

# Provider Reporting from the Electronic Health Record

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# Agenda

- Provider Reporting - Background, current gaps
- Pilot EHR Reporting -Goals and objectives
- Demo screen Pilot screen shots
- Lessons Learned and Successes
- Next Steps

# NYC's Current Electronic Reporting

- Currently Providers report via:
  - Fax, mail or Reporting Central (in-house developed application)
- Challenges with current provider reporting:
  - Data currently exists in EHR
  - Issues with missing, late or incomplete report
- CDC/CSTE/NAACHO exploring opportunities for EHR provider reporting

# Electronic Health Records: Current Landscape

- How can the Health Department leverage EHR systems so that providers don't have to re-enter data into Reporting Central?
  - Hundreds of EHR vendors with varying systems and data fields
  - Multiple jurisdictions with varying reporting requirements
- Leverage and align with Meaningful Use initiatives

# Pilot Project Background

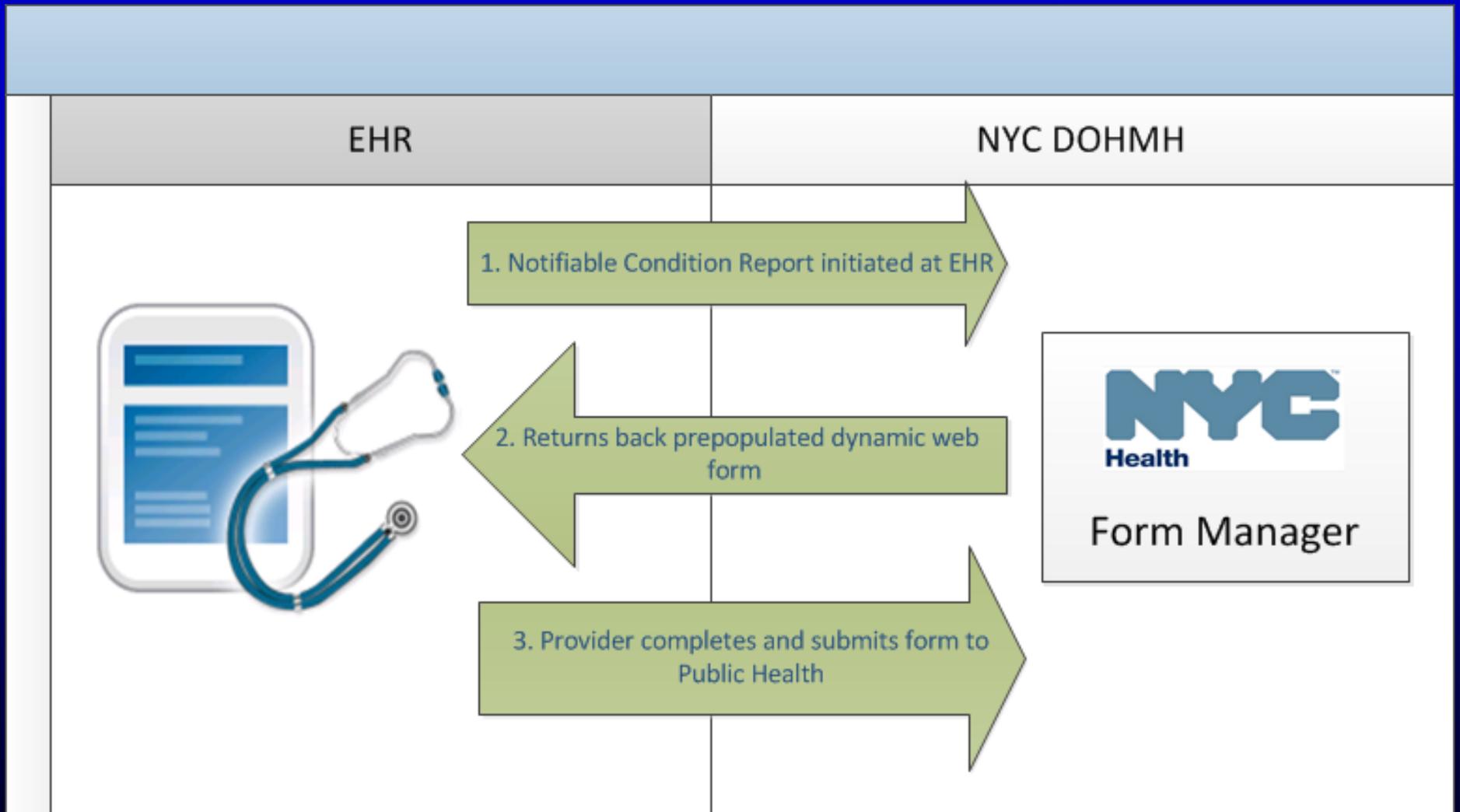
Goal: To pull data from the EHR clinical data architecture (CDA) - continuity of care document (CCD), and pre-populate case report forms.

