Diagnostic and Screening Procedures in Family Practice

Past, Present, and Future Use

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Objective: This report documents the experience, current practices, and plans of family physicians regarding their use of clinical procedures in diagnosis, screening, and prevention.

Design: A mailed survey of family physicians asked who offered or planned to add a variety of clinical procedures in their practices.

Participants: Active members of the Washington Academy of Family Physicians.

Main Outcome Measures: Does the physician include the procedure in his or her current practice or plan to add it in the future?

Results: Questionnaires were returned by 790 (82%) of 963 physicians, with 750 usable responses. Eighty-four percent of respondents were male and 68% had trained for at least 3 years. The median age of respondents was 40 years. Procedures performed by most respondents included the following: Papanicolaou's smear (97%), electrocardiography (80% performed it and 71% interpreted the results), endometrial biopsy (66%), pulmonary function test (61%), rigid sigmoidoscopy (58%), chest roentgenogram interpretation (54%), flexible sigmoidoscopy (52%), performing chest roentgenography (51%), and endocervical curettage (51%). Procedures most often planned to be added by respondents included flexible sigmoidoscopy (59%), colposcopy (30%), endometrial biopsy (23%), pulmonary function test (18%), smoking cessation groups (16%), exercise tolerance test (14%), and fine-needle aspiration biopsy (14%). Forty-two percent of respondents volunteered to teach these procedures to their colleagues.

Conclusions: Family practice includes a wide variety of procedures used in diagnosis, screening, and prevention. Family physicians are eager to add procedures to their practices and to teach their colleagues the procedures they know.

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PROCEDURAL SKILLS are important tools in the comprehensive care provided by family physicians. The specific procedures offered vary among physicians, across communities, and over time. This report documents the procedural experience, practices, and interests of family physicians, with special emphasis on those techniques used in cancer prevention, preventive cardiology, and women's health care. The purpose of this study was to document the availability of a variety of clinical procedures in the practices of family physicians. No attempt was made to assess the frequency or appropriateness of use of these procedures in patient care. That was the goal of other studies with other methods. The aim herein was to document the prevalence and patterns of interest, skill, and equipment in community-based family practices. Attempts to influence the provision of clinical services in primary care must build on this foundation of current practice.

The second focus of this study was to identify the interests of practicing family physicians in adding new procedures in these important areas of patient care. Educators at all levels must respond to these needs in preparing family physicians for the future.
SUBJECTS AND METHODS

A one-page questionnaire was mailed in early 1989 to all 963 current, active members of the Washington Academy of Family Physicians who lived in Washington State. A follow-up questionnaire was mailed to those who had not responded within 3 weeks. The questionnaire listed 30 clinical procedures that are sometimes included in the practices of family physicians. The physician was asked to identify the place of each in his or her own current office or practice, as follows: never offered, currently offered, offered in the past but no longer offered, or would like to offer in the future.

The list of procedures was drawn from a pilot study that identified the interests of these practicing family physicians. Thus, the list included procedures that are routinely recommended plus some that are traditionally performed in physicians' practices (including some of questionable value in screening programs) and a few procedures of emerging interest.

Procedures studied included the following that are commonly used in the prevention and diagnosis of major cancers:\textsuperscript{6-12} for breast cancer, breast biopsy, fine-needle aspiration biopsy, and performing mammography and interpreting the results; for cervical cancer, Papanicolaou's smear, endocervical curettage, cervical biopsy, and colposcopy; for colorectal cancer, rigid sigmoidoscopy, flexible fiberoptic sigmoidoscopy, colonoscopy, and performing barium enema radiography and interpreting the results; for endometrial cancer, endometrial biopsy; for laryngeal cancer, laryngoscopy (indirect and fiberoptic); for lung cancer, performing chest roentgenography and interpreting the results; and leading a smoking cessation group for patients.

The procedures studied included several that are commonly used in preventive\textsuperscript{13} and diagnostic cardiology: serum lipid analysis, performing electrocardiography (ECG) and interpreting the results, performing chest roentgenography and interpreting the results, performing Holter monitor tests and interpreting the results, treadmill exercise tolerance tests, pulmonary function tests, and leading patient smoking cessation groups.

