



Centers for Medicare & Medicaid Services
Assistant Secretary for Technology Policy (ASTP)/
Office of the National Coordinator for Health Information Technology (ONC)
Department of Health and Human Services
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Re: Health Technology Ecosystem Request for Information

Thank you for the opportunity to comment on the referenced Request for Information (RFI). Cognizant Technology Solutions U.S. Corporation and its affiliates, including Cognizant TriZetto Software Group, Inc. ("CTSG"). As a global leader experienced in delivering transformative solutions to a diverse client base, Cognizant fully supports the transformation of the healthcare technology ecosystem and the imperative of exchanging seamless, real-time clinical and other patient data, as well as aligning with technological advancements, industry changes, and regulatory requirements. We are committed to advancing our health technology applications to being a part of the solution for reducing barriers to data access and exchange, and leveraging technology and innovation to support value-based care.

Although all topics covered in this RFI are important, Cognizant focuses on those areas most relevant to its current capabilities and technology strategy.

1. Ecosystem

TD-1. What short term (in the next 2 years) and longer-term steps can CMS take to stimulate developer interest in building digital health products for Medicare beneficiaries and caregivers?

To stimulate developer interest in building digital health products for Medicare beneficiaries and caregivers, CMS can take a strategic, phased approach that includes both short-term and longer-term actions.

Short-Term (Next 1–2 Years)

1. Promote Awareness and Use of Existing APIs

- Increase visibility and education around CMS APIs like **Blue Button 2.0**, **Data at the Point of Care (DPC)**, and **Beneficiary Claims Data API (BCDA)**.
- Highlight real-world use cases and success stories to demonstrate the value of these APIs to developers and patients alike.

2. Leverage Clearinghouses as Data Hubs

- Encourage partnerships with clearinghouses, which already serve as central data conduits for providers, to facilitate broader and more complete data access for developers.

3. Launch Developer Challenges and Competitions

- Collaborate with ASTP/ONC to host innovation challenges that reward the creation of patient-centered apps and tools that improve care coordination, access, and outcomes.
- Promote winning solutions to increase adoption and visibility.

4. **Support Internal API Integration**

- Ensure CMS Innovation Center models and other internal programs actively use and showcase CMS APIs, setting an example for the broader ecosystem.

5. **Reduce Barriers to Data Access**

- Streamline the onboarding and approval process for developers accessing CMS data.
- Provide clear documentation, sandbox environments, and technical support

Longer-Term (2+ Years)

1. **Invest in FHIR-Based Infrastructure**

- Continue supporting the **Da Vinci Project**, the **CARIN Alliance** and other FHIR-based initiatives to standardize data exchange and improve interoperability across Medicare, Medicaid and Health Insurance Marketplaces.

2. **Incentivize Adoption Through Policy Levers**

- Introduce **Quality Payment Program (QPP) Improvement Activities** that reward providers for using interoperable digital tools and encouraging patient engagement through apps.

3. **Expand LEAP and Grant Funding**

- Increase funding for **Leading Edge Acceleration Projects (LEAP)** and similar grant programs to support the development of innovative digital health solutions.

4. **Promote Consumer-Facing Applications**

- Actively endorse and promote apps that leverage CMS data to empower patients and caregivers, helping them manage care, understand benefits, and make informed decisions.

5. **Signal Industry Commitment**

- As a leading payer, CMS can influence the market by signaling long-term commitment to digital health and interoperability, encouraging private sector investment and innovation.

TD-2. Regarding CMS Data, to stimulate developer interest-- a. What additional data would be most valuable if made available through CMS APIs? b. What data sources are most valuable alongside the data available through the Blue Button 2.0 API? c. What obstacles prevent accessing these data sources today? d. What other APIs should CMS and ASTP/ONC consider including in program policies to unleash innovation and support patients and providers?

TD-2a. What additional data would be most valuable if made available through CMS APIs?

