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Chapter 8 Master Files

8.1 PURPOSE

In an open-architecture healthcare environment there often exists a set of common reference files used by one or more application systems. Such files are called master files. Some common examples of master files in the healthcare environment include:

- a) doctor master file
- b) system user (and password) master file
- c) location (census and clinic) master file

d)device type and location (e.g., workstations, terminals, printers, etc.)

- e) lab test definition file
- f) exam code (radiology) definition file
- g) charge master file
- h) patient status master
- i) patient type master

These common reference files need to be synchronized across the various applications at a given site. The Master Files Notification message provides a way of maintaining this synchronization by specifying a standard for the transmission of this data between applications.

In many implementations, one application system will "own" a particular master file such as the doctor master file. The changes (e.g., adds, deletes, updates) to this file are made available to various other applications on a routine basis. The Master Files Notification message supports this common case, but also supports the situation where an application not "owning" a particular master file, transmits update information to other systems (usually to the "owning" system), for review and possible inclusion.

The Master Files Notification message supports the distribution of changes to various master files between systems in either online or batch modes, and allow the use of either original or enhanced acknowledgement modes, as well as providing for a delayed application acknowledgement mode. These messages use the MSH segment to pass the basic event code (master files notification or acknowledgement). The MFI (master file identification) segment

identifies the master file being updated as well as the initial and requested dates for "file level" events (such as "replace file"). For each record being changed, the MFE (Master File Entry) segment carries the record-level event code (such as add, update, etc.), the initial and requested dates for the event, and the record-level key identifying the entry in the master file. The MFA (master file acknowledgement) segment returns record-specific acknowledgement information.

Note: The MFE segment is not the master file record, but only specifies its identifier, event, and event dates. The master file record so identified is contained in either Z-segments or HL7-defined segments immediately following the MFE segment. This record may be either a flat record contained in a single segment, or a complex record needing more than a single segment to carry its data and (usually hierarchical) structure.

The master file segments commonly needed by many HL7 applications will be defined in balloted appendices to this chapter. Those needed by other application-specific chapters will be defined in balloted appendices to the appropriate application-specific chapter.

A given master files message concerns only a single master file. However, the location of a record-level event code (and requested activation date) on the MFE and the MFA segments allows a single message to contain several types of changes (events) to that file.

The Master Files Notification events do not specify whether the receiving system must support an automated change of the master file in question, nor do they specify whether the receiving system must create a file in the same form as that maintained on the sending system.

In general, the way in which the receiving system processes the change notification message will depend on both the design of the receiving system and the requirements negotiated at the site. Some systems and/or sites may specify a manual review of all changes to a particular master file. Some may specify a totally automated process. Not every system at every site will need all the fields contained in the master file segment(s) following the MFE segment for a particular master file entry.

This also means that an application acknowledgement (or a deferred application acknowledgement) from a receiving system that it changed a particular record in its version of the master file does not imply that the receiving system now has an exact copy of the information and state that is on the sending system: it means only that whatever subset of that master file's data (and state) that has been negotiated at the site is kept on the receiving system in such a manner that a new Master Files Notification transaction with the same primary key can be applied unambiguously (in the manner negotiated at the site) to that subset of information.

8.3 TRIGGER EVENTS

The Master Files Change Notification message can be used for the following message-level trigger events:

Mnn:A message containing notifications of changes to a single master file.

nn defines a particular HL7 master file. Currently defined values are (see Table 0003): M01 - master file not otherwise specified (for backwards compatibility only); M02 - staff/practitioneer master file; M03 - test/observation master file; M04-M99 - reserved for future HL7-defined master files. Site-specific master files should use a code of the form Znn.

An MFN message may contain the following "file-level" events, as specified in the MFI segment:

REP:Replace current version of this master file with the version contained in this message.

UPD: Change file records as defined in the record level event codes for each record that follows.

These are the only file-level events currently defined. REP means that every MFE segment that follows will use the MAD event code.

The replace option allows the sending system to replace a file without sending delete record-level events for each record in that file. UPD means that the events are defined according to the record-level event code contained in each MFE segment in that message.

An MFN message may contain the following "record-level" events, as specified in the MFE segments.

MAD:Add record to master file.

MDL:Delete record from master file.

MUP:Update record for master file.

MDC:Deactivate: discontinue using record in master file, but do not delete from database.

MAC:Reactivate deactivated record.

The MFD transaction is used for the following trigger event:

MFA:Master Files Delayed Application Acknowledgement.

