**Problem Statement**

Specific Problem: Medical leaders cannot assure safe, quality health information online.

- Internet health-assessment tools that are not validated by a medical professional may pose a risk to uninformed consumers who use this information to self-diagnose and self-medicate

**Purpose & Study**

The purpose of this qualitative research study using the Delphi design is to:

- Explore expert opinion about ramifications of Internet health assessment tools
- Understand how to ensure the health needs and optimal outcomes of consumers
- Explore recommendations for best practices in incorporating Internet health assessment tools into quality health care

**Background**

More than 160 million Americans access the Internet for health information.

- 4 out of 5 health information seekers discovered information online to help diagnose and treat a condition.
- 41% of respondents claimed that the Internet did their health care decisions, including whether to go to a doctor, treat an illness, or question their doctor.
- Only 1 out of every 40 self-diagnoses resulted in a patient making an office visit for a medical consultation.

**Study Significance**

Little is known about the effects of Internet self-assessment tools on consumer health behaviors and health outcomes.

The study can be used to:

- Develop innovative health care models
- Provide a health-care provider view of benefits and risks of Internet-based health assessment tools on consumer health
- Help medical leaders incorporate the Internet into quality health management shared between the doctor and patient
- Serve as the groundwork for future research
- Healthcare leaders need to understand the impact of Internet health content on consumer health behaviors and outcomes (Potential health risks, dangers, and outcomes that such utilization can cause)

**Study Findings**

Panelists shared many common values and beliefs regarding how the Internet has changed the patient/physician relationship:

- The Internet is a key source for:
  - The dissemination of health care information
  - Patient empowerment and support
- The experts unanimously expressed the need for greater physician involvement and regulatory oversight

**Common Themes**

How has the Internet changed healthcare?

- Information Access → Information Accuracy
- How can self-help and health information websites influence consumer health behaviors and health outcomes?
  - Consumer Engagement → Empowerment → Patient/Physician Relationship → Social Support
- In your experience, what have been the benefits of such tools?
  - The internet can negatively impact consumer health behaviors and outcomes
- Empowerment → Patient/Physician Relationship → Social Support
- Internet tools and websites be incorporated into healthcare practices?
  - Internet enables like-minded patients to connect with each other for social support
- Health Oversight → Patient/Physician Relationship → Social Support
- Health-related internet tools impact consumer health behaviors
  - It is critical for health professionals to develop informed health consumers who know where to look for credible health information
- Health care professionals must play an active role in Internet health and in guiding patients to reliable Internet health information
- Current reimbursement system makes online patient/physician interaction nothing more than an uncompensated burden

**Key Terms**

Study definition of Internet health assessment tools:

- Digital content that enables consumers to self-diagnose and self-treat their medical conditions

Examples of Internet health assessment tools:

- Symptom Checkers: Websites that prompt users to enter symptoms, yielding possible conditions or sites that describe symptoms associated with medical conditions
- Social Media: Patient blogs and online support groups that promote discussion of symptoms and conditions without participation of medical personnel

**Identified Benefits**

- Internet has changed healthcare - Places vast amounts of health information and resources literally at the fingertips of physicians, patients, care managers, health providers and other individuals engaged in health care
- Internet health tools can benefit the expansion of consumer awareness and participatory medicine
- Internet enables like-minded patients to connect with each other for social support
- Internet empowers patients to communicate with their health care providers about a condition

**Identified Risks**

General panelist consensus 92%

- Suggested that because advice found on the Internet is often based solely on information they have obtained on the Internet can be at risk by self-diagnosing, self-treating, or delaying care

Expert panelists agree that...

- Consumers making health decisions based solely on information they have obtained on the Internet can be at risk by self-diagnosing, self-treating, or delaying care

**Study Conclusions**

Dr. Dorfman is a Doctor of Health Administration, an accomplished media innovation, marketing and sales executive, a published author and an industry speaker with strong connections and ties to both the healthcare and life sciences industries.

**Recommendations**

- More active role of health care professionals in Internet health
  - Benefits include instant empowerment and access to health information previously provided only by medical professionals
  - Implications of negative health outcomes have been uncovered
  - Internet use for health information, as exists today, can have more negative than positive effects

**Future Research**

- Long-term quantitative analyses
  - Examining the impact of health-related Internet tools on consumer health behaviors, health outcomes, and cost consequences
- Documenting potential risks and subsequent cost to care
- Future research examining consumer and provider perspectives on use of Internet health assessment tools on consumer health behaviors and outcomes