

The Future of Behavioral eHealth Research: A Qualitative Study.

(498 Words)

The field of eHealth is emerging and holds promise for improving the accessibility, impact, and reach of evidence-based programs for health behavior change and chronic disease management. To assess the existing challenges and future course of the eHealth landscape, 40 interviews were conducted between May 2002 and September 2003 using a semi-structured approach. Participants were stakeholders in eHealth intervention development and research, purchasers and the private health sector, consumer groups, and practitioners. The interviews were audiotaped and transcribed, and qualitative coding and analysis was conducted using NVIVO software. Participants discussed various dimensions of eHealth, providing assessments of the quality of interventions and the credibility of demonstrated outcomes, evaluation approaches and methodologies, obstacles and opportunities for dissemination, and the ability of eHealth to address traditionally underserved populations.

Distinct themes emerged across sectors, with slight differences in emphases, but overall concordance on the following issues:

Consensus and Standardization:

Most stakeholders express a strong desire for a more coordinated, rigorous effort to define and integrate the field. Researchers, in particular, as well as purchasers, need criteria for identifying quality information, sharing and comparing results, and building upon current findings.

Evaluation Approaches:

Among researchers, developers, and those implementing eHealth applications, outcome effects are widely regarded as the “bottom line.” Demonstrating outcomes is required to establish eHealth quality and efficacy. There is currently dissatisfaction with outcome measures, in terms of their sensitivity, validity, and reliability. Quantitative, clinical measures are preferred over qualitative or self-reported measures. There is a great deal of concern over the refinement of process measures, as linking outcomes to process is important in identifying which aspects of the intervention are effective - determining whether positive outcomes result from a unique benefit conferred by the intervention itself, or by the personal determinants of users, situational effects, and other confounders will inform future application development, assessments of quality, and dissemination.

Quality, Value, and Future Potential:

There is confidence in the cost-effective potential for eHealth interventions. Once investments are made in development and evaluation, the value of eHealth lies in its ease of dissemination and ability to reach a large audience for little cost. The intersection between cost-effectiveness, efficiency, and improved clinical status generates a high degree of interest. From a public health perspective, even if applications are slightly less effective than standard (more expensive) care, the potential for population-level change is high.

Building infrastructure to support widespread dissemination is crucial and multifaceted. Participants suggest ways in which health systems might align technologies with existing workflow challenges and reimbursement incentives, ensure technical interoperability, and enhance consistency of care.

Health Disparities:

Most stakeholders contend that traditionally underserved populations will particularly benefit from eHealth applications. If access to technology is ensured, there are greater possibilities for improved access to healthcare. Stakeholders expect to overcome the challenges of language and technological literacy going forward.

While pragmatic in their appraisal of eHealth as a field in its early stages, participants were optimistic about its potential. These results provide a roadmap for guiding eHealth research in the future.