8.5 MESSAGES

The following messages are defined for master files transactions: MFN, master files notification; MFK, master files application acknowledgement; MFD, master files delayed application acknowledgement; and MFQ, master files query.

8.6.1 MFN - master files notification

The MFN transaction is defined as follows:

| MFN | Master File Notification | <u>Chapter</u> |
|-------|------------------------------|----------------|
| | | |
| MSH | Message Header | 2 |
| MFI | Master File Identification | 8 |
| {MFE | Master File Entry | 8 |
| [Z] } | One or more HL7 and/or | (varies) |
| | Z-segments carrying the data | |
| | for the entry identified | |
| | in the MFE segment | |
| | | |

| MFK | Master File Application Ackno | wledgement | Chapter |
|-----------|-------------------------------|------------|---------|
| | | | |
| MSH | Message Header | 2 | |
| MSA | Acknowledgement | 2 | |
| [ERR] | Error | 2 | |
| MFI | Master File Identification | 8 | |
| { [MFA] } | Master file ACK segment | 8 | |

The master file record identified by the MFE segment is contained in either Z-segments and/or HL7-defined segments immediately following the MFE segment, and is denoted by "Z..." in the MFN abstract message definition given above. This record may be either a flat record contained in a single segment, or a complex record needing more than a single segment to carry its data and (usually hierarchical) structure.

The master file record "[Z..]" identified by the MFE segment is optional (indicated by square brackets) in the single case where the master file is a simple one which contains only a key and the text value of that key. For this case only, both values may be carried in the primary key value CE field of the MFE segment.

Note:The MFK message is used for an application acknowledgment in either the original or enhanced acknowledgement modes.

The MFA segment carries acknowledgement information for the corresponding MFE segment (identified by the primary key value).

8.6.3 MFD - master files delayed application acknowledgement

The MFD transaction is the delayed application acknowledgement. It can be used to return "deferred" application level acknowledgement statuses at the MFE level, without reference to the original MFN message. It is defined as follows:

| MFD | Master File Delayed Acknowledgement Cha | | | | | | |
|-----------|---|---|----------|--|--|--|--|
| | | | | | | | |
| MSH | Message Header | 2 | | | | | |
| MFI | Master File Identification | 8 | | | | | |
| { [MFA] } | Master file ACK segment | 8 | | | | | |
| | | | | | | | |
| | | | | | | | |
| MSA | General Acknowledgement | (| Chapter_ | | | | |
| | | | | | | | |
| MSH | Message Header | 2 | | | | | |
| MSA | Acknowledgement | 2 | | | | | |
| [ERR] | Error 2 | | | | | | |

8.6.5 MFQ - master files query

The MFQ transaction allows a system to query for a particular record or group records (defined by the primary key) in a particular master file.

The Master files query is defined as follows:

| Query for Master File Reco | rd Chapte |
|----------------------------|--|
| | |
| Message Header | 2 |
| Query Definition | 2 |
| Query Filter | 2 |
| Continuation | 2 |
| Master Files Response | Chapter |
| Message Header | 2 |
| Acknowledgement | 2 |
| Error | 2 |
| Query Definition | 2 |
| Query Filter | 2 |
| Master File Name | 8 |
| Master File Entry | 8 |
| One or more HL7 and/or | (varies) |
| Z-segments carrying | |
| the data for the entry | |
| identified in the MFE segr | nent. |
| Continuation | 2 |
| | Message Header Query Definition Query Filter Continuation Master Files Response Message Header Acknowledgement Error Query Definition Query Filter Master File Name Master File Entry One or more HL7 and/or Z-segments carrying the data for the entry identified in the MFE segr |

8.6.6.1 MFQ use notes

The value "MFQ" of the "what subject filter" of the QRD segment identifies a master files query. The "what department data code" of the QRD identifies the name of the master file in question. The "what data code value qual" of the QRD identifies the primary key (or keys, or range of keys) defining the master file MFE segments (and associated master file records, denoted by "Z..") to be returned with the response. The QRF segment may be used to define time ranges, particular MFN record-level event codes etc. Unless otherwise specified, the response returns only active current record(s).

8.7 SEGMENT DEFINITIONS

The following segments are defined for the master files messages.

