



**Patient Appointment Information
Transmission
(PAIT)**

**Release Notes Addendum to
SD*5.3*333**

Released with SD*5.3*349

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Revision History

Date	Revision	Description	Author
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Introduction

During installation and run of SD*5.3*333 - Patient Appointment Information Transmission - the following problems occurred in some locations:

1. In several instances an entry in the Outpatient Encounter file, pointed to from the Outpatient Encounter field (#21) of the Appointment multiple sub file (#2.98) of the Patient file, was missing or incomplete. This situation was not anticipated in SD*5.3*333 and is addressed in this patch by verifying the existence of the pointed entry, before trying to retrieve the desired data. If the pointed entry does not exist, PAIT will attempt to retrieve the Check Out Date/Time from the Hospital Location Appointment multiple sub file (#44.001)
2. An entry in the Appointment multiple sub file (#2.98) of the Patient file did not exist despite a pointer from the "ASADM" cross reference of the Patient file. The pointer is ignored if the entry is not found.
3. An error occurred if the Institution or Division was missing in the Hospital Location file. The error was generated by a call to \$\$SITE^VASITE() with NULL value. A call is executed without any entry for a default set up.
4. Several sites initiated the PAIT transmission prior to the scheduled start date and had to be re-started after purging the premature run. Errors occurred when HL7 acknowledgements were received for purged batches. Acknowledgement messages are now matched against the PAIT transmission log vs. HL7 logs.
5. Occasionally, duplicate acknowledgements were sent by the Austin Automation Center generating multiple records for the same acknowledged batch. Duplicate acknowledgements are now screened and removed.
6. Several sites initiated the PAIT transmission outside the scheduled dates. A restriction was implemented to prevent this, but still allow for starting within 3 days grace period.
7. When an appointment was identified with 'RS'- Re-schedule Appointment Type and the Creation Date was the same as Cancellation Date, the Reschedule Date/Time may have been equal to the Appointment Date. That situation was eliminated.
8. When an appointment in VistA is canceled and then another one is created for the same date/time the result is a single appointment recorded. We have to deal with two appointments while having only one record in VistA. This problem was discovered during testing and has been addressed.

PAIT Changes introduced with SD*5.3*349

Background Job

The PAIT BACKGROUND JOB completion message was modified to include both Starting Date and the Last Scanned Date, and they are sent to the forum server to reflect more accurate status of the site transmission in the completion report.

Patient Status Code

Modification to interpretation of the Patient Status Code.

Old version:

Table 0216 - Patient Status Codes

NTF (New To Facility)

Patient did not have a prior appointment at this facility in the past 24 months.

SHB (Seen Here Before)

Patient did have a prior appointment at this facility in the past 24 months.

The patient status code indicates if a patient is new to a facility or not. The patient is new to the facility if he/she did not have another appointment in the same facility during the last 24 months. The facility is determined from the Institution file if there is a pointer to it from the Hospital Location file, through the Division pointer to the Medical Center Division, and its Institution pointer to the Institution file with its Station Number field (#99).

New version:

Table 0216 - Patient Status Codes

NSF (New to Parent and Sub Station)

Patient did not have a prior appointment at this Facility in the past 24 months

SHB (Registered Here Before)

Patient did have a prior appointment at this Parent and Sub Station in the past 24 months

OPN

Patient did not have a prior appointment at this Sub Station but was registered with Parent Station.

The patient status code indicates if a patient is new to a facility or not. Both the Parent Station and the Substations are evaluated as the facility. The parent Station is evaluated with the primary DSS ID only; the Substation is evaluated with both the DSS ID stop code and the DSS credit stop code. The patient is new to the facility if he/she did not have another scheduled appointment in the same facility during the last 24 months. The facility is determined from the Institution file if there is a pointer to it from the Hospital Location file through the pointer to the Medical Center Division from the Division field of the Hospital file.

Table 0216 - Patient Status Codes

VALUE	DESCRIPTION
NSF	Patient did not have a prior appointment at this Facility in the past 24 months; New to Parent and Sub Station
SHB	Patient did have a prior appointment at this Parent and Sub Station in the past 24 months; Registered Here Before.
OPN	Patient did not have a prior appointment at this Sub Station but was registered with Parent Station.

