

# **Power of Population Health in Public Health**

**Integrating, Connecting and Rebuilding through  
leveraging an Electronic Health Record**

**Riverside University Health System- Public Health**

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# Journey to **Epic**

- Started in 2016 with Early Intervention Services Program (EIP/HIV) and TB clinics
- Shared Epic Platform with Riverside University Health System - Medical Center and Community Health Centers
- Expanded significantly during COVID response – testing & vaccinations – CARES Act

# Public Health Pandemic Response & *Epic*

- COVID Pandemic uses of EPIC in Public Health
- COVID testing, tracking, resulting and contact tracing
- COVID vaccination – mobile units, mass vaccination clinics
- Coordination of care between Public Health, Medical Center and Clinics
- COVID risk assessment logic calculation

# COVID Pandemic & ***Epic***

Testing and Vaccination Completed within EPIC

# Public Health Next Steps... **Epic** Roadmap

- Goal is to move Public Health programs onto EPIC by year end 2024
- Integrated Electronic Health Record (EHR) to meet the needs through coordinated population health management
  - Internal referrals to programs
  - External referrals for services
  - Expand, connect and coordinate care with shared patients within the health system
  - Health Plan data sharing

## Epic - Public Health

Req #	Program	Priority	1. Registration/ Scheduling	2. Billing/ Claims	3. **Referrals (In/Out)	4. WPHS	5. Clinical Documentation	6. Data Sharing	7. Dashboards & Analytics	8. Care Everywhere	9. Outreach	10. Telehealth	11. MyChart	12. Mobile Documentation
<b>EPE</b>														
1	Health Equity Mobile Teams 1-5		X	X	X	X	X	X	X	X	X	X	X	X
2	Raw Data		X	X	X	X		X	X	X	X			
<b>LAB</b>														
3	Lab	1	X	X	X		X	X	X	X			X	X
<b>HIV/STD</b>														
4	EIP (RNHC, PERRIS, INDIO)	3	X	X	X	X	X	X	X	X	X	X	X	X
5	STD Case Investigation	1	X	X	X	X	X	X	X	X	X	X	X	X
6	HIVEHE & Prevention	2	X	X	X	X	X	X	X	X	X	X	X	X
<b>CCS/CMS</b>														
7	MTU (Cor, Hem. Ind, La Gran, PS, Murrieta, Red Maple)	1	X	X	X	X	X	X	X	X	X	X	X	X
8	MTU Riverwalk	1	X	X	X	X	X	X	X	X	X	X	X	X
9	MTU Banning	1												
10	CCS Med Consultants	2			X		X	X						
11	Social worker profile	3	Needs additional information											
12	Student profile similar to PT and OT assistants		Need new access for security template											
13	CCS General Program		X	X	X	X	X	X	X	X	X	X	X	X
14	Childhood Lead Prevention Program		X	X	X	X	X	X	X	X	X	X	X	X
<b>WIC/NUTRITION SERVICES - NOT COMPLETED</b>														
15	WIC sites - OutPatient	1	X	X	X	X	X	X	X	X	X	X	X	X
16	WIC InPatient MC	1	X	X	X	X	X	X	X	X	X	X	X	X
17	Loving Support	4	X	X	X	X	X	X	X	X	X	X	X	X
18	Childhood Lead Prevention Program		X	X	X	X	X	X	X	X	X	X	X	
19	CHWs	2	X	X	X	X	X	X	X	X	X	X	X	X
20	ECM	3	X	X	X	X	X	X	X	X	X	X	X	X
21	Dieticians including CMS (HIV Dietician already in CHC)		X	X	X	X	X	X	X	X	X	X	X	X
22	Health Plans (IEHP, Molina KP)	By Dec 2023			X									
23	CDC Hypertension	6	X	X	X	X	X	X	X	X	X	X	X	X
24	Blue Zones (Dr. Tsang)	5	X	X	X	X	X	X	X	X	X	X	X	X
25	Location support for Correctional Health	7	X	X	X	X	X	X	X	X	X	X	X	X
<b>INJURY PREVENTION</b>														
26	Oral Health Program	1			X	X	X	X	X		X		X	X
27	Community Outreach	3			X			X	X	X	X	X	X	X
28	Car Seat Mobile Program	2	X	X	X									
29	RDDA		X	X	X									
30	RISE													
31	Violence Prevention													
<b>IMMUNIZATION</b>														
32	Mobile Units	1	X	X	X	X	X	X	X	X	X	X	X	X
33	Emergency Response	3	X	X	X	X		X	X	X	X	X	X	X
34	Family Planning	2	X	X	X	X	X	X	X	X	X	X	X	X
<b>FISCAL</b>														
35	Billing Infrastructure across all PH	1		X					X					

**LEGEND:**

Implemented
Not implemented
In progress
Needs optimization
Low priority
Not in scope

\*\*Include Care link and Healthy Planet



# PROGRAM EXPERIENCES

*the GOOD, the BAD and the UGLY...*

# Maternal Child and Adolescent Health



# ***Epic*** Referrals in **Maternal Child and Adolescent Health**

## **The GOOD**

Epic referrals available for providers to refer to MCAH based on logic criteria for qualifying patients

## **The BAD**

Adoption and awareness of program can impact referral completion rates

## **The UGLY**

Even with a built-in decision support tool, battling pop up fatigue and continuous education/awareness of programs available can still be a challenge

# Initial Referral Within EPIC

Ambulatory referral to Adolescent Family Life (AFLP) Program ✓ Accept ✗ Cancel

Class:  **Internal Referral** External Referral

Referral:  Override restrictions

Priority:

Reason:  **Specialty Services Required**

To dept:

To dept spec:

To provider:

Type:  **Consultation**

Pregnant?

First time Mom?

Post-Partum?

Number of Children and Ages

Services Needed

**!** Reason for Referral:

Specific Referral Instructions:

RefType:  **Consultation**

**!** Next Required ✓ Accept ✗ Cancel

# Updated Simplified Referral Within EPIC

Procedures

Name	Frequency	Type	Px Code
Ambulatory referral to Maternal Child Adolescent Health (MCAH) Program		Referral	REF144

Ambulatory referral to Maternal Child Adolescent Health (MCAH) Program Accept Cancel

Class:  **Internal Referral** External Referral

Referral:  Override restrictions

Priority:

Reason:  **Specialty Services Required**

To dept:

To dept spec:

To provider:

Type:  **Consultation**




**Reason for Referral:**

Specific Referral Instructions:

Show Additional Order Details

**Next Required** Accept Cancel

# Referral Rates Within EPIC for 2023

BPA Group	Completion Rate	Numerator	Denominator
<input type="checkbox"/> PH MCAH	 98.17%	161	164
<input checked="" type="checkbox"/> BASE AMB REFERRALS PH ADOLESCENT FAMILY LIFE HEALTH PROGRAM (AFLP)	 98.17%	161	164
<b>Total</b>	 <b>98.17%</b>	<b>161</b>	<b>164</b>

# ***Epic*** Documentation for **Maternal Child and Adolescent Health**

## **The GOOD**

Epic available for documentation for MCAH home visiting programs

## **The BAD**

Workflow challenges for scheduling and completing notes in the field

## **The UGLY**

Technical support and template optimization opportunities to make it smoother

# Mobile Units

# **Epic** Documentation in Mobile Units

## **The GOOD**

- Shared EPIC resource allows for seamless patient experience, allowing patients to be treated across teams and the RUHS network.
- Clear frame for documenting vaccine administration, Lot Manager for vaccine inventory for each clinic works well.

## **The Challenges**

- Some of the order fields are task heavy with a lot of keystrokes or clicks to complete a task.
- Hard stops around data fields, correctly applying multi-select options to questions needing that option vs questions that do not.

## **The Opportunities for Growth**

- Optimizing BPA and hard stops consistently
- Utilize WPHS and referral processes within system

# Oral Health



# **Epic** Referrals in the Oral Health Program

## **The GOOD**

Epic Referrals helped the Oral Health Program implement a robust community-clinical linkage system using an electronic referral for connecting and linking individuals to a source of dental care, tracking the progress of care from referral to completion of treatment plan.

## **The BAD**

Hesitation of community members to complete consent forms due to lack of program awareness.

## **The UGLY**

Referral module was first of its kind; therefore, it faced various system complexities to meet the needs of the program including, staff turnover, and Epic training platform issues.

