

TEXAS Health and Human Services

Texas Department of State Health Services

IIS Initiatives

Modernized Reports, Data Quality Initiatives, and Automated Onboarding

Prageet Kaang, Director, Interoperability Unit Lilian Obwoge, Health Informatics Specialist III, Interoperability Unit

Agenda

- Modernized Provider Activity Dashboard
 - Texas Immunization Provider Summary (TIPS) Report
 - Consent Accepted Rate Evaluation (CARE)
 - Provider Activity Reports (PAR)
- Data Quality Initiatives
- Automated Bidirectional Onboarding
- Let's Talk Numbers
- Resources

Provider Activity Dashboard



Texas Department of State Health Services

IAMOnline

 Navigate to <u>https://IAMOnline.hhs.state.tx.us</u> and log in.

🕞 My Apps

Acceptable User Agreement (AUA)



ImmTrac2

Once logged into ImmTrac2:

- 1. In the "Reports" section, click the link for "scheduled report."
- 2. Click on the "Provider Activity Dashboard" link.



Select a Report: TIPS, CARE, or PAR



TIPS Report



Texas Department of State Health Services

Select an Organization



Choose a Reporting Period



Enter Org Code or Name

If you do not have any organizations reporting to your organization, then you will only see your organization listed.

Filters	
Filt	ters
Monthly Reporting Period	Then Enter the Org
Latest Reporting Period	Code or Org Name in 🧹
	the Search Box.
Org Code & Provider Name	
All	~
[∞] Search	
☐ 36882133 - 368822LCM LA —	S COLINAS MEDICAL CTR
41982145 - DALLAS MEDIC	CAL SPEC 419811DMS
. 🗌 42312161 - WOMENS HEA	LTH ALLIANCE 423111WH2
42312162 - WOMENS HEA	LTH ALLIANCE 423111WHA
AAPH9744 - AA Pharmacy,	LLC

Close Filter Pane





Organization Information

	TEXAS Health and Human Services	Texas Department of State Health Services	Ļ	Provider A Texas Immuniza M	ctivity Dashb tion Provider Summary (ay 2024	oard	Ļ		TIPS CARE PAR FAQ
$\mathbf{\mathbf{Y}}$	N/A TVFC Pin	1100190007 TX IIS ID	CITY0006 Org Code	JOHN APPLESEED POC Name	Lhd Austin Hhs Divi Provider Name	JOHN APPLESEED@ POC Email Address	16-AUG-25 Site Agreement Expirat	Meets Ex	pectations

Fields at the top of the screen include the organization's:

- Texas Vaccines for Children (TVFC) Provider Identification Number (PIN)
- TX Immunization Information System (IIS) ID
- Org code
- Point of contact name

- Provider name
- Point of contact email address
- Site agreement expiration date
- TIPS rating

Select a View User Activity Summary, Online Activity, DX Activity



User Activity Summary

Top Headings

User Activity Summary

Displays the user activity for the reporting period and compares the total users versus active users

		Active C	lients Served	Online Clients	Served	Total User	Logins	
User Activity Summary		4	93,241 Goal: 39	2,083 ! Goal: 88,150		1,763 ~ Goal: 190		
	95	Monthly Reportin	g Period Rating	Previous month TI % Active Users	PS Rating Active Users	# of Online Client	User Logins	
Online Activity	# of Total Users	A May 2023	Meets Expectations	99 %	79	Searches 6,270 5 182	2,624	
¢,	92	July 2023 August 2023	Meets Expectations Exceeds Expectations	98 % 96 %	78 79	3,999 6,167	2,930 2,852 3,934	
ata Exchange Activity	# of Active Users	September 2023 October 2023	 Meets Expectations Exceeds Expectations 	97 % 88 %	103 97	4,953 4,660	3,402 3,091	
		November 2023 December 2023	Exceeds Expectations Meets Expectations	88 % 98 %	100 99	5,624 3,992 4,324	3,008 2,300 2,860	
	96.84%~ Goal: 75.00%	February 2024 March 2024	Meets Expectations Meets Expectations	98 %	95	4,086	2,809	
	% of Active Users	April 2024 May 2024	 Meets Expectations Meets Expectations 	98 % 97 %	95 92	2,409 2,083	2,076 1,763	

Online Activity Display



Data Exchange Activity Display

Data Exchange Activity

Displays counts of clients, immunizations added, and reporting latency for data exchange activity



Provider Reports: CARE



Texas Department of State Health Services

Select the CARE Report



Filters in the CARE Header



More Options Icon

The "more options" three dots icon in the far-right corner of this section becomes visible only when hovered over. Options it provides include:

- Export data
- Show as a table
- Spotlight,
- Get insights
- Sort descending
- Sort ascending
- Sort by
 - The "Sort by" option offers column categories for sorting, such as TX IIS ID or TVFC Pin.



