RADIOLOGY / NUCLEAR MEDICINE RELEASE NOTES

Patch RA*5.0*81

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Department of Veterans Affairs
Health Systems Design & Development
Provider Systems

Release Notes: Patch RA*5*81

This patch contains three minor enhancements to the Radiology/Nuclear Medicine application:

1. Processing rules for HL7 messages containing multiple OBR segments have been modified to better handle printsets and addendums.

2. Broadcasting rules for HL7 ORU messages have been modified.

3. A new file has been added: Rad/Nuc Med HL7 Application Exception (File #79.7).

See the FORUM Patch Description for installation instructions and full background information.

Enhancement #1:

The Radiology 5.0 application has established business rules for sharing an exam report between multiple cases, and for registering multiple cases at the same exam date/time:

- Cases from different orders should have their own separate reports (single orders)

- Cases from a parent procedure order should share the same report (printset)

- Cases from a parent procedure cannot be registered at the same time with cases from other orders

- Cases from more than one parent procedure cannot be registered at the same time

These business rules are not always followed by radiology departments when using voice recognition (VR) dictation systems.

Some VR systems may allow the user to group two or more cases from separate orders and dictate one report for these cases (sometimes referred to as "printset on the fly"), even though these cases were not defined to share the same report. The VR system sends this single dictated report as separate OBR segments within one HL7 message (one OBR segment for each case) to the VistA Radiology application. In the past, Radiology only accepted the first of this group of OBR segments and ignored the remaining OBR segments without sending back reject HL7 messages to notify the sending VR system that some of their OBR segments were not accepted.

This patch will modify the Radiology application's processing of an incoming HL7 message with multiple OBR segments from VR, to account for this deviation from business rules.

Parent Procedures and Printsets

- If VR sends an HL7 message with multiple OBR segments for one dictated report based upon cases from separate orders, the Radiology application will make a separate record in the RAD/NUC MED REPORTS file (#74) for each case. The report text and impression will be identical in these separate records in file #74.

- If VR sends an HL7 message with multiple OBR segments for one dictated report based upon cases from separate orders AND a parent procedure (printset), the Radiology application will make a separate record in the RAD/NUC MED REPORTS file (#74) for

each of the cases from separate orders, but only one report record in file #74 for all the cases within the parent procedure (printset). The report text and impression will be identical in these separate records in file #74.

- If VR sends an HL7 message with multiple OBR segments for one dictated report based upon cases from two or more parent procedures, the Radiology application will make a separate record in the RAD/NUC MED REPORTS file (#74) for each printset under the parent procedure, but not for each case within those printsets. The report text and impression will be identical in these separate records in file #74.

Amended Reports and Addendums

- If VR sends an HL7 message with multiple OBR segments for the same addendum based upon cases from separate orders, the Radiology application will put the addendum into each of the existing report records for each case that is expected to have a separate report.

- If VR sends an HL7 message with multiple OBR segments for the same addendum based upon cases from separate orders and a parent procedure, the Radiology application will put the addendum into each of the existing report records for the cases that are expected to have separate reports, and the same addendum into the shared report record for the cases that are expected to share a report (those in a printset under a parent procedure).

- If VR sends an addendum that is identical to the existing verified report in the VistA database, the Radiology application will reject this message.

Enhancement #2:

When a HL7 ORU report message is received by the Radiology application, the Radiology application files the report and broadcasts out the HL7 report message to all known subscribers. This allows all subscribers (including the original VR sender) to be updated with the same report. This patch allows the original sender to decide whether or not to prevent the Radiology application from broadcasting the HL7 report message back to them.

Enhancement #3:

A new file has been created to hold parameters related to the application exceptions generated while processing Radiology HL7 messages: #79.7 – Rad/Nuc Med Application Exception File. See the Radiology/Nuclear Medicine 5.0 Technical Manual for the detailed file description and security settings.