Healthcare Directory Technology Learning Community

TLC Meeting – May 12, 2017
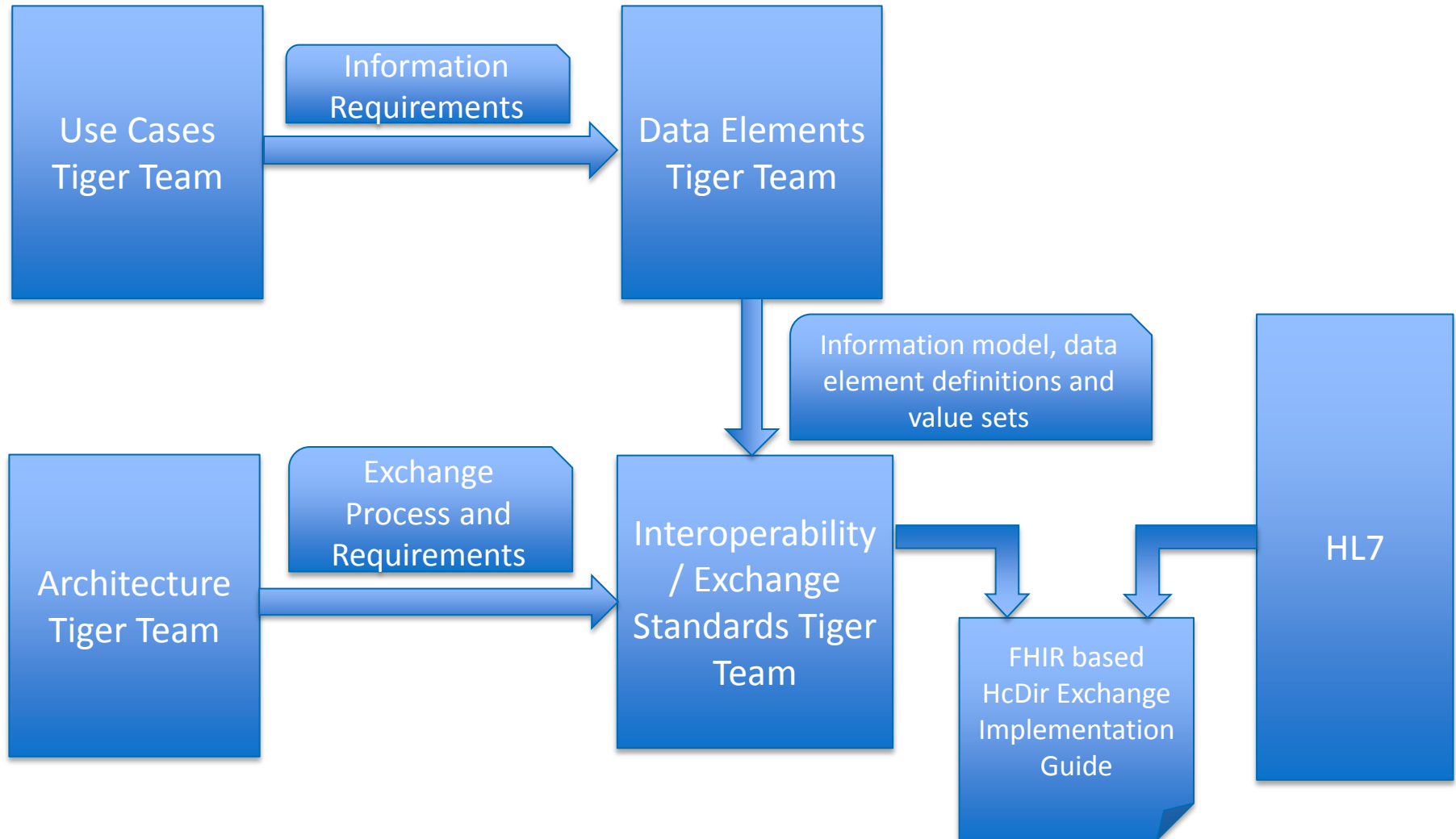
Daniel Chaput, ONC – Rim Cothren, A Cunning Plan - Bob Dieterle - EnableCare, LLC

Agenda

- Welcome and Housekeeping

- Tiger Team Updates

- Industry Updates

  » Sorin Davis, Managing Director, Industry Relations, CAQH

- Discussion

  » Relationships/affiliations in HcDir

Use Cases Tiger Team

Information Requirements →

Data Elements Tiger Team

Information model, data element definitions and value sets

Architecture Tiger Team

Exchange Process and Requirements →

Interoperability / Exchange Standards Tiger Team

FHIR based HcDir Exchange Implementation Guide

HL7

Use Cases

- **Basic Information Exchange**

  » A1. Enable electronic exchange (e.g. discovery of electronic end points such as IHE/EHR endpoints, FHIR server URLs, Direct addresses)

  » A2. Find an individual and/or organization (even if no electronic end point is available)

- **Patient/Payer focused**

  » B1. Find provider accessibility information (specialty, office hours, languages spoken, taking patients)

  » B2. Relationship between provider and insurance plan (insurance accepted) or plan and provider (network)

  » B3. Plan selection and enrollment

  » B4. Claims management (adjudication, prior authorization, payment)

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- Care Delivery / Value Based Care