Columns of the CARE Report

- Texas IIS ID
- TVFC PIN Number
- Provider Name
- ImmTrac2 Status (open or closed)
- Org Code
- Provider Address
- Provider City
- Provider Zip code
- Provider County
- Region

- Responsible Entity
- Provider Phone
- Provider Fax
- Organization Contact Name
- Organization Email
- Organization Type
- Number of DX Files Submitted
- Number of DX Clients Submitted
- Number of DX Clients Accepted
- Percentage of DX Clients Accepted

Provider Reports: PAR



Texas Department of State Health Services

PAR Dashboard Sections

- 1. Header
- 2. Search filter
- 3. Column header section

Clien manage client enter new client edit consent information	E Servi	XAS th and Human Texas Departmen ices Health Services	it of State	P	rovider A Provi Ji	ctivity Dat ider Activity Report anuary 2024	shboard		1		TIPS CARE PAR FAQ
manage client status criteria Immunizations manage immunizations	View Summary	Open Definitions	Org Code & Provider Name All	Responsib ✓ All	ole Entity 🕜	TVFC Indicator All	Organizati ∨ All	ion Type	Last Site Agreement Date All	Monthly Rep	orting Period D24 V
manage list	TX IIS ID	TVFC Pin ImmTra	c2 Status Provider Name			0	Org Code	Provider Add	ress Provide	r City Provider	ZIP Provider Cc
find student check school report	0000000	Open	ABCD Medical	Center		•	ABC123	0023 John St.	Austin	79424	Austin
Reports generate report	1234567890	Open					EFG 12 3	1234 May St.	Austin	/9424	Austin

Search Filter Section

The search filter section has a set of filters with dropdown menus for user selections.

TEXAS Health and Human Services Health Services Texas Department of State Health Services Provider Activity Report May 2023										TIPS CARE PAR FAQ				
	Г		Org Code & Provider Name		Responsible Entity 🕜		TVFC Indicator		Organization Type		Last Site Agreement Date	Mont	nly Reportir	ng Period
View Summary	(Open Definitions	All	\sim	All	\checkmark	All	\sim	All	\sim	All	/ 5/20)23	

Detail View

This view shows the detailed provider report after filters have been applied. If you do not have any organizations that report to your organization, then you will only see your organization listed.

TEX	AS and Human Te s Ho	exas Department of State ealth Services		Provider Ac	ctivity Dashk der Activity Report May 2023	oard				TIPS CARE PAR FAQ
View Summary	Open Defi	org Code & All	Provider Name \checkmark	Responsible Entity 🕜	TVFC Indicator	Organization Type All	~	Last Site Agreement Date	Monthly Repo	orting Period
TX IIS ID	TVFC Pin	ImmTrac2 Status	Provider Name			Org Code	Provide	r Address	Provider City	Provider ZIP
1135050011		Open	HASSE ELEMENTA	RY ALVIN ISD		HASS0001	1200 E	HOUSE ST	ALVIN	77511
1135050100		Open	HOOD-CASE ELEM	1ENTARY		HOOD0003	1450 H	IEIGHTS RD	ALVIN	77511
1115159000		Open	Liberty Preschool			LIBE5490	2525 V	V DUMBLE ST	ALVIN	77511
1206160008		Open	LIVING STONES C	CHRISTIAN SCHOOL		LIVI0009	1407 V	ICTORY LN	ALVIN	77511
1122307000		Open	Manvel Family Clir	nic, Pllc		MANV0005	23869	W STATE HWY 6	ALVIN	77511
1135050084		Open	MARK TWAIN ELE	MENTARY ALVIN ISD		MARKOOOS	345 KE	NDALL CREST DR		77511

PAR Filters Detailed View Definitions

 The "Open Definitions" tab provides definitions of column headers for whichever view is currently displayed.

 The definitions for the detailed view are displayed here.



