# Going Digital! Experiences with Converting to Teletype (TTY) Software

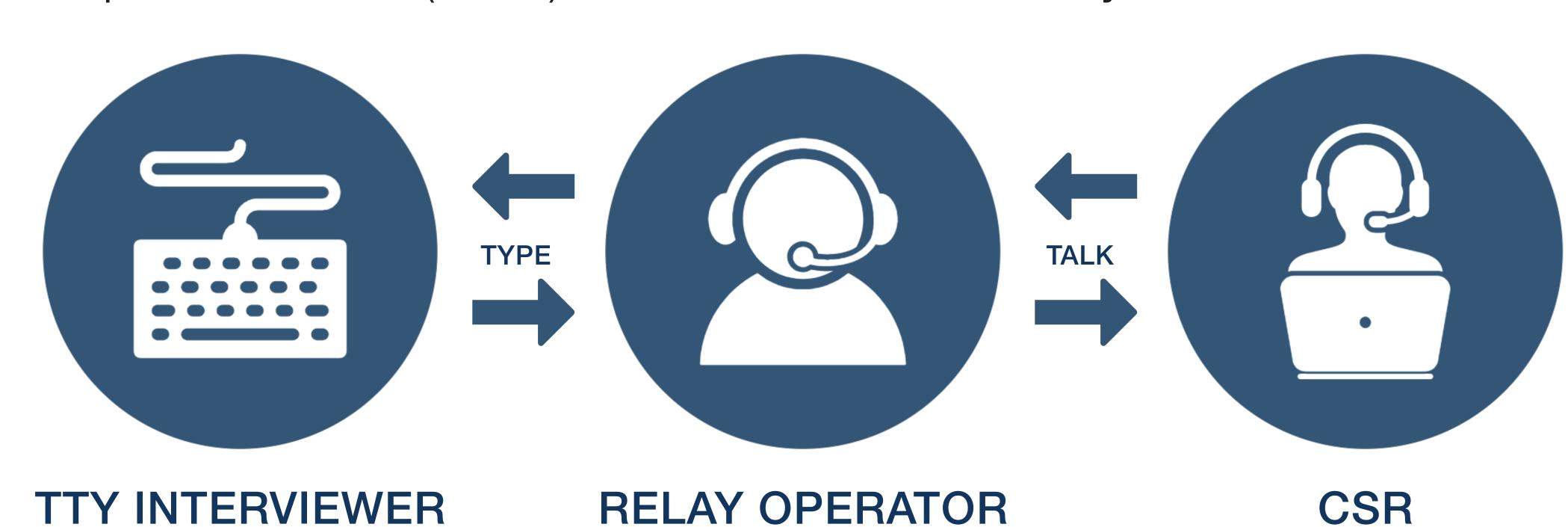
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## BACKGROUND

IMPAQ investigated and tested digital TTY software to replace the current TTY machines for calls with hearing impaired to understand the differences in terms of time, efficiency and clarity.

A typical process for connecting to a Customer Service Representative (CSR) via 711 or State Relay Services:



#### INITIATIVE

# Our initiative for upgrading IMPAQ's TTY capabilities:

- Modernize the system with current technology
- Increase efficiency in call logging and monitoring
- Eliminate process, management, and storage of TTY paper tapes
- Easier storage, management, and retrieval of TTY records
- Enhance TTY support using a digital system: Remote and on site interviewers

# Challenges to overcome:

- Can we connect to the locations with this system and stay connected,
- Does it take a similar amount of time to operate a digital system versus a TTY machine, and
- Do we have documentation for the call?

### FINDINGS

## Seamless integration in existing telephony and CATI software

- On site and remote interviewers have access to the digital TTY software
- Date and time stamps match: Digital TTY and CATI System
- Using existing telephony infrastructure: program communicates through IP and uses standard session initiation protocol (SIP).

## Successful connectivity to, and complete call record with, all available TTY services

- Save with a unique file name and path to interviewer folder
- Record of date and time of start and end of call
- Confirm phone number called
- Delineate between caller (red) and relay operator (black)

Call Start Date/Time: 03/10/2020 07:24:47 AM Call End Date/Time: 03/10/2020 07:26:57 AM

Remote Party: 9711

MD RELAY OPR 9084 MT NBR PLS GA

2678476017 ga

DIALING 267-847-6017 RING 1 '2 3 4 YOUR CALL HAS BEEN FORWARDED TO AN AUTOMATED VOICE MESSAGING SYSTEM 267 847 6017 IS NOT AVAILABLE AT THE TONE PLEASE RECORD YOUR MESSAGE WHEN YOUA RE FINISHED RECORDING YOU MAY HANG UP OR PRESS 1 FOR MORE OPTIONS (BEEP) (ANS MACH LEAVE MSG Q) GA

thank you please hang up sksk THK U BYE OPR 9084 MT SK

## Improved efficiency and quality

- Visually: CATI and TTY systems on one computer screen side by side
- Monitoring: TTY and the CATI system from one screen
- Typing: Computer keyboard is more natural then TTY keyboard
- Naming: Convention for each individual TTY tape file
- Calling: The percent of successful calls proves to be comparable between using the TTY software (91.49%) and the TTY machine (91.73%)
- Timing: Time to connect to a live person, using the TTY software compared to the TTY machine, was slightly shorter and significant (154.69 seconds versus 160.87 seconds)
- Locating TTY tape file: Identifying a TTY digital tape is much faster than searching for a paper TTY tape by hand
- Providing: TTY tape may be emailed as evidence or back up information
- Storage: Digital TTY Tapes take up much less space than boxes of TTP tapes

#### CONCLUSIONS

Upgrading from analog TTY machines to digital TTY increased efficiencies in calling, monitoring, recording, storing and identifying TTY calls. It is clear that the new system will help us in post-survey processes (i.e. records storage and management) without giving away any efficiency. Due to COVID-19, all interviewers moved remote and we were able to continue the TTY calls through the digital system, desktop TTY required staff to be on site.

