



# Life after EHR Implementation: Promoting Transparency and Driving Market Improvements

ONC Annual Meeting

January 27, 2020

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The Office of the National Coordinator for  
Health Information Technology



## Purpose of Today's Discussion:

1. Discuss progress to date of the 21<sup>st</sup> Century Cures Act EHR Reporting Program
  - Stakeholder engagement
  - Draft reporting criteria
2. Discuss approaches to EHR Reporting criteria data collection

# BACKGROUND

# Project Team

- **ONC**
  - Staff Leads: Michael Wittie, Lauren Richie, Seth Pazinski
- **Urban Institute**
  - Christal Ramos (PI)
  - Fred Blavin, Emily Johnston, Dulce Gonzalez, Luis Basurto, Diane Arnos
  - Consultant: Steven Lane (Sutter Health)
- **HealthTech Solutions:**
  - Gary Ozanich (lead)
  - Kathy Frye, Ashley Kruger, Pam Zemaitis, Caitlyn Turner, Amy Osborne

# EHR Reporting Program

Mandated by the 21<sup>st</sup> Century Cures Act

- Provide publicly available, comparative information about certified health IT through:
  - Mandatory developer reporting
  - Voluntary user reporting
- Five key domains:
  - Interoperability
  - Usability and user-centered design
  - Security
  - Conformance to certification testing
  - Other categories as appropriate

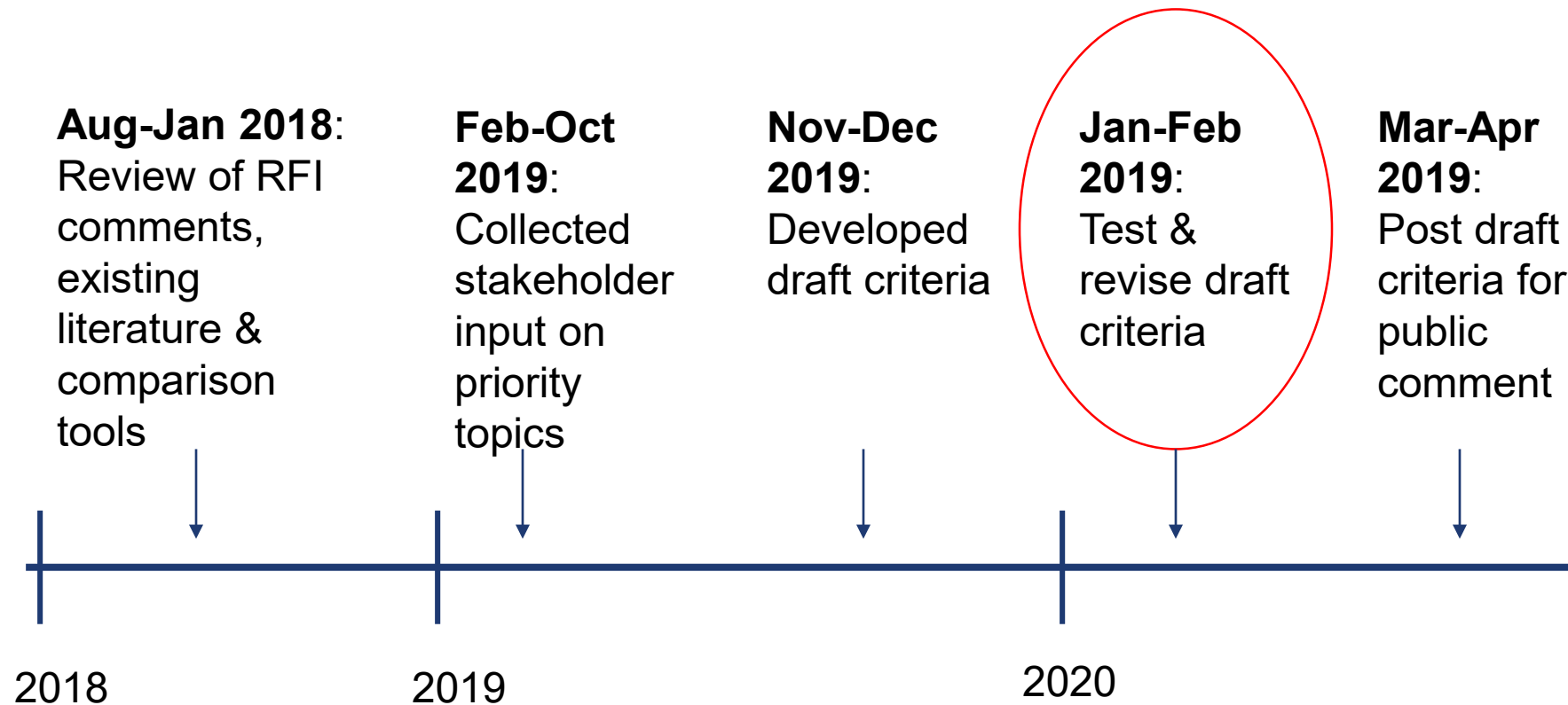
## Limitations with Existing Comparison Tools

