

A Report on the Findings of the Ad Hoc Committee on International Physician Assistant Education—October 2003

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Executive Summary

In May 2002 the APAP Ad Hoc Committee on International PA Education began its development of a white paper on international issues relating to APAP and the education of physician assistants. Specifically, the committee reviewed the results of a survey on international PA education, canvassed PA faculty to learn about their experiences with international student rotations, and identified PA educational activities outside the United States. From this preliminary research, the committee formulated the following nine objectives and corresponding goals to guide its work.

Objectives

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| <ol style="list-style-type: none"> 1. Appraise PA educational activity outside the United States.
<i>Goal:</i> Undertake a survey of international activities. 2. Explore the motivation for students' international experiences.
<i>Goal:</i> Canvass PA faculty and students and review the literature to determine outcomes from international rotations for students, their programs, and host preceptors. 3. Formulate guidelines for PA students' international experiences.
<i>Goal:</i> Draft a set of guidelines with help from experts in PA international education. 4. Identify experts and consultants on international and immigrant issues.
<i>Goal:</i> Create a list of experts and consultants. | <ol style="list-style-type: none"> 5. Examine international and immigrant health issues as they relate to PA curricula.
<i>Goal:</i> Develop a list of international health topics 6. Share the physician assistant concept with other countries.
<i>Goal:</i> Recommend resource material. 7. Identify opportunities to network with other organizations interested in international PA education.
<i>Goal:</i> Develop liaisons 8. Evaluate the information on international activities on the AAPA Web site.
<i>Goal:</i> Determine applicability to APAP 9. Determine the need for an APAP committee on international PA education.
<i>Goal:</i> List the benefits to APAP of a standing committee. |
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Committee Charge

The APAP Ad Hoc Committee on International Physician Assistant Education will create a white paper on international issues as they relate to APAP and the education of physician assistants. The committee will examine APAP membership issues and policy statements, evaluate educational activities abroad, inform the APAP membership of opportunities for students, and explore the need for an APAP database of international activities.

Committee members were selected for their expertise in immigrant or international health care and activity on behalf of physician assistant (PA) students' international rotations. Some members have trained other health professionals or gained educational experience with PAs in both developed and developing countries. Others are faculty who study the international health work force.

Background

With the global expansion of the U.S. economy, international interest in the American health care system also increased. Not surprisingly, the physician assistant concept has reached other countries attempting to provide cost-effective, quality medical care to their populations.

Interest among PA educators in PA activity abroad was spurred by APAP's formation in 1999 of an international special interest group—the first centralized effort at collaboration on international health education issues among PA programs. Outcomes of the International Activities Survey of Physician Assistant Educational Programs in the United States,¹ detailed in this report, document the increased interest and participation among domestic PA programs in activity abroad.

International education for PAs has two centers of attention. First is the development of PA programs outside the United States. In 1992, the Canadian Armed Forces inaugurated a PA program modeled largely on those in the United States. Today, in addition to Canada, the Netherlands, Malaysia, Liberia, Haiti, Lesotho, Thailand, the United Kingdom, and India have developed the PA concept to some extent within their countries, with physician assistant providers or programs similar to those in the United States.

The second focus is the establishment of clinical rotations for U.S. PA students in other countries: The Pedersen survey identified nearly 50 countries in which students had completed clinical rotations.

These developments led the U.S. PA organizations to establish formal protocols on such issues as the evaluation of credentials and the accreditation of PAs trained in other countries. In December 2001, the National Commission on Certification of Physician Assistants (NCCPA) convened the first Four Organization Meeting among itself and the other national PA professional organizations—APAP, the American Academy of Physician Assistants (AAPA), and the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA). This group continues to meet regularly and monitor international issues of importance to the profession.

In 2002, APAP formed the Ad Hoc Committee on International PA Education. Together with the AAPA Board Committee on International Affairs, the committee is developing new strategies to share detailed knowledge of PAs and their education with other countries. APAP and the AAPA communicate regularly about international PA education and deployment, APAP's Ad Hoc Committee advises the AAPA on international issues, and the APAP Federal Affairs Council is working with the AAPA Education Council on a resource guide for the development of PA programs abroad.

The profession benefits from the international educational opportunities programs have provided for their students. As this report shows, international clinical rotations have a profound effect on students and their careers. The experiences

of students abroad influence not only their later choice of practice sites, but also the populations they choose to serve.

APAP and the PA Profession Expand Internationally

1999 The College of Allied Health Sciences in Madang, Papua New Guinea, becomes APAP's first international colleague.

APAP International Special Interest Group established.

2000 PA faculty participate in the Commission on Graduates of Foreign Nursing Schools (CGFNS), authorized by the Immigration and Naturalization Service (INS) to verify the credentials of foreign-trained PAs applying for visas to enter the United States.

2001 AAPA develops *Guidelines for PAs Working Internationally*.

First Four Organization Meeting held among the national professional PA organizations—APAP, AAPA, and ARC-PA, and the NCCPA—to establish a dialogue on international issues of importance to the profession.

2002 APAP forms the Ad Hoc Committee on International PA Education.

PA program survey on international activities conducted.

2003 APAP Federal Affairs Council charged to develop a resource guide for the development of PA programs outside the United States.

APAP participates in AAPA Invitational Meeting/Symposium for International Delegations on PA Role, Education, and Regulation, held in conjunction with AAPA's 31st Annual PA Conference in New Orleans, Louisiana.

Objectives

Objective 1. Appraise PA educational activity outside the United States.

Goal: Undertake a survey of international activities.

