

# **A Review of the Family Medicine Preceptor Assessment Process at the University of Alberta**

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## **Introduction**

Effective clinical teaching of future family physicians is an important academic goal of the Department of Family Medicine, University of Alberta. Faculty members must have appropriate clinical and supervisory skills in order to be effective preceptors to postgraduate physicians in family medicine. There are a relatively small number of full time academic family medicine faculty responsible for the postgraduate and undergraduate teaching commitment in this department. Many of the faculty have high percentages of their university academic contribution assigned to teaching. In addition, much of this teaching is one-on-one clinical preceptorship, advisorship, and mentorship. To improve the effectiveness of teaching and to acknowledge it as a valid scholarly activity, there is a need for ongoing assessment and accountability.

In 1989/90, the Department of Family Medicine developed a 29 item rating scale to assess teaching and supervisory skills of family medicine faculty. This form also includes a separate page for open-ended comments. A resident completes the form after his/her family medicine block rotation in one of the four family medicine clinical teaching sites. In 1992/93, the Chair of the department incorporated this assessment tool into a quarterly review process of faculty members. Together, the preceptor assessment form and the quarterly review constitute the Preceptor Assessment Process.

In early 1999 a decision was made by the Chair of Family Medicine to evaluate the Preceptor Assessment Process to determine the effectiveness of the process in terms of enhancing faculty supervisory and teaching skill sets, and to make recommendations to the faculty for improving the process. This paper discusses the results of a survey of faculty and the issues arising from preceptor assessment.

## **Process**

In April 1999 there were 20 full time clinical faculty members with the Department of Family Medicine. Each faculty member was sent an information letter, consent form and questionnaire by the external member of the evaluation team. Faculty were assured that no member of the Department would see individual responses and that all responses would be anonymous. No identification of individuals would be made in either the analysis or the report preparation. Steps were taken to ensure that the external evaluator would not be able to identify individuals either in the analysis of the preceptor assessment form database or in the analysis of the questionnaire results.

After the initial mailing, we agreed that the physicians who had been in the Department less than one year should not have been included in the sample as these physicians lacked familiarity with the Preceptor Assessment Process. Based on this decision, four physicians were removed from the sample, leaving a total sample size of 16.

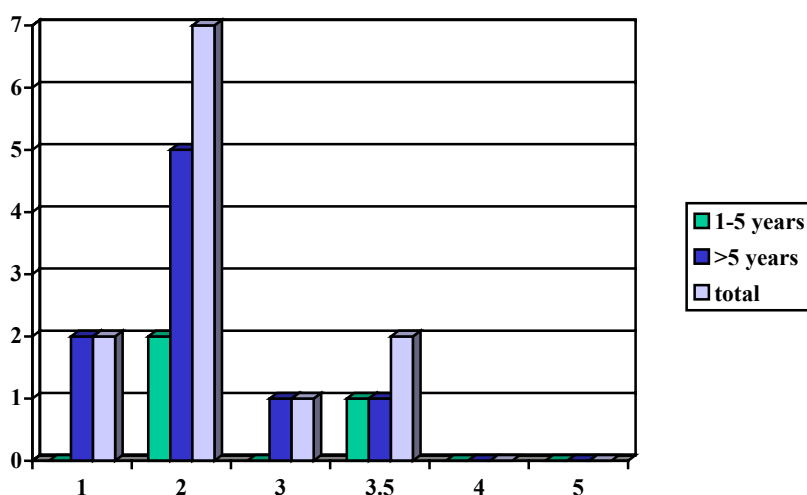
We were committed to making the results of the evaluation known to the faculty members and discussing ideas for potential improvements prior to making any recommendations. The initial survey findings were presented to the Department of Family Medicine Faculty Research Forum in September 1999.

## Results

A ten item questionnaire including questions on the overall preceptor assessment process and separate questions on the preceptor assessment form and the quarterly review process was sent to faculty preceptors. Twelve of 16 eligible faculty responded to the questionnaire: three with between 1- 5 years experience in the department and nine with greater than five years experience.

Faculty were asked to rate how useful the preceptor assessment forms were to them. The responses are shown in Figure 1.

**Figure 1: How useful are the preceptor assessment forms?**



Physicians with more than five years experience tended to find the preceptor assessment forms more useful than those with less experience in the Department.

Anonymous feedback from residents is useful in faculty evaluation. Please note that one evaluation by itself is not meaningful, however the aggregate data over time and many residents is valid and reliable.

