

## The use of telephone reminder calls improves compliance with INR testing

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The AMS has a number of ongoing strategies to improve compliance with INR testing including a tiered system of DNA (did not attend) calls and letters reminding patients when they are late for a scheduled INR test.

Historically, all reminders were sent to patients by mail and in 2011 Televox reminder calls were implemented. There were a number of reasons that automated reminder phone calls were brought in to replace mail and these included:

- Response rate is better with phone reminders
- Cost savings (paper, postage, labor)
- More timely delivery of reminder notices
- Friendly notification despite geographical location or travel
- People like to listen to messages rather than open mail

### DNA Procedures

The tiered DNA system involves the administrative team, office manager and nurses depending on the DNA level as outlined below:

| DNA lists managed by administrative team   | Nurses involved at DNA 3, 4 and final discharge   |
|--|---|
| <ul style="list-style-type: none"> <li>• DNA 1 call on second business day after scheduled INR date</li> <li>• Bulk reschedule to one week from previous date (2 weeks if the notice is mailed)</li> <li>• Daily Televox report by office manager</li> </ul> | <ul style="list-style-type: none"> <li>• Reminders created on patient record for RN to follow up                             <ul style="list-style-type: none"> <li>○ Investigate if INR available</li> <li>○ Call patient</li> <li>○ Inform physician and request support, danger of potential discharge</li> <li>○ Document status in DAWN AC and hospital record</li> <li>○ RN makes final decision for discharge</li> </ul> </li> </ul> |

When the reminder list is received at Televox, reminder calls are transmitted during calling hours that the AMS choose. If the phone call does not go through to a patient, answer machine or voicemail, Televox continues to try and reach the patient and the results of the Televox calls can be reviewed the day after the reminder list was sent. Daily reports are sent for follow-up when needed and show whether a patient or an answer machine picked up the call, if it was aborted, and provides lists of any invalid numbers.

The screenshot displays the DAWN AC software interface. At the top left, there is a small window titled "DAWN AC 7.9" showing a patient's profile. The main window is titled "List view" and shows a search filter: "Filter With: 1st Notice (Televox, Email) - 7 Days" and "Date On or Before: 09/23/2015". Below the filter, there are several dropdown menus for refining the search, including "With", "All risk classes", "On or Before", "All types", and "Reschedule" days to advance. A "List view" pop-up window is also visible, showing a list of patients with columns for "List view", "Late Notice - Yesterday", "Call List", "Scheduled Muets - TODAY", "1st Notice (Other) - 14 Days", "First Notice (Advance 14-Days)", "Second Notice (Advance 7-Days)", "Third Notice (Advance 7-Days)", "Final Notice (Advance 7-Days)", "Pts Rescheduled Without Appt", "More than 3 days late", and "Late and Due to Stop in next 13 days".

Two orange callout boxes provide additional context:
 

- The top callout box states: "Lists of patients meeting criteria for DNA 1 and DNA 2 are queried each weekday."
- The bottom callout box states: "The rescheduling of patients calls up the 'outbound Televox DNA House Call' procedure and documents the message on the Letters tab"

In the bottom right corner of the screenshot, a "Letters" tab is open, showing a list of messages. One message is highlighted with a red circle and labeled "Televox Send DNA messages". Other messages in the list include "Outbound-Interface-Addition (Includes INR)", "Non Attendance Phone 1", "Standing Order", and "UNMONITORED MAILBOX DO NOT REPLY".

The DNA reschedule event and non-attendance count on the patient record determines the choice of routines for creating outbound messages and text file messages are created and exported from DAWN AC to the individual DNA 1 and DNA 2 folders on the server.

A batch file merges all DNA 1 and DNA 2 messages into a single file, the Partners file transfer protocol (FTP) process outputs the files to Televox and an enterprise transaction manager schedules and monitors the entire process. Televox retrieves the files from their secure FTP site on a daily basis and makes the automated call at a designated time.

The Televox system used by the AMS uses a recorded human voice that sounds crisp and professional and calls are translated into 8 different languages in order to serve the AMS’s culturally diverse population. Messages are not personalized to ensure compliance with HIPAA regulations.

