Introduction

Innovation thrives when leaders like CMS and ASTP/ONC invite bold ideas. Deloitte[1] is proud to answer your call, drawing on decades of experience helping guide federal and state health agencies, payers, providers, and accountable care organizations (ACOs) through the evolving health technology landscape. Below, we offer perspectives on short- and long-term opportunities for the government to rapidly accelerate interoperability improvements to equip providers with better, more actionable information on their patients and shift the national healthcare landscape towards a focus on prevention and value.

While the government has established a foundation for data exchange through its interoperability rulemaking and electronic health record (EHR) incentive payment and certification programs, the actual use and scope of interoperable solutions and data is still limited. We believe these efforts can be rapidly expanded and accelerated through:

- Expanding the scope of open standards and their use in targeted areas such as attribution, digital quality measures (dQMs), and the integration of healthcare data with health-related social needs information to drive cost and quality improvements.
- Incentivizing the implementation and use of interoperability by explicitly including incentive payments for these capabilities in value-based care (VBC) and value-based purchasing agreements.
- Rapidly enabling broader health information exchange by expanding and simplifying data use agreement policies.

Table 1 summarizes our perspectives and recommendations and rates them across implementation complexity, level of investment, impact on clinical outcomes, and potential for cost savings.

Table 1. Summary of recommendations and value dimension ratings

Recommendation (Section #) *Click to jump to section*	Impl. Complexity	Level of Investment	Clinical Impact	Cost Savings
Provision consistent payer-derived patient attribution to vendors (Section 1)	◑	◔	●	◕
Make timelier, more actionable data-types available to providers (Section 2)	◑	◕	●	◕
Align required TEFCA use cases with those permissible under HIPAA (Section 2)	◕	◔	◕	◕
Establish bidirectional data exchange agreements with health information exchange entities (Section 2)	◑	◑	◕	◔
Define more specific criteria for alternative payment model (APM) technology requirements (Section 3)	◑	◔	◑	◔
Align broader technology requirements for non-APM providers with APM waiver provisions to accelerate VBC (Section 3)	◑	◔	◑	◑

[1] As used in this document "Deloitte" means Deloitte Consulting LLP. Deloitte Consulting LLP is not a certified public accounting firm. Please see www.deloitte.com/us/about for a detailed description of the legal structure of Deloitte LLP and its subsidiaries. Certain services may not be available to attest clients under the rules and regulations of public accounting.

Recommendation (Section #) *Click to jump to section*	Impl. Complexity	Level of Investment	Clinical Impact	Cost Savings
Remove NIST 800-88 data destruction requirements for vendors supporting providers in APMs or offer a pathway to persist data (Section 4)	◕	◔	●	◑
Standardize open-source digital quality measure frameworks across APMs (Section 4)	●	◑	◑	◑
Support definitions and categorization of clinical terms to train NLP models (Section 5)	◑	◕	◑	◑
Endorse a single, standardized approach for dQMs (Section 6)	◑	◔	◕	◕
Update the ONC Health IT Certification Program to include the CMS-recommended dQMs (Section 6)	◕	◕	◕	◔
Sponsor the establishment of regional health data utilities (RHDUs) (Section 7)	●	◕	◕	◑
Deliver Companion Guides and Test Procedures for all final rules with concrete implementation recommendations and examples (Section 8)	◕	◑	◑	◔

1. Attribution data as the foundation of VBC analytics and reporting *(VB-3, VB-4, VB-12)*

Make consistent, accurate attribution data available to vendors to enable the delivery of advanced analytic tools and reports for VBC. Attribution enables vendors to establish treatment, payment, and operational relationships and to share appropriate patient data according to their data use agreements with providers. Currently, payers use different attribution schemas (e.g., attributing to a practice vs. attributing to a provider) that are updated on different cadences and provided in different formats; practices then need to reconcile lists across their multi-payer patient populations and provide this attribution to health information exchanges (HIEs) and vendors. Comparing practice-submitted rosters to official attribution lists, we consistently see a 10-40% gap, meaning that providers have a blind spot in data insights on a major proportion of their accountable population.

