## USING INTEROPERABILITY TO IMPROVE IMMUNIZATION ACCURACY

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### Presenters







## Disclosures

The following speaker(s) have no relevant financial relationships with ineligible companies to disclose:

Rajesh Dikonda

Brittney Townsend



#### UTHealth Houston | UT Physicians

Academic | Greater Houston area | Hyperdrive May 22

2,000+ CLINICIANS	<b>100+</b> AMBULATORY CLINICS	<b>2</b> BEHAVIORAL HEALTH HOSPITALS
<b>1 Million+</b> PATIENTS	<b>2 Million</b> OUTPATIENT VISITS	<b>538</b> BH BEDS

UTHealth Houston is an academic university that includes McGovern Medical School, a behavioral health campus, and the clinical practice of UT Physicians (UTPhysicians.com). Founded in 1972, the university focuses on education, patient care for the whole family, and research.



## Learning Objectives

- Examine potential pitfalls and best practices for bidirectional exchange with an Immunization Information System (IIS)
- 2. Describe tools for monitoring and correcting errors between Epic and the IIS.
- **3.** Identify build that may be helpful in optimizing workflows for obtaining IIIS consent and documentation.

## Immtrac2 – Texas' Immunization Registry

Founded in 2017

ImmTrac2 was founded in April 2017 replacing legacy system ImmTrac. Opt In

Texas Immunization Registry is an opt in registry. Immunizations only store if consent is obtained.

#### Logistics

ImmTrac stores more than 164 million immunization records with 60,000 participating organizations.

## Why have an Immunization Registry?

The American Academy of Pediatrics recommends it.

Centers for Disease Control and Prevention (CDC) says a state-based immunization information system is essential for reaching and sustaining coverage levels.

The immunization schedule is confusing to parents. A registry helps to keep parents/patients informed about when they/their children need vaccines.

People lose their vaccine records or don't remember.

Track immunization coverage to identify under-vaccinated areas and/or communities.





### PITFALLS AND BEST PRACTICES

### ERROR MONITORING AND CORRECTION

WORKFLOW IMPROVEMENTS

WHAT'S NEXT





## PITFALLS AND BEST PRACTICES

## **Pitfalls and Best Practices**

#### Initial Bidirectional implementation

- External monitoring of errors
- Batch consents separate from vaccine administration

#### Full Bidirectional implementation

- Workqueue view
- Error mapping
- Additional access to operation staff

#UTHealth Houston UT\* Physicians<sup>-</sup>

## Pitfalls cont...Initial Implementation

#### Monitoring Errors in Text file

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Batch Consents outside of Immunization Admin

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## Pitfalls cont...Initial Implementation

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#### Monitoring Errors in Text file

#### Batch Consents outside of Immunization Admin

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# Pitfalls to Best Practices...Initial Implementation

#### Monitoring Errors in Text file

#### Interface Error Workqueue - AMB - OUTGOING VACC ADMIN ERRORS [1940] Last refreshed: 9/3/2021 10:57:59 AM

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lesubmitted	Error ID	Description	Offending Value	Error Instant	Origin	Severity	Patient Name	Patient MRN
	6145	USER RECORD DOESN'T HAVE A LINKED PROVIDER	673	9/2/2021 8:29 AM		Notification	TESTING^BOY/BABY^^^^L	10000677^^
	87032	NO MPI IDS FOUND FOR ADMINISTRATING PROVIDER		8/30/2021 12:45 PM		Notification	AMBULATORY^NORMAN^	202436^^^U
	8048	PRIMARY FACILITY MAPPING FAILED	10501	8/30/2021 12:45 PM		Warning	AMBULATORY^NORMAN^	202436^^^U
	87032	NO MPI IDS FOUND FOR ADMINISTRATING PROVIDER		8/30/2021 12:39 PM		Notification	AMBULATORY^COURTNE	202433^^^U

#### Batch Consents outside Immunization Admin

#### Monitoring Errors in Epic

#### Send consent status with vaccine administration

## Pitfalls to Best Practices continued...Initial Implmentation

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@ Messa	ge 25 ① 24			Reference Guides	
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0 MSA 1 PIL USA 2 PDI	^~\& EPIC UTP FAHILY HEDICINE - UTP8 TXImmtrac TxD5H5 20228725130219-850   1 10822551^^VTH*'98  19HTRACTNO'ADUL**REFUSE_CONSENT^^^L  10850101 N 10 *P^^A8201 48201  1 100297890  1  1        20220722  A 20220722 1= 2= 3. Primary Facility = UTP 6410 FANNIN ST^+6410F 4. Primary Facility = UTP 6410 FANNIN ST^+6410F 4. Primary Facility = UTP 6410 FANNIN ST^+6410F 5= 6. Handicap = 7 = 8 = 9 = 10 = 11: Publicity Code = 12: Protection Indicator = M	0 673 VXU*V04*VXU_V04 25 P <mark>2.5.1</mark>   ER AL     2 MHTRAC2*ADULT*REFUSE CONSENT*  1234585 TERSTR*	44°C0CPHIIN5 ~HOUSTOR*TX*77889	PD1-12: Protection Indicator Description This field indicates to whether or in document of a certain type and sta Notes You can configure this interface to immunization data sharing. If your share their data electronically, pati- if the patient or a designated repri- your state doesn't require a patient exchange, consent is assumed unit documenting their relaxal to share The value that indicates whether a information differs based on the v using:	Provide Feedback     Provide Feedback     Consents based on     trus.      meet your state's requirements for     state requires a patient's consent to     end data is shared with the registry only     restative completes a consent form. If     t's explicit consent for electronic data     ess the patient completes a form     data.     patient has consented to sharing their     ersion of HL7 your receiving system is
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	# Internal value				
	1 Immtrac Adult Registry Consent [201255]	TXA			
		17.1			
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	1 Immtrac Disaster Retention Consent [201256]	UXI			

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Monitoring Errors in Epic

#### Send consent status with vaccine administration

## Consent Types

ImmTrac Consent Type	When to collect?	Frequency
Child Consent	<ul><li>Newborn</li><li>When new pediatric patient has no record of ImmTrac consent</li></ul>	1x
Adult Consent	<ul> <li>Child to Adult When child turns 19</li> <li>Any patient that is 19+ and does not have an ImmTrac consent on file</li> </ul>	1x
Disaster Authorization Consent (applies to emergency use vaccines only)	<ul> <li>Required consent to retain COVID-19 vaccines after 5 years</li> <li>If consent is not collected, all COVID-19 vaccinations will be purged from ImmTrac2 registry 5 years after disaster authorization expires</li> </ul>	Waived currently; 1x

