

Abstract Title: Evaluation of an adapted version of the Patient Assessment of Chronic Illness Care (PACIC) and 5A's survey for use in dietetic practice: The Assessment of Registered Dietitian Care Survey (ARCS)
Fielding A¹, Taylor LM², Moriartey S³, Stadnyk J⁴
¹⁻⁴ Alberta Health Services, Alberta [R]

Introduction: Nutrition is a modifiable risk factor in the management of many chronic diseases and as such, dietitians are well poised to support patient care. However, there is no existing measure of patient experience to evaluate if nutrition service provision is aligned with evidence based chronic disease care and a nutrition counselling approach (NCA).

Objectives: The purpose of this study was to adapt and evaluate the validity, reliability, usefulness and patient acceptability of the Assessment of Registered Dietitian Care Survey (ARCS) and its subscales: the patient assessment of chronic illness care (PACIC), 5As (ask, advise, agree, assist and arrange), and NCA.

Methods: Outpatient dietitians (N=20) in Alberta Health Services offered the 33 item ARCS once to each successive patient (N=1034) with a chronic disease who attended a nutrition appointment. Concurrent and construct validity were examined using Pearson correlation coefficients and principal components analysis (PCA). Reliability was examined using Pearson correlations and Cronbach's alpha. Acceptability was evaluated by survey response rate and readability. Usefulness was assessed using linear regression models and the Kruskal-Wallis test.

Results: A total of 479 survey packages were returned. The response rate was 46%, deemed acceptable compared to similar studies; and the readability score was 5.3 using the Simple Measure of Gobbledygook. Concurrent validity indices were high ($r=0.91$ and 0.94 , $p<0.001$) between PACIC and NCA subscales respectively and lower with overall patient satisfaction ($r=0.63$ and 0.65 , $p<0.001$). Construct validity revealed two factors for both PACIC and NCA subscales. There was high internal reliability for the PACIC, 5As, and NCA (Cronbach's $\alpha >0.7$) and test-retest reliability showed consistency over time ($r=0.70$, $p<0.05$). The ARCS was a useful tool as statistically significant differences in scores were identified between RDs (PACIC $chi-square=54.5$, $df=20$, $p<0.001$; 5As $chi-square=42.3$, $df=20$, $p=0.002$; NCA subscale $chi-square=51.6$, $df=20$, $p<0.001$).

Conclusions: The ARCS is an appropriate patient experience survey to help RDs understand the patients' experience of care, alignment of care with an NCA and evidenced based chronic disease care.