- Limitations with 18 existing health IT comparison tools include (ONC 2016<sup>1</sup>):
  - High fees to access information
  - Methodological problems
  - Lack information on cost, usability, interoperability, and quality reporting capabilities
- Additional review of tools in 2018 revealed (Urban 2018<sup>2</sup>):
  - 4 are no longer available
  - 4 cater to narrow, specialized audiences
  - 3 only include product functionalities, no ratings or reviews
- Some stakeholders worry current tools don't meet needs of all providers

<sup>1</sup>ONC, Report on the Feasibility of Mechanisms to Assist Providers in Comparing and Selecting Certified EHR Technology Products, Report to Congress, April 2016

<sup>2</sup>Urban Institute, What Comparative Information is Needed for the EHR Reporting Program? November 2019

# Development of EHR Reporting Criteria

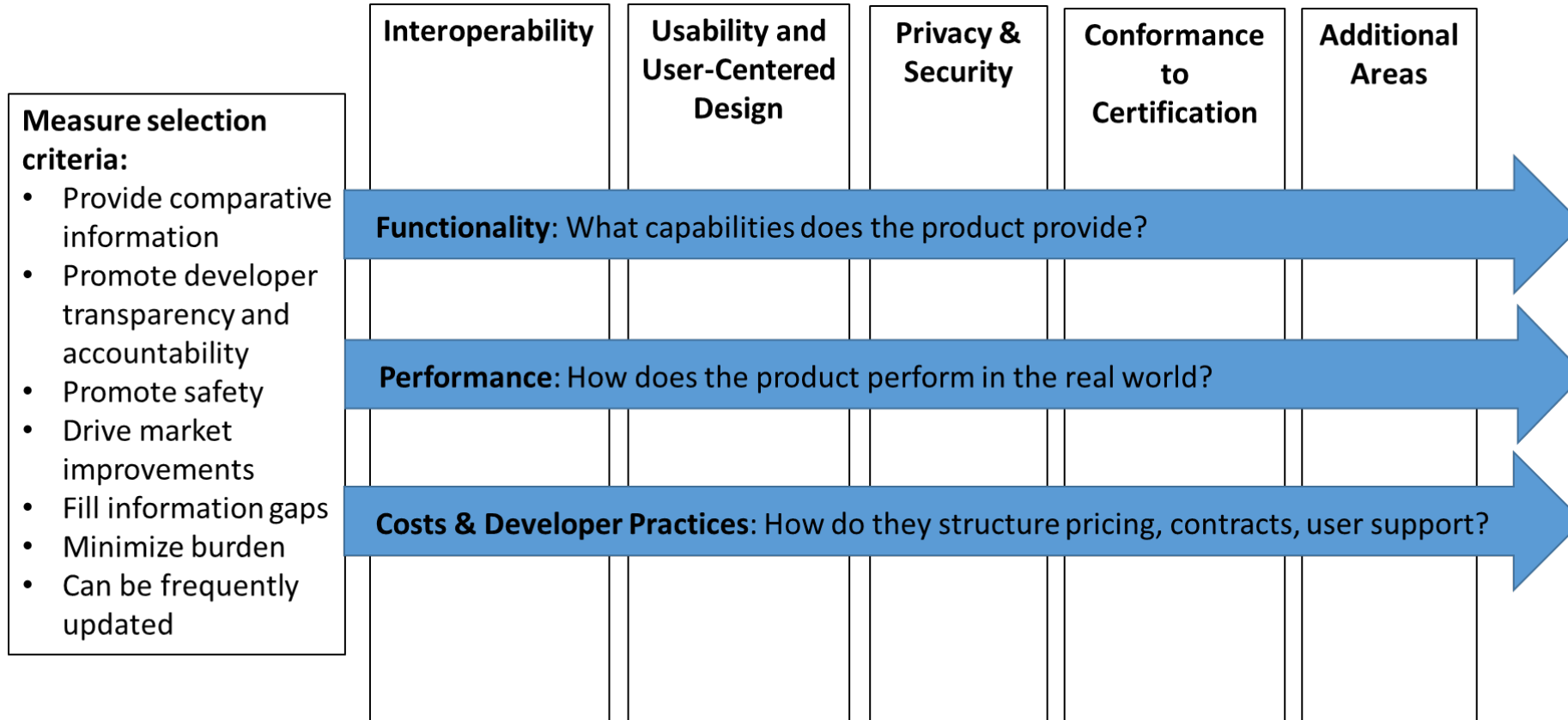


Note: Work beyond September 2020 is subject to additional ONC funding

# Stakeholder Input



# Framework based on Stakeholder Priorities



## Stakeholder Input

- ONC Request for Information (77 comments)
- Public forums and office hours (7 states)
- Professional association conferences (4)
- Topical, virtual group discussions (9)
- One-on-one discussions with experts (9)
- Market research calls on existing EHR compare tools (3)
- Dedicated email inbox for public feedback

## Draft Criteria Development Process

- Based on the stakeholder priorities, draft criteria were developed:
  - from existing data sources
  - to collect from EHR developers
  - to collect voluntarily from certified health IT users
- Measures were revised based on review and feedback from subject matter experts
- Cognitive and feasibility testing of criteria for EHR developers and users occurring this month
- Draft criteria are being revised based on testing and will be posted in March for public comment (not yet available)