Procedures studied also included the following that are used in selected areas of women's health care. Screening and diagnostic procedures for cancer of the cervix and uterus included Papanicolaou's smear, endocervical curettage, cervical biopsy, colposcopy, and endometrial biopsy. Procedures used in the screening and evaluation of breast diseases included breast biopsy, fine-needle aspiration biopsy, and performing mammography and interpreting the results. Obstetrical test procedures studied included amniocentesis and performing and interpreting the results of obstetrical ultrasonography. Suction dilation and evacuation and laparoscopy were also studied.

The questionnaire also included items describing the personal characteristics of the physician and his or her practice and community. Each physician was asked to volunteer to be a resource for colleagues who wished to learn the procedures with which he or she had experience. Each respondent was also given the opportunity to request the names of other family physicians who had volunteered to teach specific procedures he or she wanted to learn. To provide for this sharing of information, interests, and experience, the questionnaire bore the preprinted name of the respondent.

Comparisons between physician groups were tested with the test of proportions. The criterion for statistical significance was \( P=.05 \).

The evolution of the procedural practice of family physicians will influence the provision of clinical services, the direction of health care policy, and the future of the specialty.

RESULTS

Of the 963 questionnaires mailed, 790 (82\%) were returned. Survey data were complete and usable for 750 respondents and are reported herein. Responses were excluded from physicians who were retired, living out of state, or inactive or who disqualified themselves because they were not involved in patient care. The demographic profile of the respondents was compared with that of the active members of the Washington Academy of Family Physicians, and no significant differences were found in any of the factors described below. In addition, those physicians who responded to the initial questionnaire were compared with those who responded to the second mailing, and no differences were found in demographic characteristics or procedural practices. Thus, the 750 respondents described herein can be regarded as a statistical sample, representative of this population of family physicians.

Six hundred thirty (84\%) of the respondents were male and the median age of the group was 40 years. Five hundred ten (68\%) of these family physicians had completed 3 or more years of postgraduate training. Respondents selected the following undefined categories to describe their practice communities: rural, 91 (12\%); small town, 206 (27\%); suburban, 188 (25\%); and urban, 265 (35\%). Practice arrangement was listed as solo by 187 respondents (25\%), family practice group by 338 respondents (45\%), and multispecialty group by 113 respondents (15\%); the remaining 112 respondents (15\%) worked in other professional settings. Obstetrics was included in the practices of 406 respondents (54\%) and major surgery was performed by 137 (18\%) of the 750 family physicians responding to this survey.

Table I shows for each procedure the number and percentage of family physician respondents who currently practice it, never practiced it, practiced it only in the past, or plan to practice it in the future. The percent-
age of physicians currently offering these procedural services to their patients ranged from a high of 97% for Papanicolaou's smears to a low of 2% for laparoscopy, colonoscopy, and interpretation of mammograms and barium enema radiographs. Since the survey group was large, however, even the smallest percentage represents 11 family physicians in Washington who currently interpret barium enema radiographs.

Not all physicians who are involved in tests that require both a technical and professional component both perform the test and interpret its results. Some perform the procedure but send the results elsewhere for interpretation and some have the test performed outside their offices but interpret the results themselves. For example, more physicians in this group interpret chest roentgenograms in their practices (54%) than perform roentgenography in their offices (51%). For the more rarely performed radiographic examinations, eg, mammography and barium enemas, however, more physicians perform the tests in their offices than interpret the radiographs themselves.

Table 2 shows the number and percentage of family physicians who want to add the procedure to their practices among those who do not currently perform that procedure. Thus, Table 1 summarizes the distribution of practices, but Table 2 more clearly shows the degree of interest in learning new procedures.

Among the family physicians responding to this survey, 42% volunteered to serve as resources for their colleagues to discuss and teach the procedures with which they had experience.

**COMMENT**

The results of this study document the breadth and depth of diagnostic and screening procedures offered by family physicians in Washington. As with most areas of practice in the
specialty, there is a wide variety of interests, needs, and competencies. Many family physicians in Washington State perform procedures that may not have traditionally been considered part of family practice, such as colonoscopy or colposcopy. Many practitioners are willing to counsel their colleagues on the use of the procedures they perform and teach them these techniques.

