



# Session #1

## Comprehensive Review of All Health Plan Requirements

ACAP Interoperability Workshop  
April 30-May1, 2020

Khoa Nguyen, KN Consulting LLC  
[khoa.nguyen@kn-consulting.net](mailto:khoa.nguyen@kn-consulting.net)

# Overview of the Workshop Agenda

	Time	Topics
#1	8am-9:15am PT 11am-12:15pm ET	Comprehensive Review of All Health Plan Requirements Implications for Planning and Implementation
	15 minute break	
#2	9:30am-10:45am PT 12:30pm-1:45pm ET	Introduction to FHIR and Data Mapping FHIR Server Implementation Strategies and Considerations
	15 minute break	
#3	11am-12:15pm PT 2:00pm-3:15PM ET	Lessons Learned from Blue Button 2.0 3 <sup>rd</sup> -Party Access Management
	15 minute break	
#4	12:30pm-1:45pm PT 3:30pm-4:45 ET	Potential Use Cases and Opportunities
	1:45pm-2pm PT 4:45pm-5pm ET	Final Q&A period

## 3 Questions

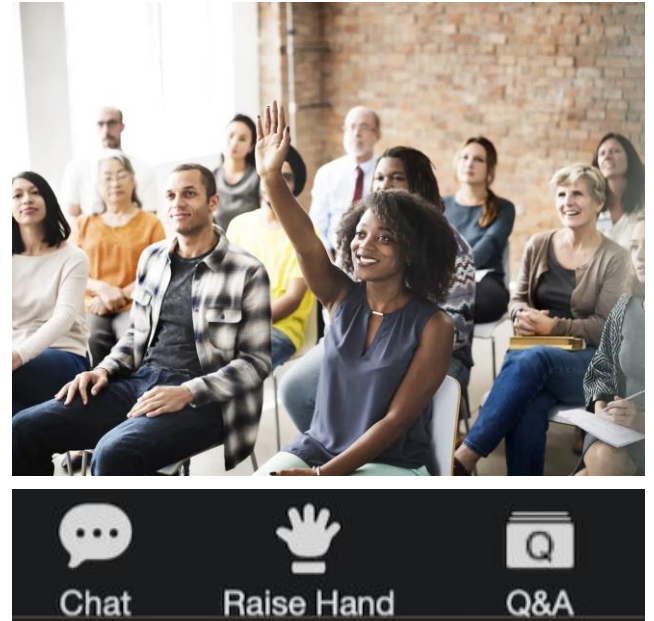
- How should my health plan prepare for the interoperability requirements?
- What are the most critical things I should be planning for?
- How does this impact my health plan?

## Important Resources

- ACAP April 2 Roundtable Call
  - Key changes and clarifications
  - Overview of health plan requirements
- Today's materials and recording will be available

# Administrative Stuff

- Everyone will be Muted to start
- You can Unmute to ask Q's or add comment
  - Chat option
  - “Raise Hand” feature
  - Your name and health plan to start



