

hope Dr Rogers and his colleagues continue to expand their work in this field.

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REFERENCES

1. Rogers J, Corboy J, Dains J, Huang W, Holleman W, Bray J, Monteiro M. Task-oriented processes in care (TOPIC): a proven model for teaching ambulatory care. *Fam Med* 2003;35(5):337-42.
2. Dickeman JL, Cairney WJ. Process skills development in ambulatory family practice, Dubuque, Iowa: Kendall/Hunt Publishing Company, 1999.

Authors' Reply:

We were delighted to receive the letter from Drs Dickerman and Cairney. We agree with them fully on the benefits of a process-oriented model that they describe so well, and we envision other possible benefits as well. Specifically, we believe that this approach may help our specialty respond to the literature about our performance failures, particularly regarding provision of preventive services, chronic disease management, and recognition of mental disorders. For example, at a chronic illness visit, the clinician no longer needs to remember a particular list of tests and referrals for each condition but instead recalls a set of processes and tasks that are the same for every chronic illness. It is then easier to recall the appropriate test or referral for a specific task.

In addition, we think process models may help deal with three of the five "The Future of Family Medicine" challenges: #1, generating understanding of family practice, #2, organizing individuality, and #4, making family practice an attractive career option. Focusing on process, instead of scope of practice, may help the public understand what distinguishes us from other primary care specialists. Process models also may be able to describe to the public what is core to family practice, in that all of us in the specialty do the same processes and

tasks. Medical students may view the breadth of our specialty as less "daunting" if our work is conceptualized as major processes and tasks, rather than 30 to 50 different health conditions (www.futurefamilymed.org).

We, too, are using the TOPIC model in our residency training program and wonder how many other programs are developing or using similar process approaches. As with our student program, we are very interested in assessing the outcome of our teaching. For the past 3 years, our residents have taken a Clinical Performance Examination similar to the student exam reported in our paper. We are in the process of conducting chart audits of residents' preventive and chronic illness care to see the correspondence between their competence during the standardized patient examination and their performance under actual clinical conditions. Given the discrepancy between chart documentation and visit behaviors, we are also developing a "stealth" standardized patient program, so we can measure resident completion of visit tasks in the clinical setting with unannounced standardized patients.

We are heartened, but not surprised, by the similarity between our TOPIC model and the model described by Dickerman and Cairney. We did not invent the process approach but just made this general trend explicit for teaching.¹⁻³ This emphasis on process is also consistent with current models for chronic illness care⁴ and clinical practice guidelines. Lastly, since our community preceptors use an implicit process approach to teach our clerkship students,⁵ it is not surprising that others elsewhere have developed similar process approaches. We will present more detail on our model and teaching strategies in our forthcoming book, *The Task-oriented Processes in Care (TOPIC) Model in Ambulatory Care*, which will be the next vol-

ume in the Springer Series on Medical Education.

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REFERENCES

1. Rivo ML, Saultz JW, Wartman SA, DeWitt TG. Defining the generalist physician's training. *JAMA* 1994;271(19):1499-1504.
2. Stange KC, Zyzanski SJ, Jaen CR, et al. Illuminating the "black box"—a description of 4,454 patient visits to 138 family physicians. *J Fam Pract* 1998;46:377-89.
3. Stange KC, Miller WL, McWhinney I. Developing the knowledge base of family practice. *Fam Med* 2001;33(4):286-97.
4. Grumbach K. Chronic illness, comorbidities, and the need for medical generalism. *Ann Fam Med* 2003;1(1):4-7.
5. Huang WY, Dains JE, Monteiro M, Rogers JC. Observations on the teaching and learning occurring in offices of community-based family and community medicine clerkship preceptors. *Fam Med* 2004, in press.

Research Training Needed**To the Editor:**

Merenstein et al¹ concluded that most clinical family medicine research uses cross-sectional study design, and the majority of papers do not meet established criteria for relevance and validity. Those results are consistent with our findings² that 89% of 101 published papers from Taiwan that were published in from 1979 through 1992 used the cross-sectional study design, and more than half (65.2%) of published articles were irrelevant to clinical family practice. It is apparent that the status of research in family medicine is the same in Eastern and Western societies.

Merenstein and associates also indicated the desire that family physicians take a critical look at research activities in our discipline, or we will lose our autonomy and specialty. However, the authors did not discuss factors related to research activities and productivity of

family physicians. We conducted a survey³ of 143 faculty members of family medicine in Taiwan on this topic and found that neither adequate time in research nor an adequate amount of time spent in ambulatory care were significant factors for research activity or productivity. Instead, incompetence in research skills is the only significant factor identified with respect to research activity.