## Pitfalls cont...Full Implementation

#### Inability to easily and efficiently view error(s) in WQ

Multiple IIS Errors falling to same Error ID

Exporting errors for operational review/correction Interface Error Workqueue - AMB - OUTGOING VACC ADMIN ERRORS [1940] Last refreshed: 9/3/2021 10:57:59 AM

🔆 Refresh 🔎 Expand message 🔄 Relevance 🖾 Relevance 🖾 Relevance 🖄 Skip message 🔅 Relevance 🗋 Add note

Errors (Total:	29)								
Resubmitted	Error ID	Description	Description Of		Error Instant	Origin	Severity	Patient Name	Patient MRN
	6145	USER RECORD D	OESN'T HAVE A LINKED PROVIDER	673	9/2/2021 8:29 AM		Notification	TESTING^BOY/BABY	10000677^^^.
	87032	NO MPI IDS FOUN	FOR ADMINISTRATING PROVIDER		8/30/2021 12:45 PM		Notification	AMBULATORY^NORMAN^	202436^^^U
	8048	PRIMARY FACILI	( MAPPING FAILED	10501	8/30/2021 12:45 PM		Warning	AMBULATORY^NORMAN^	202436^^^U
	87032	NO MPI IDS FO	ID FOR ADMINISTRATING PROVIDER		8/30/2021 12:39 PM		Notification	AMBULATORY^COURTNE	202433^^^U

		*				- · · · ·
					ERROR REPORT	<b>\$ -</b> 9
① DATA TYPE ERROR [195512]	*	Message Submissio	n Details			*
User Message: MER-110::Message rejected. MSH-22 value Invalid. This error is logged if the specified field contained data of the wrong d type. Contextual Error Information Message Location	ata MSH(1)-22	Built: Sent: Acknowledgment: ID^DAT: Mnemonic:		Mon Dec 13 Mon Dec 13 CA Z156141^ Immunizatio	3, 2021 04:47:09 PM 3, 2021 04:47:16 PM \$55439.97 on Trigger	
Error Severity Application Error Code Application Error Text General Error Information Severity	E 3 Illogical Value error Notification	Error Audit History Event WQ Add	User INTERFACE, VACCINATION ADMINISTRATION OUT	Event Time Mon Dec 13, 2021 11:22 PM	Comments Added to WQF AMB - OUTGOING VACC ADMIN ERRORS (1940) as WQI 25149644	×
Scope Instant of error Logged error ID Occurred at Delete Error	Message Mon Dec 13, 2021 11:22 PM 35149205 LogSegmentError+1^AIHL7ERRIFL01 +1	WQ Add	[INTF334322] INTERFACE, VACCINATION ADMINISTRATION OUT [INTF334322]	Mon Dec 13, 2021 11:22 PM	Added to WQF CLINIC - OUTGOING VACC ADM ERRORS [7048] as WQI 25149645	IIN
Error Audit History 🗸						

## Pitfalls cont...Full Implementation

#### Inability to easily and efficiently view error(s) in WQ

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## Multiple IIS Errors falling to same Error ID

 Exporting errors for operational review/correction

REQUIRED FIELD MISSING [195511]	User Message: IEE-519::Warning. NK1 Segment/Responsible person, missing
REQUIRED FIELD MISSING [195511]	User Message: MER-105::Message rejected. Required field PID-11-3 missing
REQUIRED FIELD MISSING [195511]	User Message: MER-105::Message rejected. Required field PID-11 missing.
REQUIRED FIELD MISSING [195511]	User Message: MER-105::Message rejected. Required field PID-11-5 missing.
REQUIRED FIELD MISSING [195511]	User Message: MER-105::Message rejected. Required field PID-5-2 missing.
REQUIRED FIELD MISSING [195511]	User Message: CLR-201::Client rejected. Client name cannot be empty.
REQUIRED FIELD MISSING [195511]	User Message: CLR-203::Client rejected. Client last name must be at least one character in length.
REQUIRED FIELD MISSING [195511]	User Message: IEE-318::Warning. The patient's race in PID-10 is missing. If your organization is able to capture and report this information then do so using HL70005 code set
REQUIRED FIELD MISSING [195511]	User Message: IEE-319::Warning. The patient's ethnicity in PID-22 is missing. If your organization is able to capture and report this information then do so using the HL70189 CDCREC code set.
REQUIRED FIELD MISSING (195511)	User Message: IMR-128::Immunization rejected. Manufacturer Code inaccurate or missing data.
REQUIRED FIELD MISSING [195511]	User Message: IEE-413::Phone number is empty or invalid or contains a placeholder value.
REQUIRED FIELD MISSING [195511]	User Message: IMR-151::Immunization rejected. The information for the provider who ordered the immunization reported is missing in ORC-12.
TABLE VALUE NOT FOUND [195513]	User Message: IEE-511::Informational Message. RXA #1 ignored. Refusal of Immunization is not accepted or stored in the registry
TABLE VALUE NOT FOUND [195513]	User Message: IMR-132::Immunization rejected. Immunization rejected for an unconsented client.
TABLE VALUE NOT FOUND [195513]	User Message: IEE-321::Warning. The patient's ethnicity in PID-22 is invalid. Use the appropriate HL70189 CDCREC code set values for this field.
TABLE VALUE NOT FOUND [195513]	User Message: IMR-129::Immunization Rejected. Tradename (***) not produced by manufacturer (***).
TABLE VALUE NOT FOUND [195513]	User Message: IEE-320::Warning. The patient's race in PID-10 is invalid. Use the appropriate HL70005 code set values for this field.

