

## REFERENCES

1. Lafferty WE. The changing epidemiology of HSV-1 and HSV-2 and implications for serological testing. *Herpes* 2002;9:51-5.
2. Yoshikawa T, Hill JM, Stanberry LR, Bourne N, Kurawadwala JF, Krause PR. The characteristic site-specific reactivation phenotypes of HSV-1 and HSV-2 depend upon the latency-associated transcript region. *J Exp Med* 1996;184:659-64.
3. Engelberg R, Carrell D, Krantz E, Corey L, Wald A. Natural history of genital herpes simplex virus type 1 infection. *Sex Transm Dis* 2003;30:174-7.
4. Kim HN, Meier A, Huang ML, Kuntz S, Selke S, Celum C, et al. Oral herpes simplex virus type 2 reactivation in HIV-positive and -negative men. *J Infect Dis* 2006;194:420-7.
5. Roberts CM, Pfister JR, Spear SJ. Increasing proportion of herpes simplex virus type 1 as a cause of genital herpes infection in college students. *Sex Transm Dis* 2003;30:797-800.
6. Thompson C. Genital herpes simplex typing in genitourinary medicine: 1995-1999. *Int J STD AIDS* 2000;11:501-2.
7. Lowhagen GB, Tunback P, Andersson K, Bergstrom T, Johannisson G. First episodes of genital herpes in a Swedish STD population: a study of epidemiology and transmission by the use of herpes simplex virus (HSV) typing and specific serology. *Sex Transm Infect* 2000;76:179-82.
8. Xu F, Lee FK, Morrow RA, Sternberg MR, Luther KE, Dubin G, et al. Seroprevalence of herpes simplex virus type 1 in children in the United States. *J Pediatr* 2007;151:374-7.
9. Xu F, Sternberg MR, Kottiri BJ, McQuillan GM, Lee FK, Nahmias AJ, et al. Trends in herpes simplex virus type 1 and type 2 seroprevalence in the United States. *JAMA* 2006;296:964-73.
10. Fleming DT, McQuillan GM, Johnson RE, Nahmias AJ, Aral SO, Lee FK, et al. Herpes simplex virus type 2 in the United States, 1976 to 1994. *N Engl J Med* 1997;337:1105-11.
11. Becker TM, Magder L, Harrison HR, Stewart JA, Humphrey DD, Hauler J, et al. The epidemiology of infection with the human herpesviruses in Navajo children. *Am J Epidemiol* 1988;127:1071-8.
12. Pebody RG, Andrews N, Brown D, Gopal R, De Melker H, Francois G, et al. The seroepidemiology of herpes simplex virus type 1 and 2 in Europe. *Sex Transm Infect* 2004;80:185-91.
13. Wald A, Link K. Risk of human immunodeficiency virus infection in herpes simplex virus type 2-seropositive persons: a meta-analysis. *J Infect Dis* 2002;185:45-52.
14. Reynolds SJ, Risbud AR, Shepherd ME, Zenilman JM, Brookmeyer RS, Paranjape RS, et al. Recent herpes simplex virus type 2 infection and the risk of human immunodeficiency virus type 1 acquisition in India. *J Infect Dis* 2003;187:1513-21.
15. Brown EL, Gardella C, Malm G, Prober CG, Forsgren M, Krantz EM, et al. Effect of maternal herpes simplex virus (HSV) serostatus and HSV type on risk of neonatal herpes. *Acta Obstet Gynecol Scand* 2007;86:523-9.
16. Rouse BT, Kaistha SD. A tale of 2 alpha-herpesviruses: lessons for vaccinologists. *Clin Infect Dis* 2006;42:810-7.
17. Stanberry LR, Spruance SL, Cunningham AL, Bernstein DI, Mindel A, Sacks S, et al. Glycoprotein-D-adjunct vaccine to prevent genital herpes. *N Engl J Med* 2002;347:1652-61.

## The Role of the Med-Peds Physician in a Changing Medical World

The combined internal medicine-pediatrics (med-peds) residency program celebrates its 40th birthday in 2007. With the growth in med-peds programs over the years, almost 1 of every 8 pediatricians currently in training is completing a med-peds residency program.<sup>1</sup> The past several years also have seen increased attention to the evaluation of med-peds training and outcomes.<sup>2-5</sup> With the recent declining interest in primary care, what options do med-peds graduates have for their careers? What is the nature of their job search after completing training?

Chamberlain et al try to answer those questions in this issue of *The Journal*.<sup>6</sup> The authors found that med-peds graduates had less difficulty than categorical pediatric graduates finding a position and had significantly higher starting salaries. In addition, although neither group of graduates was particularly likely to accept a position in a rural area (2%-3% in each group), med-peds graduates were more likely to select a position in a small town (population <50,000).