  » C1. Provider relationship with a patient (e.g. for alerts)

  » C2. Provider relationship with other providers in context of a patient (e.g. care team communications)

- Other

  » D1. Provider credentialing

  » D2. Quality or regulatory reporting (e.g. aggregate data, plan networks)

  » D3. Detection of fraud; inappropriate approval of services and/or payment for services

Data Elements Tiger Team

	B	Cardinality		E				
	Information Requirement [1]	Ind	Org		A1	A2	B1	B2
3	**Demographics**							
4	Individual type	1..*	--		Yes	Yes	Yes	Yes
5	Organization type [6]	--	1..*		Yes	Yes	Yes	Yes
6	Name	1..1			Yes	Yes	Yes	Yes
7	Description	--	0..1					Yes
8	Alternate name (a.k.a., d.b.a., alias, historical)	0..*			Yes	Yes	Yes	Yes
9	Name type	1..1			Yes			Yes
10	Time period	1..1				Yes	Yes	
11	Primary Address [2]	0..1			Yes			
12	Alternate address (including historical) [2]	0..*			Yes	Yes	Yes	Yes
13	Address type	1..1			Yes	Yes	Yes	Yes
14	Time period	1..1				Yes	Yes	Yes
15	Gender	1..1	--		Yes	Yes	Yes	Yes
16	DOB/Age	1..1	--		Yes	Yes	Yes	Yes
17	Picture	0..1	--				Yes	
18								
19	**Identification**							
20	Global unique identifier [3] [7]	1..1	1..1			Imp	Imp	Yes
21	Identifier (NPI, etc.)	0..*	0..*		Yes	Yes	Yes	Yes
22	Type	1..1	1..1		Imp	Yes	Yes	Yes
23	Time period	1..1	1..1			Yes	Yes	Yes
24	License information (state, DEA, etc.)	0..*	0..*		Yes	Imp	Imp	Imp
25	Type	1..1	1..1		Imp	Imp	Imp	Imp
26	Time period	1..1	1..1			Imp	Imp	Imp
27	Tax ID	0..1	1..1		Yes			
28								
29	**Contact information**	1..*						
30	Telephone number	1..*			Yes	Yes	Yes	Yes
31	Via (reception, etc.)	0..1			Yes			
32	Type/purpose [4]	1..1			Imp	Yes	Yes	Yes
33	Time Period	1..1				Yes	Yes	Yes
34	Email address [5]	1..*			Yes	Yes	Yes	Yes
35	Via (reception, etc.)	0..1			Yes			

Data Elements Tiger Team

- Logical Groupings:

  » Demographics (e.g. name, gender, DOB, type)

  » Contact information (e.g. phone, email, fax, purpose of each)

  » Location (e.g. addresses, hours, contact info, purpose)

  » Identification (e.g. unique ID/type)

  » Education/license (e.g. education, license information, tax ID)

  » Relationships (e.g. parent-child, individual-org, role)

  » ESI/electronic end point

  » Validation

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1. Review reference standards and document relevant portions

    » S&I, IHE HPD, ASC X12, FHIR

2. Draft recommended data elements

    » Include applicable relationships/constraints

    » Identify/propose value sets

3. Describe validation processes

4. Describe restrictions

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Data Elements - Address

Address Object								
	The Address Object contains a single physical, virtual or postal address	Data Type	Card	Scope	Value Set		Entry check	Validate against Source wrt Context
Address1	First line of an address	Text	1..1				No	Yes
Address2	Second address line, if needed	Text	0..1				No	Yes
City	Contains a valid US city	Code	1..1	USPO	US cities		Yes	Yes
County	Contains a valid US county	Code	0..1	USPO	US counties		Yes	Yes
State	Two digit state	Code	1..1	USPO	US states		Yes	Yes
ZIP Code	Five digit zip with optional extension	Code	1..1	USPO	Zip codes		Yes	Yes
Geolocation	Geolocation for physical addresses	Set	0..1	Calc	generate and store		Yes	No
Type	Type of address	Code	1..1	HcDir	Type for the Address		Yes	Yes
Usage	Indicates the usage for this address.	Code	1..*	HcDir	Usage for the Address		Yes	Yes
Status	Status of this address	Code	1..1	HcDir	Status for the Address		Yes	Yes

- **Synchronous Request & Response**

  » Any user makes a request for HcDir Data, could be an existing sub/set, a "query" for a population, a query for an individual rec, etc.

  » System processes as necessary

  » Response may be sent with data (real-time) or sent with a URI for future pickup (batch)

- **Subscribe/Publish**

  » Any user makes a request for HcDir Data, could be an existing sub/set, a "query" for a population, etc., may be one time or on a schedule

  » System processes as necessary

  » System publishes the result as a push to subscriber (real-time), to a queue (real-time), or as a batch for the subscriber to pull

Architecture Tiger Team – Exchange Scenarios

- Describe how various actors interact with a healthcare directory

  » E.g. information exchange, payer, provider, EHR, state/federal government, etc.

- Define scope of populations (i.e. what are they searching for?)

  » Is the population geography or state-based? Is the population defined by a relationship? Is the population defined by some attribute?

