How to Run the HL7 Error Log

1. Log into I-CARE and navigate to the "Reports" tab at the top of the screen:

_i †† I-CARE	Search I-CARE	Patients - Q	⑦ Help -
Home v Patients v Site v Reports Q	uick Assist Admin 🖴		KING, JOSEPH IMMUNIZATION PROGRAM AT WSCDC ~
View: Reports			
Site: IMMUNIZATI	ON PROGRAM AT WSCDC		
Reports Background Report Results Admin	e tatatatatatata		

2. Scroll down to the section titled "Site Reports" and click on HL7 Errors

Site Reports
Bad Address – Generate a list of active patients with an invalid primary address.
Invalid Doses – Generate a list of patients with invalid doses. ★ UPDATED
Missed Opportunities Detail – Generate a report of missed opportunities for a site. A missed opportunity for a patient is calculated by finding the most recent shot date for a patient, and then listing all forecasted shots where the forecasted date is before the most recent shot date.
Missed Opportunities Summany – Generate a summany report of missed opportunities for a site.
Missing Lots – Generate a list of patients with missing lot numbers on immunizations.
Monthly Statistics - Generate a monthly statistics report for patients aged 24 - 35 months or for patients aged 9 - 26 years. This report will always run as a background process.
Patient List Export – Generate a comma-delimited text file of patients that match the search criteria.
Shot Refusals – Generate a list of shots refusals reported by a site within a given time period.
HUT Errors- Generate a HL7 Errors Report. View all HL7 upload errors and warnings.

3. Enter your site name and the date range you would like to review. For this report, you may choose to either view all HL7 Warnings and Errors, or you may select any which you would like to view:

a. For ALL HL7 Warnings & Errors:

Report	Site HL7 Errors	
Criteria Report		
🔓 Select Group:	Site	~
Site	IMMUNIZATION PROGRAM AT WSCDC	
Date Range	03/11/2025	
All Errors and Warnings	From Io	 Operations Field
		* = Kequired Heid
Select an Action	HTML Report PDF Report CSV Export Cancel	

b. For any specific HL7 Warnings or Errors you would like to view, first uncheck "All Errors and Warnings" and check the box(es) corresponding to the HL7 Error(s) and/or Warning(s)

you would like to view:

Report:	Site HL7 Errors	
Criteria Report		utata t
⊆ Select Group:	Site	~
Site:	IMMUNIZATION PROGRAM AT WSCDC *	
Date Range:	03/11/2025	
	From To	
All Errors and Warnings:		
Error Codes:	[1000] - MRN Re-use for two different patients	
	[1011] - Patient MRN (PID-3) is empty [PID-3]	
	[1012] - ID Type Code has an empty or repetition value	
	\Box [1013] - ID Type Code does not exist in the system	
	[1014] - Alias Name is empty. Alias Record Ignored	
	[1015] - Alias Code does not exist in the system	
	[1016] - Empty Address Line 1	
	[1017] - Duplicate Address	
	[1018] - Address Type Code does not exist in the system	
	🗆 [1019] - Empty Phone Number	
	\Box [1020] - Telecom Type Code does not exist in the system	
	\Box [1021] - Telecom Use Code does not exist in the system	
	[1022] - NK1 Relationship code does not exist in the system	
	🗆 [1023] - Empty Shot Date	

- 4. You may choose to view this report within I-CARE as an HTML Report, view as a PDF, or export as an Excel file (CSV):
 - a. **HTML Report:** This report can be sorted using the top row (ex. Sort by DOB ascending/descending or Error Description by A-Z or Z-A). You may also click on the highlighted Patient Name to view the corresponding I-CARE record or click the "Source HL7 File" link to view the raw HL7 message sent to I-CARE

