Response to a Mobile Health Decision-Support System for Screening and Management of Tobacco Use

Kenrick Cato, RN, PhD, Sookyung Hyun, RN, PhD, and Suzanne Bakken, RN, PhD

Smoking is the most preventable cause of death in the United States (Jamal, Dube, Malaracher, Shaw, & Engstrom, 2012). About 443,000 premature deaths are attributed to cigarette smoke annually (Jamal et al., 2012). African Americans and Hispanics die from smoking-related cancers at much higher rates than Caucasians (Haiman et al., 2006). In addition, African Americans are diagnosed at later stages and die at higher rates from smoking-related cancers than their Caucasian counterparts (Haiman et al., 2006).

Consistently screening for and treating tobacco use and dependence is crucial to reducing tobacco use and dependence (Fiore et al., 2008). More than 50% of smokers have contact with a healthcare provider annually, providing important opportunities for counseling and treatment (Jamal et al., 2012). The 2008 update to the U.S. Public Health Service (PHS) Clinical Practice Guideline: Treating Tobacco Use and Dependence recommended that clinicians and healthcare delivery systems consistently identify and document tobacco use status and treat every tobacco user seen in a healthcare setting using the 5 A’s model: (1) Ask—identify tobacco users at every visit, (2) Advise—strongly suggest that tobacco users quit, (3) Assess—determine willingness to attempt quitting, (4) Assist—aid in quitting by providing counseling and medication, and (5) Arrange—make sure patient follow-up occurs (Fiore et al., 2008). The PHS guideline also recommended individual, group, and telephone counseling, as well as provision of first-line medications approved by the U.S. Food and Drug Administration as methods for increasing successful cessation attempts (Fiore et al., 2008). Despite the PHS recommendations, clinicians and healthcare systems often do not screen for or treat tobacco use consistently and effectively (Doolan & Froelicher, 2006; Jamal et al., 2012; Schnoll, Rukstalis, Wileyto, & Shields, 2006).

Numerous studies reported that computer-based approaches may assist evidence-based practice at the point of care (Bakken et al., 2008; Lobach et al., 2007; Wells et al., 2008). In particular, computer-based systems have influenced healthcare provider adherence to clinical guidelines: Treating Tobacco Use and Dependence recommendations, clinicians and healthcare systems consistently identify and document tobacco use status and treat every tobacco user seen in a healthcare setting using the 5 A’s model: (1) Ask—identify tobacco users at every visit, (2) Advise—strongly suggest that tobacco users quit, (3) Assess—determine willingness to attempt quitting, (4) Assist—aid in quitting by providing counseling and medication, and (5) Arrange—make sure patient follow-up occurs (Fiore et al., 2008). The PHS guideline also recommended individual, group, and telephone counseling, as well as provision of first-line medications approved by the U.S. Food and Drug Administration as methods for increasing successful cessation attempts (Fiore et al., 2008). Despite the PHS recommendations, clinicians and healthcare systems often do not screen for or treat tobacco use consistently and effectively (Doolan & Froelicher, 2006; Jamal et al., 2012; Schnoll, Rukstalis, Wileyto, & Shields, 2006).

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