# Customer Relationship Management System

CRM-548

IB Work Queue CRM Summary Dial Void CRM Copy CRM Audit Trail Assign Owner Service Search

CRM: 548 Created By: Ruh Reg, Ph Oral Health Program Coordinator 04/10/2023 12:30 PM

From: Hyperspace Status: Unresolved

CRM

Primary Info

Contacts

Attachments

Tasks

Notes

Letters

Forms

Route/Resolve

## Primary Information

Source Type

Source

Subject Type

Subject

Topic

Subtopic

Communication

Summary

## Contacts

Inc. Call Out. Call Inc. Mail Inc. Fax Inc. Email Onsite Other

No contacts

A contact is required to save the CRM.

## Attachments

Type

Patient

Appointment

Provider

CRM

Department



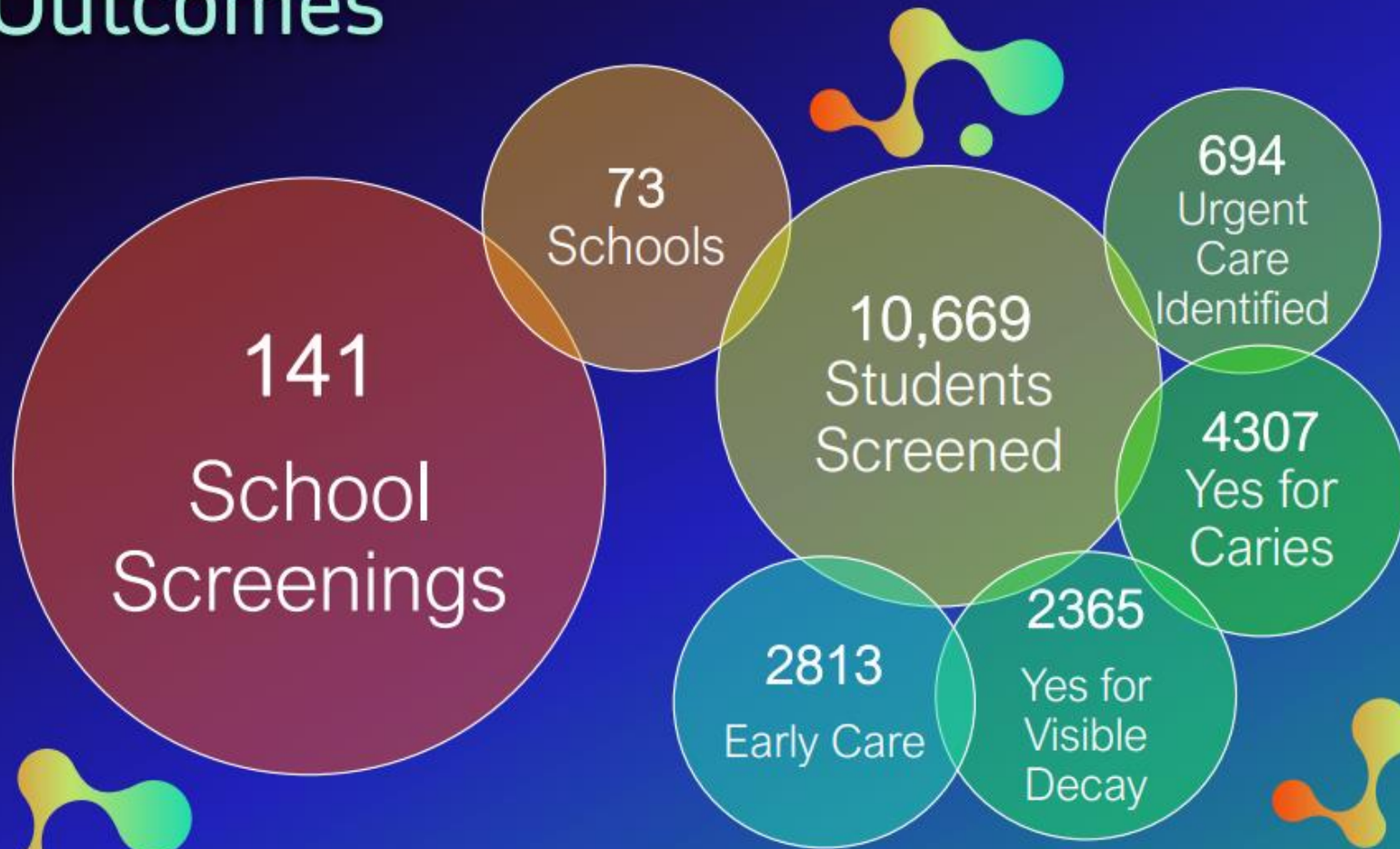
Attachment

Reason

Add Attachment

No attachments for this CRM

# Outcomes



# Oral Health Referral

**General**

Referred By/To  
Referral Details  
Diagnoses  
Services  
Questionnaire  
Communications  
Flags  
Triage  
Scheduling  
Appointment List  
Authorization  
INLAND \*IEHP MC\*  
Coverage Auth

Referral # 2924

Type PH Dental Program

Priority Routine

Class Outgoing

Referral Reasons

Initial Request Type  
Preservice Retro Concurrent

Referral Status  
Status New Request

Reason

Auto Assign

Dates

Title	Number
Early Dental Care	501171004
Evaluation by Dentist Recommended	501171002
Flouride Varnish	501171006
Preventive Services Recommended	501171003
Requests Assistance Connecting to Dental Provider	501171001
Sealants	501171005
Urgent Dental Need	501171000

**Questionnaire**

RUH PH ORAL HEALTH PROGRAM

School District

School of Screening

Reason for Referral

Screening Assessment:

Treatment Urgency:

Preferred Language:

Any additional communication needs?

Last edited 4/13/2023 10:18 PM by RUH REG, PH ORAL HEALTH PROGRAM COORDINATOR

Close

Previous Next



# WIC

# ***Epic*** in the WIC Program

## **The GOOD**

- WIC nationally is becoming digital!
- USDA is embracing the use of electronic health records to streamline services and enhance case management.
- January 2024 under Cal Aim, health plans will be required to refer all prenatal, postpartum, infants and children 0-5 to WIC.

## **The BAD**

- Provider and client knowledge of services, case management, referrals that and enrollment through an Electronic Health Record System (EHR) is complicated.
- There is not one EHR system in a jurisdiction that impacts completion service rates.

