Overcoming Challenges to SBI Implementation with Technology: The Promise of Interactive Voice Response

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Funding: NIAAA R01 AA018658 (Rose); R21 AA015777 (Helzer)



IVR-Primary Care Interface



PRE-PROGRAMMED SURVEY; INTERVENTION







TAILORED FEEDBACK & ADVICE FOR PATIENT

Questions to Address

- Why IVR?
- How do you do it?
 - Developing a script
 - Implementing in primary care
- What potential does it have?

Advantages to Automation

- Saves provider time
 - Pre-visit basic education
 - MD can personalize
- Avoids barriers of live interactions
 - Provider discomfort
 - Social desirability bias
- Patient-directed treatment

Developing an IVR Script

- Starting point: NIAAA Guide
 - -IVR follows branching logic
 - -Adaptations for IVR environment
- Step 2: no diagnosis of AUD
 - -Ethics: automated diagnosis?
 - -Practical: minimize participant burden

Modified Step 2: Screen for AUD

- Hazardous use
- Larger/longer than intended
- Past history withdrawal

Step 3: Advise & Assist

Interested in Change?

Not

Cut Down strategies

Quit strategies

Goal setting; planning for urges & risky situations; avoidance of triggers; self-monitoring; etc.
(Several voices)

Description of treatment and self help models for abstinence; info on local support, Tx, and other resources

Implementation Principles 1: Avoid Interference

- Screen & intervene before visit
- Stay out of the way
- Capitalize on existing technology
 - EMR
 - Networked printers

Implementation Principles 2: Promote Communication

- Screen & intervene before visit
- Suggest topics to discuss with PCP
- Send screen results to chart
- Walk a fine line!

Implementation Principles 3: Maximize Exposure

- Passive Consent: Opt-out letter
 - Default is to include in participant pool
 - Requires active opt-out instead of active opt-in
 - Increases representativeness

Potential Implications

- Cost: implementation is low-cost after development
- Validity: screening is consistently performed
- Public Health: greater implementation potential than PCP SBI?

Thank You

References

- 1. Rose G.L., et al. (2010). Utility of prompting physicians for brief alcohol intervention.

 Substance Use & Misuse, 45 936-950.
- 2. Rose, G.L., et al. (2010). Interactive voice response technology can deliver alcohol screening and brief intervention in primary care. JGIM, 25 340-344.
- 3. Rose, G.L., et al. (2010). Automated screening for at-risk drinking in a primary care office using IVR. JSAD, 71 734-738.

Feasibility Results

- 83 (44%) screened positive
- 61 (73%) consented to IVR-BI study
- 34 (56%) consenting participants completed the IVR-BI
- Mean call duration = 3-7 Min
- 8 (24%) indicated desire to change drinking habits

Interview Results [n=30]

- Length: "about right"
- IVR-BI not necessary for me = 40%
 - 5+/4+ once a month or less
- IVR-BI increased awareness of my drinking = 80%
- IVR-BI motivated me to make a change in my drinking = 40%
- Also had provider BI = 45% (13/30)
 - 5+/4+ daily or weekly
 - IVR-BI "as useful" and "more comfortable" than PCP BI
 - Pts "as or more" honest with IVR-BI
- Trend for ↓ alcohol consumption

Conclusions from Pilot

- IVR-BI feasible in busy clinic setting
- Minimal interference with patient flow
- Patients willing to make the IVR-Screen and IVR-BI calls
- IVR-BI acceptable to patients; pts at least as comfortable with IVR-BI as PCP BI
- IVR perceived at least as useful as PCP

Bottom Line:

IVR-BI produced greater exposure to needed advice and information than would have occurred otherwise

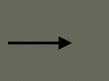
Strengths

- Minimizes disruption to workflow
- No office space or HE required
- Overcomes literacy & sight barriers
- Can prompt patient and PCP to act
- Low tech & relatively easy to adopt
- Scalable to large populations

Patient Recruitment

2 DAYS PRE-VISIT









MA call:

- •appt reminder
- •invite to IVR-Screen
- •transfer to IVR

Automated:

- •IVR-Screen
- •eligibility assessment
- •transfer to MA if eligible

MA:

- •invite to IVR-BI
- •randomization





IVR-BI

No IVR-BI