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# Health Information Technology- Enabled Quality Measurement Roadmap

*Prepared for:*



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December 23, 2022

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# 1 Executive Summary

Health Information Technology (HIT) and Health Information Exchanges (HIEs) play a fundamental role in the national quality measurement landscape. However, stakeholders in New York State (NYS) are not using these resources to their full potential when conducting quality measurement reporting activities. While the benefits of HIT-Enabled Quality Measurement remain evident – in that it has the potential to improve healthcare quality and outcomes, minimize reporting errors, promote transparent reporting, and eliminate inefficiencies – many healthcare stakeholders have yet to fully adopt NYS’ HIT/HIEs for quality measurement initiatives.

The HIT-Enabled Quality Measurement Roadmap (Roadmap) documents the current and planned activities over the next 3-5 years that the New York State Department of Health (NYSDOH) is engaged in to advance the state’s HIT-Enabled Quality Measurement goals. The Roadmap is informed by policy and regulatory changes, findings from collaborative quality measurement projects, and state and national healthcare priorities. NYSDOH revisits the Roadmap on an annual basis to review and update priorities and progress on realizing the state’s HIT-Enabled Quality Measurement vision.

## 1.1 Key Priorities

The following priorities are included in the Roadmap to be considered when planning initiatives to further HIT-Enabled Quality Measurement in NYS.

### *Promoting and Integrating Electronic Clinical Data Systems for Value-Based Payment Programs*

While health plans have demonstrated success in reporting certain quality measures (i.e., breast cancer screening) using electronic clinical data systems (ECDS) for NYSDOH’s quality reporting program, gaps remain for screening and follow-up measures (i.e., depression screening and follow-up) that require data captured beyond administrative data sources. ECDS reporting “encourages health information exchange...and is part of the National Committee for Quality Assurance’s (NCQA) larger strategy to enable a Digital Quality System aligned with the industry’s move to digital measures.”<sup>1</sup> Administrative data sources provide rich information about the care a person receives, however administrative data alone does not fully support NYSDOH’s transition to digital quality measurement. Integrating claims and electronic clinical data through NYSDOH’s existing HIT infrastructure could serve as a powerful tool to: 1) support health plans through their transition to digital quality measurement, and 2) inform performance improvement initiatives in real time. NYSDOH can look to opportunities like the Adirondacks Accountable Care Organization and Hixny partnership to test and document the feasibility of a Qualified

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<sup>1</sup> National Committee for Quality Assurance (NCQA), “ECDS Frequently Asked Questions,” 2022, <https://www.ncqa.org/hedis/the-future-of-hedis/ecds-frequently-asked-questions/>.

Entity (QE) serving as an intermediary to inform Value-Based Payment (VBP) initiatives in primary care practices.

### *Measuring Social Determinants of Health*

Social determinants of health (SDoH) are “the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.”<sup>2</sup> SDoH includes factors such as housing, transportation, education, and nutrition. Challenges that exist when measuring the impact of SDoH on health outcomes are, in part, due to the nature of how this information is collected by healthcare and social care providers. Data is often captured in unstructured fields or captured by non-standardized tools that are not integrated into electronic health record (EHR) platforms.<sup>3</sup>

Efforts are underway at the state and national levels to address gaps in collecting and using SDoH data. NCQA, for example, is introducing quality measures for the Healthcare Effectiveness Data and Information Set (HEDIS) Measurement Year (MY) 2023 that focus on Social Needs Screening and Intervention.<sup>4</sup> NYS, through their most recent 1115 Waiver amendment, proposes a network of community-based organizations (CBO) tasked with collecting and optimizing standardized SDoH data for the populations they serve.<sup>5</sup>

### *Adopting New Technology and Standards for Quality Measurement*

In 2020, NCQA released five draft Fast Healthcare Interoperability Resource (FHIR) digital quality measures (dQMs) for organizations to test and provide feedback on. The measures leverage a new standard and format through which NCQA seeks to promote interoperability and harmonization with industry standards as they transition to a digital quality system. NCQA notes that dQMs are “are much

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<sup>2</sup> U.S. Department of Health and Human Services, “Social Determinants of Health,” Healthy People 2030, <https://health.gov/healthypeople/priority-areas/social-determinants-health>.

<sup>3</sup> Ian E. Hoffberg, “Overcoming Obstacles to Social Determinants of Health,” HIMSS, June 9, 2020, <https://www.himss.org/resources/overcoming-obstacles-social-determinants-health>.

<sup>4</sup> NCQA Communications, “HEDIS MY 2023: See what’s New, What’s Changed and What’s Retired,” NCQA Inside Health Care, August 1, 2022, <https://www.ncqa.org/blog/hedis-my-2023-see-whats-new-whats-changed-and-whats-retired/>.

<sup>5</sup> New York State Department of Health (NYSDOH), “New York Health Equity Reform (NYHER): Making Targeted, Evidence-Based Investments to Address the Health Disparities Exacerbated by the COVID-19 Pandemic,” September 2, 2022, [https://www.health.ny.gov/health\\_care/medicaid/redesign/med\\_waiver\\_1115/docs/2022-09-02\\_final\\_amend\\_request.pdf](https://www.health.ny.gov/health_care/medicaid/redesign/med_waiver_1115/docs/2022-09-02_final_amend_request.pdf).

easier to deploy, enabling knowledge to be readily shared across the entire continuum of care.”<sup>6</sup> The majority of HEDIS measure specifications are anticipated to be provided in a digital format by 2027.<sup>7,8</sup>

The above priorities are expanded upon throughout this Roadmap, namely in Section 3 – Opportunity Areas in the Current State and Section 4 – Transitioning to the Future State. Section 4.1 describes the current projects that NYSDOH is involved in: Health Plan Readiness Assessment, MCO-QE Supplemental Data Exchange, Learning Collaborative, and HIT-Enabled Quality Measurement Roadmap.

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<sup>6</sup> NCQA, “HEDIS Digital Quality Measures,” 2022, <https://www.ncqa.org/hedis/the-future-of-hedis/digital-measures/>.

<sup>7</sup> NCQA, “HEDIS Digital Quality Measures.”

<sup>8</sup> NCQA, “Episode 11 – Future of HEDIS: Better Data, Better Measures, Better Care,” The Future of HEDIS, March 2, 2022, <https://www.ncqa.org/hedis/the-future-of-hedis/>.

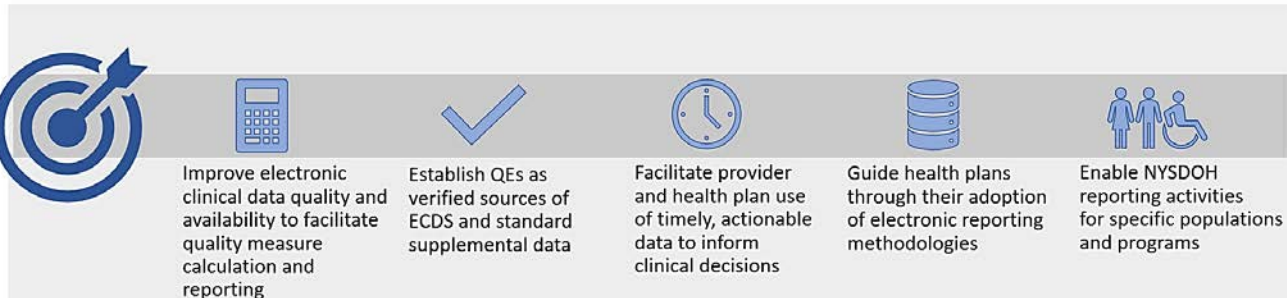
## 2 Background

Multiple efforts are underway in NYS to address the ability of QEs, provider practices, and health plans to conduct quality measurement activities utilizing the state’s existing HIT and HIE infrastructures. These activities align with NYSDOH’s HIT-Enabled Quality Measurement vision, which is to realize:

*An infrastructure of technology and policies that allow multiple stakeholders to access high-quality data that represents a complete picture of the care delivered to a patient and enables measurement of the health outcomes of a population.*

This Roadmap was developed at the request of NYSDOH and puts forth an actionable approach, guided by the objectives in **Error! Reference source not found.**, to realize this vision and establish NYS as a leader in HIT-Enabled Quality Measurement. Along with a set of shared objectives that NYSDOH hopes to achieve, the Roadmap describes activities that are underway, or planned, to test approaches to incorporating HIT and HIE into current quality measurement processes. It further describes a set of activities that NYSDOH can undertake to continue closing gaps in the current state and moving towards the future state of HIT-Enabled Quality Measurement.

