

Michigan Care Improvement Registry (MCIR) Meaningful Use Follow Up Submission/ Quality Assurance Testing Guide

Document Description

This guide is intended for:

1. Eligible Providers and Eligible Hospitals in meeting the requirements for Meaningful Use Stage One follow up submission
2. Immunization Providers that wish to begin reporting their patient immunization data to MCIR using the HL7 format.

This document outlines the data quality standards required for reporting data to MCIR using the HL7 version 2.3.1 or 2.5.1 format. One of these two versions is required for the Meaningful Use incentive. Certain fields are required in the HL7 message in order to pass quality assurance review. It is strongly advised that providers configure their Electronic Health Records (EHRs) so that staff are entering valid data into the required fields before testing for quality assurance with MCIR.

Background

The July 2010 Centers for Medicaid and Medicare Services final rule on the Electronic Health Record Incentive Program defines a set of meaningful use measures that eligible providers and hospitals are required to achieve in order to receive incentive payments. Providers and hospitals are required to meet one of the three public health meaningful use objectives. Submitting immunization information to an immunization registry is one of the public health objectives.

The final rule states that providers and hospitals shall perform at least one test of certified EHRs technology's capacity to submit electronic data to immunization registries and actual follow up submission in accordance with applicable law and practice (<http://edocket.access.gpo.gov/2010/pdf/2010-17207.pdf>). This document provides guidance to eligible providers and hospitals on the Michigan Department of Community Health's follow up submission practice for submitting immunization information to the MCIR.

Follow Up Submission Quality Assurance Testing Requirement

Following the successful submission of one test message for Stage 1 meaningful use, eligible providers and hospitals must pass quality assurance testing before actual submission can occur. It is important to note that EHR certification for Stage 1 does not guarantee that the EHR software meets your business needs or the MCIR requirements. Furthermore, in order to ensure complete and correct data is recorded, MCIR has set high standards for data completeness, quality and timeliness. MCIR measures this during a data quality assessment of new interfaces. This assessment process includes a Data Quality Assurance (DQA) report and score.

Compliance with follow up submission requires eligible providers and hospitals to adhere to the quality assurance testing process. Eligible providers and hospitals must demonstrate they are actively engaged in the quality assurance testing within one year of the meaningful use pass notification date by following the testing steps listed below.

Once providers have passed the quality assurance testing process, production submission can occur. Providers and hospitals may continue to send immunization data in the required HL7 format. Manual entry or data being sent via the EXT transfer method would no longer be necessary.

Quality Assurance Testing Steps

1. Validate the certified EHR captures the required fields. See "Required Fields" table below.
2. Validate the certified EHR contains the CVX and Vaccine Eligibility codes. See tables below.
3. Validate that valid (not dummy or filler) data on actual patients are being entered into the required fields.
4. Send a first batch of a day's worth of immunizations or 10 messages, whichever is greater. Messages must be in accordance with the MCIR HL7 specification. Either version 2.3.1 or 2.5.1 of HL7 must be used. Here is the link to the MCIR HL7 specification:

- <http://mcir.org/forms/MCIR%20HL7%20Spec%20Guide%20with%20MNF-CVX%20attach.pdf>

5. Await quality assurance feedback and further instructions.

Contact MCIRHELP@mphi.org when you are ready for QA testing.

Quality Assurance Criteria

Required Fields – All required fields should be included in the message. Filler or “dummy” data should not be contained in the required fields. If there is no value in a required field because it was not entered or because there was no value known, then empty should still be sent. Fields that cannot be left empty are identified in the specification. MCIR “Required Fields” are listed in the tables below:

MCIR EXT Transfer Term	HL7 Term	HL7 Segment
MSH		
n/a	Sending Facility (MCIR will assign this number to the site. <i>It is not the MCIR Site ID number.</i>)	MSH-4
Patient Information		
Patient ID	ID MRN	PID-3
Last Name	Name Last	PID-5.1
First Name	Name First	PID-5.2
Date of Birth	Date/Time of Birth	PID-7
Gender	Administrative Sex	PID-8
Street Address	Address Street	PID-11.1
City	Address City	PID-11.3
State	Address State	PID-11.4
Zip	Address Zip	PID-11.5
Vaccination Information		
Date of Encounter	Admin Date	RXA-3
CVX Code	Administered Code CVX*	RXA-5
Vaccination given by another provider <i>(Historical data)</i>	Administered Information Source	RXA-9 ⁺
Provider’s MCIR Site Id (11-digit number assigned by MCIR)	Administered-at Location Name/Facility	RXA-11.4
Vaccine Eligibility Code (at the dose level)	VFC Status (Eligibility at the dose level, required for all vaccines except historical data. <i>Refer to Vaccine Eligibility Codes table on following page.</i>)**	OBX
Lot Number	Substance Lot Number**	RXA-15
Manufacturer Code	Substance Manufacturer Name**	RXA-17

* **US Licensed Vaccine Codes**—CVX codes must be used to submit vaccines administered. Refer to the US Licensed Vaccine Codes in MCIR in the Michigan Care Improvement Registry HL7 2.5.1 Specification for Vaccination Messages guide.

