



Partnerships for Training Distance Learning Project Trains Clinicians to Serve the Health Needs of Mississippi Delta Residents

Expansion of the partnerships for training program

SUMMARY

From 1995 to 2003, the Delta Health Education Partnership developed a distance-education (interactive video and Web-based courses) degree program for nurse practitioner, certified nurse-midwife and physician assistant students in the federally designated Medically Underserved Area¹ of the lower Mississippi Delta (parts of Mississippi, Tennessee, Arkansas and Louisiana).

The project was part of the Robert Wood Johnson Foundation (RWJF) *Partnerships for Training: Regional Education Systems for Nurse Practitioners, Certified Nurse-Midwives and Physician Assistants* national program.

Key Results

- The Delta Health Education Partnership developed a distance-education 15- to 24-month full- or part-time program for nurse practitioner, certified nurse-midwife and physician assistant students in Medically Underserved Areas in the lower Mississippi Delta.
- Students could take about one-third of their courses online.
- The Delta Health Education Partnership enrolled 189 students, 30 percent of whom were members of minorities.
- All program graduates (180) were practicing in Medically Underserved Areas of the lower Mississippi Delta.

¹ **Medically Underserved Area (MUA)**—Similar to a Health Professional Shortage Area, this somewhat more liberal federal designation is for an urban or rural area that does not have enough health care resources to meet the needs of its population.

Funding

RWJF supported this project through two grants totaling \$1,796,358 to the Arkansas State University, where the project was housed.

THE PROBLEM

In 1990, the lower Mississippi Delta, which includes the parts of Mississippi, Tennessee, Arkansas and Louisiana that border the Mississippi River, was the poorest region of the United States, according to the Lower Mississippi Delta Development Commission. The commission also reported that the area had the highest rates in the United States for lung cancer, high blood pressure and death by accident, and less than half the primary care providers per 1,000 population as the national average (.81 physicians vs. 2.05 physicians nationally).

Nurse practitioners are among the primary care practitioners who might help meet the health needs of rural areas. Nurse practitioners are registered nurses with advanced training who provide primary care services usually working in collaboration with physicians (e.g., performing physical examinations and diagnostic testing, interpreting findings, prescribing medications, and conducting patient education and counseling); nurse practitioners practice on their own licenses and in most states are governed by state boards of nursing.

CONTEXT

Increasing access to medical care has been one of RWJF's priorities since its founding in 1972. One of RWJF's strategies to meet this goal is to expand and improve the primary care workforce. In the early 1970s, RWJF began supporting projects to train nurse practitioners and physician assistants. RWJF funded:

- Six nursing schools to train nurse practitioners at the master's degree level.
- The *Nurse Faculty Fellowships Program* to develop a core of nursing educators to train nurse practitioners at the master's degree level.
- Alderson-Broadus College (West Virginia) and Lake Erie College (Ohio) to create undergraduate physician assistant majors.

In the 1980s, RWJF developed four national programs to strengthen the nursing profession:

- The *Clinical Nurse Scholars Program*, which prepared nursing school faculty for careers combining clinical practice, research, and management.
- *Strengthening Hospital Nursing: A Program to Improve Patient Care*, which sought to make hospital nursing a more attractive career choice.

- The *Nursing Services Development Program* and *Ladders in Nursing Careers*, which sought to increase the number of nurses by attracting and supporting disadvantaged students and health care workers who wanted to pursue nursing careers (see the [Program Results Report](#) on *Ladders in Nursing Careers*).

In addition, RWJF has supported two programs to increase the number of primary care practitioners in underserved areas:

- *Practice Sights: State Primary Care Development Strategies* (see the [Program Results Report](#)), which supported state efforts to recruit and retain primary care providers, including physicians and mid-level providers (nurse practitioners, certified nurse-midwives and physician assistants), and to develop and sustain practice sites in underserved areas.
- *Southern Rural Access Program*, which seeks to increase access to services in eight rural and underserved southern states (for more information see [Program Results Report](#)).