We have found success working with CMMI to directly provide HIEs and vendors with attribution files and recommend expanding this practice while promoting consistency in attribution formats across payers, potentially through mandates for Medicaid and Medicare Advantage plans to provide patient rosters for accurate routing to practices. This approach removes an unnecessary and error-prone step in the current workflow, promotes automation, reduces burden on providers and vendors, and ensures that model participants receive information on their full attributed population, while allowing for flexibility in attribution methodology for innovation in VBC.

2. Drive VBC with timelier, more actionable insights to providers *(VB-1, VB-2, VB-4)*

Through our engagement with APM providers to design streamlined data solutions that support their performance in numerous CMS models, we have identified data types and formats that are commonly requested and cited as useful in a VBC context. CMS should **make these data more**

easily available to providers for informed decision-making and improved quality and outcomes:

- **Multi-payer utilization and expenditure data** – Providers in a VBC model need to pay closer attention to utilization and expenditure trends. The ability to monitor utilization and expenditures across payer lines enables providers to make the shift to a population health focus more successfully.
- **Risk scores/stratification** – In recent years, practices have been increasingly interested in risk information to help prioritize care management workflows. Risk stratification is helpful when overlaid on most data types (e.g., to prioritize patient follow-up from discharge notifications).
- **Clinical data from external sources** – Enabling providers in VBC arrangements to receive the full universe of their patient's clinical information (e.g., from specialists external to the PCP's health system, lab results ordered by different providers) is critical to develop care management workflows that help providers better meet model goals (Section 5 further elaborates on improving clinical data accessibility).
- **Admission, Discharge, Transfer (ADT) data** – ADT alerts enable providers to proactively coordinate with the attending care team, reducing the likelihood of unnecessary tests and procedures, and follow up with the patient after discharge, reducing the likelihood of an avoidable readmission.

Expanding on the latter bullet, we have seen high practice adoption (80%+ practices reviewing alerts 3+ times per week) and strong projected returns ($60-80M net savings) implementing CMS attribution-driven ADT and broader encounter notification services in APM demonstrations. Despite the benefits and ease of implementation for ADT, its use is still incomplete and fragmented in the healthcare system. To address these gaps, **CMS should consider the following**:

- Mandate that providers of healthcare services to Medicare and Medicaid beneficiaries sign up for and use ADT/encounter notifications services from an ADT provider such as an HIE, as relevant/appropriate.
- Update interoperability rules to address better standards for accelerating consistent delivery and use of ADT notification information.
- Build incentive payments into Medicare and Medicaid value-based care and value-based purchasing programs to accelerate the systematic use of real-time alerts in the healthcare system.

Establishing legal and data use agreements across the multiple entities treating, paying for, and supporting the healthcare system is often a barrier to providing these services. For example, the Trusted Exchange Framework and Common Agreement (TEFCA) establishes some broad categories for nationwide exchange of health information. However, these agreements are very time-consuming and resource-intensive to establish and limited in scope. They are also duplicative in that a broad and well-tested legal framework and policies already exist in the form of the Health Insurance Portability and Accountability Act (HIPAA) Privacy and Security Rules. To accelerate the use of a broader set of use cases for interoperability, the government could perform a one-time, broad **update of TEFCA to include all use cases already permissible under HIPAA and mandate that**

all QHINs return information related to queries permissible under HIPAA. Combined with guidelines on best practices for validating consent, this would rapidly remove barriers to enabling a broader set of treatment, payment, and operations use cases for improving healthcare quality and reduce costs while leveraging the policies already in place to keep patient information safe and secure.

Furthermore, CMS should consider **making bidirectional data use agreements available to health information exchange entities, including QHINs and EHR providers**, to further enable the flow of claims and clinical information between CMS and the healthcare system. Enabling the bidirectional flow of a common set of claims and clinical information between HIEs, providers, health plans, and CMS provides all parties with access to the same information to better treat patients and control healthcare costs. CMS could derive great benefit from better access to clinical information about its Medicare and Medicaid beneficiaries for more real-time, granular insight into care patterns and outcomes drivers.