Sort Template

The Sort Template: [SD-PAIT PEND EXCL FUTURE], used with option SD-PAIT PENDING has been modified to give users the ability to request a certain range of records sorted by the Appointment Date.

Batch Header

The Batch Header of the HL7 acknowledgement message from station 200 was modified to request a commit acknowledgement from Vista HL7. The addition of the commit acknowledgement (CA) provides a receipt of message reception by Vista HL7 and improves internal tracking mechanisms.

```
BHS^~|\&^SD-AAC-PAIT^200^SD-SITE-PAIT^500^20040408140937^^~P~ACK~2.4~AL~NE^AE^200404-5003^5003

MSH^~|\&^SD-SITE-PAIT^500^SD-AAC-PAIT^200^^^SIU~S12^5003236-1^D^2.4^^^AL^AL^USA
SCH^1^^^^^4^NAT^^^^~20030908~~~Date Appt Created|~~~~~Desired Date|~~~200309180800~~~Appt
Date|~~~~~Checkout Date|~~~~~Cancellation Date|~~~~~Auto-rebook Date|~~~~~Resched
Date^^^^^^^^^^^^^^P
PID^1^^^"~~~USVHA&&L~NI|7171938~~~USVHA&&L~PI^^WOLFIK~EDZIU^^19301212^^^^~19107^^^^^^2081212
30P
PV1^1^O^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^500
PV2^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^SHB
AIP^1^^1934~PETERSON~JAMES~R^Provider
AIL^1^^422~~~~~CECELIA'S CLINIC^402~CARDIAC SURGERY~DSS Clinic ID^418~AMPUTATION CLINIC~DSS
Credit Stop
ZEN^1^^^^^^5
```

```

ZSP^1^N^
MSH^~|\&^SD-SITE-PAIT^500^SD-AAC-PAIT^200^^^SIU~S15^5003236-2^D^2.4^^^AL^AL^USA
SCH^1^^^^^CC^3^RS^^^^~20030829~~~Date Appt Created|~~~20030829~~~Desired
Date|~~~200308291330~~~Appt Date|~~~~~Checkout Date|~~~200308290940~~~Cancellation
Date|~~~~~Auto-rebook Date|~~~200308291030~~~Resched Date^^^^^^^^^^^^^F
PID^1^^"~~~USVHA&&L~NI|7172069~~~USVHA&&L~PI^^YORTY~OUTPATIENT^^19710604^^^^~17042^^^^^^509
060471P
PV1^1^U^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^500
PV2^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^SHB
AIP^1^^1934~PETERSON~JAMES~R^Provider
AIL^1^^614~~~~~YORTY'S CLINIC^329~MEDICAL PROCEDURE UNIT~DSS Clinic ID^^DSS
Credit Stop
ZEN^1^^^^^^1
ZSP^1^Y^60
MSH^~|\&^SD-SITE-PAIT^500^SD-AAC-PAIT^200^^^SIU~S15^5003236-3^D^2.4^^^AL^AL^USA
SCH^1^^^^^CP^3^RS^^^^~20030829~~~Date Appt Created|~~~20030829~~~Desired
Date|~~~200309010815~~~Appt Date|~~~~~Checkout Date|~~~200308290856~~~Cancellation
Date|~~~~~Auto-rebook Date|~~~200309010815~~~Resched Date^^^^^^^^^^^^^F
PID^1^^"~~~USVHA&&L~NI|7172424~~~USVHA&&L~PI^^VILELLA~JOEY~ASHLEY~III~MR^^19490
416^^^^~33354^^^^^^244990005
PV1^1^U^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^500
PV2^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^NTF
AIL^1^^312~~~~~XXXXX^102~ADMITTING/SCREENING~DSS Clinic ID^104~PULMONARY FUNCTION~DSS Credit
Stop
ZSP^1^N^
BTS^3

```

Batch Acknowledgement

The format of the Batch acknowledgement message was modified to conform to Vista HL7's proprietary formatting:

```

BHS^~|\&^SD-AAC-PAIT^200^SD-SITE-PAIT^500^20040408140937^^~P~ACK~2.4~AL~NE^AE^200404-5003^5003
MSA^AE^5003
MSA^AE^5003-1^250
MSA^AE^5003-2^200
MSA^AE^5003-3^200
BTS^3

