

Title: Assessment of residents for professionalism and communication skills in China

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Context and setting: The ACGME initiated the Outcome Project to increase the emphasis on educational outcomes in the accreditation of residency programs. We adopted a 360-degree instrument to assess the residents in three affiliated hospitals of China Medical University in 2011.

Why the idea was necessary: The ACGME endorsed the six general competencies including: professionalism, interpersonal and communication skills. However, Medical education outcomes still lack a specific evaluation standard for professionalism, interpersonal and communication skills in China.

What was done: We carried out an evaluation of 98 resident doctors from three affiliated hospitals in China. All residents had been in practice for their first year. A 360-degree evaluation questionnaires from education outcomes service group of the Arizona Medical Education Consortium was developed for use by the attending, resident self, nurse, patient, office staff and resident peer. Raters were asked to use a 5-point rating scale (1 = never, to 5 = always). The questionnaire for attending doctor, resident self, resident peer, nurse, patient and office staff consisted of 21, 21, 21, 26, 23 and 15 items, respectively, with the same 5-point rating scale. Reliability was assessed using Cronbach's alpha coefficient for each of the rater groups and for each of the scales or factors for each rater group, which enables an assessment of overall instrument stability. We used exploratory factor analysis to identify the factors and numbers of factors for each instrument, and to describe the relative variance accounted for by each factor and their coherence. These factors or scales could then be used to establish the key domains for improvement while the items within each factor would provide more precise information about behaviors. All data were analyzed using SPSS version 13.0 (SPSS Inc., Chicago, IL, USA) for Windows®.

Evaluation of results and impact: The questionnaires are internally consistent (Cronbach's alpha > 0.90). The results of principal components analysis with varimax rotation are well too. The score of attending doctor, resident self, resident peer, nurse, patient and office staff is 98.2 (SD=3.14), 98.29 (SD=2.42), 96.90 (SD=5.85), 96.53 (SD=5.80), 94.95 (SD=6.01) and 92.50 (SD=8.35). Significant differences ($P < 0.05$) were found among different evaluators.

The 360-degree instrument appears to be reliable to evaluate residents' competency in professionalism and communication skills. We have provided the information from the assessment to residents.

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