FIGURE 1. OBJECTIVES

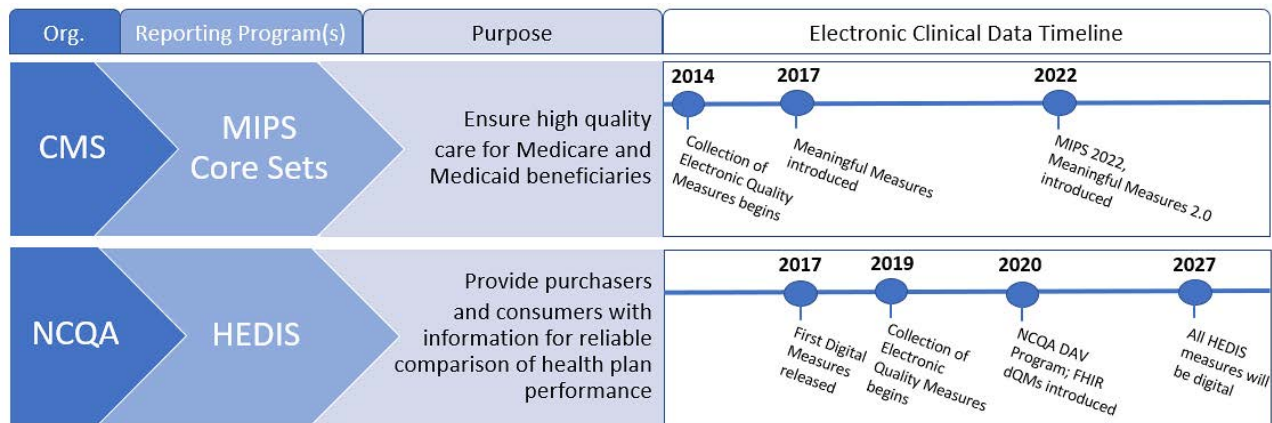


### 2.1 National Quality Measurement Landscape

Healthcare providers, health plans, and state and national government agencies all share the goal of transforming the healthcare system from one that pays solely for services rendered to one that bases payment and rewards on the quality of care delivered. Stakeholders are working to leverage HIT and HIEs to improve processes that can store, share, calculate, and report data metrics that allow for the measurement of quality of care. In doing so, stakeholders also emphasize the alignment of efforts across organizations to ensure a comprehensive, streamlined approach to this transformation.

Organizations that serve as quality measure developers and stewards play a key role in shaping the landscape in which healthcare quality is assessed. The Centers for Medicare & Medicaid Services (CMS) implements quality measurement initiatives to ensure high quality care for its beneficiaries. NCQA develops and maintains HEDIS to measure the performance of healthcare organizations, government agencies, and health plans, including Managed Care Organizations (MCO). Both CMS and NCQA have embraced the electronic collection of data to generate quality measures. CMS began collecting electronic clinical quality measures (eCQMs) in 2014 while, in 2017, NCQA began introducing standards-based, machine-readable specifications. NCQA expanded value sets to encourage the use of HIT data and converted traditionally reported measures to the ECDS reporting method.<sup>9, 10</sup>

FIGURE 2. NATIONAL LANDSCAPE



While NCQA’s and CMS’ quality measurement initiatives each have distinct purposes, the organizations have sought to align their programs to increase efficiency and reduce the burden of quality measurement reporting. In 2017, CMS introduced the Meaningful Measures approach to identify high priority areas for quality measurement and improvement to promote alignment in the larger healthcare system.<sup>11</sup> Correspondingly, NCQA’s Digital Measures Roadmap was designed to complement the priorities identified in the Meaningful Measure program, align reported measures, and expand the HEDIS measure set to include digital measures.<sup>12</sup> Both the Meaningful Measures program and the Digital

<sup>9</sup> Centers for Medicare & Medicaid Services (CMS), “Electronic Specifications for Clinical Quality Measures,” December 1, 2021, [https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Electronic\\_Reporting\\_Spec](https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Electronic_Reporting_Spec).

<sup>10</sup> NCQA, “The Future of HEDIS,” 2022, <https://www.ncqa.org/hedis/the-future-of-hedis/>.

<sup>11</sup> CMS, “Quality Measures,” April 14, 2022. <https://www.cms.gov/medicare/quality-initiatives-patient-assessment-instruments/qualitymeasures>.

<sup>12</sup> NCQA Communications, “CMS Meaningful Measures-NCQA’s Digital Measures Roadmap: What’s the Connection?” NCQA Inside Health Care, May 15, 2019, <https://www.ncqa.org/blog/cms-meaningful-measures-and-ncqas-digital-measures-roadmap-whats-the-connection/>.

Measures Roadmap leverage existing data collection and reporting methods to reduce the burden on entities that report quality measure data. Additional efforts towards strategic alignment and standardization include recent national reporting requirements, such as the Children’s Health Insurance Program Reauthorization Act (CHIPRA) and the Substance Use Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities (SUPPORT) Act which mandate the reporting of the Child Core Set of measures and the Behavioral Health Core Set of measures, respectively, in 2024.<sup>13,14</sup>

Another initiative through NCQA is the Data Aggregator Validation (DAV) Program, which “evaluates clinical data streams to help ensure that health plans, providers, government organizations and others can trust the accuracy of aggregated clinical data for use in HEDIS reporting and other quality programs.”<sup>15</sup> Health plans often use data from HIEs as supplemental data for HEDIS reporting. Using NCQA-validated sources eliminates the need for health plans to undergo primary source verification during the HEDIS audit process, saving time, money, and resources for all stakeholders involved. The DAV Program also has requirements related to data output in Continuity of Care Documents (CCDs), ensuring consistency and standardization around data file formats and exchange between organizations.<sup>16</sup>

## 2.2 New York State Quality Measurement Landscape

NYS is engaged in several statewide initiatives to transform its healthcare system and achieve the Triple Aim of improving quality, improving population health, and reducing the cost of care.<sup>17</sup> Each of these initiatives requires the reporting of quality measure data.

### *NYS Quality Strategy*

The NYS Quality Strategy provides detailed guidance to organizations regarding quality measurement reporting and assessment. It also delineates NYSDOH activities that ensure high quality care is delivered through the state’s Medicaid Managed Care program. Key components of the NYS Quality Strategy include the Quality Incentive Program, Performance Improvement Projects, and the Quality Assurance

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<sup>13</sup> Medicaid.gov, “Children’s Health Care Quality Measures,” <https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult-and-child-health-care-quality-measures/childrens-health-care-quality-measures/index.html>.

<sup>14</sup> MaryBeth Musumeci and Jennifer Tolbert, “Federal Legislation to Address the Opioid Crisis: Medicaid Provisions in the SUPPORT Act,” Kaiser Family Foundation, October 5, 2018), <https://www.kff.org/medicaid/issue-brief/federal-legislation-to-address-the-opioid-crisis-medicaid-provisions-in-the-support-act/>.

<sup>15</sup> NCQA, “Data Aggregator Validation,” 2022, <https://www.ncqa.org/programs/data-and-information-technology/hit-and-data-certification/hedis-compliance-audit-certification/data-aggregator-validation/>.

<sup>16</sup> NCQA, “Data Aggregator Validation.”

<sup>17</sup> Institute for Healthcare Improvement, “The IHI Triple Aim,” 2022, <https://www.ihl.org/Engage/Initiatives/TripleAim/Pages/default.aspx>.



Reporting Requirements (QARR) program. QARR focuses on health outcome and process measures and requires health plans to report HEDIS measures to NCQA and state-specific measures to NYS.<sup>18</sup>

### *NYS 1115 Waiver Demonstration Amendment*

In 2022, NYS submitted an amendment to the state’s 1115 Waiver Demonstration. The amendment, titled “New York Health Equity Reform (NYHER): Making Targeted, Evidence-Based Investments to Address the Health Disparities Exacerbated by the COVID-19 Pandemic,” is structured around a central goal of reducing health disparities, advancing health equity, and supporting the delivery of social care. The strategies proposed in NYHER include:

1. Building a more resilient, flexible, and integrated delivery system that reduces health disparities, advances health equity, and supports the delivery of social care,
2. Developing and strengthening transitional housing services and alternatives for the homeless and long-term institutional populations,
3. Redesign and strengthen system capabilities to improve quality, advance health equity, and address workforce shortages, and
4. Creating statewide digital health and telehealth infrastructure.<sup>19</sup>

### *NYS Medicaid Value-Based Payment Roadmap*

In 2015, NYSDOH developed the NYS Medicaid VBP Roadmap to document the state’s plan to maintain the transformation realized under the state’s previous 1115 waiver, the Delivery Reform Incentive Payment program (DSRIP), which ran from 2015 to 2020. The VBP Roadmap described the use of quality measures to calculate shared costs within VBP arrangements between provider organizations and health plans. The quality measures chosen for NYS’ Medicaid Payment Reform strategy aligned with DSRIP’s goals to improve outcomes and reward outcomes over inputs.<sup>20</sup> Per the 2019 New York Scorecard on

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<sup>18</sup> NYSDOH Office of Quality and Patient Safety, “2019 Quality Assurance Reporting Requirements Technical Specifications Manual,” 2019, [https://www.health.ny.gov/health\\_care/managed\\_care/qarrfull/qarr\\_2019/docs/qarr\\_specifications\\_manual.pdf](https://www.health.ny.gov/health_care/managed_care/qarrfull/qarr_2019/docs/qarr_specifications_manual.pdf).

<sup>19</sup> NYSDOH Medicaid Redesign Team Waiver Amendment, “New York Health Equity Reform (NYHER)...” 2022, [https://www.health.ny.gov/health\\_care/medicaid/redesign/med\\_waiver\\_1115/docs/2022-09-02\\_final\\_amend\\_request.pdf](https://www.health.ny.gov/health_care/medicaid/redesign/med_waiver_1115/docs/2022-09-02_final_amend_request.pdf).

<sup>20</sup> NYSDOH Medicaid Redesign Team, “A Path toward Value Based Payment: Annual Update, September 2019: Year 5,” September 2019, [https://www.health.ny.gov/health\\_care/medicaid/redesign/dsrp/vbp\\_library/2019/docs/sept\\_redline2cms.pdf](https://www.health.ny.gov/health_care/medicaid/redesign/dsrp/vbp_library/2019/docs/sept_redline2cms.pdf).