THE PROJECT

Six universities and four state health departments formed the Delta Health Education Partnership to increase education, recruitment and retention of nonphysician primary care providers to serve in the lower Mississippi Delta (parts of Mississippi, Tennessee, Arkansas and Louisiana). The project was housed at Arkansas State University (see the [Appendix](#) for the list of partners).

During the planning grant (ID# 027992), project staff and participants set up the project's infrastructure, including:

- Developing guidelines for working together.
- Recruiting 17 cooperating partners (community organizations such as hospitals and physicians' offices).
- Conducting market research (e.g., collecting supply and demand data on nurse practitioners, certified nurse-midwives and physician assistants and holding focus groups of clinical preceptors, faculty and students).
- Developing a recruitment and retention plan.
- Developing and implementing a pilot interdisciplinary Role Theory course for nurse practitioner, certified nurse midwife and physician assistant students.
- Acquiring matching funds and in-kind contributions to support the project over the long term.

During the implementation grant (ID# 032601), the Delta Health Education Partnership began recruiting students, with a focus on minorities, and enrolling them in educational

programs, which began delivering distance education through interactive video and moved to Web-based courses beginning in 1998. To recruit students, project staff developed brochures, videotapes, public service announcements and a cultural awareness newsletter. Project staff and participants also made presentations to hospitals and physicians groups to recruit students and to obtain financial support and clinical rotations for students. Students promised to work in their communities after they graduated.

Project staff trained faculty in distance education through an informatics technology workshop (May 2000) and clinical preceptors through a clinical precepting module. Three regional summit conferences (September 1998, September 2000 and April 2002) brought program participants and others together, and provided a forum for promoting the project and discussing common problems and solutions.

The project raised \$450,000 in additional funding, including from the U.S. Department of Agriculture (\$350,000), Helene Fuld Health Trust (\$64,000), U.S. Health Resources Service Administration's Bureau of Primary Care (\$27,000) and the RWJF national program *Southern Rural Access* (\$9,600). U.S. Department of Agriculture funds supported the purchase of computers and software for students, preceptors and community agencies. U.S. Health Resources Service Administration funds supported graduate student nurse traineeships.

Melissa Martin, RN, is a nurse practitioner student in the Delta Health Education Partnership project: Web-based courses have made it possible for Martin, a nurse practitioner student at Arkansas State University, to pursue an advanced degree. "It's not an easy program," Martin said. "A student has to be motivated and keep positive reinforcements nearby." Melissa grew up in Wynne, Ark., and hopes to remain there to practice, ideally in a clinic or with her family physician.

RESULTS

The Delta Health Education Partnership achieved the following results, according to project staff in reports to RWJF and interviews:

- **The Delta Health Education Partnership developed a distance-education 15- to 24-month full- or part-time program for nurse practitioner, certified nurse-midwife, and physician assistant students in Medically Underserved Areas² in the lower Mississippi Delta.** Students could choose from one of six programs:
 - Alcorn State University (Natchez, Miss.): nurse practitioner program.

² **Medically Underserved Area (MUA)**—Similar to a Health Professional Shortage Area, this somewhat more liberal federal designation is for an urban or rural area that does not have enough health care resources to meet the needs of its population.

