-MSH : Message Header -

| Location | Data Element | Data | Categorization |
|-----------|---------------------------------------|-----------------------------|------------------------------|
| MSH-1 | Field Separator | | Value-Profile Fixed |
| MSH-2 | Encoding Characters | ^~\& | Value-Profile Fixed |
| MSH-3 | Sending Application | | |
| MSH-3.1 | Namespace ID | NISTEHRAPP | Presence-Configuration |
| MSH-3.2 | Universal ID | | Indifferent |
| MSH-3.3 | Universal ID Type | | Indifferent |
| MSH-4 | Sending Facility | | |
| MSH-4.1 | Namespace ID | NISTEHRFAC | Presence-Configuration |
| MSH-4.2 | Universal ID | | Indifferent |
| MSH-4.3 | Universal ID Type | | Indifferent |
| MSH-5 | Receiving Application | | |
| MSH-5.1 | Namespace ID | NISTIISAPP | Presence-Configuration |
| MSH-5.2 | Universal ID | | Indifferent |
| MSH-5.3 | Universal ID Type | | Indifferent |
| MSH-6 | Receiving Facility | | |
| MSH-6.1 | Namespace ID | NISTIISFAC | Presence-Configuration |
| MSH-6.2 | Universal ID | | Indifferent |
| MSH-6.3 | Universal ID Type | | Indifferent |
| MSH-7 | Date/Time Of Message | | |
| MSH-7.1 | Time | 20150624093847.804-0500 | Presence-System Generated |
| MSH-9 | Message Type | | |
| MSH-9.1 | Message Code | VXU | Value-Profile Fixed |
| MSH-9.2 | Trigger Event | V04 | Value-Profile Fixed |
| MSH-9.3 | Message Structure | VXU V04 | Value-Profile Fixed |
| MSH-10 | Message Control ID | NIST-IZ-AD-4.1 Send V04 Z22 | Presence-System Generated |
| MSH-11 | Processing ID | | |
| MSH-11.1 | Processing ID | P | Presence-Content Indifferent |
| MSH-12 | Version ID | | |
| MSH-12.1 | Version ID | 2.5.1 | Value-Profile Fixed |
| MSH-15 | Accept Acknowledgment Type | ER | Value-Profile Fixed |
| MSH-16 | Application Acknowledgment Type | AL | Value-Profile Fixed |
| MSH-21 | Message Profile Identifier | | |
| MSH-21.1 | Entity Identifier | Z22 | Value-Profile Fixed |
| MSH-21.2 | Namespace ID | CDCPHINVS | Value-Profile Fixed |
| MSH-21.3 | Universal ID | | Indifferent |
| MSH-21.4 | Universal ID Type | | Indifferent |
| MSH-22 | Sending Responsible Organization | | |
| MSH-22.1 | Organization Name | NISTEHRFAC | Presence-Configuration |
| MSH-22.6 | Assigning Authority | | |
| MSH-22.7 | Identifier Type Code | | Indifferent |
| MSH-22.10 | Organization Identifier | | Indifferent |
| MSH-23 | Receiving Responsible Organization | | |
| MSH-23.1 | Organization Name | NISTIISFAC | Presence-Configuration |
| MSH-23.6 | Assigning Authority | | |
| MSH-23.7 | Identifier Type Code | | Indifferent |
| MSH-23.10 | Organization Identifier | | Indifferent |

PID : Patient Identification -

| Location | Data Element | Data | Categorization |
|----------|-------------------------|------|---------------------|
| PID-1 | Set ID - PID | 1 | Value-Profile Fixed |
| PID-3 | Patient Identifier List | | |
| | I . | I | |

