

# eCR Now

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*Electronic case reporting (eCR)*

*The automated identification of reportable health events in electronic health records and their transmission to state and local public health authorities for review and action.*

# eCR Now

- Electronic case reporting (eCR) is a critical tool for COVID-19 and other outbreak management needs
  - Automated case reporting from EHRs to state and local public health agencies (PHAs)
  - Minimizes healthcare provider burden and meets core public health needs
  - Supports case management, contact tracing, situational awareness and reporting, connecting lab results, coordinating isolation and other response measures
  - Case reporting is a legally requirement in every state and territory
- eCR is operating well now for COVID-19, but there were a limited number EHRs with eCR capabilities when COVID-19 began
- We need more implementations of eCR Now

# eCR Now Elements

1. Cohort-based COVID-19 rapid eCR implementations for provider sites that have eCR enabled EHRs
2. A new eCR Now FHIR app that non-eCR enabled EHRs can rapidly implement to automate COVID-19 eCR
3. Extension of the existing eHealth Exchange policy framework through a developing Carequality eCR implementation guide

# eCR Now – Element 1

- Accelerated, cohort-based onboarding
  - Implementation has been streamlined to as little as just 3 days
  - Last week an initial California cohort onboarded 4.5 million patients and 13,000 physicians, this week there is a second cohort, and next week cohorts will expand outside of California
  - Over 100,000 COVID-19 case reports have now been triggered. Over 1000 facilities are actively reporting. 22 states are actively receiving reports and 45 have the capacity to do so.
- FHIR trigger code distribution service (eRSD)
  - Cases initiated from over 10 sets of evolving trigger codes (ICD, LOINC, SNOMED)
- Cases are automatically delivered to Public Health Agencies for surveillance – no manual entry in clinical care and minimized burden on healthcare providers and public health
- Electronic case reports are faster and more complete than manual reporting or ELR for outbreak management and contain critical clinical and demographic data