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**** Inventory Required Fields**—Providers participating in the MCIR Vaccines for Children Program (VFC) Inventory; and/or providers that maintain a MCIR Private Inventory; and/or providers that maintain an All Hazard Inventory, must include the Vaccine Eligibility at the dose level, along with Manufacturer and Lot Number in their **messages** for accurate inventory management.

* **RXA-9** - if this field contains a value other than “00” (new immunization record) then the VFC fields are not required (Manf/Lot#/Vaccine Eligibility Code).

Reminder and Recall Recommended Fields – There are additional “highly recommended” fields listed in the table below that are “Required” to enable patient immunization reminder and recall notice follow up. Please make sure that these fields are populated in your EHR system:

MCIR EXT Transfer Term	HL7 Term	HL7 Segment
Patient Information		
Patient Home Phone	Phone	PID-13
Responsible Party/Next of Kin Information		
Responsible Party Last Name	Name Last (Next of Kin)	NK1-2.1
Responsible Party First Name	Name First (Next of Kin)	NK1.2.2

Vaccine Eligibility Codes – HL7 OBX: Observation Segment – The Vaccine Eligibility Code is a required field for all vaccines except historical immunization data (see ⁺RXA-9). This is required for all vaccines, regardless of if the provider maintains an active inventory in the MCIR.

Value (Financial Class)	Default MCIR inventory for auto-deduction	HL7 Description
V02	VFC/Public	VFC eligible – Medicaid/Medicaid Managed Care
V03	VFC/Public	VFC eligible – Uninsured
V04	VFC/Public	VFC eligible – American Indian/Alaskan Native
V05	VFC/Public	VFC eligible – Underinsured
V07	VFC/Public	Local-specific eligibility [317 Special Funds]
MIA04	VFC/Public	MI-VRP (Michigan Vaccine Replacement Program)
V01	Private	Not VFC eligible
V06	Private	MI-Child - state-specific eligibility [S-CHIP]
MIA05	Private	Medicare (parts A, B and D)
MIA08	Private	Other Public Purchase
MIA10	All Hazard	All Hazard eligible – Public Purchase

A copy of the “All Vaccine CVX Codes in MCIR” document is attached. Updated revisions can be found at: http://www.mcir.org/forms/All_Vaccine_codes.pdf

- MCIR CVX codes are a reflection of those maintained at the CDC National Immunization Program website (<http://www2a.cdc.gov/nip/IIS/IISStandards/vaccines.asp?rpt=cvx>)

A copy of the “Manufacturer codes, Vaccine (CVX) codes, of U. S. Licensed Vaccines in MCIR” document is attached. Updated revisions can be found at: http://www.mcir.org/forms/CVX_CPT4_codes_w_Manufacturers.pdf

- Manufacturer codes are also available online at the Centers for Disease Control and Prevention (CDC) website: [Http://www.cdc.gov/vaccines/programs/iis/stds/mvx.htm](http://www.cdc.gov/vaccines/programs/iis/stds/mvx.htm)

All Vaccine (CVX) and CPT-4 codes in MCIR

MCIR codes are a reflection of those maintained at the CDC National Immunization Program website:

<http://www.cdc.gov/vaccines/programs/iis/stds/cpt.htm>

It is very important to select specific codes for currently administered vaccines.