# Potential Draft Criteria Options for Public Feedback

# Interoperability Draft Criteria Topics for Feedback

...	Developer	User
<b>Exchange w/national networks, trading partners</b>	Networks, HIEs/HIOs, agencies supported PDMP – single sign-on Method of exchange Video demos (Direct, PDMP) Cost (per message, interface costs)	Ease of exchange
<b>Electronic reporting (registries, incentive programs)</b>	Retrieval of underlying data Successful user attestation (PI, MIPS) Time to implement new measures Customization and costs for reports Pediatric measures	Ease of quality reporting Ease/success of attestation (PI, MIPS) Cost
<b>Technical standards, versions, APIs</b>	HL7 interfaces (#, upgrade frequency, cost) FHIR resources supported Patient matching ISA standards, USCDI, APIs	--
<b>Consumer-facing applications</b>	Methods for consumer access to data	--

## Usability Draft Criteria Topics for Feedback

	Developer	User
<b>Overall usability</b>	--	Overall rating Functionality for specialty/clinical focus
<b>Quality and safety</b>	--	Extent to which product supports quality, safety
<b>Provider burden</b>	--	Affect on efficiency, documentation time
<b>Features and functions to enhance usability</b>	Additional cost or customization required	Ease of use
<b>Implementation process</b>	Cost for customized interfaces Cost for implementation support	Ease of implementation process Satisfaction with communication and training

## Usability Draft Criteria Topics for Feedback: Features/Functions

- Automated field population
- Social determinants data collection
- Analytics
- Orders sets
- e-Prescribing of controlled substances
- Chronic disease management tool
- Medication tapering
- Mobile and remote accessibility
- Optical character recognition
- Receive/review images
- Patient reminders
- Single sign-on
- Telemedicine
- User-configured interfaces
- Voice recognition