Medicaid Payment Reform, “80.4% of all Medicaid payments were value-oriented—either tied to performance or designed to cut waste.”<sup>21</sup>

NYSDOH updated the VBP Roadmap in May 2022. The updated VBP Roadmap “carries the requirements and principles of payment reform from the DSRIP program through the current NYHER 1115 Waiver amendment and into ongoing contracting practices between plans and providers.”<sup>22</sup> Per this roadmap, VBP payments should be linked to both the outcomes and efficiency of care delivery. Included in the priorities is the need to maintain funding and incentives for “essential and mandatory costs within the system,” one of which is health information technology capacity and interoperability.<sup>23</sup>

Additional requirements include addressing SDoH through targeted interventions and collaborations with CBOs. NYSDOH also noted the need to evaluate the feasibility of incorporating SDoH into QARR measures in order to track and measure successful interventions. The updated VBP Roadmap continues to require Level 2 and 3 agreements to implement at least one social care intervention that aligns with either economic stability, education, health and healthcare, neighborhood and environment, and/or social, family, and community context. The state encourages MCOs to screen members for social care needs using a validated assessment tool and document using the associated z-codes. MCOs in Level 2 and 3 agreements must also measure the success of social care programs implemented and report related metrics to the state on an annual basis.<sup>24</sup>

### *NYS Patient Centered Medical Home*

The NYS Patient-Centered Medical Home (NYS PCMH) is a multi-payer model built in collaboration with NCQA to create a unified approach to improving the quality of primary care in New York State.<sup>25</sup> The model is designed to integrate a financially sustainable service delivery model with a reimbursement structure that improves health outcomes.<sup>26</sup> To measure the performance of NYS PCMH practices, NYSDOH produces an annual Primary Care Scorecard using data submitted by health plans through QARR. QARR data is also used to produce measures for NYS Medicaid managed care plans participating

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<sup>21</sup> NYSDOH and Catalyst, “2019 New York Scorecard on Medicaid Payment Reform,” [https://www.health.ny.gov/health\\_care/medicaid/redesign/dsrip/vbp\\_library/scorecard/docs/2019\\_medicaid\\_scorecard.pdf](https://www.health.ny.gov/health_care/medicaid/redesign/dsrip/vbp_library/scorecard/docs/2019_medicaid_scorecard.pdf).

<sup>22</sup> NYSDOH Medicaid Redesign Team, “Value Based Payment: Update, New York State Roadmap for Medicaid Payment Reform,” May 2022, [https://www.health.ny.gov/health\\_care/medicaid/redesign/vbp/roadmaps/docs/final\\_updated\\_roadmap.pdf](https://www.health.ny.gov/health_care/medicaid/redesign/vbp/roadmaps/docs/final_updated_roadmap.pdf).

<sup>23</sup> NYSDOH Medicaid Redesign Team, “Value Based Payment: Update...”

<sup>24</sup> NYSDOH Medicaid Redesign Team, “Value Based Payment: Update...”

<sup>25</sup> NYSDOH, “New York State Patient-Centered Medical Home (NYS PCMH),” April 2022, [https://www.health.ny.gov/technology/nys\\_pcmh/](https://www.health.ny.gov/technology/nys_pcmh/).

<sup>26</sup> NYSDOH, “2019 Value Based Payment Reporting Requirements,” January 2019, [https://www.health.ny.gov/health\\_care/medicaid/redesign/dsrip/vbp\\_library/2018/tech\\_spec\\_manual.htm](https://www.health.ny.gov/health_care/medicaid/redesign/dsrip/vbp_library/2018/tech_spec_manual.htm).

in VBP arrangements and to report measures contained in the core sets mentioned in Section 2.1, National Quality Measurement Landscape.

### *Qualified Entities*

QEs are NYSDOH-certified organizations that are connected to the Statewide Health Information Network for New York (SHIN-NY). QEs oversee, govern, and facilitate the exchange of health information among their connected participants, which include providers, hospitals, and laboratories, among other entities.<sup>27</sup> Currently, there are six QEs that operate across NYS. The SHIN-NY acts as a “network of networks,” enabling QE participants to query patient data across NYS.<sup>28</sup> QEs are subject to NYSDOH’s SHIN-NY regulations and policy guidance as well as their own internal governance models and policies and procedures. The SHIN-NY regulation and policy guidance stipulates security, privacy, and certification requirements, among other aspects of QE operations.<sup>29</sup>

There is significant interest among stakeholders in using electronic clinical data sources to focus on outcome-based quality measures rather than process-based ones. Electronic clinical data can be utilized in quality measurement in several ways:

- As supplemental data to fill gaps in health plans’ administrative data sources,
- As the sole source of data for an eCQM, and
- As the sole source of data, or in combination with other sources of data such as claims, to calculate a proxy measure.

QEs are playing an increasing role in quality measurement, with some QEs now calculating measures for their provider participants and sharing data directly with health plans. Per the Privacy and Security Policies and Procedures for Qualified Entities and their Participants in New York State, QEs are permitted to disclose protected health information to payer organizations for the purpose of HEDIS or QARR measure calculation.<sup>30</sup>

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<sup>27</sup> NYS New York Codes, Rules and Regulations, “Title: Section 300.4 - Qualified entities,” <https://regs.health.ny.gov/content/section-3004-qualified-entities>.

<sup>28</sup> New York eHealth Collaborative (NYeC), “What is the SHIN-NY?,” <http://www.nyehealth.org/shin-ny/what-is-the-shin-ny/>.

<sup>29</sup> NYSDOH, “SHIN-NY Policy Guidance for 10 NYCRR Part 300,” March 2022, <https://www.health.ny.gov/technology/regulations/>.

<sup>30</sup> “Privacy and Security Policies and Procedures for Qualified Entities and their Participants in New York State under 10 N.Y.C.R.R. § 300.3(b)(1), Version 3.9,” January 2022, [https://www.health.ny.gov/technology/regulations/shin-ny/docs/privacy\\_and\\_security\\_policies.pdf](https://www.health.ny.gov/technology/regulations/shin-ny/docs/privacy_and_security_policies.pdf).

As of 2022, all six QEs in NYS are participating in the NCQA DAV Program,<sup>31</sup> meaning that health plans will be able to leverage them as standard supplemental data sources for quality measurement reporting. NYSDOH's MCO-QE Supplemental Data Exchange project is actively engaged with six MCO-QE pairs to understand the processes and challenges of establishing a connection to exchange supplemental data for quality measurement reporting. Documenting organizations' practices will provide valuable insight into the resources necessary to successfully leverage electronic clinical data for quality measurement. NYSDOH plans to continue exploring the role of QEs in the quality measurement landscape through the efforts described in the following sections.

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<sup>31</sup> NCQA, "Directory: Data Aggregator Validation," <https://www.ncqa.org/programs/data-and-information-technology/hit-and-data-certification/hedis-compliance-audit-certification/data-aggregator-validation/directory-data-aggregator-validation/>.

# 3 Opportunity Areas in the Current State

There are several barriers and gaps (Figure 3) to improving processes across the state for quality measurement reporting. Opportunity areas to advance NYS’ HIT-Enabled Quality Measurement vision are outlined in Figure 4 and are further detailed below.

FIGURE 3. GAPS IN THE CURRENT STATE

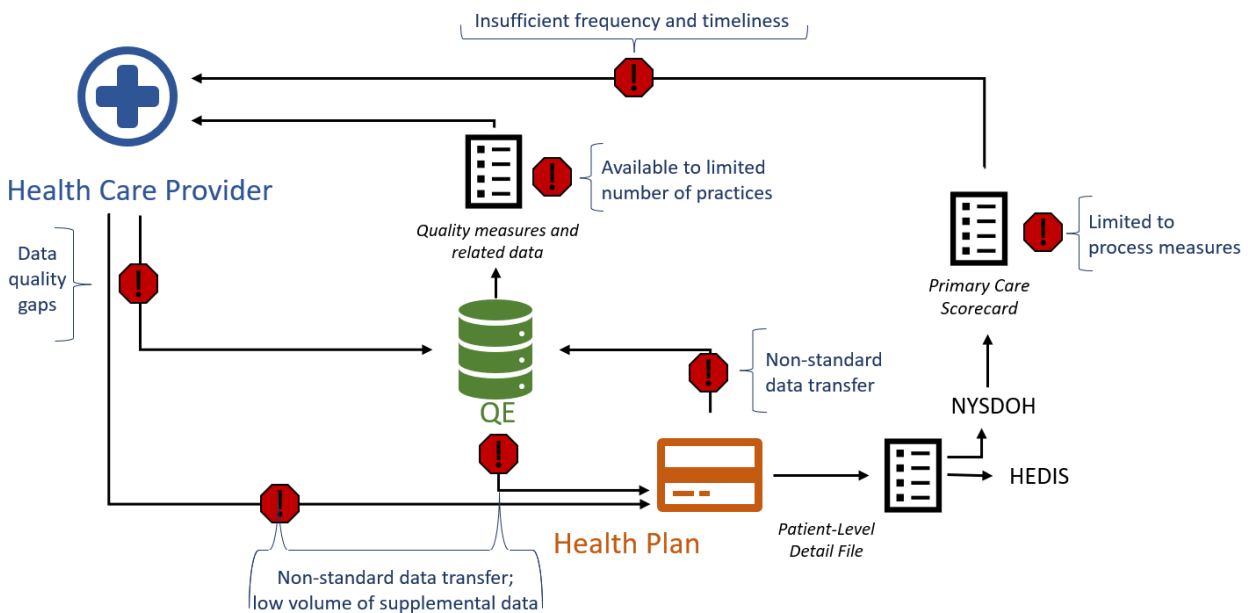
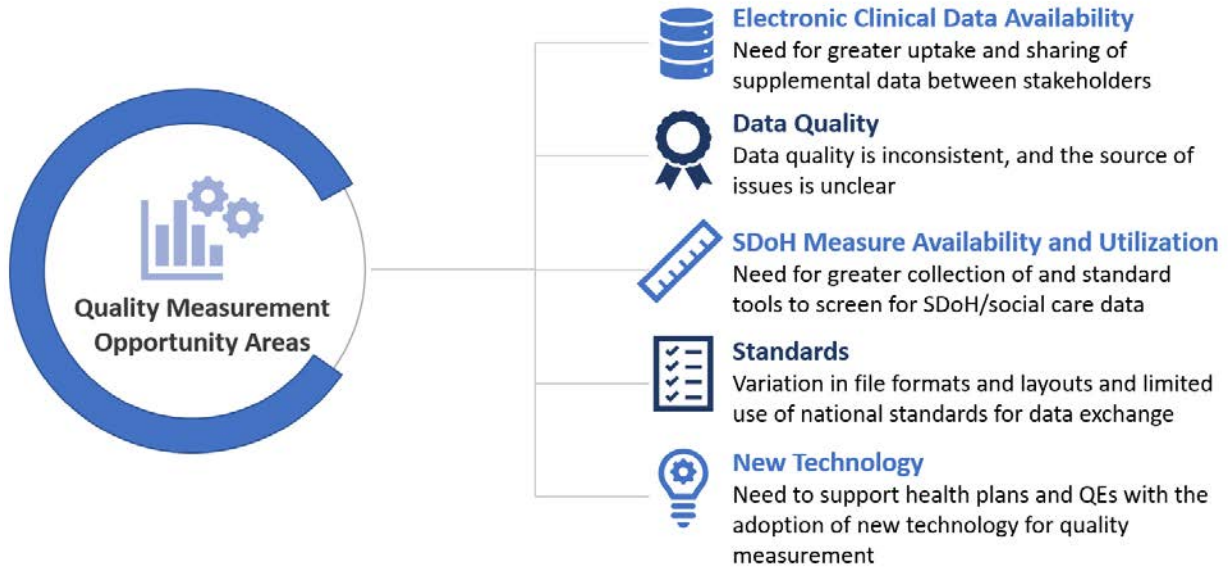


