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DEVELOPING VIRTUAL PATIENT ADVOCATE TECHNOLOGY FOR SHARED DECISION MAKING

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Hyatt Regency

(DEC) Decision Psychology and Shared Decision Making (DEC)

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Purpose: To develop an interactive decision aide using web-accessed relational agent technology, known as a virtual patient advocate (VPA), to support shared decision making and the uptake of contraception use for the prevention of unplanned pregnancy among young African American women.

Method: The VPA is a computerized, animated character designed to integrate best practices from provider-patient communication theory. The VPA emulates the face-to-face conversational behavior of an empathic clinician, including nonverbal communicative behavior such as gaze, posture, and hand gestures to deliver patient education messages tailored to individual needs, assess patient comprehension, and record progress. It also allows for sophisticated levels of interaction with the user, employee evidence-based approaches to shared decision making.

Result: A VPA was configured for delivery via internet so that users can access the system on any computer with Web access. The system is designed for episodic use over a six month period. It (1) provides information about different contraceptive options including oral contraceptive pills, IUD, condoms, abstinence and the option of deferring discussing contraceptive use; and 2) assesses women's preferences and values for 4 different attributes of contraception methods, including ease of use, side effects, efficacy in pregnancy and STD prevention and cost; (3) confirms choice implementation, and (4) reassesses the contraceptive choice at 3 months. This system delivers information in a patient-centered way employing strategies consistent with the motivational interviewing approach to behavior counseling and a shared decision making interaction tailored to the patient's self-identified preferences. The VPA also support access to peer-derived decision support through a novel story-authoring function that allows participants to write their own health-related stories and listen to stories authored by others related to their contraception use experiences. Stories are reviewed and some edited to remove identifiers or content that is not relevant or correct, before being made available to all users. This allows the content to be updated and remain culturally concordant with users' style and syntax.

Conclusion: VPAs are ideal for delivering decision support. They can deliver unbiased information about treatment options, reach a large number of patients, alleviate clinician time restraints, with high patient acceptability. Pilot testing of the VPA decision support system will begin in July 2012. [A demonstration of the decision aid will be available for the presentation]

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