The data presented herein are based on self-reported descriptions of each respondent's practice. The high response rate and lack of response bias in this large sample make these data representative. It seems unlikely that physicians would have a strong motive either to underreport or overreport the availability of procedures in their practices. Self-reporting is likely to be a more valid estimate of simple procedure availability than it is of the more difficult issues of frequency and appropriateness of procedure use. No attempt was made to verify these reports or to measure the frequency or competency with which physicians performed these procedures. Plans to add procedures in the future are also based on self-reports. Only time will tell how many physicians follow through on their expressed interests in learning the new procedures and offering them in their practices.

The large and representative sample described herein gives an excellent picture of the practices and interests of those family physicians who were active members of the Washington Academy of Family Physicians in 1989. It may not, however, represent as accurately all the family physicians and general practitioners in the state, a group difficult to classify and count but approximately twice as large as the Academy membership.

Some of the respondents among the 15% who listed their practice arrangement as "other" may be working in nonclinical settings. Thus, the denominators used to calculate these rates of procedure use may include nonclinicians, and the resulting rates would then underestimate the

Table 2. Physicians' Plans to Add Procedures

<table>
<thead>
<tr>
<th>Rank Plan*</th>
<th>Rank Practice†</th>
<th>Procedure</th>
<th>Perform Currently</th>
<th>Plan to Add in the Future‡</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>Flexible sigmoidoscopy</td>
<td>389 (52)</td>
<td>214 (59)</td>
</tr>
<tr>
<td>2</td>
<td>22</td>
<td>Colposcopy</td>
<td>49 (6)</td>
<td>209 (30)</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>Endometrial biopsy</td>
<td>490 (66)</td>
<td>58 (23)</td>
</tr>
<tr>
<td>4</td>
<td>14</td>
<td>Cervical biopsy</td>
<td>254 (34)</td>
<td>99 (20)</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>Pulmonary function test</td>
<td>455 (61)</td>
<td>53 (18)</td>
</tr>
<tr>
<td>6</td>
<td>20</td>
<td>Smoking cessation group</td>
<td>60 (8)</td>
<td>108 (16)</td>
</tr>
<tr>
<td>7</td>
<td>19</td>
<td>Treadmill exercise tolerance tests</td>
<td>137 (18)</td>
<td>87 (14)</td>
</tr>
<tr>
<td>8</td>
<td>16</td>
<td>Fine-needle aspiration biopsy</td>
<td>179 (24)</td>
<td>81 (14)</td>
</tr>
<tr>
<td>9</td>
<td>11</td>
<td>Endocervical curettage</td>
<td>381 (51)</td>
<td>46 (12)</td>
</tr>
<tr>
<td>10</td>
<td>12</td>
<td>Laryngoscopy</td>
<td>345 (46)</td>
<td>40 (10)</td>
</tr>
<tr>
<td>11</td>
<td>9</td>
<td>Serum lipid analysis</td>
<td>387 (52)</td>
<td>35 (10)</td>
</tr>
<tr>
<td>12</td>
<td>28</td>
<td>Colonoscopy</td>
<td>14 (2)</td>
<td>66 (9)</td>
</tr>
<tr>
<td>13</td>
<td>17</td>
<td>Perform Holter monitor test</td>
<td>59 (8)</td>
<td>45 (6)</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
<td>Interpret electrocardiograms</td>
<td>603 (90)</td>
<td>11 (7)</td>
</tr>
<tr>
<td>15</td>
<td>24</td>
<td>Perform obstetrical ultrasonography</td>
<td>41 (5)</td>
<td>49 (7)</td>
</tr>
<tr>
<td>16</td>
<td>18</td>
<td>Interpret Holter test results</td>
<td>143 (19)</td>
<td>41 (7)</td>
</tr>
<tr>
<td>17</td>
<td>26</td>
<td>Interpret obstetrical ultrasonograms</td>
<td>25 (3)</td>
<td>47 (6)</td>
</tr>
<tr>
<td>18</td>
<td>13</td>
<td>Suction dilatation and evacuation</td>
<td>259 (34)</td>
<td>27 (5)</td>
</tr>
<tr>
<td>19</td>
<td>15</td>
<td>Breast biopsy</td>
<td>204 (27)</td>
<td>28 (5)</td>
</tr>
<tr>
<td>20</td>
<td>1</td>
<td>Papainoculos's smear</td>
<td>728 (97)</td>
<td>1 (4)</td>
</tr>
<tr>
<td>21</td>
<td>10</td>
<td>Perform chest roentgenography</td>
<td>384 (51)</td>
<td>16 (4)</td>
</tr>
<tr>
<td>22</td>
<td>7</td>
<td>Interpret chest roentgenograms</td>
<td>406 (54)</td>
<td>14 (4)</td>
</tr>
<tr>
<td>23</td>
<td>3</td>
<td>Perform electrocardiography</td>
<td>534 (71)</td>
<td>9 (4)</td>
</tr>
<tr>
<td>24</td>
<td>29</td>
<td>Interpret mammograms</td>
<td>12 (2)</td>
<td>23 (3)</td>
</tr>
<tr>
<td>25</td>
<td>21</td>
<td>Perform mammography</td>
<td>60 (8)</td>
<td>21 (3)</td>
</tr>
<tr>
<td>26</td>
<td>6</td>
<td>Rigid sigmoidoscopy</td>
<td>436 (58)</td>
<td>10 (3)</td>
</tr>
<tr>
<td>27</td>
<td>23</td>
<td>Amniocentesis</td>
<td>48 (6)</td>
<td>23 (3)</td>
</tr>
<tr>
<td>28</td>
<td>27</td>
<td>Laporoscopy</td>
<td>17 (2)</td>
<td>13 (2)</td>
</tr>
<tr>
<td>29</td>
<td>29</td>
<td>Perform barium enema examinations</td>
<td>25 (3)</td>
<td>5 (1)</td>
</tr>
</tbody>
</table>