## Pitfalls cont...Full Implementation

#### Inability to easily and efficiently view error(s) in WQ

#### Multiple IIS Errors falling to same Error ID

#### Exporting errors for operational review/correction

#### Name

AMB\_OUTGOING\_VACC\_ADMIN\_2022-07-26\_PID Errors AMB\_OUTGOING\_VACC\_ADMIN\_2022-07-14\_PID Errors AMB\_OUTGOING\_VACC\_ADMIN\_2022-07-01\_PID Errors AMB\_OUTGOING\_VACC\_ADMIN\_2022-07-01\_IEE-201 multiple pt matching AMB\_OUTGOING\_VACC\_ADMIN\_2022-06-27IEE\_201 multiple matches AMB\_OUTGOING\_VACC\_ADMIN\_2022-06-21\_IEE\_201 warning multiple patient matching AMB\_OUTGOING\_VACC\_ADMIN\_2022-06-15\_IEE-201 multiple client matches AMB\_OUTGOING\_VACC\_ADMIN\_2022-05-27\_IEE-201 multiple matches AMB\_OUTGOING\_VACC\_ADMIN\_2022-05-09\_MER-105 PID 5 errors AMB\_OUTGOING\_VACC\_ADMIN\_2022-05-19\_IEE-201 multiple matches AMB\_OUTGOING\_VACC\_ADMIN\_2022-05-09\_IEE-201 duplicate patient matching AMB\_OUTGOING\_VACC\_ADMIN\_2022-04-22\_IEE-201 multiple patient matches AMB\_OUTGOING\_VACC\_ADMIN\_2022-04-14\_IEE-201 multiple patient matching AMB\_OUTGOING\_VACC\_ADMIN\_2022-04-11\_MER-105 PID missing infomation AMB\_OUTGOING\_VACC\_ADMIN\_2022-04-11\_IEE-201 multiple matches AMB\_OUTGOING\_VACC\_ADMIN\_2022-04-01\_IEE-201 patient matching AMB\_OUTGOING\_VACC\_ADMIN\_2022-03-29\_MER-105 patient ID or address missing AMB\_OUTGOING\_VACC\_ADMIN\_2022-03-30\_CLR-201-203-205 Confidential name issue AMB\_OUTGOING\_VACC\_ADMIN\_2022-03-29\_IEE-201 warning, multiple matching patients

### Pitfalls to Best Practices cont...Full Implementation

Interface Error Workqueue - AMB - OUTGOING VACC ADMIN ERRORS [1940] Last refreshed: 10/29/2021 12:00:52 PM

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Msg No	Resubmitted	Error ID	Description	Error Message Text	Error Instant Origin	Severity
50601		195510	SEGMENT SEQUEN.	Oser message. CLR-205. Client reje	9/2//2021 9:22 AM	Notification
50602		195510	SEGMENT SEQUEN	User Message: CLR-205::Client reje	9/27/2021 9:22 AM	Notification
50609		195510	SEGMENT SEQUEN	User Message: CLR-205::Client reje	9/27/2021 11:00	Notification
50676		195512	DATA TYPE ERROR	User Message: IEE-571::Warning, T	9/27/2021 11:03	Notification
50688		195510	SEGMENT SEQUEN	User Message: IEE-404::Warning, R	9/27/2021 11:03	Notification
50688		195510	SEGMENT SEQUEN	User Message: IEE-404::Warning. R	9/27/2021 11:03	Notification
50690		195510	SEGMENT SEQUEN	User Message: IEE-404::Warning. R	9/27/2021 11:03	Notification
50690		195510	SEGMENT SEQUEN	User Message: IEE-404::Warning, R	9/27/2021 11:03	Notification
50713		195512	DATA TYPE ERROR	User Message: IEE-571::Warning. T	9/27/2021 11:04	Notification
50723		195512	DATA TYPE ERROR	User Message: IEE-571::Warning, T	9/27/2021 11:05	Notification
50758		195512	DATA TYPE ERROR	User Message: IEE-571::Warning. T	9/27/2021 11:06	Notification
50779		195512	DATA TYPE ERROR	User Message: IEE-571::Warning. T	9/27/2021 11:07	Notification

Image: Client Rejected. Client LAST NAME MUST BE AT L // STONE CHAR. [195511203]       Message Submission Details         Client rejected. Client last name must be at least one character in len?       Image: Contextual Error Information         Contextual Error Information       PID(1)-S         Error Severity       E         Application Error Code       6         Application Error Text       Required observation missing         User Message       CLR-203:Client rejected. Client last name must be at least one character in length.         General Error Information       Scope         Scope       Message         Instant of error       Fril Mar 10, 2023 12:26 PM         Logged error ID       3785013         Occurred at       LogSegmentError+4^AIICPOUT +1         Delete Error       Kon Mar 20, 2023         Resolution Plan Information       Status: Unassigned V						
CLIENT REJECTED. CLIENT LAST [195511203]	NAME MUST BE AT LEST ONE CHAR.	Message Sub	mission Details			*
		Built:		Fri Mar	0, 2023 12:26:39 PM	
	*	Sent:		Fri Mar 1	0, 2023 12:26:54 PM	
Client rejected. Client last name must be at le	ast one character in leng	Acknowledgment	:	CA		
Contraction I Francisco Information		ID^DAT:		Z505	3^54996	
Contextual Error Information		Mnemonic:		Immuniz	ation Trigger	
Message Location	PID(1)-5					
Error Severity	E	Emon Audit I	latanı			~
Application Error Code	6	Error Audit H	istory			~
Application Error Text	Required observation missing	Event	User	Event Time	Comments	
User Message	CLR-203::Client rejected. Client last name must be at	WO Add	INTERFACE	Fri Mar 10, 2023	Added to WOF AMB - OUTGOING VACC	
	least one character in length.		VACCINATION	12:26 PM	ADMIN ERRORS [1940] as WOI 3298734	
General Error Information			ADMINISTRATION			
Severity	Fatal		OUT [INTF334322]			
Scope	Message	WQ Release	DIKONDA, RAJESH	Mon Mar 20, 2023	Removed WQI 3298734 from WQF 1940	
Instant of error	Fri Mar 10, 2023 12:26 PM		[254]	2:24 PM		
Logged error ID	3785013	WQ Add	INTERFACE,	Mon Mar 20, 2023	Added to WQF AMB - OUTGOING VACC	
Occurred at	LogSegmentError+4^AITCPOUT +1		VACCINATION	2:24 PM	ADMIN ERRORS [1940] as WQI 3300941	
Delete Error			ADMINISTRATION			
Resolution Plan Information	Status: Unaccioned &		OUT [INTF334322]			
	Status, Unassigneu V					
Error Audit History 🖉						