8.8.1 MFI - master file identification segment

The fields in the MFI segment are defined as follows:

Figure 8-1 MFI attributes

| SEQ | LEN | DT | R/O | RP/# | TBL# | ITEM# | ELEMENT NAME |
|-----|-----|----|-----|------|------|-------|------------------------------------|
| 1 | 60 | CE | R | N | 0175 | 00658 | Master file identifier |
| 2 | 6 | ID | 0 | | 0176 | 00659 | Master file application identifier |
| 3 | 3 | ID | R | | 0178 | 00660 | File-level event code |
| 4 | 26 | TS | 0 | | | 00661 | Entered date/time |
| 5 | 26 | TS | 0 | | | 00662 | Effective date/time |
| 6 | 2 | ID | R | | 0179 | 00663 | Response level code |

8.4.1.0 MFI field definitions

8.8.2.1 Master file identifier (CE) 00658

Components: <identifier> ^ <text> ^ <name of coding system> ^ <alternate identifier> ^ <alternate text> ^ <name of alternate coding system>

Definition: a CE field that identifies a standard HL7 master file. This table may be extended by local agreement during implementation to cover site-specific master files (z-master files).

Table 0175 Master file identifier code

| Value | Description |
|------------------------------|--|
| CDM STF PRA OM1-OM6 | Charge description master file (see Chapter 6, Appendix) Staff master file (see Chapter 8, Appendix) Practitioner master file (see Chapter 8, Appendix) Observation text master file (i.e., Lab) (see Chapter 7, Appendix) |

8.8.2.2 Master files application identifier (ID) 00659

Definition: optional code of up to 6 characters which (if applicable) uniquely identifies the application responsible for maintaining this file at a particular site. A group of intercommunicating applications may use more than a single instance of a master file of certain type (e.g., charge master or physician master). The particular instance of the file is identified by this field. Refer to user-defined *table 0176 - master files application identifier* for suggested values.

8.8.2.3 File-level event code (ID) 00660

Definition: defines file-level event code.

Table 0178 File level event code

| Value | Description | | | | | | |
|-------|---|--|--|--|--|--|--|
| REP | Replace current version of this master file with the version contained in this | | | | | | |
| | message | | | | | | |
| UPD | Change file records as defined in the record level event codes for each record that follows | | | | | | |

8.8.2.4 Entered date/time (TS) 00661

Definition: time stamp for file-level event on originating system.

8.8.2.5 Effective date/time (TS) 00662

Definition: an optional effective date/time can be included for file-level action specified. It is the date/time the originating system expects that the event is to have been completed on the receiving system. If this field is not present, the action date/time should default to the current date/time (when the message is received).

8.8.2.6 Response level code (ID) 00663

Definition: these codes specify the application response level defined for a given Master File Message at the MFE segment level as defined in *table 0179 - response level*. Required for MFN message. Specifies additional detail (beyond *MSH-15-accept acknowledgement type* and *MSH-16-application acknowledgement type*) for application level acknowledgement paradigms for Master Files transactions. MSH-15 and MSH-16 operate as defined in Chapter 2.

Table 0179 Response level

| Value | Description |
|-------|--|
| NE | Never. no application level response needed |
| ER | Error/Reject conditions only. Only MFA segments denoting errors must be |
| | returned via the application level acknowledgement for this message |
| AL | Always. All MFA segments (whether denoting errors or not) must be returned |
| | via the application level acknowledgement message |
| SU | Success. Only MFA segments denoting success must be returned via the |
| | application level acknowledgement for this message |

8.8.3 MFE - master file entry segment

Figure 8-2 MFE attributes

| SEQ | LEN | DT | R/O | RP/# | TBL# | ITEM# | ELEMENT NAME |
|------------------|---------------------|----------------------|-------|------|------|----------------------------------|--|
| 1 2 3 4 | 3 20 26 60 | ID ST TS CE | R C R | Y | 0180 | 00664 00665 00662 00667 | Record-level event code MFN control ID Effective date/time Primary key value |

8.4.2.0 MFE field definitions

8.8.4.1 Record-level event code (ID) 00664

Definition: defines record-level event for the master file record identified by the MFI segment and the primary key field in this segment.

Table 0180 Record-level event code

| Value | Description | | | |
|-------|---|--|--|--|
| MAD | Add record to master file | | | |
| MDL | Delete record from master file | | | |
| MUP | Update record for master file | | | |
| MDC | Deactivate: discontinue using record in master file, but do not delete from | | | |
| | database | | | |
| MAC | Reactivate deactivated record | | | |

8.8.4.2 MFN control ID (ST)00665

Definition: a number or other identifier that uniquely identifies this change to this record from the point of view of the originating system. When returned to the originating system via the MFA segment, this field allows the target system to precisely identify which change to this record is being acknowledged. It is only required if the MFI response level code requires responses at the record level (any value other than NE). Note that this segment does not contain a Set ID field. The MFE:2-MFN control ID implements a more general concept than the Set ID. It takes the place of the SET ID in the MFE segment.

