



Optimizing Instructions for PM&R Resident Learning Plans

Scott Campea, MD¹ and Max Hurwitz, DO^{1,2}

¹Department of Rehabilitation Medicine, University of Washington, Seattle, WA

²Department of Rehabilitation Medicine, University of Pittsburgh, Pittsburgh, PA



Background

Writing a learning plan is a required activity for PM&R residents, as it can help meet practice-based learning and improvement milestones and develop the skills necessary become an independent lifelong learner.

Learning plans are often created using a worksheet with commonly used prompts. Over time we have developed the following prompts to help residents compose their learning plans:

1. Take a moment to reflect on your performance as resident. Using a variety of sources of feedback, describe your strengths and weaknesses in medical knowledge or skills.
2. Based on your self-assessment above, identify a specific deficiency or limit in your knowledge or skill that you are looking to improve in the next few months. Describe this specific learning gap that you would like to target for your learning plan.
3. Articulate a process goal that you hope to achieve in the next three months, including any learning activities that you may pursue.

Objective

The specific goal of this project was to improve the instructions given to residents completing learning plans.

Design

27 residents in a PM&R residency program completed a learning plan using a handout with standard prompts. A single attending provided written feedback on all resident learning plans, using an online platform. The feedback from the learning plans was de-identified and reviewed by two reviewers, including the author of the feedback. Qualitative themes were identified by both reviewers. Discussion between the two reviewers refined the identified themes.

Results

Three primary themes emerged:

- 1.) Residents can use more detail in all aspects of their learning plan, including articulating strengths and weaknesses, describing learning goals and generating learning activities.
- 2.) Residents can more clearly link the components of the learning plan (for example, the learning goals should be linked to the identified weaknesses and learning activities should be linked to learning goals).
- 3.) Residents frequently use multiple choice questions as a primary learning activity for medical knowledge.

Conclusions

As with any new complex task, PM&R residents benefit from instructions on how to write a learning plan. The themes identified here can be used to help residents improve their learning plans. It will be useful to emphasize these points prior to when learning plans are written. This can take place in written form on the worksheet itself, or as part of a lecture prior to distributing the worksheet. We hope this may help generate more robust learning plans, allowing feedback to be more individualized towards learning activities and less on the mechanism of writing a learning plan.

The use of multiple-choice questions as a learning activity may be common due to the emphasis our profession places on standardized testing. While not ideal as a primary learning activity to improve medical knowledge, multiple-choice questions can serve to identify areas of strength and weakness, measure success, or influence confidence. It may be helpful to include a discussion on use of multiple-choice questions prior to having residents write a learning plan.