Two findings from this study warrant further reflection. First, although the number of med-peds graduates who choose subspecialty careers is less than graduates from categorical pediatric programs (18% versus 31%), there is a significant shift in career plans during residency. As the authors point out, the number of med-peds graduates who planned a primary care career was 55%, in contrast to the 70% who anticipated entering primary care at the start of residency. In contrast, the number of pediatric graduates who took a pri-

mary care position was 50%, with 51% anticipating this career at the start of residency. Why was there such a large shift for med-peds residents? Is there something about the residency training that encourages subspecialty careers or discourages primary care? Certainly the extra year of training allows for more career exploration. This shift away from primary care was also occurring at a time when large numbers of categorical internal medicine and pediatrics trainees were also choosing subspecialty careers. In addition, med-peds graduates have more subspecialty options than any other discipline, being able to select from any internal medicine, pediatric, or combined subspecialty program. What is not clear from this data is whether med-peds graduates are selecting additional training in a single specialty (and if so, which one?) or a combined specialty and whether these choices will fluctuate with time.

Assuming that most med-peds graduates who choose subspecialty careers will include the care of children, they may help to alleviate the shortage in some pediatric subspecialties. In addition, with 90% of children with chronic illnesses living >20 years,<sup>7</sup> med-peds subspecialists can help provide care for this group of patients who need chronic, complex care.

---

See related article, p 419

---

Reprint requests: John G. Frohna, MD, MPH, Department of Pediatrics, University of Wisconsin, 600 Highland Avenue, H4/447, Madison, WI 53792-4108. E-mail: jfrohna@pediatrics.wisc.edu.

*J Pediatr* 2007;151:338-9

0022-3476/\$ - see front matter

Copyright © 2007 Mosby Inc. All rights reserved.

10.1016/j.jpeds.2007.06.018

To foster the career development of dually trained med-peds subspecialists, academic institutions need to break down some of the traditional departmental barriers to hire, retain, and promote med-peds subspecialists. As pointed out by Chamberlain et al, med-peds graduates may be particularly limited in gaining exposure to research because of the relative lack of med-peds research mentors. With the growth in the number of med-peds-trained subspecialists, this barrier should diminish with time, but the logistical issues of working within 2 departments remain. However, the existence of med-peds programs has helped foster interdepartmental linkages for education and can serve as a bridge to further collaborations in patient care and research.

The second important finding from this study is the large number of med-peds graduates who are choosing careers as hospitalists. This is not too surprising when one considers that the number of hospitalist jobs has been expanding, especially in internal medicine, but also in pediatrics. This increase in jobs has likely continued since this data was collected, particularly in light of the growing role for hospitalists as medical centers look for ways to help provide clinical care as duty hours for residents were reduced. Med-peds physicians are also well trained for hospitalist careers, because a large part of the training occurs in an inpatient setting. Furthermore, smaller hospitals with minimal inpatient pediatric volume may find med-peds physicians especially appealing because they can avoid hiring a separate person just for their pediatric patients.

Med-peds hospitalists can also play important roles in academic medical centers. Med-peds graduates are well trained in complicated cases in adult patients, and this experience can be valuable in caring for the increasingly complex pediatric inpatient. Further, med-peds physicians are used to working with the whole family in the pediatric setting, and these skills can be useful in the adult hospital as well. Beyond the clinical care provided, med-peds physicians can help 1

department learn from the other, about efficiencies in admissions and discharges, approaches to enhance patient safety, and methods for improving hospital systems of care. Additional study about the roles and effectiveness of med-peds hospitalists is needed; a recent review of the literature did not find any articles that addressed the role of med-peds physicians in this area.<sup>8</sup>

Med-peds physicians comprise an important and unique subset of the pediatric workforce. As shown in this study, med-peds graduates are particularly well positioned to adapt to a changing medical landscape.

John G. Frohna, MD, MPH

Clinical Associate Professor  
Departments of Internal Medicine, Pediatrics, and Medical Education  
Med-Peds Program Director  
University of Michigan  
Ann Arbor, Michigan

## REFERENCES

1. American Board of Pediatrics. Workforce data: 2006-07. Available at <https://www.abp.org/ABPWebSite/stats/wrkfrc/workforce06.pdf>. Accessed May 27, 2007. Chapel Hill, NC: American Board of Pediatrics.
2. Frohna JG, Melgar T, Mueller C, Borden S. Internal medicine-pediatrics residency training: current program trends and outcomes. *Acad Med* 2004;79:591-6.
3. Freed GL, Fant KE, Nahra TA, Wheeler JR. Internal medicine-pediatrics physicians: their care of children versus care of adults. *Acad Med* 2005;80:858-64.
4. Freed GL. Comparing perceptions of training for medicine-pediatrics and categorically trained physicians. *Pediatrics* 2006;118:1104-8.
5. Melgar T, Chamberlain JK, Cull WL, Kaelber DC, Kan BD. Training experiences of US combined internal medicine and pediatrics residents. *Acad Med* 2006;81:440-6.
6. Chamberlain JK, Cull WL, Melgar T, Kaelber DC, Kan BD. The effect of dual training in internal medicine and pediatrics on the career path and job search experience of pediatric graduates. *J Pediatr* 2007;151:419-24.
7. Gortmaker SL, Sappenfield W. Chronic childhood disorders: prevalence and impact. *Pediatr Clin North Am* 1984;31:3-18.
8. Freed GL, Uren RL. Hospitalists in children's hospitals: what we know now and what we need to know. *J Pediatr* 2006;148:296-9.