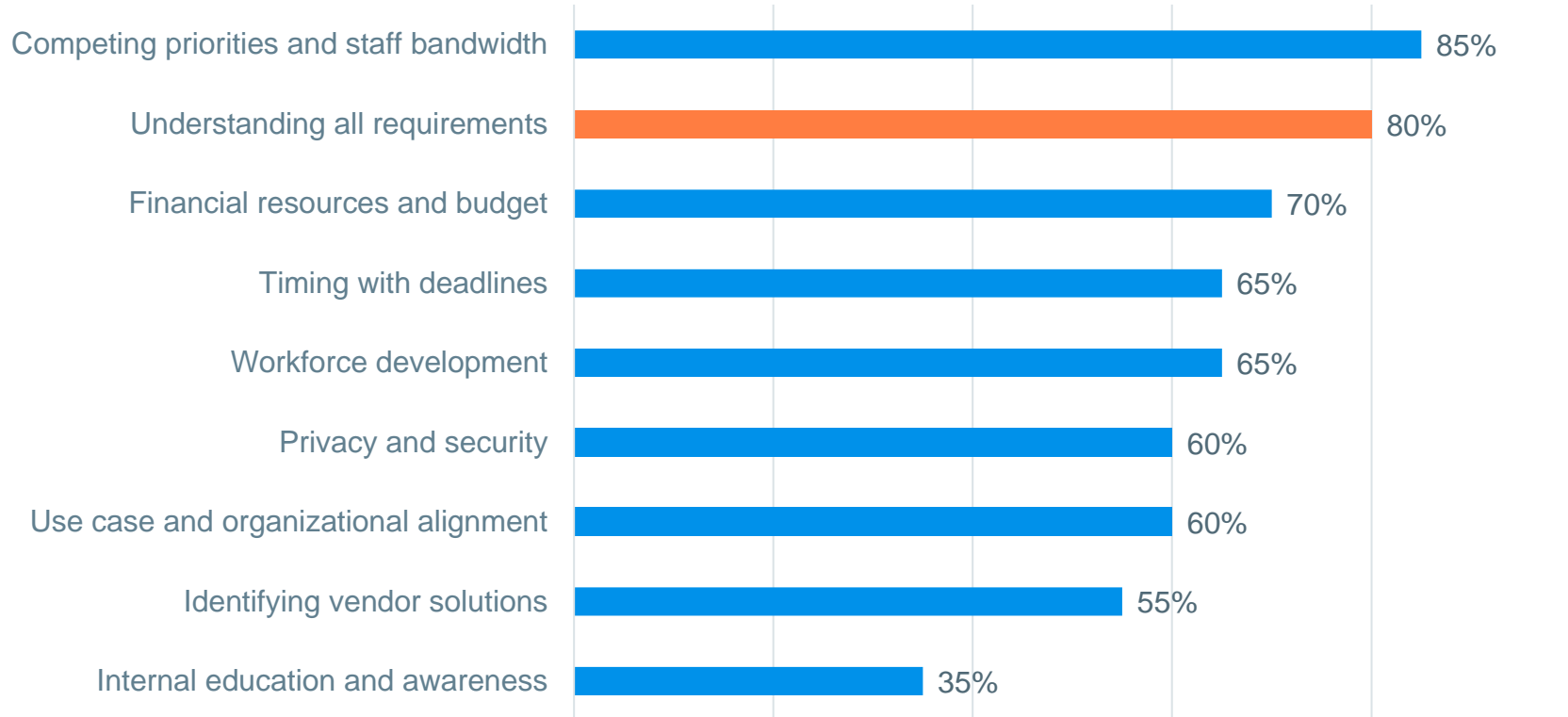


“

*What are all the bare minimums we have to do by the deadline – and what is optional or nice to have.*

# Survey Responses (N=20)

% of health plans indicating very or extremely challenging factors



# Discussion Framework: Health Plan Perspective

Required

Optional

Can't Do

- Impacted health plans and programs
- Data exchange partners and deadlines
- Standards and implementation guides
- Data requirements
- API connectivity and testing
- Privacy and security



## Appendix – Regulatory References

- By data exchange requirements
  - Standards
  - Patient Access API
  - Provider Directory API
  - Payer-to-Payer Data Exchange
- For impacted programs
  - Medicare Advantage
  - Medicaid MCOs
  - CHIP MCOs
  - QHPs on the FFEs

# Session #1 - Speakers

Comprehensive Review of All  
Health Plan Requirements



Khoa Nguyen  
KN Consulting LLC

Panelist – Health Plan Perspective  
Implications for Planning



Laurie Doran  
Advancing Health Care  
Health Alliance Plan



Bhaskar Chowdhury  
Geisinger Health Plan

# Impacted Payers and Programs



# 345 Unique CMS Payers and Programs Impacted

Required

## Medicaid and CHIP

- State FFS
  - Managed care plans (MCOs)
  - Prepaid inpatient health plans (PIHPs)
  - Prepaid ambulatory health plans (PAHPs)
- 
- Including mental health, dental and LTSS plans

## Medicare

- Medicare Advantage HMOs, POS and PPOs
- 
- Including SNPs, MMPs

## Exchange

- QHPs on the FFE (exemption available)

# CMS Payers and Programs Exempt

Optional

(exempt)

## Medicaid and CHIP

## Medicare

- Standalone Part D plans
- Cost plans
- PACE

## Exchange

- Standalone dental plans (SADPs) on the FFE
- FF-SHOP
- State-based Exchanges

# Data Exchange Partners and Deadlines



# Data Exchange Partners and Deadlines

Required

	Data Exchange Partner	Effective Date
1. Patient Access API	Members (thru 3 <sup>rd</sup> -party apps)	<del>January 1, 2021</del> July 1, 2021 <sup>2</sup>
2. Provider Directory API	3 <sup>rd</sup> -Party Apps <sup>1</sup>	
3. Payer-to-Payer Data Exchange	Other CMS-regulated Plans <sup>3</sup>	January 1, 2022