FIGURE 4. OPPORTUNITY AREAS



### Electronic Clinical Data Availability

As mentioned above, the move to ECDS reporting and use of dQMs is both a state and national priority. Currently, health plans produce quality measures using a combination of the administrative, hybrid, and ECDS methods. Hybrid measures require medical record review, a costly and time-consuming process where the resulting quality measure is calculated using only a sample of a health plan’s members. NYSDOH uses data from health plans to calculate measures for NYS PCMH practices and VBP arrangements. When that data, which is already based on a sample of the health plan’s member population, is further divided by provider practice setting, the resulting population is generally too small to yield a valid quality measure result. As a result, NYSDOH is unable to report outcome measures for these populations and NYS PCMH practices are affected.

While many health plans collect supplemental data from EHRs, laboratories, or other data sources to aid with administrative and ECDS reporting, they often struggle with having a sufficient volume of high-quality supplemental data to fully transition to either of these reporting methods. Both administrative and ECDS reporting methods would provide data on *all* measure-eligible health plan members as opposed to just a sample of those members.

As NCQA and NYSDOH continue to adopt digital quality measurement, it is becoming increasingly important for health plans to capture data beyond administrative sources to fulfill ECDS reporting requirements. As such, there is still considerable work to be done to ensure that health plans are leveraging QEs to their full extent for quality measurement reporting purposes. To guide and support

organizations through this, NYSDOH will need to address these issues and work with both health plans and QEs to increase the volume of supplemental data available to stakeholders.

### *Data Quality*

The quality of the electronic clinical data available for quality measurement is inconsistent and determining the source of data quality issues is challenging. For example, it is unclear what caused the low numerator hits observed in the VBP Measure Testing project and whether this could be mitigated through efforts to improve data quality.<sup>32</sup>

Furthermore, the opportunity areas related to both data quality and electronic clinical data availability, as well as standards and new technology (below), could be addressed by more fully leveraging QEs and the SHIN-NY. QEs do not currently serve as the primary source of electronic clinical data despite their potential to provide high-quality data in standard formats. All six QEs in NYS are participating in the NCQA DAV Program and several MCO-QE connections to exchange standard supplemental data are underway. However, barriers to stakeholders' sharing and using supplemental data for quality measurement include:<sup>33</sup>

- Rigorous and resource-intensive HEDIS audit requirements,
- Lack of resources required to manage supplemental data feeds,
- Varying requirements across health plans when connecting to a QE for supplemental data,
- Lack of health plan and provider education and awareness about the return on investment of connecting to a QE,
- Concern around the quality of data received from QEs and lack of guidance on how to ensure that the data is complete and conformant, and
- The timeline and rigorous requirements for QEs when completing the NCQA DAV process to become validated as standard supplemental sources.

Adoption of HIT and HIE-driven solutions depends on data consumers having a sufficient amount of supplemental data and trusting the quality of the data they receive. More focused efforts to connect health plans to the SHIN-NY via QEs, as well as data quality assessments and improvement activities, are foundational to NYSDOH's ongoing quality measurement efforts.

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<sup>32</sup> Please refer to the VBP Measure Testing Pilot final report delivered to OQPS on March 3, 2020 for more information.

<sup>33</sup> Please refer to the MCO-QE Supplemental Data Exchange Project Interim Report delivered to OQPS on May 31, 2022 for more information.

### *SDoH Measure Availability and Utilization*

SDoH have been shown to affect healthcare utilization, cost, health outcomes, and health disparities.<sup>34</sup> As mentioned above, both state and national stakeholders are engaged in initiatives to promote health equity through performance measurement. NCQA introduced risk stratification into a set of measures for HEDIS MY 2022 to evaluate the completeness of race and ethnicity data collected by health plans, and included seven new measures on Social Needs Screening and Intervention for HEDIS MY 2023.<sup>35,36</sup> In NYS, NYSDOH is requiring payers and contractors in Level 2 or 3 VBP arrangements to implement targeted SDoH/social care interventions, and goals related to the new NYHER 1115 Waiver amendment to address social care, housing, workforce, and overall equity initiatives.<sup>37,38</sup> Though SDoH/social care are key components of several initiatives, challenges remain in order to comprehensively collect this data for quality measurement. A lack of standardization in metrics that define SDoH, varied use of screening tools, and inconsistent measurement practices across the provider community make it difficult to use SDoH data for actionable purposes.<sup>39</sup> A 2022 study on the quality of SDoH data in EHRs found that the most common issues include data accuracy, completeness, and conformance (compatibility).<sup>40</sup>

### *Standards*

There is inconsistent and infrequent use of national standards when exchanging data required for quality measurement between various stakeholders such as health plans, QEs, and providers. Organizations also often have varying and incompatible requirements for data file types and layouts. The lack of standardization decreases the efficiency of sharing information between organizations that would use the data to calculate quality measures.

NCQA and CMS have advanced their quality measurement approaches through the development of measure specifications that utilize standard formats and logic, and via reporting methods that encourage the use of electronic clinical data. NCQA's DAV program requires that supplemental data be shared in a CCD format that conforms to specific guidelines. However, MCOs have reported some challenges around using and ingesting CCDs especially when working with third party HEDIS vendors

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<sup>34</sup> CMS, "CMS Issues New Roadmap for States to Address the Social Determinants of Health to Improve Outcomes, Lower Costs, Support State Value-Based Care Strategies," January 7, 2021, , <https://www.cms.gov/newsroom/press-releases/cms-issues-new-roadmap-states-address-social-determinants-health-improve-outcomes-lower-costs>.

<sup>35</sup> NCQA, "Health Equity and Social Determinants of Health in HEDIS: Data for Measurement," June 2021, <https://www.ncqa.org/about-ncqa/health-equity/health-equity-and-social-determinants-of-health-in-hedis-data-for-measurement/>.

<sup>36</sup> NCQA Communications, "HEDIS MY 2023: See What's New, What's Changed and What's Retired."

<sup>37</sup> NYSDOH Medicaid Redesign Team, "Value Based Payment: Update..."

<sup>38</sup> NYSDOH, "New York Health Equity Reform (NYHER)."

<sup>39</sup> Ian E. Hoffberg, "Overcoming Obstacles to Social Determinants of Health."

<sup>40</sup> Lily A Cook, Jonathan Sachs, and Nicole G Weiskopf, "The quality of social determinants data in the electronic health record: a systematic review," *Journal of the American Medical Informatics Association*, 2022 Jan; 29(1): 187–196, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8714289/>.



that are unable to ingest the file format.<sup>41</sup> Despite this multi-program shift, NYS health plan adoption of new specifications, reporting methods, and standard file formats is limited. NYSDOH will benefit from a greater understanding of:

- Health plans' readiness, challenges, and successful practices with implementing the ECDS reporting method,<sup>42</sup>
- Health plans' and QEs' ability to process, receive, and use data in standard formats, such as CCDs as required by the NCQA DAV Program, and
- Stakeholders' challenges around adopting new standards for data exchange for quality measurement purposes.

### *New Technology*

Health plans' knowledge of how to leverage new technology and processes, specifically FHIR, for quality measure reporting is limited. In 2020, eight MCOs responded to the Health Plan Readiness Assessment (Readiness Assessment) stating they have no plans to adopt FHIR for quality measurement, while five MCOs reported that their organizations did have some type of plan in place to adopt FHIR, including:<sup>43</sup>

- Partnering with a third-party vendor for a platform that supports FHIR,
- Prioritizing FHIR efforts after achieving better success with CCD and Health Level Seven (HL7) v2 consumption, and
- Considering building a FHIR platform when establishing an initial connection with a QE.

As the MCO-QE Supplemental Data Exchange project progresses, there will be an opportunity to identify early adopter organizations that NYSDOH can collaborate with to understand capacity, increase readiness, and prepare organizations to adopt FHIR and other new processes for quality measurement.