- **Quality Measure Data:** Data that supports the calculation and reporting of CMS quality measures would be highly valuable. Making this data available via FHIR-based APIs would reduce provider and payer burden and support the development of tools that align with CMS program requirements.
- **Program-Aligned Data:** Aligning API-accessible data with what is required by CMS and other federal programs would create clear use cases for developers and encourage innovation.

- **Interoperability by Design:** CMS should embed interoperability goals and FHIR standards into new programs from the outset, especially in Innovation Center Models and quality reporting programs.

TD-2b. What data sources are most valuable alongside the data available through the Blue Button 2.0 API?

- **Health and Wellness Metrics:** Data such as A1c levels, cancer screening completions, and mental health screenings would help apps support patient health management.
- **Medicare Advantage Metrics:** Including star ratings and other plan performance data would help beneficiaries make informed choices.
- **Provider Directory Information:** Leveraging HL7 FHIR Da Vinci PDex PlanNet to include up-to-date provider directories.
- **Price Transparency Data:** Incorporating hospital pricing and patient-specific cost transparency data, consistent with the No Surprises Act and Executive Order 14221, would empower patients to make cost-effective care decisions

TD-2c. What obstacles prevent accessing these data sources today?

- **Consent and Data Use Complexity:** Developers face challenges navigating consent frameworks and data use agreements, especially for third-party apps.
- **Data Curation Needs:** For APIs to be useful, data must be curated and actionable for patients, which requires timely and relevant data delivery.
- **Data Quality Issues:** Inaccurate or outdated data—especially in provider directories—limits usefulness. Key fields like provider availability must be current.

TD-2d. What other APIs should CMS and ASTP/ONC consider including in program policies to unleash innovation and support patients and providers?

- **Cost Transparency APIs:** Support for APIs aligned with the No Surprises Act and HL7 Da Vinci Patient Cost Transparency IG.
- **Quality Reporting APIs:** APIs that facilitate the calculation and submission of quality measures using FHIR would reduce burden and improve data quality.
- **Scheduling APIs:** APIs that enable appointment scheduling could improve care access and outcomes. HL7 has ongoing work in this area that could be leveraged.

2. Digital Identity

TD-3. Regarding digital identity implementation: a. What are the challenges and benefits? b. How would requiring digital identity credentials (for example, CLEAR, Login.gov, ID.me, other NIST 800-63-3 IAL2/AAL2 CSPs) impact cybersecurity and data exchange? c. What impact would mandatory use of the OpenID Connect identity protocol have?

TD-3. Digital Identity Implementation

a. Challenges and Benefits

Implementing digital identity systems presents a dual-edged sword of opportunity and complexity. On one hand, digital identity offers transformative benefits: streamlined access to services, enhanced user experience, and improved security through strong authentication mechanisms. It enables governments, enterprises, and individuals to interact in a more trusted, efficient, and scalable manner.

However, the challenges are equally significant. These include:

- **Privacy and Consent Management:** Ensuring individuals retain control over their personal data while meeting regulatory requirements like GDPR or CCPA.
- **Interoperability:** Aligning diverse identity systems across jurisdictions and sectors to enable seamless data exchange.
- **Security Risks:** Centralized identity systems can become high-value targets for cyberattacks.
- **Digital Divide:** Ensuring equitable access for populations with limited digital literacy or infrastructure.

b. Impact of Requiring Digital Identity Credentials (e.g., CLEAR, Login.gov, ID.me, NIST 800-63-3 IAL2/AAL2 CSPs)

Mandating the use of digital identity credentials that meet NIST 800-63-3 Identity Assurance Level 2 (IAL2) and Authenticator Assurance Level 2 (AAL2) standards would significantly bolster cybersecurity and data exchange integrity. These credentials:

- **Enhance Trust:** By verifying both the identity and the authentication strength of users, they reduce the risk of impersonation and fraud.
- **Improve Interoperability:** Standardized credentials facilitate secure data sharing across platforms and agencies.
- **Support Zero Trust Architectures:** They enable continuous identity verification, a cornerstone of modern cybersecurity frameworks.

