



**Webinar:**

**Embracing Electronic Data Capture  
The Interoperability you Need NOW to Address  
Changes in the Healthcare Landscape**

**May 20, 2020**

## Speakers:

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SCAN Health

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*Director of EMR Strategy*

Pulse8



## About SCAN Health

Founded in 1977 by groups of senior activists in Long Beach with a goal of improving access to care and services with the goal of being able to stay healthy and independent as possible. Up to now, this remain SCAN's mission.

Current Total Lives: 220,000 senior lives



# SCAN's Risk Adjustment Coding & Audit Operations Prior to CDE

- Driven by data gaps and suspects
- Internal tools & resources

## Targeting the Right Medical Records



- Traditionally collects medical records
- SCAN internal team
- Contracted vendors
- Collaborate with contracted groups

## Collecting Medical Records



- All audits are 100% performed by a team of certified coders
- Homegrown audit application

## Audit process



# EMR Integration Overview



- ✓ Ready to be remote?
- ✓ For what opportunities does EMR Integration open doors?
- ✓ What is EMR Integration?
- ✓ Why is data-sharing so powerful?
- ✓ We have achieved integration, what's next?

## Ready to be Remote?

In the face of recent events, provider offices and payers are quickly moving to essential personnel only.

Chart retrieval, as we know it, will require an immediate and drastic change in order to continue to close risk adjustment and quality gaps.



## Key Elements

### **Control Cost**

- Eliminate costly and time-consuming manual processes that add to administrative waste
- Support data collection for Risk Adjustment, HEDIS<sup>®</sup>, NCQA, and CMS Star Ratings

### **Improve Efficiency**

- Collect data in an electronic format that is easy to ingest and primed for analysis
- Obtain multiple years of patient data to support in-depth analysis

### **Preserve Security**

- Securely receive information for use by only intended users, in accordance with HIPAA
- Securely transmit provider alerts directly into the physician's EHR

### **FHIR is the favored technology to enable EHR interoperability per CMS and ONC**

- FHIR R4 has emerged as the current standard
- SMART on FHIR apps and CDS Hooks are also intended to be standards-based
- Cost savings/efficiencies realized by payers & providers across all use cases