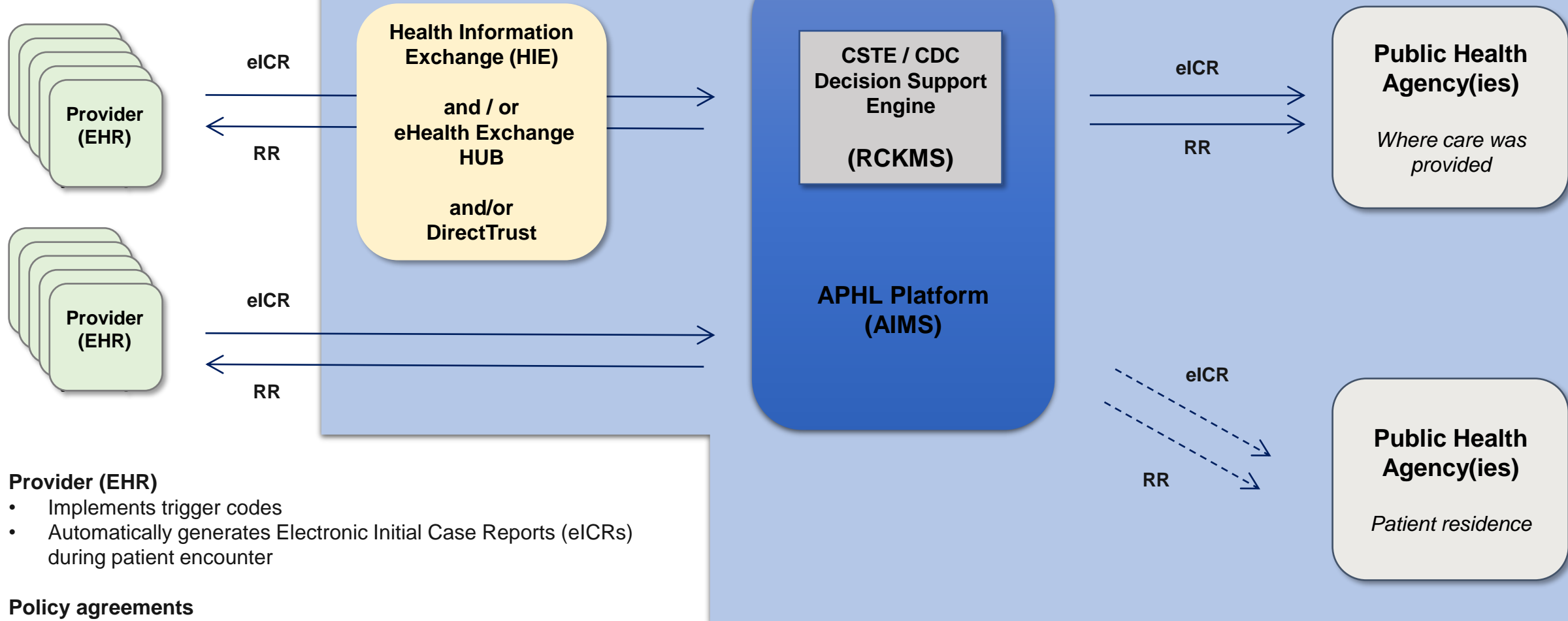
# eCR Now FHIR App – Element 2

- A FHIR app that can be rapidly implemented to automate COVID-19 eCR in otherwise non-enabled EHRs
- Connect COVID-19 electronic case reporting to existing infrastructure to confirm case reports and route to appropriate public health surveillance systems
- Immediately implement in as many EHRs as possible, based on API that is “in the wild” without waiting for EHR software releases
- Initial version of eCR Now app for COVID-19 and source code will be available May 1 for EHR sandbox implementation and testing

# eCR Now - FHIR Reporting App

	eCR Now COVID-19 and full eCR option	Backend Services App	Reporting Services in FHIR API
<b>Description</b>	<i>Expedited delivery of app to provide automated COVID-19 eCR for EHRs that don't have it. App can be used subsequently for full eCR.</i>	<i>Planned roll-out of app with fully automated launch, trust services, and other reporting functions</i>	<i>Advance FHIR Common Reporting Functions into FHIR API – all EHRs must report</i>
<b>Timing</b>	<b>App / source code available May 1</b>	Projected for 2021	Longer term objective
<b>Output</b>	<b>HL7 CDA electronic Initial Case Report (eICR) Ver 1.1</b>	HL7 FHIR electronic Initial Case Report Version 1.0 and other FHIR payloads	Multiple FHIR payloads
<b>Operations</b>	<ul style="list-style-type: none"> <li>• Fully manages triggering with eRSD input</li> <li>• Automated behind the scenes process</li> <li>• “SMART on FHIR App launch” for patient and encounter context</li> <li>• App launch by auto pages, CDS Hooks, etc.</li> <li>• Followed by system access for triggering and eICR loading or refresh tokens</li> <li>• Backend can be centrally hosted by EHR</li> <li>• Direct or XDR transport</li> </ul>	<ul style="list-style-type: none"> <li>• Full backend services app</li> <li>• Trust services for chronic surveillance</li> <li>• FHIR Subscription triggering</li> <li>• CQL engine connection</li> </ul>	<ul style="list-style-type: none"> <li>• Minimized app services</li> <li>• Possible CQL engine services</li> </ul>
<b>Query Data</b>	<ul style="list-style-type: none"> <li>• Argonaut 1.0.0 (R2) based on FHIR Version 1.0.2</li> <li>• USCore 2.0.0 (STU 2) based on FHIR Version 3.0.1</li> </ul>	<ul style="list-style-type: none"> <li>• FHIR Release 5</li> <li>• USCore</li> </ul>	<ul style="list-style-type: none"> <li>• TBD</li> </ul>

# Existing eCR Infrastructure



## Provider (EHR)

- Implements trigger codes
- Automatically generates Electronic Initial Case Reports (eICRs) during patient encounter

## Policy agreements

- eHealth Exchange participation, APHL participation agreement, and Carequality coming

## HL7 Standards

- Electronic Initial Case Report (eICR) CDA v1.1
- Reportability Response (RR) CDA v1.0