However, widespread adoption requires robust governance, user education, and mechanisms to prevent vendor lock-in or exclusion of marginalized groups.

c. Impact of Mandatory Use of the OpenID Connect Identity Protocol

Mandating OpenID Connect (OIDC) as the identity protocol standard would have a profound impact on digital identity ecosystems:

- **Interoperability and Scalability:** OIDC is a widely adopted, RESTful protocol that supports federated identity and single sign-on (SSO), making it ideal for large-scale, cross-domain identity federation.

- **Security and Privacy:** Built on OAuth 2.0, OIDC supports secure token-based authentication and can be configured to minimize data exposure.
- **Developer Adoption:** Its simplicity and broad support across platforms make it easier for developers to implement secure identity flows.

However, mandatory adoption must be accompanied by clear implementation guidelines and support for legacy systems to ensure a smooth transition.

Recommendations

To maximize the benefits and mitigate the risks of digital identity implementation, we recommend:

1. **Adopting IAL2/AAL2 Identity Assurance:** These levels strike a balance between security and usability, ensuring strong identity proofing and authentication without excessive friction.
2. **Leveraging Kantara-Certified Identity Providers:** Kantara Initiative certification ensures that identity providers meet rigorous conformance and trust criteria, enhancing ecosystem reliability.
3. **Building on Federated Digital Trust Frameworks:** Frameworks such as the Trust Framework Solutions (TFS) or the Pan-Canadian Trust Framework (PCTF) promote interoperability, governance, and mutual recognition of credentials across sectors and borders.

3. Technical Standards and Certification

TD-4. How can CMS better encourage use of open, standards-based, publicly available APIs over proprietary APIs?

To better encourage the use of open, standards-based, publicly available APIs over proprietary ones, **CMS should adopt a comprehensive strategy that promotes accessibility, affordability, accountability, and alignment with national interoperability goals.**

- **Empower Third-Party Enablement**
 - CMS should ensure that open APIs—especially those based on HL7® FHIR®—can be implemented and supported by third parties such as clearinghouses and health IT vendors. This enables providers and plans to contract for API services without incurring the high costs of building and maintaining infrastructure themselves, making adoption more scalable and cost-effective.
- **Leverage ONC Certification and Program Requirements**
 - CMS can drive adoption by requiring the use of ONC-certified health IT that supports FHIR and other open standards. By embedding these requirements into CMS programs, providers can be confident they have the certified technology needed to meet program goals. This alignment ensures that open APIs are not just available, but actively used.
- **Prioritize FHIR and Internet-Based Standards**
 - CMS should explicitly prioritize **FHIR-based API data exchange** and other **modern, internet-based standards**. Interfaces must be **discoverable, easy to connect to**, and **designed for seamless integration with consumer-facing applications**. Additionally,

CMS should require that applications be **notified of changes** to APIs to maintain continuity and trust in data exchange.

- **Incentivize and Design for Adoption**
 - CMS should incorporate the use of open APIs into program design from the outset (as noted in TD-2), giving participants time to prepare. Program-level **incentives and disincentives** can further encourage adoption and discourage reliance on proprietary systems that hinder interoperability.
- **Promote Accountability and Measure Impact**
 - CMS and ONC must follow through on **validating compliance** with open API requirements and **measuring their real-world use and impact**. This ensures that standards are not only adopted in name but are delivering tangible value across the healthcare ecosystem.
- **Educate and Advocate**
 - **Finally, CMS should invest in education and outreach to ensure that patients, providers, payers, and developers understand the goals and benefits of open standards. Promoting success stories and demonstrating real-world value will help build momentum and trust across the ecosystem.**

TD-5. How could a nationwide provider directory of FHIR endpoints improve access to health information for patients, providers, and payers? Who should publish such a directory, and should users bear a cost?

A **nationwide provider directory of FHIR endpoints** would be a foundational asset for achieving scalable, standards-based interoperability across the U.S. healthcare system. It would significantly improve access to health information for patients, providers, and payers by enabling seamless, secure, and automated data exchange.