# Data Exchange Partners

Optional



(not required)

- Plan-to-Provider
  - CMS interoperability requirements do not directly regulate providers
  - Health plans are not required to change existing data exchange practices with providers or provider contract language to meet the interoperability requirements

Unless  
Consumer-directed

- Plan-to-State Medicaid/CHIP FFS



Today	July 2020	January 2021	July 2021	January 2022
 <p>Patient Access API Provider Directory API</p>				
			<p><u>CMS Estimate</u> 6-month+ Implementation \$788K - \$2.5 Mil</p>	
 <p>Payer-to-Payer Data Exchange</p>				

## Panelist – Implications for Planning



Laurie Doran  
Advancing Health Care  
Health Alliance Plan



Bhaskar Chowdhury  
Geisinger Health Plan

# Standards and Implementation Guides

# Standards

Required

## Technical Standards

1. HL7 Fast Healthcare Interoperability Resources, Release 4.0.1



Foundation for API  
Data Exchange

## Content and Vocabulary Standards

2. U.S. Core for Data Interoperability, version 1
3. SMART on FHIR Application Launch Framework IG Release 1.0.0 (a profile of OAuth 2.0 specification), including mandatory support for SMART on FHIR Core Capabilities
4. OpenID Connect, version 1.0, incorporating errata set 1

USCDI

OAuth

OpenID

Foundation for Data

Foundation for  
Privacy and Security

**CMS Final Rule**  
(345 CMS-regulated payers)



**Interoperability based  
on Common Standards**

---

FHIR R4

USCDI v1

Oauth 2.0

OpenID 1.0

**ONC Final Rule**  
(Health IT ONC Certification)



3<sup>rd</sup>-Party Developers and Applications

# Standards

	FHIR	Oauth OpenID	USCDI
1. Patient Access API	Required	Required	Required <sup>1</sup>
2. Provider Directory API	Required	Can't Do	Not applicable
3. Payer-to-Payer Data Exchange	Optional	???	Required

<sup>1</sup> If health plan maintains clinical data included in the USCDI standard.

# Updates to Standards

Optional

May use an updated version of any standard

## Conditions

- If required by other applicable law
- If no prohibited under any other applicable law
- Does not disrupt an end user's ability to access the data available through the API
- For FHIR and USCDI standards – if the National Coordinator approves updated standard for ONC Health IT Certification Program (through Standards Version Advancement Process)

# API Implementation Guides

Optional

(recommended)

May use implementation guides to map required data to FHIR standards

	Required Data	Implementation Guides
Patient Access API	Claims and Encounters	CARIN Blue Button IG
	Clinical (if maintained, USCDI)	US Core IG
	Drug Formulary	Da Vinci IG
Provider Directory API	Provider, Pharmacy Network	Da Vinci IG



## Panelist – Implications for Planning



Laurie Doran  
Advancing Health Care  
Health Alliance Plan



Bhaskar Chowdhury  
Geisinger Health Plan

# Data Requirements



# Accessible Content through API

Required

## Patient Access API

1. Claims and encounters
  - Including enrollee cost-sharing and provider remittance
2. Clinical data based on USCDI - if maintained
3. Drug formulary (Medicare) or preferred drug list (Medicaid/ CHIP)
  - QHPs on FFE exempt

## Provider Directory API

1. Provider network
2. Pharmacy network

QHPs on FFE exempt

## Payer-to-Payer Data Exchange

1. USCDI standard

# Update Timeframes and Date Ranges

## Required

- No later than one (1) business day for adjudicated claims, and no later than one (1) business day after receiving encounter and clinical data
- For drug formulary data, no later than one (1) business day after the effective day of any such information or updates to such information
- With a date of service on or after January 1, 2016

	Required Data	Update Timeframe	Date Ranges
Patient Access API	Claims and Encounters	< 1 B day	2016+
	Clinical (if maintained, USCDI)	< 1 B day	2016+
	Drug Formulary	< 1 B day	Current
Provider Directory API	Provider, Pharmacy Network	< 30 days	Current

## Clarification

### Patient Access API Update Timeframe

- Patient Access API requires the information to be shared no later than one (1) business day after it is **RECEIVED** by the impacted payer.
- If payer receives or gets lab data "late" -- it doesn't impact the 1 business day requirement
- Same for encounters received from delegated/ capitated providers and Rx claims from subcontracted vendors like PBM

# Additional Data Audit and Correction

Optional

(not required)