## Security Draft Criteria Topics for Feedback

...	Developer	User
<b>Overall</b>	--	Satisfaction w/security features
<b>Multi-factor authentication</b>	Support for multi-factor authentication	--
<b>Role-based access</b>	Types of controls that can be implemented	--
<b>Security risk assessment</b>	Date of last assessment	--
<b>Security incidents</b>	# of incidents in past year # upgrades and patches to address vulnerabilities	Ever notified by developer of breaches
<b>42 CFR Part 2</b>	Tools offered to implement (tagging, segregation, role-based access)	--



## Other Draft Criteria Topics for Feedback

...	Developer	User
<b>Cost</b>	Pricing model (license, subscription) Average total & itemized costs	Total upfront purchase cost Annual ongoing cost
<b>Maintenance, upgrades</b>	Typical ongoing maintenance costs Upgrade frequency Downtime for maintenance, upgrades	Extent to which upgrades are useful, not burdensome
<b>Support</b>	Resources for user support Cost for user support	Satisfaction with support
<b>Contracts</b>	“Out clause” and “gag clause” requirements	“Out clause” and “gag clause” requirements
<b>Other</b>	--	Overall satisfaction

# Conformance to Certification Draft Criteria Topics for Feedback

- Draft criteria that primarily draw from CHPL:
  - Certification status
  - Developer status
  - Certification date
  - Certification edition
  - ONC-ACB responsible for certifying the listing
- Draft criteria also include developer question on successful completion of non-ONC conformance testing

