach and develop analytics that integrate less traditional but equally important health care industries like self-insured employers, direct primary care, and social settings. It is important to note this journey was not without its obstacles and challenges that resulted in multiple strategic pivots. This is an important reminder that transformation is just that, and rarely is there one, linear roadmap to the end. With the right type of leadership commitment, community and analytics partnerships, you can use our lessons learned to move your HIE from a transactional data intermediary to a population health utility efficiently.

"We were able to reduce the number of vendors we use for reporting, from four vendors in 2017 to just one – NEHII— in 2018"- QCDR/MIPS initiative, Ron Kloewer, Chief Information Officer, Montgomery County Memorial Hospital