TEX/ Health a Services	AS nd Human Texas Department of State Health Services	Provider Activity Dashboard Provider Activity Report May 2023	rs RE A R AQ
View Summary	Close Definitions	the PAR detailed view definitions. Vignation Type All Vignation Type A	'eriod
TX IIS ID	Column Header	Definitions	P
1111727000	Provider Fax	As listed in the organization's contact information in the ImmTrac2 profile display in ###-#### format.	
1122843000	Provider Phone	As listed in the organization's contact information in the ImmTrac2 profile display in ###-##### format.	
1230400179	Organization Contact Name	As listed in the organization's contact information in the ImmTrac2 profile.	
1244570003	Site Registration Date	As listed in the organization's ImmTrac2 profile in MM/DD/YYYY format	
1121836000	Site Agreement Expiration Date	As listed in the organization's ImmTrac2 profile in MM/DD/YYYY format plus two years	
1132630115	# of DX Client Records Accepted	Number of client records accepted for updates, adds, or deletes by an organization via electronic files to the	
1114171000	# of DX Clients Queried	Number of client records queried in file submissions via Data Exchange	

Summary Tab

- To access the summary view, click the "View Summary" tab.
- This tab toggles between the detailed view and the summary view.
 Once selected, the tab changes to "View Detail."

TEXAS Health and Human Texas Department of State Services Health Services	Provider Activity Dashboard Provider Activity Report May 2024						
A second and a sec		Responsible Entity 🧿	TVFC Indicator	Organization Type		Last Site Agreement Date	Э
View Summary	\sim	All \checkmark	All \checkmark	All	\sim	All	\sim

Column Header Section

- Each column header in the report has an up or down arrow, allowing users to sort the data in ascending or descending order.
- Clicking on an arrow again reverses the sorting order.

TEXAS Health and Human Texas Departn Services Health Service	ient of State is	Provider Ac Provide Jan	TIPS CARE PAR FAQ			
View Summary Open Definitions	Org Code & Provider Name Re All \checkmark Al	esponsible Entity 🍘	TVFC Indicator All \checkmark	Organization Type All	Last Site Agreement Date	Monthly Reporting Period January 2024 V
TX IIS ID TVFC Pin ImmTr	ac2 Status Provider Name			Org Cod	le Provider Address	Provider City Prc
Open	ABC Medical Center			AUS000	ABC123 ST.	Austin 79

Color-Coded Sections

The PAR has columns that are grouped into sections:

- Organization Information
- User Information
- Online Activity
- Data Exchange
- Consents and TIPS Rating

More Options

- The "more options" three dot icon is on the far-right corner of the search filter section.
- The options provided include:
 - Export data (shown as a table)
 - Spotlight
 - Get insights
 - Sort descending
 - Sort ascending
 - Sort by
 - The "Sort by" option offers column categories for sorting, such as TX IIS ID or TVFC Pin.

	Pro	vider A Provi	Ctivity ider Activity anuary 202	Dashl Report	ooard	ł			TIPS CARE PAR FAQ
Г	Responsible E	intity 🕜	TVFC Ind	icator	Organiz	ation Type	Last Site Agreement Date	Mon	thly Reporting Period
~	All	~	All	\sim	All	\sim	All		Nore options
						Org Code	Provider Address		Provider City Prc

Provider A	Ctivity [ider Activity Re anuary 2024	Dash eport	board					CARE PAR FAQ
nsible Entity \bigcirc	TVFC Indica	ator 🗸	Organizat All	ion Type \checkmark	Last Site Agr All	eement Date	Monthly Reportin	g Period \checkmark
				Org Code	Provider A	jî E> ⊊ Sh ,&i Sp	xport data now as a table potlight	Pro
						Q Ge ≩↓ Sc √ ≜↓ Sc	et insights ort descending ort ascending	Н
						Sc	ort by	>

New Data Quality Initiatives



Texas Department of State Health Services

Lot Number Validation

- IIS will implement a warning error for immunizations submitted through data exchange with an incorrectly formatted vaccine lot number.
- Only alphanumeric characters and dashes (-) are allowed.
- Minimum of four characters.



Lot Number Validation Continued

Vaccine lot numbers cannot start with: "LOT," "(P)," "MED," "SKB," "PMC," "WSD," "WAL"

To review the full list of the lot number validations, refer to the open-source message Quality Evaluator project on the AIRA website:

- Validation logic for lot numbers: <u>https://github.com/immregistries/mqe-validator/blob/development/src/main/java/org/immregistries/mqe/validator/engine/rules/vaccination/VaccinationAdministeredLotNumberIsValid.java
 </u>
- List of invalid prefixes/suffixes/infixes: <u>https://github.com/immregistries/mqe-validator/blob/development/src/main/java/org/immregistries/mqe/validator/engine/codes/LotNumberInvalidFixes.java</u>

Beyfortus Doses

- Previously, ImmTrac2 accepted only Beyfortus dose values reported in "milligrams" through DX. The only acceptable values for the RXA-6 and RXA-7 fields were "1" or "0.5" and "mL" respectively.
- On November 22, 2024, IIS expanded the capability to accept "50" or "100" in RXA-6 and "mg" in RXA-7 values.