*Ranked in order of the percentage of physicians who want to add the procedure among those who do not currently perform that procedure.
†Ranked in order of the percentage of physicians currently performing the procedure (from Table 1).
‡The percentage of physicians who plan to add a procedure in the future was calculated using as the denominator the number who do not currently perform that procedure.
percentages of clinicians who perform the procedures. Likewise, if rates of use of procedures related to obstetrical care, such as obstetrical ultrasonography, were calculated using as the denominator only those family physician respondents who practice obstetrics, the resulting rates would be higher. Thus, of the 405 physicians who practice obstetrics, 48 (11.9%) currently perform amniocentesis and 41 (10.1%) currently perform obstetrical ultrasonographic tests.

This survey counted the number of physicians who offer each procedure listed. Many important procedures and nonprocedural services essential to the comprehensive care provided by family physicians were not studied. The performance of a given procedure in a physician’s practice does not necessarily imply that it is performed competently or is used appropriately as part of a sound prevention program.

Procedures used in the prevention and early diagnosis of cancer of the breast include imaging and biopsy techniques. Approximately one fourth of Washington family physicians include open breast biopsy (204 respondents) and fine-needle aspiration biopsy (179 respondents) in their practices. Fifty-five physicians (7%) have chosen to stop performing open biopsies. Although only 5% of those who do not currently perform open breast biopsies plan to add that procedure to their practices, 14% of those who do not currently perform fine-needle aspiration biopsy want to learn that technique. This percentage represents 81 survey respondents and 105 practitioners in the Washington Academy of Family Physicians who want to learn fine-needle aspiration biopsy.

Smaller, but still substantial, numbers of physicians currently perform mammography (60 respondents [8%]) and interpret the results (12 respondents [2%]), most of whom practice in rural areas where these services would not otherwise be conveniently available to their patients. Despite the cost of the equipment, the need for specific training, and concerns over professional liability, some family physicians wish to add mammography to the services they offer.

Papanicolaou’s smear is the foundation of prevention of cancer of the cervix and almost every practicing family physician performs it. Many also perform cervical biopsies (253 physicians [34%]) and endocervical curettage (381 physicians [51%]), either under direct vision or at colposcopy. Although only 49 physicians (6.5%) in the survey sample currently perform colposcopy, 209 (30%) of those who do not plan to learn and practice that technique. An immediate need clearly exists in both residency and continuing medical education for teaching colposcopy and the management of abnormal Papanicolaou’s smears.