	Report Actio	PDF	Report	CSV Expo	ort			
HL7 Erro Print Rep Errors Re Printing	ors Report port for Site ICARE TRAINING SITE1 eported on Dates from 03/01/2025 Report Date: 3/12/2025 9:13 AM	to 03/04/2025	5				††	I-CARE Illinois Comprehensive Automated Immunization Registry Exchange
MRN Patient_ID	🚔 Patient Name	⊕ Date of Birth ■	≑ Error Type	≑ Error ID	+ Error Description	HL7 Field	♦ Error Date/Time	Source HL7 File
S14L414761 1344027280	LEVANAAIRA LYCOMINGAIRA	02/19/2021	w	1016	Empty Address Line 1. Address Record Ignored	PID^1^11^1^1	03/03/2025 10:20:30	Web_Service.C.bba32cb3_ICARET2.txt
S14L414761 1344027280	LEVANAAIRA LYCOMINGAIRA	02/19/2021	w	1061	Invalid or Empty Ethnicity Code	PID^1^22	03/03/2025 10:20:30	Web_Service.C.bba32cb3_ICARET2.txt
S14L414761 1344027280	LEVANAAIRA LYCOMINGAIRA	02/19/2021	w	1060	Invalid or Empty Race Code	PID^1^10	03/03/2025 10:20:30	Web Service.C.bba32cb3_ICARET2.txt
V30G414873 1344027325	CORINAIRA ISADORA JUNGSTROINAI	12/31/2020	E	1052	Invalid CVX/NDC code Patient Shot Record # 1 - Shot CVX and NDC Codes are Empty or Invalid. Shot has been Ignored.	RXA^1^5	03/03/2025 10:21:12	Web_Service.C.dfd976db_ICARET2.bd
W08D414667 1344027197	QUINNAIRA DARINKA GEAUGAAIRA	12/31/2020	w	1064	MVX code is Empty. Changed to UNK	RXA^1^17	03/03/2025 10:19:09	Web_Service.C.e702b0e5_ICARET2.txt
X38C414774 1344027285	BRYANNAAIRA VAN ZANDTAIRA	02/19/2021	w	1064	MVX code is Empty. Changed to UNK	RXA^1^17	03/03/2025 10:20:42	Web_Service.C.9a522d75_ICARET2.txt
X38C414774 1344027285	BRYANNAAIRA VAN ZANDTAIRA	02/19/2021	w	1016	Empty Address Line 1. Address Record Ignored	PID^1^11^1^1	03/03/2025 10:20:42	Web_Service.C.9a522d75_ICARET2.txt
X38C414774 1344027285	BRYANNAAIRA VAN ZANDTAIRA	02/19/2021	w	1061	Invalid or Empty Ethnicity Code	PID^1^22	03/03/2025 10:20:42	Web_Service.C.9a522d75_ICARET2.txt
X38C414774 1344027285	BRYANNAAIRA VAN ZANDTAIRA	02/19/2021	w	1060	Invalid or Empty Race Code	PID^1^10	03/03/2025 10:20:42	Web Service.C.9a522d75 ICARET2.txt
Z78X414696 1344027218	YOORALLAAIRA WINTERMANAIRA	02/21/1993	w	1064	MVX code is Empty. Changed to UNK	RXA^3^17	03/03/2025 10:19:32	Web_Service.C.17542997_ICARET2.txt
Z78X414696	YOORALLAAIRA WINTERMANAIRA	02/21/1993	w	1064	MVX code is Empty. Changed to UNK	RXA^2^17	03/03/2025	Web_Service.C.17542997_ICARET2.txt

b. **PDF Report:** This report cannot be sorted, but it does contain embedded links to I-CARE Patient Record and raw HL7 message



HL7 Errors Report Print Report for Site ICARE TRAINING SITE1 Errors Reported on Dates from 03/01/2025 to 03/04/2025