We strongly recommend a sustained research training program in both graduate and postgraduate education for family physicians. In our series,² two thirds of published articles were contributed by academic family physicians working in the university environment. However, since family practice is largely a community-based specialty, it is also recommended that collaboration with medical schools or guidance from the national association of family physicians is essential (eg, Web site resources, mentorship), so that family physicians at primary care settings can be more actively involved in research and publication.⁴

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REFERENCES

1. Merenstein J, Rao G, D'Amico F. Clinical research in family medicine: quantity and quality of published articles. *Fam Med* 2003;35(4):284-8.
2. Lee MC, Fu CC, Chen PH, Chou MC. Analysis of published papers on family medicine in Taiwan from 1979 through 1992. *Chinese Journal of Family Medicine* 1994;4(1):51-61.
3. Fu CC, Lee MC, Chen JD, Chiou JY, Tai TY. Influencing factors on research activity and productivity of faculty of family medicine residency programs in Taiwan. *Chinese Journal of Family Medicine* 1997;7(1):1-12.
4. Lee MC. Research in family medicine. In Lee MC, ed. *Family medicine and practice management with the National Health Insurance*, fourth edition. Taipei: Ho-Ghi Publisher, 2003:94-107.

Authors' Response:

We appreciate the perspective on family practice research in Asia by Dr Lee and colleagues. It is somewhat discouraging that "the status of research in family medicine is the same in Eastern and Western societies." US family physicians have a tradition of looking elsewhere for innovative ideas for and guidance in developing their discipline. Practice-based research networks, for example, have their origins in Europe.¹

As in Asia, lack of research skills is a significant barrier to research productivity among family physicians in the United States.² The American Academy of Family Physicians recent efforts in establishing research centers, practice-based research networks, and the Robert Graham Center will perhaps provide the necessary stimulus for family practice research in this country. Grants from the federal government to support research training programs could make an even greater impact.

Green and Mold³ describe an appropriate and important research agenda waiting for competent family medicine researchers. We agree that producing such individuals is long overdue.

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REFERENCES

1. van Weel C. General practice research networks. *Gateway to primary care evidence. Med J Aust* 2002;177:62-3
2. Mills OF, Zyzanski SJ, Flocke S. Factors associated with research productivity in family practice residencies. *Fam Med* 1995;27(3):188-93.
3. Mold JW, Green LA. Primary care research: revisiting its definition and rationale. *J Fam Pract* 2000;49(3):206-8.

New Research

Incomes of General Practitioners in China

To the Editor:

In China, there are six provinces (Beijing, Shanghai, Zhejiang, Heilongjiang, Guizhou, and Fujian) implementing general practitioners residency training programs, with a total of 639 trainees. There are also 13 provinces planning to offer the general practitioners' residency training programs.¹ Zhejiang province developed the first general practitioners residency training program in China, and the quantity of recruiting and quality of training remains superior to this day.² There were 43 Zhejiang trainees in 2000 and 19 trainees in 2001.

We explored trainees' perceptions about, and satisfaction with, their incomes. To address this question, in May 2002, we surveyed the 62 trainees in the Zhejiang general practitioners' residency training programs who were enrolled between September 2000 and July 2002; 48 (81.4%) completed the survey. Graduate students from the Institute of Social Medicine and from Family Medicine in Zhejiang University acted as study investigators.

The trainees' self-reported incomes per month decreased annually from 1999 to 2001. They were paid 1327.8 Yuan (\$161 US) in 1999, 1217.5 Yuan (\$147) in 2000, and 1,173.6 Yuan (\$142) in 2001. Compared with their former income, 37 (84%) respondents believed that their monthly incomes decreased by 717.6 Yuan (\$87) in the past year. Compared with their counterparts at their home-based hospitals, 44 (92%) respondents believed that their income decreased by 884.5 Yuan (\$107). In addition, 32 (67%) respondents were not satisfied with their incomes.

The Colorado Springs Pioneers Museum's newest exhibit, COS@150, is now open. Explore our community's history and culture through 150 objects, illuminating 150 stories, commemorating 150 years. [Read More](#). Colorado Springs Sesquicentennial. Colorado Springs was founded 150 years ago on July 31, 1871. Join us for a year long, community celebration of our city's rich history. [Read More](#). Helping Businesses Respond to COVID-19. The City of Colorado Springs is working hand-in-hand with county and state officials in obtaining the most accurate and up-to-date information about COVID-19. [Read Hide Show timer Statistics](#). In Colorado subalpine meadows, nonnative dandelions co-occur with a native flower, the larkspur. Bumblebees visit both species, creating the potential for interactions between the two species with respect to pollination. In a recent study, researchers selected 16 plots containing both species; all dandelions were removed from eight plots; the remaining eight control plots were left undisturbed. Colorado Springs, Colorado. From Wikipedia, the free encyclopedia. Home rule municipality in Colorado, United States. Colorado Springs, Colorado. Home rule municipality. Colorado Springs with the Front Range in background. Flag. Nicknames Colorado Springs is a home rule municipality that is the largest city by area in Colorado as well as the county seat and the most populous municipality of El Paso County, Colorado, United States. Colorado Springs is located in the east central portion of the state. It is situated on Fountain Creek and is located 60 miles (97 km) south of the Colorado State Capitol in Denver. At 6,035 feet (1,839 m) the city stands over 1 mile (1.6 km) above sea level, though some areas of the city are significantly higher and lower.