- **Please use Vaccine (CVX) codes in your transfer file, if at all possible, to prevent conflicts.**
Example: some vaccines do not have a specific CPT4 code. For example, CPT4 90734 can be either Meningococcal Oligosaccharide (MCV4 Menveo, which is CVX code 136) or Meningococcal Conjugate (MCV4 Menactra), which is CVX code 114)
- **Do not use Unspecified or Historical vaccine codes for current data.**

Bold* = new codes; Italics= Unspecified and/or Historical

Name	Vaccine (CVX) Code	CPT-4 code
Anthrax	24	90581
BCG: Bacillus of Calmette & Guerin	19	90728 or 90585 or 90586
Botulinum Antitoxin	27	90287
Cholera	26	90725
CMVIG (IV): Cytomegalovirus globulin	29	90291
Diphtheria antitoxin	12	90296
DT (pediatric)	28	90702
DTaP (pediatric)	20	90700
DTaP (Daptacel)	106	No CPT-4 code assigned
DTaP-Hep B-IPV (Pediarix)	110	90723
DTaP-Hib (Trihibit)	50	90721
DTaP-Hib-IPV (Pentacel)	120	90698
DTaP-IPV (Kinrix)	130	90696
HBIG: Hep B globulin	30	90371
Hep A (adult)	52	90632
Hep A-Hep B (Twinrix)	104	90636
Hep B (adult)	43	90746 or 90743
Hep B (dialysis)	44	90747 or 90740
Hep B (pediatric or adolescent)	08	90744
HepA (ped/adol)	83	90633
Hib (PRP-T) (ActHib/Hiberix)	48	90648
Hib-HepB (Comvax)	51	90748
Hib (PedvaxHib) (3-dose, PRP-OMP)	49	90647
HPV, bivalent (HPV2) (Cervarix)	118	90650
HPV, quadrivalent (HPV4) (Gardasil)	62	90649
Immune Globulin - IM	86	90281
Immune Globulin - IV	87	90283
Influenza LAIV (FluMist)	111	90660
Influenza Shot TIV (Inject P-Free)	140	90654, 90655, 90656
Influenza Shot TIV (Inject)	141	90657, 90658
Influenza High Dose (Fluzone)	135	90662
Influenza Intradermal (Inject P-Free) *	144	90654
IPV (Polio)	10	90713
Japanese Encephalitis intramuscular (IM)	134	90738
Japanese Encephalitis subcutaneous (SC)	39	90735

Name	Vaccine (CVX) Code	CPT-4 code
Lyme Vaccine	66	90665
M/R: Measles-Rubella	04	90708
Measles	05	90705
Meningococcal Conjugate (MCV4) (Menactra)	114	90734
Meningococcal Oligosaccharide (MCV4) (Menveo)	136	90734
Meningococcal Polysaccharide (MPSV4) (Menomune)	32	90733
MMR	03	90707
MMRV (ProQuad)	94	90710
Mumps	07	90704
Pertussis	11	No CPT-4 code assigned
Plague	23	90727
Pneumococcal Conjugate (PCV7)(Pevnar)	100	90669
Pneumococcal Conjugate (PCV13) (Pevnar13)	133	90670
Pneumococcal Polysaccharide (PPSV23)(Pneumovax)	33	90732
Rabies (ID) (intradermal injection)	40	90676
Rabies (IM) (intramuscular injection)	18	90675
RIG: Rabies globulin	34	90375 or 90376
Rotavirus Monovalent (2-dose, Rotarix, RV1)	119	90681
Rotavirus Pentavalent (3-dose, Rotateq, RV5)	116	90680
Rotavirus Tetravalent (RotaShield, RV7)	74	No CPT-4 code assigned
RSV-MAB(Synagis)	93	90378
Rubella	06	90706
Rubella-Mumps	38	90709
Smallpox (Vaccinia)	75	No CPT-4 code assigned
Td (adol/adult)	09	90718
Td PF (adol/adult): Preservative Free	113	90714
Tdap (adol/adult)	115	90715
Tetanus Toxoid	35	90703
TIG: Tetanus globulin	13	90389
Tuberculin (PPD intradermal)	96	No CPT-4 code assigned
Typhoid (oral)	25	90690
Typhoid (parenteral)-AKD	53	90693
Typhoid ViCPS polysaccharide vaccine	101	90691
Vaccinia Immune Globulin	79	90393
Varicella (Varivax)	21	90716
VZIG (IND)	117	No CPT-4 code assigned
VZIG: Varicella zoster globulin	36	90396
Yellow Fever	37	90717
Zoster (Zostavax)(shingles) vaccine, live	121	90736
<i>DTP (historical)</i>	<i>01</i>	<i>90701</i>
<i>DTP-Hib (historical)</i>	<i>22</i>	<i>90720</i>
<i>Hep A adult (historical)</i>	<i>85</i>	<i>90730</i>
<i>Hep A pediatric (unspecified, historical)</i>	<i>31</i>	<i>No CPT-4 code assigned</i>