Several procedures practiced by family physicians are used in the early diagnosis and prevention of colorectal cancer. More than half the respondents (436 physicians [58%]) perform rigid sigmoidoscopy. Another 233 (31%) have abandoned that procedure, most in favor of performing the superior flexible fiberoptic sigmoidoscopy that is currently performed by 389 family physicians (52%) in the state of Washington. For most physicians, the two techniques appear to be mutually exclusive alternatives; those who currently use the flexible fiberoptic equipment had either never performed or had abandoned the rigid technique. Two hundred fourteen respondents (59%) who do not already perform flexible sigmoidoscopy plan to learn and use the newer technique. This level of interest clearly calls for initiatives in training and credentialing practicing family physicians in this procedure.

The resulting improvement in patients’ access to and compliance with sigmoidoscopy can increase the effectiveness of colorectal screening efforts in family practice. Fourteen practitioners have built on their experience with flexible sigmoidoscopy and acquired the training and equipment needed to perform colonoscopy. An additional 66 family physicians plan to do the same, which is almost 10% of all those who do not currently perform colonoscopy. The implications of training, equipping, and credentialing these physicians deserve attention.

Few physicians currently perform barium enema examinations (25 respondents) or interpret the results (11 respondents). Only a handful plan to add these procedures to their practices, which is fewer than the number who plan to add mammography to their practices.

In the secondary prevention of endometrial cancer, timely endometrial biopsy has become an important procedure. Four hundred ninety-six (66%) of the study respondents currently perform this procedure. Others may still use other techniques for sampling the endometrium when indicated. Fifty-eight (28%) of those respondents not currently performing endometrial biopsy plan to add it. If all respondents who expressed this interest added the procedure, still only 74% of family physicians in this state would offer endometrial biopsy. Given the recent advances in equipment and technique that have improved the comfort, safety, and yield of this procedure, perhaps even more family physicians could offer it to their patients. Considering the aging of the patient population and the increase in the use of hormone replacement therapy in the prevention of osteoporosis, endometrial biopsy should be of increasing importance to most family physicians.

Procedures for the prevention of laryngeal cancer include smoking cessation counseling for primary prevention and indirect laryngoscopy for early diagnosis. Fewer than half of these family physicians (345 respondents [46%]) perform laryngoscopy and only an additional 40 (5%) plan to add it to their practices. There is an apparent need to promote among family physicians strategies to ensure access to examination of the larynx in appropriate patients at high risk of cancer, including learning and maintaining these examination skills, adopting newer equipment to improve the ease and yield of the examination, or encouraging referral to other specialists.

Methods to help patients avoid or stop smoking are without doubt the most important measures in preventing
lung cancer. Conducting a formal smoking cessation group in their practices is only one service that family physicians can offer their patients to help them avoid smoking. Sixty respondents (8%) currently conduct such group sessions in their practices and 108 (16%) of those who do not would like to start offering smoking cessation groups. Individual counseling and referral to services in the community are other major methods available to physicians but were not examined in this study. An initiative to provide family physicians in training and practice with the skills, staff, and materials needed to incorporate smoking cessation groups into their practices could have substantial impact on reducing smoking and the illnesses it causes.

Chest roentgenography is a standard diagnostic procedure in many family physicians' offices, even though it is not recommended as a routine screening test for lung cancer. About half of the respondents perform chest roentgenography (384 physicians [51%]) and interpret the results (406 physicians [54%]) in their offices. The correspondence between these groups is not complete, with many physicians interpreting chest roentgenograms obtained outside their offices and many others performing roentgenography in their offices and sending the films to a radiologist for interpretation. As with several other procedures studied, including sigmoidoscopy and fine-needle aspiration biopsy, chest roentgenograms are often used in the diagnosis of other disorders.

Family physicians offer procedural services that are important elements in the prevention and diagnosis of cardiovascular diseases. The most commonly practiced procedures are those diagnostic methods that are routinely incorporated into clinical family practice training, including ECGs, pulmonary function tests, and chest roentgenography. The majority of physicians who interpret these test results have the equipment and staff to perform the tests in their offices. Few family physicians have given up offering these procedures. Of the relatively small numbers of physicians who do not currently offer these services, only a few plan to add them in the future. Presumably, their practice patterns are settled and they do not believe that the benefits to their patients and their practices outweigh the costs of these procedures in terms of time, expense, staff, and equipment.

Serum lipid analysis is offered by 387 (52%) of these family physicians. Only 35 (10%) of the remainder plan to add it to their practices. The expense of the necessary equipment, the restrictions on compensation, and the increasing burden of office laboratory regulation may all be deterrents to making this service more available in family practice offices. This study did not address the lipid fractions analyzed or the method of assay used in these practices. Many family physicians presumably use outside laboratories for serum lipid analysis.