```

Description of Error Codes:

Appointments sent via the Patient Appointment Information Transmission (PAIT) application can be rejected by the AAC, and if so they have specific error codes that may be found in the PCMM HL7 ERROR CODE file (#404.472). Rejected appointments can be listed by using the Rejected Transmissions [SD-PAIT REJECTED] option. The Rejected Transmission report should be used to review and correct patient appointment records that the AAC rejected. Rejections can occur due to incomplete dates, invalid site/facility codes (ones that do not match the site of the sender), and for other reasons. For a particular site; see sample of REJECTED TRANSMISSION LOG report below. For a list of rejection codes and their definition see table AAC001 - Error Code Set in the SD*5.3*333 Release Notes. A site should use this report for correcting their patient appointment records. Once the site has corrected the record it will be sent to the National Data Base in the next bi-monthly update run and loaded into the National Database. The correction of rejected records is the VistA site's responsibility. If the rejected

record is not corrected it is sent again by the PAIT application with the next scheduled or executed PAIT, and it may be rejected again.

PATIENT APPOINTMENT INFO LOG LIST		SEP 9, 2008	11:28	PAGE 1
PATIENT	APPT DATE			
SHORT DESCRIPTION				ERROR MESSAGE
CLINIC				

RETENTION FLAG: YES - to be sent when 'Final'				
ERROR MESSAGE: 850				
KING, FEB	APR 29, 2008	08:00		
Admit type is invalid (table SD009)				850
NEW CLINIC				

Error 100

PATIENT DFN IS NOT NUMERIC OR IS MISSING:

DFN, or internal entry number of a patient in the Patient File is missing or not a number. Most likely the result of a HL7 transmission formatting error. Requires no intervention or correction at site level the first time the error occurs. The record will be re-transmitted. If error persists initiate NOIS and/or call the National Help Desk.

Error 150

CLINIC IEN IS NOT NUMERIC OR IS MISSING:

Clinic IEN, or internal entry number of the Clinic in Hospital Location File is missing or not a number. Most likely the result of a HL7 transmission formatting error. Requires no intervention or correction at site level the first time the error occurs. The record will be re-transmitted. If error persists initiate NOIS and/or call the National Help Desk.

Error 200

BHS STATION NUMBER AND STA3N ARE NOT EQUAL:

Error 200 indicates that the Hospital Location of a particular appointment is set up with an Institution whose Station Number field doesn't match the sending facility number. The Institution is identified from the Medical Center Division file (# 40.8) pointed to by the Division field (# 3.5) of the Hospital Location file (#44). The first three digits of the station number have to match the sending VistA facility number. The site has to find if the Station Number in the Institution is incorrect or another Institution has to be set up with the Medical Center Division of the Hospital file. If the Institution field of the Medical Center Division file is not null it is treated as a designated location of that appointment. The PAIT retrieves the Institution and its Station

Number, following the Division field pointing to the Medical Center Division file, and its Institution File Pointer field (# .07). IRM should direct this issue to whomever is responsible for set-up of the Hospital Location file. If the issue cannot be solved locally a Remedy ticket has to be initiated and/or the National Help Desk notified.

Error 250

INVALID OR MISSING BHS STATION NUMBER:

HL7 site parameters are incorrect. Initiate NOIS and/or call the National Help Desk.

Error 300

INVALID OR MISSING STA3N:

Error similar to 250. It indicates that the Station Number field (# 99) identified from the Institution is null or its first three characters do not match the facility 3 digits number. Allow the record to be re-transmitted. If error persists initiate NOIS and/or call the National Help Desk.

Error 350

HL7 DATE IS NOT IN PROPER FORMAT OR IS MISSING:

Error 350 is mostly caused by too old desired date of appointment or bogus date of appointment itself, filed in VistA sub file 1900 of the Patient File. IRM has to address this issue consulting the Scheduling team. If no evidence can be found initiate NOIS and/or call the National Help Desk.