- Patient demographics
- Provider/Reporter demographics
- Disease details

Pilot Sites: NYC and WI Public Health  
Partnered with EPIC (EHR vendor)

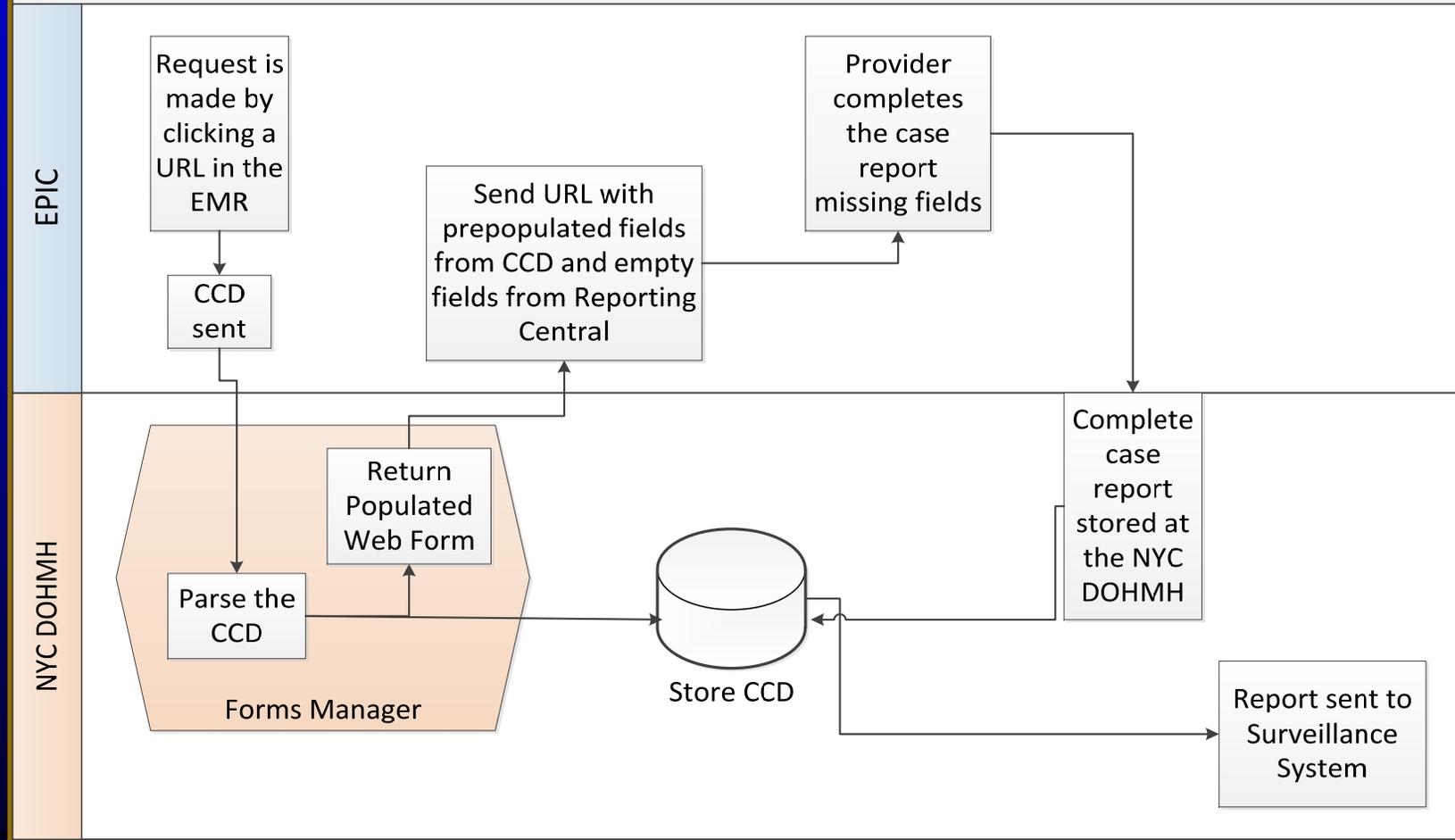


# Workflow Summary

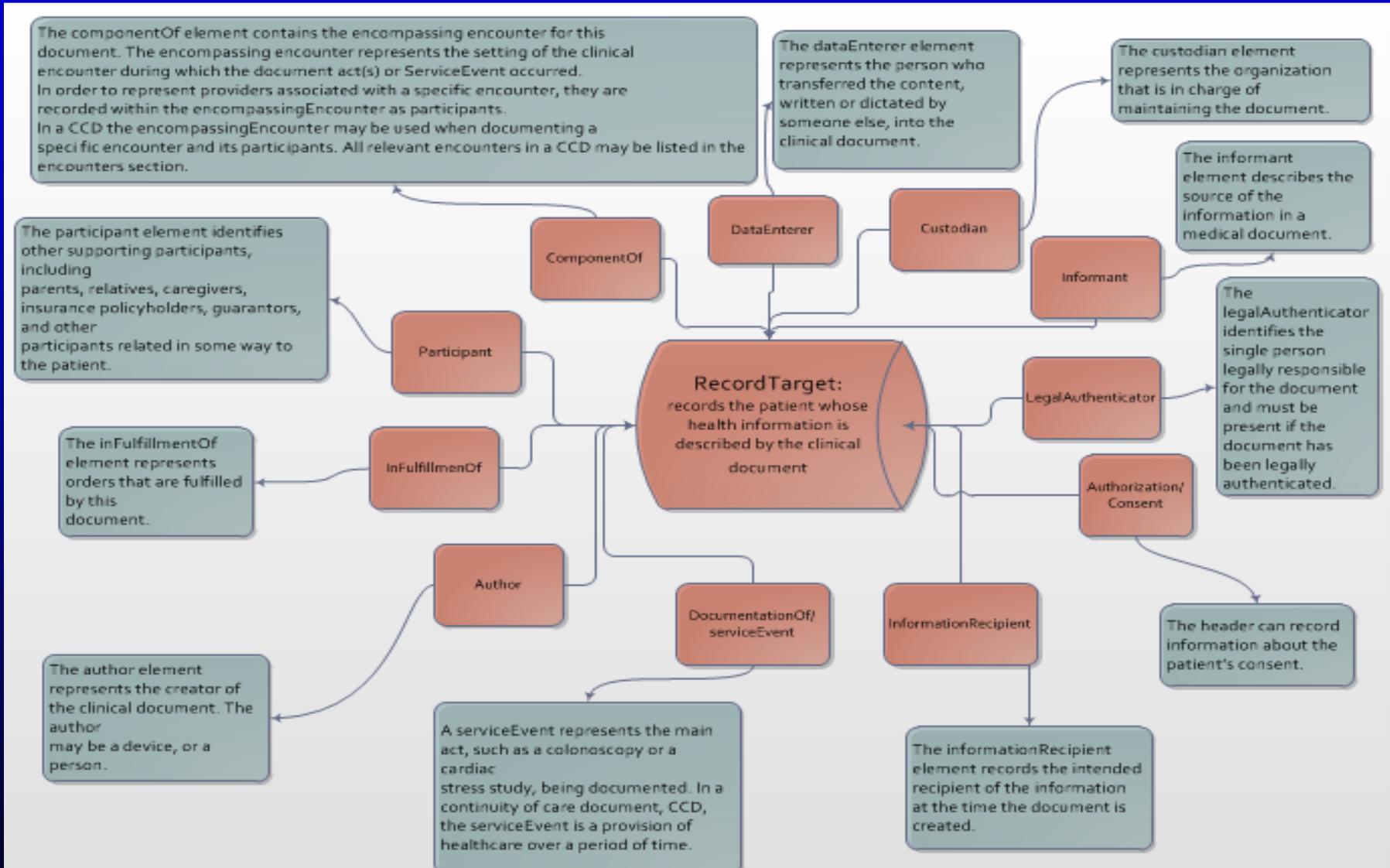


# Architecture/Data Flow

## Pertussis EMR Reporting Pilot



# What does a CDA Contain?



# Reporting Central Fields Mapped to the CCD

- Patient
  - 33 fields in RC vs. 18 found in CCD
- Provider
  - 11 fields in RC vs. 8 found in CCD
- Facility
  - 9 fields in RC vs. 6 found in CCD
- Reporter
  - 5 fields in RC vs. 3 found in CCD

- HOME
- Demographics
- Record Vital Signs
- Nurse Documentation
- Chart Summary
- View Results
- Allergies
- Immunizations
- Past Medical History
- Family History
- Social History
- Health Maintenance
- HPI / Problem List
- Review of Systems
- Physical Exam
- Procedures
- Assessment
- Management
- / OS / Diag
- Secondary
- E&M
- Report to Public Health
- Coumadin
- Adult Office Visit
- Echocardiogram
- Nutrition Assessment
- Stress Master
- Stress Nuclear
- Preview Offline

Patient: John Dokes Age: 47 DOB: 03/14/1960  
 Current Provider: Joseph Barclay MD Gender: Male Current Encounter: 06/26/2007

New patient  
 Established patient

Specialty: IM  
 Visit Type: Office Visit  
 Historian: self

Reason(s) for visit: cough, headache  
 Brief Visit: FU, FU, FU, FU, FU, FU

Chronic Problem List: Chronic Problem

Referring MD | PCP Info Alerts Patient Service info

Add to today's assessments ?