8.8.4.3 Effective date/time (TS) 00662

Definition: an optional effective date/time can be included for the record-level action specified. It is the date/time the originating system expects that the event is to have been completed on the receiving system. If this field is not present, the effective date/time should default to the current date/time (when the message is received).

8.8.4.4 Primary key value (CE) 00667

Components: <identifier> ^ <text> ^ <name of coding system> ^ <alternate identifier> ^ <alternate text> ^ <name of alternate coding system>

Definition: uniquely identifies the record of the master file (identified in the MFI segment) to be changed (as defined by the record-level event code). The first component of this CE data field carries an optional subcomponent, the application ID, that uniquely identifies the application responsible for creating the primary key value. The application ID subcomponent can be used to guarantee uniqueness of the primary key across multiple applications.

The repetition of the primary key permits the identification of an individual component of a complex record as the object of the record-level event code. This feature allows the Master Files protocol to be used for modifications of single components of complex records.

8.8.5 MFA - master file acknowledgement segment

The MFA segment contains the following fields:

Figure 8-3 MFA attributes

| SEQ | LEN | DT | С | RP/# | TBL# | ITEM# | ELEMENT NAME |
|-----|-----|----|---|------|------|-------|-------------------------------|
| 1 | 3 | ID | R | | 0180 | 00664 | Record-level event code |
| 2 | 20 | ST | С | | | 00665 | MFN control ID |
| 3 | 26 | TS | С | | | 00668 | Event completion date/time |
| 4 | 60 | CE | R | | 0181 | 00669 | Error return code and/or text |
| 5 | 60 | CE | R | Υ | | 00667 | Primary key value |

8.4.3.0 MFA field definitions

8.8.6.1 Record-level event code (ID) 00664

Definition: defines record-level event for the master file record identified by the MFI segment and the primary key in this segment. Refer to HL7 *table 0180 - record level event code*.

8.8.6.2 MFN control ID (ST)00665

Definition: a number or other identifier that uniquely identifies this change to this record from the point of view of the originating system. This field uniquely identifies the particular record (identified by the MFE segment) being acknowledged by this MFA segment. When returned to the originating system via the MFA segment, this field allows the target system to precisely identify which change to this record is being acknowledged. It is only required if the MFI response level code requires responses at the record level (any value other than NE).

8.8.6.3 Completion date/time (TS) 00668

Definition: may be required or optional depending on the site specifications for the given master file, master file event, and receiving facility.

8.8.6.4 Error return code and/or text (CE) 00669

Components: <identifier> ^ <text> ^ <name of coding system> ^ <alternate identifier> ^ <alternate text> ^ <name of alternate coding system>

Definition: this field reports on the status of the requested update. Site defined-table, specific to each master file being updated via this transaction.

All such tables will have at least the following two return code values:

User-defined Table 0181 MFN record-level error return

| Value | Description |
|-------|---|
| S | Successful posting of the record defined by the MFE segment |

Unsuccessful posting of the record defined by the MFE segment

8.8.6.5 Primary key value (CE) 00670

Components: <identifier> ^ <text> ^ <name of coding system> ^ <alternate identifier> ^ <alternate text> ^ <name of alternate coding system>

Definition: uniquely identifies the record of the master file (identified in the MFN segment) to be changed (as defined by the record-level event code). The first component of this CE data field carries an optional subcomponent, the application ID, that uniquely identifies the application responsible for creating the primary key value. The application ID subcomponent can be used to guarantee uniqueness of the primary key across multiple applications.

The repetition of the primary key permits the identification of an individual component of a complex record as the object of the record-level event code. This feature allows the Master Files protocol to be used for modifications of single components of complex records.

8.9 EXAMPLES

This is an example of a proposed generic method of updating a standard HL7 table. This particular example shows two records being added to the HL7 religion table.

Note: A standard HL7 table segment can be constructed by defining two fields: a table entry field (as a CE field) and a display-sort-key field (a numeric field) as follows.