#### Update the view and add appropriate columns

Remap responses to have their own unique Error ID

 Give operations team access to a Clinic Error WQ

## Pitfalls to Best Practices cont...Full Implementation

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	#	Error Code	Error (AIE) record		
	2	IEE-407	NO RELATIONSHIP CODE SPECIFIED. DEFAU	ILTING TO GUARDIAN [195521407]	•
	3	IEE-521	MORE THAN ONE CLINICIAN FOUND TO MAT	CH (PROVIDER NAME) [195521521]	
	4	IEE-594	THE INCOMING DELETE IMMUNIZATION DOE	S NOT MATCH AN EXISTIN. [195521594]	
	5	iEE-550	THE SENDING FROMBER ORGANIZATION D	SES NOT OWN THE EXISTIND [195521596]	
	6	CLR-101	CLIENT REJECTED. CONSENT FLAG NOT VA	LID FOR CLIENT AGE [195512101]	
	7	IMR-111	IMMUNIZATION REJECTED. 157 IS AN INVALI	D CVX CODE OR REGISTD [195512111]	
	8	IEE-257	YOU ARE ATTEMPTING TO UPDATE THE SSM	OF IMMTRAC2 CLIENT ID [195512257]	
	9	IEE-296	YOU ARE ATTEMPTING TO UPDATE THE FIR	STNAME OF IMMTRAC2 CLIENT ID: , WHO WAS CR	EATED BY THE STATE'S VITA
	10	IEE-297	YOU ARE ATTEMPTING TO UPDATE THE LAS	TNAME OF IMMTRAC2 CLIEN [195512297]	
	11	IEE-298	YOU ARE ATTEMPTING TO UPDATE THE MID	DLENAME OF IMMTRAC2 CLE [195512298]	
	12	IEE-309	INVALID STATE CODE (AB). NO VALUE STOR	ED [195512309]	
	13	IEE-313	YOU ARE ATTEMPTING TO UPDATE THE GET	IDER OF IMMTRAC2 CLIENT [195512313]	
	14	IEE-317	MULTIPLE BIRTH INDICATOR AND BIRTH OR	DER VALUES ARE CONFLI [195512317]	
	15	IEE-422	PID-6.1 - MOTHER'S MAIDEN LAST NAME IS I	NVALID AND WAS IGNO. [195512422]	
	16	IEE-423	PID-6.2 - MOTHER'S FIRST NAME IS INVALID	AND WAS IGNORED [195512423]	~

Update the view and add appropriate columns

Remap Responses to have their own unique Error ID

 Give operations team access to a Clinic Error WQ

### Pitfalls to Best Practices cont...Full Implementation

Workd	Inability to easily and efficiently view error(s) queue List - Interface Errors - Favorites esh gopn g Report Export S Manage WQ - X Show All	▼ New Filter L My WQs		<ul> <li>Update the view appropriate colun</li> </ul>
Acc	count 🔄 Adj/Refund Review 🕋 Adj/Refund Review 🛗 Appt Re	quests 💼 Case Rate 🔄 Charge Review	🖨 Charge Review 🖳 Interface Errors 🗸	
() Th	is list is filtered ₩ Rem <u>o</u> ve			Roman respons
F	ID Name	Service Area	Count Active WQ Status V	their own unique
☆	7592 AMB - OUTGOING DISASTER VACC ADMIN ERRORS	UTHEALTH	0 Yes	
☆	1940 AMB - OUTGOING VACC ADMIN ERRORS	UTHEALTH	4 Yes	
☆	1741 AMB - OUTGOING VACC HIST QUERY ERRORS	UTHEALTH	1 Yes	
☆	7593 CLINIC - OUTGOING DISASTER VACC ADMIN ERRORS	UTHEALTH	0 Yes	
☆	7048 CLINIC - OUTGOING VACC ADMIN ERRORS	UTHEALTH	0 Yes	Cive operations

#### arational review/correction

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and add

es to have rror ID

team access to a Clinic Error WQ





### PITFALLS AND BEST PRACTICES

### ERROR MONITORING AND ERROR CORRECTION

WORKFLOW IMPROVEMENTS

WHAT'S NEXT



## ERROR MONITORING AND CORRECTIONS

## **Error Monitoring & Correction**

What is the build behind the best practices?

- Interface Setup COVID/Non-COVID
- Interface Error Workqueue Setup Analyst and Operations
- How did this build assist with monitoring and correcting errors?
  - ✦ Identification of true errors
  - Automatic error designation to working team

