

**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                       | NISTAPP                   | Presence-Configuration       |
| MSH-3.2   | Universal ID                       |                           | Indifferent                  |
| MSH-3.3   | Universal ID Type                  |                           | Indifferent                  |
| MSH-4     | Sending Facility                   |                           |                              |
| MSH-4.1   | Namespace ID                       | NISTFAC                   | Presence-Configuration       |
| MSH-4.2   | Universal ID                       |                           | Indifferent                  |
| MSH-4.3   | Universal ID Type                  |                           | Indifferent                  |
| MSH-5     | Receiving Application              |                           |                              |
| MSH-5.1   | Namespace ID                       | IISAPP                    | Indifferent                  |
| MSH-5.2   | Universal ID                       |                           | Indifferent                  |
| MSH-5.3   | Universal ID Type                  |                           | Indifferent                  |
| MSH-6     | Receiving Facility                 |                           |                              |
| MSH-6.1   | Namespace ID                       | IISFAC                    | 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                               | 20210123084727.655-0500   | 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-3.1-RE_Send_COVID | 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                  | NISTFAC                   | Indifferent                  |
| 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                  | IISFAC                    | Indifferent                  |
| 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                            |                        |                              |
| PID-3.1    | ID Number                                          | 8891                   | 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                                            | Paige                  | Presence-Content Indifferent |
| PID-5.2    | Given Name                                         | Wray                   | Presence-Content Indifferent |
| PID-5.3    | Second and Further Given Names or Initials Thereof | Charles                | 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                                            |                        | Indifferent                  |
| PID-6.7    | Name Type Code                                     |                        | Indifferent                  |
| PID-7      | Date/Time of Birth                                 |                        |                              |
| PID-7.1    | Time                                               | 20020602               | Presence-Content Indifferent |
| PID-8      | Administrative Sex                                 | M                      | Value-Test Case Fixed        |
| PID-10     | Race                                               |                        |                              |
| PID-10.1   | Identifier                                         | 1002-5                 | Value-Test Case Fixed        |
| PID-10.2   | Text                                               | Native American        | 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                          | 924 Sycamore Lane      | Presence-Content Indifferent |
| PID-11.2   | Other Designation                                  |                        | Indifferent                  |
| PID-11.3   | City                                               | Arroyo                 | Presence-Content Indifferent |
| PID-11.4   | State or Province                                  | PA                     | Presence-Content Indifferent |
| PID-11.5   | Zip or Postal Code                                 | 00714                  | 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                                |                        |                              |
| PID-13.2   | Telecommunication Use Code                         | PRN                    | Value-Test Case Fixed        |
| PID-13.3   | Telecommunication Equipment Type                   | 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                                       | 5555835                | 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                           | Y                      | Indifferent                  |
| PID-25     | Birth Order                                        | 2                      | Indifferent                  |
| PID-29     | Patient Death Date and Time                        |                        |                              |
| PID-29.1   | Time                                               |                        | NonPresence                  |
| PID-30     | Patient Death Indicator                            | N                      | Indifferent                  |

**PD1 : Patient Additional Demographic**

| Location | Data Element                                | Data                          | Categorization               |
|----------|---------------------------------------------|-------------------------------|------------------------------|
| PD1-11   | Publicity Code                              |                               |                              |
| PD1-11.1 | Identifier                                  | 08                            | Value-Test Case Fixed        |
| PD1-11.2 | Text                                        | Reminder/recall - to provider | Presence-Test Case Proper    |
| PD1-11.3 | Name of Coding System                       | HL70215                       | Value-Profile Fixed          |
| PD1-12   | Protection Indicator                        | N                             | Indifferent                  |
| PD1-13   | Protection Indicator Effective Date         | 20150624                      | Indifferent                  |
| PD1-16   | Immunization Registry Status                | A                             | Value-Test Case Fixed        |
| PD1-17   | Immunization Registry Status Effective Date | 20040602                      | Presence-Content Indifferent |
| PD1-18   | Publicity Code Effective Date               | 20150624                      | 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                                  | 5645            | Indifferent                  |
| ORC-2.2    | Namespace ID                                       | NIST-AA-IZ-3    | Indifferent                  |
| ORC-2.3    | Universal ID                                       |                 | Indifferent                  |
| ORC-2.4    | Universal ID Type                                  |                 | Indifferent                  |
| ORC-3      | Filler Order Number                                |                 |                              |
| ORC-3.1    | Entity Identifier                                  | 9999            | Value-Profile Fixed          |
| ORC-3.2    | Namespace ID                                       | NIST-AA-IZ-3    | 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                                          | 7282            | Presence-Content Indifferent |
| ORC-10.2   | Family Name                                        |                 |                              |
| ORC-10.2.1 | Surname                                            | Prince          | Presence-Content Indifferent |
| ORC-10.3   | Given Name                                         | Janet           | 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               | Indifferent                  |
| ORC-10.13  | Identifier Type Code                               | PRN             | Value-Test Case Fixed List   |
| ORC-12     | Ordering Provider                                  |                 |                              |
| ORC-12.1   | ID Number                                          | 954             | Presence-Content Indifferent |
| ORC-12.2   | Family Name                                        |                 |                              |
| ORC-12.2.1 | Surname                                            | Porter          | Presence-Content Indifferent |
| ORC-12.3   | Given Name                                         | Harry           | Presence-Content Indifferent |
| ORC-12.4   | Second and Further Given Names or Initials Thereof | James           | 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      | Indifferent                  |
| ORC-17.2   | Text                                               | NISTEHRFacility | Indifferent                  |
| ORC-17.3   | Name of Coding System                              | HL70362         | Indifferent                  |