Printing Report Date: 3/12/2025 9:17 AM

MRN Patient_ID	Patient Name	Date of Birth	Error Type	Error ID	Error Description	HL7 Field	Error Date/Time	Source HL7 File
301773 134402691 0			w	1063	Invalid Administered Flag. Adm. Flag should be equal 00(Administered) or 01(Historical). Changed to 01	RXA^1 ^9	03/04/2025 17:06:51	Web_Service.C.fd 3c4370_888IZG.t xt
301773 134402691 0			w	1063	Invalid Administered Flag. Adm. Flag should be equal 00(Administered) or 01(Historical). Changed to 01	RXA^1 ^9	03/04/2025 17:06:40	Web_Service.C.1 cac4799_888IZG. txt
301773 134402691 0			w	1063	Invalid Administered Flag. Adm. Flag should be equal 00(Administered) or 01(Historical). Changed to 01	RXA^1 ^9	03/04/2025 17:06:15	Web_Service.C.d ceab747_888IZG. txt
301773 134402691 0			E	1052	Invalid CVX/NDC code Patient Shot Record # 1 - Shot CVX and NDC Codes are Empty or Invalid. Shot has been Ignored.	RXA^1 ^5	03/04/2025 17:05:42	Web_Service.C.1 d717de6_888IZG .txt
301773 134402691 0			w	1063	Invalid Administered Flag. Adm. Flag should be equal 00(Administered) or 01(Historical). Changed to 01	RXA^1 ^9	03/04/2025 17:05:37	Web_Service.C.2 e76244f_888IZG. txt

c. **CSV Export:** This will download the report as an Excel file which does not contain embedded links to I-CARE Patient Records and raw HL7 messages. You can use this for more in-depth review of HL7 errors by utilizing tools in Excel such as Pivot Tables.