Client Contact Information

- IIS will implement a warning error for any new client record submitted through DX that is missing a phone number.
- IIS will conduct outreach to providers who are reporting less than 50% of the clients with a valid email address.

Added Farm Worker Occupation

Consent Information 🔻		01.11	5	
Client AKA (0) 🔻		Childc	are Personne	91
Organization Information		Farm	Worker	
Organization Information ¥	First R	(esponders (police, fire, EMT)	
Client Information 🔺		Food	Service Perso	onnel
[back to top]		Health	Care Persor	nnel
* Race (select all that apply)	Most Recent	Home	and and Nat	ional Security
American Indian or Alaska Native	Provider	Labora	atory Personi	nel
Asian	Most Recent	Mortua	ary Personne	I
Native Hawaiian or Other Pacific Islander	Provider Date	Pharm	acists	
Black or African-American	Birth Facility	N Public	Health Perso	onnel
✓ White		Schoo	l Personnel	
Other Race	School	Veterir	nary Personn	el
Recipient Refused	Occupation			~
Unknown	Lang	uage Spo	oken ENGL	.ISH 🗸
* Ethnicity Hispanic or Latino				
Address Information 🔻				
Responsible Persons (1) 🔻				
Client Comments (0) 🔻				
Client Notes (0) 🔻				

Automated Bidirectional Onboarding



Texas Department of State Health Services

Data Exchange Overview

Two methods to electronically exchange data with Texas IIS:

- Uni-directional (Batch):
 - Providers report data through electronic health records (EHR) to registry.
 - Delay between data submission and appearance in Texas IIS.



- Bi-directional Exchange (BiDx):
 - Real-time communication between providers' EHR and IIS.
 - No delay; seamless integration with EHR systems.



Automated Onboarding Steps



40

IIS Initiative May 2023 Automated Bidirectional Onboarding Launched







Provider Tracks Data Quality

- Allows providers to review their own data quality
- Allows IIS staff to review the quality of the organization's data

his phase of the onboarding process ertaining to the patient and immuniz	ensures the data being sent to Imm ation records. A 90% Data Qualiting	Trac2 is complete and accurate information Rate is required to pass this phase. Click or
ne Review Data Quality Corrections N	Veded button below to see issues to	o fix in order to meet the
Calculated Metrics	Calculated Data Quality Rate	
Patient Demographic Completeness		
	00/	
Immunization Completeness	0%	
Immunization Completeness Immunization Accuracy	0%	

Data Quality Review Messages

Pre	e-Produc	ction: Data (Quality Review						
	Messa	ges	Immunization Report		Patient Re	eport	VFC Report	Qua	ality Summary
#	Result	Control ID	Message Type	R	Received	Va	alidation Summary		View Message
1	3	2041M2727599	VXU: Non-Hx	03 0	06 2023 20:28	🗹 0 Vali	d 🥝 12 Errors 🔔 2 Wa	arnings	View
2	8	2038M2727599	VXU: Non-Hx	03 0	06 2023 20:26	⊻ 0 Vali	d 🥝 23 Errors 📥 6 Wa	arnings	View
3	8	2037M2727599	VXU: Non-Hx	03 0	06 2023 20:25	🗹 0 Vali	d 🧭 11 Errors 🔔 2 Wa	arnings	View

Data Quality Review Immunization Report

Immunization Repo	ort Patient Report	VFC Report	Quality Summary	
Completeness				
	Field		% Required To Pass Completeness	s Curr Comj
Action Code Set			90%	100.0
Administering Provider			90%	100.00%
Administration Site			95%	100.00%
Dosage- Completeness			95%	100.00%
Lot ID Number			95%	100.00%
Manufacturer			90%	100.00%
Vaccination Date			100%	100.00%
Vaccine Administered Code			100%	78.65%
Vaccine Expiration Date			95%	100.00%
Vaccine Program Eligibility			90%	100.00%
VIS			90%	100.00%

Data Quality Review Patient Report

Pre-Production: D	ata Quality Review			
Messages	Immunization Report	Patient Report	VFC Report	Quality Summary
Completeness	Reporting Period F	rom [b2]/[06]/[20	023 To: 03 / 08	/ 2023 Run Report
Field	% Rec Co	quired To Pass mpleteness	Current % or Completenes	f Pass/Fail s
Address		100%	100.00%	∠
Mother/Father/Guardian		90%	100.00%	~
Patient Name		100%	100.00%	✓
Phone Number		95%	0.00%	0

Data Quality Review VFC Report

The VFC report shows counts of VFC-eligible patients by eligibility category.