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<sup>41</sup> Please refer to the MCO-QE Supplemental Data Exchange Project Interim Report delivered to OQPS on May 31, 2022 for more information.

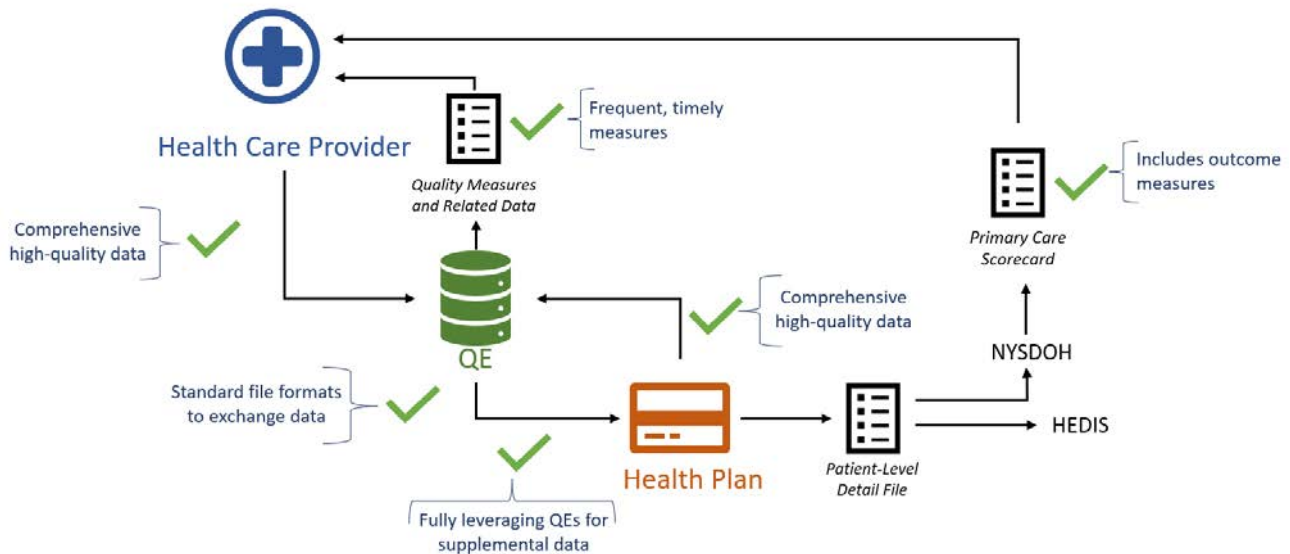
<sup>42</sup> Please refer to the MCO MY 2020 ECDS Results delivered to OQPS on March 4, 2022.

<sup>43</sup> Please refer to the Health Plan Readiness Assessment white paper delivered to OQPS on March 17, 2021 for more information.

# 4 Transitioning to the Future State

This Roadmap suggests an incremental approach to achieving the future state by closing current state gaps. In the future state diagram (**Error! Reference source not found.5**), identified gaps are closed and progress has been made to achieve NYSDOH’s HIT-Enabled Quality Measurement Vision.

FIGURE 5. FUTURE STATE



## 4.1 Current HIT-Enabled Quality Measurement Initiatives in NYS

In addition to this Roadmap, which is used to document NYSDOH’s past and future HIT-enabled quality measurement efforts, the following initiatives are currently underway in NYS.

### *MCO-QE Supplemental Data Exchange Project*

In November 2020, a Health Plan Readiness Assessment<sup>44</sup> was conducted to assist NYSDOH in supporting Medicaid MCOs with the adoption of electronic quality reporting methodologies, one of the priorities discussed in this Roadmap. The Readiness Assessment documented information on: 1) health plans’ current and planned connectivity to the SHIN-NY via QEs; 2) the file format(s) they receive data in from QEs for quality measure reporting, and 3) their organizational need/capacity related to the use of CCDs, HL7 v2, and FHIR for HEDIS/QARR. The results of the Assessment guided the development of the

<sup>44</sup> The Health Plan Readiness Assessment white paper was delivered to OQPS on March 17, 2022.

MCO-QE Supplemental Data Exchange project (MCO-QE project), which began in 2021. The goals of the MCO-QE project are to:

- Build capacity for MCOs and QEs that are establishing supplemental data connections,
- Operationalize the NCQA DAV Program by providing guidance to MCOs as they receive supplemental data from QEs for quality reporting programs, namely HEDIS and QARR, and
- Monitor and advance MCOs' ability to receive timely and actionable data for care coordination efforts.

The MCO-QE project is actively engaged with four health plans and three QEs, comprising six MCO-QE pairs. Documenting the pairs' successful practices and challenges while establishing a supplemental data connection provides valuable insight into the resources necessary to leverage electronic clinical data for quality measurement. As part of this project, NYSDOH also developed a Data Quality Assessment to evaluate the impact of receiving standard supplemental data from entities validated through NCQA's DAV program on health plans' quality measurement rates. The Data Quality Assessment aims to understand data completeness and conformance around a specific HEDIS measure.

Findings from the MCO-QE project will increase NYSDOH's understanding of and ability to address several of the opportunity areas described above, namely the availability of electronic clinical data, data quality, and use of standards for data exchange.

### *Learning Collaborative*

The Learning Collaborative, based on the Institute for Healthcare Improvement's model for performance improvement,<sup>45</sup> provides an interactive forum for health plans, QEs, and other stakeholders to discuss policies, successful practices, and challenges related to leveraging electronic clinical data for quality measurement. The quarterly meetings create a structure where members can learn from each other as well as experts in the field, build knowledge, and share their experiences with implementing new technology and standards for quality reporting.

Since 2021, Learning Collaborative meetings have focused on:

- Establishing data-sharing agreements between MCOs and QEs,
- Aligning requirements and processes for MCOs and QEs implementing supplemental data connections,

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<sup>45</sup> Institute for Healthcare Improvement, "IHI's Collaborative Model for Achieving Breakthrough Improvement," <https://www.ihl.org/resources/Pages/IHIWhitePapers/TheBreakthroughSeriesIHIsCollaborativeModelforAchievingBreakthroughImprovement.aspx>.

- NCQA DAV Program overview and updates,
- Perspectives from health plans that successfully leveraged a QE as a supplemental data source for HEDIS/QARR reporting,
- Health plans' provider network engagement and outreach efforts related to quality measurement.

Learning Collaborative agendas are informed by participant feedback to ensure that topics are relevant and useful. Meetings are well-attended by stakeholders from across the state and offer a forum to address many of the opportunity areas described above.

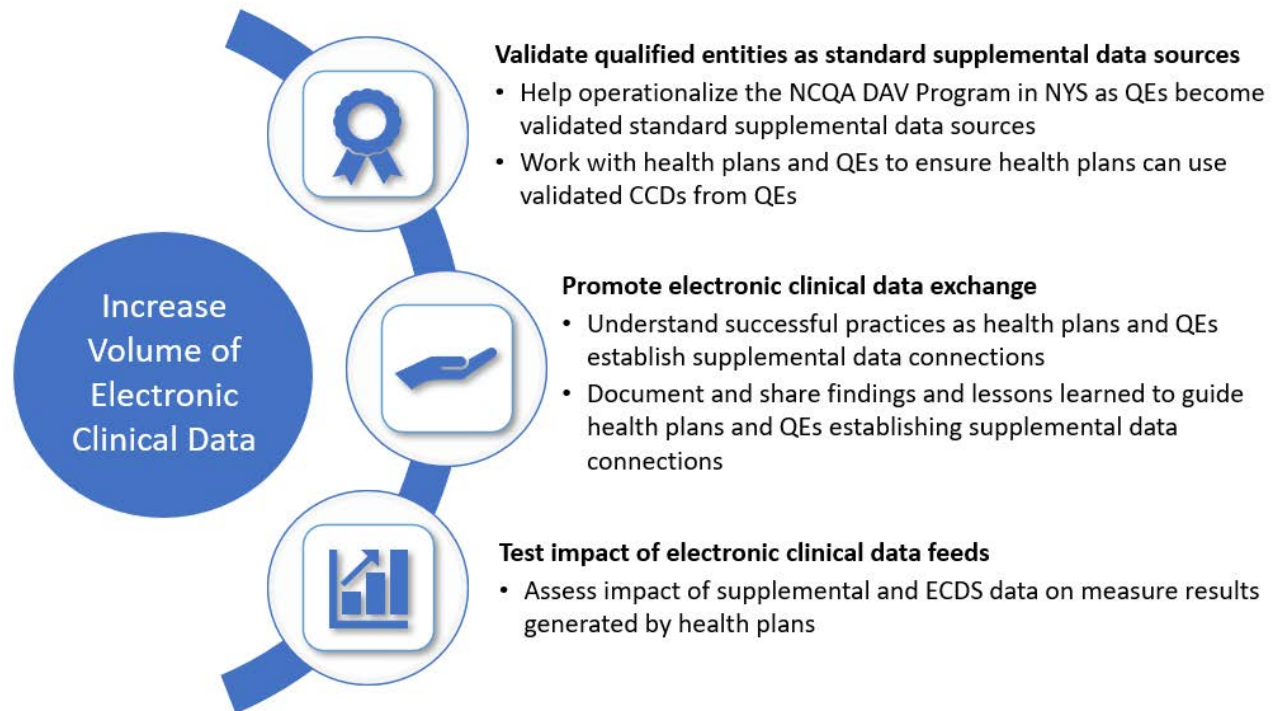
## 4.2 Action Plan

The opportunity areas described above can be systematically addressed through an informed approach that builds upon the state's current efforts (Section 4.1). The action plan laid out in this section details specific strategies that NYSDOH, together with its partners, can implement to increase data availability, improve data quality, promote the use of SDoH measures and health equity initiatives, encourage standardization, and promote new technologies.