### **Immunization Flow Architecture**



## Interface Setup for COVID/Non-COVID

With Browner       Set Use View View View View View View View Vie	Conoral Info	Oracing lafe	$\underline{OI} \underline{OI} \underline{OJ}$				
Records       Grouper(VCG) with         1       COVID-19 MODERNA BUXENT BOOSTER 12-YR (GRAV DERDET         2       COVID-19 MODERNA BUXENT BOOSTER 12-YR (GRAV DERDET         3       COVID-19 MODERNA BUXENT BOOSTER 12-YR (GRAV DERDET         4       COVID-19 MODERNA BUXENT BOOSTER 12-YR (GRAV DERDET         5       COVID-19 MODERNA BUXENT BOOSTER 12-YR (GRAV DERDET         6       COVID-19 MODERNA BUXENT BOOSTER 12-YR (GRAV DERDET         6       COVID-19 MODERNA BUXENT BOOSTER 12-YR (GRAV DERDET         7       COVID-19 MODERNA BUXENT BOOSTER 12-YR (GRAV DERDET         0       COVID-19 PEZER BUXENT BOOSTER 12-YR (GRAV DERDET         1       COVID-19 PEZER BUXENT BOOSTER 12-YR (GRAV DERDE CAP)         1       COVID-19 PEZER BUXENT BOOSTER 12-YR (GRAV DERDE CAP)         1       COVID-19 PEZER BUXENT BOOSTER 12-YR (GRAV DERDE CAP)         1       COVID-19 PEZER BUXENT BOOSTER 12-YR (GRAV DERDE CAP)         1       COVID-19 PEZER BUXENT BOOSTER 12-YR (GRAV DERDE CAP)         1       COVID-19 PEZER BUXENT BOOSTER 12-YR (GRAV DERDE CAP)         1       COVID-19 FEZER BUXENT BOOSTER 12-YR (GRAV DERDE CAP)	General Into	Grouper Into	26 26				
COVID-19 JANESEEN 18 & OVER VACCINATION [43]       Covid-19 MODERNA ULLENT BOOSTER 14 JANES ROBRE         COVID-19 MODERNA DIVALENT BOOSTER 14 JANES ROBRE       Covid-19 MODERNA DIVALENT BOOSTER 14 JANES ROBRE         COVID-19 MODERNA DIVALENT BOOSTER 14 JANES ROBRE       Covid-19 MODERNA DIVALENT BOOSTER 14 JANES ROBRE         COVID-19 MODERNA DIVALENT BOOSTER 14 JANES ROBRE       Readewind the second diversity of the second divers	Recor	rds					
2 COVID-19 MODERNA BUX-LENT BOOSTER 124*R; (GAAY BORCER)         3 COVID-19 MODERNA BUSCHENT DOOSTER 124 R; (GAAY BORCER)         4 COVID-19 MODERNA LEI PEDI PRIMARY BMO - SYR VACCINATION (RED CAP)         6 COVID-19 MODERNA LEI PEDI PRIMARY BMO - SYR VACCINATION (RED CAP)         9 COVID-19 MODERNA LEI PEDI PRIMARY SMO - SYR VACCINATION (RED CAP)         9 COVID-19 MODERNA LEI PEDI PRIMARY SMO - SYR VACCINATION (RED CAP)         9 COVID-19 MODERNA LEI PEDI PRIMARY SMO - SYR VACCINATION (RED CAP)         9 COVID-19 MODERNA 12 & OVER VACCINATION (RED CAP)         10 COVID-19 PRIZER BUX-LEIT BOOSTER 21/RY (GAAY CAP)         10 COVID-19 PRIZER BUX-LEIT BOOSTER 1/RY (GAAY CAP)         11 COVID-19 PRIZER BUX-LEIT BOOSTER 1/RY (GAAY CAP)         12 COVID-19 PRIZER BUX-LEIT BOOSTER 2/RY (GAAY CAP)         12 COVID-19 PRIZER BUX-LEIT BOOSTER 2/RY (GAAY CAP)         12 COVID-19 PRIZER BUX COVID COVID COVID CONTRUCT TABLE BUX COVID         12 COVID-19 PRIZER BUX COVID COVID CONTRUCT TABLE BUX COVID         13 COVID-19 PRIZER BUX COVID COVID CONTRUCT TABLE BUX COVID         14 COVID-19 PRIZER BUX COVID COVID CONTRUCT TABLE BUX COVID TABLE BUX COVID TABLE BUX COVID TABLE BUX COVID TABLE BUX COVID TABLE BUX COVID TABLE BUX COVID COV	1 COVI	D-19 JANSSEN 18 & OVER VACCINATION [403]				Grouper(VCG) with	
a) COVID-19 MODERNA BUX-LENT BOOSTER 11 X (IGAX PORDER 4) COVID-19 MODERNA BOOSTER 12 X OVER NACCINATION (RED CAP) (MOT) 6) COVID-19 MODERNA BOOSTER 12 X NC, PRANCY 611/YR VACCINATION 6) COVID-19 MODERNA BOOSTER 12 X NC, PRANCY 611/YR VACCINATION (RED CAP) (MOT) 8) COVID-19 PRZER 12 X OVER VACCINATION (RED CAP) (MOT) 8) COVID-19 PRZER 12 X OVER VACCINATION (PARE-DLUTE) (K1 10) COVID-19 PRZER 12 X VACINATION (PARE-DLUTE) (K1 10) COVID-19 PRZER 12 X VACINATION (MARCON)       Rule 10 Content 10 COVID-19 PRZER 12 X VACINATION (MARCON)       Rule 10 Content 10 COVID-19 PRZER 12 X VACINATION (MARCON)       Stath New 10 COVID-19 PRZER 12 X VACINATION (MARCON)       Stath New 10 COVID-19 PRZER 12 X VACINATION (MARCON)       Stath 10 Content 10 COVID-19 PRZER 12 X VACINATION (MARCON)       Stath 10 Content 10 COVID-19 PRZER 10 VACINATION (MARCON)       Stath 10 Content 10 COVID-19 PRZER 10 VACINATION (MARCON)       Stath 10 Content 10 COVID-19 PRZER 10 VACINATION (MARCON)       Stath 10 Content 10 CovID VACINE Triggering RLE Based on CovID VACINATION (MARCON)       Stath 10 Content 10 CovID VACINE Triggering RLE Based on CovID VACINATION (MARCON)       Stath 10 Content 10 CovID VACINE Triggering RLE Based on CovID VACINATION (MARCON)       Stath 10 Content 10 CovID VACINE Triggering RLE Based on CovID VACINATION (MARCON)       Stath 10 CovID VACINATION (MARCON)       Stath 10 CovID VACINATION (MARCON)       Stath 10 CovID VACINATION (TRIGGER, RULE ECRI 10 CovID VACINATION (TRIGGER, RULE EGRI 10 COVID VACINATION (TRIGGER, RULE [5634]       Imm Trac NON COVID VACCINE Triggering RULE Based on Grouper ID [729448]       CovID VACINATION (TRIGGER, RULE EGRI 10 COVID VACINATION (TRIGGER) (TRIGGER ECRI 10 COVID VACINATION (TRIGG	2 COVI	D-19 MODERNA BIVALENT BOOSTER 12+YR (G				COVID LIMS	
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COVID-19 MODERNA BODERNA SUB-SERVE VACCINATION © COVID-19 MODERNA 12.8 OVER VACCINATION [RED CAP) [400] © COVID-19 MODERNA SOURCE LAYPR, (PRANKY 6-11YE MARKY 6-11YE MARK	4 COVI	D-19 MODERNA BOOSTER 12 & OVER VACCIN/	ATION (RED C				
© COVID-19 MODERNA 12 T2PR. PRIMARY 6-11YR VACCI 7 COVID-19 MODERNA 12 OVER VACCINATION (REC CAP (190)) 9 COVID-19 POTERE II 2.4 OVER VACCINATION (PURPLE-UILTE) [40] 10 COVID-19 PPTERE IIVALENT BOOSTER 5-11YR (RAA CAP (200)) 11 COVID-19 PPTERE IIVALENT BOOSTER 5-11YR (RAA CAP (200)) 12 COVID-19 PPTERE	5 COVI	D-19 MODERNA LIL PEDI PRIMARY 6MO - 5YR V	VACCINATION			<u> </u>	
Profile Variable       Value         Profile Variable       Value         IMMUNIZATION_TRIGGER_RULE [5634]       ImmTrac NON COVID VACCINE Triggering RULE Based on Grouper ID [729448]	6 COVI	D-19 MODERNA BOOSTER 12YR+, PRIMARY 6-	11YR VACCI				
B       COVID-19       NOVAVAX SARS-COV2 VACCINATION [44]         9       COVID-19       PFIZER 112 & OVER VACCINATION (PLEPLED)LIE) [40]         10       COVID-19       PFIZER BIVALENT BOOSTER 12+YR (GRAV CAP) [301]         11       COVID-19       PFIZER BIVALENT BOOSTER 5-11YR (GRAV CAP) [301]         12       COVID-19       PFIZER BIVALENT BOOSTER 5-11YR (GRAV CAP) [301]         12       COVID-19       PFIZER BIVALENT BOOSTER 5-11YR (GRAV CAP) [301]         12       COVID-19       PFIZER BIVALENT BOOSTER 5-11YR (GRAV CAP) [301]         12       COVID-19       PFIZER BIVALENT BOOSTER 5-11YR (GRAV CAP) [301]         12       COVID-19       PFIZER BIVALENT BOOSTER 5-11YR (GRAV CAP) [301]         12       COVID-19       PFIZER BIVALENT BOOSTER 5-11YR (GRAV CAP) [301]         13       CovID-19       PFIZER BIVALENT BOOSTER 5-11YR (GRAV CAP) [301]         14       CovID-19       Protein       *** CovID-19         15       Fragering RULE Based on Grouper ID [729448]       *** CovID-19       CovID-19         15       Value       ImmTrac NON COVID VACCINE Triggering RULE Based on Grouper ID [729448]       CovID       CovID         16       Value       ImmTrac NON COVID VACCINE Triggering RULE Based on Grouper ID [729448]       CovID       CovID       CovID       CovID	7 COVI	D-19 MODERNA 12 & OVER VACCINATION (RED	0 CAP) [400]			Rules With In/Ex cluding	
