



Memory When You Need It Most: Review of Personalized Video Recording of Doctor-Patient Consultations at a Neurosurgical Institution

Randall W. Porter MD; Andrew J. Meeusen MA LIS; Michele Grigaitis DNP, FNP-BC
Barrow Neurological Institute, Phoenix, Arizona



Introduction

Patients visiting a medical provider often have difficulty remembering everything the provider told them during their visit. Over half of all information presented is forgotten within hours or days (Ley, 1965-1979; Kessels, 2003; Makaryus, 2005). Recall is also affected by anxiety, such as during discussion of surgery or a diagnosis of cancer (Shapiro, 1992; North, 1992). Other factors which affect recall include age (Bankoff, 2012), health literacy level (AMA, 2007), and medical or mental illness (Hogbin, 1989). Even in healthy volunteers, recall is shown to be very low for information (Fortun, 2008). Seeking better ways to remember, many patients take notes, bring family members to appointments, or use audio recording devices such as smartphones to capture information.



The goal of this study was to review the experience of physicians at a neurosurgical institution using a personalized video recording system to improve provider-patient communication, providing a new tool to help patients retain the medical information presented to them.



Methods

Between August 2012 and August 2014, the authors collected patient opinions about their experiences with their videos and their ability to remember the information discussed during their visit using a SurveyMonkey web survey.

Personalized video recordings were given to 1,276 patients of six neurosurgeons. Patients were given the opportunity to have their consultation recorded and uploaded to a secure website, and given access to the video to watch and listen to again at home. 717 of these patients were sent an electronic survey to ask about their impression of the service. 287 responses were collected (40%). 91% of respondents watched their video at least once, and an average of 2.5 times, and 67% shared their video with another person. 47% of respondents felt more at ease, 34% less anxious, and 70% could remember more of their provider's advice and instructions after watching their video.

Overall, 90% of patients responded that the video "was helpful" to them and over 40 unsolicited comments were made about the fact they patients wished other providers were using video in their practices.

Conclusions

Patients who cannot or do not remember their provider's instructions are at risk of not adhering to those instructions, which can greatly impact quality of care and have adverse consequences. To date, many interventions to improve patient recall of medical advice and instructions have been attempted, but despite these, patient recall remains low.

The effect of poor patient recall is that patients continue to misremember provider instructions about care, medications, or informed consent for procedures. In extreme cases, this can lead to patients experiencing problems requiring further medical intervention or readmission to the hospital (in surgical cases) or potentially even "he-said-she-said" legal issues.



The use of video recordings of provider-patient consultations appears to improve patients' recall of medical information. Personalized video recording of provider-patient interactions provides the ability to record more than just words. Other benefits of personalized video recording include that recordings show the patient's actual experience with the provider as opposed to generic material, and that video provides a complete record of the visit in the provider's own words instead of medical jargon.