- Identify appropriate exchange mechanisms

  » Pull (real-time), pull (batch), sub/pub (push), sub/pub (queue), sub/pub (batch)

- Define scope of data accessed in a healthcare directory

  » Full data, delta data, urgent data

- Goal: Implementation Guide for Sept. HL7 ballot cycle

  » PSS is under review at HL7 meeting in Madrid

- Applicable FHIR resources

  » Organization, Practitioner, Location, HealthcareService, Endpoint, PractitionerRole

- New resources?

  » Network, Product, Accessibility, Credentialing/Accreditation, Validation, Restriction, Contract, OrganizationRole, OrganizationAffiliation

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- CAQH – Sorin Davis

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CAQH

Provider Data Action Alliance

facilitated by CAQH

May 12, 2017

CAQH

- CAQH, a non-profit alliance, is the leader in creating shared initiatives to streamline the business of healthcare.

- Through collaboration and innovation, CAQH accelerates the transformation of business processes, delivering value to providers, patients, dental and health plans.

- CAQH member organizations:

The Provider Data Action Alliance is an outgrowth of the 2016 Provider Data Summit

Public
Health Plans

Health
Systems /
Providers

Government /
Regulators

Consumers

HIEs /
Marketplaces

Private
Health Plans
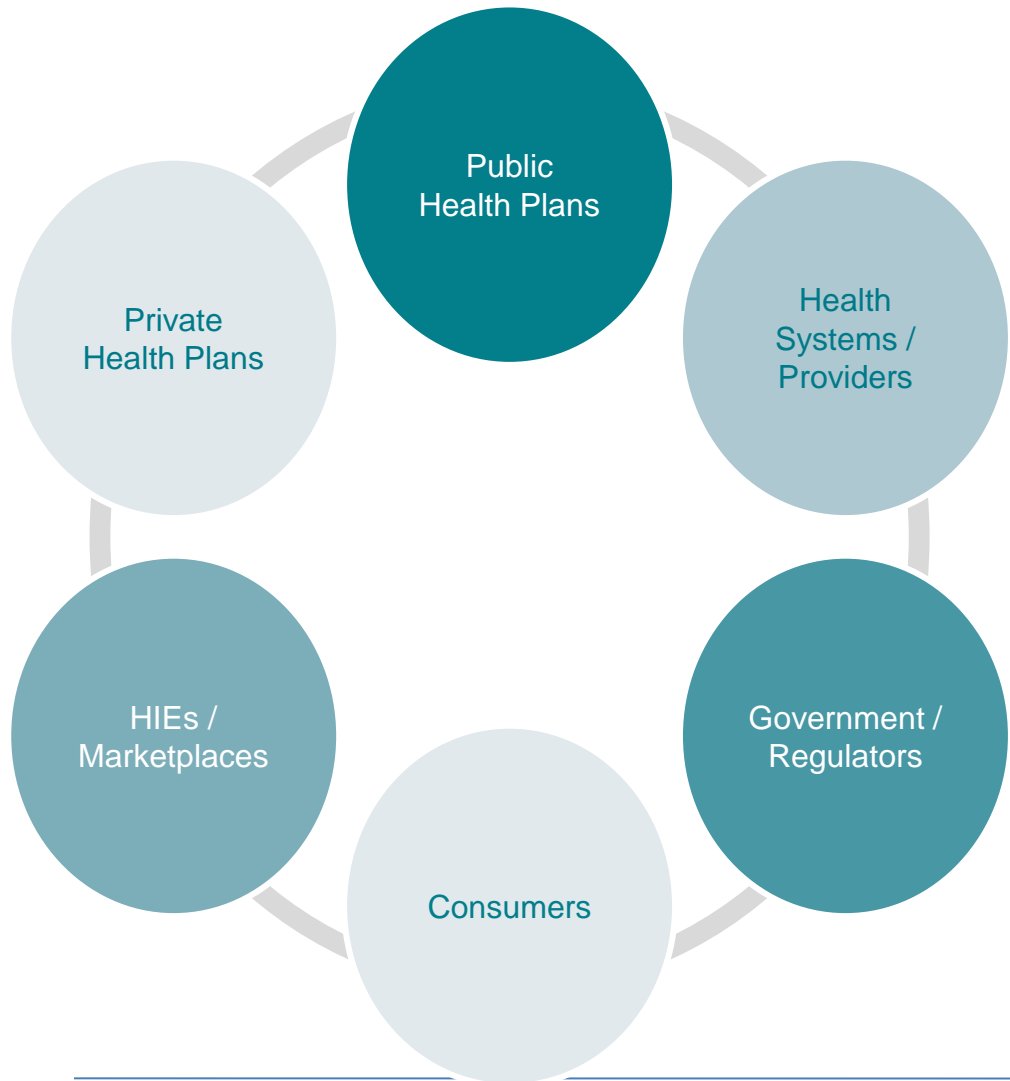
- Last September, CAQH brought together more than 100 industry leaders from public and private entities to discuss potential solutions to provider data issues.

- The key recommendation was the collective development of an **industry roadmap** that would establish a long-term vision and outline a practical, collaborative, and cross-sector approach to solving provider data issues.

- The purpose of the Provider Data Action Alliance is to enable an industry-wide conversation on an industry roadmap.