How It Improves Access

- **For Providers and Payers:** It enables accurate, real-time discovery of organizational FHIR endpoints, which is essential for payer-to-payer and payer-to-provider data exchange. This supports care coordination, prior authorization, and value-based care.
- **For Patients:** It empowers consumer-facing applications to locate and connect to the right data sources, improving access to personal health information and enhancing transparency.
- **For the Ecosystem:** It reduces administrative burden, eliminates duplicative directories, and supports automation through FHIR-based APIs.

What the Directory Should Include

To be effective, the directory must:

- Focus on **organizational endpoints**, not individual providers.

- Include **provider and payer affiliations, demographic data, and identity information** (e.g., NPI, TIN).
- Be **discoverable, machine-readable, and notifiable**—applications should be alerted when endpoint data changes.

Who Should Publish It

A **central, federally managed directory**—ideally led by CMS in collaboration with ASTP/ONC—is the most efficient and trustworthy model. This central hub could feed downstream systems via APIs, ensuring consistency and reducing duplication. Given their expertise, **clearinghouses could be key partners** in building and maintaining this infrastructure.

Cost Considerations

While building such a directory requires investment, the **long-term savings** from consolidating fragmented directories and reducing administrative overhead would be substantial. CMS could:

- **Incorporate costs into existing programs.**
- **Adjust incentives and disincentives** to encourage participation.
- **Ensure the directory is publicly accessible**, with no cost to users for basic access to regulated API endpoints.

A national FHIR endpoint directory is not just a technical asset—it is a **critical national utility**. It will unlock the full potential of FHIR, reduce burden, and drive the healthcare system toward a more connected, efficient, and patient-centered future.

TD-6. What unique interoperability functions does TEFCA perform? a. What existing alternatives should be considered? b. Are there redundant standards, protocols or channels or both that should be consolidated?

TEFCA (Trusted Exchange Framework and Common Agreement) plays a unique role in the U.S. health data interoperability landscape by establishing a **federated, policy-based framework** for **nationwide health information exchange**. Its core value lies in enabling **trusted, secure, and standardized exchange** of clinical data across disparate networks and systems.

Unique Interoperability Functions of TEFCA

- **Establishes a Nationwide Governance Model:** TEFCA creates a legal and operational foundation for data sharing across Qualified Health Information Networks (QHINs).
- **Supports Network-to-Network Exchange:** It enables cross-network data exchange that goes beyond point-to-point APIs or regional HIEs.
- **Standardizes Data Sharing Agreements:** It reduces variability in legal agreements, helping organizations connect more easily and securely.

- **Lays Groundwork for FHIR at Scale:** TEFCA's Interoperability and Access Services (IAS) are evolving to support **FHIR-based exchange**, which is essential for modern, API-driven interoperability.

a. Existing Alternatives to Consider

- **FHIR-based APIs:** Already widely adopted under the 21st Century Cures Act, FHIR APIs offer real-time, patient-directed access and are easier to implement for many use cases.
- **DirectTrust and HIEs:** These networks already facilitate secure clinical document exchange and could be enhanced rather than replaced.

b. Redundancies and Opportunities for Consolidation

- **Redundant Channels:** Multiple overlapping networks (e.g., HIEs, DirectTrust, Carequality) and protocols (e.g., XCA, XDR, FHIR) can create confusion and inefficiency.
- **Need for Streamlining:** CMS and ONC should focus on **consolidating redundant standards and protocols**, and prioritize **FHIR-based APIs** as the common denominator for scalable, modern data exchange.
- **Simplify Production Connectivity:** TEFCA should work toward **easier, more automated ways to connect to APIs in production**, reducing onboarding friction and accelerating adoption.

TEFCA's value lies in its ability to unify and scale trusted data exchange across the nation. To maximize its impact, it must ensure that **FHIR-based IAS work at scale**, avoid duplicating existing efforts, and focus on **streamlining access to production-grade APIs**. Collaboration with existing networks and a clear path toward consolidation will be key to its success.