9 COVID-19 PFIZER 12 & OVER VACCINATION (PURPLE-DILUTE) (ATT         10 COVID-19 PFIZER BIVALENT BOOSTER 12-YR (GRAY CAP) (3001         11 COVID-19 PFIZER BIVALENT BOOSTER 12-YR (GRAY CAP) (3001         12 COVID-19 PFIZER BIVALENT BOOSTER 12-YR (GRAY CAP) (3001         12 COVID-19 PFIZER BIVALENT BOOSTER 12-YR (GRAY CAP) (3001         12 COVID-19 PFIZER BIVALENT BOOSTER 12-YR (GRAY CAP) (3001         12 COVID-19 PFIZER BIVALENT BOOSTER 12-YR (GRAY CAP) (3001         12 COVID-19 PFIZER BIVALENT BOOSTER 12-YR (GRAY CAP) (3001         12 COVID-19 PFIZER BIVALENT BOOSTER 12-YR (GRAY CAP) (3001         12 COVID-19 PFIZER BIVALENT BOOSTER 12-YR (GRAY CAP) (3001         12 COVID-19 PFIZER BIVALENT BOOSTER 12-YR (GRAY CAP) (3001)         12 COVID-19 PFIZER BIVALENT BOOSTER 12-YR (GRAY CAP) (3001)         12 COVID-19 PFIZER BIVALENCE BOORD (3002)         13 COVID-19 PFIZER BIVALENCE BOORD (3002)         14 COVID-19 PFIZER BIVALENCE BOORD (3002)         15 OPIER BIVALENT BOOSTER 12-YR (3001)         15 OPIER BIVALENT BOOSTER 12-YR (3001)         15 OPIER BIVALENT BOOSTER 12-YR (3002)	8 COVI	D-19 NOVAVAX SARS-COV-2 VACCINATION [404	4] 🥒			Grouper(CER1/CER2)	
10       COVID-19       PFIZER       RIVALENT BOOSTER 12+YR (GRAY CAP) [301]         11       COVID-19       PFIZER       RIVALENT BOOSTER 12+YR (GRAY CAP) [301]         12       COVID-19       PFIZER       RIVALENT BOOSTER 5-11YR (GRAY CAP) [301]         12       COVID-19       PFIZER RIVALENT BOOSTER 12+YR (GRAY CAP) [301]       Immediate file         12       COVID VACCINE Triggering RLEE Based on Grouper (D)       Tripdet (D)       Immediate file         11       COVID VACCINE Triggering RLEE Based on Grouper (D)       Tripdet (D)       Immediate file       Content +         11       Content +       Immediate file       Content +       Content +       Content +       Content +         11       Immediate file       Content +       Content + <td>9 COVI</td> <td>D-19 PFIZER 12 &amp; OVER VACCINATION (PURPLE</td> <td>E-DILUTE) [40]</td> <td></td> <td></td> <td></td> <td></td>	9 COVI	D-19 PFIZER 12 & OVER VACCINATION (PURPLE	E-DILUTE) [40]				
11 COVID-19 FPIZER BIVALENT BOOSTER 5-11YR (ORANGE CAP)     12 COVID-19 FPIZER BLVALENT BOOSTER 5-11YR (ORANGE CAP)     13 COVID-19 FPIZER BLVALENT BOOSTER 5-11YR (ORANGE CAP)     14 COVID-19 FPIZER BLVALENT BOOSTER 5-11YR (ORANGE CAP)     15 Bule have   1 mmtrace COVID-19 FPIZER BLVALENT BOOSTER 5-11YR (ORANGE CAP)     1 mmtrace COVID-19 FPIZER BLVALENT BOOSTER 5-11YR (ORANGE CAP)     1 mmtrace COVID-19 FPIZER BLVALENT BOOSTER 5-11YR (ORANGE CAP)     1 mmtrace COVID-19 FPIZER BLVALENT BOOSTER 5-11YR (ORANGE CAP)     1 mmtrace COVID-19 FPIZER BLVALENT BOOSTER 5-11YR (ORANGE CAP)     1 mmtrace COVID-19 FPIZER     1 mmtrace NON COVID VACCINE Triggering RULE Based on Grouper ID [729448]     1 mmtrace NON COVID VACCINE Triggering RULE Based on Grouper ID [729448]     1 mmtrace NON COVID VACCINE Triggering RULE Based on Grouper ID [729448]     2 mmtrace Non Covid PIZER     2 mmtrace Non Cov	10 COVI	D-19 PFIZER BIVALENT BOOSTER 12+YR (GRA)	Y CAP) [3001]				
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Profile Variable     Value     Profile Variable     Value     IMMUNIZATION_TRIGGER_RULE [5634]     Immara: NON COVID VACCINE [5634]     Immara: NON COVID VACCINE [5634]     Immara: NON COVID VACCINE [5634]     Immara: Non Covid Value     Value     Immunation Triggering     Nulle Based on Grouper ID [729448]     Immara: Non Covid Value	12 COVI	D-19 PFIZER LIL PEDI 6 MO - 4Y/O VACCINATIO	N (MAROON				
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I via Name       • Nate D/ Context         • Nate D/ Context       • Value         • ImmTrac NON COVID VACCINE Triggering RULE Based on Grouper ID       729449         • Property       • Operator         • Property       • Operator         • Property       • Operator         • Operator       • Operator </th <th></th> <th>piane D</th> <th></th> <th></th> <th></th> <th></th> <th></th>		piane D					
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Operator       Value         ion * et all       =       Couper ID         Grouper ID       Grouper ID         IM GENERAL COVID 199 [122465]       Grouper ID         MODENDERAL COVID 199 [122465]       Grouper ID         IM GENERAL COVID 199 [122465]       Value         Profile Variable       Value         IMMUNIZATION_TRIGGER_RULE [5634]       Immunization Grouper ID [729448]	1						
en , A e Constant s Grouper Record Grouper Record Grouper Record Grouper ID IM GENERAL COVID-19 [123461] Profile Variable Value IMMUNIZATION_TRIGGER_RULE [5634] ImmTrac NON COVID VACCINE Triggering RULE Based on Grouper ID [729448] SET PV Immunization_TRIGGER_RULE=CER1		Operator Value	# Property	Operator Value			
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IM GENERAL COVID-19 [123461     Profile Variable   Value   IMMUNIZATION_TRIGGER_RULE [5634]   ImmTrac NON COVID VACCINE Triggering RULE Based on Grouper ID [729448]     COVID		Grouper ID		Grouper ID			
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Profile Variable       Value         IMMUNIZATION_TRIGGER_RULE [5634]       ImmTrac NON COVID VACCINE Triggering RULE Based on Grouper ID [729448]							
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Profile Variable       Value         IMMUNIZATION_TRIGGER_RULE [5634]       ImmTrac NON COVID VACCINE Triggering RULE Based on Grouper ID [729448]             COVID       NON					0.6	CER1/CER2	
Profile variable     Value       IMMUNIZATION_TRIGGER_RULE [5634]     ImmTrac NON COVID VACCINE Triggering RULE Based on Grouper ID [729448]	Deefle	Variable	Malua		0.0		
IMMUNIZATION_TRIGGER_RULE [5634]       ImmTrac NON COVID VACCINE Triggering RULE Based on Grouper ID [729448]       O         COVID       NON	Profile	variable	value		012	$\rightarrow V, \alpha \in (0,1)$	TP T K P
IMMUNIZATION_TRIGGER_RULE [5634] ImmTrac NON COVID VACCINE Triggering RULE Based on Grouper ID [729448] COVID COVID VACCINE Triggering RULE Based on Grouper ID [729448] COVID VACCINE Triggering					0151 (00)		
RULE Based on Grouper ID [729448]     COVID     NON	IMMUN	VIZATION_TRIGGER_RULE [5634]	Imm I rac NON COV	ID VACCINE Triggering	$-\frac{\sqrt{1-\sqrt{2}}}{\sqrt{2}}$		
			RULE Based on Gro	ouper ID [729448]	0.15 (malk		