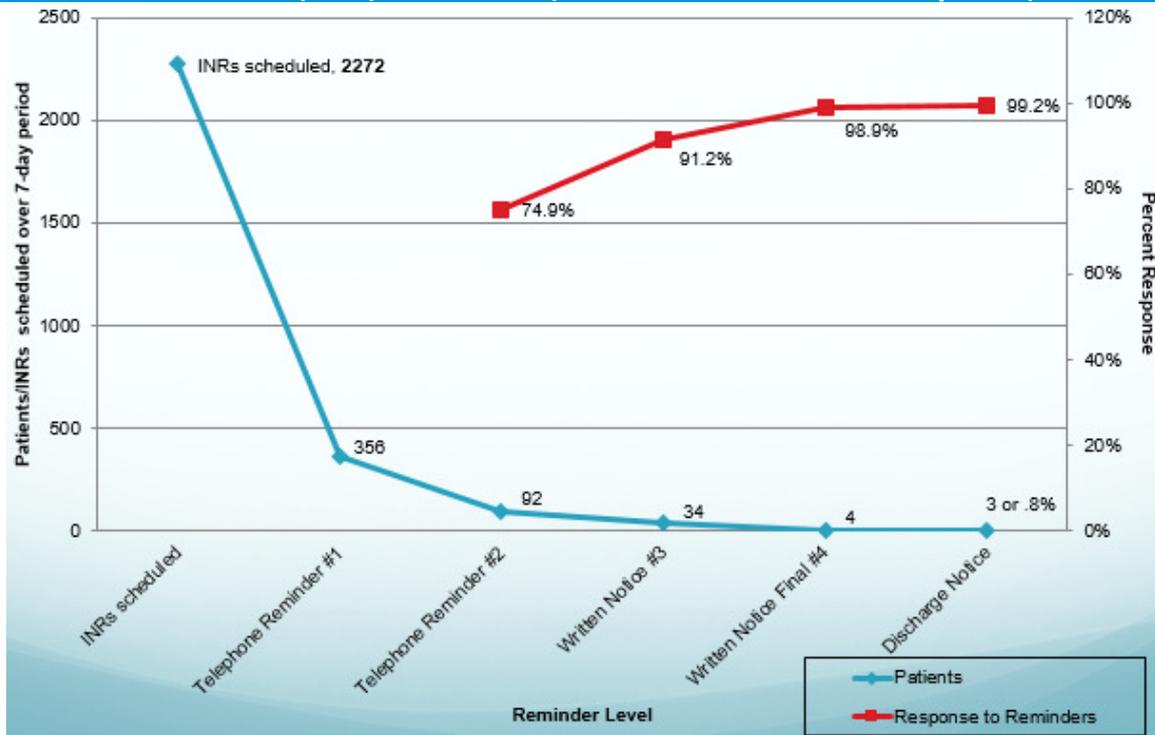
AMS nurses assist in educating patients about Televox reminder calls and during comprehensive education sessions, patients receive an explanation of the system, emphasizing safety.

In 2014 the AMS explored the impact of the Televox reminder system from two perspectives:

- Patient compliance
- Cost savings

The survey identified a patient cohort with a scheduled INR date for a one month period of time and this patient cohort was followed throughout an 8 week period through all DNA levels. Patient responses (attended for INR) to DNA 1 and 2 Televox reminders and written notices were determined during this time.

**Response to Did Not Attend (DNA) Reminders (reflects details of a 1 week period)**



Annualized Cost Reduction Post Telephone Reminders – 251 days Monday to Friday



The survey demonstrated that Televox reminders make a difference in the following ways:

- Patients respond positively to Televox reminder calls
- Phone calls are timely and prevent further progression to DNA 3 and 4 levels, therefore improving patient monitoring and safety
- Significant cost savings were demonstrated

The AMS is committed to improving patients' user experience and this advanced technology enables patients to receive DNA reminders on time and re-engage to avoid discharge from the AMS.