There is an increasing demand to expose osteopathic family practice residents to research. Within the Department of Family Medicine at the University of North Texas Health Science Center at Fort Worth—Texas College of Osteopathic Medicine, the Division of Education and Research (DEAR) was developed in 1999. The primary focus of DEAR is to provide the necessary resources and knowledge for faculty members and residents to conduct research and accomplish scholarly activities. Guidelines are implemented to ensure the timeliness, efficiency, and completion of each resident’s paper.

The efficacy of DEAR’s policies is evaluated annually through surveying the residents, tracking paper submissions to the resident director, and tracking publications and presentations. The expectation of DEAR’s resident research component is full completion of a resident paper suitable for publication in a peer-reviewed journal before graduation. Initial evaluation suggests positive strides toward reaching this goal. Future successes will be determined by monitoring the next few years.

Exposing residents to family practice research provides essential skills for complete medical career maturation. For this reason, the American College of Osteopathic Family Physicians (ACOFP) and the American Academy of Family Physicians recommend curricula in research education.1,2 Accordingly, family practice residency programs are increasingly requiring a research component.3

Helping residents overcome obstacles to complete projects should be a key focus of programs requiring research.4 A survey of family practice residents in Ohio found that only 22% of residents believed family practice physicians should conduct research and that one third of third-year residents believed they had adequate training to conduct research.5 Ryan et al6 propose that a required research component is “unjust” if residents do not have access to relevant training and guidance. The availability of educational and physical resources, such as computers, space, and seminars, is progressively addressed by family medicine departments with successful research programs.7 Within the Department of Family Medicine at the University of North Texas Health Science Center at Fort Worth—Texas College of Osteopathic Medicine (UNTHSC), the Division of Education and Research (DEAR) was developed in 1999 and included a program to assist family practice residents in completing research papers.

Division of Education and Research—A Model System

The primary focus of DEAR is to create and maintain a research environment for faculty, residents, and students. A DEAR research associate helps residents select a topic and type of research paper/project, pick an appropriate journal for submission, acquire permission from the UNTHSC Institutional Review Board, develop databases, and edit rough drafts. Four other primary members of DEAR include the director, director of research and funding, medical informatics computer user analyst, and editorial assistant. The primary obligations of DEAR’s director are to find funding for independent resident projects, oversee the research program, and remove barriers likely to inhibit the research process. The director of grants and funding assists with protocol methodology, biostatistics, database development, and epidemiology. Residents learn to conduct literature searches, manage databases, and use the clinical digital library from the medical informatics computer user analyst. The editorial assistant maintains departmental research records, assists with logistic aspects of submitting papers, and procures the availability of resources.

The Department of Family Medicine chair and DEAR implemented steps to ensure support and guidance and to monitor resident progress. These steps include collaborative meetings between the Department of Family Medicine chair, director of DEAR, and family practice residency director. The research associate sustains contact with residents through phone conversations, one-on-one meetings, and monthly meetings. Within the first 3 months of their residencies, residents attend a presentation on how to write a research paper and options available for projects. Residents are given an extensive

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A Divisional Approach to Enhancing Research Among Osteopathic Family Practice Residents

MEDICAL EDUCATION

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ACOFP and Departmental Policies

Since 1995, the ACOFP requires family practice residents to complete a residency rotation to be eligible for board certification. The residency must “provide opportunities for residents to participate in research or other scholarly activities.”1 This requirement may be met by having residents participate in departmental research projects; participate in institutional research projects involving the Department of Family Medicine; participate in area-wide or multicentered projects involving the Department of Family Medicine; write an original paper on a health care topic; present at a state, regional, or national meeting; or author a grant.1 Additionally, residents must complete their papers/research projects within 6 years of entering their residency (Table).

To encourage resident compliance with ACOFP requirements, the Department of Family Medicine at the UNTHSC initiated a new policy beginning with the 2003 graduating class stipulating that board examination expenses will only be reimbursed for residents submitting a paper by the end of their third year. Furthermore, the program completion certificate is withheld until a final paper is submitted. A timeline for accomplishing this requirement is clearly presented to residents during their first year of residency. Due dates for each research component are given throughout the residency, and each resident’s progress is monitored individually.