*Faculty member comment*

Although individual responses varied, preceptors indicated that the forms were a useful source of feedback from residents. The information provides an indication of the preceptors' strengths and weaknesses and allows them to judge the rapport and opportunities they have with residents.

There were specific comments however in relation to two types of questions. Questions with a reverse scale appear to cause problems with residents frequently giving ratings directly opposed to the ratings on other questions. Some questions ask the resident to make judgements regarding the

physicians' knowledge (e.g. knowledge of current literature). One faculty member saw those judgements as inappropriate.

The preceptors were asked if they had made any changes to their teaching, supervision or practice as a result of the feedback from the preceptor assessment forms. None of the preceptors

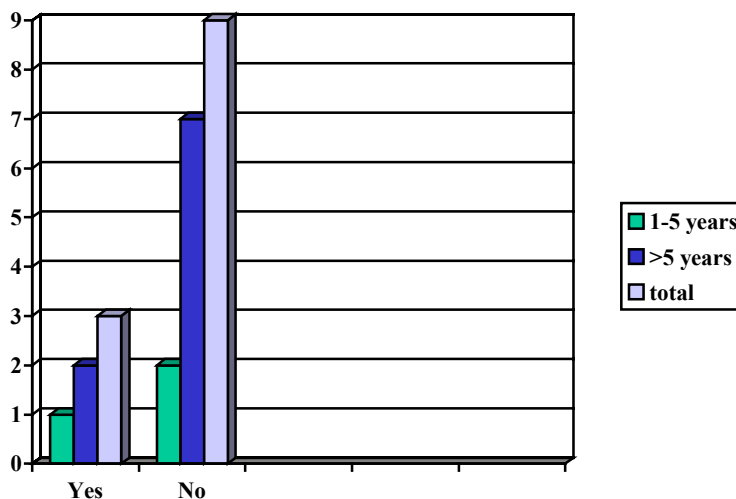
with less than five years experience in the department had made changes; 75% of the preceptors with five or more years experience indicated that they had made changes.

I have been fortunate that overall ratings have been excellent. Anything I need to work on has been too ambiguous to know how to proceed  
*Faculty member comment*

The majority of physicians who had not made changes stated that no changes were needed because the comments from residents were positive. There were those who stated that the ambiguity of some of the questions as problematic. For example, in the question “The practice volume of your staff physician is appropriate”, a negative response does not let the preceptor know if the volume is too high or too low. Although there is a section for written comments, not all residents provide the information that would clarify their previous response.

Preceptors were asked whether or not they reviewed the preceptor assessment forms independent of the quarterly review. The results are shown in Figure 2.

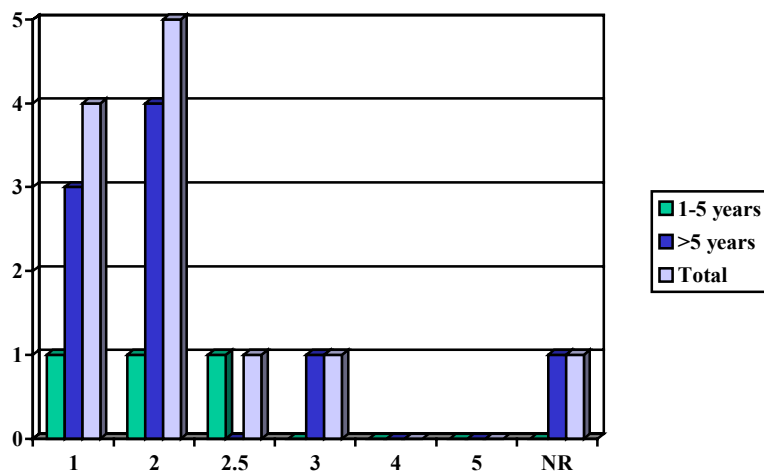
**Table 2: Do you review the forms independent of the quarterly review?**



The majority of preceptors (75.0%) indicated that they did not review the forms outside of the quarterly review. Although not part of the questionnaire, it was established through discussion with preceptors that for the period 1989/90 to 1992/93 (when the quarterly review was initiated) no review of the forms was made at all.

Faculty were asked to rate the usefulness of the quarterly review process with the Department Chair. The responses are shown in Table 3.