8.10.1 ZL7 segment (proposed example only)

Figure 8-4 ZL7 attributes

| SEQ | LEN | DT | R/O | RP/# | TBL# | ITEM# | ELEMENT NAME |
|--------|---------|----------|--------|------|--------------|----------------|---|
| 1 2 | 60 3 | CE NM | R R | R | xxxx xxxx | XXXXX XXXXX | HL7 table entry for table xxxx Display-sort-key |

8.5.1.0 ZL7 field definitions

8.10.2.1 HL7 table entry for table xxxx (CE) xxxxx

Components: <HI7 code> ^ <text> ^ HL7 <HL7 table number>

Definition: HL7 table values for identifier and text encoded as a CE data type.

8.10.2.2 Display-sort-key (NM) xxxxx

Definition: used to specify a non-alphabetic ordering for display or print versions of a standard HL7 table.

8.10.3 MFN message with original acknowledgement mode

MSH|^-\&|HL7REG|UH|HL7LAB|CH|19910918060544||MFN^M01|MSGID002|P|2.2 MFI|0006^RELIGION^HL7|UPD|||AL MFE|MAD|199109051000|199110010000|U^Buddhist^HL7 ZL7|U^Buddhist^HL7|3^^Sortkey MFE|MAD|199109051015|199110010000|Z^Zen Buddhist^HL7 ZL7|Z^Zen Buddhist^HL7|2^^Sortkey

In this case, the primary key contains all the data needed for this simple table, so that the HL7 segment could be constructed with ONLY the single field, "sort-key", rather than repeating the primary key value as we have done in this example.

MFK, master file application acknowledgement, as original mode acknowledgement of the HL7 message according to MFI Response Level Code of "AL".

MSH|^~\&|HL7LAB|CH|HL7ADT|UH|19910918060546||MFK|MSGID99002|P|2.2 MSA|AA|MSGID002 MFI|0006^RELIGION^HL7|UPD MFA|MAD|199109051000|19910918060545|S|U^Buddhist^HL7 MFA|MAD|199109051015|19910918060545|S|Z^Zen Buddhist^HL7

8.10.5 Enhanced mode application level acknowledgement to the MFN message

8.10.6.1 Initial message with accept acknowledgement

 $\label{eq:msh-lab-condition} $$MSH|^--\&\|L7REG\|UH\|L7LAB\|CH\|19910918060544\|MFN^M01\|MSGID002\|P\|2.2\|AL\|ALMFI\|0006^RELIGION^+L17\|UPD\|\|ALMFE\|MAD\|199109051000\|199110010000\|U^Buddhist^HL7 ZL7\|U^Buddhist^HL7\|3^^Sortkey$$ $$MFE\|MAD\|199109051015\|199110010000\|Z^Zen Buddhist^HL7 ZL7\|Z^Zen Buddhist^HL7\|12^^Sortkey$$$

 $\label{eq:msh} $$MSH|^*-\&|HL7LAB|CH|HL7ADT|UH|19910918060545||MSA|MSGID99002|P|2.2 $$MSA|CA|MSGID002$$

8.10.6.2 Enhanced mode application acknowledgement message

 $\label{eq:msh-alpha} $$MSH/^-\&\|HL7LAB\|CH\|HL7ADT\|UH\|19911001080504\|\|MFK\|MSGID99502\|P\|2.2\|AL\|MSA\|AA\|MSGID002$$MFI|0006^RELIGION^HL7\|UPD$$MFA\|MAD|199109051000|19910918010040|S\|U^Buddhist^HL7$$MFA\|MAD|199109051015|19910918010040|S|Z^Zen Buddhist^HL7$$$

 $\label{eq:mshin} MSH|^-\&|HL7ADT|UH|HL7LAB|CH|19911001080507||ACK|MSGID444|P|2.2\\ MSA|CA|MSGID5002$

8.10.7 Delayed application level acknowledgement

8.10.8.1 Initial message with accept acknowledgement

 $\label{eq:msh-alphabeta} $$MSH/^-\lambda_{HL7REG}|UH|HL7LAB|CH|19910918060544||MFN^M01|MSGID002|P|2.2||AL|NE MFI|0006^RELIGION^+L7|UPD|||AL MFE|MAD|199109051000|199110010000|U^Buddhist^HL7 ZL7|U^Buddhist^HL7|3^^Sortkey $$MFE|MAD|199109051015|199110010000|Z^Zen Buddhist^HL7 ZL7|Z^Zen Buddhist^HL7|12^^Sortkey$