| PID-3.1 | ID Number | 89778 | Presence-Content Indifferent |
|------------|---|------------------------|------------------------------|
| PID-3.4 | Assigning Authority | | |
| PID-3.5 | Identifier Type Code | MR | Value-Test Case Fixed |
| PID-5 | Patient Name | | |
| PID-5.1 | Family Name | | |
| PID-5.1.1 | Surname | Benton | Presence-Content Indifferent |
| PID-5.2 | Given Name | Katherine | Presence-Content Indifferent |
| PID-5.3 | Second and Further Given Names or Initials Thereof | Mackenzie | Presence-Content Indifferent |
| PID-5.7 | Name Type Code | L | Value-Test Case Fixed |
| PID-6 | Mother's Maiden Name | | |
| PID-6.1 | Family Name | | |
| PID-6.1.1 | Surname | Jones | Presence-Content Indifferent |
| PID-6.7 | Name Type Code | M | Value-Profile Fixed |
| PID-7 | Date/Time of Birth | | |
| PID-7.1 | Time | 20031221 | Presence-Content Indifferent |
| PID-8 | Administrative Sex | F | Value-Test Case Fixed |
| PID-10 | Race | | |
| PID-10.1 | Identifier | 2106-3 | Value-Test Case Fixed |
| PID-10.2 | Text | White | Presence-Test Case Proper |
| PID-10.3 | Name of Coding System | CDCREC | Value-Profile Fixed |
| PID-11 | Patient Address | | |
| PID-11.1 | Street Address | | |
| PID-11.1.1 | Street or Mailing Address | 89 West 21st Ave | Presence-Content Indifferent |
| PID-11.2 | Other Designation | 05 (1000 2100 1110 | Indifferent |
| PID-11.3 | City | Bozeman | Presence-Content Indifferent |
| PID-11.4 | State or Province | MT | Presence-Content Indifferent |
| PID-11.5 | Zip or Postal Code | 59715 | Presence-Content Indifferent |
| PID-11.6 | Country | USA | Presence-Content Indifferent |
| PID-11.7 | Address Type | P | Value-Test Case Fixed List |
| PID-13 | Phone Number - Home | 1 | value-Test Case Fixed Elst |
| PID-13.2 | Telecommunication Use Code | PRN | Value-Test Case Fixed |
| | Telecommunication Equipment | i i | |
| PID-13.3 | Туре | PH | Value-Test Case Fixed |
| PID-13.4 | Email Address | | NonPresence |
| PID-13.6 | Area/City Code | 406 | Presence-Content Indifferent |
| PID-13.7 | Local Number | 5554019 | Presence-Content Indifferent |
| PID-22 | Ethnic Group | | |
| PID-22.1 | Identifier | 2186-5 | Value-Test Case Fixed |
| PID-22.2 | Text | Not Hispanic or Latino | Presence-Test Case Proper |
| PID-22.3 | Name of Coding System | CDCREC | Value-Profile Fixed |
| PID-24 | Multiple Birth Indicator | N | Value-Test Case Fixed |
| PID-25 | Birth Order | 1 | Indifferent |
| PID-29 | Patient Death Date and Time | | |
| PID-29.1 | Time | | NonPresence |
| PID-30 | Patient Death Indicator | N | Value-Test Case Fixed |

-PD1: Patient Additional Demographic

| Location | Data Element | Data | Categorization |
|----------|-------------------------------------|--------------------|------------------------------|
| PD1-11 | Publicity Code | | |
| PD1-11.1 | Identifier | 01 | Value-Test Case Fixed |
| PD1-11.2 | Text | No reminder/recall | Presence-Test Case Proper |
| PD1-11.3 | Name of Coding System | HL70215 | Value-Profile Fixed |
| PD1-12 | Protection Indicator | Y | Value-Test Case Fixed |
| PD1-13 | Protection Indicator Effective Date | 20150624 | Presence-Content Indifferent |
| PD1-16 | Immunization Registry Status | A | Value-Test Case Fixed |

| PD1-17 | Immunization Registry Status Effective Date | 20031221 | Presence-Content Indifferent |
|--------|--|----------|------------------------------|
| PD1-18 | Publicity Code Effective Date | 20150624 | Presence-Content Indifferent |

NK1: Next of Kin / Associated Parties

| Location | Data Element | Data | Categorization |
|-----------|---|------------------|------------------------------|
| NK1-1 | Set ID - NK1 | 1 | Value-Profile Fixed |
| NK1-2 | Name | | |
| NK1-2.1 | Family Name | | |
| NK1-2.1.1 | Surname | Benton | Presence-Content Indifferent |
| NK1-2.2 | Given Name | Kari | Presence-Content Indifferent |
| NK1-2.3 | Second and Further Given Names or Initials Thereof | Michelle | Presence-Content Indifferent |
| NK1-2.7 | Name Type Code | L | Value-Test Case Fixed |
| NK1-3 | Relationship | | |
| NK1-3.1 | Identifier | MTH | Value-Test Case Fixed |
| NK1-3.2 | Text | Mother | Presence-Test Case Proper |
| NK1-3.3 | Name of Coding System | HL70063 | Value-Profile Fixed |
| NK1-4 | Address | | |
| NK1-4.1 | Street Address | | |
| NK1-4.1.1 | Street or Mailing Address | 89 West 21st Ave | Presence-Content Indifferent |
| NK1-4.2 | Other Designation | | Indifferent |
| NK1-4.3 | City | Bozeman | Presence-Content Indifferent |
| NK1-4.4 | State or Province | MT | Presence-Content Indifferent |
| NK1-4.5 | Zip or Postal Code | 59715 | Presence-Content Indifferent |
| NK1-4.6 | Country | USA | Presence-Content Indifferent |
| NK1-4.7 | Address Type | P | Value-Test Case Fixed List |
| NK1-5 | Phone Number | | |
| NK1-5.2 | Telecommunication Use Code | PRN | Value-Test Case Fixed |
| NK1-5.3 | Telecommunication Equipment Type | РН | Value-Test Case Fixed |
| NK1-5.4 | Email Address | | Indifferent |
| NK1-5.6 | Area/City Code | 406 | Presence-Content Indifferent |
| NK1-5.7 | Local Number | 5554019 | Presence-Content Indifferent |