Example:

Error 350 would have to be evaluated by a person having programming access and authority to repair data. Please note the following examples:

```
(1) DFN 105723 error for 12/1/2004      <= CORRECTED

^DPT(105723,"S",3041201.133,0) = 5142^^^^^3^^^^^^^9^^^
3040315^^^^^0^0^0

^DPT(105723,"S",3041201.133,1) = 1200104^1    <= incorrect date
^DPT(105723,"S",3041201.133,1) = 3041201^1    <= corrected

(2) DFN 41221 error 10/11/2004

^DPT(41221,"S",3041011.1018,0) = 1072^C^^^^^3^^^^^34131
^^3031014.0845^11^9^^3413
1^3031014^^^^^0^0^0
^DPT(41221,"S",3041011.1018,1) = 3041011^1    <= appears correct
^DPT(41221,"S",3041011.1018,"R") = error
      from the Hospital Location file (#44)
```

```
^SC(1072,"S",3041011.1018,0) = 3041011.1018
^SC(1072,"S",3041011.1018,1,0) = ^44.003PA^^
```

You may have to look into a related appointment that was made on the original appointment's cancellation date, please see below:

```
Global ^DPT(41221,"S",1011103.1018
^DPT(41221,"S",1011103.1018,0) = 1072^^^^^^3^^^^^^9^^^3031014
^^^^^0^^0
^DPT(41221,"S",1011103.1018,1) = 1011103^1
```

Patient DFN 41221 has appt. date 11/03/1801 - not correct.

(3) DFN 85462 error 12/2/2003 <= CORRECTED

```
^DPT(85462,"S",3031202.13,0) = 1048^^^^^Y^3^^^^^^3031202
^^^9^^^3030915^15323851^^^^0^O^0
^DPT(85462,"S",3031202.13,1) = 1200203^0 <= incorrect date
```

```
^DPT(85462,"S",3031202.13,1) = 3031202^0 <= corrected
```

```
^DPT(5385215543,"S",1120303.13,0) = 4532^C^^^^^3^^^^^40347
^^3031105.1110^11^9^^40347^3031105^^^^^0^^0
^DPT(5385215543,"S",1120303.13,1) = 3031112^1
^DPT(5385215543,"S",1120303.13,"R") = error
    from File #44
^SC(4532,"S",1120303.13,0) = 1120303.13
^SC(4532,"S",1120303.13,1,0) = ^44.003PA^^
```

(4) DFN 42092 error 12/22/2003 CORRECTED

```
^DPT(42092,"S",3031222.14,0) = 5175^C^^^^^3^^^^^38323
^^3031124.1512^11^9^^38323^3031124^^^^^0^O^0
^DPT(42092,"S",3031222.14,1) = 1201203^1 <= incorrect date
^DPT(42092,"S",3031222.14,"R") = WRONG DATE
```

```
^DPT(42092,"S",3031222.14,1) = 3031222^1 <= corrected
```

Error 400

DOB IS MISSING OR INVALID:

Site staff should examine demographics of Patient for an invalid or missing date of birth and correct.

Error 450

CREATE DATE OR APPT DATE IS MISSING:

Each generated appointment must have the Creation Date. Site should verify an entry in 409.6 file checking the DATE APPT MADE field. If that field exists, allow the record to be re-transmitted. If error persists initiate NOIS and/or call the National Help Desk.

Error 500**CREATION DATE IS BEFORE SEPTEMBER 1, 2002**

PAIT evaluates appointments based on the Creation Date before Sep 1st 2002. Site should verify an entry in 409.6 file checking the DATE APPT MADE field. If its value shows a date before Sep 1st 2002 initiate NOIS and/or call the National Help Desk, otherwise allow the record to be retransmitted and if the error persists initiate NOIS or/and call the National Help Desk.

Error 600**RESCHEDULED DATE AND APPT TYPE ARE NOT IN AGREEMENT**

Please refer to description of Appointment Type: RS – Rescheduled in chapter 4.0 Appointment Selection Logic of SD*5.3*333 Release Notes. If the Rescheduled Date was identified the Appointment Type must be ‘RS’. No site intervention is required, initiate NOIS and/or call the National Help Desk.

Error 650**CHECK OUT DATE AND EVENT REASON ARE NOT IN AGREEMENT**

The Event Reason: ‘CO’ or ‘COE’ require the Check Out Date to be included with a transmitted appointment. No site intervention is required, initiate NOIS and/or call the National Help Desk.