## **The UGLY**

- Even with contracts with multiple EHR systems like EPIC, Care Everywhere etc., healthcare systems, providers, and clients need to understand the restrictions and values of client consent forms in this technology and virtual world.

# Beaker

# **Epic** Build in Public Health Lab - Beaker

## **The GOOD**

- Integrated with EHR and PH case management system.
- All data is in one central location.

## **The BAD**

- Beaker is designed for MC Labs and not PH labs. This requires configuration, workflow work arounds, and 3<sup>rd</sup> party tools to be integrated.
- Aggressive project implementation timelines and staff shortage at PHL makes implementation difficult.
- As all data is shared between MC and PH labs in a central location, staff may access or release information without authorization.
- DI which is used as a middleware between Beaker and lab instruments doesn't have drivers for all PH Lab instruments. This prevents all labs instruments from being interfaced.



# **Epic** Build in Public Health Lab - Beaker

## **The UGLY**

Technical support, optimization opportunities....

- The annual maintenance costs from StarLIMS to Beaker has gone from ~\$40K to ~\$120K (\$100K Beaker + \$20K DI).
- Changes will take longer as this is a shared system. All changes need to be submitted to LL via the Clinical Informatics team. PHL won't be able to work directly with the vendor to implement changes during urgent. This will impact the response PHL has to an emergency.

# NEXT STEPS

# Public Health, Population Health & ***Epic***

## Opportunities

- Build out of all PH programs in EPIC
- Internal PH referrals (e.g. MCAH to Car Seat or WIC programs)
- Population data for aggregate Public Health services
- External referrals for CHW, primary care, behavioral health and other EPIC enabled services (ECM youth, SDOH services)
- Tracking and strategic planning to continue to expand PH services

# Data Exchange Framework

# Data Exchange in Public Health & *Epic*

- DHCS Equity Practice Transformation alignment with Data Exchange participation → movement towards Value Based Care
- Alignment of Public Health Data Exchange efforts towards shared data systems

# Questions?

# Thank you!



**Riverside  
University**  
**HEALTH SYSTEM**

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**Public Health**