# Table 1. Summary of RXA Element 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                  |                                               |                              |
| RXA-3.1    | Time                                               | 20210123                                      | Presence-Content Indifferent |
| RXA-5      | Administered Code                                  |                                               |                              |
| RXA-5.1    | Identifier                                         | 208                                           | Value-Test Case Fixed        |
| RXA-5.2    | Text                                               | COVID-19, mRNA, LNP-S, PF, 30 mcg/0.3 mL dose | Presence-Test Case Proper    |
| RXA-5.3    | Name of Coding System                              | CVX                                           | Value-Profile Fixed          |
| RXA-6      | Administered Amount                                | 999                                           | Presence-Test Case Proper    |
| RXA-7      | Administered Units                                 |                                               |                              |
| RXA-7.1    | Identifier                                         |                                               | NonPresence                  |
| RXA-7.2    | Text                                               |                                               | NonPresence                  |
| RXA-7.3    | Name of Coding System                              |                                               | NonPresence                  |
| RXA-9      | Administration Notes                               |                                               |                              |
| RXA-9.1    | Identifier                                         |                                               | NonPresence                  |
| RXA-9.2    | Text                                               |                                               | NonPresence                  |
| RXA-9.3    | Name of Coding System                              |                                               | NonPresence                  |
| RXA-10     | Administering Provider                             |                                               |                              |
| RXA-10.1   | ID Number                                          |                                               |                              |
| RXA-10.2   | Family Name                                        |                                               |                              |
| RXA-10.2.1 | Surname                                            |                                               |                              |
| RXA-10.3   | Given Name                                         |                                               |                              |
| RXA-10.4   | Second and Further Given Names or Initials Thereof |                                               |                              |
| RXA-10.9   | Assigning Authority                                |                                               |                              |
| RXA-10.10  | Name Type Code                                     |                                               | Indifferent                  |
| RXA-10.13  | Identifier Type Code                               |                                               |                              |
| RXA-11     | Administered-at Location                           |                                               |                              |
| RXA-11.4   | Facility                                           |                                               |                              |
| RXA-15     | Substance Lot Number                               |                                               | NonPresence                  |
| RXA-16     | Substance Expiration Date                          |                                               |                              |
| RXA-16.1   | Time                                               |                                               | NonPresence                  |
| RXA-17     | Substance Manufacturer Name                        |                                               |                              |
| RXA-17.1   | Identifier                                         |                                               |                              |
| RXA-17.2   | Text                                               |                                               |                              |
| RXA-17.3   | Name of Coding System                              |                                               |                              |
| RXA-18     | Substance/Treatment Refusal Reason                 |                                               |                              |
| RXA-18.1   | Identifier                                         | 03                                            | Presence-Content Indifferent |
| RXA-18.2   | Text                                               | Patient decision                              | Presence-Test Case Proper    |
| RXA-18.3   | Name of Coding System                              | NIP002                                        | Value-Profile Fixed          |
| RXA-20     | Completion Status                                  | RE                                            | Value-Test Case Fixed        |
| RXA-21     | Action Code - RXA                                  | A                                             | Value-Test Case Fixed        |