**Figure 3: How useful to you is the quarterly review?**

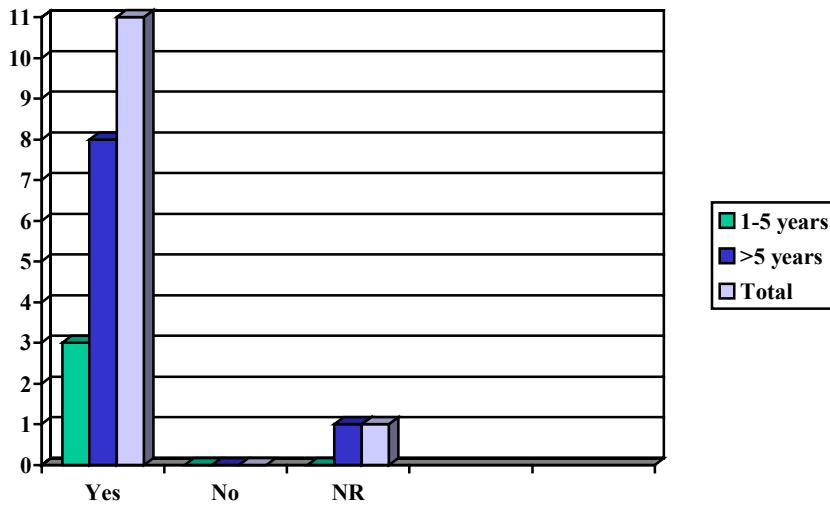


Teaching residents is least likely to be respected by stakeholders outside the department and the quarterly review is one of the few events which reaffirms resident teaching as an important academic contribution.  
*Faculty member comment*

The majority of preceptors (83.3%) found the quarterly review with the Department Chair to be **useful** or **very useful** to them. It gives preceptors an opportunity to meet with the Department Chair, to review the preceptor assessment forms and to discuss issues and career plans. Preceptors felt that the quarterly review helped in prioritizing faculty development, teaching and clinical activities.

Faculty were asked whether the Chair of Family Medicine reviewed the results of the preceptor's assessment forms with them. The results are shown below in Figure 4.

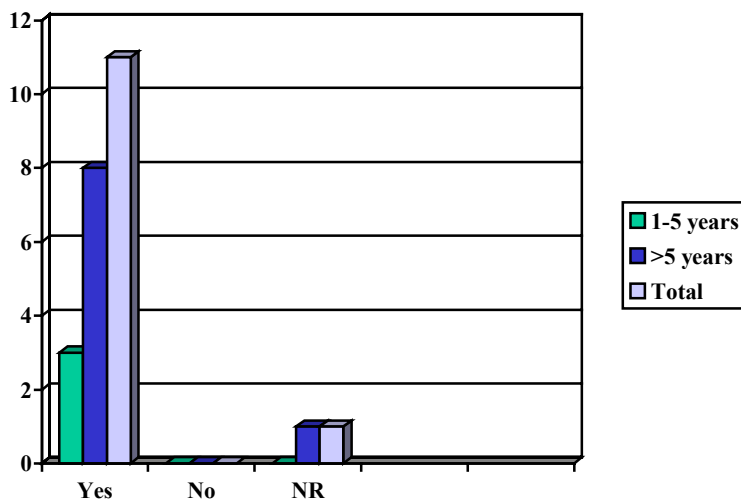
**Figure 4: Does the Chair of Family Medicine Review the results of the residents' assessments with you?**



The only 'no response' can be directly attributed to the Chair of Family Medicine who does not wish to remain anonymous on this point. His written comments indicate that he believes it would be useful to have someone review his preceptor assessment data with him on a quarterly basis, just as he does for his faculty members.

Faculty members were also asked whether the Chair compared current information with previous assessments. This is shown in Figure 5.

**Figure 5: Does the Chair compare current information with previous assessments?**



Faculty were asked “Do you have any comments on how the Preceptor Assessment Process (which includes the residents’ completing a 29 question rating form, and providing written comments on the preceptor, as well as discussing these ratings in the quarterly review) be made more useful to you as a preceptor?” Overall, the preceptors found the process to be useful to them. No preceptors recommended discontinuing the preceptor assessment process or any particular component of the process. There were, however, recommendations to strengthen the process. These included:

- Formatting that would allow residents to make specific suggestions after each question.(This deals specifically with questions that can be ambiguous, as described previously)
- Stating the questions more clearly, and/or encouraging residents to read the wording of questions more carefully. (This deals with the five questions that have “reverse” scoring in comparison to the other questions.)
- Psychometrically analysing the 29 questions to see if several questions could be collapsed into one. This concept of ‘clustering’ is discussed in more detail in a separate paper.
- More effectively displaying the assessment data for review. For example, providing a bar graph of individual scores compared to a bar graph of the total faculty performance. Some respondents believed that comparing peers anonymously would be a powerful motivator.