### *Increase the Volume of Electronic Clinical Data*

The shift away from hybrid measure specifications towards administrative and ECDS specifications requires a greater volume of electronic clinical data, including supplemental data, to eliminate the need for health plans to conduct medical record reviews. NYSDOH can take several steps outlined in Figure 6 to continue increasing the volume of supplemental data available to health plans.

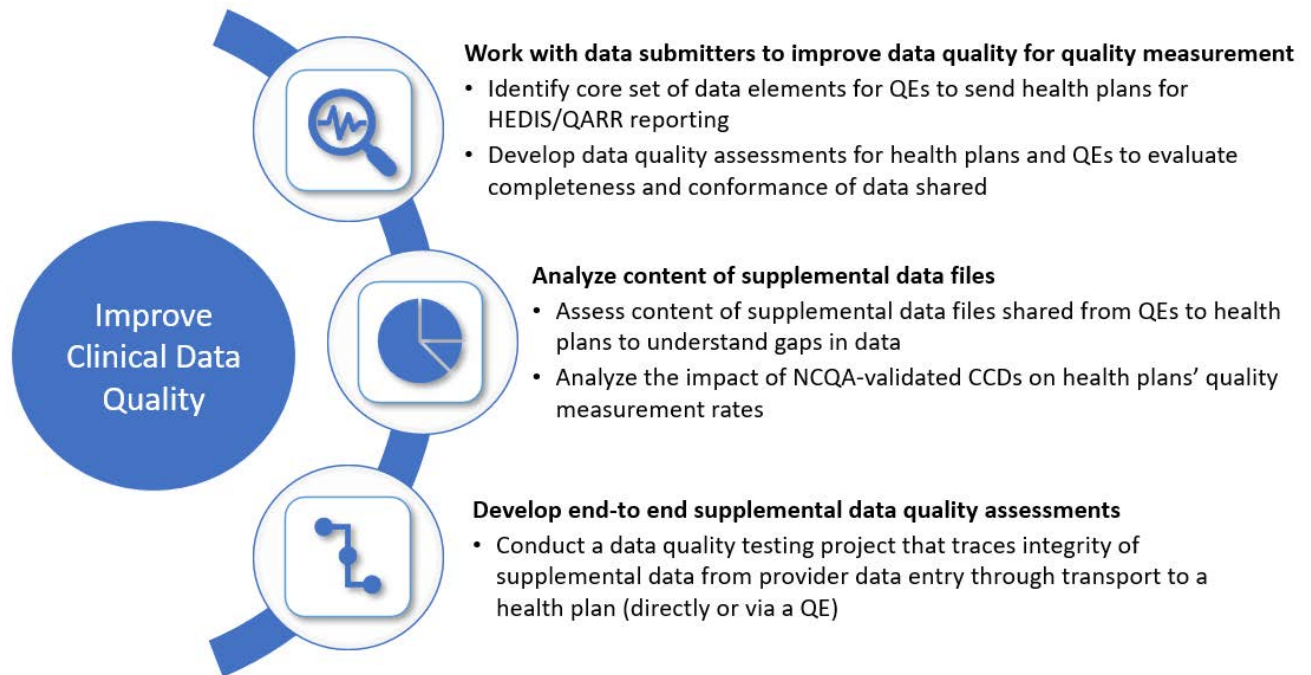
**FIGURE 6. INCREASE VOLUME OF ELECTRONIC CLINICAL DATA**



### Improve Clinical Data Quality

While previous projects have identified that gaps (e.g., missing codes, poorly structured data) exist in the clinical data available to health plans, additional information on the details of the gaps, including where and how they originate, needs to be understood. Key activities outlined in Figure 7 can be used to better understand and address this area.

FIGURE 7. IMPROVE CLINICAL DATA QUALITY

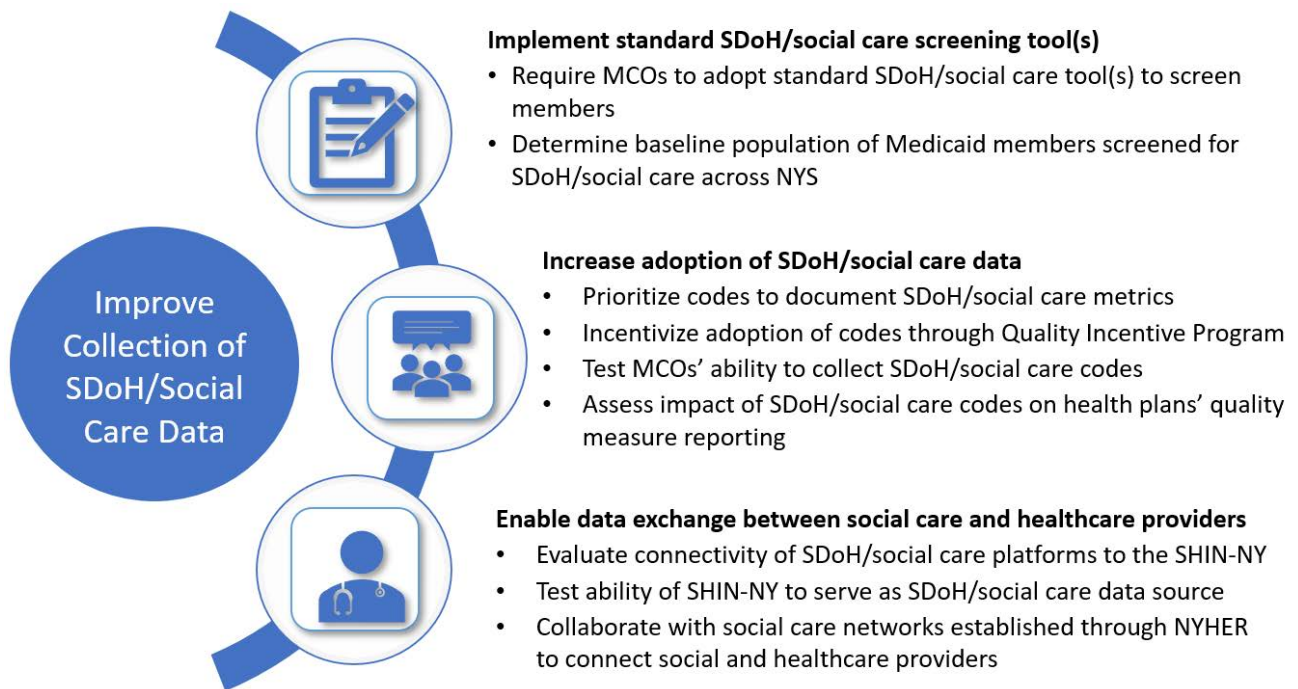


### Improve Collection of SDoH Data

Integrating health equity metrics into performance measurement has become a key area of focus among state and national stakeholders. To better understand the extent to which NYS’ current HIT infrastructure can support measuring social care, NYSDOH can engage in the activities outlined in Figure 8 to understand how SDoH data is captured and stored by providers and CBOs to support VBP initiatives.

Additional opportunities exist in leveraging social care networks and related data collected through the initiatives proposed in NYHER, and through the analysis of NCQA’s new Social Needs Screening and Intervention measures that will be included in HEDIS MY 2023. Documenting current processes will allow NYSDOH to identify gaps in the overall system and assess where opportunities lie for increased efficiencies, more comprehensive SDoH data collection, and accurate health equity performance measurement.

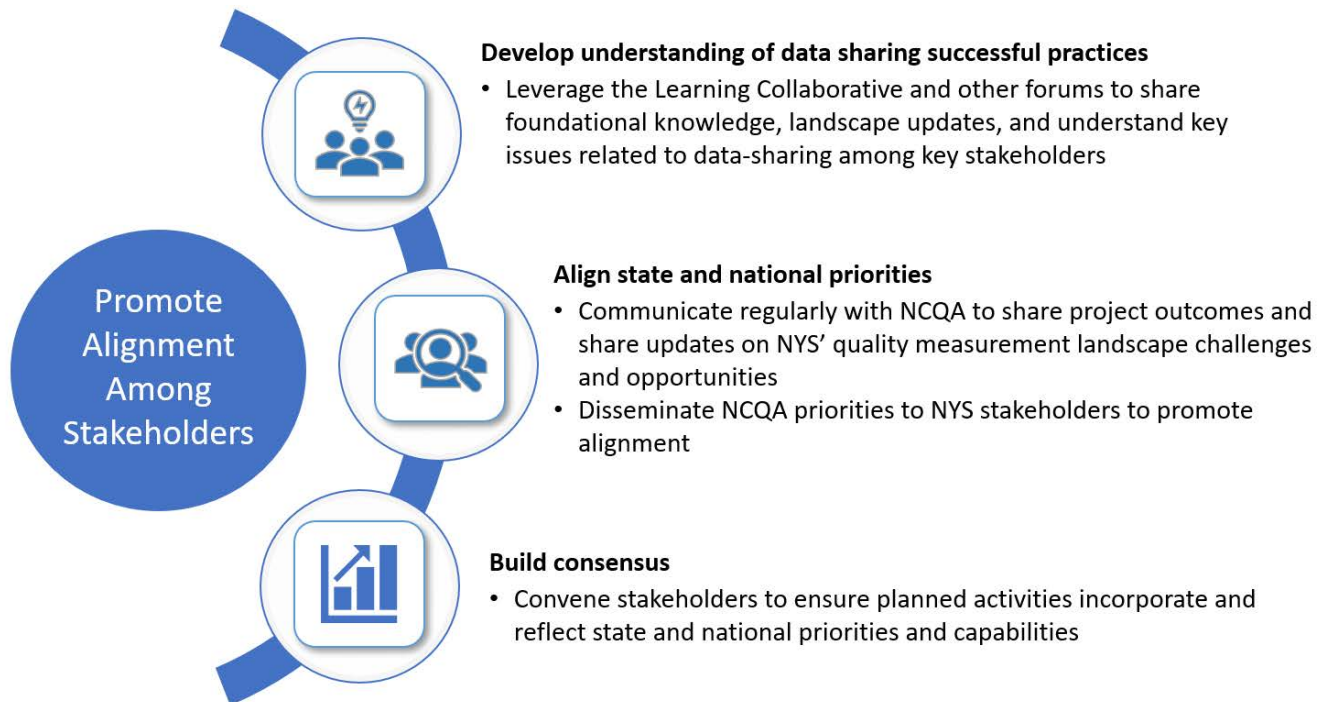
FIGURE 8. IMPROVE COLLECTION OF SDOH DATA



### Promote Alignment among Stakeholders

Ensuring alignment among stakeholders is foundational to transforming the quality measurement landscape. This includes developing a shared understanding of key concepts, ensuring that priorities are aligned, and developing consensus around the steps needed to achieve the desired goals. The activities outlined in Figure 9 aim to increase engagement and collaboration among organizations, while also aligning priorities across state and national stakeholders.