TD-7. To what degree has USCDI improved interoperability and exchange and what are its limitations? a. Does it contain the full extent of data elements you need? b. If not, is it because of limitations in the definition of the USCDI format or the way it is utilized? c. If so, would adding more data elements to USCDI add value or create scoping challenges? How could such challenges be addressed? d. Given improvements in language models, would you prefer a non-proprietary but less structured format that might improve data coverage even if it requires more processing by the receiver?

The **U.S. Core Data for Interoperability (USCDI)** has played a pivotal role in advancing health data exchange by establishing a **baseline set of standardized data elements** that must be supported for FHIR-based interoperability. It provides a **shared foundation** across the healthcare ecosystem, enabling more consistent and structured data exchange.

Improvements and Value

USCDI has:

- **Standardized core data elements** across systems, improving consistency.
- **Enabled FHIR adoption** by defining the minimum data required for exchange.

- **Created a common starting point** for implementers, reducing ambiguity in what data must be supported.

Key Limitations

1. **Lack of Operational Clarity:** USCDI is more of a policy framework than a fully defined data model. It relies on the US Core Implementation Guide (IG) for technical details, which are not always fully developed. This leads to **inconsistent implementation**—for example, “disability status” is a defined concept, but lacks a standardized structure, making it difficult for vendors to implement reliably.
2. **Overly Broad Certification Requirements:** Health IT vendors may be required to support all USCDI data classes, even if their systems will never use certain elements. This creates **unnecessary burden** and misaligned investment.

Addressing These Challenges

- **Refine Implementation Guidance:** Continued collaboration with HL7 and the FHIR community is essential to operationalize USCDI elements with clear, testable definitions.
- **Align Certification with Use Cases:** As noted in TD-9, certification should be scoped to relevant data classes based on the system’s intended use, reducing unnecessary complexity.
- **Expand Thoughtfully:** Adding more data elements can add value, but must be balanced against implementation feasibility. A modular or tiered approach to USCDI expansion could help manage scope.

On Structure vs. Flexibility

While emerging technologies like language models can process less structured data, **structured FHIR-based data remains essential** for actionable, interoperable exchange. A smaller, well-defined dataset is often more useful than a larger, unstructured one that cannot be reliably integrated. That said, **non-proprietary, semi-structured formats** could complement USCDI in specific use cases where flexibility is needed, provided the receiving systems are equipped to handle them.

USCDI is a **critical enabler of interoperability**, but to fully realize its potential, it must evolve from a policy statement into a **fully operationalized, use-case-driven framework**. With clearer implementation guidance, smarter certification alignment, and thoughtful expansion, USCDI can continue to drive meaningful, scalable FHIR-based data exchange across the healthcare system.

4. Data Exchange

TD-12. Should CMS endorse non-CMS data sources and networks, and if so, what criteria or metrics should CMS consider?

Yes, **CMS should endorse non-CMS data sources and networks**—especially those that enhance whole-person care by bridging clinical, administrative, and social determinants of health data. The healthcare ecosystem is a dynamic web of public and private entities, and the more CMS can enable digital health

IT to leverage **all relevant data**, the more effectively providers and payers can deliver **coordinated, patient-centered care** that improves outcomes and reduces costs.

Why It Matters

- **Whole-person care** requires access to a broad spectrum of data—including from **clearinghouses, community resource networks**, and other non-traditional sources—that can connect healthcare with social services.
- These networks often serve as **critical intermediaries**, especially in connecting providers and payers, and can accelerate data exchange through established infrastructure.

Recommended Criteria for Endorsement

CMS should consider endorsing non-CMS networks based on:

- **Number of active connections** (e.g., providers, payers, community organizations)
- **Cost and ease of connectivity** for participants
- **Technical capabilities**, such as support for **FHIR APIs**, real-time data exchange, and scalability
- **Data quality and completeness**, especially for underserved populations
- **Alignment with CMS interoperability goals** and standards

By endorsing and integrating high-performing non-CMS networks, CMS can **amplify the reach and impact of its programs**, foster innovation, and help build a more connected, equitable, and efficient healthcare system.

