

# Epic and CAREWare Integration

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## **Ryan White HIV/AIDS Program**

Rebecca Geiser: REACCH

Jill Weber: Portland TGA

Don Calhoun: University of Virginia

Ellie Coombs (TA Provider)

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# Agenda

- Introduction
  - Ellie Coombs, DART Team
  - Rebecca Geiser, PinnacleHealth System
- CAREWare Provider Data Import
  - Jill Weber: Portland TGA
- CAREWare HL7
  - Don Calhoun: University of Virginia
- Next Steps
- Contact Information



# **University of Virginia**

## **CAREWare & EPIC/HL7**

March 2016

# UVA CAREWare Overview

- Receive RW Funding Parts B,C,D
- Using CAREWare since 2005
- Over 1600 clients in CARE database
- Over 4700 clients in Prevention database
- Serve annually over 750 active clients
- Serve clients in over 24 counties in Virginia
- 2009 began HL7 interface with EPIC
- 2012 began using PDI to import nightly EPIC Data to CAREWare (import labs, screenings,)
- 2016 start conversion from CAREWARE to VA Statewide eCOMPAS System

# UVA Overall HL7 Process

- Have key Medical Provider along with HIV Staff meet with IT Department
- Be prepared with documents of what you are requesting (i.e. lab, services, screenings, medications)
- Identify key staff members for the interface
- Set a timeline/budget for the project
- Identify nightly HL7 test process (e\*Gate interface)
- Monitoring and set go live period
- Completed a sign off on project

# Getting Started with HL7 Process

## ■ What are the first steps?

Using the technical support resources provided by your EHR, research the HL7

- ADT export capabilities of the EMR
- Identify any EMR interface engine and provide any programming required
- Design a plan to match feeds with existing CAREWare feed options
- Install and configure the CAREWare Socket listener and its associated COUCHBASE document database.
- Configure/mapping of CAREWare to process the feeds properly.



# What is HL7?

- **Health Level-7** or **HL7** refers to a set of international standards for transfer of clinical and administrative data between software applications used by various healthcare providers. These standards focus on the application layer, which is "layer 7" in the Open Systems Interconnection Module.
- HL7 and its members provide a framework (and related standards) for the exchange, integration, sharing, and retrieval of electronic health information.
- Example of HL7 Version 2

```
MSH|^~\&|MegaReg|XYZHospC|SuperOE|XYZImgCtr|20060529090131-0500||ADT^A01^ADT_A01|01052901|P
EVN||200605290901|||200605290900
PID|||56782445^^^UAREg^PI||KLEINSAMPLE^BARRY^Q^JR||19620910|M||2028-9^^HL70005^RA99113^^XYZ
PV1||I|W^389^1^UABH^^^^3|||12345^MORGAN^REX^J^^MD^0010^UAMC^L||67890^GRAINGER^LUCY^X^^MD
OBX|1|NM|^Body Height||1.80|m^Meter^ISO+||||F
OBX|2|NM|^Body Weight||79|kg^Kilogram^ISO+||||F
AL1|1|^ASPIRIN
DG1|1||786.50^CHEST PAIN, UNSPECIFIED^I9|||A
```