APAP International Survey

In 2002, Kathy Pedersen, faculty member of the University of Utah PA Program and chair of the APAP Ad Hoc Committee on International PA Education, surveyed the 130 PA educational programs in the United States to learn

the extent of their involvement with international activities.¹ Of 72 respondents, more than half reported that their programs participated in international activities. Most respondents (70%) were willing to share information with other PA programs, and 58 percent said they would allow students from other programs to participate in their activities abroad. Most responding programs (73%) said they would access a database of contacts, 67% would use a dedicated Web site, and 64% would subscribe to an electronic mailing list, if available.

All respondents believed that students benefited from international rotations, and nearly all reported having students who wished to participate in international rotations. Respondents indicated that issues related to international medicine fit into the philosophy of their PA programs. Of the 44 programs responding that they participated in international activities, 36 (83%) sent students on international rotations. Seventy-three percent had a faculty member who either had done or had a strong interest in international or volunteer work.

International Activities at PA Programs

Domestic PA programs engage in such international activities as:

- Placing students in international settings for clinical rotations.
- Integrating international health care issues into their curricula.
- Hosting foreign clinicians at programs.
- Facilitating student or faculty exchange programs with other countries.
- Advancing the PA concept in other countries.
- Participating in or establishing faculty- or student-initiated international projects.

Database of International Activity

APAP members reported that an annual update of PA programs' activities in other countries would be useful to them. A database to track PA programs' international activities could be developed. For each program, entries would include the following:

- Program contact person responsible for international activities
- Countries hosting international rotations for the program or developing PA-type programs
- Other information identified by APAP leadership.

Summary and Recommendations

Interest and involvement in educational activities, such as clinical rotations, outside the United States appear to be strong among programs responding to the survey. The committee recommends that APAP develop a database to track international program activity and provide its membership with an annual update.

Objective 2. Explore the motivation for students' international experiences.

Goal: Canvass PA faculty and students and review the literature to determine outcomes from international rotations for students, their programs, and host preceptors.

International Health Care Issues

If PA students' experiences are similar to those documented for medical residents, it is likely that students taking part in international rotations contribute to the flow of new knowledge into American medicine. Their skills in history taking and conducting physical exams are enhanced, and they are likely to be drawn to work in underserved areas, public health, and international positions.² Students often report that they are profoundly affected by overseas rotations, particularly those in undeveloped countries, and testify to a broader perspective on global issues that tends to endure.³

Faculty who answered the Pedersen survey supported students' own perceptions that international experiences were life-changing and reported that students who participated in rotation experiences abroad gained enhanced cultural competence (76%), exposure to global medicine (95%), language skills (67%), and familiarity with missionary work (67%).

The host site and its preceptors appear to reap several benefits from PA student rotations. Survey respondents said the host gained medical knowledge (88%), health education (94%), English skills (61%), and exposure to Western medicine (88%). In anecdotal reports, preceptors have expressed their pleasure in teaching students, practicing English with native speakers, learning new medical concepts—particularly e-medicine—and exchanging cultural experiences. The experience of hosting PA students may also lead preceptors to consider a PA model for their country, however differently it may be interpreted to fit the country's unique health care structure.

As one PA educator said:

International rotations can be an excellent educational experience for PA students. Clinical and educational opportunities in diverse cultures offer students a multidimensional experience. This exposure may also better prepare students for employment opportunities at multinational sites and for practice within the United States where diseases once thought foreign are becoming common considerations (D. Caswell, oral communication, December 2001).

As PAs increasingly become recognized as health care providers throughout the world, it becomes important for PA students to understand international health care issues. Rotations in other countries provide students with opportunities to gain this experience.

Summary and Recommendations

APAP should state its commitment to PA students' global health education and rotation experiences outside the United States. Students appear to benefit from international rotations by observing and practicing medicine in other countries. These experiences enhance students' awareness of health care practices, beliefs, and cultural values in host countries. Many students related that international rotations were life-changing events that heightened their appreciation for the ways that culture affects health care. Graduates who participated in international rotations as students may be more likely to work or volunteer in domestic and international clinical activities serving disadvantaged populations. Placement of students abroad exposes host countries to the PA concept and may provide a catalyst for the development of similar programs within these countries.

Objective 3. Formulate guidelines for PA students' international experiences.

Goal: Draft a set of guidelines with help from experts in PA international education.

Using comprehensive models developed by the PA programs at Pacific University in Oregon, the University of Utah School of Medicine, and the University of Washington MEDEX Northwest program in Washington, the committee developed *Guidelines for International Rotations for Physician Assistant Students*, which can be found in Table 1.

Divergence in Survey Outcomes Demonstrates Need for Guidelines

The Pedersen PA program survey indicated a wide divergence of opinion on some issues relating to international rotations. In the section of the survey in which faculty were allowed more than one response, two-thirds (69%) felt the supervisor of PA students at a clinical site should be a Western-trained doctor, while nearly half (47%) felt that a non-Western trained doctor would also be appropriate. Thirty-nine percent felt the supervisor should be a health care provider comparable to a PA/NP. Some programs said that a faculty person should accompany any group of PAs traveling overseas.

Other issues produced a more uniform response. A majority of respondents (68%) reported that they monitor and approve the international rotation similarly to their programs' clinical rotations within the United States, reevaluate them as needed (90%), and have a liaison person at the overseas site (90%). The majority of programs (79%) indicated that students were adequately prepared for international rotations and had sufficient immunizations (100%). Well over half of the responding programs (69%) had students sign a safety waiver, and more than a third (37%) required evacuation insurance. Travel costs were usually borne by the student (92%), though some institutions identified special student

funds or loans for international activity and indicated that community resources might also provide financial support.

The Pedersen survey found that international rotations were usually used to meet an elective (94%). In some instances the rotation may have fulfilled a requirement for a rural, underserved, or primary care rotation; in other cases it served as a research project.