TD-13. What new opportunities and advancements could emerge with APIs providing access to the entirety of a patient's electronic health information (EHI)? a. What are the primary obstacles to this? b. What are the primary tradeoffs between USCDI and full EHI, especially given more flexible data processing capabilities today?

APIs that provide access to the **entirety of a patient's electronic health information (EHI)** open the door to a new era of **personalized, timely, and data-driven care**. By enabling comprehensive, on-demand access to clinical and administrative data, these APIs can transform how care is delivered, coordinated, and experienced.

New Opportunities and Advancements

- **Whole-Person Care:** Access to full EHI ensures that providers have the complete context—clinical history, social determinants, and administrative data—to make informed decisions.
- **Innovation in Digital Health:** Developers can build smarter tools, such as AI-driven decision support, care navigation apps, and personalized health interventions.
- **Improved Transitions of Care:** Seamless data exchange across settings reduces duplication, errors, and delays in treatment.

- **Patient Empowerment:** Patients gain greater control and visibility into their health data, supporting engagement and self-management

Primary Obstacles

- **Data Format and Structure:** Much of EHI is still unstructured or inconsistently formatted, making it harder to use effectively.
- **Attribution and Consent:** Determining who has the right to access what data, and under what circumstances, remains a complex policy and technical challenge.
- **Compute and Infrastructure Limitations:** Processing large volumes of unstructured data requires significant resources and advanced tooling.
- **Lack of Real-World Testing:** Many systems are still early in their journey toward full EHI exchange, and operational experience is limited.

USCDI vs. Full EHI: Tradeoffs

- **USCDI** provides a **structured, standardized floor** for interoperability, ensuring consistency and reliability.
- **Full EHI** offers **completeness and flexibility**, but often lacks structure, making it harder to integrate and act upon.
- With today's improved data processing capabilities (e.g., NLP, machine learning), there is growing potential to extract value from less structured data—but this comes at the cost of **greater processing burden** on the receiving systems.

A Strategic Path Forward

As an example, the Da Vinci Project supports a **pragmatic, phased approach**:

1. **Start by getting the data moving**, even if it's unstructured.
2. **Learn from real-world exchange** to identify the most valuable and frequently used data.
3. **Gradually standardize** those data elements to improve usability and reduce variability.
4. **Invest in infrastructure and policy** to address consent, attribution, and compute challenges.

Ultimately, the goal is to ensure that **whatever data are needed are available when and where they are needed**—and FHIR-based APIs are the key to making that vision a reality.

TD-14. Regarding networks' use of FHIR APIs: a. How many endpoints is your network connected to for patient data sharing? What types, categories, geographies of endpoints do you cover? Are they searchable by National Provider Identifier (NPI) or organizational ID? b. How are these connections established (for example, FHIR (g)(10) endpoints, TECCA/Integrating the Health Enterprise (IHE) XCA, or proprietary APIs)? c. Do you interconnect with other networks? Under what frameworks (for example, TECCA, private agreements)?

Summary: Networks' Use of FHIR APIs

a. Endpoint Connectivity

Networks are increasingly connected to a diverse range of FHIR endpoints, including:

- **Payers, providers, and health systems** across various geographies.
- **Organizational endpoints** (rather than individual providers), often searchable by **National Provider Identifier (NPI)** or **organizational ID**—when such directories exist.

However, the ability to discover and connect to the correct endpoint remains a challenge. The creation of a **national, non-proprietary directory** must serve as a **central source of truth** for endpoint discovery. This is essential to enable scalable, cross-network FHIR API exchange.

b. Connection Methods

Connections are established using a mix of:

- **FHIR §170.315(g)(10) APIs** (as required under ONC certification),
- **TEFCA/IHE XCA protocols**, and
- **Proprietary APIs** where standards-based options are not yet available.