# What is EMR Integration?

BMI 22

Cr 0.73mg/dl

BL-RADS Category 0  
Hemoccult-negative

1.73m2

DM LDL-c <100

HbA1C-6.3%

HR 85

BMD T Score -1.25

EF 35%

Pain <140/90

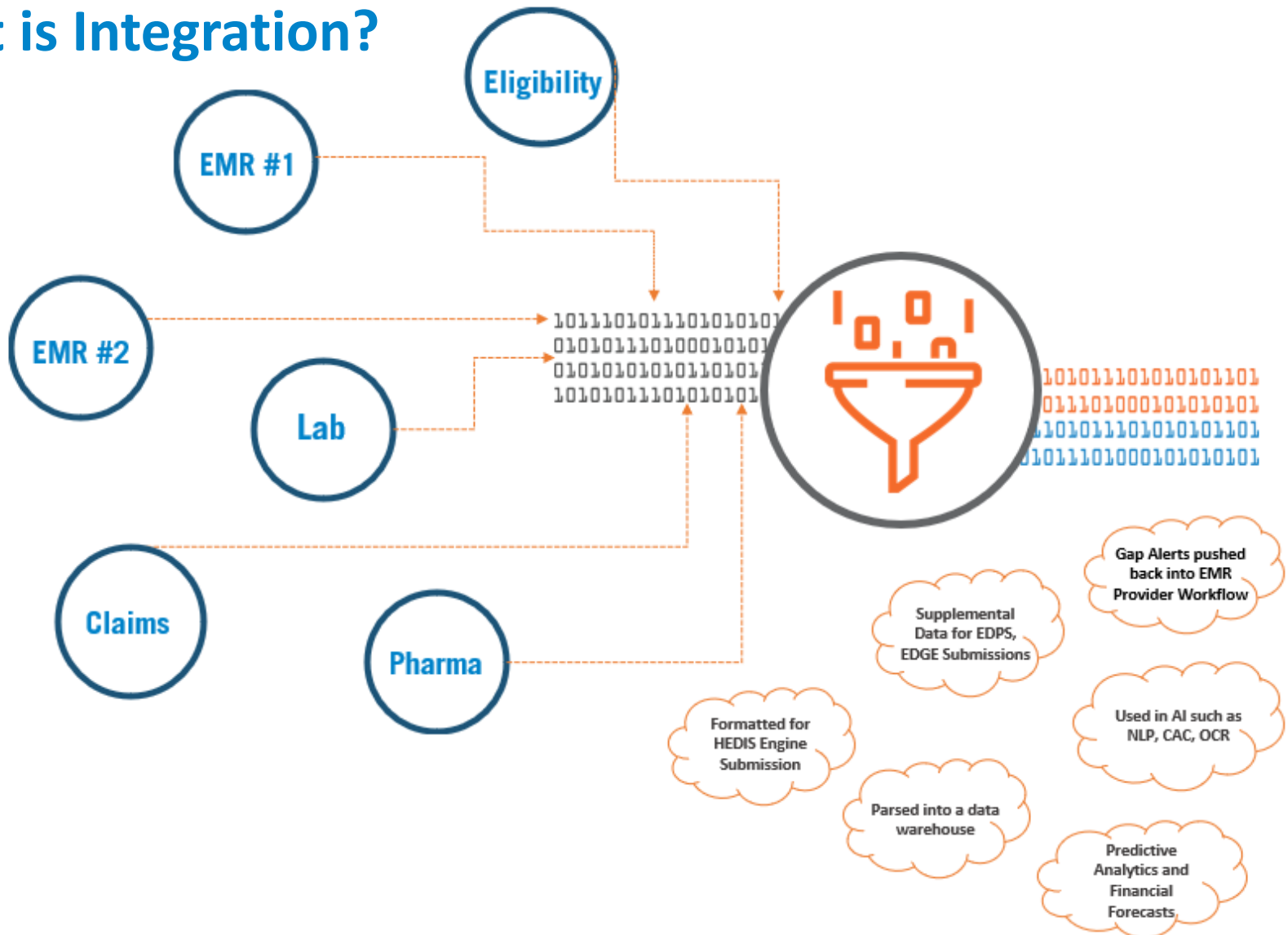
FEV1/FVC Ratio 65%

RR 16

T 98.8



# What is Integration?

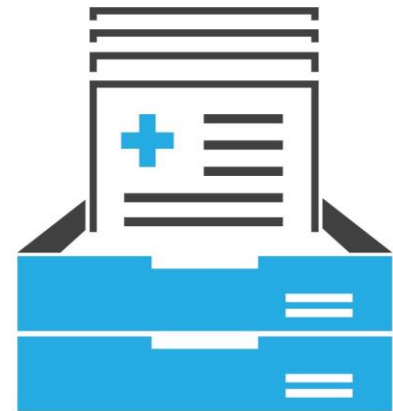


## Extract. Code. Submit.

- Structured clinical data for each patient encounter follows HL7 Consolidated Clinical Document Architecture standards (CCDA) in XML format
- Unstructured data, or notes taken down free-hand by the provider, are included as either a PDF or RTF file
- Metadata enables the requestor to search and filter packages without having to open each content file—making it easier for health plans to use the files in an automated fashion

## Examples of Chart Data Included in Extraction

- “The Continuity of Care Document (CCD) is built using [HL7 Clinical Document Architecture \(CDA\)](#) elements and contains data that are used to share summary information about the patient within the broader context of the personal health record”
- CDA is a base standard that provides a common architecture, coding, semantic framework, and markup language for the creation of electronic clinical documents



## Examples of Chart Data included in Extraction

- ✓ Provider Tax Identification Number
- ✓ Provider Name
- ✓ Provider Group Name
- ✓ Date of Birth
- ✓ Applicable Member ID
- ✓ Date of Service
- ✓ Chief Complaint
- ✓ Medical History (Outpatient)
  - ✓ Date of Service
  - ✓ Diagnosis
  - ✓ Description
  - ✓ Place of Service
  - ✓ Rendering Provider
- ✓ Problem List
- ✓ History of Present Illness
- ✓ Review of Systems
- ✓ Assessment and Plan
- ✓ Medications
- ✓ Progress Note
- ✓ Diagnoses
- ✓ Consult
- ✓ Procedure Codes (CPT)
- ✓ Electronic Signature and Credentials

**\* *Imaged data (scanned documents or picture files) are not shared at this time***

## XML CCD Example

```
<participant typeCode="IND">
  <associatedEntity classCode="GUAR">
    <id root="4ff51570-83a9-47b7-91f2-93ba30373141"/>
    <addr>
      <streetAddressLine>17 Daws Rd.</streetAddressLine>
      <city>Blue Bell</city>
      <state>MA</state>
      <postalCode>02368</postalCode>
    </addr>
    <telecom value="tel:(888)555-1212"/>
    <associatedPerson>
      <name>
        <given>Kenneth</given>
        <family>Ross</family>
      </name>
    </associatedPerson>
  </associatedEntity>
</participant>
```