The division phased in a new timeline over three entering classes from 1999 to 2001. Currently, residents select a topic by February of their first year, complete a literature review by June of their first year, submit a draft paper to DEAR by November of their second year, submit a final paper to the residency program director by April of their second year, submit the revised department-approved paper to the ACOFP by July of their third year, and submit their paper to a journal by November of their third year (Table). Completing the paper in the first half of the third year allows residents to focus on other issues before graduation, such as securing employment. Additionally, it allows 7 months for revisions and/or resubmissions to journals. The department takes pride in graduating residents with research experience and marketability.

Project Types

Family medicine residents at UNTHSC choose from various types of research projects, including research papers from original research, literature reviews, case reports, case reviews, editorials, and letters to the editor. Residents are encouraged to choose an interesting and relatively narrow topic. A letter to the editor must be accepted for publication in a peer-reviewed journal for research credit. For residency certification, a research paper suitable for publication in a peer-reviewed journal must be submitted to the ACOFP. Each paper must be approved by the residency director. The Division of Education and Research encourages residents to select an appropriate journal before the writing process begins. The Table shows an

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**Table**

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<tr>
<th>Research Process</th>
<th>Timeline</th>
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<tbody>
<tr>
<td>1. Select topic</td>
<td>February (year 1)</td>
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<tr>
<td>2. Choose type of research project</td>
<td>February–June (year 1)</td>
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<td>3. Conduct literature search</td>
<td>June (year 1)</td>
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<tr>
<td>4. Have project approved by IRB</td>
<td>June (year 1)</td>
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<tr>
<td>5. Collect data</td>
<td>June (year 1)–November (year 2)</td>
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<tr>
<td>6. Choose journal</td>
<td>June (year 1)–November (year 2)</td>
</tr>
<tr>
<td>7. Write paper</td>
<td>June–November (year 2)</td>
</tr>
<tr>
<td>8. Send manuscript to DEAR for editing</td>
<td>November (year 2)</td>
</tr>
<tr>
<td>9. Submit draft to residency program director</td>
<td>April (year 2)</td>
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<tr>
<td>10. Submit draft to ACOFP</td>
<td>July (year 3)</td>
</tr>
<tr>
<td>11. Submit paper for publication</td>
<td>November (year 3)</td>
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IRB indicates institutional review board; DEAR, Division of Education and Research; ACOFP, American College of Osteopathic Family Physicians.
11-step process for completing resident research papers. During or before 2002, the type of papers completed by residents graduating have been 50% case reports, 35% literature reviews, and 15% research projects, such as surveys, retrospective chart reviews, and case-control studies. Residents may also work on a research project with a faculty member and submit a literature review on the topic if the project will not be completed by graduation. The literature review will be reformatted to serve as the introduction to the final paper submitted for publication.

Evaluation/Next Steps
After 1 year of exposure to DEAR, only 3 (37.5%) of the 8 graduating residents turned in a final draft of their paper by the end of their third year. At 2 years postproject initiation (2001), 7 (58.3%) of 12 graduating residents completed papers by the end of their third year. Three years postproject initiation (2002), 8 (72.7%) of 11 residents submitted a paper by graduation. These results suggest that DEAR’s residency component is successfully promoting timely completion of resident papers.

Several steps will be taken to evaluate DEAR’s effectiveness. A survey of residents’ perceived barriers was implemented in 2001. This survey will be given annually, and responses will be analyzed to determine DEAR’s effectiveness in alleviating obstacles. Additionally, timely submissions and the annual number of publications and presentations will be recorded. With new timelines strictly encouraged and enforced, these outcome measures should increase with each graduating class.

It is further recognized that as an increasing percentage of residents choose research projects over health care-related papers and the level of sophistication for resident research increases, the timelines will need to be adjusted. This will allow more time for developing the research proposal, collecting data, and analyzing data. These adjustments may be accepted, with careful monitoring, to ensure research and scholarly activity are a priority and the research requirement is completed by graduation.

References