Error 700**CANCELLATION DATE AND EVENT REASON ARE NOT IN AGREEMENT**

The Cancellation Date requires the Event Reason to be either ‘CC’, ‘CP’, ‘NS’ or ‘CT’. Please refer to SIU Event Mapping Table in chapter 4.0 Appointment Selection Logic of SD*5.3*333 Release Notes. Appointment Type ‘CT’ may be also sent without the Cancellation Date if a new appointment that overrode the original one is still ‘pending’. Initiate NOIS and/or call the National Help Desk if no solution is evident.

Error 750**EVENT REASON AND FILLER STATUS ARE NOT IN AGREEMENT**

Review SIU Event Mapping Table in chapter 4.0 Appointment Selection Logic of SD*5.3*333 Release Notes to see the indicated relation. . Initiate NOIS and/or call the National Help Desk if no solution is evident.

Error 800**FILLER STATUS IS MISSING OR IS INVALID**

Each appointment record must have the Filler Status that corresponds to either 'pending' or 'final' value. Initiate NOIS and/or call the National Help Desk.

Error 850**ADMIT TYPE IS INVALID (table SD009)**

Patch SD*5.3*446 was released with a new sequence - Admission Type, see below, to be accepted in Austin.

PV1 - Patient Visit Segment

SEQ	LEN	DT	TBL#	ELEMENT NAME	VISTA DESCRIPTION
4	4	ID	0007	Admission Type (Purpose of Visit)	Refer to Table SD009

For a list of valid types see table SD009 - Purpose of Visit & Appointment Type in the SD*5.3*333 Release Notes.

Austin set up a new rejection code 850 - 'Admit type is invalid (table SD009)' on their site that corresponds to the code in the PCMM HL7 ERROR CODE file (#404.472).

```
IF ADMIT_TYPE NOT IN ('0101','0102','0103','0104','0105','0106',
    '0107','0108','0109','0111','0201','0202','0203','0204','0205',
    '0206','0207','0208','0209','0211','0301','0302','0303','0304',
    '0305','0306','0307','0308','0309','0311','0401','0402','0403',
    '0404','0405','0406','0407','0408',
    '0409','0411','')
THEN ERR_CODE = '850';
```

The report from the Rejected Transmissions [SD-PAIT REJECTED] option will list any entry with rejection code '850'. Like the other errors on that report, it needs to be investigated and the appointment retransmitted (in this case, the valid Purpose of Visit and Appointment Type need to be determined). Sites must not create their own local appointment types because ones not on the table will be rejected.

Error "R"

WHOLE BATCH REJECTED:

The whole batch rejection from the AAC has not been implemented at this time and will be future enhancement but a manual rejection may be implemented if needed. No action at all has to take place because there was a problem with accepting the whole batch. The batch will be retransmitted, no action is needed.

Mail Message

The message generated at the end of generated appointment batches in a Vista facility, and it will contain additional information regarding the Started and the Last Scanned Date:

Subj: 656 - PAIT BACKGROUND JOB [#5277039] 04/22/04@16:06 13 lines
From: POSTMASTER In 'IN' basket. Page 1 *New*

The PAIT job has completed - TASK #: 8949063 Log #: 2 on 4/22/04@16:05

Started: 4/22/04

Last Scanned: 4/21/04

Pending appointments: 33411

Final appointments: 63586

Total appointments: 96997 Number of batches: 20

Fac	Log	Bch	Appt #	Date finished	IP Address	Gen	Sent	Com	R	Com	P
-----	-----	-----	--------	---------------	------------	-----	------	-----	---	-----	---

656	2	20	96997	4/22/04@16:05	10.104.10.89	379	378	378	378		
Inactive											

WARNING: 1 out of 20 batches have to be still transmitted. This message might be generated when HL7 transmission is still in process.

PAIT Trouble shooting

After successful completion of the bi-monthly PAIT transmission, members of the SDPAIT mail group should receive a PAIT BACKGROUND JOB MailMan message confirming success. It is the site's responsibility to initiate a NOIS if this message is not received after the scheduled task finishes or if an error is found in the error log. The site should first check the error log, looking at the time when the PAIT task terminated, and call the **REDACTED**.

All completion messages are also sent to the Forum server where HSD&D and EVS can verify that the reported transmission has finished. If an error or problem occurs, IRM should not start the next PAIT task until HSD&D or EVS staff review the problem and take or advise corrective action.