International Rotations Consistent with Programs' Missions

The committee concluded that international clinical rotations are consistent with the mission of PA education. PA students and faculty reap the greatest benefit when their host institutions support such activities and when dedicated program faculty assist and mentor students and maintain ongoing relationships with preceptors at international clinical sites. Student selection for rotations abroad requires guidelines, which should be formalized by each program according to its mission and values. Suggested guidelines appear in Table 2.

Developing an International Clinical Rotation

Responsibilities of the PA Program

- Identify a clinical site with a preceptor interested in supervising the student.
- Assess an international site by the same process as a rotation within the United States and in accordance with the ARC-PA *Standards*.
- Explain the PA role to the preceptor, medical staff, and administrator of the facility.
- Ascertain arrangements for the student's safe housing and transportation between the airport and the clinical site.
- Notify the United States Embassy or consulate within the host country of the dates of the student's stay.
- Draw up an affiliation agreement—consistent with the terms of affiliation agreements for other clinical rotations used by the PA program—with the international host facility and preceptor.

Responsibilities of Preceptor and International Host Facility

- Arrange for English-speaking contacts. If the student is not fluent in the host country's language, the preceptor should speak English or arrange for an interpreter to assist with communication and coordinate logistics of the rotation.
- Determine whether a minister of health or other authority must also approve the PA student's placement.

Preparation of PA Students for International Rotations

Minimizing the risk to the student while providing an enriching cultural and medical experience is a priority for an international rotation. Some issues programs must consider when preparing students for international rotations include

Table 1

Guidelines For International Rotations For Physician Assistant Students

These guidelines are intended to provide information for physician assistant (PA) programs interested in establishing international student rotations. Most importantly, a program should consider how the rotation fits into the students' overall clinical training. Since medical care in other countries is often very different from that practiced in the United States, the international rotation should not replace a core clinical rotation. Rather, the rotation may serve as an elective or public health or community medicine rotation. In addition, the program needs to consider the increased liability issues for international rotations and how to adequately prepare students for travel to other countries.

Benefits of International Rotations

1. International rotations may provide an opportunity for students to treat tropical diseases or other acute and chronic medical conditions not typically found in the United States. International rotations also provide the direct experience of and interactions with other cultures that broaden students' capacity for cultural competency. Equally important are the often-seen changes in social values that result from international experiences, which frequently strengthen individuals' commitment to providing care for underserved populations, both in the United States and abroad.
2. Through working in different health care delivery systems in other countries, students can learn strategies to provide medical care with limited resources.
3. Students can gain exposure to the non-Western, alternative treatments that are more common in other countries and learn how to integrate such treatments into their patient care.
4. Politics plays an important role in the delivery of health care around the world. Students will see how changes in policy, especially in developing countries, can affect health care in both positive and negative ways.
5. Students on international rotations develop a global understanding of health care by witnessing poverty, infectious diseases, and problems that stem from famine, population growth, personal sanitation issues, housing issues, the lack of clean water and access to education.

Program Considerations

1. Programs need to treat international rotations just as they would any other clinical rotation with regard to site visits, affiliation agreements, preceptor evaluations, adequacy of the rotation, student selection, and liability issues.
2. Prior to the student's placement, a PA faculty member with international experience should visit the international site to evaluate its suitability for a clinical rotation. The faculty member should identify an English-speaking contact person

to assume responsibility for assisting the student before and during the rotation. Some international sites have prior experience hosting students from medical schools, and PA programs can contact groups such as the International Health Medical Education Consortium (IHMEC), which have substantial experience with international sites and the placement of medical residents, for help with site evaluation.

3. A faculty member should be responsible for preparing students for international travel. Long-term relationships between international sites and the PA programs are important for the establishment and maintenance of international rotations, and the PA faculty member should have frequent contact with the site.
4. Clarifying expectations for all parties engaging in rotations abroad is important for the success of participants and rotation experiences, and the PA program should assess why an international site wishes to host a PA student. The program also needs to be certain that the preceptor understands the role of the PA. Preceptors commonly cite the following as reasons for hosting PAs: teaching and speaking the English language with a native speaker, sharing medical information, learning about advances in the practice of medicine, and obtaining supplies for the clinic. Frequently, they evaluate the PA role for its potential and suitability for their country.
5. Due to the increased liability concerns for students at international sites, programs should evaluate issues related to student safety, such as housing, transportation, medical care abroad, potential evacuation, political issues within the country, medical malpractice coverage, and site evaluation, as required by the ARC-PA.
6. Programs are encouraged to develop an orientation program to prepare students for international rotations. The orientation should cover such issues as travel; safe housing, food, and water; the availability of medical care; communication while abroad; health care, political concerns, and cultural issues relating to the host country; and expectations for students' behavior while abroad.