Print Fo	r From_Date	To_Date	Error_Id_List								
Site	3/1/2025	3/4/2025									
Site Id	Site Name	MRN	Patient Id	Patient Name	Date of Birth	Error/Warning	Error Id	Error Description	HL7 Field	Error Date/Time	Source HL7 File
110	3 ICARE TRAINING SITE1	301773	1.344E+09			W	1063	Invalid Administered Flag. Adm. Flag should be equal 00(Administered) or 01(Historical). Changed to 01	RXA^1^9	3/4/2025 17:06	Web_Service.C.fd3c4370_888IZG.txt
110	3 ICARE TRAINING SITE1	301773	1.344E+09			w	1063	Invalid Administered Flag, Adm. Flag should be equal 00(Administered) or 01(Historical). Changed to 01	RXA^1^9	3/4/2025 17:06	Web_Service.C.1cac4799_888IZG.txt
110	3 ICARE TRAINING SITE1	301773	1.344E+09			W	1063	Invalid Administered Flag. Adm. Flag should be equal 00(Administered) or 01(Historical). Changed to 01	RXA^1^9	3/4/2025 17:06	Web_Service.C.dceab747_888IZG.txt
110	3 ICARE TRAINING SITE1	301773	1.344E+09			E	1052	Invalid CVX/NDC code	RXA^1^5	3/4/2025 17:05	Web_Service.C.1d717de6_888lZ0.txt
110	3 ICARE TRAINING SITE1	301773	1.344E+09			W	1063	Invalid Administered Flag, Adm. Flag should be equal 00(Administered) or 01(Historical). Changed to 01	RXA^1^9	3/4/2025 17:05	Web_Service.C.2e76244f_888lZG.txt
110	3 ICARE TRAINING SITE1	301773	1.344E+09			W	1063	Invalid Administered Flag. Adm. Flag should be equal 00(Administered) or 01(Historical). Changed to 01	RXA^1^9	3/4/2025 17:05	Web_Service.C.36a94176_888IZG.txt
110	3 ICARE TRAINING SITE1	301773	1.344E+09			w	1063	Invalid Administered Flag. Adm. Flag should be equal 00(Administered) or 01(Historical). Changed to 01	RXA^1^9	3/4/2025 17:05	Web_Service.C.c0cd7394_888IZ0.txt
110	3 ICARE TRAINING SITE1	301773	1.344E+09			W	1063	Invalid Administered Flag, Adm. Flag should be equal 00(Administered) or 01(Historical). Changed to 01	RXA^1^9	3/4/2025 17:05	Web_Service.C.de4b6a13_888IZG.txt
110	3 ICARE TRAINING SITE1	239363	1.344E+09			w	1065	Historical Dose Given on Submission Date	RXA^1^3	3/4/2025 15:11	Web_Service.C.fbef37e4_TESTICAREX2.txt
110	3 ICARE TRAINING SITE1	239363	1.344E+09			w	1064	MVX code is Empty. Changed to UNK	RXA^1^17	3/4/2025 15:11	Web_Service.C.fbef37e4_TESTICAREX2.txt
5 110	3 ICARE TRAINING SITE1	239363	1.344E+09			W	1021	Invalid Telecom Location Code	PID^1^13^2^3	3/4/2025 15:11	Web_Service.C.fbef37e4_TESTICAREX2.txt
5 110	3 ICARE TRAINING SITE1	239363	1.344E+09			w	1021	Invalid Telecom Location Code	PID^1^13^1^3	3/4/2025 15:11	Web_Service.C.fbef37e4_TESTICAREX2.txt
110	3 ICARE TRAINING SITE1	239363	1.344E+09			w	1060	Invalid or Empty Race Code	PID^1^10	3/4/2025 15:11	Web_Service.C.fbef37e4_TESTICAREX2.txt
110	3 ICARE TRAINING SITE1	239363	1.344E+09			W	1065	Historical Dose Given on Submission Date	RXA^1^3	3/4/2025 15:11	Web_Service.C.3ae301ac_TESTICAREX2.txt
110	3 ICARE TRAINING SITE1	239363	1.344E+09			w	1064	MVX code is Empty. Changed to UNK	RXA^1^17	3/4/2025 15:11	Web_Service.C.3ae301ac_TESTICAREX2.txt
110	3 ICARE TRAINING SITE1	239363	1.344E+09			w	1021	Invalid Telecom Location Code	PID^1^13^2^3	3/4/2025 15:11	Web_Service.C.3ae301ac_TESTICAREX2.txt
110	3 ICARE TRAINING SITE1	239363	1.344E+09			W	1021	Invalid Telecom Location Code	PID^1^13^1^3	3/4/2025 15:11	Web_Service.C.3ae301ac_TESTICAREX2.txt
110	3 ICARE TRAINING SITE1	239363	1.344E+09			w	1060	Invalid or Empty Race Code	PID^1^10	3/4/2025 15:11	Web Service.C.3ae301ac TESTICAREX2.txt

HL7 Error Log Review

★ To be reviewed AFTER "How to Run the HL7 Error Log"

The most important thing for anyone reviewing this report to remember is that Error Type = E means that this particular shot was ignored by I-CARE due to a critical Error. Any shots that have an error need to be resubmitted to I-CARE; otherwise, they will never make it into I-CARE and will not be on the patient's immunization record.

CDPH recommends sorting/filtering your HL7 Error Log and always reviewing Errors first (Error Type = E)

Every Error and Warning has an Error ID: a string of 4 numbers I-CARE uses to identify HL7 Errors and Warnings

After you have separated out any HL7 Errors, review the Error Descriptions for these shots. This will tell you the reason why the shot was ignored by I-CARE in plain language.

The "HL7 Field" row will tell you exactly where in the HL7 message the Error or Warning is located. For example, if HL7 Field = RXA^1^9 that means the Error or Warning is located in the first RXA segment in the ninth field. This is helpful for determining exactly what the cause of an HL7 Error or Warning is.

You can view the Error Date/Time; this will tell you exactly when I-CARE encountered the HL7 Error or Warning.

Reviewing HL7 Errors

Any shots with an HL7 Error (Error Type = E) will need to be resubmitted to I-CARE if they have not already been. An HL7 Error indicates that a shot was ignored by I-CARE.