ORC: Common Order

| Location | Data Element | Data | Categorization |
|------------|---|--------------|------------------------------|
| ORC-1 | Order Control | RE | Value-Profile Fixed |
| ORC-2 | Placer Order Number | | |
| ORC-2.1 | Entity Identifier | 5237 | Presence-Content Indifferent |
| ORC-2.2 | Namespace ID | NIST-AA-IZ-2 | Presence-Content Indifferent |
| ORC-2.3 | Universal ID | | Indifferent |
| ORC-2.4 | Universal ID Type | | Indifferent |
| ORC-3 | Filler Order Number | | |
| ORC-3.1 | Entity Identifier | 31309 | Presence-Content Indifferent |
| ORC-3.2 | Namespace ID | NIST-AA-IZ-2 | Presence-Content Indifferent |
| ORC-3.3 | Universal ID | | Indifferent |
| ORC-3.4 | Universal ID Type | | Indifferent |
| ORC-10 | Entered By | | |
| ORC-10.1 | ID Number | 7824 | Presence-Content Indifferent |
| ORC-10.2 | Family Name | | |
| ORC-10.2.1 | Surname | Jackson | Presence-Content Indifferent |
| ORC-10.3 | Given Name | Lily | Presence-Content Indifferent |
| ORC-10.4 | Second and Further Given Names or Initials Thereof | Suzanne | Presence-Content Indifferent |

| ORC-10.9 | Assigning Authority | | |
|------------|---|-----------------|------------------------------|
| ORC-10.10 | Name Type Code | L | Value-Test Case Fixed |
| ORC-10.13 | Identifier Type Code | PRN | Value-Test Case Fixed List |
| ORC-12 | Ordering Provider | | |
| ORC-12.1 | ID Number | 654 | Presence-Content Indifferent |
| ORC-12.2 | Family Name | | |
| ORC-12.2.1 | Surname | Thomas | Presence-Content Indifferent |
| ORC-12.3 | Given Name | Wilma | Presence-Content Indifferent |
| ORC-12.4 | Second and Further Given Names or Initials Thereof | Elizabeth | Presence-Content Indifferent |
| ORC-12.9 | Assigning Authority | | |
| ORC-12.10 | Name Type Code | L | Value-Test Case Fixed |
| ORC-12.13 | Identifier Type Code | MD | Value-Test Case Fixed List |
| ORC-17 | Entering Organization | | |
| ORC-17.1 | Identifier | NISTEHRFAC | Presence-Content Indifferent |
| ORC-17.2 | Text | NISTEHRFacility | Presence-Content Indifferent |
| ORC-17.3 | Name of Coding System | HL70362 | Value-Profile Fixed |

