

Letter to the Editor

To the Editor—As part of the ISPOR Education Steering Committee, the ISPOR Fellowship Task Force was formed in the spring of 2000. The Task Force's mission is to define the fundamentals of a core curriculum for pharmaco-economic and outcomes research (PE/OR) fellowships, as well as to foster knowledge of these programs among students of various scientific and professional backgrounds. As a result, in 2001 the Task Force began a research study to provide insight into the characteristics and components of the PE/OR fellowship programs. The results of this study have recently been described in two articles published in the *American Journal of Pharmaceutical Education* [1,2]. A brief description of the main research findings is presented.

PE/OR fellowship programs have been in existence in the United States for more than a decade. With the increasing number of programs, however, it has become difficult to quantify the exact number of programs offered, and little is known about how these programs are structured [3]. The objectives of the study conducted by the ISPOR Fellowship Task Force were: 1) to describe the organizational structures and educational components of PE/OR fellowship programs within the United States and 2) to determine the extent to which these programs adhere to the 1999 American College of Clinical Pharmacy (ACCP) PE fellowships guidelines.

From November 2001 through December 2001, the Task Force conducted a cross-sectional, Web-based survey via the ISPOR Web site. The survey population consisted of fellows as well as preceptors involved in a PE/OR fellowship, who were identified by collecting information through different sources including the ACCP and ISPOR directories for these programs. The Task Force developed a set of three questionnaires, which were administered, respectively, to current fellows enrolled in a fellowship, to fellows who had finished a fellowship, and to preceptors currently involved in a fellowship. Of the 151 individuals completing the survey, 33 current fellows, 38 former fellows, and 38 preceptors met the inclusion criteria.

According to fellows and preceptors' responses, the results of the study revealed that PE/OR fellowships have numerous similarities in terms of their general characteristics, as well as their organiza-

tional and educational aspects [1,2]. Therefore, a common profile for these programs can be described as shown in Table 1. With a program 2 years in length, sponsored by the pharmaceutical industry, and conducted predominantly in academic and pharmaceutical industry sites, PE/OR fellowships reportedly provide trainees with adequate resources to carry out scientific research [2]. In addition, programs offer applicants exposure to a variety of types of research design and analysis to enhance their knowledge about PE/OR.

According to preceptors' opinions, current PE/OR fellowships appear to adhere to the 1999 ACCP guidelines [1]. In particular, preceptors reported that programs show significant compliance with the main aspects of the guidelines, which define both the structure and the process of fellowships. Few preceptors, however, indicated that their programs currently offer trainees hands-on research activities at the level suggested by these guidelines.

In conclusion, as an initiative of the ISPOR Fellowship Task Force, this is the first study to describe the current state of PE/OR fellowship programs in the United States. The results of these investigations provide substantial insight to institutions and organizations wishing to develop new or refine existing PE/OR fellowship programs.—Vittorio Maio, PharmD, MS, Office of Health Policy, Clinical Outcomes, Thomas Jefferson University.

Table 1 Common profile of a US-based pharmaco-economic/outcomes research fellowship program based on fellows and preceptors' responses*

Organizational features	
1.	Two-year program.
2.	Sponsored by pharmaceutical industry.
3.	Conducted primarily in academic and pharmaceutical industry sites.
4.	Available facilities, including medical library, computer center, medical database
5.	Average fellow's salary: US\$30,000–US\$40,000 (year 2001).
Educational features	
6.	Skills taught, including economic analysis and methodologies, as well as research design and methods.
7.	Software applications, including SAS and Access.
8.	Exposure to PE/OR design and analysis.
9.	Research skills, including the conceptualization, operationalization, data management, and application of research projects.

*Adapted from Maio et al. [1,2].

References

- 1 Maio V, Lofland JH, Nash DB. Pharmacoeconomic fellowships. preceptors' views regarding adherence to the American College of Clinical Pharmacy guidelines. *Am J Pharm Educ* 2003;67:Article 75.
- 2 Maio V, Lofland JH, Doan QC, et al. Organizational structure and educational components of pharmacoeconomic fellowship programs: a fellows' perspective. *Am J Pharm Educ* 2003;67:Article 105.
- 3 Maio V, Girts TK, Lofland JH, Nash DB. Pharmacoeconomic fellowships: the need for outcomes measures. *Pharmacoeconomics* 2001;19:795-802.