# eCR Now - “Ask”

- We would like your help in enabling automated reporting for COVID-19 in as many health systems as possible
- If you have a functional eCR EHR capability now, partner with us in rapid implementation cohorts
- If you do not have an eCR implementation yet, we would like you to:
  - Take the eCR Now app and source code on May 1<sup>st</sup>
  - Implement it in your sandbox
  - Participate in the Connectathon preparation webinar the week of May 4th and the HL7 FHIR Virtual Connectathon Public Health Track on May 13-15th.
  - Following any post Connectathon updates, implement the eCR Now app in your client organizations for seamless, automated COVID-19 reporting

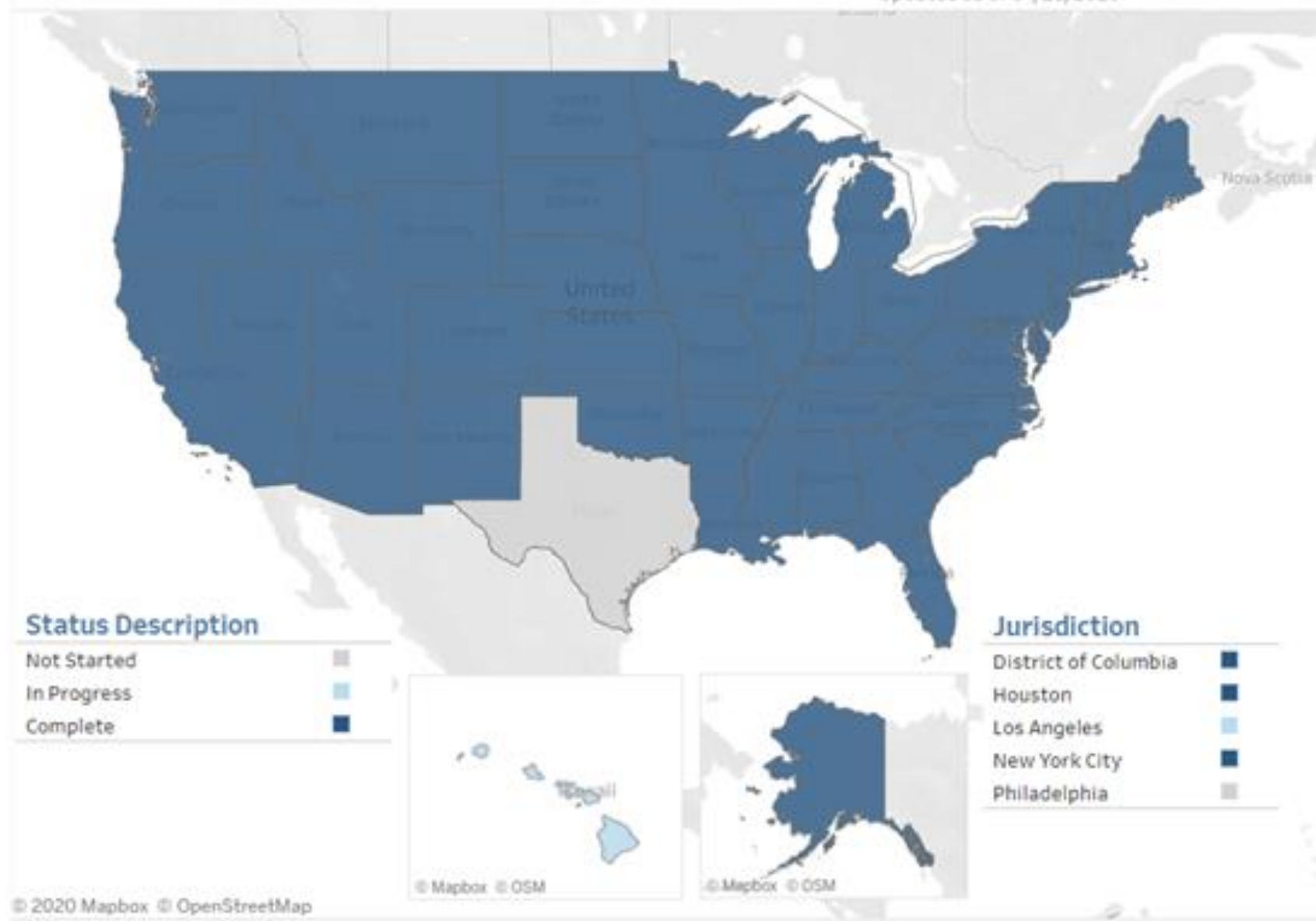


# FHIR Reporting Technical Team

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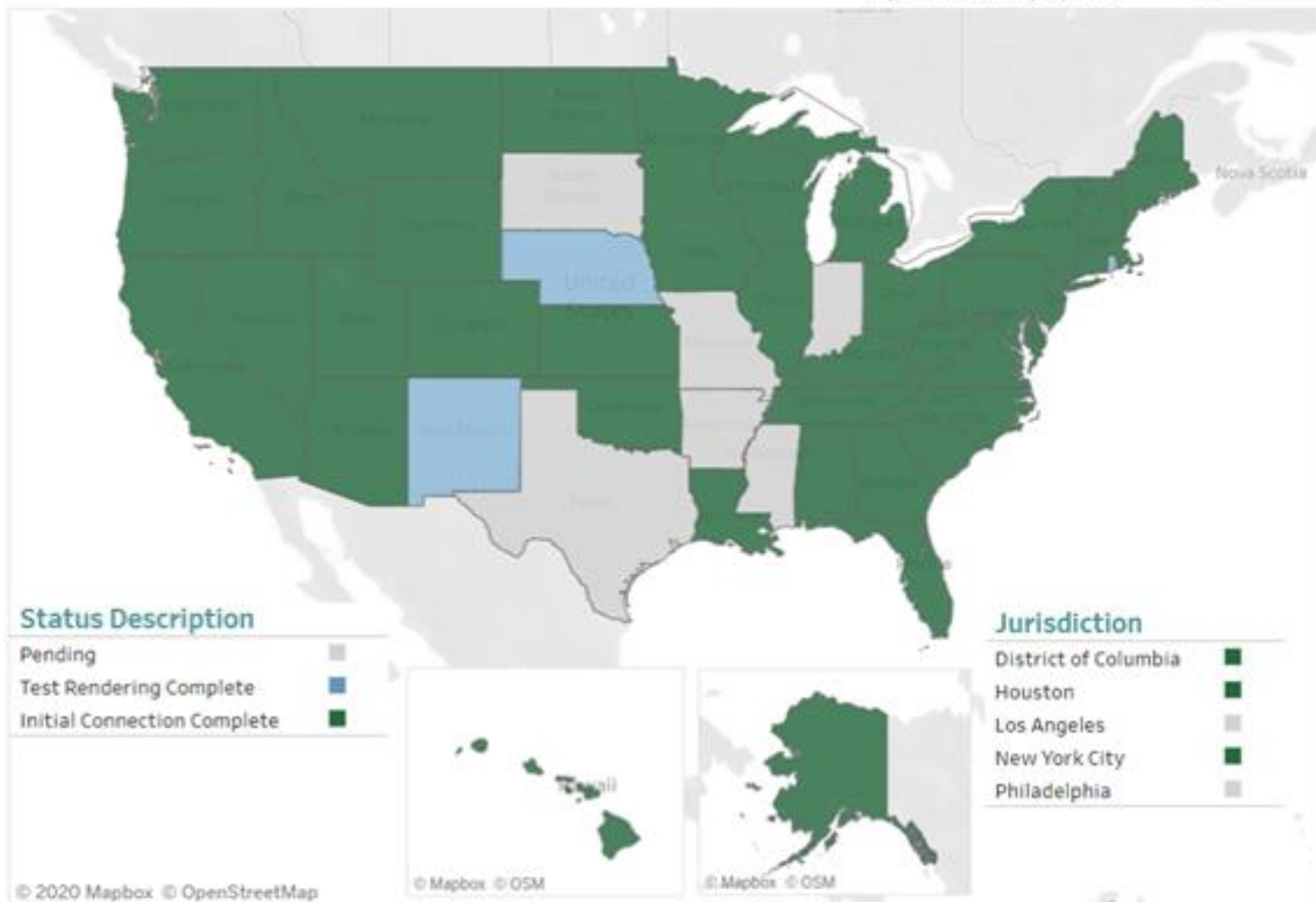
# Coronavirus Authoring Status

Updated as of 04/23/2020



# Initial Connectivity Status

Updated as of 04/23/2020



## Jurisdictions Receiving eCR COVID Case Reports

Updated as of 04/23/2020

