

Interpreting new application scores and critiques

Implementation of many of the Enhancements to Peer Review began with the May 2009 review meetings, and applicants are receiving summary statements with new features, such as scores determined under the new system.

To give applicants a clearer understanding of the basis of reviewer ratings, changes to the review and scoring process were created with the goals of:

- Placing more emphasis on impact and less emphasis on technical details
- Encouraging succinct, well-focused critiques that evaluate, rather than describe, applications
- Encouraging routine use of the entire rating scale

Scores

The final score for each application represents the overall impact of the application and is in a new 2-digit format. It is calculated as the average (to one decimal point) of the overall impact/priority scores (1-9 in whole numbers only) given by all eligible review panel members, multiplied by ten (so the new scores range from 10-90 in whole numbers).

Another new addition to the summary statement is the scoring of individual criteria, which was instated to help improve the quality and transparency of review, as well as to help identify strengths and weaknesses of individual components. The summary statement shows the criterion scores given by assigned reviewers, in the critique section. Please remember that no direct correlation exists between criterion score(s) and the overall impact/priority score from each reviewer. That is, no formula is used to derive the overall impact/priority score from the individual criterion scores, and reviewers are instructed to weigh the different criteria as they see fit in deriving their overall scores. An application does not need to be strong in all five core review criteria to be judged as likely to have major scientific impact.

Reviewers have been instructed to score each of five review criteria, and the overall impact/priority of each application, on a 9-point rating scale according to the following descriptions and additional guidance:

Score	Descriptor	Additional Guidance on Strengths/Weaknesses
1	Exceptional	Exceptionally strong with essentially no weaknesses
2	Outstanding	Extremely strong with negligible weaknesses
3	Excellent	Very strong with only some minor weaknesses
4	Very Good	Strong but with numerous minor weaknesses
5	Good	Strong but with at least one moderate weakness
6	Satisfactory	Some strengths but also some moderate weaknesses
7	Fair	Some strengths but with at least one major weakness
8	Marginal	A few strengths and a few major weaknesses
9	Poor	Very few strengths and numerous major weaknesses

Minor Weakness: An easily addressable weakness that does not substantially lessen impact
Moderate Weakness: A weakness that lessens impact
Major Weakness: A weakness that severely limits impact

Impact	Score	Descriptor	Strengths/Weaknesses
High Impact	1	Exceptional	
	2	Outstanding	
	3	Excellent	
Moderate Impact	4	Very Good	
	5	Good	
	6	Satisfactory	
Low Impact	7	Fair	
	8	Marginal	
	9	Poor	
Non-numeric score options: NR = Not Recommended for Further Consideration, DF = Deferred, AB = Abstention, CF = Conflict, NP = Not Present, ND=Not Discussed			

To interpret the new scores, consider a final overall impact/priority score of 55. In this case, we can see that the score should reflect a “good” to “satisfactory” application that the reviewers judged to be of moderate impact. The application was judged as having some strengths but also one or more moderate weaknesses.

Critiques

The critique format is also new with this review cycle. To help improve the quality and transparency of review, NIH has developed [formatted critique templates](#) for reviewers to use to record their comments in the form of bullets, making succinct, focused points. Reviewers have been asked to focus on major strengths and weaknesses, i.e., ones that contributed directly to the overall rating of the application. In the critique section of the summary statement, you will see the individual criterion scores and comments from each reviewer. Comments should help the applicant identify strengths and weaknesses of the overall application, as well as for each criterion. The critique templates also include an optional section “Additional Comments to Applicant,” which gives reviewers the opportunity to provide guidance to the applicant on issues that did not affect the score given by the reviewer.

For more information about the guidance given to reviewers, download the Reviewer Orientation at http://enhancing-peer-review.nih.gov/reviewer_orientation.ppt or visit the Enhancing Peer Review Web site at <http://enhancing-peer-review.nih.gov/index.html>.