Name	Vaccine (CVX) Code	CPT-4 code
<i>Hep B (pediatric/adolescent/high risk, historical)</i>	42	90745
<i>Hep B (unspecified, historical)</i>	45	90731
<i>Hib (unspecified, historical)</i>	17	90737
<i>Hib-HibTITER (HbOC) (historical)</i>	47	90645
<i>Hib-ProHIBIT (PRP-D) (historical)</i>	46	90646
<i>HPV(historical)</i>	137	
<i>Influenza (unspecified, historical)</i>	88	90724
<i>ISG/IgG (historical)</i>	14	90741 or 90399
<i>Meningococcal, NOS (unspecified, historical)</i>	108	No CPT-4 code assigned
<i>Novel influenza-H1N1-09 (unspecified)</i>	128	90663
<i>Novel influenza-H1N1-09 injection</i>	127	90663
<i>Novel influenza-H1N1-09, nasal</i>	125	90663
<i>Novel influenza-H1N1-09, preservative-free injection</i>	126	90663
<i>OPV (polio historical)</i>	02	90712
<i>Polio (unspecified, historical)</i>	89	No CPT-4 code assigned
<i>Rabies (unspecified, historical)</i>	90	90726
<i>Rotavirus, Tetravalent (old, historical)</i>	74	No CPT-4 code assigned
<i>Rotavirus NOS (unspecified, historical) RV</i>	122	No CPT-4 code assigned
<i>Typhoid (parenteral, historical)</i>	41	90692
<i>Typhoid (unspecified, historical)</i>	91	No CPT-4 code assigned
For MCIR HEDIS query results (not used for MCIR reporting):		
<i>Antiviral: Osteltamivir (Tamiflu)</i>	903	
<i>Antiviral: Zanamivir (Relenza)</i>	904	
<i>NO LONGER USED in MCIR after March 2011: “Influenza TIV (Historical)”</i>	15	No CPT-4 code assigned

U.S. Licensed Vaccine (CVX) Codes with Manufacturers (MVX) and CPT-4 Codes in MCIR November 2011

Vaccine	Trade Name	Manufacturer	Manuf Code	Vaccine (CVX) Code	CPT-4 Code	MI-VFC
Anthrax	BioThrax	BioPort	MIP	24	90581	N
Diphtheria-Tetanus (DT pediatric)	(Generic)	Sanofi	PMC	28	90702	Y
DTaP	Daptacel	Sanofi	PMC	106	None	Y
	Infanrix	GlaxoSmithKline	SKB	20	90700	Y
	Tripedia	Sanofi	PMC	20	90700	Y
DTaP/Hib	TriHIBit	Sanofi	PMC	50	90721	N
DTaP-HepB-IPV	Pediarix	GlaxoSmithKline	SKB	110	90723	Y
DTaP-IPV	Kinrix	GlaxoSmithKline	SKB	130	90696	Y
DTaP-IPV/Hib	Pentacel	Sanofi	PMC	120	90698	Y
Haemophilus influenzae type b (Hib)	ActHIB/ Hiberix	Sanofi	PMC	48	90648	Y
	PedvaxHIB	Merck	MSD	49	90647	Y
Haemophilus influenzae type b-Hepatitis B (Hib-HepB)	Comvax	Merck	MSD	51	90748	N
Hib-PedvaxHIB (3-dose, PRP-OMP)	PedVaxHIB	Merck	MSD	49	90647	Y
HBIG: Hep B globulin	HBIG	NABI	NAB	30	90371	N
Hepatitis A adult (HepA)	Havrix	GlaxoSmithKline	SKB	52	90632	N
	Vaqta	Merck	MSD	52	90632	N
Hepatitis A pediatric (HepA)	Havrix	GlaxoSmithKline	SKB	83	90633	Y
	Vaqta	Merck	MSD	83	90633	Y
Hepatitis A-Hepatitis B (HepA-HepB)	Twinrix	GlaxoSmithKline	SKB	104	90636	N
Hepatitis B adult (HepB)	Engerix-B	GlaxoSmithKline	SKB	43	90746 or 90743	N
	Recombivax HB	Merck	MSD	43	90746 or 90743	N
Hepatitis B pediatric (HepB)	Engerix-B	GlaxoSmithKline	SKB	08	90744	Y
	Recombivax HB	Merck	MSD	08	90744	Y
Human Papillomavirus Quadrivalent (HPV4)	Gardasil	Merck	MSD	62	90649	Y
HPV, bivalent (HPV2)	Cervarix	GlaxoSmithKline	SKB	118	90650	Y