-RXA: Pharmacy/Treatment Administration -

| Location | Data Element | Data | Categorization |
|------------|---|---------------------|------------------------------|
| RXA-1 | Give Sub-ID Counter | 0 | Value-Profile Fixed |
| RXA-2 | Administration Sub-ID Counter | 1 | Value-Profile Fixed |
| RXA-3 | Date/Time Start of Administration | ı | |
| RXA-3.1 | Time | 20150624 | Presence-Content Indifferent |
| RXA-5 | Administered Code | | |
| RXA-5.1 | Identifier | 00006-4119-01 | Value-Test Case Fixed List |
| RXA-5.2 | Text | GARDASIL 9 | Presence-Test Case Proper |
| RXA-5.3 | Name of Coding System | NDC | Value-Profile Fixed |
| RXA-6 | Administered Amount | 0.5 | Presence-Test Case Proper |
| RXA-7 | Administered Units | | |
| RXA-7.1 | Identifier | mL | Value-Test Case Fixed |
| RXA-7.2 | Text | mL | Presence-Test Case Proper |
| RXA-7.3 | Name of Coding System | UCUM | Value-Profile Fixed |
| RXA-9 | Administration Notes | | |
| RXA-9.1 | Identifier | 00 | Value-Test Case Fixed |
| RXA-9.2 | Text | New Record | Presence-Test Case Proper |
| RXA-9.3 | Name of Coding System | NIP001 | Value-Profile Fixed |
| RXA-10 | Administering Provider | | |
| RXA-10.1 | ID Number | 7824 | Presence-Content Indifferent |
| RXA-10.2 | Family Name | | |
| RXA-10.2.1 | Surname | Jackson | Presence-Content Indifferent |
| RXA-10.3 | Given Name | Lily | Presence-Content Indifferent |
| RXA-10.4 | Second and Further Given Names or Initials Thereof | Suzanne | Presence-Content Indifferent |
| RXA-10.9 | Assigning Authority | | |
| RXA-10.10 | Name Type Code | L | Value-Test Case Fixed |
| RXA-10.13 | Identifier Type Code | PRN | Value-Test Case Fixed List |
| RXA-11 | Administered-at Location | | |
| RXA-11.4 | Facility | | |
| RXA-15 | Substance Lot Number | 795441 | Presence-Content Indifferent |
| RXA-16 | Substance Expiration Date | | |
| RXA-16.1 | Time | 20151223 | Presence-Content Indifferent |
| RXA-17 | Substance Manufacturer Name | | |
| RXA-17.1 | Identifier | MSD | Value-Test Case Fixed |
| RXA-17.2 | Text | Merck and Co., Inc. | Presence-Test Case Proper |
| RXA-17.3 | Name of Coding System | MVX | Value-Profile Fixed |

| RXA-18 | Substance/Treatment Refusal Reason | | |
|----------|---------------------------------------|----|-----------------------|
| RXA-18.1 | Identifier | | NonPresence |
| RXA-18.2 | Text | | NonPresence |
| RXA-18.3 | Name of Coding System | | NonPresence |
| RXA-20 | Completion Status | СР | Value-Test Case Fixed |
| RXA-21 | Action Code - RXA | D | Value-Test Case Fixed |

RXR : Pharmacy/Treatment Route

| Location | Data Element | Data | Categorization |
|----------|-----------------------|---------------|---------------------------|
| RXR-1 | Route | | |
| RXR-1.1 | Identifier | C28161 | Value-Test Case Fixed |
| RXR-1.2 | Text | Intramuscular | Presence-Test Case Proper |
| RXR-1.3 | Name of Coding System | NCIT | Value-Profile Fixed |
| RXR-2 | Administration Site | | |
| RXR-2.1 | Identifier | RD | Value-Test Case Fixed |
| RXR-2.2 | Text | Right Deltoid | Presence-Test Case Proper |
| RXR-2.3 | Name of Coding System | HL70163 | Value-Profile Fixed |

-OBX[*]-

OBX : Observation/Result

| Location | Data Element | Data | Categorization |
|----------|------------------------------|------------------------|------------------------------|
| OBX-1 | Set ID - OBX | 1 | Value-Profile Fixed |
| OBX-2 | Value Type | CE | Value-Test Case Fixed |
| OBX-3 | Observation Identifier | | |
| OBX-3.1 | Identifier | 30963-3 | Value-Test Case Fixed |
| OBX-3.2 | Text | Vaccine Funding Source | Presence-Test Case Proper |
| OBX-3.3 | Name of Coding System | LN | Value-Profile Fixed |
| OBX-4 | Observation Sub-ID | 1 | Presence-Test Case Proper |
| OBX-5 | Observation Value | | |
| OBX-5.1 | Identifier | VXC50 | Value-Test Case Fixed |
| OBX-5.2 | Text | Public | Presence-Test Case Proper |
| OBX-5.3 | Name of Coding System | CDCPHINVS | Value-Profile Fixed |
| OBX-6 | Units | | |
| OBX-6.1 | Identifier | | NonPresence |
| OBX-6.2 | Text | | NonPresence |
| OBX-6.3 | Name of Coding System | | NonPresence |
| OBX-11 | Observation Result Status | F | Value-Profile Fixed |
| OBX-14 | Date/Time of the Observation | | |
| OBX-14.1 | Time | 20150624 | Presence-Content Indifferent |
| OBX-17 | Observation Method | | |
| OBX-17.1 | Identifier | | Indifferent |
| OBX-17.2 | Text | | Indifferent |
| OBX-17.3 | Name of Coding System | | Indifferent |