MSH|^~\&|HL7LAB|CH|HL7ADT|UH|19910918060545||MSA|MSGID99002|P|2.2 MSA|CA|MSGID002

8.10.8.2 Deferred application acknowledgement message

 $\label{eq:mshin} $$MSH^*_{\alpha}(HL7ADT|UH|19910919060545||MFD|MSGID99002|P|2.2|||ALMFI|0006^RELIGION^HL7|UPD$$MFA|MAD|199109051000|19910919020040|S|U^Buddhist^HL7$$MFA|MAD|199109051015|19910919020040|S|Z^Zen Buddhist^HL7$$$

 $\label{eq:mshin} $$MSH|^*_{a} = \frac{1}{2} MSA|CA|MSGID444|P|2.2 MSA|CA|MSGID500$$

8.11 OUTSTANDING ISSUES

- 1.We are investigating a proposal for an OBX-like segment (name value pair) for use by master files transactions.
- 2. We invite proposals for the specification of other HL7-wide master files segments.

8.APPENDIX A:

9.1 Staff and practitioner master file segments

The staff (STF) and practitioner (PRA) segments can be used to transmit master files information between systems. The STF segment provides general information about personnel; the PRA segment provides detailed information for a staff member who is also a health practitioner. Other segments may be defined to follow the STF segment to provide additional detail information for a particular type of staff member: the PRA segment is the first such segment. When the STF and PRA segments are used in an MFN message, the abstract definition is as follows:

| MFN | Master File Notification | Chapter | |
|-----------|----------------------------|----------|-----|
| | | | |
| MSH | Message Header | 2 | |
| MFI | Master File Identification | 8 | |
| {MFE | Master File Entry | 8 | |
| STF | Staff Identification | 8 | |
| [PRA] | Practitioner Detail | 8 | |
| } | | | |
| | | | |
| MFK | Master File Acknowledgeme | ent Chap | ter |
| | | | |
| MSH | Message Header | 2 | |
| MSA | Acknowledgement | 2 | |
| MFI | Master File Identification | 8 | |
| { [MFA] } | Master file ACK segment | 8 | |
| | • | | |

When the STF and PRA segments are used in the MFR message, the part of the message represented by:

```
{MFE [Z..] } is replaced by: {MFE STF [PRA]
```

9.1.1 STF - staff identification segment

The STF segment can identify any personnel referenced by information systems. These can be providers, staff, system users, and referring agents. In a network environment, this segment can be used to define personnel to other applications; for example, order entry clerks, insurance verification clerks, admission clerks, as well as provider demographics. *MFE-4-primary key value* is used to link all the segments pertaining to the same master file entry. Therefore, in the MFE segment, *MFE-4-primary key value* must be filled in. Other segments may follow the STF segment to provide data for a particular type of staff member. The PRA segment (practitioner) is one such. It may optionally follow the STF segment in order to add practitioner-specific data. Other segments may be defined as needed.

The STF segment contains the following fields:

Figure 8A-5 STF attributes

| SEQ | LEN | DT | R/O | RP/# | TBL# | ITEM# | ELEMENT NAME |
|-----|-----|----|-----|------|------|-------|-----------------------------|
| 1 | 60 | CE | R | | | 00671 | STF - primary key value |
| 2 | 60 | CE | 0 | Υ | | 00672 | Staff ID Code |
| 3 | 48 | PN | 0 | | | 00673 | Staff Name |
| 4 | 2 | ID | 0 | Υ | 0182 | 00674 | Staff Type |
| 5 | 1 | ID | 0 | | 0001 | 00111 | Sex |
| 6 | 26 | TS | 0 | | | 00110 | Date of Birth |
| 7 | 1 | ID | 0 | | 0183 | 00675 | Active/inactive |
| 8 | 200 | CE | 0 | Υ | 0184 | 00676 | Department |
| 9 | 200 | CE | 0 | Υ | | 00677 | Service |
| 10 | 40 | TN | 0 | Υ | | 00678 | Phone |
| 11 | 106 | AD | 0 | Y/2 | | 00679 | Office/Home Address |
| 12 | 26 | CM | 0 | Υ | | 00680 | Activation Date |
| 13 | 26 | CM | 0 | Υ | | 00681 | Inactivation Date |
| 14 | 60 | CE | 0 | Υ | | 00682 | Backup Person ID |
| 15 | 40 | ST | 0 | Υ | | 00683 | E-mail Address |
| 16 | 1 | ID | 0 | | 0185 | 00684 | Preferred Method of Contact |

8.A.1.0 STF field definitions

9.1.2.1 STF - primary key value (CE) 00671

Definition: must match MFE-4-primary key value to identify which entry is being referenced.