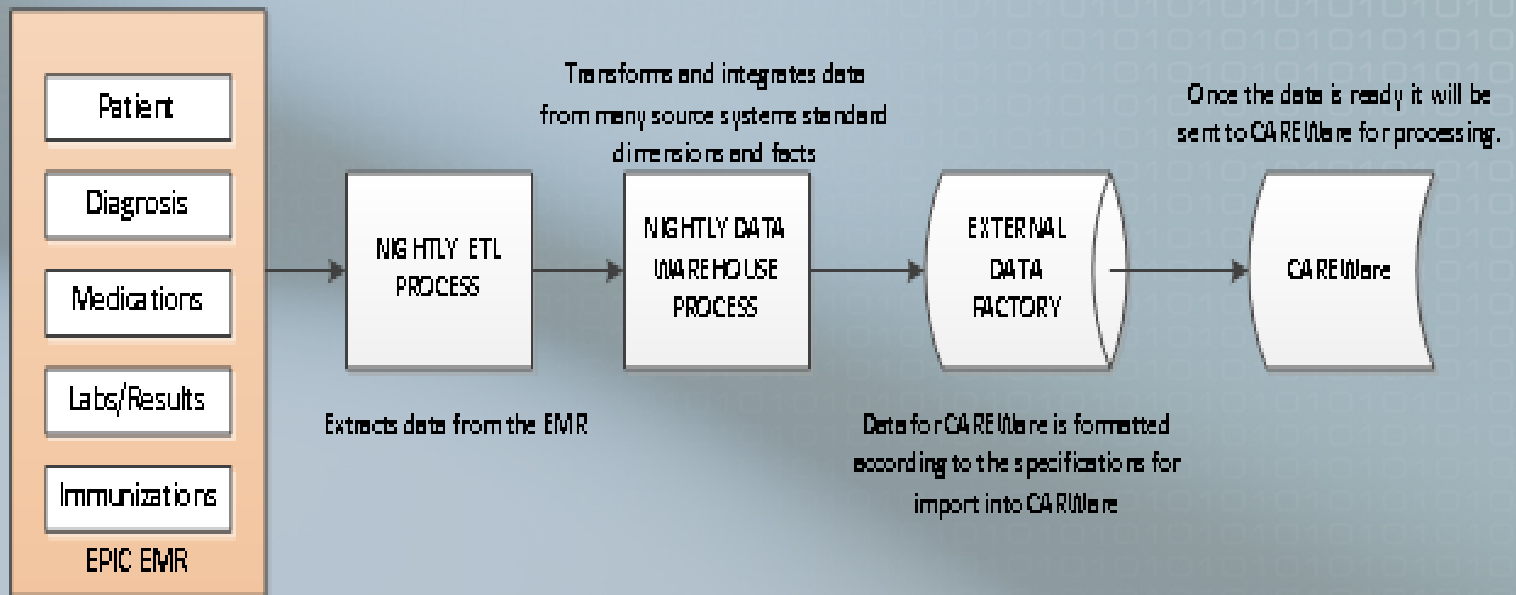
# The 7 Sections of HL7

- [Section 1: Primary Standards](#) - Primary standards are considered the most popular standards integral for system integrations, inter-operability and compliance. Our most frequently used and in-demand standards are in this category.
- [Section 2: Foundational Standards](#) - Foundational standards define the fundamental tools and building blocks used to build the standards, and the technology infrastructure that implementers of HL7 standards must manage.
- [Section 3: Clinical and Administrative Domains](#) - Messaging and document standards for clinical specialties and groups are found in this section. These standards are usually implemented once primary standards for the organization are in place.
- [Section 4: EHR Profiles](#) - These standards provide functional models and profiles that enable the constructs for management of electronic health records.
- [Section 5: Implementation Guides](#) - This section is for implementation guides and/or support documents created to be used in conjunction with an existing standard. All documents in this section serve as supplemental material for a parent standard.
- [Section 6: Rules and References](#) - Technical specifications, programming structures and guidelines for software and standards development.
- [Section 7: Education & Awareness](#) - Find HL7's Draft Standards for Trial Use (DSTUs) and current projects here, as well as helpful resources and tools to further supplement understanding and adoption of HL7 standards.