Table 1 continued

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| <ol style="list-style-type: none"> 7. The program should consult with the risk management department at its host institution, discuss liability concerns, and consider developing a release of liability consent for the student. 8. The program should develop a communication plan to ensure adequate contact between the program, the preceptor, and the student before and during the rotation. Use of the Internet, e-mail, and phone should be included in such a plan. 9. Some programs have found it helpful to notify the U.S. Embassy or consulate in the host country when a student is participating in a clinical rotation. 10. In case of a problem at the rotation site or within the host country, the program may want to have a contingency plan to assist with the emergency evacuation of a student. <p>Student Concerns</p> <ol style="list-style-type: none"> 1. Students and programs should develop clear learning objectives and assignments that relate to the international site. 2. Students must be adequately prepared for and understand the risks associated with the rotation. 3. Students need to provide proof of any necessary immunizations required for travel to particular countries. Students should consult the Centers for Disease Control and Prevention (CDC) Web site for up-to-date immunization information: www.cdc.gov/travel/vaccinat.html. | <ol style="list-style-type: none"> 4. Students should check with their medical insurance companies to determine whether they are covered for emergency care abroad. If not, they should purchase policies to cover both emergency medical care and evacuation and provide proof of coverage prior to the rotation. Some host institutions may provide evacuation coverage as part of their general liability insurance. 5. Students should consider an appropriate gift for host families. Many international sites arrange for students to live in home-stay arrangements with host families that provide some meals and laundry for the student. Arrangements should be made for students' transportation to and from the airport and the housing site. 6. Students are responsible for such costs associated with international rotations as air travel, housing, meals, immunizations, additional insurance, and other expenses and may be able to obtain an increase in their financial aid loans to cover the additional costs. Some universities have special funds for international rotations, and community organizations may also sponsor students. 7. Students returning from rotations are an invaluable resource for others with similar interests and should share their experiences with the faculty and other class members. |
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Table 2

Guidelines For Selecting Students For International Rotations

PA students in clinical rotations abroad are distant from the host program, live and study in a different culture, and may encounter severe hardships. Many faculty believe the ideal student candidate for a successful international experience should be

- Well organized
- Well prepared
- Emotionally stable
- In good health
- Adaptable, flexible, and patient
- Culturally sensitive
- Interested in the world and its people
- Committed to sharing knowledge and skills
- Able to tolerate some personal discomfort
- In good academic and ethical standing in the program
- Able to identify what they can offer and gain from the experience

Moreover, they must have

- A good sense of humor
- A supportive network of family and friends
- Good problem-solving skills

safety and security, the health care and social infrastructure of the host country, and cultural differences. Student orientation should include a review of common illnesses and diseases that may be encountered; availability of medication and medical resources; clinics' hours of operation; climate; availability of refrigeration, electricity, purified water, and toilet facilities; meals; anticipated expenses; student lodgings; and appropriate dress. The student should understand prevalent social and community beliefs in the host country that may affect health care. Students and faculty on rotation should have a clear plan for ongoing communication with the PA program and a special means of contacting the program in case of emergencies.

Guidelines for PAs Working Internationally

PAs working or volunteering outside this country serve as ambassadors for the profession and are, for many outside the United States, their first contact with the PA concept. This, coupled with the fact that the U.S. model of the physician assistant is not formally established in most countries, led the American Academy of Physician Assistants (AAPA) Committee on International Affairs to develop guidelines for all PAs working internationally.

PAs practicing abroad should work within the role of the PA and not misrepresent themselves as independent practitioners. They must understand and respect the beliefs and the values of those for whom they provide care. They should familiarize themselves with the resources and limitations of the local health care system. Whenever possible, PAs should attempt to train personnel who might be required to provide continuing health care.

AAPA Guidelines for PAs Working Internationally

1. PAs should establish and maintain the appropriate physician/PA team.
2. PAs should accurately represent their skills, training, professional credentials, identity, or service, both directly and indirectly.
3. PAs should provide only those services for which they are qualified via their education and/or experiences, and in accordance with all pertinent legal and regulatory processes.
4. PAs should respect the culture, values, beliefs, and expectations of the patients, local health care providers, and the local health care systems.
5. PAs should take responsibility for being familiar with and adhering to the customs, laws, and regulations of the country where they will be providing services.
6. When applicable, PAs should identify and train local personnel who can assume the role of providing care and continuing the education process.

Liability and Malpractice Insurance

While malpractice liability claims may not be an issue in some countries, this should not prevent students from practicing in a reasonable and prudent manner at all times. For any international rotation, the committee believes it is the responsibility of the PA program to verify whether medical liability is an issue in the host country. If it is, the program should provide adequate medical malpractice coverage for students on rotation. The general liability policy carried by the PA program's host institution may cover students participating in international rotations. It is recommended that institutions develop an assumption of risk and liability waiver for students to complete prior to the rotation.

In a survey of 50 U.S. medical schools involved with international medical rotations, Kuhn and colleagues found that no domestic agency carried commercial malpractice insurance for health care providers serving indigenous populations in developing countries. Nor could the authors identify a single verified report of a malpractice suit against a U.S. health care worker providing humanitarian services in the developing world. Although civil suits involving damage or injury have been documented, the committee is not aware of any that involve medical malpractice (T. Kuhn, oral communication, February 2003). The authors also spoke with representatives from several religious denominations that conduct medical

missions, as well as personnel from Christian Medical and Dental Association, International SOS Insurance Company, Mission to the World, and Doctors Without Borders. They found that none of these agencies carry malpractice insurance, had any knowledge of malpractice lawsuits, or knew of insurance carriers that would provide malpractice coverage.

A founding physician of the International Medical Health Education Consortium (IHMEC) familiar with overseas rotations for medical students reported that, to his knowledge, there is no such thing as malpractice in developing countries. In most of these countries there is no tradition for civil cases involving medical malpractice—only criminal. In criminal cases, medical malpractice insurance is of no help (J. Heck, oral communication, December 2000).

Another physician stated: "Currently, our practice is in agreement with our risk management department that, if we have a letter from the overseas preceptor stating that malpractice is not an issue, and the overseas preceptor does not carry malpractice [insurance], then the resident is allowed to participate in the rotation without coverage" (T. Gates, oral communication, December 2000). The committee concurs that, at this writing, it is important to obtain information on how PA programs' sponsoring institutions deal with issues of malpractice coverage for students in clinical rotations abroad.

Summary and Recommendations

APAP should disseminate the *Guidelines for International Rotations for Physician Assistant Students* (see Table 1), originating from models offered by PA programs and medical schools with international experience. The guidelines include considerations for the safety of students on rotation and outline responsibilities of the PA program, its host institution, and the clinical site.

