

## A Study of a 360-Degree Assessment Instrument For PACU Education and Evaluation

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### Introduction

The use of 360-degree assessment has been advocated recently as a means of gaining additional feedback on resident physician performance from sources other than attending physicians. This type of assessment employs the use of raters from a variety of disciplinary groups interacting with trainees. For anesthesia residents in PACU rotation, such an approach is especially warranted given the tradition emphasis on teamwork and collaboration in patient care. The present study is to perform a test on 360-degree assessment for anesthesia residents in PACU rotation.

### Method

In this study, the 13 items were selected based on overall competence, quality of patient's care, personal characteristics/professionalism and communication (Table 1). Each item was scaled on a Likert-type scale ranging from 1 (unsatisfactory performance) to 9 (outstanding performance). Rating forms were distributed to raters after the completion of PACU rotation. Raters were PACU nurses and secretarial staff.

Raters were encouraged to give comments. Anonymity of the raters was ensured. We collected data from July of 2004 to February of 2005. Residents were aware of 360-degree assessment and participated voluntarily.

### Results

Our residency program has a total of 12 residents per academic year. The PACU rotation of the residency program is a mandatory 2-week rotation that occurs in this unit. There were 8 different residents scheduled to rotate through PACU as postgraduate year-2 during the study period. The PACU used for this study has 52 beds, 40 full time nurses, 10 part time nurses and 6 secretarial staff.

Data collection results were, 104 ratings forms being returned during the study period. The response rate was 75%. Item means and other descriptive statistics are displayed in table 2. Residents were ranked highest for # and lowest for #11. The Average rating across all items combined was high (8.12). The average mean rating across all items from PACU nurses was higher (8.55) than from secretarial staff (6.82) ( $p < 0.05$ ).

### Discussion

Our study describes the initial use of such instrument in PACU setting. The results showed the response was high (75%) which revealed the willingness of the nurses and secretarial staff to participate the assessment. The finding that the overall resident performance was rated highly (8.12) which seem to be logical. Good patient care on PACU depends on a high level of teamwork. PACU residents always work at bedside.

Another finding is that the residents' performance was rated higher significantly by PACU nurses than secretarial staff. The possible explanation for this result is that PACU nurses have more frequent contact with residents than secretarial staff.

### Conclusions

This type of resident assessment tool can be useful for PACU rotation. It provided reliable data, was feasible to use, and provided formative feedback to residents regarding professionalism as well as performance.

**References**

1. ACGME outcome project: Enhancing residency education through outcomes assessment. Chicago, Accreditation Council for Graduate Medical Education, 2000.
2. Nursing Views of 360-Degree Assessments for Resident Evaluation in the PACU Setting. *J Clin Anesth.* Dec; 16(8) 606-7, 2004
3. A Resident Survey for PACU Education and Evaluation. *J Clin Anesth.* Dec; 15(8): 633-4. 2003

**Table: 1 Evaluation Questions**

<b>Evaluation by Nurses in PACU:</b>	
1. Did this resident treat you with courtesy?	
2. Did this resident treat you with professional respect?	
3. Does this resident understand your contributions to patient care within our health system?	
4. Did this resident explain their decisions in a logical and satisfactory manner?	
5. Did this resident contribute significantly to the patient care in PACU?	
6. Was the resident presentation clearly delivered and informative?	
7. Would you want to work with this resident as an attending physician?	
<b>Evaluation by Secretarial in PACU:</b>	
8. Did this resident treat you with courtesy and respect?	
9. Did this resident cooperate with the administrative procedures in PACU?	
10. Does this resident understand your contributions to patient care within our health system?	
11. Did this resident communicate effectively with respect to special patient needs or problems?	
12. Did this resident contribute significantly to the patient care in PACU?	
13. Would you want to work with this resident as an attending physician?	
<b>Comments:</b> _____	
_____	
* Scale ranging from 1 to 3(unsatisfactory performance); 4 to 6 (Satisfactory performance); 7 to 9 (outstanding performance).	

**Table: 2 Evaluation Results**

Question #	Means	Question #	Means
1	8.8	8	8.1
2	8.6	9	6.5
3	8.6	10	6.8
4	8.6	11	6.5
5	8.5	12	6.5
6	8.0	13	6.5
7	8.7		
8.55		6.82	

The results were based on 104 respondents