

# VICKY

## Using virtual counselors to overcome genetic literacy barriers

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# Target: Patients with Low Health Literacy



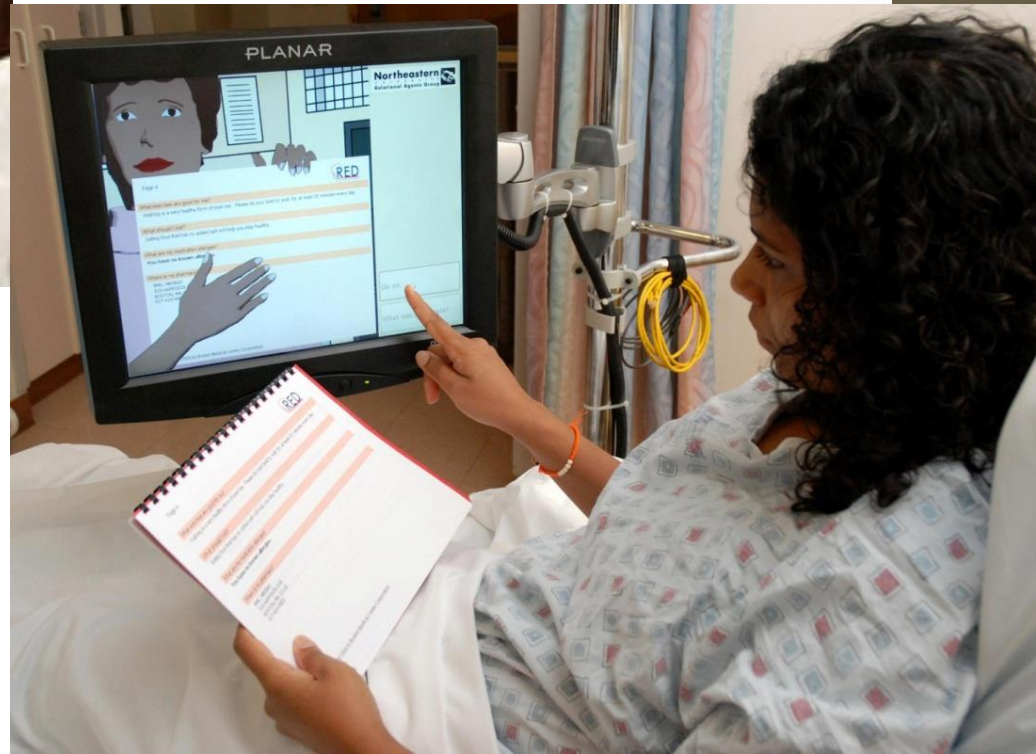
- 33-50% of adults in US have inadequate health literacy.
- These individuals struggle with health-related technology as well.

# Relational Agents



- Simulate face-to-face conversation
- Verbal and nonverbal behavior

- Significantly more acceptable to low literacy users





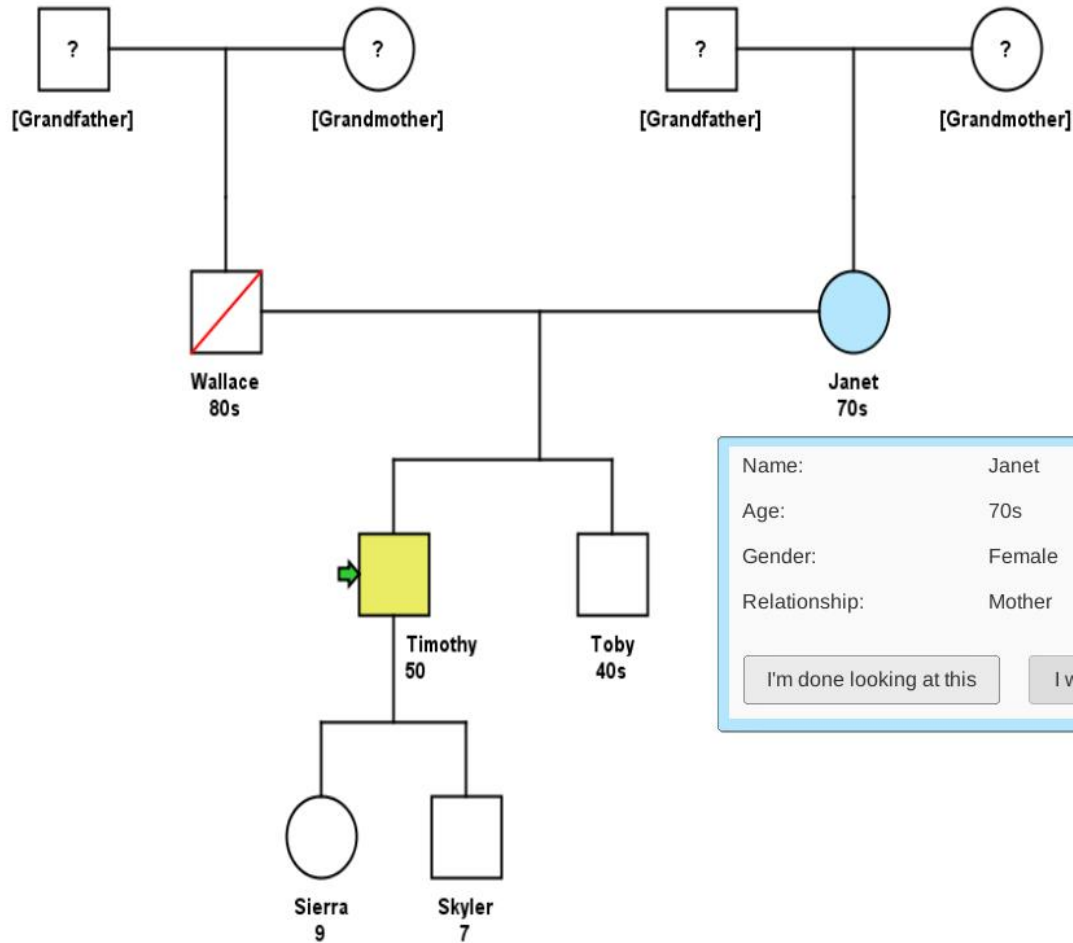
Please choose each type of cancer you have had:

- Breast
- Colon*
- Lung
- Ovarian
- Skin
- Other type of cancer

I have or have had the selected cancers.

I don't or never had cancer.

# Interactive Pedigree



- Squares are males
- Circles are females
- Those who have died have a red line

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- Target customers: Patient-facing
- Intended Use Context:
  - Home (primary, due to length of sessions & audio)
- Platform: web-based
- Unique features:
  - Designed for low literacy patients
  - Tutorials on pedigree charts
  - Counseling to motivate sharing of pedigree with providers
- HL7: FHIR export
- Provider use: any
- Clinical decision support: none (yet)
- Distribution: willing to license

# VICKY

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- Publication:
  - Wang, C., Bickmore, T., Bowen, D., Norkunas, T., Campion, M., Cabral, H., Winter, M., Paasche-Orlow, M.: Acceptability and feasibility of a virtual counselor (VICKY) to collect family health histories. *Genetics in Medicine* 17, 822–830 (2015)