Objective 4. Identify experts and consultants on international and immigrant issues.

Goal: Create a list of experts and consultants.

The Role of Experts

APAP should be a primary resource for countries interested in learning about PA education in the United States. To fulfill this role, the association should identify a cadre of individuals to serve as experts and consultants on PA education, international health, and health policy. A pool of experts would further the PA profession's capacity for international development. These individuals would be qualified to serve in multiple capacities; for example, as hosts for international delegations attending both APAP and AAPA conferences, as consultants with countries interested in PA education within the United States, or as spokespersons on various aspects of PA education and the profession. Experts could also assist domestic PA programs in developing international rotations.

Identifying Experts

Experts among APAP faculty would be individuals whose work in developed and developing countries or care for immigrants in the United States has allowed them to develop a level of skill in these areas. They may be active with international delegations, participate in clinical rotations or educational conferences abroad, facilitate health care delivery systems for other countries, or conduct research. They might also be found among the growing number of faculty who are members of such international interest groups as the following:

- Association of Medical Educators in Europe
- International Society for Traumatic Stress Studies
- International Planning Committee for Association of Allied Health Programs
- International Medical Workforce Conference Group
- International Health Medical Education Consortium
- Global Health Council
- International Health Economic Association
- Global Family Health
- World Organization of Family Doctors (WONCA)
- Physician Assistants for Global Health
- Society of Teachers of Family Medicine
- American Academy of Family Physicians

In identifying experts and consultants, the committee recommends that APAP strive for balanced and proportionate representation from its committees, task forces, and the membership at large. Qualified representation may also be sought from members of the APAP Board of Directors, the APAP Ad Hoc Committee on International PA Education, the APAP Federal Affairs Committee, the AAPA Education Council, and other interested faculty with experience in international medical education or student rotations.

Interaction with Other Countries

The committee feels that individuals representing APAP and AAPA should lend support but not guide a country in building its education program for health care providers. Before attempting to apply concepts to other nations, PA consultants need to equip themselves with information on the health education programs already in place within those countries, the structure of their health care systems, and unique cultural issues.⁴ Issues may be very different for developing and developed countries.

Attributes of APAP Experts

Ideally, those designated as experts should have experience with and an understanding of legislative, regulatory, and health policy issues in both the United States and those countries they hope to serve. The ideal candidate is a PA educator or a practicing PA with international experience, expertise with international training courses, an effective

speaker experienced in presenting to international delegations, and a culturally sensitive person who displays qualities of open-mindedness, diplomacy, patience, and tact. The experts should be capable of serving as resources for countries interested in the PA concept.

Experts would be able to discuss core competencies and role delineation—in primary, secondary, and tertiary care settings—for PA programs in the United States. They should also be familiar with applicant selection, didactic and clinical year curricula, types of PA programs, and accreditation standards.

Experts must be prepared for such questions as “How would you design a program for our country?” Creating a practitioner role that will meet a country’s needs and educating practitioners quickly may be among the most challenging issues they will encounter. They may be asked to explain certain aspects of the curriculum used in practitioners’ training, the combination of didactic and clinical training, compensation of preceptors, employment while attending PA school, and the balance of autonomy and dependence within the PA role. International delegations have typically been interested in whether flexibility can be built into PA programs, what a self-study entails, prerequisite course work, class objectives, and preceptor issues. The PA consultant should also be aware of all materials on the PA profession and programs available to visitors from other countries.

Finally, international delegations have often requested meetings with PA student preceptors. Physician preceptors should be recommended by colleagues and selected for their experience as preceptors, student mentors, and advocates for the PA profession. Some programs may find their medical directors well suited for this role.

Engaging International Delegations at National PA Conferences

PA conferences sponsored by APAP and AAPA have attracted delegations of European, Canadian, and Asian educators. APAP should communicate with representatives from other countries that intend to send delegations to the United States and solicit from them topics they would like to discuss with program directors, faculty, preceptors, and other educators while in the country. Following such discussions, needs assessments for each country represented can help identify the information most helpful to visitors. Language issues should be identified and interpretation services provided, if necessary, during the conferences. Representatives from countries actively developing PA-like programs should be invited to discuss their activities during the meetings, and the PA contacts most closely associated with those countries should be included in conference activities.

Summary and Recommendations

APAP should develop a cadre of experts in domestic and international PA education. In representing APAP, designated experts should be knowledgeable in all aspects of PA education

within the United States and with the health care issues of the countries involved.

Objective 5. Examine international and immigrant health issues as they relate to PA curricula.

Goal: Develop a list of international health topics.

Need for Enhanced Preparation

The globalization of health care means that PAs could play an increasingly important role in international medicine. And as immigrants continue to settle in both urban and rural areas across the United States, patient populations in the United States will become more culturally diverse. PAs will likely require enhanced preparation to equip themselves for immigrant care in the States and care of indigenous populations abroad. According to the Pedersen survey, while the majority (84%) of responding PA programs teach classes in public health, only 21% teach classes in tropical medicine, 42% in travel medicine, and 26% in refugee or immigrant health. Most programs (70%) indicated that international topics should be taught at the AAPA conference as CME (77%), or as an elective (66%), if the student is doing an international rotation.