CAQH

Provider Data Action Alliance participants are drawn from across the industry

Provider Data Action Alliance

Providers
- *Montefiore*
- *CHRISTUS*
- *SureScripts*
- *Anne Arundel*

Private Payers
- *Cigna*
- *Humana*
- *Aetna*
- *BCBST*
- *United Dental*
- *Harvard Pilgrim*
- *Davis Vision*

Public Payer
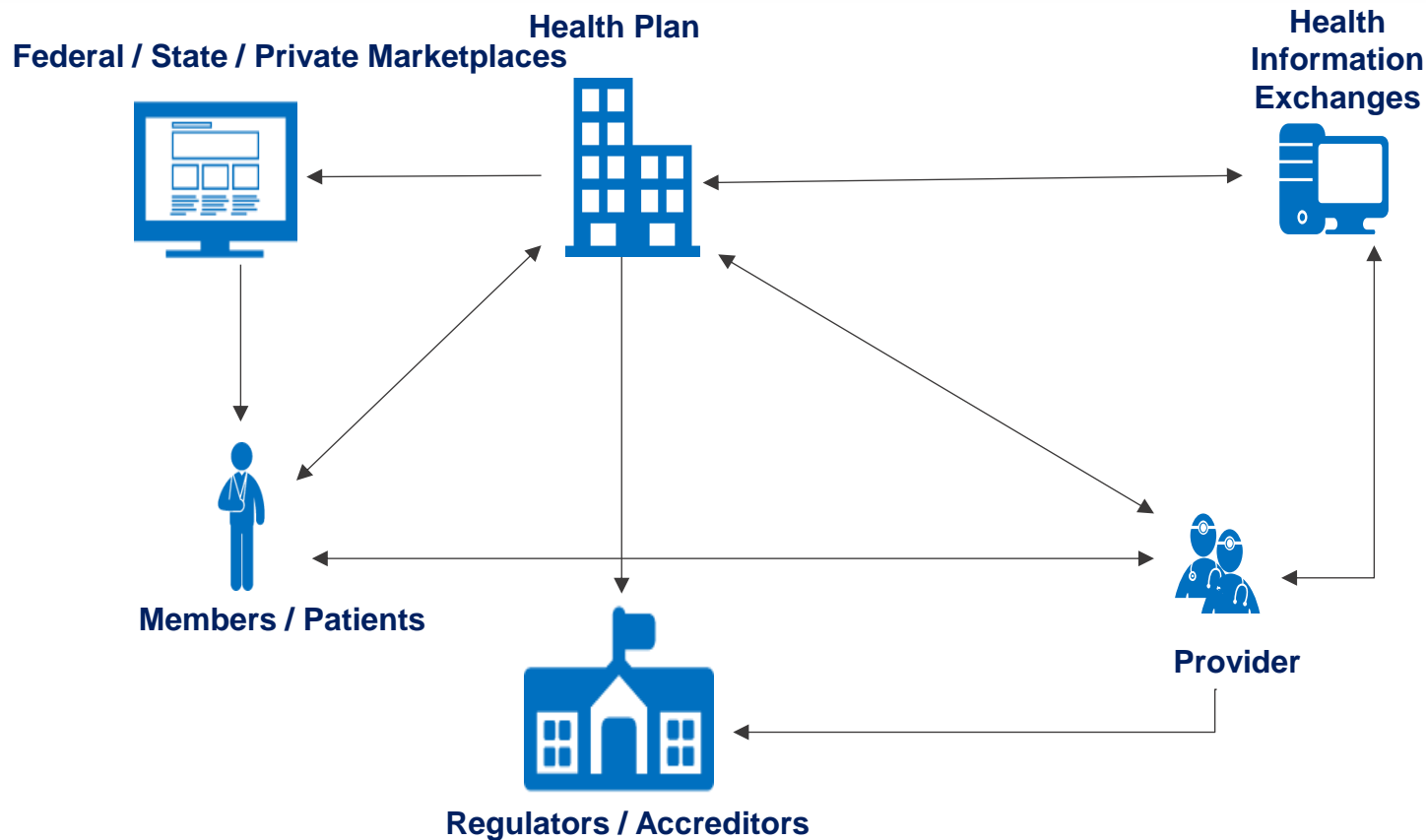- *TennCare*
- *VA*
- *HHS – ONC*
- *Medicare - CMS*

HIE/Marketplace
- *CRISP*
- *Covered CA*
- *MiHIN*
- *Aon/Hewitt*

Regulator
- *NCQA*
- *FSMB*
- *NPDB*
- *CMS*

CAQH

The highly inter-connected healthcare system relies on accurate and up-to-date provider data in almost every transaction and activity

Federal / State / Private Marketplaces

Health Plan

Health Information Exchanges

Members / Patients

Regulators / Accreditors

Provider

The main elements of an industry roadmap should provide benefits to every stakeholder.

- **Standardized Definitions and Requirements:**
  - Industry-standard data definitions enables simpler interchange and reduces the friction in data-sharing between and among industry sectors.
  - Authoritative data sources reduce the likelihood of conflicting information that causes rework and poor quality.
  - Alignment of regulatory requirements creates both efficiency and certainty.