9.1.2.2 Staff ID code (CE) 00672

Components: <identifier> ^ <text> ^ <name of coding system> ^ <alternate identifier> ^ <alternate text> ^ <name of alternate coding system>

Definition: personnel identification code or institution user number, used by institution to identify this person. Repeating field allows multiple ID codes per person, with the type of ID code indicated in the third component of the coded entry data type.

9.1.2.3 Staff name (PN)00673

Definition: staff person's name.

9.1.2.4 Staff type (ID) 00674

Definition: code identifying what type of staff. Refer to user-defined *table 0182 - staff type*. Values may include codes for staff, practitioner (physician, nurse, therapist, etc.), referral agent or agency, etc.

9.1.2.5 Sex (ID) 00111

Definition: staff person's sex. Refer to table 0001 - sex for valid codes.

9.1.2.6 Date of birth (TS) 00110

Defintion: staff member's date of birth.

9.1.2.7 Active/inactive (ID) 00675

Defintion: whether person is currently a valid staff member.

Table 0183 Active/inactive

| Value | Description |
|--------|-----------------------------|
| A I | Active staff Inactive staff |

9.1.2.8 Department (CE) 00676

Components: <identifier> ^ <text> ^ <name of coding system> ^ <alternate identifier> ^ <alternate text> ^ <name of alternate coding system>

Definition: institution department to which this person reports or belongs. Refer to user-defined *table 0184 - department*.

9.1.2.9 Service (CE) 00677

Components: <identifier> ^ <text> ^ <name of coding system> ^ <alternate identifier> ^ <alternate text> ^ <name of alternate coding system>

Definition: hospital or ancillary service with which this staff person is associated. Depends on intitution use.

9.1.2.10 Phone (TN) 00678

Definition: This is a repeating field with a component for indicating which phone number is which. The TN data type includes a last component which can be used to indicate whether the preceding phone number is home, beeper, office, FAX, or cellular. This last component can also contain times of day for which the numbers are best used. The STF segment contains a separate field for E-mail address (because it's not in TN format). It is recommended that the last part of the TN, [C any text], start with a code from the table associated below with STF-16-preferred method of contact, in order to indicate the type of each phone number in this repeating field.

9.1.2.11 Office/home address (AD) 00679

Office address and home address are represented by this repeating field. Note that the last component of the AD data type indicates the address category.

9.1.2.12 Activation date (CM) 00680

Components: <date (TS)> ^ <institution name (CE)>

Definition: date when staff became active for an institution. Repeats. Note that the CE component of this field uses the subcomponent character for its delimiter.

9.1.2.13 Inactivation date (CM) 00681

Components: <date (TS)> ^ <institution name (CE)>

Definition: date when staff became active for an institution. Repeats. Note that the CE component of this field uses the subcomponent character for its delimiter.

9.1.2.14 Backup person ID (CE) 00682

The *MFE-4-primary key value* of the master file entry which corresponds to the designated backup person for this staff person.

9.1.2.15 E-mail address (ST) 00683

This is a separate field for contacting staff because it is not in the TN format as the other contact phones are.

9.1.2.16 Preferred method of contact (ID)00684

A one letter code that indicates which of multiple phone numbers is the preferred method of contact for this person. Note that all values of this code refer to this segment's phone field, except for the value "E", which refers to the Email address field. If more than one phone number of the preferred type exists in *STF-10-phone*, this field refers to the first such instance.

Table 0185 Preferred method of contact

| Value | Description |
|-------|-----------------------------------|
| Н | Home phone number |
| 0 | Office phone number |
| F | FAX number |
| С | Cellular phone number |
| В | Beeper number |
| E | E-mail address (not in TN format) |

9.1.3 PRA - practitioner detail segment

The PRA segment adds detailed medical practitioner information to the personnel identified by the STF segment. A PRA segment may optionally follow an STF segment. A PRA segment must always have been preceded by a corresponding STF segment.

The PRA segment contains the following fields:

Figure 8A-6 PRA attributes

| | | | | | 50110 011 | | |
|-----|-----|----|-----|------|-----------|-------|-------------------------|
| SEQ | LEN | DT | R/O | RP/# | TBL# | ITEM# | ELEMENT NAME |
| 1 | 20 | ST | R | V | | 00685 | PRA - primary key value |
| 2 | 60 | CE | 0 | Y | | 00686 | Practitioner group |
| 3 | 3 | ID | 0 | Υ | | 00687 | Practitioner Category |
| 4 | 1 | ID | 0 | | 0186 | 00688 | Provider Billing |
| 5 | 100 | CM | 0 | Υ | 0187 | 00689 | Specialty |
| 6 | 100 | CM | 0 | Υ | | 00690 | Practitioner ID Numbers |
| 7 | 200 | CM | 0 | Υ | | 00691 | Privileges |

8.A.2.0 PRA field definitions

9.1.4.1 PRA - primary key value (ST) 00685

Defintion: must match MFE-4-primary key value, to identify which entry is being referenced.