International Curricular Content in PA Programs

Typically, the education of PAs in the United States includes training in cultural competency, care for immigrants, and clinical experiences in health care facilities for multicultural populations. Through informal e-mail communications between committee members and PA faculty about the inclusion of international health topics in their programs' curricula, several faculty described coursework in public health or similar topics. Some of these include a health systems organization course at Duke University's PA program in North Carolina that prepares students to deal with immigrant access and barriers to care; international medicine and immigrant health topics embedded in epidemiology, immunology, and microbiology classes at Midwestern University's PA program in Downers Grove, Illinois; and an infectious disease education module at Lock Haven University's PA program in Pennsylvania that includes tropical medicine and socially and culturally relevant issues affecting health care and delivery systems. The Lock Haven program also uses the basic curriculum in epidemiology from the Centers for Disease Control and Prevention. The Interservice PA Program at Fort Sam Houston, Texas, teaches a military public health class that focuses on chemical, biological, physical, insect, and animal threats; refugee health; and infectious disease or tropical medicine. The Marquette University PA program in Wisconsin teaches population-based medicine, which includes public health, in its course on patient advocacy, as well as community-oriented primary care (COPC). A COPC project is included in a popular clinical rotation in Belize, Central America. Pacific University in Oregon includes a seminar on

travel, tropical medicine, and immigrant health as part of its professional practice seminars for all second-year students.

Curricula for Developing Countries

The curricula to prepare domestic PA students for a global community should include such basics as gender and poverty issues, hygiene and sanitation, refugee care and disaster relief. By incorporating topics on international health care into the PA curricula, programs can develop clinicians with an awareness of the impact culture has on the health and health care of populations throughout the world.

International Health Care Topics

From discussions with programs involved with international health, the committee identified a set of topics related to the delivery of care to refugees, immigrants, and migrant workers in the United States and the developing world. Some of these are

- Cross-cultural communication
- Dermatology
- Emergency relief
- Family planning and population control
- Hygiene and sanitation
- Immigrant care
- Immunizations
- Infectious diseases/tropical medicine
- Maternal and child health
- Mental health
- Nutrition
- Ophthalmology
- Oral health
- Parasitology
- Religious beliefs
- Relocation issues
- Role of women in society
- Toxicology/pesticides
- Traditional healing methods
- Trauma and stress

Global Offerings in PA Curricula

The concept of the world as a global village in which health care issues in one part of the world affect world populations is becoming a reality and is motivating PA educators to include international health care topics in their curricula. Diseases once confined to remote areas of the world spread more rapidly with the availability and frequency of worldwide travel, requiring today's clinicians to have an increased awareness of international health issues.

Folusho Ogunfeditimi, a PA active in international work and with the AAPA specialty organization PAs for Global Health (PAGH), comments on the way that new global approaches to infectious disease may influence curriculum changes in PA programs:

No longer can the United States rely on the natural disease protection from distance and weather that have for centuries plagued other countries. The trend of medicine within the past five years has been towards a global approach to disease eradication with more attention being placed on international health and infectious disease. A huge divide still exists between tertiary treatment applications and primary preventative measures in medicine. This is primarily attributed to a lack of significant focus placed on preventative, tropical, and infectious medicine in PA programs. A change towards global medicine will result in curriculum modification in PA programs all over the country.⁵

Summary and Recommendations

Enhanced preparation is needed for students traveling to other countries and PAs serving different cultural groups within the United States. PA education should be expanded to include global and multicultural perspectives on health and health care. The committee recommends that APAP advocate for the development of a set of topics integral to international health care and rotations for inclusion into the PA curricula.

Objective 6. Share the physician assistant concept with other countries.

Goal: Recommend resource material.

The Worldwide Medical Community at the Start of the New Century

Issues that spurred the development of the PA profession in the United States of the 1970s, such as a shortage of physicians to provide care to the underserved, are now surfacing in other countries. A strong interest in the U.S. PA model exists as medical communities worldwide are exploring the role for a new health care professional in their nations. Concurrently, such issues as infectious diseases, weapons of mass destruction, terrorism, widespread migration (within and between countries), and the search for employment opportunities are presenting new problems—and new opportunities—for the PA profession. The complex questions of bi-directional employment and professional reciprocity raise questions for the education, accreditation, and service of health care professionals in the international arena.

A Resource Guide to PA Education for International Institutions

To share aspects of the U.S. PA educational programs with international institutions and agencies requesting detailed information, APAP charged its Federal Affairs Council with creating a resource guide. Council members are working in tandem with the AAPA Education Council to produce a clear, concise framework for PA education that

may help those outside the United States to develop or refine their own curricula to meet the health care needs within their countries. The guide will also serve as the basis for discussion among PA educators of the elements most essential for the education of PAs.

Foreign-Trained PAs Entering the United States

Graduates of overseas PA programs based on the U.S. model are likely to seek visas to practice in the United States. The AAPA Professional Practice Council (PPC) has developed a paper outlining relevant issues for foreign-trained PAs seeking to practice in the United States and determined equivalency standards for PAs educated in other countries.

Foreign-Born PA Students in Domestic PA Programs

The increasing number of citizens from other countries enrolled as students in domestic PA educational programs will likely also be a factor in the expansion of the PA profession abroad. While many international students reside permanently in the United States, some clearly anticipate returning to their homelands for clinical rotations or as a strategy to introduce the PA concept to their countries. This kind of cross-pollination will probably increase both international interest in and activity of the PA profession.

International Activity within APAP

APAP is considering broadening its international membership categories; however, more dialogue is needed to be certain that membership changes remain consistent with the association's mission. APAP has provided an international colleague category for several years to accommodate individuals and institutions based outside the United States with an interest in PA education.

Resource Materials

Both APAP and AAPA have produced resource materials for those inquiring about various aspects of the PA profession within the United States. These are available on both organizations' Web sites, through phone and mail inquiries, and via fax. Domestic PA experts and consultants to countries interested in the U.S. PA programs should familiarize themselves with these materials and disseminate them appropriately.