- ★ This guide starts off assuming the individual has already pulled their HL7 Error Log and separated out any Errors
- 1. Pull up the patient record of the individual with an HL7 Error and navigate to the "Import" tab. Find the import with the same Date/Time as the Error Date/Time on the HL7 Error Log and click the + to see the shot that was entered with an Error:

		Home	l	ts 💙 Site	✓ Reports	Admin 🔒									IMMUNIZATION PROGRAM A	T WSCDC Y
		Pat	ient Con	tacts Shots	Pa ID Numbe	ntient: W	OTHERS Repor	S Dups Import (1) Opt-C	NORA	(DOB: 0)1/07/2021 Age: 4y 2m	5d] 	.04		×
^ Msg #	Error	rs	Import	on		mport by		External Id			Prio	rity	Processed	From	File Name	Seq #
- 1	[_]		3/10/2025	5 10:01:39 AM	IC	ARE TRAINING	<u>G SITE1</u>	M76Z58836			High	Pr	ocessed	HL7	Web Service.C.829	23799 ICARET2.txt 1
HL7 Version 2.5.1																
MRN	Name			DOB	Language	Nationality	Race	Ethnicity	Sex	Status	VFC Code	Moth's Maiden				
M76Z58836	LUCIANAIRA HO	NORA WOTHER	SPOONAIRA	01-07-2021	L. C.		White	Not Hispanic or Latino	Female	Active		SAYOKOAIRA ALLENAIR	A			
Permanent /	Address: 1589 WE	ST ST, TREETOPS	VILLAGE IL	49735-												
Telephone: 9	897603766															
Site:	Vacci	ne:	Dosage:	Imm Date:	Lot: VFC:	Prov: Vacc:	Rte/Ste	Adm: RXA-11:								
ICARE TRAIN	ING SITE1 21 / U	JNK [Varicella]	999	01-07-2025				01								
+ Show [RA	AW data]															

2. Once you have the name of the shot, navigate to the "Shots" tab. Review the shots to see if the shot appears on the patient record:

Home 🗸 🗸 Patients	✓ Site ✓	Reports Admin 🖴				іммі	KING, JOSEPH UNIZATION PROGRAM AT WSCD
Patient Contacts	s Shots	Patient: WOTHERSI	POONAIRA, LUCIANAIRA HONC s Dups Import (1) Opt-Out	DRA [DOB: 01/07/2021	I Age: 4y 2m 5d]	3404	
s	elect View:	Shots: Status - Add	Shot(s) Delete Selected Shots F	Remove Duplicates	Reports -		
Immunization DUE:	DTP, HIB, HAV	HBV. FLU, MMR, PNE, POL, CO	/ID-19				
Group	Ø	# Vaccine	Lot Number	Date	Status	Reporting Site	
DTP		DTP	Earliest: 02/18/2021 OverDue: 05/04/2021	03/07/2021	🛕 Due	-	
HIB		НІВ	Earliest: 01/07/2022 OverDue: 06/03/2022	04/07/2022	🛕 Due		
HAV		HAV	Earliest: 01/07/2022 OverDue: 02/03/2023	01/07/2022	A Due		
HBV		HBV	Earliest: 02/04/2021 OverDue: 05/04/2021	03/07/2021	A Due		
		HPV	Earliest: 01/07/2030 OverDue: 02/03/2034	01/07/2032	m Due Later		
EU		FLU	Earliest: 07/01/2024	07/01/2024	🛕 Due		
		MMR	Earliest: 02/04/2025	02/04/2025	A Due		

If the shot DOES appear on the record, no further action is needed.

If the shot DOES NOT appear on the record, the shot will need to be resubmitted to I-CARE either manually or via your EHR.

If you have any questions regarding any HL7 Errors, Warnings, or your HL7 interface/connection in general, please reach out to <u>CDPH.HL7@cityofchicago.org</u> or <u>joseph.king2@cityofchicago.org</u>