9.1.4.2 Practitioner group (CE) 00686

Components: <identifier> ^ <text> ^ <name of coding system> ^ <alternate identifier> ^ <alternate text> ^ <name of alternate coding system>

Definition: name and/or code of a group of practitioner to which this practitioner belongs.

9.1.4.3 Practitioner category (ID) 00687

Definition: category of practitioner. User-defined *table 0186 - practitioner category* whose values may include codes for staff physician, courtesy physician, resident, physician assistant, physical therapist, psychiatrist, psychologist, pharmacist, registered nurse, licensed practical nurse, licensed vocational nurse, nurse practitioner, etc.

9.1.4.4 Provider billing (ID) 00688

Definition: how provider services are billed.

Table 0187 Provider billing

| Value | Description |
|-------|--------------------------------|
| P | Provider does own billing |
| I | Institution bills for provider |

9.1.4.5 Specialty (CM) 00689

Components: <specialty name (ST)> ^ <governing board (ST)> ^ <eligible or certified (ID)> ^ <date of certification (DT)>

Definition: repeating field made up of multiple components to record the practitioner's specialties. The multiple components of each specialty are: (1) specialty name or abbreviation, identifies provider's specialty, (2) name of specialty governing board, (3) Eligible/Certified contains "E" or "C", (4) certified date contains date of certification, if certified.

9.1.4.6 Practitioner ID numbers (CM) 00690

Components: <ID number (ST)> ^ <type of ID number (ID)> ^ <state/other qualifying info (ST)>

Definition: repeating field which lists this practitioner's license numbers and other ID numbers. This is a field made up of the following components: (1) the ID number, and (2) the type of number, and optionally (3) the state in which it is valid, if relevant, or other qualifying information. It is recommended that state qualifications use the two character U.S.P.O. abbreviations. The practitioner ID number type (component 2) is a user-defined table whose values may include codes for Universal Physician Identification Number, Drug Enforcement Agency Number, State License Number, Medicare Number, Medicaid Number, Labor and Industries Number, General Ledger Number, QA Number, County Number, Training License Number, Tax ID Number, etc.

9.1.4.7 Privileges (CM) 00691

Definition: institutional priveleges which this provider may exercise. Depends upon institutional needs. For example, admit, transfer, discharge, place orders, verify orders, review results, etc. Can also be used for privileges other than patient services. This is a repeating field, with each privilege made up of the following components: (1) privilege; (2) privilege class; (3) privilege expiration date, if any; and (4) privilege activation date, if any. Note that the privilege and privilege class components are CE data types, and thus they are encoded with the subcomponent delimiter (&) rather than the component delimiter (^).

9.1.5 Example: Doctor Master File MFN message

MFE|MAD|U2246|199110011230|PMF98123789182^^PLW

STF|PMF98123789182^^PLW|U2246^^PLW~111223333^^SSN|KILDARE^RICHARD^J^JR^DR^M.D.|P|M|

- ... 19511004|A|^ICU|^MED|(206)689-1999X345CO~ (206)283-3334CH~
- ... (206)689-1345X789CB|214 JOHNSON ST^SUITE 200^SEATTLE^ WA^98199^H~ $\,$
- $...~3029~24 TH~AVE~W^{\ }SEATTLE,~WA^{\ }98198^{\ }O~|19890125^{\ }UMC\&University~Medical$
- ... Center&L01||PMF88123453334|74160.2326 @COMPUSERV.COM|B

PRA|PMF98123789182^^PLW|^KILDARE FAMILY PRACTICE|ST|I|OB/GYN^STATE BOARD OF OBSTETRICS AND

- ... GYNECOLOGY^C^19790123|1234887609 ^UPIN~1234987^CTY^MECOSTA~223987654^
- ... TAX~1234987757^DEA~

12394433879^MDD^CA|ADMIT&&ADT^MED&&L2^19941231~DISCH&&ADT^MED&&L2^19941231|

Acknowledgement

MFD 8-4

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