- Arkansas State University (Little Rock, Ark.): nurse practitioner program.
- Delta State University (Cleveland, Miss.): nurse practitioner program.
- Frontier School of Midwifery and Family Nursing (Hyden, Ky.): certified nurse-midwife program.
- Louisiana State University (Shreveport, La.): physician assistant program.
- University of Tennessee (Memphis, Tenn.): nurse practitioner program.
- **Students could take about one-third of their courses online.** The Delta Health Education Partnership project included:
 - Five inter-disciplinary, core, Web-based courses that all nurse practitioner, certified nurse-midwife and physician assistant students could take:
 - Advanced Health Assessment/Physical Diagnosis
 - Pathophysiology (advanced)
 - Pharmacology (advanced)
 - Role Development in Advanced Practice
 - Policy Systems and Issues in Health Care.
 - Approximately 42 other Web-based courses, which comprised about one-third of the program.
 - Electronic Information Resources: a required one-credit hour course to help students learn computer basics.
 - An interdisciplinary Web-based discussion group similar to a journal club. Each month, a faculty moderator assigned a journal article for review. Students and faculty from each school reacted to the questions posed.
 - Technical support: a full-time technical support person worked on the distance education component and provided electronic support to students.
 - Clinical experience: students were placed with preceptors in their field of study near their homes.
 - Computers for students and preceptors in rural sites: Students could access Web-based course materials, and students and preceptors could search the Web for medical information and communicate with other health care professionals through e-mail and listservs. The computers provided an incentive for the preceptors to participate in the program.

- **The Delta Health Education Partnership enrolled 189 students, 30 percent of whom were members of minorities.** There were 144 nurse practitioner, 13 certified nurse-midwife and 23 physician assistant students.
- **Some 180 students graduated from Delta Health Education Partnership educational programs; 30 percent of these graduates were minorities.** Nine students (less than 5%) withdrew from their programs.
- **All program graduates (180) were practicing in Medically Underserved Areas³ of the lower Mississippi Delta.**
- **The Delta Health Education Partnership fostered about 10 alliances among physicians' offices and community health organizations and students:** physicians and health organizations provided financial support for students to enroll in Delta Health Education Partnership programs and clinical opportunities for them in their communities and students agreed to practice in those communities after graduation. For example, Community Medical Practices of Ferriday, Vidalia, and St. Joseph, La. developed student rotations with Louisiana State University-Shreveport and supported six physician assistant students a year; these students agreed to practice in those communities. In Paris, Tenn., a physician and a local hospital provided a stipend to send a student to the Frontier School of Midwifery and Family Nursing's distance-education certified nurse-midwife program; the student agreed to return to Paris to practice.
- **The Delta Health Education Partnership developed a clinical precepting module comprised of a print and online workbook, to help clinical preceptors work with students.** Staff recruited clinicians in small towns, many of whom had little experience in teaching and supervising students, to serve as preceptors. Staff produced a workbook to help preceptors guide students and troubleshoot problems. Preceptors who completed assignments related to the module could receive continuing education units.

Participants

Gloria Graham participated in the Partnerships in Training program at Mid-South Community College in West Memphis, listening to interactive lectures piped in by computer from Jonesboro or other locations. On her own computer at home, she would study and complete assignments at night. "My mother was sick with cancer at the time," she says. "It was good that I could take classes in West Memphis and still be home with her." After Graham graduated and was certified as a nurse practitioner, she went to work for Midsouth Pediatrics in Marion, Ark., a clinic run by Crittenden Memorial. She now sees 30 to 40 patients a day, many of them living at least 20 miles

³ **Medically Underserved Area (MUA)**—Similar to a Health Professional Shortage Area, this somewhat more liberal federal designation is for an urban or rural area that does not have enough health care resources to meet the needs of its population.

away. "I'm able to diagnose, prescribe medication, order lab tests, do referrals. I take care of them. They're my patients." See full Profile.

Katherine Smith is a family nurse practitioner student in the Delta Health Education Partnership project: Smith is enjoying her preceptorship at the Aaron E. Henry Community Health Services Center in Clarksdale, Miss., with Pat White, a certified nurse midwife and family nurse practitioner. White is a former Partnerships for Training student who earned her family nurse practitioner degree at Delta State University. Both women are grateful for the opportunity to work at this state-of-the-art clinic. Smith especially enjoys taking time to educate her patients on health matters, a luxury she could rarely afford when she worked as a hospital registered nurse.

Communications

Project staff produced brochures and newsletters and developed a website about the project. Staff made presentations at several national and regional meetings. See the [Bibliography](#) for details.