The goal is to move toward **standardized, FHIR-based APIs** as the default for all data exchange.

c. Network Interconnection

Many networks interconnect through:

- **Private agreements** and bilateral arrangements,
- Emerging **TEFCA frameworks**, and
- Participation in **multi-stakeholder initiatives** like Da Vinci and Carequality.

To support secure and accurate data exchange across these networks, **digital identity** is another critical enabler. Ensuring the right data is shared with the right patient and provider requires robust identity assurance and attribution mechanisms.

To fully realize the promise of FHIR APIs, the healthcare ecosystem needs two foundational capabilities:

1. A **centralized, public directory of FHIR endpoints**, and
2. A **trusted digital identity infrastructure**.

Together, these will enable scalable, secure, and efficient data exchange across networks—supporting better care, lower costs, and improved outcomes.

TD-15. Regarding bulk FHIR APIs: a. How would increased use of bulk FHIR improve use cases and data flow? b. What are the potential disadvantages of their use?

Bulk FHIR APIs represent a powerful advancement in scalable, standards-based data exchange, and we strongly support their continued development and adoption.

a. Benefits of Increased Use

Bulk FHIR enables the efficient exchange of data for **groups or panels of patients**, which is essential for:

- **Population health management**
- **Quality measurement and reporting**
- **Value-based care programs**
- **Payer-provider data exchange at scale**

By supporting **asynchronous, high-volume data transfer**, Bulk FHIR allows systems to move beyond one-patient-at-a-time queries, unlocking new efficiencies and enabling more timely, data-driven decision-making.

b. Potential Disadvantages

Despite its promise, Bulk FHIR adoption faces several challenges:

- **Compute Resource Constraints:** Many EHR systems are still hosted on-premises, limiting their ability to handle large-scale, asynchronous data requests efficiently.
- **Consent and Attribution Complexity:** Managing patient consent and accurately attributing patients to providers or payers in bulk scenarios remains a significant hurdle.

To address these issues, we encourage CMS and ASTP/ONC to:

- **Support patient search and group ID functionality** to streamline Bulk FHIR workflows.
- **Collaborate with the HL7 community** to refine standards and implementation guidance around consent and attribution.

Bulk FHIR is essential for scaling modern healthcare data exchange. While technical and policy challenges remain, they are surmountable—and the benefits for care coordination, analytics, and administrative efficiency are substantial.

TD-16. What are the tradeoffs of maintaining point-to-point models vs. shared network infrastructure? a. Do current rules encourage scalable network participation? b. What changes would improve alignment (for example, API unification, reciprocal access)?

Maintaining **point-to-point models** versus adopting **shared network infrastructure** presents a clear set of tradeoffs in terms of cost, scalability, and operational efficiency.

Tradeoffs: Point-to-Point vs. Shared Network Infrastructure

- **Point-to-Point Models**

These require each participant to establish and maintain individual connections with every other party. While they offer direct control, they are:

- **Expensive** to implement and maintain
- **Technically complex**, requiring in-house expertise
- **Difficult to scale**, especially as the number of connections grows

- **Shared Network Infrastructure (e.g., Clearinghouses)**

Clearinghouses offer a more scalable and efficient alternative by:

- **Centralizing data preparation, formatting, and routing**
- **Reducing the technical burden** on individual participants
- **Enabling faster onboarding** and broader participation
- **Maintaining their own directories**, which can reduce or eliminate the need for a national directory

This model allows providers and payers to focus on their core missions while leveraging the clearinghouse's infrastructure for secure, standards-based data exchange.

a. Do Current Rules Encourage Scalable Network Participation?

Current rules have made progress—particularly through FHIR API requirements and TEFCA—but they still **favor point-to-point models** in many cases. This can discourage smaller or resource-constrained organizations from participating at scale due to the cost and complexity of maintaining multiple direct connections.

b. What Changes Would Improve Alignment?