## Discussion

According to Marsh, the purposes of student evaluation of teaching are usually summarized as feedback to the instructor, input to administrative decisions (promotion), information for student use in selecting resources and to provide a measure for research on teaching. Undergraduate teaching uses faculty wide assessment processes. However, these were designed primarily for large group didactic teaching and some small group problem-based learning settings. Postgraduate resident teaching and preceptoring did not have a credible assessment process in place. Feedback to preceptors and input to faculty promotion were the motivating needs in 1989 when the preceptor assessment project was initiated. In the past decade there has been increasing literature on the reliability and validity of student evaluation of teaching. In university settings, student evaluations are reasonably consistent across raters, rating forms, courses and time periods. Student evaluations agree reasonably well with evaluations made by teacher colleagues and alumni. There is moderate correlation with more objective indicators of teaching effectiveness such as scores on final exams and enrolment in advanced courses<sup>1</sup>.

Several studies have been conducted specific to student and resident assessment of clinical preceptors. More than one study has found that relatively small numbers of evaluations can achieve reasonable reliability<sup>2,3</sup>. There is similarity between programs as to what preceptor attributes were included on the assessment forms<sup>4</sup>. Some attributes emerged as more important because of the context of the teaching. For example, it was found that in ambulatory settings the residents valued a preceptor's ability to facilitate management of patients in a timely fashion<sup>3</sup>.

Arreola states that there is no one “best” approach to designing a faculty assessment process<sup>5</sup>. The process should be developed to best meet the needs of the particular organization. All faculty assessment processes have a certain level of subjectivity inherent in their design given the sources of the assessments (typically students, peers and administrators). It is important however to limit the degree of subjectivity in the process. Literature also indicates that effective



assessment processes include information from multiple sources, rather than relying on one source (e.g. student evaluations) for the entire assessment. Of course, student and resident evaluations are often the only source of preceptor assessment regularly gathered.

Although the need for faculty assessment is generally accepted as being important there are models recently proposed in the literature that provide structure to the evaluation of faculty whose main scholarly contributions are educational<sup>6</sup>. Such outlines of scholarly activity are encouraging to those who strive to improve teacher evaluation methods. More robust preceptor evaluation would be an important component of such a faculty member's teaching dossier. The use of preceptor assessment for faculty development depends heavily on faculty participation and ownership of the process of evaluation and feedback.

There was initial questioning by one faculty of the validity of resident opinion about preceptor effectiveness. This is addressed by referring to literature from numerous educational settings<sup>7</sup>. A more specific and persistent concern by some faculty is to question whether residents are capable of making informed judgements about preceptor clinical ability and knowledge. It seems that we should be very aware of the stage of the learner when addressing this question. It would seem foolish to ask a second year medical student doing an elective with a family physician to judge that preceptor's clinical ability or use of evidence based medicine. On the other hand, a first year family medicine resident in a two-year program spending four months with one preceptor may be better able to judge this.

The measures to assure anonymity of the residents raised some concerns as well. The concept of natural justice was raised, whereby the resident knew how the preceptor rated him/her, but could avoid accountability for what was said about the preceptor. The prevailing opinion was that the stakes and consequences of an individual assessment were much higher for the resident. It was understood that only a recurring issue arising from several residents would necessitate attention from a preceptor in most cases.

We are encouraged that a majority of preceptors found the assessment process useful for faculty development and faculty promotion purposes. It would be preferable to have more objective measures of changes in teaching behaviour documented but there were many variables which also changed over the past decade in the teaching clinic environments. We do know however that some preceptors did make specific changes based on the assessment feedback. More obvious examples would be modifying the clinical experience to include or exclude certain patient care activities or adjusting the patient booking schedule.

Some preceptors told us that the preceptor assessment process reinforced and encouraged continuation of some teaching practices that might otherwise have been discontinued. We feel this is an important contribution of the assessment process. In the context of health care reform and other stressors in the typical faculty's work environment, there could easily be a move away from time consuming teaching methods or styles. The recognition and documented appreciation of some teaching behaviours encouraged faculty to continue providing them. One cited example is the preceptor's willingness to allow resident management decisions to vary from his or her usual course of action if the outcome for the patient was not jeopardized.

## Conclusion

Based on the results of our study, we are recommending the continuation of the Preceptor Assessment Process currently in place within the Department of Family Medicine. A survey of family medicine preceptors found that the Preceptor Assessment Process was helpful in reinforcing specific teaching activities and in modifying certain behaviours amongst faculty members.

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