# Rendered CCD Example

**Good Health Health Summary**

<b>Patient</b>	Mr. Adam Everyman		
<b>Date of birth</b>	November 25, 1954	<b>Sex</b>	Male
<b>Race</b>	White	<b>Ethnicity</b>	Not Hispanic or Latino
<b>Contact info</b>	Primary Home: 17 Daws Rd. Blue Bell, MA 02368, US Tel: (781)555-1212	<b>Patient IDs</b>	12345 2.16.840.1.113883.19 111-00-1234 2.16.840.1.113883.4.1
<b>Document Id</b>	999021 2.16.840.1.113883.19		
<b>Document Created:</b>	March 29, 2005, 17:15:04 +0500		
<b>Performer (primary care provider)</b>	Dr. Pseudo Physician-1 of NIST HL7 Test Laboratory		
<b>Performer (primary care provider)</b>	Dr. Pseudo Physician-3 of HL7 Test Laboratory		
<b>Author</b>	Henry Seven		
<b>Contact info</b>	Work Place: 123 Main St Boston, MA 02368, USA Tel: (555)555-1000		
<b>Entered by</b>	Henry Seven		

**“Document ID” from the “U.S. Realm” Header (Document ID element)**

**“Allergies”, “Medications” & “Problems” sections implemented to meet “CCD” and Transition of Care Objective requirements**

**“Good Health Health Summary” from the “U.S. Realm” Header (Document Title element)**

Allergies, Adverse Reactions, Alerts		
Substance	Reaction	Status
Penicillin	Hives	Active
Aspirin	Wheezing	Active
Codeine	Nausea	Active

Medications					
Medication	Directions	Start Date	Status	Indications	Fill Instructions
Proventil 0.09 MG/ACTUAT inhalant solution	2 puffs QID PRN wheezing	2011-03-01	Active	Bronchitis (32398004 SNOMED CT)	Generic Substitution Allowed

**Problems**

- Pneumonia: Resolved in March 1998
- ...

“Good Health Health Summary” – Sample CCD. “CCD.sample.xml” file. C-CDA R2 July 2012 via HL7.

# EMR Integration Advantages

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## Advantages of Direct EMR Integration: SCAN's Early Experience

- **Zero Provider Burden**

No interference with provider office activities; providers can focus on what matters – member care

- **Efficiency in Audits**

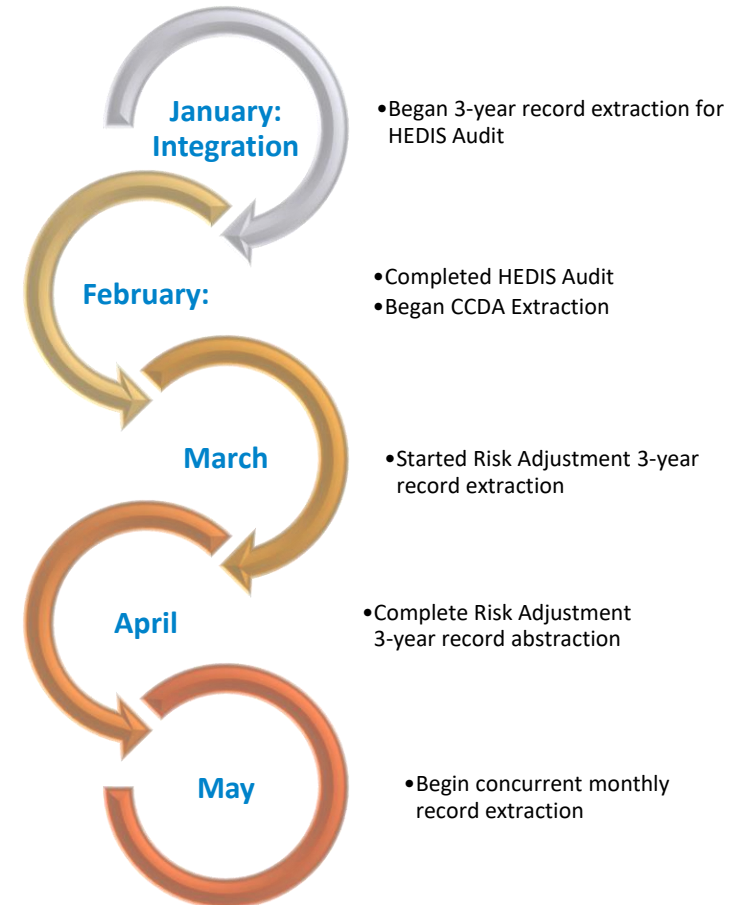
Audits will eventually be concurrent rather than retrospective

- **Enterprise Collaboration**

Medical records are shared between different departments, for different purpose

- **Predictive Analytics**

In progress





# Lifecycle of an EMR Integration

## What?

What needs to happen with all these “data”? Not information until they have been:

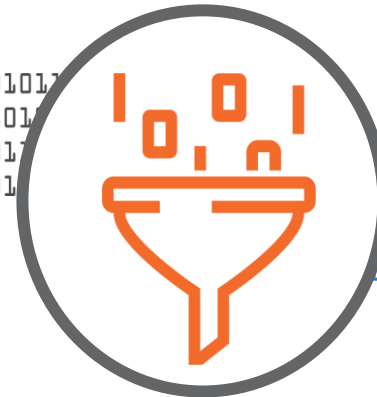
- **Normalized:**

This ensures the information will be used in the same way

- **Aggregated:**

Consolidates the data from individual patients to groups or pools of patients. Aggregating the data is necessary before healthcare providers can analyze the overall impact and performance of the whole pool.