- **Definitions and Maintenance Processes for High-Quality Data:**
  - Consensus-defined benchmarks of data quality enables different stakeholders to interact with consistent and well- understood expectations.
  - Aligning accountability and incentives among participants enables stakeholders to work in concert to achieve quality.

- **Centralized Data Resources:**
  - Rationalization of overlapping or redundant data sources streamlines integration efforts for data producers and consumers.
  - More consolidated infrastructure enables the pooling of investments for data verification and quality assurance capabilities, leading to lower costs.

CAQH

A Provider Data Roadmap must be persuasive.

- An industry roadmap is fundamentally a persuasive document, designed to influence a broad array of stakeholders to align their short-term objectives and longer-term strategies with a shared vision.

- To this end, a successful roadmap must not only lay out this shared vision, but convincingly explain how all relevant parties each have an compelling interest in achieving it.

- Further, to be persuasive, it must identify and address existing barriers which have previously prevented industry convergence on a shared vision, as well as identify those issues which could arise in pursuit of the articulated goals.

Key Components of a Roadmap

1. *Clarify the terms and issues*

2. *Identify underlying causes*

3. *Describe a future state*

4. *Explain how to achieve the vision*

CAQH

Outline of an Industry Provider Roadmap: Terms and Issues Clarification.

1. **Clarify the terms**

    - Providers

        – "Physicians, hospitals, allied health professionals, other practitioners and institutions who deliver or coordinate healthcare services, including nurse practitioners, social workers, counselors, community health centers, behavioral health agencies and other organizations."

    - Provider Data

        – "Information about individual providers, groups of providers and institutions – who or what they are, their qualifications, how to access them, the services they provide, and the health plan networks or products they participate in."

2. **Clarify the issues**

    - The Provider Data Summit in 2016 identified the following four issues:

        – There are few authoritative provider data sources, leading to waste in the healthcare system.

        – Provider data requirements and standards vary widely.

        – Provider data changes frequently and multiple entities must be notified of each change.

        – Providers must be more engaged in the provider data dialogue.

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2. **Identify the underlying causes of the issues**

- Why are there few effective authoritative provider data sources?

- Why is there not yet a single standard which specifies requirements for provider data?

- What causes the proliferation of entities which must be notified of each change in provider data?

- What has prevented greater provider engagement?

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Outline of an Industry Roadmap: Describe a Future State.

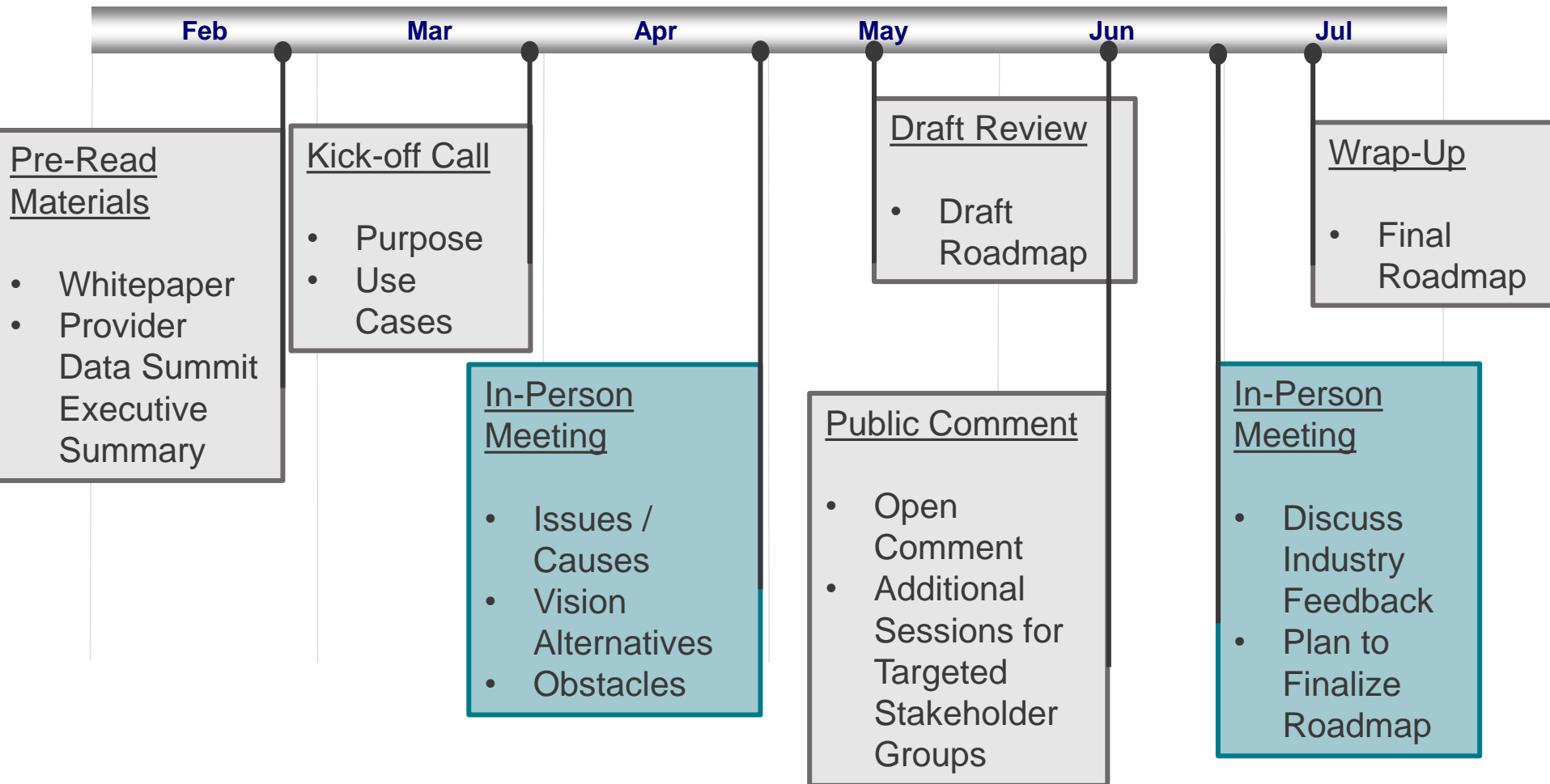3. <u>**Articulate a vision of the future.**</u>