To better align incentives and promote scalable participation, CMS and ONC could consider:

- **API Unification:** Standardizing around FHIR-based APIs for both clinical and administrative data exchange to reduce fragmentation.
- **Reciprocal Access Requirements:** Ensuring that if one party must expose data via APIs, others must be equally accessible.
- **Support for Shared Infrastructure:** Recognizing and endorsing clearinghouses and other intermediaries as trusted exchange partners.
- **Directory Simplification:** Leveraging clearinghouse-maintained directories or federated models to streamline endpoint discovery.

While point-to-point models offer control, they are not sustainable at scale. Shared network infrastructure—especially when supported by policy and technical alignment—offers a more efficient, scalable path forward for nationwide interoperability.

TD-17. Given operational costs, what role should CMS or ASTP/ONC or both have in ensuring viability of healthcare data sharing networks, including enough supply and demand, that results in usage and outcomes?

CMS and ASTP/ONC play a critical role in ensuring the **viability and sustainability of healthcare data sharing networks** by fostering both **supply and demand** for interoperable data exchange.

To do this effectively, they should:

- **Incentivize Participation:** Use policy levers and program requirements to encourage providers, payers, and health IT vendors to participate in data sharing networks.
- **Support Infrastructure:** Invest in shared services like national directories, digital identity frameworks, and FHIR-based APIs to reduce operational burdens and lower entry costs.
- **Ensure Balanced Demand:** Align incentives so that both data suppliers and consumers benefit from participation, driving meaningful usage.
- **Measure and Promote Outcomes:** Track usage, performance, and impact on care quality and cost to demonstrate value and guide continuous improvement.

By aligning policy, technology, and incentives, CMS and ASTP/ONC can help ensure that data sharing networks are not only operationally viable but also widely used and impactful.

5. Compliance

TD-19. Regarding price transparency implementation: a. What are current shortcomings in content, format, delivery, and timeliness? b. Which workflows would benefit most from functional price transparency? c. What improvements would be most valuable for patients, providers, or payers, including CMS? d. What would further motivate solution development?

Current Shortcomings

- **Content & Format:** Estimates often lack consistency and structure, making them hard to compare or interpret.
- **Delivery & Timeliness:** Patients frequently receive cost information too late—via mail or multiple portals—limiting its usefulness.
- **Coordination Challenges:** Providers struggle to generate a single Good Faith Estimate (GFE) when multiple co-providers are involved.

Workflows That Benefit Most

- **Self-pay and uninsured patient scheduling**
- **Payer-provider coordination for Advanced Explanation of Benefits (AEOBs)**
- **Digital health apps integrating cost data into care planning and decision-making**

Valuable Improvements

- **FHIR-based APIs** streamline the creation and exchange of GFEs and AEOBs, enabling real-time, app-accessible transparency.
- **Coordinating Platforms** (e.g., EHRs, portals, third-party tools) can automate multi-provider GFE workflows.
- **Patient Access APIs** allow patients to receive cost data in the app of their choice, improving usability and engagement.

Motivating Further Development

- **Clear federal rulemaking** for insured patient workflows under the No Surprises Act is essential to drive adoption.
- **Incorporating price transparency APIs into CMS programs and certification** would incentivize implementation.
- **FHIR's alignment with existing standards** (e.g., CARIN IG for Blue Button®, PDex) reduces burden and promotes reuse across regulatory requirements.

While legacy EDI systems have limitations in flexibility and real-time exchange, FHIR APIs offer a modern, scalable solution for price transparency. They support consistent workflows for all patients—insured, uninsured, and self-pay—and enable digital tools to deliver timely, personalized cost information. With continued support from CMS and ASTP/ONC, and clear regulatory guidance, the healthcare industry can fully realize the promise of transparent, patient-centered care.

Cognizant appreciates the opportunity to offer our feedback and looks forward to continuing to collaborate with CMS and ASTP/ONC to implement policies that support and improve efficient and effective care delivery. Please contact Bettina Vanover, Director – Regulatory Affairs at Bettina.Vanover@cognizant.com with comments or questions about the content of this response.

Best,

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