Summary and Recommendations

APAP should develop a resource guide to PA education in the United States for countries requesting this information as they develop PA-type programs for their nations and as a basis for PA educators' discussion of the elements most essential for PA education. The committee suggests that APAP further develop existing international membership categories, study the AAPA Professional Practice Council policies governing practice within the United States for PAs trained abroad, and determine whether these policies are in accord with APAP's mission.

Objective 7. Identify opportunities to network with other organizations interested in international PA education.

Goal: Develop liaisons.

International Health Medical Education Consortium

The International Health Medical Education Consortium (IHMEC) was formed in 1991 by a group of 24 medical schools in the United States. It grew rapidly, and by 1995, 78 of the 126 then-accredited allopathic medical schools had joined the consortium. IHMEC's mission is to foster international medical education in four academic areas: curriculum, clinical training, career development, and international health policy. By means of an electronic mailing list, IHMEC provides opportunities for networking and discussion of international projects and sponsors annual conferences on international topics. IHMEC coordinates student placement between medical schools throughout the world, and perhaps more importantly for PA programs, has established a model that allows medical schools to find international rotations, as well as support, fund, and assist medical students and residents on international rotations. IHMEC's models and policies are an important resource to the U.S. PA profession in its global expansion.

PAs for Global Health (formerly PAXI)

At this writing there are a number of AAPA committees, councils, and caucuses interested in global health. One of these groups is Physician Assistants for Global Health (PAGH), whose mission is to cultivate the "cross-cultural awareness and delivery of PA services to domestic and international health professional shortage areas."⁶ This organization has been active in introducing other countries to the PA role and helping APAP and AAPA understand the variety of nonphysician providers throughout the world.

AAPA Committee on International Affairs

The AAPA Committee on International Affairs serves as a clearinghouse for inquiries from other countries, agencies, and institutions interested in the PA profession. An AAPA staff member coordinates the flow of information concerning the use of PAs outside the United States and provides information to individuals or educational programs exploring overseas student experiences. The AAPA communicates with individuals in many countries who are interested in developing the PA educational or delivery of care models. The committee recommends that APAP and AAPA coordinate efforts to manage the ever-increasing volume of interest originating from other countries.

The Four Organization Group

The four national PA professional organizations—NCCPA, APAP, AAPA, and ARC-PA—have met regularly since 2001 to

discuss international issues affecting the profession. Although their agenda does not focus exclusively on international issues, the value of such intra-organizational dialogue cannot be overstated.

Special Council on International PA Activity

To facilitate and improve communication on international issues and activities among PA organizations, the committee recognizes the value of establishing a special council on international PA activity. Members would be drawn from those designated as experts on international and immigrant issues and PA organizations, committees, and interest groups. Such a special council would not duplicate the efforts of the Four Organization Group. Rather, through its awareness of issues arising on the international front, the special council would be positioned to apprise the Four Organization Group of these and update the group concerning program and committee efforts to address them. The special interest group would be represented in the Four Organization meetings and join forces in other ways.

Other International Health Educational Organizations

A list of international health and educational organizations for those exploring the PA model is provided in Table 3.

Summary and Recommendations

The committee recommends that APAP develop alliances with groups interested in global health to network and share information and, with IHMEC in particular, to facilitate international student rotations. The committee also recommends that APAP establish a special council on international issues.

Objective 8. Evaluate the information on international activities on the AAPA Web site.

Goal: Determine applicability to APAP.

International Activities on the AAPA Web Site

The international section of the AAPA Web site, www.aapa.org/international.html, provides information on international PA activity. Details on planning international rotations are available for students and graduates. The site also allows visitors to join an international networking database.

Options for an International Section on APAP Web Site

APAP's Web site should include a section devoted to international PA educational issues that complements the AAPA site. APAP and AAPA should coordinate content on clinical sites, ethical guidelines, practice issues, preparation and funding for student rotations, and opportunities for employment and volunteering. APAP should develop and post a checklist for students and programs to assess international rotations. Coordinating, monitoring, and updating these sites regularly will ensure that they exist as valuable resources to programs, students, and graduate PAs.

Table 3

Recommended Internet Sites For International Rotations

- American Academy of Family Medicine (AAFP) International Health Care Opportunities in Family Medicine
www.aafp.org/cgi-bin/ihcop.pl
- Society of Teachers of Family Medicine (STFM) International Health Committee
International Health: A Manual for Advisors and Students
www.stfm.org/pdfs/International%20Health.pdf
- International Health Medical Education Consortium (IHMEC)
IHMEC Guidebook: Advising Medical Students and Residents for International Experiences; international health
www.ihmec.org
- American Medical Student Association (AMSA) International Health Committee
International elective and travel information
www.amsa.org/global/ih
- American Academy of Physician Assistants (AAPA) International issues
www.aapa.org/international.html

Other Internet Sites

- World Health Organization
www.who.int
- Centers for Disease Control and Prevention
www.cdc.gov
- World Organization of Family Doctors (WONCA)
www.globalfamilydoctor.com
- Global Health Council
www.globalhealth.org
- Association for Medical Education in Europe
www.amee.org
- International Federation of Medical Students' Associations
www.ifmsa.org
- International Medical Volunteers Association
www.imva.org
- InterAction
www.interaction.org
- Child Family Health International
www.cfhi.org
- International Health Central American Institute
www.ihcai.org
- International internships
www.epa-internships.org
- American Medical Women's Association
www.amwa-doc.org/Education/RHI/International/rhi_international.htm

Summary and Recommendations

APAP should devote a section of its Web site to information on international PA educational issues that complements the material on the AAPA site and prepare an international rotation checklist for programs and students.

Objective 9. Determine the need for an APAP committee on international PA education.