- Health plans are not required to do any additional audit or review *beyond current practice*
  - May include a notice or disclaimer to enrolled members as part of the API to indicate this
- Payers and providers do not need to change current plan-provider contract language or current data exchange processes

# Claims and Encounters

## Required

- Must include all covered services
  - Including behavioral health, LTSS claims, dental, Medicare supplemental benefits – for which a claim or encounter is generated or adjudicated
  - Including subcontracted, capitated or delegated services
- Including claims data for payment decisions that may be appealed, were appealed, or are in the process of appeal

# Clinical Data

Required

- Required in Patient Access API if “maintained” by the health plan
  - Access to the data
  - Control over the data
  - Authority to make the data available through the API
- Data classes and data elements included in the USCDI v1 standard



## USCDI v1 Summary of Data Classes and Data Elements

### Allergies and Intolerances

- Substance (Medication)
- Substance (Drug Class)
- Reaction

### Assessment and Plan of Treatment

- Assessment and Plan of Treatment

### Care Team Members

- Care Team Members

### Clinical Notes

- Consultation Note
- Discharge Summary Note
- History & Physical
- Imaging Narrative
- Laboratory Report Narrative
- Pathology Report Narrative
- Procedure Note
- Progress Note

### Goals

- Patient Goals

### Health Concerns

- Health Concerns

### Immunizations

- Immunizations

### Laboratory

- Tests
- Values/Results

### Medications

- Medications

### Patient Demographics

- First Name
- Last Name
- Previous Name
- Middle Name (incl Middle Initial)
- Suffix
- Birth Sex
- Date of Birth
- Race
- Ethnicity
- Preferred Language
- Current Address
- Previous Address
- Phone Number
- Phone Number Type
- Email Address

### Problems

- Problems

### Procedures

- Procedures

### Provenance

- Author Time Stamp
- Author Organization

### Smoking Status

- Smoking Status

### Unique Device Identifier(s) for a Patient's Implantable Device(s)

- Unique Device Identifier(s) for a Patient's Implantable Device(s)

### Vital Signs

- Diastolic Blood Pressure
- Systolic Blood Pressure
- Body Height
- Body Weight
- Heart Rate
- Respiratory Rate
- Body Temperature
- Pulse Oximetry
- Inhaled Oxygen Concentration
- BMI Percentile (2 - 20 Years)
- Weight-for-length Percentile (Birth - 36 Months)
- Head Occipital-frontal Circumference Percentile (Birth - 36 Months)

# Validate or Correct Clinical Data

Optional

(encouraged)

- Health plans are not required to validate or correct clinical data received from another source
  - *Also, providers are not required to submit updated data to payers should a patient suggest there is an error in their data*
- Payers and providers do not need to change current plan-provider contract language or current data exchange processes

# Data Segmentation

Can't Do

Health plans cannot segment or direct specific segments of data be made available via the Patient Access API

- If approved and at the direction of the beneficiary, must provide ALL of the data in the Patient Access API
  - Including behavioral health data
  - The beneficiary can choose not to make the request or share it with 3<sup>rd</sup>-party apps
- CMS consideration: technical specifications to segment data elements are not widely adopted

# Drug Formulary

Required

- Medicaid/ CHIP
  - Preferred drug list
- Medicare Advantage with Part D (MA-PDs)
  - Covered Part D drug and tiered formulary structure or UM procedures (step therapy, prior auth, qty limits)
- QHPs on FFEs are exempt

Same update  
timeframe that exist  
for health plan  
formulary information  
today.

# Provider Directory API (QHPs on FFEs exempt)

## Required

- Updated no later than 30 calendar days after a health plan receives the provider directory information or updates to the provider directory information
- Consent and authentication requirements do not apply – already public information

### Provider Network

1. Name
2. Address
3. Phone number
4. Specialty

### Pharmacy Network

1. Pharmacy name
2. Address
3. Phone number
4. Number of pharmacies in the network
5. Type of pharmacy – such as “retail pharmacy”

## Panelist – Implications for Planning



Laurie Doran  
Advancing Health Care  
Health Alliance Plan



Bhaskar Chowdhury  
Geisinger Health Plan

# API Connectivity and Testing



# API Documentation

Required

Health plan must make API documentation publicly accessible (website or publicly accessible hyperlink) and include the following information:

1. API syntax, function names, required and optional parameters supported and their data types, return variables and their types/structures, exceptions and exception handling methods and their returns;
2. The software components and configurations an application must use in order to successfully interact with the API and process its response(s); and
3. All applicable technical requirements and attributes necessary for an application to be registered with any authorization server(s) deployed in conjunction with the API.