FIGURE 9. PROMOTE ALIGNMENT AMONG STAKEHOLDERS

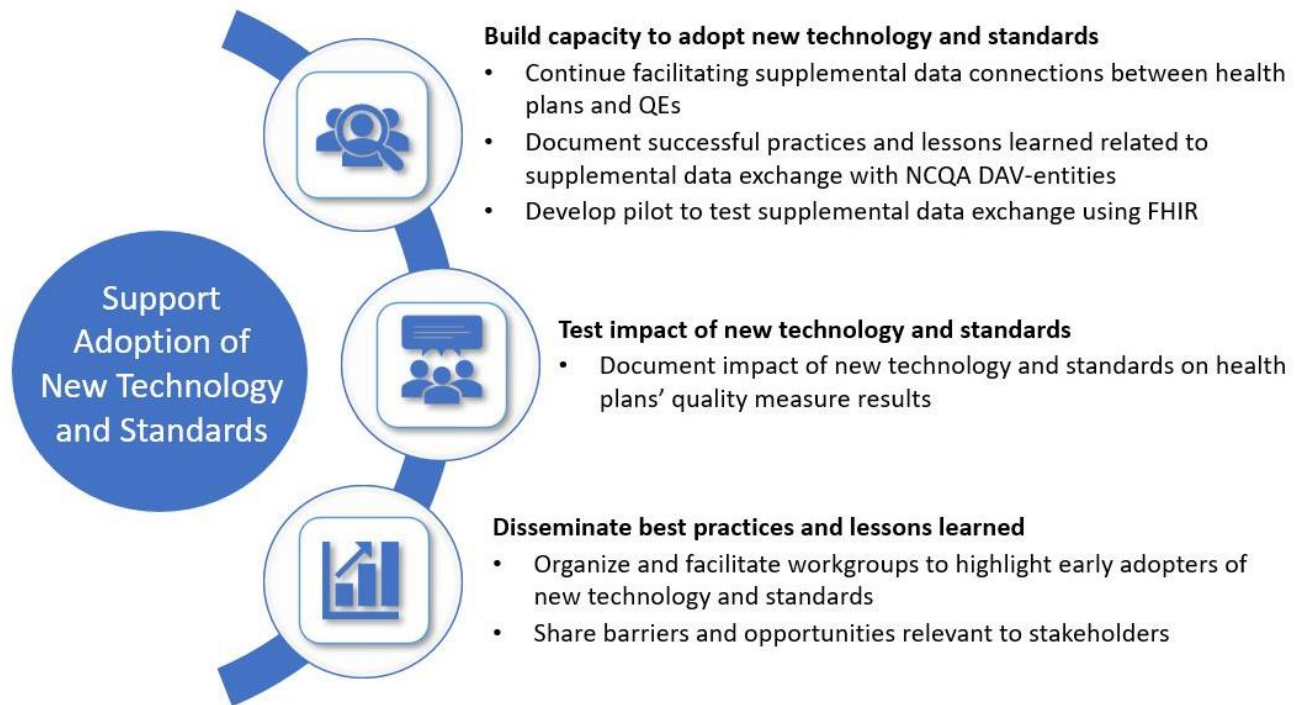




### Support Adoption of New Technology and Standards

NYSDOH can leverage findings from the Readiness Assessment and the MCO-QE Supplemental Data Exchange project to identify areas of need related to health plan and QE capacity for adopting new technology and standards, such as FHIR and CCDs, for data exchange and quality measurement purposes.<sup>46, 47</sup> Steps to understand stakeholders' readiness and prepare health plans to use new technology and standards (e.g., draft FHIR digital measure specifications) are outlined in Figure 10.

**FIGURE 10. SUPPORT ADOPTION OF NEW TECHNOLOGY AND STANDARDS**



<sup>46</sup> Please refer to the Health Plan Readiness Assessment white paper delivered to OQPS on March 17, 2021 for more information.

<sup>47</sup> Please refer to the MCO-QE Supplemental Data Exchange Project Interim Report delivered to OQPS on May 31, 2022 for more information.

# Appendix A: Glossary of Terms

Abbreviations	Terms	Definitions
<b>CCD</b>	Continuity of Care Document	An electronic document exchange standard for sharing patient summary information. Summaries include the commonly needed pertinent information about current and past health status in a form that can be shared by all computer applications, including web browsers, and EHR software systems.
<b>CHIPRA</b>	Children's Health Insurance Program Reauthorization Act	Legislation that improved Medicaid coverage for children.
<b>CMS</b>	Centers for Medicare & Medicaid Services	The steward of eCQMs; also publishes regulations for the EHR Incentive Programs; Federal regulatory agency that oversees Medicare and Medicaid health insurance programs.
<b>DAV</b>	Data Aggregator Validation	A program through NCQA that validates electronic clinical data that organizations collect and share with vendors and health care organizations that undergo an audit for reporting NCQA's HEDIS measures.
<b>dQM</b>	Digital Quality Measure	Quality measures that are organized as self-contained measure specifications and code packages, that use one or more sources of health information that is captured and can be transmitted electronically via interoperable systems.
<b>DSRIP</b>	Delivery System Reform Incentive Payment	The main mechanism to fundamentally restructure the health care delivery system by reinvesting in the Medicaid program, with the primary goal of reducing avoidable hospital use by 25% over 5 years (2015-2020).

Abbreviations	Terms	Definitions
<b>ECDS</b>	Electronic Clinical Data Systems	Network of data containing a member’s PHI and records of their experiences within the health care system; ECDS is a HEDIS reporting standard for health plans collecting and submitting quality measures to NCQA.
<b>eCQM</b>	Electronic Clinical Quality Measures	A quality measure encoded using the Health Quality Measure Format (HQMF) so that it can be interpreted by information systems such as an electronic health record system.
<b>EHR</b>	Electronic Health Records	Digital version of a patient’s paper medical chart. EHRs are real-time, patient-centered records that make information available instantly and securely to authorized users.
<b>FHIR</b>	Fast Healthcare Interoperability Resources	Standard for exchanging healthcare information electronically to advance interoperability.
<b>HEDIS</b>	Healthcare Effectiveness Data and Information Set	A widely used set of performance measures in the managed care industry, developed and maintained by NCQA
<b>HIE</b>	Health Information Exchange	Platform that allows health care providers and patients to access and securely share medical information electronically.
<b>HIT</b>	Health Information Technology	Technology that supports health information management and the secure exchange across computerized systems.
<b>MCO</b>	Managed Care Organization	Health plan/organization focused on delivering high quality care while keeping overall costs low. MCOs in NYS include Health Maintenance Organizations, Prepaid Health Services Plans, Special Needs Plans, and Primary Care Partial Capitation Providers certified by NYSDOH. As of 2022, 13 Medicaid MCOs operate in NYS.
<b>NCQA</b>	National Committee for Quality Assurance	An organization dedicated to improving health care quality.