- Explain what the provider data ecosystem will look like once the issues causing current pain points have been addressed.

- Identify priority use cases and define the essential data set for each use.

- Point to specific benefits that would accrue to each stakeholder.

- Designate metrics, goals and measurement processes that will show progress toward the desired state.
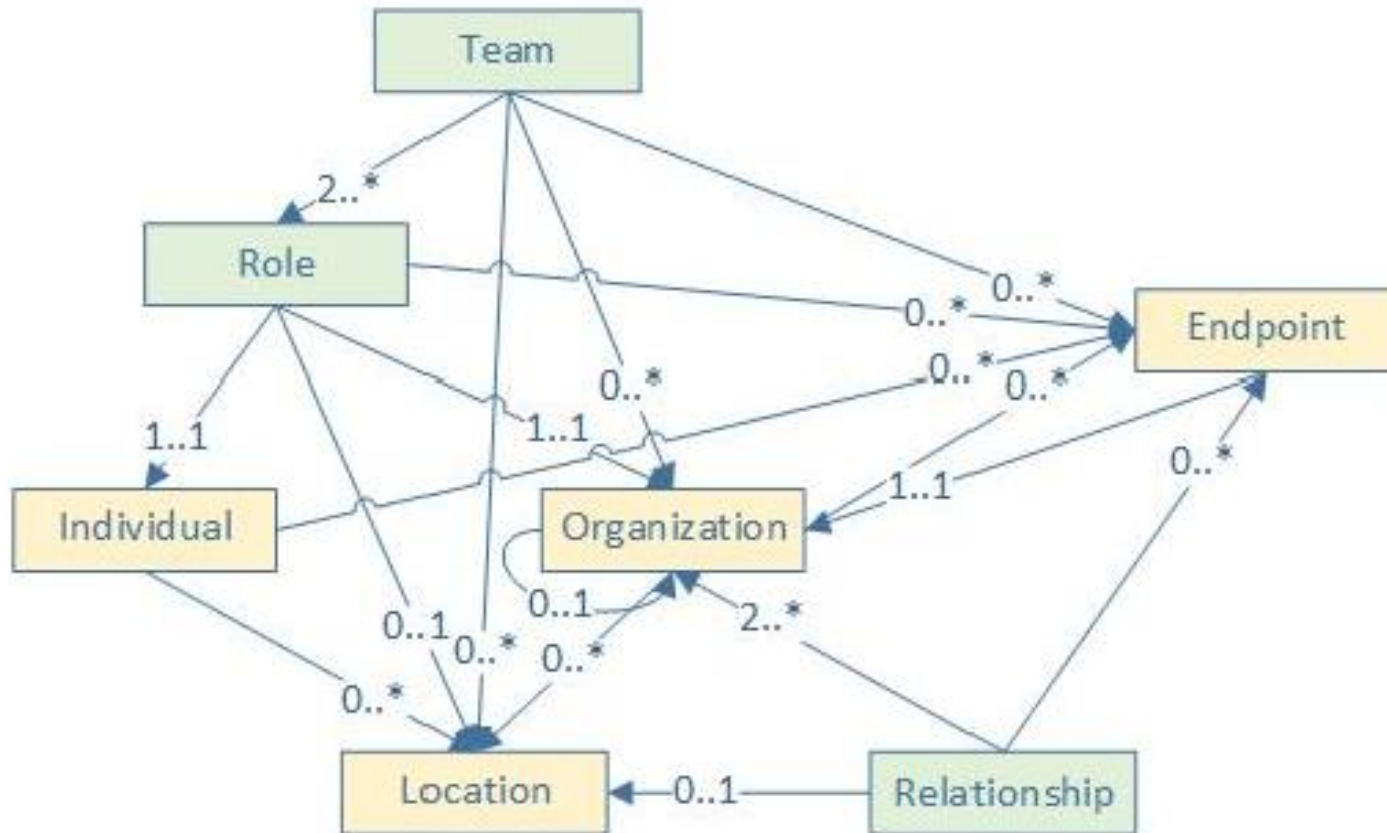
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4. **Lay out the necessary steps to achieve the vision.**

- Does provider data infrastructure need to be developed or extended?

- Do current incentive structures need to be re-aligned or adjusted, or new incentives created?