Goal: Review the benefits to APAP of a standing committee.

Purpose of an APAP International Committee

An APAP International Committee would take the lead on students' clinical rotations and other issues related to international PA education. A strong and active committee on international PA education, supported by the association, is vital to prepare APAP and PA educators to contribute to the dialogue taking place within the profession that seeks to define the PA concept within and outside the United States.

Future Considerations

It is estimated that there will soon be nearly 30 educational programs based on the U.S. physician assistant model but outside of the United States (R. Hooker, oral communication, August 2003). An APAP International Committee would be able to join with AAPA's Professional Practice Council and be positioned to explore issues relating to international PA practice as they arise. Committee members have also delineated other possibilities for their further exploration: a research agenda—how students participating in international rotations are funded, what they learn, their motivation, their programs' goals for them—and the preparation of materials to assist them.

The expansion of the PA concept around the globe, increased interest in international health care on the part of APAP and its member programs, and the benefits for PA students as they increase their international involvement and become more active in humanitarian and service-based learning—all of these support the need for a permanent APAP International Committee.

Summary and Recommendations

A standing APAP International Committee would benefit APAP and provide a valuable service to students, educators, and others involved with international PA issues. The committee recommends that APAP establish a permanent APAP International Committee.

Conclusions

After exploring the issues involved with international PA education, the committee recommends that APAP

1. Develop a database to track international program activity and provide its membership with an annual update.
2. State its commitment to PA students' global health education and rotation experiences outside the United States.
3. Disseminate the *Guidelines for International Rotations for Physician Assistant Students*.

4. Develop a cadre of experts in domestic and international PA education.
5. Advocate for the development of a set of topics integral to international health care and rotations for inclusion in PA curricula.
6. Develop a resource guide to PA education in the United States for countries requesting this information and as a basis for PA educators' discussion of the elements most essential for PA education; develop existing international membership categories; develop policies for PAs trained outside the United States.
7. Develop alliances and share information with groups interested in global health and, with IHMEC in particular, facilitate international student rotations; establish a special council on international issues.
8. Devote a section of its Web site to information on international PA educational issues that complements the material on the AAPA site and prepare an international rotation checklist for programs and students.
9. Establish a permanent APAP International Committee.

This white paper on international health education issues is intended to encourage a global focus for PA education and a multicultural perspective for APAP and its member programs. It further delineates APAP's role, which the committee feels will broaden as PA program curricula topics become more global and students' international rotations increase.

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References

1. Pedersen KJ. International activities survey of physician assistant educational programs in the United States. [master's project]. Salt Lake City, Utah: University of Utah Physician Assistant Program; 2002.
2. Haq C. New world views: preparing physicians in training for global health work. *Fam Med J.* 2000;32:8.
3. James D. Going Global: N Physician. 1999;8:6.
4. Cawley JE, Hooker RS. Physician assistants: does the US experience have anything to offer other countries? *J Health Serv Res Policy.* 2003;8:65-67.
5. Ogunfeditimi F. Editor's Corner. NEXUS. 2002;X:5.
6. Katz R. Editor's Corner. NEXUS. Spring 2002.

Additional References

- A National Consensus on the Essential International Health Curriculum for Medical Schools. *Acad Med* (formerly *J Med Educ*). 1993; 68:596-598.
- AAPA Leadership Project: Physician Assistants as Providers of International Health Care: Serving the Global Village in the New Millennium. January 1999.
- AMSARC. Global Health, International Health Resources [Online].
- APAP Bylaws 2002.
- Ballweg R, Stolberg S, Sullivan E. A guide to clinical practice. *Physician Assistant.* May 1999.
- Butler E. CIA Quarterly Report. Spring 2002.
- Butler E. AAPA Working to Facilitate International Communication with APAP. *APAP Update.* September 2001.
- Caswell D. Draft UPAP International Rotation Overview. 12/01.
- Caswell D. International rotation site evaluation, Enclosure #3. UPAP 5/00.
- Caswell D. Program Proposal for International Medicine. UPAP 1999.
- Cawley JE. The importance of faculty development to PA educators and the profession. *APAP Update* [serial online]. September 2002. Available at <http://www.apap.org/0902docs/0902facultydev.htm>. Accessed May 2003.
- Cawley JE. Proposed APAP Task Force on a PA Template Curriculum. APAP Educational Forum. November 2002.
- Cawley JE. The Importance of Faculty Development to PA Educators and the Profession. *APAP Update.* September 2002.
- Gara N. INS and Foreign-Trained "Physician Assistants." Memorandum. March 2001.
- Gara N. *Foreign-Trained PAs Discussion Paper.* AAPA Professional Practice Council. February 2003.
- Guidelines for PAs Working Internationally. AAPA HOD Brief 2001.
- Harbert KR, Smith R, Grink G, Bergen B. Best practice approach to the development of a physician assistant program in the Netherlands. *Medical Teacher.* 2003 (in review).
- Hooker RS, Cawley JE. *Physician Assistants in American Medicine.* 2nd ed. New York, NY: Churchill Livingstone; 2003:23.
- Hooker RS, MacDonald K, Patterson R. Canadian Forces physician assistants. *Military Medicine.* 2003;167(9) (accepted for publication).
- Institute of International Education. 2002. [Online].
- Kuhn T. Malpractice Insurance and MTW Medical Missions 2/20/03.
- Legler CF. *International Rotations for PA Students.* APAP Educational Forum 11/02.
- Pedersen D. APAP International Medicine Activities. 1999.
- Smith RA. MEDEX. *JAMA.* 1970;234:174.
- STEM International Committee Newsletter 2001.*
- 2000-2001 Directory of Members and Information Resources.* AAPA.