LESSONS LEARNED

1. **In projects with several academic partners, use formal contracts to clarify each organization's commitment.** Organizing six academic institutions and many other support partners located across several states was a formidable challenge. The Delta Health Education Partnership used formal contracts to prevent barriers from arising among the academic partners. Each year, all partners reviewed and signed a letter of understanding outlining the partnership's goals and providing for the transfer of credits for partnership courses among the partners. Eliminating academic barriers kept participating institutions focused on the mission to provide health care to underserved areas of the lower Mississippi Delta. (Project Director)

AFTERWARD

Delta Health Education Partnership schools continue to use the expertise in online education that they developed under this project. The schools continue to use the Web-based courses developed under this project, and to develop new Web-based courses for nurse practitioner, certified nurse-midwife and physician assistant students. Five schools—Arkansas State University, Delta State University, Frontier School of Midwifery and Family Nursing, Louisiana State University, and University of Tennessee—now offer complete Web-based programs. Alcorn State University offers many of its courses online.

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APPENDIX

Delta Health Education Partnership Partners

(Current as of the time of the grant; provided by the grantee organization; not verified by RWJF.)

- Alcorn State University, Natchez, Miss.
- Arkansas Office of Rural Health, Little Rock, Ark.
- Delta State University, Cleveland, Miss.
- Frontier School of Midwifery and Family Nursing, Hyden, Ky.
- Louisiana State University Medical Center–Shreveport, La.
- Louisiana Office of Rural Health, Baton Rouge, La.
- Tennessee Department of Health, Nashville, Tenn.
- University of Tennessee, Memphis, Tenn.

BIBLIOGRAPHY

(Current as of date of the report; as provided by the grantee organization; not verified by RWJF; items not available from RWJF.)

Books

Frontier School of Midwifery and Family Nursing. *Clinical Precepting*. Arkansas State University, State University: Delta Health Education Partnership, 2000.

Articles

Skorga P. "Interdisciplinary and Distance Education in the Delta: The Delta Health Educational Partnership." *Journal of Interprofessional Care*, 16(2): 149–157, 2002. Abstract available [online](#).

Reports

"Delta Health Education Partnership." (brochure) State University, AR: Delta Health Education Partnership, 1996, 1998, 1999, 2000 and 2001.

Audio-Visuals and Computer Software

Nine- and four-minute recruitment videotapes for the Delta Health Education Partnership. Jonesboro, AR: Arkansas State University, August 1998.

Advanced Practice Roles, a recruitment videotape for the Delta Health Education Partnership. Jonesboro, AR: Arkansas State University, January 2002.

Survey Instruments

Preceptor Survey. Delta Health Education Partnership, fielded January–March 1999.

Community Development Survey of Educational Needs. Delta Health Education Partnership and Arkansas Office of Rural Health, fielded September–November 1999.

Sponsored Conferences

"Growing Our Own: Community Success Stories," September 17, 1998, Natchez, MS. Attended by 100 people from 40 organizations. Examples of organizations represented included Arkansas State University, Alcorn State University, Delta State University, Louisiana State University and University of Tennessee. Six presentations.

"Delta Regional Summit: Promoting Positive Practice Environments," September 17–18 1998, Natchez, MS. Three presentations.

"Community Networking: Expanding Opportunities for Health Care Access and Promoting Positive Practice Environments," September 21–22, 2000, New Orleans. Attended by 40 people. Five presentations.

"Positive Practice in the Delta—Sustainable Achievements," April 6, 2002, Tunica, MS. Attended by more than 115 people. Seven presentations.

Grantee Websites

www.dhep.astate.edu (no longer available). Provided information about the Delta Health Education Partnership with links to the Web-based core courses and several other related links. Jonesboro, AR: Delta Health Education Partnership: Spring–Summer 1998.

PROFILE LIST

- Gloria Graham, Marion, Ark.