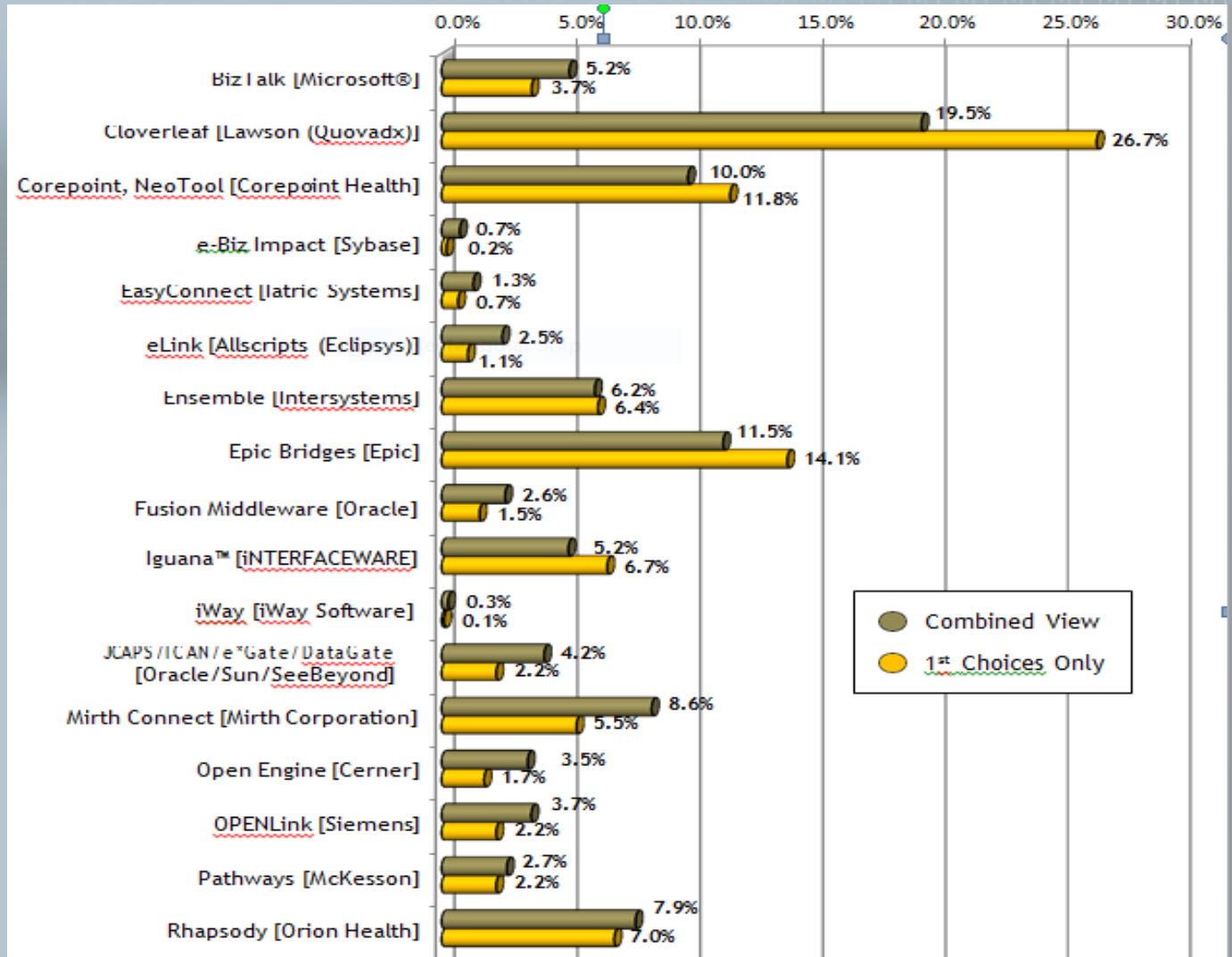
# UVA EPIC/CAREWare Interface

## ■ Nightly Data Flowchart



# Interface Engines

Core Health Technology 2012 survey



# EPIC Interface

- EPIC Data Dictionary

- Note: EPIC VL values are within comments

EPIC to CAREWare Nightly Import Data Variables (Provider Data Import/PDI)						
EPIC Lab Code	Labs Values	CAREWare Labs Values	EPIC Lab Values	Mapped Yes or No	Test Date	Notes
LAB Code 293	CBC and Differential	N/A			00/00/000	
	291 Hemoglobin	Hemoglobin	CBC & Differential	Y		
	301 Platelets	Platelets	PLT	Y		
	293 WBC	WBC	WBC	Y		
	113 Phosphorus	Phosphorus	Phos			

# Mapping of CAREWare

- Map data variables in CAREWare
- Monitor system for Nightly downloads
- Verify files are updated
- Continue Quality Control process on an established schedule

# Interoperability

- Remember: You are not alone!
- EMR's major concerns were outcomes
- Interfacing with other systems are now a major priority:
  - reduce duplicated data entry
  - manpower/cost
  - outdated data



# Upcoming HL7 features

- Health Level Seven International has launched the Argonaut Project – a collaborative comprising healthcare heavy-hitters such as [Epic](#), [Cerner](#), MEDITECH, [Mayo Clinic](#), Intermountain and [Partners HealthCare](#) – to speed the development and adoption of HL7's standards framework, FHIR.
- FHIR – it's pronounced "fire," and stands for Fast Healthcare [Interoperability](#)
- FHIR is billed as a next-generation framework that makes use of the latest Web-based standards, with a focus on putting them to work in healthcare interoperability. [HL7](#) officials say FHIR is a so-called "RESTful" application programming interface
- EPIC CEO is calling for interoperability and National Patient ID

# Resources

## Healthcare IT News

- <http://www.healthcareitnews.com/directory/interoperability>
- HAB.HRSA.gov\CAREWare
- <http://www.epic.com/software#Interoperability>

# UVA CAREWare/HL7 Overview

**Thank You!**

**Don Calhoun**

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# Next Steps: We Want Your Feedback!

- Regular calls and webinars (*quarterly?*)
- Smaller user groups to trouble-shoot issues and discuss detailed IT processes
- Get together at the All Grantees Meeting
- Complete a survey on your processes and needs
- Contact us!

# Additional Questions?

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