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U.S. Licensed Vaccine (CVX) Codes with Manufacturers (MVX) and CPT-4 Codes in MCIR November 2011

Vaccine	Trade Name	Manufacturer	Manuf Code	Vaccine (CVX) Code	CPT-4 Code	MI-VFC
Immune Globulin – IM	Gamastan	Talecris	TAL	86	90281	N
Influenza intranasal (LAIV)	FluMist	Medimmune	MED	111	90660	Y
Influenza shot (TIV) Inject	Afluria	CSL	CSL	141	90657, or 90658	N
	FluLaval	GlaxoSmithKline	SKB	141	90657,or 90658	N
	Fluvirin	Chiron	NOV	141	90657,or 90658	Y
	Fluzone	Sanofi	PMC	141	90657,or 90658	Y
Influenza shot (TIV) Inject Preservative Free	Afluria	CSL	CSL	140	90654 or 90655 or 90656	N
	Fluarix	GlaxoSmithKline	SKB	140	90654 or 90655 or 90656	N
	Agriflu	Chiron	NOV	140	90654 or 90655 or 90656	N
	Fluzone	Sanofi	PMC	140	90654 or 90655 or 90656	Y
Influenza Intradermal Preservative Free	Fluzone Intradermal	Sanofi	PMC	144	90654	N
Influenza High Dose	Fluzone High-Dose	Sanofi	PMC	135	90662	N
Japanese Encephalitis (JE)	Ixiaro (Intramuscular)	Novartis	NOV	134	90738	N
	JE-Vax (Subcutaneous)	Sanofi	PMC	39	90735	N
Measles	Attenuvax	Merck	MSD	05	90705	Y
Meningococcal Conjugate (MCV4)	Menactra	Sanofi	PMC	114	90734	Y
Meningococcal Polysaccharide (MPSV4)	Menomune	Sanofi	PMC	32	90733	N
Meningococcal Oligosaccharide (MCV4O)	MENVEO	Novartis	NOV	136	90734	Y
MMR	M-M-R II	Merck	MSD	03	90707	Y
MMRV	ProQuad	Merck	MSD	94	90710	N

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U.S. Licensed Vaccine (CVX) Codes with Manufacturers (MVX) and CPT-4 Codes in MCIR November 2011

Vaccine	Trade Name	Manufacturer	Manuf Code	Vaccine (CVX) Code	CPT-4 Code	MI-VFC
Mumps	Mumpsavax	Merck	MSD	07	90704	N
Pneumococcal Conjugate (PCV7)	Prevnar	Wyeth	WAL	100	90669	Y
Pneumococcal Conjugate, 13 valent (PCV13)	Prevnar	Wyeth	WAL	133	90670	Y
Pneumococcal Polysaccharide (PPSV23)	Pneumovax 23	Merck	MSD	33	90732	Y
Polio (IPV)	Ipol	Sanofi	PMC	10	90713	Y
Rabies	Imovax Rabies	Sanofi	PMC	18	90675	N
	RabAvert (Intramuscular injection)	Chiron	NOV	18	90675	N
Rotavirus Monovalent (2-dose, Rotarix, RV1)	Rotarix	GlaxoSmithKline	SKB	119	90681	Y
Rotavirus Pentavalent (3-dose, Rotateq, RV5)	RotaTeq	Merck	MSD	116	90680	Y
RSV-MAB(Synagis)	Synagis	MedImmune	MED	93	90378	N
Rubella	Meruvax	Merck		06	90706	N
Smallpox (Vaccinia)	ACAM2000	Acambis	ACA	75	None	N
Tdap	Adacel	Sanofi	PMC	115	90715	Y
	Boostrix	GlaxoSmithKline	SKB	115	90715	Y
Tetanus Toxoid (TT)	(Generic)	Sanofi	PMC	35	90703	N
Tetanus-diphtheria adult (Td)	(Generic)	Massachusetts Biological Labs	MBL	09	90718	N
	Decavac (Preservative Free)	Sanofi	PMC	113	90714	Y
Typhoid	Typhoid ViCPS polysaccharide vaccine	Sanofi	PMC	101	90691	N
	Parenteral-AKD (Military)	Berna	BPC	53	90693	N
	Vivotif Berna (oral)	Berna	BPC	25	90690	N
Varicella (VAR)	Varivax	Merck	MSD	21	90716	Y
Yellow Fever (YF)	YF-Vax	Sanofi	PMC	37	90717	N
Zoster (Herpes Zoster, Shingles, ZOS)	Zostavax	Merck	MSD	121	90736	N