Fifty-three respondents (18%) who do not currently offer it are interested in adding pulmonary function testing to their practices, even though equipment and staff are required for this procedure. Even more expensive equipment is required to perform treadmill exercise tolerance testing, yet 87 (14%) of those not currently offering it plan to do so in the future. In some communities, physicians can perform treadmill exercise tolerance tests on their patients at the local hospital without acquiring the equipment for their offices.

There is a general trend for family physicians practicing in smaller communities to be more likely to offer exercise tolerance testing, lipid analysis, and Holter monitor testing and interpretation. Only for Holter testing and interpretation is this trend significant for plans to add procedures in the future.

Only small percentages of Washington family physicians are currently involved in obstetrical ultrasonography. With this large sample, however, these percentages represent 41 physicians (5.5%) who perform ultrasonography in their practices and 25 (3.3%) who interpret the results. Interest is growing in studying the role of obstetrical ultrasonography in family practice and in teaching appropriate use of the technique.

As expected, there is a strong association between offering obstetrical ultrasonography and practicing obstetrics in rural communities. The same association with rural practice is seen in the numbers of family physicians in this group who currently perform amniocentesis (48 respondents) and who plan to add it to their practices (23 respondents).

These figures do not completely reflect the range of services available in any given practice community since it is common for physicians in group practices or smaller communities to build individual and complementary procedure profiles. Thus, one physician in a group may perform colposcopy while another may conduct smoking cessation groups, making both services available to patients.

To my knowledge, this study represents the largest community-based survey of procedure use and interests among family physicians. Previous reports have described procedural experience overseas, in single communities, or among smaller numbers of nonresidency-trained general practitioners. Other reports have described procedure use in graduates of selected family practice residency programs. Most studies of cancer prevention efforts in physicians' practices have focused on physical examination, patient education, and the ordering of screening tests rather than on physicians' use of clinical procedures.

The use of a variety of procedures by general internists was recently surveyed nationwide. Compared with these internists, Washington family physicians are more likely to perform the following procedures: flexible sigmoidoscopy (family physicians, 52% vs internists, 42%), laryngoscopy (family physicians, 46% vs internists, 23%), and breast aspiration or biopsy (family physicians, 24% needle biopsy vs internists, 10% needle aspiration). The family physicians were less likely than the internists to perform the following: ECG interpretation (internists, 98% vs family physicians, 80%), chest roentgenogram interpretation (internists, 76% vs family physicians, 54%), Holter monitor interpretation (internists, 53% vs family physicians, 19%).
and exercise tolerance tests (internists, 45% vs family physicians, 18%). (The survey of interns did not inquire about the technical component of these procedures.) About equal proportions of these two physician groups perform pulmonary function tests in their practices (family physicians, 61% vs interns, 62%).

The high rate of response by practicing family physicians to this survey suggests their keen interest in learning about their specialty, sharing information about their practices, and expanding the scope of their services through learning new procedures. Close to half of these physicians volunteered to share their experiences and expertise and to help other family physicians from across the state to add new procedures to their practices.

Using the information provided by this study, The Family Health Foundation of Washington has created the Procedure Resource Network (PRN). This computerized data bank connects members who are experienced in specific clinical procedures with those who are interested in learning new procedures. Physicians who wish to add new procedures to their practices can contact the Network and are given the names, addresses, and telephone numbers of family physician colleagues near their communities who perform the procedure of interest and who have volunteered to counsel and teach their colleagues.

This survey is an initial effort at mapping the territory of procedural practice in family medicine. By mapping this territory and identifying those physicians working near the frontiers of the specialty, we can better chart the future of family practice. Documenting current patterns of procedural practice should provide information and incentive to family practice leaders involved with the important issues of disease control and prevention, hospital privileges, physician supply, and health care financing and policy.

Identifying the interests of practicing family physicians in learning specific new procedural skills should help guide residency training and continuing medical education programs. Establishing this Procedure Resource Network will foster the process of family physicians learning from and teaching each other to enhance professional skills, broaden the scope of the specialty, and expand the services that family physicians bring to their patients and communities.

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Reprints not available.

REFERENCES