# Approaches to Data Collection

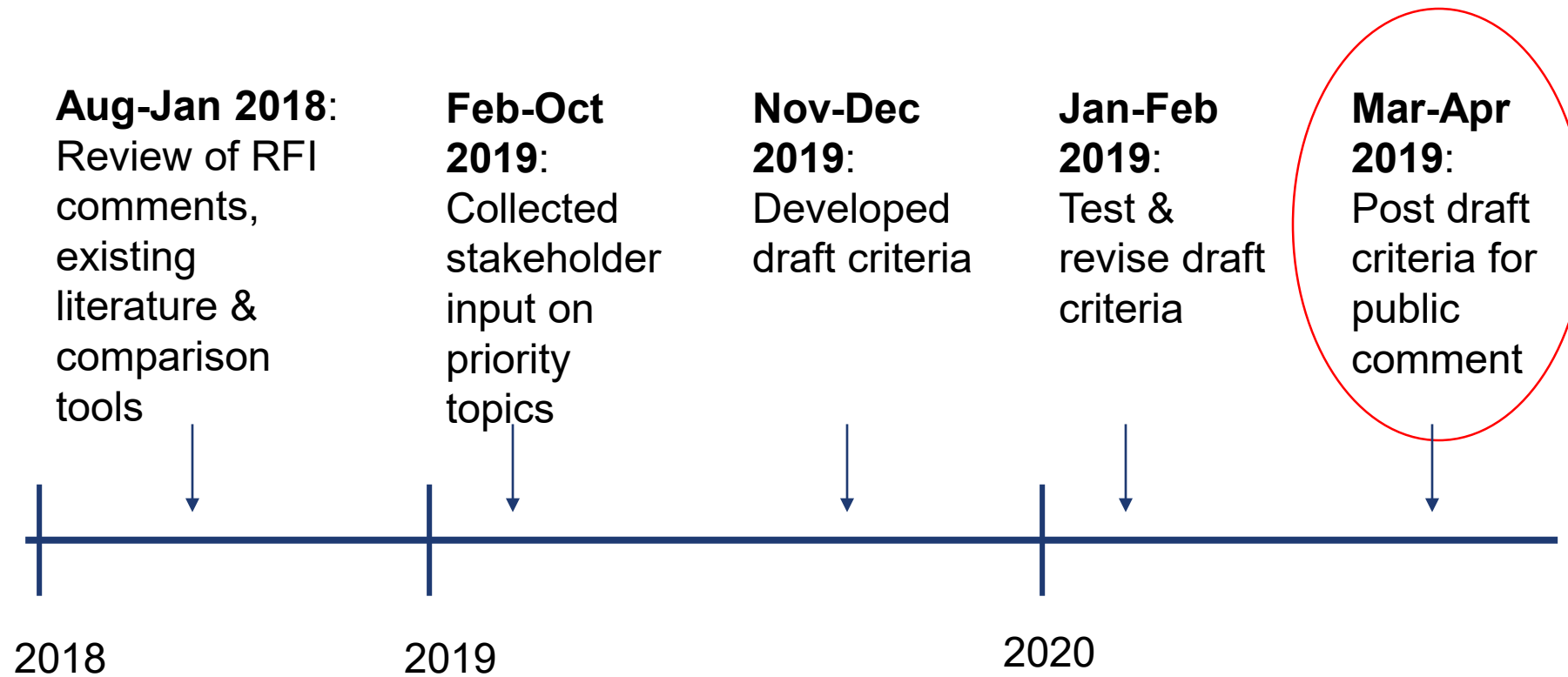
## Potential Data Sources

- Existing data sources
  - CHPL
  - Program data, other info from clinicians (market research, survey data)
- Data from EHR developers
  - As part of Cures, required to report on all certified technology to maintain certification
  - Trade-off between burden and data quality/quantity
  - Voluntary vs. mandatory criteria
- Voluntary data from EHR users
  - Crowd-sourcing approach is the least burdensome and most sustainable in a rapidly-changing environment
  - Concerns: biased responses and lack of incentives to review products

## Discussion Questions

- Overall
  - Priority topics to include?
  - Ability to collect comparable information on cost?
  
- Developer reporting
  - Focus on most recent versions of products?
  - Value of criteria using lists of connections and video demos?
  - Voluntary vs. mandatory criteria?
  
- User reporting
  - Effectiveness of crowd-sourcing approach?
  - Incentives to promote participation?

# Call to Action



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## Questions or Comments?

- Email: [ehrfeedback@urban.org](mailto:ehrfeedback@urban.org)

## Example Criteria – If Needed



## Example Measures: National Networks, Trading Partners

Source	Developer	User	CHPL
<b>Functionalities</b>	Support for: Carequality, Commonwell, eHealth Exchange  Method of exchange w/post- acute care, behavioral health	--	Direct Secure Messaging (DSM)  Public health reporting  Transitions of care, C- CDA creation
<b>Performance</b>	List locations for eHealth Exchange hub services, connections w/HIEs/HIOs, federal agencies  Video demo of DSM and PDMP workflows	Ease of exchange with HIEs/HIOs, federal agencies, PDMP, trading partners	--
<b>Cost &amp; Developer Practices</b>	Cost for DSM (per message fee) Interface Costs Interface Upgrades	--	--

## Example Measures: Electronic Reporting

Source	Developer	User	CHPL
<b>Functionalities</b>	Ability to collect data and provide electronic reports for MIPS and CPC+	...	Automated numerator recording  Automated measure calculation
<b>Performance</b>	Providers attested to MIPS in PY 2021 using product  Average time between availability of new quality measures and release date	Successful attestation to MIPS in PY 2021  Ease of attestation to PI and MIPS  Ease of quality measure reporting	...
<b>Cost &amp; Developer Practices</b>	Customization, consultant or add-on service required for reports	Additional costs for meeting MIPS requirements	...

## Example Measures: Usability - Orders

Source	Developer	User	CHPL
<b>Functionalities</b>	<p>Availability of default values for common orders</p> <p>Availability of evidence-based order sets and charting templates</p>	...	<p>CPOE – meds, labs, diagnostic imaging</p> <p>Drug-drug, drug-allergy checks for CPOE</p>
<b>Performance</b>	...	<p>Ease of default values for common orders</p> <p>Ease of evidence-based order sets and charting templates</p>	...
<b>Cost &amp; Developer Practices</b>	Functionalities in base model or with additional cost and customization?	...	...