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# Advantages of Direct EMR – The Power of Data Sharing

## Cost Benefits

Healthcare organizations working to change their cost structure and improve outcomes must design interventions that target high-risk, high-cost patients who need to be carefully and proactively managed.

Separating patient populations into high-risk, low-risk, and the ever-important rising-risk groups using models such as HCC, ACG, CCI; in addition to access to SDoH; can help drive focus to the right population at the right time.

Having access to all your patients' data will make this possible.



## The Power of Data Sharing

### HIPAA was meant to aid in data sharing, not prevent it!

- Put safeguards in place to protect patient health information
- Reasonably limit use and sharing to the minimum necessary to accomplish your intended purpose
- Have agreements in place with service providers that perform covered functions. BAAs ensure that service providers use, safeguard, and disclose patient information
- Procedures to limit who can access patient health information

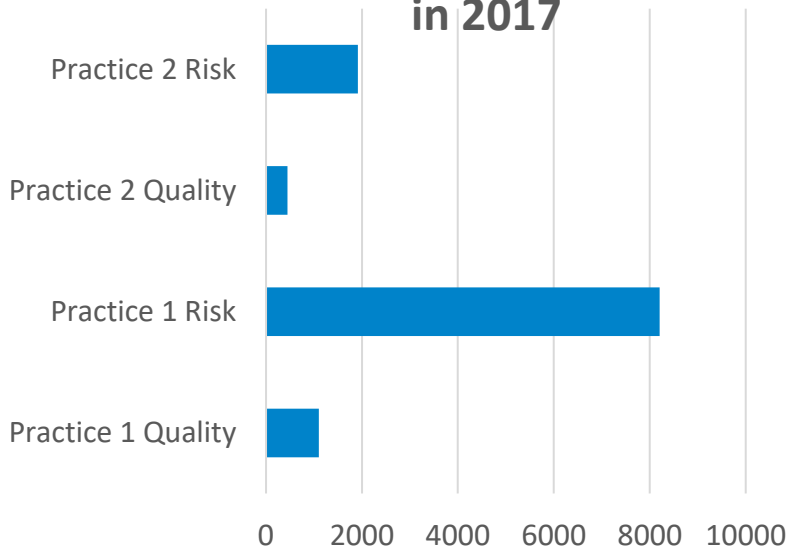


# Cost Analysis

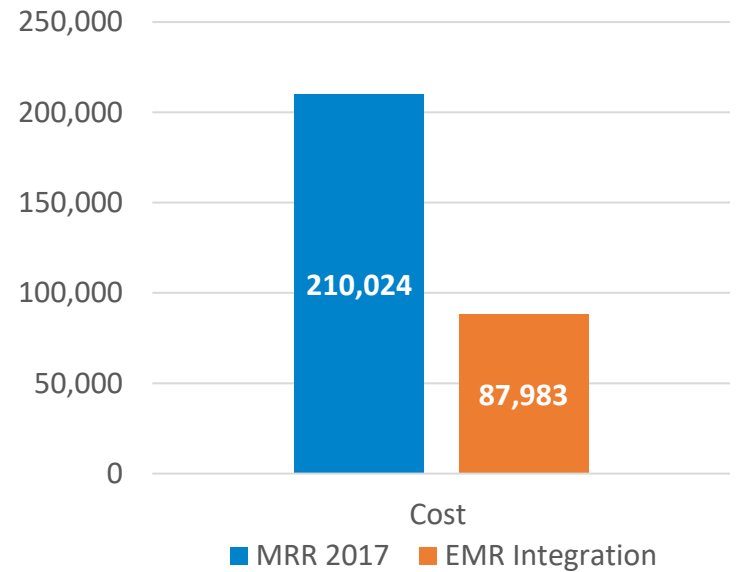
Potential Cost Savings of Medical Record Retrieval for Clinics in 2018

**\$122,041**

Volume of Records Requested in 2017



Cost for MRR



# We Have Integration, What's Next?

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## Next Steps

The typical healthcare organization has thousands of connecting points. These points tend to be hard-coded, inflexible, and expensive to change.

### Invest in an Integration Engine or a Partner!

- Automate using standards (HL7)
- Authenticate messages and identify errors through configuration logic
- Operationalize data and events, i.e. triggers



# Q&A

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