

11. Multilingual Interactive Voice Response System for Patient Reported Outcomes in Multiple Countries

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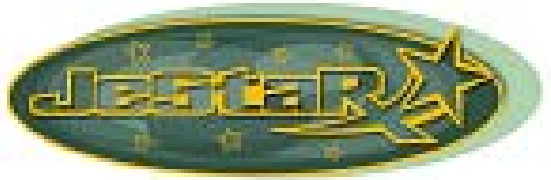
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Abstract

In 2000, the JeSTARx Group initiated a comprehensive data collection effort using our proprietary interactive Voice Response System (IVRS) for a study conducted in 6 countries and 5 languages.

JeSTARx support for the study was identified as crucial for completion and collection of patient reported outcomes. JeSTARx activities for the project included development of the protocol, data collection forms, and standard operating procedures; presentation materials for the institutional review boards, data collection, and reporting of study results. The systems took into account the diversity of the sites participating—some of the sites did not routinely participate in clinical studies. The tools developed were configured to meet the needs and policies of the individual sites participating in the study. Because the study was multi-national, and multi-lingual, the instrument was validated in 5 languages.

Conclusion: IVRS technology provides a simple, HIPAA compliant manner to rapidly capture data across multiple sites. The interactive capabilities have wide-spread application across local and multi-national clinical studies.



Background

- IVRS technology:
 - Developed and integrated with existing systems,
 - Requires few interventions once running,
 - Multilingual capabilities,
 - Data stored in a common database in “Real-time”
 - Excellent for studying:
 - Large numbers of patients
 - Patient compliance and “diary data,” and
 - Patient Reported Outcomes (PROs) including Quality of Life (QOL)
 - Confidential Information¹ (compared with human interviewer), especially for treatment compliance, sex, drug use, or caregiver satisfaction.
- “Alert” professionals to red-flag responses:
 - “YES” to “Are you feeling suicidal?”
 - Sent to: Pagers, Faxes, Emails

JeSTARx Group has been developing Interactive Voice Response (IVR) systems since 1995. These systems are designed for communications:

- inbound (patients calls into the system)
- outbound (the system calls the patient) technology, and
- hybrid (both inbound and outbound utilization).

Hardware & Software

- Hardware**
- Fully redundant HP Pavilion Pentium PCs .
 - operational 24/7/365
- Software**
- Voice Operating System (VOS) by Parity Software.
 - Version 6.0

Results

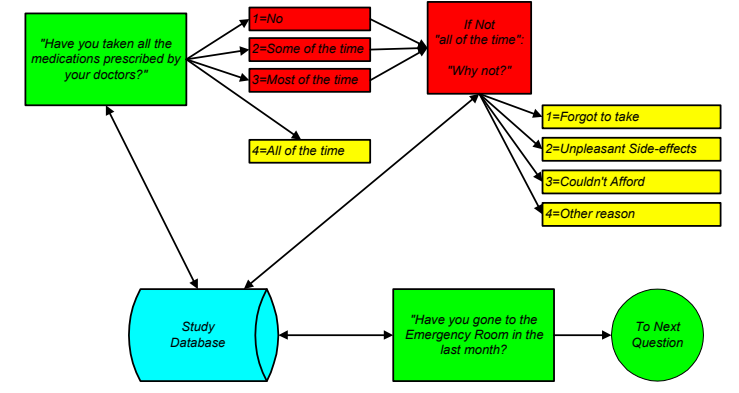
System Standard Operating Procedures

Sample Patient Instructions

Sample System Reports:

- Tracks enrollment, completion and variances by site
- Overall Study
- Site Specific

Flow-chart of the branching logic used in the (IVRS):



Key

Question for all respondents (Green) | Flagged response, and follow-up (Red) | Record Response and continue (Yellow)

Because an IVR system can not be adequately represented on a poster, please ask for a live demonstration.

Conclusions

- IVRS technology provides a simple, HIPAA compliant manner to rapidly capture data across multiple sites.
- The interactive capabilities have wide-spread application across local and multi-national clinical studies.
- System easily integrated with existing clinical studies materials

Reference

¹Corkrey R, Parkinson L. Behav Res Methods Instrum Comput. 2002 Aug;34(3):354-63.

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