3. Offer more clarity / guidance to providers in APMs *(TD-12, VB-1, VB-2, VB-9, VB-13)*

Define more specific APM requirements around the types of capabilities and connectivity required for a prescribed digital solution to be successful. When APM technology requirements are too open-ended, practices commonly attest to using inappropriate tools to meet those requirements (e.g., citing their local EHR as meeting an HIE connectivity requirement). Those practices are unable to benefit from the analytic solutions offered through an APM. CMS should **provide clearer criteria for practices in selecting their vendor** (e.g., regional hospital connectivity, reputable patient ID matching schemas). If CMS is concerned about endorsing specific technologies, they should consider requiring explicit use of prescribed technologies for APM participation, instead of simply having a given capability in place. Building on the earlier example, in current CMMI primary care models, CMS has required connectivity with HIEs, but has not provided a linkage between this requirement and the cost saving and quality improvement goals of the model. CMS could have metrics around actually receiving and using ADTs on a regular basis to reduce avoidable hospitalizations and Emergency Department visits and improve care coordination.

Standardize these requirements as applicable across APM and non-APM organizations, aligning waiver provisions with broader health IT requirements. More closely aligning requirements would reduce fragmentation in clinical quality standards, reporting processes, technical capabilities, and other core functions for a more efficient, interoperable, and effective technology ecosystem. Further, parity in technology requirements sets up non-APM organizations to transition to APMs more easily down the line, enabling CMS' goal of all Medicare patients in an accountable care relationship by 2030. For example, CMS could incentivize through VBC payments the use of dQMs not only in its CMMI demonstration pilots, but more broadly across MIPS and other programs with broader provider and patient coverage.

4. Reduce burden on vendors to improve provider experience *(PR-8, VB-11, VB-12)*

Consider removing the NIST 800-88 destruction requirements for vendors supporting participants in APMs receiving CMS data, or provide a pathway for vendors to securely persist data to support providers with continuity in analytics and reporting services. NIST 800-88 requirements prove difficult for many vendors, who need to overhaul systems and processes to be compliant. From a public health and clinical perspective, destroying data at the end of a model or a participant's tenure in the model stymies the ability to trend data over time and reduces the usefulness and completeness of data available to providers. It also has the potential to harm patients as it may reduce availability of valuable attribution, payment, or claims data that can help providers better treat their patients.

Explore open-source quality measure frameworks for digital quality measures (dQMs) to reduce provider and vendor burden. Even when enlisting the support of third-party vendors, users often need to manually configure data pulls to support different specifications for similar measures across programs. One representative from a large health system speaking at a national meeting for a CMMI APM reported needing to calculate "four different definitions of death" for various VBC and other reporting requirements. Building on CMS' Universal Measure Set and/or an **open-source framework**, such as the Patient Information Quality Improvement (PIQI) Framework, to create a core set of dQMs for APMs would reduce provider burden by aligning on a consistent format for EHRs and vendor systems to exchange information to support quality measure reporting, regardless of program. When measures require license agreements or payments, it can reduce widespread use of measures standards. Some organizations regularly upgrade their measures specifications, sometimes unnecessarily, so users need to continue renewing and purchasing specifications and license agreements. CMS should also consider the drivers behind measures upgrades to ensure alignment with CMS policies and objectives.

5. Accessibility of data to support VBC organizations *(PC-8.c)*

ASTP/ONC should support definition and categorization of clinical terms to train natural language processing (NLP) models, unlocking the potential of existing C-CDA data and enabling support from the AI industry without requiring direct clinical experience. Despite the regular exchange of millions of C-CDA documents across national networks, providers struggle to gain timely insights as critical provider perspectives within notes, images, faxed records, and more are often lost in large data retrievals. This loss of provider-to-provider insights puts the burden of translating and coordinating care on the patient.

Implementing NLP capabilities to surface documents tagged by specialty-specific keywords (e.g., oncology, cardiology) offers a low-risk first step in using AI to manage the massive volumes of clinical data available, and we have seen firsthand how this approach transformed a large healthcare's operation for a unique use case.

6. Converge on a single digital quality measures approach *(TD-9.e, VB-1)*

Further elaborating on the feedback we have heard from VBC organizations in Section 4, **we recommend CMS endorse a single, standardized approach for digital quality measures.** Several

HL7 FHIR implementation guides (IGs) have been developed to support dQMs, including the Da Vinci Data Exchange for Quality Measures (DEQM) IG[2] which builds on the Electronic Clinical Quality Improvement (eCQI) Resource Center's Quality Improvement Core (QI-Core) HL7 IG.[3] Additionally, HL7's Bulk Data Access IG could provide the means of sharing these standardized FHIR resources,[4] aligning with other CMS API recommendations. If CMS chooses to support the development of and endorses a single set of comprehensive implementation guidance, the industry will converge at that point to provide feedback and drive refinement.