## Interface Error Workqueue Setup

#### Add New Error Codes to Table(XX

AIE 🔎	199151	
	Error Code Name	Error Code ID
	INVALID SET ID	199
	THE PATIENT'S RACE IN PID-10 IS MISSING. IF YO	195511318
	NO MPI IDS FOUND FOR ADMINISTRATING PROVI	87032
	PATIENT FYI ERROR	8740
	INFORMATIONAL MESSAGE. RXA #1 IGNORED. R	195513511
	THE PATIENT'S ETHNICITY IN PID-22 IS INVALID	195513321
	THE PATIENT'S RACE IN PID-10 IS INVALID. USE T	195513320

#	Error Code	Error (AIE) record
2	IEE-407	NO RELATIONSHIP CODE SPECIFIED. DEFAULTING TO GUARDIAN [195521407]
3	IEE-521	MORE THAN ONE CLINICIAN FOUND TO MATCH (PROVIDER NAME) [195521521]
4	IEE-594	THE INCOMING DELETE IMMUNIZATION DOES NOT MATCH AN EXISTIN. [195521594]
5	IEE-596	THE SENDING PROVIDER ORGANIZATION DOES NOT OWN THE EXISTIND [195521596]
6	CLR-101	CLIENT REJECTED. CONSENT FLAG NOT VALID FOR CLIENT AGE [195512101]
7	IMR-111	IMMUNIZATION REJECTED. 157 IS AN INVALID CVX CODE OR REGISTD [195512111]
8	IEE-257	YOU ARE ATTEMPTING TO UPDATE THE SSN OF IMMTRAC2 CLIENT ID [195512257]
9	IEE-296	YOU ARE ATTEMPTING TO UPDATE THE FIRSTNAME OF IMMTRAC2 CLIENT ID: , WHO WA
10	IEE-297	YOU ARE ATTEMPTING TO UPDATE THE LASTNAME OF IMMTRAC2 CLIEN [195512297]
11	IEE-298	YOU ARE ATTEMPTING TO UPDATE THE MIDDLENAME OF IMMTRAC2 CLE [195512298]
12	IEE-309	INVALID STATE CODE (AB). NO VALUE STORED [195512309]
13	IEE-313	YOU ARE ATTEMPTING TO UPDATE THE GENDER OF IMMTRAC2 CLIENT [195512313]
14	IEE-317	MULTIPLE BIRTH INDICATOR AND BIRTH ORDER VALUES ARE CONFLI [195512317]
15	IEE-422	PID-6.1 - MOTHER'S MAIDEN LAST NAME IS INVALID AND WAS IGNO. [195512422]

AIE: Add Custom Error Codes to DSHS Descriptions

Table With New Error Codes(XXX)

#### SET PV ERROR\_CODE\_TABLE=XX>

Create Rules for IEWQ

> CER for IEWQ

#### Set PV ERROR\_CODE\_TABLE=XX

#### Create Error Workqueue With Rules

Ru	les			ጵ Expand 🕂 Add 🎤 Edit 💥 Remove
	ID	Name	Active?	Description
-	691639	AMB - OUTGOING VACC ADMIN ERRORS	✓	Collects errors from the Outgoing Vaccination Administration interface for EDI.
	Rule criteria	:		
	1. Interface E ADMINISTR/	Error » Interface = INCOMING ASYNCHRON ATION [334322]	OUS ACKNOV	VLEDGMENT [334999], OUTGOING VACCINATION
	2. Interface E	Error » Error Code = UNABLE TO PARSE DO	OSE AND UNIT	FROM LPL 4020 [176308], VACCINATION SEQUENCE

CALCULATION ERROR [176316], VIS DATE TRANSLATION FAILURE [176317], RECORD DOES NOT EXIST IN DATABASE [8719], UNKNOWN HL7 DATA TYPE [8720], NO CARE AREA FOUND [9515], REFUSAL REASON MUST BE MAPPED FOR DEFERRED