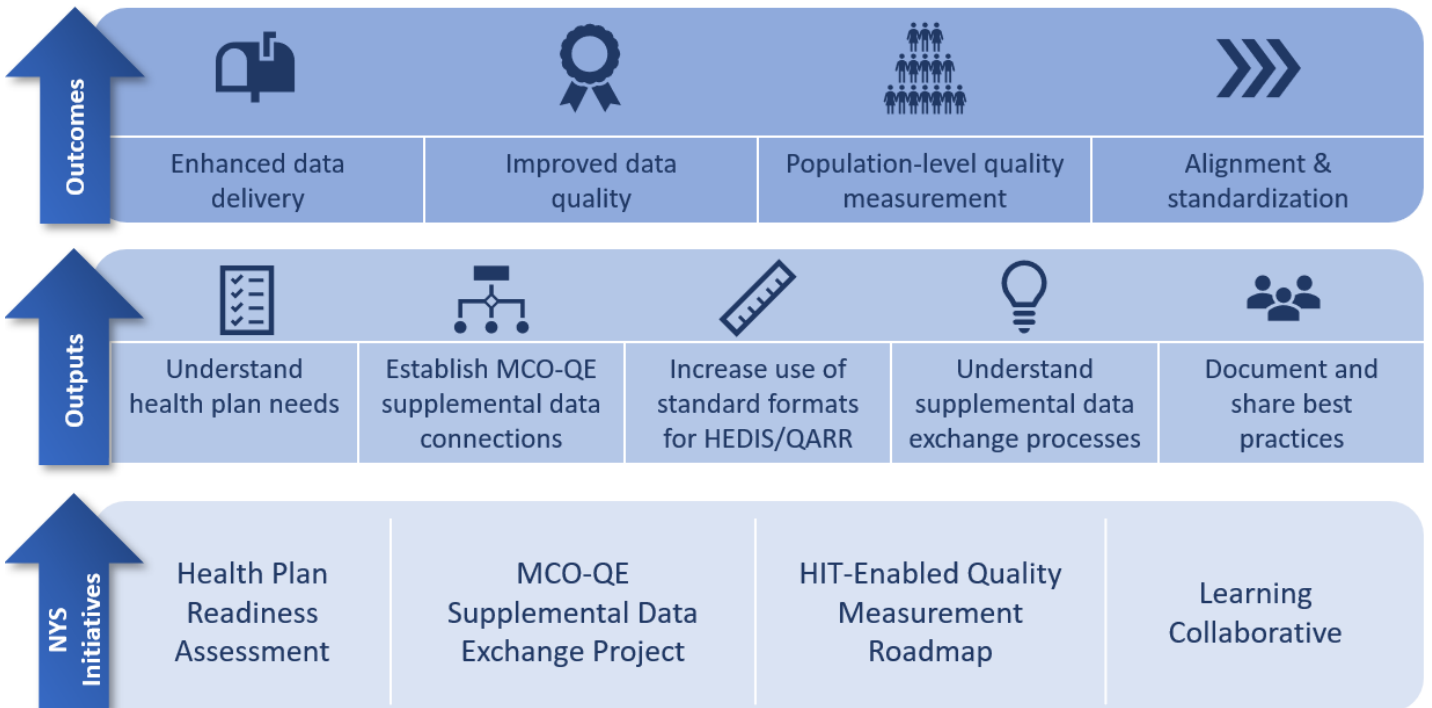
Abbreviations	Terms	Definitions
<b>NYHER</b>	New York Health Equity Reform (NYHER): Making Targeted, Evidence-Based Investments to Address the Health Disparities Exacerbated by the COVID-19 Pandemic	NYS’ new 1115 Waiver amendment request, submitted in 2022. NYHER seeks address health disparities and systemic delivery issues highlighted by COVID-19 with a central goal of reducing health disparities, advancing health equity, and supporting the delivery of social care
<b>NYS PCMH</b>	New York State Patient Centered Medical Home	A model of primary care that is patient-centered and emphasizes care coordination; a collaboration between NYSDOH and NCQA to transform healthcare delivery and shift towards value-based care in NYS.
<b>QARR</b>	Quality Assurance Reporting Requirements	The New York State Department of Health’s version of HEDIS and is a set of performance measures that health plans must report on an annual basis.
<b>QE</b>	Qualified Entity	A regional health information organization, or regional network where electronic health information is stored and shared.
<b>SDoH</b>	Social Determinants of Health	Critical factors that influence the health outcomes of individuals as they are the conditions in which people are “born, live, learn, work, play, worship, and age.”
<b>SHIN-NY</b>	Statewide Health Information Network for New York	Facilitates the connection between the state’s QEs to ensure the secure electronic flow of health information throughout New York.
<b>VBP</b>	Value-Based Payment	A payment model that offers financial incentives to physicians, hospitals, medical groups, and other healthcare providers for meeting certain performance measures.

# Appendix B: Initiatives (2020-Present)









## VISION

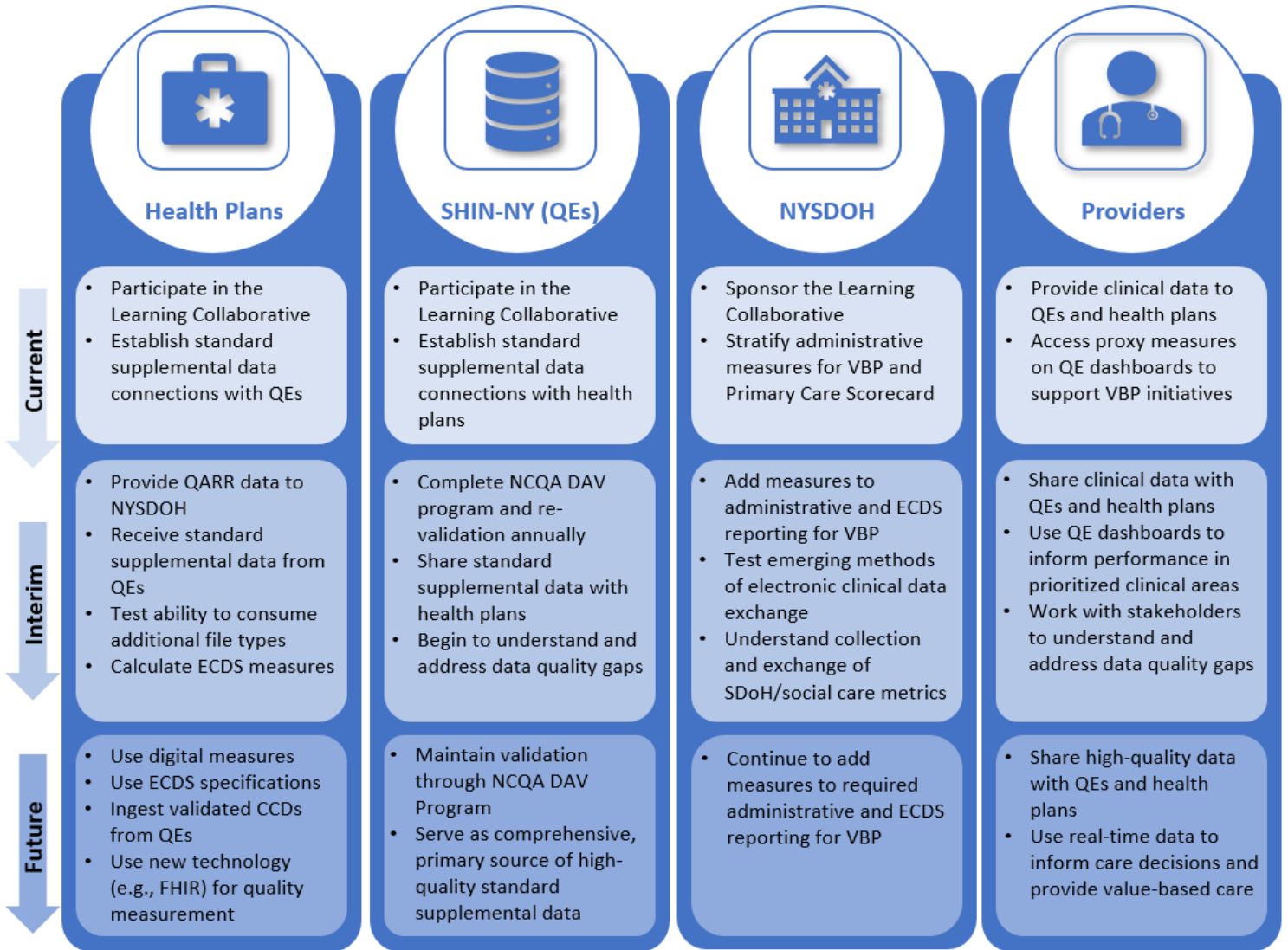
*An infrastructure of technology and policies that allow multiple stakeholders to access high-quality data that represents a complete picture of the care delivered to a patient and enables measurement of the health outcomes of a population*



# Appendix C: Action Plan Alignment

Action Plan: Achieving the Future State			
	Increase volume of electronic clinical data	<ul style="list-style-type: none"> <li>• Certify QEs as standard supplemental data sources</li> <li>• Promote electronic clinical data exchange</li> <li>• Test impact of electronic clinical data feeds</li> </ul>	<ul style="list-style-type: none"> <li>✓ All QEs are validated and are the primary source of supplemental data</li> <li>✓ Sufficient supplemental data to eliminate medical record review</li> <li>✓ Outcome measures reported via administrative &amp; ECDS methods</li> </ul>
	Expand data quality assessments	<ul style="list-style-type: none"> <li>• Design data quality assessments for health plans and QEs</li> <li>• Conduct in-depth assessments of supplemental data files</li> <li>• Develop end-to-end supplemental data quality assessments</li> </ul>	<ul style="list-style-type: none"> <li>✓ Comprehensive understanding of gaps in data quality</li> </ul>
	Improve collection of SDoH data	<ul style="list-style-type: none"> <li>• Implement standard SDoH/social care screening tool(s)</li> <li>• Increase adoption of SDoH/social care data</li> <li>• Enable data exchange between social care &amp; healthcare providers</li> </ul>	<ul style="list-style-type: none"> <li>✓ Build consensus</li> <li>✓ Align state and national priorities</li> </ul>
	Promote alignment among stakeholders	<ul style="list-style-type: none"> <li>• Develop understanding of data sharing successful practices</li> <li>• Align state and national priorities</li> <li>• Build consensus</li> </ul>	<ul style="list-style-type: none"> <li>✓ Enable data exchange between social care and healthcare providers.</li> </ul>
	Support adoption of new technology and standards	<ul style="list-style-type: none"> <li>• Build capacity to adopt new technology and standards</li> <li>• Test impact of new technology and standards</li> <li>• Disseminate best practices and lessons learned</li> </ul>	<ul style="list-style-type: none"> <li>✓ Development of pilot to test supplemental data exchange using FHIR-enabled technology and other standards</li> </ul>
			
<b>Current State</b> 2022	<b>Interim State</b>	<b>Future State</b> 2027	

# Appendix D: Stakeholder Roles





**NYSTEC**

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