- Do existing economic, social, regulatory, or technical obstacles need to be removed?

- How can key actors be sufficiently motivated to change behavior, or committed to the success of the vision?

- Which external stakeholders must be included or educated?

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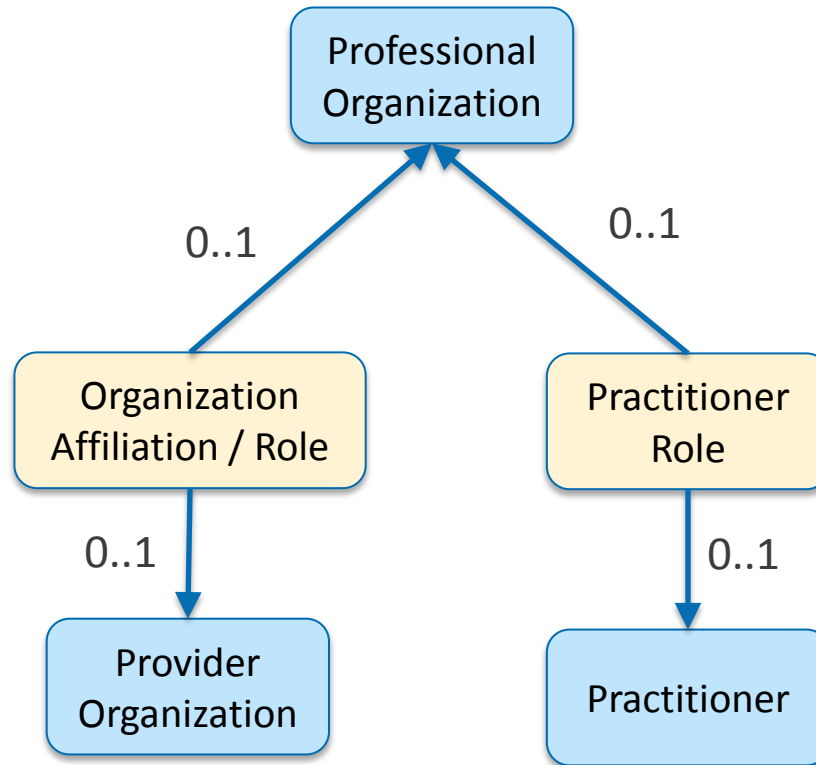# Timeline for Provider Data Action Alliance to develop an industry roadmap

Feb	Mar	Apr	May	Jun	Jul

Pre-Read Materials

- Whitepaper
- Provider Data Summit Executive Summary

Kick-off Call

- Purpose
- Use Cases

In-Person Meeting

- Issues / Causes
- Vision Alternatives
- Obstacles

Draft Review

- Draft Roadmap

Public Comment

- Open Comment
- Additional Sessions for Targeted Stakeholder Groups

In-Person Meeting

- Discuss Industry Feedback
- Plan to Finalize Roadmap

Wrap-Up

- Final Roadmap

CAQH

Professional Organization

0..1   0..1

More complex relationship with multiple roles (membership and care delivery)

