

Telemedicine: A Guide to Assessing Telecommunications in Healthcare

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TELEMEDICINE is the use of electronic information and communications technologies to provide and support health care when distance separates the participants. Telemedicine is not one technology but rather a family of technologies ranging from everyday telephone consultations to experimental remote surgery. After more than 30 years of exploration, decision-makers still lack good information comparing telemedicine to other healthcare options. In response to a request from National Library of Medicine, a committee of the Institute of Medicine (IOM), National Academy of

Sciences, developed a framework for evaluating clinical applications of telemedicine. The evaluation framework includes four components: principles, planning processes, evaluation elements, and evaluation questions. The principles call for evaluation to be:

- incorporated from the start of project planning;
- viewed as a cumulative process of building knowledge not as an isolated effort;
- organized around comparisons with the benefits and costs of relevant health care alternatives; and
- aimed at identifying practical, affordable, and sustainable applications.

Related to the last principle, the framework emphasizes the need for telemedicine projects to have a business plan. The evaluation questions focus on telemedicine's effects on the quality, accessibility, cost, and acceptability of healthcare.

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