VBC providers are largely dependent on their health technology solutions (e.g., EHR vendors, regional HIEs) providing these measures out-of-the-box. Therefore, **ASTP/ONC should also consider updating the ONC Health IT Certification Program to include the CMS-recommended dQMs** from the clinical quality measures (CQMs) already present to encourage industry adoption of these implementation methods. These updates should consider not only having certification criteria around these measures, but also coordination with CMS so that VBC reimbursement incentives align with use of these measures to report on quality and drive quality improvement in provider treatment and operations.

7. Improve data coverage with regional health data utilities *(PC-11)*

CMS should explore actively incentivizing better national health data coverage, aggregation, and curation by sponsoring the establishment of regional health data utilities (RHDUs). A regional model for health data utilities would help overcome many of the persistent challenges facing today's HIEs and interoperability efforts. By organizing data collection around defined geographic regions, RHDUs can ensure more consistent participation, reduce fragmentation, and create standardized approaches to data sharing and governance within their states. This structure enables comprehensive connectivity across all defined classes of healthcare providers within a region, closing gaps that often occur when participation is voluntary or piecemeal. Regional coordination also allows for tailored solutions that address needs while still aligning with national standards, making it easier to manage consent, privacy, and security across diverse stakeholders.

RHDUs would provide value-added services such as the aggregation of data for respective regions. Example services that an RHDU would provide are region-based directories for various healthcare facilities (e.g., practices, pharmacies, specialized care). Additionally, the collation of reference data, such as public health data dictionaries, will help care systems that go across state lines. By serving as trusted, neutral entities, RHDUs have the potential to transform health data exchange, supporting better care, stronger public health, and empowered individuals.

RHDUs can play a pivotal role in connecting healthcare and social services data, leading to transformative improvements in spending and outcomes. At present, data sharing between healthcare and social services—such as food, transportation, and housing—is often limited or nonexistent. By advancing standards and data use agreements for secure information exchange, CMS can help providers and CBOs access integrated data, fostering coordinated care and better

[2] http://hl7.org/fhir/us/davinci-deqm/ImplementationGuide/hl7.fhir.us.davinci-deqm
[3] https://ecqi.healthit.gov/qi-core
[4] https://build.fhir.org/ig/HL7/bulk-data/

patient results. For instance, CMMI's Accountable Health Communities model delivered both cost and quality benefits, Oklahoma's HIE launched a widely adopted social needs screening app, and North Carolina's initiatives indicate potential Medicaid savings of $85 PMPM. Alongside developing data standards, CMS can further encourage adoption through targeted incentive payments to providers serving Medicare and Medicaid populations.

8. Development of companion guides for CMS final rules *(PA-2)*

CMS OHEI should deliver Companion Guides and Test Procedures for all final rules, providing State Medicaid agencies and commercial payers with concrete implementation recommendations and examples. CMS carefully balances the need to deliver comprehensive final rules against the preference to provide implementers with flexibility in how they implement. However, we have witnessed confusion while working with State Medicaid agencies regarding whether implementation choices will meet expectations. ASTP/ONC delivers Companion Guides and Test Procedures for each Health IT Certification criteria which serve to drive consistent technical implementations and refine test methods. If CMS can follow a similar blueprint, these resources would clarify minimum requirements, suggest notional implementation architectures, and highlight intentionally flexible requirements. This will empower implementers to realize the full business value of CMS final rules, as they are intended. Further, CMS can provide guidance on integration of these services into Medicaid programs through value-based purchasing incentives.

Conclusion

Thank you again for the opportunity to respond to this request for information and share our perspectives on opportunities for innovation in the Health IT Ecosystem. We would welcome the opportunity to further discuss any areas of interest for CMS and ASTP/ONC. Kindly direct any follow-up correspondence to Kim Dedmon (**kdedmon@deloitte.com** or **+1 615-882-6232**).