e-Production: Data Qual	ity Revi	ew				
Messages	munizat Report	tion	Pati	ent Report	VFC Report	Quality Summary
VFC Eligibility	Cour	nt Percent	tage	The VFC I	Report indicates	counts of patients
Adult, No Insurance	0	0.00%		eligible for	r VFC (Vaccines f	or Children) by VFC
Adult, Private Pay/Insurance	3	60.00%		Eligibility	y Category for a	given date range.
Adult, Underinsured	0	0.00%				
American Indian/Alaskan Native	0	0.00%			2/6/2023 to 3/8/20	023
CHIP	0	0.00%				
Medicaid	0	0.00%				
No Insurance	0	0.00%				Adult, Private Pay/Insurance
Private Pay/Insurance	2	40.00%				Private Pay/Insurance
Underinsured, FQHC/RHC/Deputiz	ed O	0.00%				
Underinsured, Not FQHC/RHC/Deputized	0	0.00%				

Data Quality Review Quality Summary

Patient Report er of Patients Reported: 1	VFC Report	Quality Summary Number of Errors: 15
er of Patients Reported: 1	5 Total	Number of Errors: 15
er of Administered Shots F er of Historical Shots Repo	Reported Total orted (VXU): 0 Total Avera	Number of Warnings: 0 Number of Rejections: 0 age Timeliness for Period:
)(per of Historical Shots Rep per of Queries Submitted (Der of Historical Shots Reported (VXU): 0TotalDer of Queries Submitted (QBP): 00

Patient Consent Submissions

As a step of automated onboarding, organizations indicate how they will submit registry consent:

- Flat File
- HL7 Submission
- Manually

Note: We highly encourage providers to submit via HL7 submission when possible.



HL7 Consent Indicators

Texas requires these specific consent codes for HL7 submissions:

- TXY = ImmTrac2 Minor (Age 0-18)
- TXA = ImmTrac2 Adult (Age 18+)
- TXD = ImmTrac2 Disaster Retention (All Ages)

Let's Talk Numbers



Texas Department of State Health Services

Launch of Automated Onboarding Bidirectional Organizations Onboarding Part 1



Launch of Automated Onboarding Bidirectional Organizations Onboarding Part 2



Launch of Automated Onboarding Bidirectional Organizations Onboarding Part 3



Automated Onboarding Benefits

- Provider autonomy over onboarding process
- Engagement in testing
- Easier data exchange
- Automatically generates reports
- Electronic submission of documents
- Better communication in one system
- Simpler workflow
- Automated testing
- Collaboration between teams

Automated Onboarding Benefits Continued

- Simplified staff workflow under one system
- Automated testing allows staff to efficiently address errors
- Collaboration between teams working on onboarding

Automated Onboarding Challenges

- Ongoing monitoring
- Provider frustration in utilizing two systems
- Inexperienced providers
- Staff validation

Conclusions

Automated onboarding empowers health care organizations to join at their own pace.

- Efficient onboarding of multiple providers simultaneously
- Increased engagement in testing and production
- Efficient data quality reduces post-production errors

Future Vision

- Platform facilitating simultaneous onboarding for unidirectional and bidirectional organizations
- Commitment to enhance efficiency and streamline the overall process
- Enhancements to track duration of onboarding and specific onboarding phases
- Outreach to providers with training





Texas Department of State Health Services



- Data Exchange Guides and Specification: <u>https://www.dshs.texas.gov/immunizations/providers/materials</u>. Click "ImmTrac2" under "Forms."
- Consent Forms: <u>https://www.dshs.texas.gov/immunizations/public/forms</u>

Recorded Webinars

- <u>Provider Trainings:</u> <u>https://www.dshs.texas.gov/immunizations/providers/training</u> Topics include:
 - Batch FTP recorded webinars
 - Bidirectional DX recorded webinars
 - Miscellaneous video recordings
 - Online disaster reporting webinars
 - School recorded webinars
- LHD Data Sharing: <u>https://www.dshs.texas.gov/immunizations/health-departments</u> Click "Training," and under "Resource Documentation" click "Videos," go under IIS (ImmTrac2) for the "LHD Data Sharing Protocol" webinar recording done in July 2024.

Contact Information

ImmTrac2@dshs.texas.gov

 Access, site registrations or renewals, ImmTrac2 user changes, registry trainings, or publications.

ImmTracMU@dshs.texas.gov

 Data exchange questions, promoting interoperability, or data quality reports.

Thank You!

Prageet Kaang, Director Interoperability Unit Lilian Obwoge, Health Informatics Specialist III