#### Error Work Queue View

Msg No	Patient MRN	Patient Name	DOB	Gender	User Message	Vaccine Administered	Manufacturer	Severity	Admin Date	Department Admin Lot Number
1240	202433^^^UTH^MR	AMBULATORY,COURTNEY	19570803	F	CLR-203::Client rejected. C	136^MENINGOCOC		Fatal	20230310	1163400056^UTP
1241	202433^^^UTH^MR	AMBULATORY,COURTNEY	19570803	F	CLR-203::Client rejected. C	100^PNEUMOCOCC		Fatal	19630310	1163400056^UTP
1244	202433^^^UTH^MR	AMBULATORY, COURTNEY	19570803	F	CLR-203::Client rejected. C	111^INFLUENZA, LIV		Fatal	19771010	1163400056^UTP
1243	202433^^^UTH^MR	AMBULATORY, COURTNEY	19570803	F	CLR-203::Client rejected. C	300^COVID-19 PFIZ	PFR^Pfizer, I	Fatal	20230306	1115381000^UTP TESTING

## Error Monitoring & Correction

### All teams can easily identify error

- Error with correct Severity
- Patient
- ♦ Vaccination
- Owning/administering location
- Minimal to no delay in error to owning team
  - Epic backend fixes route to correct Application WQ
  - Patient/administration correction errors route to Clinic WQ





### PITFALLS AND BEST PRACTICES

### ERROR MONITORING AND CORRECTION

WORKFLOW IMPROVEMENTS

WHAT'S NEXT





## WORKFLOW IMPROVEMENTS

## Workflow Improvements

- Identification of two largest errors
  - Consent Rejections
  - Manufacturer/Tradename Rejections



**#**UTHealth Houston UT★ Physicians<sup>-</sup>

## Workflow Improvements - Consents

Move from Paper Consent to Electronic Consent

Auto-display age appropriate consent during Check In

Training on E-Sig Consent



## Workflow Improvements - Consents

### Performance Tracking

#### Figure: ImmTrac consent status totals by year



#### Table: ImmTrac consent status totals by selected clinic

	Patient			Grand
Clinic Location	Refused	Received	Signed	Total
UTP COMP SICKLE CELL CENTER FAMILY MEDICINE - TMC	1		107	108
UTP COMP SICKLE CELL CENTER HEMATOLOGY - TMC	1		244	245
UTP COVID G125 - TMC			891	891
UTP FAMILY MEDICINE - JENSEN			385	385
UTP FAMILY MEDICINE - ROSENBERG	2		466	468
UTP FAMILY MEDICINE - SIENNA			217	217
UTP PEDI CENTER PEDIATRICS - BAY AREA	1		404	405
UTP PEDI PRIMARY CARE PEDIATRICS - UTPB			1374	1374
UTP PEDIATRICS - ROSENBERG	1		300	301

## Workflow Improvements - Tradename

### Lot Manager clean up

- Removal of incorrect lot creations
- Removal of duplicate/unused storage units
- Manufacturer category List updates to match MediSpan NDC manufacturer
- Training of Lot Manager
  - Workflow when lot information does not pull into admin screen
  - Correct NDC option

ot Manager		? ×
Storage Unit     Select a Storage Unit     EMC FAMILY MEDICINE-IMMUNIZATION     Select A Storage Unit     Edit Departments	▼ Filters Immunization Lot Number	Showing: 7 of 7 × E Deactivate Displayed Lots
Active       Inactive       I	Show estimated doses remaining activate Selected Lot 💉 Edit Lot	
Lot Number Immunizati Manufacturer Package Expiration Product AMB Varicella Baxter 54569-4055-0 06/01/2023 CHICKEN Healthcare POX LOT Corporation Hep A, Adult 0006-4096-01 07/06/2023 Vaqta HEPATITIS A LOT	Inventory C         Balance         VFC Balance         Comments           General, VFC         150 each         200 each         Chicken Pox lot record           General         100 Syringe         Hepatitis A lot record	Lot Number AMB CHICKEN POX LOT Immunizations VARICELLA
AMB HEPATITIS LOT AMB HPV LOT AMB MENINGOC LOT 1 Storage units with this lot Storage Unit EMC FAMILY MEDICINE- IMMUNIZATION Departments with this lot EMC FAMILY MEDICINE- UTP FAMILY MEDICINE - INTL DISTRICT UTP PEDI CENTER PEDIATRICS - BAY AREA	Immunizations         VARICELLA         Expiration Date         6/1/2023         Package         54569-4055-0         All         Skip Package Selection         Manufacturer         Merck Sharp & Dohme         Product         VARIVAX         Comments	6/1/2023 Package 54569-4055-0 All Skip Package Selection Manufacturer Baxter Healthcare Corporation #UTHealth Houston UT + Physicians

### WORKFLOW IMPROVEMENTS -OUTCOMES

Acceptance rate of 80%

Improvement rates/table -ImmTrac consents

Decrease in Tradename rejections

**#UTHealth Houston** UT**\*** Physicians<sup>-</sup>





### PITFALLS BEST PRACTICES

### ERROR MONITORING AND CORRECTION

WORKFLOW IMPROVEMENTS

WHAT'S NEXT



## WHAT'S NEXT

## What's Next?

Status updates for Inactive patients via HL7

- Interface Workqueue to identify patient
  - Trigger buttons to update status based on inactive reason
  - Monitored and worked by operations
- Reporting workbench report to identify patients
  - Action buttons to update status and send HL7 message with appropriate reason
  - Monitored and worked by operations
- Both options above are in the exploratory phase
- Capturing Disaster Consent
  - Prompt users to capture disaster consents to store COVID in registry

## Recap

#### • UT goes live on Epic • Move

- Batch consents sent separate from vaccine administration to ImmTrac
- Manual, paper ImmTrac consent process
- Error responses sent to text file for monitoring and correction

#### July - September 2021

#### • Move Errors responses into Epic

- Creation of multidisciplinary work group to address ImmTrac errors
- Creation of error monitoring process
- Develop plan for ImmTrac error correction

#### November 2021 -January 2022

- Update workqueue Views
- Monitor ImmTrac acceptance rate to exceed 80%
- Plan to move away from paper consents to electronic consents with esign
- Activate bidirectional consent and vaccine administration exchange

#### Sept 2022

- Electronic ImmTrac Consent in Epic
- Provide ImmTrac consent rates to clinics and provide Tips Sheet for esign
- Create Disaster interface to allow for correct consent type to send with admin
- Provide access to operations for error workqueues

#### December 2022 – Febuary 2023

- Add ImmTrac Consent alert to Front Desk/Sign in
- Continue to monitor ImmTrac consent rates and error rates
- Remapping of Organic Error responses into unique Error ID in Epic
- Rule updates to file errors to owning team

#### Upcoming 2023 (exploring)

- Update workflow to address new error codes and send errors to different workqueues
- Sending patient inactive status via HL7 message
- Initiatives to capture Disaster consent



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