# API Must Be Transparent and Publicly Accessible

## Can't Do

Health plans cannot require any preconditions or additional steps for 3<sup>rd</sup>-party apps to access the API documentation

For example, health plans cannot:

- Charge a fee for access to API documentation
- Requirement to receive copy of API documentation via email
- Requirement to register or create an account to receive the API documentation
- Requirement to read promotional materials or agree to receive future communications before making the API documentation available

# Routine Testing and Monitoring

## Required

Health plan must conduct routine testing and monitoring, and update as appropriate – to ensure API functions properly

- Including assessments to verify an individual enrollee can only access claims or encounter data or other PHI that belongs to that enrollee
- CMS will provide best practices and API testing tools
- Testing requirement is accounted for in CMS budget estimates

## Optional

- Health plans can define their own timeframe intervals for testing and monitoring

# Privacy and Security



# Deny or Discontinue API Access

Optional

(recommended)

Health plans may decline to approve or may terminate 3<sup>rd</sup>-party app's connection to the health plan's API

## Conditions

- If payer determines that such access presents unacceptable security risk to health plan's systems
- Must be based on objective, verifiable criteria that are applied consistently

# 3<sup>rd</sup>-Party App Attestation

Optional

(recommended)

Health plans may request 3<sup>rd</sup>-party apps to attest to certain privacy and security provisions in the apps privacy policy, prior to granting the app access to the health plans API

- If the 3<sup>rd</sup>-party app does not attest that their privacy policy meets the health plan's criteria, health plan can inform beneficiaries that they should exercise caution before opting to disclose their information with the app
- CMS references templates
  - ONC Model Privacy Notice and CARIN Alliance Code of Conduct

# 3<sup>rd</sup>-Party App Attestation

Can't Do

Health plan cannot discriminate in its implementation

- If health plan requests attestation of one app, it must request it for all apps
- Implement consistently, using defined and objective criteria

Health plan cannot deny access if approved and at the direction of the beneficiary – regardless of attestation response (or delayed/ no response) from 3<sup>rd</sup>-party app

- Unless the 3<sup>rd</sup>-party app poses a security risk to health plan's systems

# Two-Factor Authentication (2FA)

Optional

(recommended)

Health plans may require 2FA as part of the authentication process

- OAuth 2.0 provides support for 2FA
- Significantly increases security
  - industry accepted best practice
  - routinely used across many sectors
  - known to beneficiaries
  - low administrative burden
- ONC Final Rule adds new requirement as part of certification – health IT developers must attest to whether they support multi-factor authentication

# Token Management

Optional

(recommended)

Health plans may require a token be valid for at least 3 months

- ONC Final Rule is requiring at least 3 months for certified health IT
- Considered industry best practice



# Beneficiary Education

## Required

Health plans must provide educational materials about privacy and security considerations when selecting a 3<sup>rd</sup>-party app

- Easily accessible location on health plan's website
- CMS will provide templates to meet this requirement

## Optional

- May share through other communication mechanisms with enrollees
- Can tailor materials to the patient population (e.g., language, literacy levels)

## Panelist – Implications for Planning



Laurie Doran  
Advancing Health Care  
Health Alliance Plan



Bhaskar Chowdhury  
Geisinger Health Plan

# Appendix

## Regulatory References



# Patient Access API

Impacted Programs	Regulatory Reference
Medicare Advantage	42 CFR 422.119
Medicaid MCOs	42 CFR 438.60
CHIP MCOs	42 CFR 457.1233
QHPs on the FFE	42 CFR 156.221

## Provider Directory API

Impacted Programs	Regulatory Reference
Medicare Advantage	42 CFR 422.120
Medicaid MCOs	42 CFR 438.242(b)(6)
CHIP MCOs	42 CFR 457.1233(d)(3)
QHPs on the FFE	Not applicable

## Payer-to-Payer Data Exchange

Impacted Programs	Regulatory Reference
Medicare Advantage	42 CFR 422.119(f)
Medicaid MCOs	42 CFR 438.62(b)(1)(vi)
CHIP MCOs	42 CFR 457.1216
QHPs on the FFE	42 CFR 156.221(f)(1)

# Standards

	Regulatory Reference
HL7 FHIR 4.0.1	42 CFR 170.215
USCDI version 1	42 CFR 170.213
SMART Application Launch Framework IG Release 1.0.0	42 CFR part 162
OpenID Connect 1.0, incorporating errata set 1	42 CFR 423.160