

APPLYING AN EXPANDED SET OF COGNITIVE DESIGN PRINCIPLES TO FORMATTING THE NKF KIDNEY EARLY EVALUATION PROGRAM LONGITUDINAL SURVEY (KEEP-LS)

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The Kidney Early Evaluation Program (KEEP) is a targeted, community-based screening of populations at greatest risk for chronic kidney disease (CKD), those with high rates of diabetes, hypertension, and a high proportion of racial/ethnic minorities. The KEEP longitudinal study will adopt survey methods similar to those used in KEEP to gather follow-up (F/U) data to measure CKD-related health status and gauge program effectiveness for repeated KEEP participants with evidence of moderate to severe kidney function deficiency. KEEP has defined objectives to enhance F/U survey response rates and target vulnerable populations who bear the highest CKD risk factor burdens.

The KEEP F/U Form was assessed for adherence to six cognitive design principles (simplicity, consistency, organization, natural order, clarity, attractiveness) considered to summate the techniques guiding good survey development, and for the additional cognitive design principles readability and variation of readability across survey items.

The form was found to include violations of each cognitive design principle and readability principle, possibly contributing to item non-response and low follow-up rates in KEEP. It was revised according to empirically substantiated formatting techniques guided by the principles, and found during qualitative assessment to be more user-friendly, simpler, better organized, more attractive, and easier to read.

To ensure ease of use by populations with limited literacy skills, poor health literacy, and limited survey literacy, survey researchers must apply cognitive design principles to survey development to improve participation and response rates.