Vitals Vital Signs Outside Normal Range Add New Vital Signs Expand Vital Signs

Date / Time	Temp F	Temp C	BP	Pulse	Rhythm	Respiration	Ht In	Ht Cm	wt Lb	wt Kg	Cont
06/26/2007 12:00 PM	96.4		130/90	80	regular	16	71.0		216.00		dress

Medications  No Medications Comment Allergies  No Known Allergies Comment

Medication	Dose	Sig Codes	Start Date	Stop Date	Ingredient/Allergen	Brand Name
SIMVASTATIN	10MG	1T PO OD	//	//		

Health Monitor: Set Health Maintenance Protocols Set Disease Management Protocols Tobacco User:  yes  quit

Item	Due:	Item	Due:	Item	Due:	Item	Due:
Physical Exam	//	Tetanus	//	Eye Exam	//	ALT/AST	//
Lipid Panel	06/26/2007	PSA Test	//	Foot Exam	//	CPK	//
Colonoscopy	//			HgbA1C	//	Urinalysis	06/26/2007
Sigmoidoscopy	//			BMP Fasting	//	Urine Micro	//
FOBT x3	//			EKG	06/26/2007	TSH	//
Influenza Vac	//			Stress Test	//	PFT	//
Pneumo Vac	//			Echocardiogram	06/26/2007	Chest X-ray	//

New Lock

06/26/2007 12:00 PM

- Master Im
- Master Im Vitals
- Medication
- Adult Office Visit
- Disease Mngt

Custom

## Pertussis Reporting Application

Most patient demographics can be automatically populated



\*Patient First Name:

\*Patient Last Name:

Patient Birth Country Name:

Patient Street Address:

Patient City:

Patient State:

Patient Zip:

Patient Country:

Next

## Pertussis Reporting Application



--- Select a form --- ▼

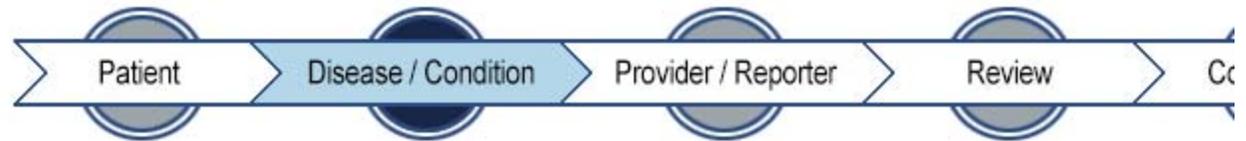
--- Select a form ---

Pertussis EHR Pilot

Request for HIV Partner Services

Previous Next

Provider/ICN selects the form to fill out



Pertussis EHR Pilot ▾

Disease detail to be entered by the reporter

\* Initial date of diagnosis/clinical suspicion

Did patient have a cough  Yes  
 No  
 Unknown

Cough onset date

Cough end date

Was cough paroxysmal  Yes  
 No  
 Unknown

Any whoop  Yes  
 No  
 Unknown

Any posttussive vomiting  Yes  
 No  
 Unknown

Any apnea  Yes  
 No  
 Unknown

Chest x-ray results for pneumonia (specify)

Any other complications  Yes



Demographic info on the provider, reporter and facility can be pulled from the EHR

**Reporter**

\*Reporter First Name:

\*Reporter Last Name:

\*Reporter WorkPhone:

**Provider**

Provider First Name:

\*Provider Last Name:

Provider Phone:

Provider Street Address1:

Provider Street Address2:

Provider City:

Provider State:

Provider Zip:

Provider Email:



Reporter reviews data before submitting

**Patient**

Patient First Name: John

Patient Middle Name: A

ApplicationResources.properties Dokes

Patient Birth Country Name: USA

Patient Date of Birth: 04/15/2003

Home Phone: 555-555-5555

Other Phone: 555-555-5551

Patient Street Address: 125 Worth Street

Patient Apartment: 3

Patient City: New York

Patient State: NY

Patient Zip: 10007

Patient Country: US

Sex: Male

## Pertussis Reporting Application



Report with ID - 297 has been submitted.

Reporter receives a  
confirmation number

# Lessons Learned

- Securing an EHR vendor partner
- Interpreting CCD fields/ translating EHR to public health
- Finding an clinical practice to test message transmission
- Competing resources with MU initiatives

# Successes

- Using existing logic from Reporting Central
- Integration with Survey tool to quickly develop forms
- CDC resources and documentation: C-CDA, IHE Web-service specification
- Collaboration with our grantee counterpart in Wisconsin
  - One standard web service reports to two jurisdictions

# Next Steps

- Enhancements to streamline usability and workflow in application for reporters
- Document reporting workflow in a clinical setting, get feedback from provider site
- Incorporate resources for the provider in the application
- Identify reporting scenarios best fit for this workflow
- Meaningful Use Menu Item - for initial phase, test connectivity with an eligible provider

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