OBX : Observation/Result -

| Location | Data Element | Data | Categorization |
|----------|------------------------|-------------------------------------|---------------------------|
| OBX-1 | Set ID - OBX | 2 | Value-Profile Fixed |
| OBX-2 | Value Type | CE | Value-Test Case Fixed |
| OBX-3 | Observation Identifier | | |
| OBX-3.1 | Identifier | 64994-7 | Value-Test Case Fixed |
| OBX-3.2 | Text | Vaccine Funding Program Eligibility | Presence-Test Case Proper |

| OBX-3.3 | Name of Coding System | LN | Value-Profile Fixed |
|----------|------------------------------|-----------------------------|------------------------------|
| OBX-4 | Observation Sub-ID | 2 | Presence-Test Case Proper |
| OBX-5 | Observation Value | | |
| OBX-5.1 | Identifier | V05 | Value-Test Case Fixed |
| OBX-5.2 | Text | VFC Eligible - Underinsured | Presence-Test Case Proper |
| OBX-5.3 | Name of Coding System | HL70064 | Value-Profile Fixed |
| OBX-6 | Units | | |
| OBX-6.1 | Identifier | | NonPresence |
| OBX-6.2 | Text | | NonPresence |
| OBX-6.3 | Name of Coding System | | NonPresence |
| OBX-11 | Observation Result Status | F | Value-Profile Fixed |
| OBX-14 | Date/Time of the Observation | | |
| OBX-14.1 | Time | 20150624 | Presence-Content Indifferent |
| OBX-17 | Observation Method | | |
| OBX-17.1 | Identifier | VXC40 | Value-Test Case Fixed |
| OBX-17.2 | Text | per immunization | Presence-Test Case Proper |
| OBX-17.3 | Name of Coding System | CDCPHINVS | Value-Profile Fixed |
| | | | |

-OBX : Observation/Result -

| Location | Data Element | Data | Categorization |
|----------|------------------------------|--------------------------|------------------------------|
| OBX-1 | Set ID - OBX | 3 | Value-Profile Fixed |
| OBX-2 | Value Type | CE | Value-Test Case Fixed |
| OBX-3 | Observation Identifier | | |
| OBX-3.1 | Identifier | 69764-9 | Value-Test Case Fixed |
| OBX-3.2 | Text | Document Type | Presence-Test Case Proper |
| OBX-3.3 | Name of Coding System | LN | Value-Profile Fixed |
| OBX-4 | Observation Sub-ID | 3 | Presence-Test Case Proper |
| OBX-5 | Observation Value | | |
| OBX-5.1 | Identifier | 253088698300029511191030 | Value-Test Case Fixed |
| OBX-5.2 | Text | HPV Vaccine VIS | Presence-Test Case Proper |
| OBX-5.3 | Name of Coding System | cdcgs1vis | Value-Profile Fixed |
| OBX-6 | Units | | |
| OBX-6.1 | Identifier | | NonPresence |
| OBX-6.2 | Text | | NonPresence |
| OBX-6.3 | Name of Coding System | | NonPresence |
| OBX-11 | Observation Result Status | F | Value-Profile Fixed |
| OBX-14 | Date/Time of the Observation | | |
| OBX-14.1 | Time | 20150624 | Presence-Content Indifferent |
| OBX-17 | Observation Method | | |
| OBX-17.1 | Identifier | | Indifferent |
| OBX-17.2 | Text | | Indifferent |
| OBX-17.3 | Name of Coding System | | Indifferent |

-OBX : Observation/Result -

| Location | Data Element | Data | Categorization |
|----------|------------------------|--------------------|------------------------------|
| OBX-1 | Set ID - OBX | 4 | Value-Profile Fixed |
| OBX-2 | Value Type | DT | Value-Test Case Fixed |
| OBX-3 | Observation Identifier | | |
| OBX-3.1 | Identifier | 29769-7 | Value-Test Case Fixed |
| OBX-3.2 | Text | Date Vis Presented | Presence-Test Case Proper |
| OBX-3.3 | Name of Coding System | LN | Value-Profile Fixed |
| OBX-4 | Observation Sub-ID | 3 | Presence-Test Case Proper |
| OBX-5 | Observation Value | 20150624 | Presence-Content Indifferent |
| OBX-6 | Units | | |

| Identifier | | NonPresence |
|------------------------------|---|--|
| Text | | NonPresence |
| Name of Coding System | | NonPresence |
| Observation Result Status | F | Value-Profile Fixed |
| Date/Time of the Observation | | |
| Time | 20150624 | Presence-Content Indifferent |
| Observation Method | | |
| Identifier | | Indifferent |
| Text | | Indifferent |
| Name of Coding System | | Indifferent |
| | Text Name of Coding System Observation Result Status Date/Time of the Observation Time Observation Method Identifier Text | Text Name of Coding System Observation Result Status Date/Time of the Observation Time 20150624 Observation Method Identifier Text |