Organization Affiliation / Role

0..1

Provider Organization

Practitioner Role

0..1

Practitioner

Expansion of role to other than professional delivering care at a location

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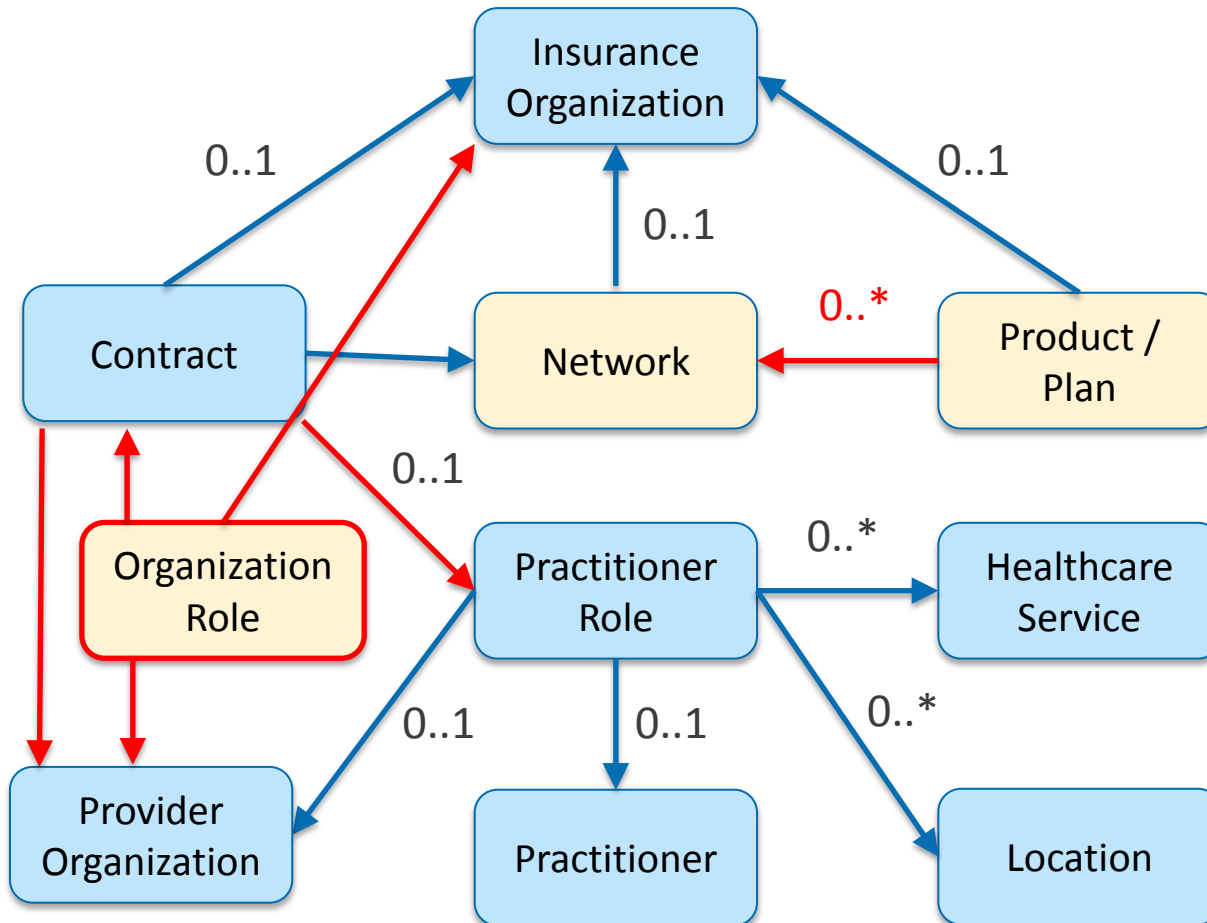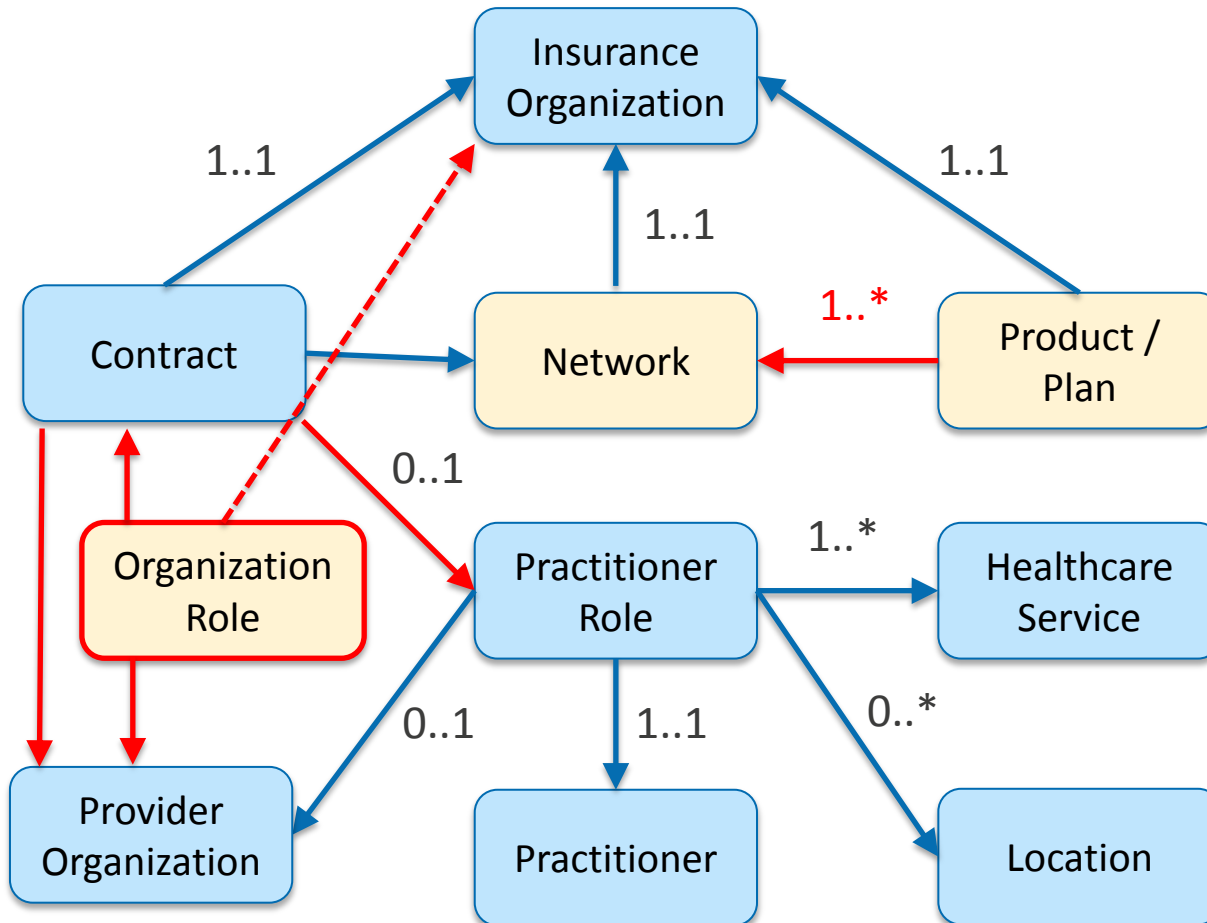
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