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Using virtual counselors to overcome genetic literacy barriers

Timothy Bickmore, Ph.D.
College of Computer & Information Science, Northeastern University

Catharine Wang, Ph.D.
Boston University School of Public Health
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
- [x] 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

- Grandfather
- Grandmother
- Grandfather
- Grandmother
- Janet 70s
- Wallace 80s
- Timothy 50
- Toby 40s
- Sierra 9
- Skyler 7

Name: Janet
Age: 70s
Gender: Female
Relationship: Mother

☐ Squares are males
☐ Circles are females
☐ ☐ Those who have died have a red line
• 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
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• Contacts:
  • Programmatic – Catharine Wang, Boston University, clwang@bu.edu
  • Technical – Timothy Bickmore, Northeastern University, bickmore@ccs.neu.edu

• Publication: