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Health Professions Schools in Service to the Nation

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EXECUTIVE SUMMARY

The Health Professions Schools in Service to the Nation Program (HPSISN) was a multi-site, multi-year program designed to explore service learning as a tool for curricular reform within health professions education, and as a method for effectively preparing future professionals for work in a new health delivery system. With sponsorship from the Corporation for National Service and The Pew Charitable Trusts, 20 institutions were invited to participate from 1995 to 1998. The program was administered by the Center for the Health Professions at the University of California at San Francisco. A project-wide evaluation was commissioned at the beginning of the second year of the grant program, and an evaluation team based at Portland State University was contracted to design and conduct the evaluation. The HPSISN institutions represented the full spectrum of US higher education: rural and urban, large research and smaller teaching institutions, some with academic health centers, and so on. Findings in this report are based on the work of the 17 institutions who completed the entire program.

The evaluation model drew on the Portland State University service learning assessment framework which is based on a systematic evaluation of the impact of service learning on students, faculty, institutions, and the community. The evaluation of HPSISN asked five research questions related to the impact of the program on university-community partnerships, student preparation for professional careers, faculty adoption of service learning, institutional capacity, and community partner capacity. Grantees were asked to complete structured progress reports at six-month intervals, culminating in a final case study for each site. These case studies served as the primary source of data for the evaluation, and were augmented with site visits conducted in the second year of the program, interviews, focus groups, observations, surveys, and review of documentation. Analysis was conducted and findings are presented according to the five research questions which operationalized the goals of HPSISN into a set of measurable variables and indicators.

This report shares the evaluation methodology, a summary of findings across the sites (separate case studies offer individual site information), and recommendations/observations regarding the potential of service learning in health professions education. This large national project produced rich information and reflected a wide variety in mission, community relationships, and definitions of service learning.

Overall, service learning was found to be a powerful tool for influencing student attitudes toward the role of service in their lives as future health professionals, and was fulfilling for faculty who feel strong motivations to link learning to meeting community needs. Community partners valued the opportunity to shape future professionals and to develop partnerships with university faculty, especially when the partner was acknowledged for their contribution to the learning outcomes of students. Remaining challenges include issues of institutionalization, confusion over the distinction between service learning and clinical training, and strategies for involving students and faculty not previously inclined toward service activities. Administrative leadership, linkage to other campus service learning activities, and integration into required courses were all associated with successful implementation and sustainability of service learning that was transforming to students.

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HEALTH PROFESSIONS SCHOOLS IN SERVICE TO THE NATION

EVALUATION REPORT

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PREFACE

The Health Professions Schools in Service to the Nation (HPSISN) program challenges health professions educational institutions to integrate community service into curricula and to promote student understanding of the social responsibility and public purposes of their chosen profession. With support from The Pew Charitable Trusts and the Corporation for National Service, the HPSISN program began in 1995 with 20 demonstration sites, which were funded to integrate service learning into professional programs of study for entry into the full range of health professions.

The integration of service learning into health professions education has become an increasingly important issue as national trends in health services delivery have shifted to community-based settings and managed care models. These new policies, practices and settings for health services professionals are changing the career paths and the knowledge base required for serving communities and populations. New career patterns and evolving delivery environments necessitate changes in educational preparation so that future professionals are competent and able to work in these settings.

Service learning has been suggested as an educational method that may have the potential to reform health professions educational curricula in ways that reflect the changing environment (Seifer, Connors and O'Neil, 1996). The HPSISN program served as a multi-site test of service learning as a method for curricular reform in health professions education. In addition, the program offered a significant opportunity to examine the impact of service learning on students,

faculty, communities and institutions across a wide array of types of universities and of community settings.

The role of this report is to provide a cumulative evaluation of the program over its three-year lifespan. This report is intended as a synthesis of findings across the program for use by participants and funders, as well as documentation of the project for other external parties who may be interested in learning from this work. The results of the evaluation may be helpful to a) institutional leaders and faculty of health professions schools who plan and implement health professions curricula; 2) staff and volunteer leaders of community-based organizations who seek to explore partnerships with health professions education programs; 3) national health-related organizations that influence the development of higher education policies and strategies; 4) federal and state policy makers who influence health professions education and the delivery of health services; and 5) others concerned with health workforce issues and health professions education.

The emphasis of this report is on programmatic learning and overall program performance, and is not intended as an assessment of the performance of individual grantees. Thus, all reporting of findings is anonymous. While certain sites have had particular experiences, we have elected to report aggregate findings rather than individual situations.

Many grantees have considerable experience and expertise to share. For further information on individual sites and referrals for consultation, interested readers should contact Community-Campus Partnerships for Health at 415-502-7979; most of the HPSISN grantees are members of this new organization, and CCPH staff will be able to make appropriate referrals.

I. ROLE OF EVALUATION IN HPSISN

The HPSISN program leadership determined during the first year of program operations that there was a need to conduct a comprehensive evaluation of the program; such an evaluation was not included in the original program design. In the Spring of 1996, HPSISN contracted with an evaluation team based at Portland State University (PSU) to design and implement an evaluation. The team was directed by Sherril Gelmon, Dr.P.H., Associate Professor of Public

Health at PSU and Senior Fellow with the Center for the Health Professions at the University of California at San Francisco. The project co-director was Barbara A. Holland, Ph.D., Associate Vice-Provost at PSU (now Associate Provost at Northern Kentucky University). Other contributors included Beth A. Morris, M.P.H., graduate research assistant (1996-1997); Anu F. Shinnamon, M.P.H., research associate (1997-1998); and Amy Driscoll, Ed.D., Director of the PSU Center for Community-University Partnerships (1996-1997).

The evaluation of the HPSISN program was designed to meet multiple purposes. It was intended primarily to assess the viability of service learning as a pedagogy in health professions education and to draw conclusions about the contribution of service learning to ongoing curriculum reform. The HPSISN program had specific objectives regarding the impact of service learning on communities, faculty and student participants, and institutions (see Appendix 1). The evaluation plan, therefore, needed to assess these program objectives. It was designed to consider issues of effectiveness and to assess the impact on those engaged in service learning activities through university-community partnerships. Through this approach, the potential of the HPSISN program as a large experiment testing service learning in health professions education could be realized.

Much of the potential of HPSISN as a program and the challenge of its overall evaluation was driven by the large number of project sites, and by their variety and diversity in size, mission, history, community context, student and program mix, etc. The structure of the HPSISN program involved multiple sites and multiple constituencies at each site. Grantees responded to overall program goals through distinctive local projects. To evaluate fully the ramifications of a commitment to integration of service learning into the curriculum, the unique experiences and impact of each site and constituency needed to be factored into the evaluation plan.

The HPSISN grantees participating in the complete evaluation are listed in Table 1. Three grantees left the program during the first two years for various reasons; the findings discussed here are based on the 17 sites participating throughout the full three year program. The participating institutions represent a range of institutional characteristics -- urban and rural in their focus, large research institutions as well as smaller institutions, some sites include academic health centers,

TABLE 1

HPSISN Grantees (1996-1998) *

Grantee	Proposed Student Disciplines	Proposed Project Focus
Georgetown University	Allopathic medicine, Nursing, Pharmacy	School-based health education, health promotion and disease prevention in an under-served African-American community
The George Washington University and George Mason University	Allopathic medicine, Physician assistant, Nurse practitioner, Public health	School-based health education, health promotion and disease prevention in several communities of Washington, DC, Maryland and Virginia
Northeastern University	Nursing, Allopathic medicine, Dentistry	Education and prevention of domestic violence, family support
Ohio University	Osteopathic medicine, Health administration	School-based health education, health promotion and disease prevention in rural under-served communities
Regis University	Nursing, Nurse practitioner	Education and prevention of teenage pregnancy, alcoholism, family violence
San Francisco State University	Nursing, Nurse practitioner	School-based health education and mentoring of Hispanic youth
University of Connecticut	Allopathic medicine, Public health, Dentistry	Family health promotion and disease prevention
University of Florida	Allopathic medicine	Family health promotion and disease prevention, case management
University of Kentucky	Nursing, Pharmacy, Allopathic medicine, Dentistry, Physician assistant	Access to health care for homeless women and children
University of North Carolina	Allopathic medicine, Nursing, Nurse practitioner, Dentistry	Health promotion/disease prevention and primary care for poor and homeless
University of Pittsburgh	Allopathic medicine, Nursing, Pharmacy	Health promotion/disease prevention and primary care for homeless men/ families
University of Scranton	Nursing, Nurse practitioner	HIV/AIDS education and health promotion, education about end-of-life decision-making for the terminally ill
University of Southern California	Nursing, Dentistry	Oral health care for under-served urban minority children and families
University of Utah	Nursing, Nurse practitioner, Allopathic medicine, Physician assistant	Health promotion/disease prevention for homeless and under-served families
University of Utah and Purdue University	Pharmacy	Companionship of homebound elderly, health education for the elderly on medication use and drug interactions
Virginia Commonwealth University	Nursing, Nurse practitioner, Public health, Allopathic medicine	HIV/AIDS outreach, education, support, case management and home care
West Virginia Wesleyan College	Nursing, Fitness, Nutrition	Health education, health promotion/disease prevention in a rural under-served community

* D'Youville College was an initial grantee, but dropped out of the program at the end of the first year. Loma Linda University and the University of Illinois - Chicago participated in the first two years of the program but were terminated in the Spring of 1997 by program administration based on information learned through site visits and other evaluative activities which revealed a lack of congruence of grantee activities with national program objectives.

some institutions were church-related, and several involved health sciences programs that are geographically separate from the rest of the campus. The health professions programs represented include allopathic medicine, dentistry, fitness, health administration, nursing, nurse practitioner, nutrition, osteopathic medicine, pharmacy, physician assistant, public health, and social work.

All of the sites operated within a set of common program goals; therefore the evaluation plan was designed to focus on collection of common data factors necessary to measure the accomplishment of the original program goals and to develop the projected interim and final assessments of HPSISN. However, the 17 sites exhibited considerable variation in their project focus, organization context, and sophistication with evaluation methods. To accommodate site diversity while also ensuring collection of common data, the design avoided mandating single evaluative tools across all sites. Rather, a common set of data elements were put forward and each site developed their own plans. A portfolio of reliable evaluation instruments was provided (Driscoll, Gelmon, Holland, Kerrigan, Longley and Spring, 1997), from which sites could select methods that complemented their own local evaluation strategies. Sites could also develop their own evaluation instruments or draw from other sources. Each site was required to develop an evaluation plan that reported its unique experience in a common format.

Overall, the role of evaluation in the HPSISN program was that of testing the applicability of the service learning pedagogy in health professions education and exploring the experience of implementation. The interpretation of the diverse experiences of multiple sites has produced evidence regarding the impact of service learning on multiple constituencies, and has provided the basis for recommendations for the implementation and sustainability of service learning. The development of impact data has been particularly important in order to explore the educational value of service learning, and to enable project participants to tell their stories and share their experiences in a manner that can be widely disseminated.

A first year evaluation report was published in August 1997 and documented the findings of one year of study (year two of the project); this report is available under separate cover from CCPH (Gelmon, Holland, Morris, Driscoll, and Shinnamon, 1997). This present report is a

cumulative report documenting the full two years of evaluation (years two and three of the HPSISN project). A separate resource document will be produced later in 1998 by CCPH which presents the various evaluation instruments used by the evaluation team, and sample instruments from the participating sites. A list of relevant presentations and related publications arising from the work of the HPSISN evaluation is presented later in this report.

II. THE EVALUATION MODEL

The HPSISN evaluation model was designed as a comprehensive evaluation model, tailored to the specific objectives of the HPSISN program, while building upon the multi-constituency approach developed for the evaluation of service-learning at Portland State University (PSU). This approach to evaluation is described in detail elsewhere (Driscoll, Gelmon, Holland, and Kerrigan, 1996); of particular relevance to the HPSISN evaluation was the PSU experience in adopting an approach to evaluation whereby impact on a variety of key groups (including students, faculty, community and institution) was considered.

The HPSISN evaluation design was constructed by beginning with the HPSISN program objectives (Appendix 1). The program objectives served as the framework for the program design and delivery over its three-year life span. From these objectives, a series of research questions were constructed which would guide grantees in their local evaluation, provide information for assessment at a national level, and respond to the interests of various stakeholders of the HPSISN program (funders, educational associations, institutions, health workforce policy makers).

The evaluation questions were developed in consultation with a variety of HPSISN stakeholders. They were:

- How has the HPSISN project affected university-community partnerships with respect to service learning in health professions education?
- Through the HPSISN program, how has the introduction of service learning into health professions education affected the readiness of students for a career in the health professions?
- To what extent have faculty embraced service learning as an integral part of the mission of health professions education?
- As a result of the HPSISN grant, how has the institution's capacity to support service learning in the health professions changed?

- What impact does service learning in the health professions have on the participating community partners?

The evaluation approach encompasses five steps in conceptualization: question, phenomenon, concept, evidence, and measurement. The approach begins with the broad area of interest stated in the research question; a statement of purpose is articulated which explains the reason for asking the question. Then, a set of phenomena to be studied are articulated -- these are the "high level" concepts for each question. From these phenomena, one can then ask "what will we look for?", and generate a list of variables or key specific concepts which help to articulate the phenomena to be studied and reflect the areas where impact might be expected. For each of these variables, one asks "what will be measured?"; the required evidence to answer this question is outlined in a series of measurable indicators. Finally, the question "how will it be measured?" is asked, and a series of measurement methods are specified. Tables 2 through 6 present the details of the conceptual framework for the evaluation.

This approach to evaluation offered three particular strengths as an evaluative strategy. First, it enabled the evaluators to clearly track the reason for every element of data collection, facilitating the justification of each measurement method and each item within the method by allowing systematic connection back to an indicator, a variable, and a research question. This is a particular benefit in large complex evaluations where it is tempting to collect large amounts of data out of convenience, but the data may never be used or analyzed -- seemingly easy to collect, but adding to the burden of data collection. Second, there were multiple indicators for each variable, and multiple measurement methods were used to collect information on these indicators to increase study validity. Since there are a finite number of measurement methods which can be employed, it was essential to use each method to collect data on a variety of indicators and variables. Third, this approach ensured the collection of data that could provide feedback for ongoing program improvement at both the national and local levels, while also offering sufficient breadth and flexibility to serve the diverse forms of service learning across the HPSISN program participants.

The findings reported here rely heavily on a qualitative research approach. As has been

demonstrated in other evaluations of community-based learning in health professions education, the utilization of “subjective” data to complement “objective” information is particularly useful for practical application of evaluation findings (Henry, 1996). Given that we were studying a phenomenon about which little was known, we chose to develop a systematic framework and use a set of procedures to help us derive an inductively grounded set of themes about service learning in the health professions (Strauss and Corbin, 1990). Rather than attempting to present findings that documented numbers, correlations, and measurements of relationships, we worked with the grantees to build a large number of individual case studies, each of which reflects a range of experiences with a number of community partners and students; each case study has generated a number of findings which can be tested against our initial concepts, providing findings that illuminate the area under study. Through the analysis of these experiences, we have begun to see trends and have formulated themes which illuminate lessons learned and recommendations for implementing service learning in health professions education.

The methods listed in Tables 2-6 include those used by the evaluation team directly, as well as those used by the individual grantees. Not all sites used all methods. As described in subsequent sections, this report is a synthesis of multiple methods of collecting common data elements through multiple formats at a number of points in time over the course of the evaluation. Since the focus of this report is on the overall impact of the HPSISN program, no attempts have been made to separate findings by method or by source; rather, the strategy has been to aggregate the data submitted by the grantees, and then integrate these findings with the primary data collected by the evaluation team. In general, findings are reported in generic language since there were frequent commonalities across sites. Given the expectation that evaluation findings would be presented anonymously, specific mention is not made of any particular grantees despite their unique experiences. Since an objective of the HPSISN program is to facilitate a national network of health professions educators engaged in service learning, the subsequent publication of the HPSISN case studies, as written by the grantees, will help promote the transfer of experience and learning, the exchange of information, and networking among interested educators.

The evaluation model is based on two years of data collection that tracked a set of relevant impact variables and built profiles of the individual grantees and the overall HPSISN program. Each grantee was expected to report on each of the variables for each research question; grantees varied in the indicators they measured and in the measurement methods they used. Grantees were asked to complete tables that asked for information regarding the methods used to measure each variable and indicator, and their findings (see Appendix 2). The level of evaluation skill and attention to detail given by grantees to these tables was highly variable. However, the variable-indicator method used to organize overall data collection ultimately proved to be invaluable as an approach to analysis of the massive amount of data collected across the sites through progress reports, site visits, interviews, focus groups, surveys, and review of documentation.

In addition to building upon the PSU model, evaluation methodologies employed in other health professions education demonstration projects were considered, and relevant methods were adapted. These other initiatives included the W.K. Kellogg Foundation's Community Partnerships in Health Professions Education project, the Bureau of Health Profession's Interdisciplinary Generalist Curriculum project, the Institute for Healthcare Improvement's Interdisciplinary Professional Education Collaborative, and the Community Care Network demonstration project of the Hospital Research and Educational Trust (funded by the W.K. Kellogg Foundation). By benchmarking the evaluation strategy against others already in process, the evaluation team was able to build upon previous learning and offer the HPSISN sites the benefit of previously tested methods.

The HPSISN evaluation plan incorporated a framework to capture common data that would characterize overall impact and explanatory factors related to the role of service learning in health professions education. This framework respected and acknowledged the unique approaches, conditions, and cultures of the 17 separate sites. Wherever feasible, methods and strategies from individual sites were exchanged among all grantees, thus helping to build local expertise and promote further shared learning.

TABLE 2
Research Question #1

How has the HPSISN project affected university-community partnerships with respect to service learning in health professions education?

Purpose: To understand the influence of service learning on the nature and scope of university-community partnerships.

Phenomena to be studied: Nature of university-community partnerships:

- role of community partners in service learning
- involvement of community partners in service learning
- university-community interactions
- nature of services provided

What will we look for?	What will be measured?	How will it be measured?
Establishment of university-community relationships	Number of community partners; Duration of partnerships	Survey, interview
Involvement of community partners	Number of service learning leaders designated by partners; Perceptions regarding interaction between partners and institution	Survey, interview, focus group
Role of community partners	Contribution of community partners to program design and decision-making	Survey, interview, focus group
Levels of university-community interaction	Institution's attention to community-identified priorities	Survey, interview, focus group
Capacity to meet unmet needs	Types of services provided; Number of clients served	Survey, interview, focus group
Communication between partners and university	Nature of relationship; Form and patterns of community involvement in university processes	Survey, interview, focus group, direct observation
Nature of partnership	Kind of activities	Interview, syllabus
Awareness of university	Knowledge of programs, activities	Interview, activity logs, focus group

TABLE 3
Research Question #2

Through the HPSISN program, how has the introduction of service learning into health professions education affected the readiness of students for a career in the health professions?

Purpose: To evaluate the effectiveness of service learning as a developmental approach to preparing health professions students for careers in the current policy, economic, social and cultural environments of health services delivery.

Phenomena to be studied: Increase in students' knowledge of community health issues, level of involvement in service learning, and personal capacity for service:

- knowledge of community needs assessment
- knowledge of barriers to health care
- knowledge of socioeconomic, environmental and cultural determinants of health and illness
- understanding of distinction between service learning and experiential clinical training
- service learning leadership roles assumed by students
- intentions toward service following completion of program
- personal and professional development

What will we look for?	What will be measured?	How will it be measured?
Type and variety of student service learning activity	Content of service learning activities	Survey, interview, syllabus review
Awareness of community needs	Knowledge of community conditions and characteristics	Survey, interview, focus group, journal
Understanding of health policy and its implications	Understanding of local health policy and its impacts; Linkage of experience to academic learning and content	Survey, interview, focus group, journal
Awareness of socioeconomic, environmental and cultural determinants of health	Perception of unmet health needs; Changes in awareness of links between community characteristics and health	Survey, interview, focus group, journal
Development of leadership skills	Attitude toward involvement	Survey, interview, focus group, direct observation
Commitment to service	Level of participation over time; Plans for future service	Survey, interview, focus group, journal
Career choice (specialization)	Influence of service learning on career plans	Survey, interview, journal
Sensitivity to diversity	Quality of student-community interactions; Attitude toward community; Reaction to clients with low health knowledge	Survey, interview, focus group, direct observation, journal
Involvement with community	Quality/quantity of interactions; Attitudes toward involvement	Survey, interview, focus group, journal
Personal and professional development	Changes in awareness of personal capacity, communication skills, self-confidence	Interview, focus group, journal

TABLE 4
Research Question #3

To what extent have faculty embraced community-based service learning as an integral part of the mission of health professions education?

Purpose: To ascertain the level of commitment of faculty to the inclusion of service learning in health professions education.

Phenomena to be studied: Incorporation of service learning into curriculum and professional pursuits:

- integration of service learning activities into required curriculum
- understanding of distinction between service learning and experiential clinical training
- expanding scholarly work to include a service learning component
- leadership roles assumed by faculty
- knowledge of and commitment to community

What will we look for?	What will be measured?	How will it be measured?
Role in service learning implementation	Number of faculty implementing service learning; Number of courses with service learning component	Survey, syllabus analysis
Understanding of community needs	Ability to characterize community conditions and needs	Survey, interview, focus group
Awareness of socioeconomic, environmental and cultural determinants of health	Perception of unmet health needs; Changes in awareness of links between community characteristics and health	Survey, interview, focus group, journal
Development of leadership skills	Perceptions of role as a service learning facilitator	Survey, interview, focus group, direct observation
Commitment to service	Attitude toward involvement; Level of participation over time; Plans for future service	Survey, interview, focus group, journal, vita
Sustained and expanding engagement in service learning	Placement of service learning in curriculum (introductory, advanced, etc.); Integration of service learning into other course components	Survey, interview, focus group, syllabus analysis
Nature of faculty/student interaction	Time spent on service learning components; Student mentoring	Survey, interview, focus group, direct observation
Nature of faculty/community interaction	Relationship to community partners	Survey, interview, focus group, direct observation
Scholarly interest in service learning	Influence of service learning on articles, presentations, committee/ conference participation, grant proposals	Survey, interview, vita
Value placed on service learning	Ability to distinguish service learning and clinical experiences	Survey, interview, focus group, journal
Understanding of barriers to community health services delivery	Knowledge of community history, strengths, problems	Survey, interview, focus group
Teaching methods and skills	Use of methods; Implementation of new methods	Interview, direct observation, journal
Professional development	Attendance at seminars, workshops	Interview, journal, vita

TABLE 5
Research Question #4

As a result of the HPSISN grant, how has the institution's capacity to support service learning in the health professions changed?

Purpose: To establish the extent to which institutions are involved in service learning activities and the factors which contribute to sustained commitment.

Phenomena to be studied: Broadening scope of institution mission to include service learning:

- involvement in national service learning network
- establishment of service learning infrastructure
- extent to which barriers to service learning have been addressed
- integration of service learning activities into required curriculum

What will we look for?	What will be measured?	How will it be measured?
Departmental involvement	Number of faculty involved in service learning coursework; Establishment of departmental agenda for service	Survey, focus group
Commitment among academic leadership	Pattern of recognition/rewards; Involvement in national service learning network	Survey, interview
Investment of resources in support of service learning	Evidence of investment in organizational infrastructure to support service learning; Investment in faculty development related to service learning	Survey, interview
Image in community	Nature of institution/community communications; Role and scope of community-university service learning advisory group; Perception of contribution of service learning to meeting unmet needs; Media coverage	Survey, interview, focus group, institutional records
Overall orientation to teaching and learning	Focus/content of professional development activities; Number of faculty involved in service learning; Focus/content of dissertations and other major student projects	Survey, interview, analysis of records
Relationship of service learning to clinical training	Nature of service learning activities integrated into required curriculum	Survey, interview, focus group
Commitment to service learning outside of health professions education	Number of non-HPE faculty involved in service learning coursework; Relationships with other academic departments or institutions regarding service learning	Survey, interview, focus group
Resource acquisition	Contribution levels; Targeted proposals; Awards for service	Survey, interview, institutional reports

TABLE 6
Research Question #5

What impact does service learning in health professions education have on the participating community partners?

Purpose: To determine the effect of partnership with the institution and attendant service learning activities on community partners.

Phenomena to be studied: Improvements in community service:

- extent to which unmet health needs have been addressed
- economic benefits
- social benefits

What will we look for?	What will be measured?	How will it be measured?
Establishment of ongoing relationships	Number and duration of partnerships	Survey, interview, focus group
Changing perceptions of unmet needs	Changes in goals of service learning activities; Changes in overall program structure and function	Interview
Capacity to serve community	Number of clients served; Number of students involved; Variety of activities	Survey, interview
Economic benefits	Cost of services provided by faculty/ students; Funding opportunities	Survey, interview
Social benefits	New connections/networks; Increase in level of volunteerism	Survey, interview, focus group
Sensitivity to diversity	Comparison of partners' descriptions of community health concerns/needs	Interview, focus group
Nature, extent and variety of partnerships	Level of community participation in service learning advisory groups	Interview, focus group
Satisfaction with partnership	Changes in partner relationships; Willingness to give both positive and negative feedback	Survey, interview, focus group
Community's sense of participation	Level of community-faculty- institution communication; Changes in self-image, confidence, and knowledge of service learning programs; Willingness to participate in evaluation activities	Survey, interview, focus group
New insights about operations/ activities	Changes in goals, activities, operations	Interview
Identification of future staff	Actual hiring	Survey, interview

III. DETAILED EVALUATION ACTIVITIES

The evaluation consisted of the following activities, as specified in the scope of work. All specified activities have been undertaken by the evaluation team during the two years of the project evaluation.

1. Review of Existing Literature and Other Documentation

The evaluation team sought to develop a baseline understanding of the project sites through a critical review and analysis of original grant applications and initial progress reports in June 1996. The team continually reviewed the relevant service learning and health professions education literature, as well as documents from other educational initiatives which could inform the design of the HPSISN evaluation. The team received and reviewed copies of all progress reports submitted by the grantees during the evaluation timeframe.

2. Regular Communication with Grantees

Individual telephone conversations were conducted with each project director during July and August of 1996, using a standard interview protocol. Program staff continued to maintain regular contact with project directors, and referred specific queries to the evaluation team as necessary. The team had increased contact with local directors in conjunction with site visits conducted during 1996-1997, and as a result of these visits additional conversations often occurred (via telephone or e-mail). A structured telephone conversation was again conducted in July/August of 1997 in order to answer any questions about the upcoming progress report, and to have a preliminary discussion about project plans for the third year of the grant. A similar conversation (voice or electronic) between an evaluation team member and each site director took place in the Spring of 1998 after receipt of the draft case study and prior to the grantee workshop in April 1998.

3. Establishment of Expert Evaluation Advisory Committee

An expert evaluation advisory committee was established in the summer of 1996 to offer guidance and feedback on various evaluative instruments. The members of the committee are listed in Appendix 3. The committee was particularly helpful in the early stages of the development of the evaluation prospectus, offering feedback from their own experiences and helping the HPSISN team to avoid some stumbling blocks which others had previously encountered. Unfortunately, each member of the advisory committee was extremely busy with other commitments and could offer little time; as a result, once the evaluation plan was in place, the team relied on selected members of the committee on an intermittent basis for advice, rather than attempting to continue to convene the entire committee. All committee members did express an interest in being kept informed of findings and further developments in the evaluation strategy.

4. Development of Evaluation Plan, Methods and Reporting Framework

In its early work in the summer of 1996, the evaluation team proposed to the HPSISN program staff that the required progress reports be revised to increase their utility to the grantees and to build toward a final program report for each site in a case study format. This recommendation was raised during the initial telephone interviews, when many of the program directors expressed discontent with the initial progress report framework provided by program staff. By reframing the progress reports as reflective as well as reporting opportunities, and by viewing them as incremental steps toward a final case study, the evaluation team hoped to overcome the directors' discontent and raise the perceived value of these reports

The team developed a case study format with the advice of the evaluation advisory group to document the experiences of each of the sites. In early December 1996, a complete evaluation prospectus and revised format for progress reports was distributed to the sites. It was made clear that subsequent progress reports would be designed to build incrementally to the final case study. A teleconference in December 1996 with the evaluation team, program staff, and site directors provided an opportunity to address questions and provide clarifications on the evaluation model.

While some directors felt that the proposed protocol was going to increase their reporting burden, in general the directors were receptive to the protocol and expressed the belief that this new format would be of greater value to them than the previous progress report format. Many welcomed the opportunity to begin (or advance) a formalized evaluation strategy.

The new progress report protocol was implemented for the report submitted in February, 1997. This included a set of tables based upon the previously articulated research questions, variables, and indicators; the tables were designed to assist sites in formulating their evaluation plans and specifying data collection and interpretation strategies (see Appendix 2). Though not all sites found the tables a helpful approach, each ultimately articulated an evaluation strategy through their progress reports.

While data collection methods were suggested for each set of variables and indicators, the evaluation design was structured to avoid mandating single evaluative tools across all sites. This strategy accommodated the diversity across sites while ensuring collection of common data to provide evidence on achievement of the common program goals. In addition, it respected the fact that some sites had already made decisions about evaluation strategies and had developed their own plans for implementation. Sites could develop their own evaluative methods, or could select methods from a portfolio of reliable evaluation instruments that complemented the local evaluation strategies. Each grantee was provided with a complimentary copy of a Portland State University workbook of evaluation methods designed to assess the impact of service learning (Driscoll et al., 1997), as a way of stimulating ideas for the design of locally relevant measurement methods. Sites were asked to include copies of any evaluation instruments they used with their progress report so that these could be shared across sites.

The February 1997 progress reports were reviewed by program staff and the evaluation team, who identified areas for special attention with individual grantees as well as with the entire group. A modified protocol, drawing upon other areas of the case study format, was prepared and circulated in May 1997 for preparation of the report due in August 1997. These reports were again reviewed by staff and the evaluation team.

A final modification of the report format to prepare for the final case study was made in the fall of 1997, was circulated to the program directors, and discussed in a teleconference in late 1997 (see Appendix 4). The February 1998 progress report was intended to serve as a draft of the final case study for each grantee. Each report was reviewed by the evaluation team and the HPSISN program staff; a conference call was then set up for the program director with the evaluation team member and program staff who had conducted the site visit one year earlier. This call was used to provide feedback on the draft case study, and to identify areas for improvement. Further feedback was provided during the grantee workshop in April 1998. The final case study was due in June 1998. The individual case studies and cross-site comparisons formed the framework for this overall project evaluation report.

6. Site Visits

A protocol for site visits was developed in the summer of 1996, and was distributed to all HPSISN sites to guide planning for the site visit. Site visits were conducted to each grantee between October 1996 and April 1997. While the site visits were initially framed as “evaluation” visits, it was determined by the evaluation team and the program staff that the most effective use of the site visits was to make joint site visits. A member of the evaluation team was the leader on each site visit; in almost every case, a senior HPSISN program staff also participated in the visit. These joint visits offered grantees a chance to discuss their activities in an integrated fashion, rather than attempting to unrealistically separate program questions from evaluation questions. Observers from program and evaluation staff, as well as related programmatic initiatives, attended selected site visits with the local site’s permission. During each visit, meetings were arranged with project leadership, academic administration, faculty, students, community partners, and other key players.

The visits were useful for both the grantees and the visitors for building additional knowledge about HPSISN specifically, and about service learning in health professions education in general. The visits also helped to establish and/or further develop working relationships between participants at each site and the program and evaluation staff. In addition, site visits

enhanced the evaluation by giving evaluators direct observation of projects, and opportunities for interaction with local project staff and participants (faculty, students, community partners, and institutional leaders). From these visits came a rich body of data regarding the impact of service learning on the community, students, faculty, and the institution – in some cases some of the strongest findings of the evaluation. The visits also provided a visible, tangible opportunity to validate information provided in the written progress reports, and to highlight local issues not otherwise articulated through progress reports. Evaluators and program staff were able to provide some immediate feedback and assistance.

7. Survey of HPSISN Applicants

HPSISN program staff were eager to learn more about the progress of institutions that had applied for HPSISN grants but had not been funded. Did service learning continue to evolve without the HPSISN support? What lessons could be learned about the state of development of service learning in health professions education in general? To answer these questions, the evaluation team undertook a survey of all original applicants to the program. Of the 85 applicants (this includes the eventual grantees), 44 responded (a 52% response rate), of whom 13 were grantees. The range of disciplines represented, and the nature of service learning activities, was similar to that reflected in the HPSISN grantees. There was a clear commitment to the relevance of service learning as part of health professions education, and a need to continue to work across higher education to overcome some of the barriers so that it may be more readily integrated as appropriate. The intent of this survey was to provide additional information to the HPSISN program directors about general progress made by those initially interested in HPSISN; since this report is about the actual HPSISN experience, no other findings from this survey of applicants are reported here. A full report of the survey findings has been prepared under separate cover (Morris, Gelmon and Holland, in progress).

8. Annual Grantee Workshops

Initially, the evaluation team met program directors at the April 1996 conference at a special meeting organized by HPSISN staff; the team presented the PSU model there as an introduction to the evaluation, and heard questions and concerns from site directors and staff.

The evaluation team planned and delivered a full day workshop on evaluation methods to HPSISN grantees prior to the 1997 CCPH conference, as an activity to promote skill development in evaluation for grantees as well as to foster a sense of collaboration among the network of grantees. A by-product of the HPSISN evaluation has been to help to advance the evaluation skills of grantees. While it was not possible for the evaluation team to serve as evaluation consultants to individual sites, the workshop was designed to provide an opportunity for skill development and consultation, as well as to advance the quality of grantee responses to the evaluation model.

The evaluation of this workshop was very positive. Participants were particularly appreciative of the hands-on consultation time with the evaluation team to learn more about specific evaluation methods and how to apply them at their own sites. The feedback from the day identified areas where individuals wanted more assistance, as well as areas where grantees needed to have more conversations (in particular about sustainability of the HPSISN network). A final strategy was for individuals to write a memo to themselves outlining what they intended to work on when they returned home after the conference. These ideas were summarized, along with the workshop evaluation, and were circulated to all grantees within a few weeks of the workshop.

Another workshop for the HPSISN grantees was organized prior to the 1998 CCPH conference. This half-day workshop built upon the personal briefings on the case studies completed prior to this meeting, encouraged further involvement in reflection activities, and helped to further clarify the content and timing of the final case study submission.

9. Participation in Annual HPSISN/CCPH Conferences

Many of the sessions at the 1996 HPSISN conference were presented by HPSISN grantees; as a result, the evaluation team was able to quickly build its knowledge of the scope and

specific directions of many of the grantees. The evaluation team made a presentation at this conference on the Portland State University model of assessment of service learning.

The HPSISN evaluation team also made several presentations during the 1997 CCPH conference on both the HPSISN and PSU evaluation models, and received substantial positive feedback from conference participants who expressed a need for more information on evaluation. It also presented results of the survey of HPSISN applicants (mentioned in #7 above) to document a perspective on the state of implementation of service learning in health professions education.

The evaluation team again made a number of presentations at the 1998 CCPH conference, including a series of sessions on the evaluation model, lessons learned from the HPSISN evaluation, and general evaluation strategies. The team also presented a session on faculty reflection, highlighting the results of the site directors' reflective exercises (see description below), and offering participants a chance to practice some reflection techniques. Feedback at the conference highlighted the continuing need for wide dissemination and discussion about both evaluation and reflection strategies in service learning.

10. Annual Focus Groups with HPSISN Site Participants

The evaluation team assisted program staff at the 1996 HPSISN conference by facilitating focus groups with program directors, students and community partners. The findings from these focus groups were used primarily by program staff for ongoing program management. At the 1997 CCPH conference the evaluation team facilitated focus groups with program directors, students and community partners, using new standardized focus group protocols which addressed issues related to the evaluation methodology; these protocols were developed in consultation with program staff. The findings from the 1997 focus groups provided valuable input for the first year (1997-1998) evaluation report. At the 1998 CCPH conference the evaluation team also facilitated focus groups with program directors, HPSISN site students, and community partners. The protocols used in 1998 were a modification of the 1997 protocols, with specific new questions related to the end of the grant program, sustainability and overall lessons learned. The findings

from these focus groups have been incorporated into this report, as well as the separate administrative report for HPSISN staff (see #15 below).

11. Program Director Reflection Activities

During the first year of the evaluation many of the program directors expressed a desire to learn more about reflection techniques and reflective practice. Service learning as an educational strategy is intended to incorporate structured reflection opportunities, but many program directors indicated that they have never actually learned how to lead, let alone participate in, reflective activities. Thus during the final year of the evaluation a formal, but not too cumbersome, series of reflection exercises was structured for the program directors. There were two goals for this: the first was personal development of reflection skills, and the second was to facilitate reflection about participation in the HPSISN program which would assist in the preparation of the case study. Program directors had a choice of completing each reflection exercise by email, or by having a telephone interview with a member of the evaluation team; in the latter case, the notes of the interview were prepared following the interview and were sent to the program director to provide a record of the conversation and to verify the accuracy of the comments made.

Several program directors indicated a high level of satisfaction with this experience and with the new skills they developed, thus achieving the first goal of this exercise for some grantees. Others viewed the activity as too time-consuming and/or unnecessary, so full participation by all of the directors was not achieved. Unfortunately, some program directors did not associate the time invested in the reflection exercises with the preparation of the case study, so there was less sense of accomplishment of the second project goal.

A substantial amount of information about faculty reflection was collected through this activity (and shared with the program directors), and the evaluation team has presented the general findings at four conferences (all findings are presented anonymously). This is another area where it is clear that there is a lack of resources for faculty, and the results from HPSISN will make an important contribution to service learning faculty across the disciplines. A manuscript that draws

upon the experiences of the program directors is being prepared (Shinnamon, Gelmon and Holland, in progress), and will enable the dissemination of the observations and findings about faculty reflection strategies to a wider audience.

12. End-of-Program Surveys

Program directors were invited to provide mailing labels for the distribution of an end-of-program survey to participating students, faculty and community partners. These surveys, which received institutional review and approval at Portland State University, provided a means of collecting additional information from the perspective of these three groups of participants in the HPSISN program. During the first year of the evaluation valuable information was collected from these groups during the site visits. Since site visits were not conducted in the second year of the evaluation, the surveys offered an alternative means of collecting input and assessing the impact of the HPSISN program at the local level. Completed surveys were returned anonymously; where institutions had concerns about release of names, the survey packets were sent to the local program director who then assumed responsibility for distribution.

Surveys were returned directly to PSU. It is not possible to calculate a precise response rate since the total number of surveys distributed is unknown (due to distribution both from PSU and from individual program directors). A total of 133 surveys were returned, including 46 from students, 34 from faculty, and 53 from community partners. The surveys represent participants at nine of the HPSISN sites. The findings from the surveys are incorporated into the general discussion of findings in this report.

13. General Technical Assistance to Grantees

The members of the team have attempted to offer technical assistance on an as-needed basis to individual grantees during the evaluation, but the scope of the contract has not permitted the commitment of time for the extensive consultation that some grantees might have preferred. The 1996-1997 site visits, and subsequent follow-up communications, offered an excellent opportunity

to provide on-site and site-specific technical assistance. Similarly, both the 1997 and 1998 CCPH conferences were productive venues for both group and individual consultations. Throughout the two-year evaluation, there have been many direct queries to the evaluation team members regarding evaluation issues; as well, periodic communications (usually via e-mail) have been forwarded to the evaluation team by the program staff. Given the breadth and depth of evaluation expertise of the evaluation team members, this consultation often extended beyond the scope of immediate HPSISN-related activities. Every effort has been made to be responsive to the questions and needs of individual sites, and to make recommendations and referrals to other sources whenever feasible.

14. Development of an Evaluation Report

As stated above, several efforts have been undertaken to build the evidence to support this evaluation report -- telephone interviews, other personal communications, site visits, progress reports, evaluation findings, focus groups, surveys, and review of documentation. This report provides the detailed overview of the evaluation, synthesis of findings, and general observations and challenges with recommendations for the future.

15. Assessment of the HPSISN Program Office's Performance

Close working relationships have developed between the program staff and the evaluation team, which have facilitated periodic feedback on the program office's performance to senior staff. In particular, some structured feedback was provided in January 1997 prior to a retreat of program staff. The evaluation team was also able to convey feedback from sites in an anonymous and non-threatening manner. While there was some concern expressed initially by some observers that the joint site visits by the evaluation team and program staff would obscure evaluative findings, in fact these visits served to provide additional opportunities for the evaluation team to discuss program operations with staff, convey observations and comments from sites, and jointly brainstorm potential solutions and responses to issues and challenges facing the program. As this developed, program staff were able to offer observations to enrich the evaluation, and evaluation team

members were able to offer observations to enrich the program -- a mutually beneficial and reciprocal communication strategy.

The program staff requested that the evaluation team conduct an assessment of the administration of the HPSISN program as part of its work. This presented an unprecedented opportunity for evaluators to assess program administration for a multi-site grant, as well as program performance. The previously mentioned focus groups with the HPSISN program directors during the 1997 and 1998 CCPH conferences included some requests for specific feedback on program operations. The program staff agreed to complete two reflective exercises independently to offer their personal insights into program development and administration. In the late Spring of 1998, a modified 360 degree feedback form was sent to program directors, funders, members of the HPSISN program advisory committee, staff and selected other key informants to solicit additional feedback on program administration from both a proximal and more distant perspective.

The program staff and evaluation team have held a series of one-day working meetings at critical points in the evaluation contract. These structured face-to-face meetings were an effective way to discuss findings, review plans, and develop strategies for related activities.

Preliminary findings of the administrative evaluation were included in the 1996-1997 Evaluation Report (Gelmon, Holland, et al., 1997). The final administrative evaluation report is being submitted to program staff under separate cover, as this evaluation report is intended to address overall program performance according to the grant objectives, and the administrative evaluation report addresses program direction and management.

16. Presentations at Professional Meetings to Disseminate Work

Throughout the two years of the evaluation, the evaluation team has participated in activities of dissemination; presentations specific to the HPSISN evaluation were made at the following:

- Second International Scientific Symposium on Improving Quality and Value in Health Professions Education, New Orleans, December 1996
- Community-Campus Partnerships for Health Annual Conference, San Francisco, April 1997
- Annual Meeting, Association of American Medical Colleges, Washington, DC, November 1997
- Annual Meeting, American Public Health Association, Indianapolis, November 1997
- Community-Campus Partnerships for Health Annual Conference, Pittsburgh, April 1998
- Assessment and Quality Conference, American Association of Higher Education, Cincinnati, June 1998
- Primary Care Conference, Baltimore, September 1998
- Regional Workshop on Service Learning, Western Region Campus Compact, Portland, June 1998
- Annual Meeting, American Public Health Association, Washington, D.C., November 1998

In addition, the evaluation team presented its service learning evaluation methodology at a number of conferences, and included a description of the HPSISN evaluation in the following:

- Conference on Faculty Roles and Rewards, American Association of Higher Education, San Diego, January 1997
- Assessment and Quality Conference, American Association of Higher Education, Miami, June 1997
- Summer Faculty Institute on Service Learning in Health Professions Education, Leavenworth, WA, July 1997
- Conference on Faculty Roles and Rewards, American Association of Higher Education, Orlando, January 1998
- Summer Faculty Institute on Service Learning in Health Professions Education, Leavenworth, WA, July 1998
- Regional Conference on Assessment, Evaluation and Improvement, Community Campus Partnerships for Health, Denver, October 1998
- Association of American Medical Colleges, Annual Meeting, New Orleans, November 1998

A workshop on faculty reflection, drawing upon the HPSISN experience, will be presented by the evaluation team and one of the HPSISN site directors at the Conference on Faculty Roles and Rewards of the American Association of Higher Education (AAHE) in San Diego in January 1999.

17. Publications in Professional Journals and Other Venues

Throughout the evaluation project, the evaluation team has been attentive to the need to begin to disseminate the evaluation methodology, instruments, and early observations as soon as possible. The evaluation prospectus (December 1996) was requested by a number of individuals

outside of the HPSISN program and was disseminated through the CCPH office and via the UCSF Center for the Health Professions website. Similarly, the first year evaluation report, published in August 1997, was distributed by CCPH; the executive summary was available at the website. This report will also be widely distributed to individuals involved in and interested in the HPSISN program, and will be available through CCPH and on the UCSF website.

The following manuscripts describing the HPSISN evaluation have been prepared to date:

Sherril B. Gelmon, Barbara A. Holland, Sarena D. Seifer, Anu F. Shinnamon, and Kara Connors. "Community-University Partnerships for Mutual Learning." Michigan Journal of Community Service Learning 5 (Fall 1998).

Sherril B. Gelmon, Barbara A. Holland, and Anu F. Shinnamon. "Community-Based Education and Service: The HPSISN Experience." Journal of Interprofessional Care, 12 (#3, August 1998).

Sherril B. Gelmon, Barbara A. Holland and Beth Morris. "Assessing Service Learning in Medical Education." In Service Learning in Medical Education, eds. Sarena Seifer, Judy Lewis and [sarena?] Washington, DC: American Association of Higher Education, forthcoming 1998.

Anu F. Shinnamon, Sherril B. Gelmon, and Barbara A. Holland. "Building Competencies in Faculty Reflection." In progress.

Beth Morris, Sherril B. Gelmon and Barbara A. Holland. "How Much Progress Have We Made in Service Learning? A Survey of Health Professions Education." In progress.

As well, HPSISN was one of five other national education reform programs referred to in "The State of the "Engaged Campus": What We Have Learned about Building and Sustaining Community-University Partnerships" by Barbara Holland and Sherril Gelmon, published in the AAHE Bulletin in October 1998.

There has been, and will continue to be, substantial learning from this program, and this should be shared widely so that others may benefit from this learning and may begin or enhance their own service learning experiences. HPSISN can learn from other national initiatives in establishing operating procedures to ensure that members of the HPSISN grantee network are not competing with each other for dissemination opportunities, and that there is clear delineation of authorship and responsibility for sharing certain information. It is essential that there be respect and trust among the network members with regard to dissemination. There should be many

opportunities for dissemination, and it would be ideal to create a culture of sharing so that many participants may benefit from being responsible for these dissemination activities.

IV. SUMMATIVE FINDINGS ACROSS THE SITES

In this section we discuss our summative findings across all of the participating sites. These findings represent a synthesis of all data collected by grantees and the evaluation team, and are both documented and clearly derived from the data provided. As described earlier, there were multiple sources of data collection, including telephone interviews, site visits, focus groups, other observation opportunities, surveys, program director reflection activities, review of documents, and analysis of bi-annual progress reports/case studies from the project sites. Data were analyzed according to the five research questions that frame the evaluation project, using the key variables that were developed as measurable elements of each question. Much of the data is qualitative data, and therefore the findings derive from multiple observations; as such findings are not always reported explicitly by method. The end of program surveys of students, partners and faculty did provide some quantitative information; this data is referred to directly as being survey data where actual numeric results are presented.

The following discussion begins with a definition of service learning, and then presents the findings for each of the evaluation research questions. Each question ends with a series of comments on "lessons learned" about each question, framed in such a way as to assist others who might be considering the impact of service learning in a health professions or other educational program.

Definition of Service Learning

The HPSISN program adopted a definition of service learning that described structured learning experiences with a balance of service and learning, combining community service with explicit learning objectives, and emphasizing opportunities for critical reflection about the service work and its relationship to the participants' professional education. An important element of this

definition is that service learning responds to community needs and involves the community as active partners. Thus the learning opportunity is developed, implemented and evaluated by the university in partnership with the community.

This differs from traditional clinical training or other forms of health professions experiential learning in that the community component plays a significant role in the university's planning of the academic experience. The element of reflection is a particular difference, as most clinical training does not have the structured opportunities for analysis and synthesis of community experiences in contexts other than the relationship to clinical skill and competency development. Most clinical experiences have also not placed much emphasis on socio-economic influences on health, instead focusing primarily on the health-related influences. Finally, the service experiences foster citizenship skills, rather than just clinical skill development. In some cases, these differences are marked; in others, the service experience may build upon existing clinical training opportunities.

Among the grantees there were several definitions used to guide HPSISN work; some of these are offered below to illustrate the range of approaches. Service learning:

- Provides experiences in which students learn and develop, the needs of the community are met, a relationship exists between the community and the University, civic responsibility is encouraged, service is centered in the curriculum, and reflection takes place.
- Includes components of voluntary service provided in conjunction with didactic information being learned in a course.
- Offers a planned learning experience which combines community service with preparation and reflection, and is implemented through community partnerships.
- Assists students to learn through active participation in thoughtfully organized service, helps to meet needs of community, and fosters civic responsibility. Relevant experiences are integrated with academic course learning and are mandatory.
- Occurs through structured service activities that are planned and implemented in partnership relationships.
- Is course-based experiential learning pedagogy in which community service is integrated into academic coursework.
- Is a method of experiential learning through which participants in community service meet community needs while developing their abilities for critical thinking and group problem-solving, and the practical skills they need in the practice of their profession.

While it is clear that there is no one “perfect” definition, common themes emerge from these statements that offer parameters of how service learning is conceptualized in health professions education, and in particular among the HPSISN grantees.

Research Question 1:

How has the HPSISN project affected university-community partnerships with respect to service learning in health professions education?

The purpose of this question was to understand the influence of service learning on the nature and scope of university-community partnerships. The discussion here focuses more specifically on the nature of the interaction within the partnership, specifically considering such issues as the role of community partners in service learning, the level of their involvement, the kinds of university-community interactions, and the nature of services provided. Refer to Table 2 on page 10 for further information on this research question.

Findings from an end-of-program survey regarding partners' perceptions of the impact of service learning on their organizations are given in Research Question 5, although some reference is also made here where relevant.

Findings

University-community relationships were especially strengthened at institutions where partners were offered specific campus roles and responsibilities such as adjunct appointments, participation in faculty meetings, participation in student reflections sessions and/or involvement in evaluation and assessment activities. This desire for formal acknowledgment of the partner role was affirmed in the survey. A genuine sense of reciprocity was found to be associated with a commitment to sustained and expanding partnerships, and tended to lead to the recruitment of new partners and/or additional partnerships between existing community partners and other university departments. Partners were particularly receptive to the offer of benefits which were a major benefit to their organizations, while actually "costing" the university little -- items such as access to e-mail, donation of old computers, library access, use of campus facilities such as meeting spaces or fitness centers, etc. At campuses where partner involvement was limited to participation in an

advisory group, university-community relationships tended to be stable and apparently similar to the status of communication prior to the project.

Offering community partners specific and active roles in service learning was also associated with an improved community understanding of the university. However, the survey shows this is an area where partners wish the universities to be more explicit in terms of defining the nature of the relationship. Where relationships were clear, partners seemed to gain more realistic views of what the university, faculty, and students can and cannot do in response to community issues or problems. Institutions that ensured that partners were well-oriented to the goals of HPSISN courses and activities were most effective in sustaining strong partner relationships that supported goals for impact on students and community. Evidence of this increased understanding extended to partners being able to describe realistic expectations for what the students and the university can deliver and accomplish within the context of a few service learning courses. Mutuality of planning efforts was associated with realistic expectations and high satisfaction with outcomes.

Data from faculty, students, and community partners consistently pointed to the importance of student preparation and orientation prior to involvement in service learning activities. There was strong evidence that student orientations were substantially more effective when community partners were participants in designing and delivering the orientations. This, again, speaks to the benefit of involving community partners directly in service learning activities previously presumed to be the domain of faculty. Involvement promotes trust and confidence among community partners by demonstrating the university's willingness to honor and value both community experience and leadership.

In other sites, community partners expressed a concern that the university was not communicating enough with them, and that they, the partner, could have done a better job of serving student learning objectives if there had been better communication and orientation to service learning between the university and the partner. This was raised strongly in the survey in 1998. These partners were willing to devote additional time and effort in order to enhance the

benefit of the experiences for students, and for their organizations. These partners also expressed high value on their role in preparing future professionals.

Sites making substantial progress toward goals demonstrated effective and active communications with community partners, especially with the community-based supervisors working with students as opposed to just with partner organization leaders. The nature of partnerships varied considerably across the sites, although there was a clear tendency to working with sites that were non-profit organizations and generally engaged in a wide range of health, human and social service activities. A list of some of the partnerships is provided in Appendix 5.

The involvement and role of community partners, and communications between partners and university, were most revealing of the level of interaction of community and campus, and were most often associated with data suggesting satisfaction and sustainability. Clearly, the HPSISN project was seen to have a positive impact on the community's awareness of the university. While tracking the number, duration and type of university-community relationships seems descriptive only, these variables and indicators were useful as descriptors of institutional differences and for characterizing community expectations. They were also strong measures for assessing institutional progress toward project goals regarding HPSISN partnerships.

Lessons Learned about University-Community Partnerships

The HPSISN program has had a strong impact on university-community partnerships, especially where partners were incorporated into the teaching/learning/assessment team as individuals with expertise to contribute to the learning goals of students. Community partners seek authentic roles with demonstrable impact on students and on institutional behaviors; they are not satisfied with symbolic or advisory roles unless these roles empower the partner to affect curriculum and institutional goals. Partners often speak positively about the recognition of their roles as “co-teachers” and value this opportunity. Concrete acknowledgments by the institution for the teaching role of partners are direct influences on levels of satisfaction, trust, and sustainability. Institutions may develop different kinds of acknowledgments or different roles for community partners; the lesson is that each university must explicitly design and communicate partnership

roles, and create specific modes of supporting and recognizing the partners' contributions to student learning.

Questions remain unanswered regarding the different forms and types of advisory groups, which were not an explicit measured variable of this study, although they may have had some impact on partner attitudes and responses. Advisory groups usually offer added value to the university in particular, but require a certain level of support and commitment from the university to ensure that this value is achieved.

While partners had varied roles across the HPSISN grantees, it is clear that in all sites the partners became involved in the university's teaching programs, either establishing new partnerships or augmenting relationships that existed prior to HPSISN. Partners generally were eager to be involved, and usually welcomed invitations for new roles that were evidence of the university's acknowledgement of the value of the partnerships. A key lesson learned from nearly all of the grantees is that partnerships cannot be taken for granted, and require continuing attention and support to ensure that there is mutuality of benefit for all participants in the partnership.

Research Question 2:

Through the HPSISN program, how has the introduction of service learning into health professions education affected the readiness of students for a career in the health professions?

The purpose of this question was to evaluate service learning as a developmental approach to preparing health professions students for careers in the current policy, economic, social, and cultural environments of health services delivery. The question and approach (set out in Table 3 on page 11) focus on gaining an understanding of the ways in which service learning increases students' knowledge about community health issues, broadens their understanding of the multiple determinants of health and illness, and enhances their individual capacity for service. Findings include data from the first year evaluation report, grantee progress reports throughout the three year program, student focus groups (held in 1997 and 1998), and the end-of-program survey. The survey, being confidential and not traceable to institutions, does not permit distinctions

between course-based and non-course based service learning; the other modes of data collection do permit these distinctions.

Across the sites there was a considerable range and variety of kinds of experiences and sites where students participated in service learning; a partial list of these sites (by generic name) is provided in Appendix 5. This variety reflects both individual contexts of university-community partnerships and the wealth of resources available in communities where health professions students might contribute community service.

Students involved in course-based service learning with specific learning objectives were positively affected on all variables identified for this question. In the end-of-program survey, all student respondents generally reported that their involvement in service learning was a positive experience. There was variability across sites on development of awareness of determinants of health, sensitivity to diversity, and understanding of health policy, depending on the nature of the service activity and the health issue being addressed. This suggests that positive impact on those variables depends on deliberate efforts to create service opportunities that explicitly incorporate attention to these factors. Students in non-course based or in clinical service situations also reported positive effects along the variables of involvement with community, commitment to service and career (specialization or location) choice; however, these students also mentioned prior experience with service.

Where the service learning HPSISN-funded activity was optional and not course-based, fewer students and faculty participated, and fewer students could identify a linkage between the activity and their professional education and career preparation. They were more likely to say that they valued the activity because it matched their own beliefs that valued volunteerism as an extra activity -- a personal commitment to service. In other words, they had already adopted the values of service and saw the HPSISN activity as a way to fulfill that need outside the curriculum. They also appreciated the activity as a way to learn about community support services so they would be effective in patient referrals and in accessing community-based resources. While this is admirable

and should not be discouraged, this kind of service was not the integrated learning experience envisioned by the goals of the HPSISN program.

Forty-eight percent of the survey respondents said that service learning should be implemented into more courses. The majority said that service learning helped them recognize how course material can be applied in everyday life, and that service learning helped them better understand materials from lectures and readings.

All sites identified the importance of student preparation and orientation to HPSISN project activities as essential to successful achievement of career goals for students as future professionals. In addition, some sites realized that many students arrive with real-life experiences and prior service experience that are assets to the service learning efforts of HPSISN, and have given students stronger roles in designing and delivering service activities. Students are often the major force advocating for service learning courses.

Prior experience with service learning seemed to explain an unexpected finding: students who participated in voluntary service learning activities were inclined to say that service learning should be optional rather than required. This was explained by their concern that students who were "forced" to do service learning might not take it seriously and would not do a good job. In programs where service learning was required, students were inclined to say it should be required for all students in health professions because of the transformation they experienced. Most often, students preferred that service learning not be required because the requirement can detract from the positive aspects of the experience; however, they also acknowledged that without the requirement, too few might participate because of other curricular demands, and they therefore would not discover the value and impact of the experience. Where students had no prior experience with service learning, almost all found that it was a transforming and motivating experience that would affect their professional conduct and career choices.

The differences between voluntary and required experiences were somewhat ameliorated at sites where students had a wide variety of choices or a high degree of personal control over the design of their service learning experiences. Choice is also important when considering issues

such as safety, comfort, values, and beliefs. While these factors are often challenged by service learning experiences, they still must be considered in order to acknowledge and respect individual student differences and competencies.

Students most valued service learning, whether voluntary or required, if it had strong and obvious connections to their professional program, and if they believed it would make them more successful in their career or provide more career options. Many students reflected on the opportunities for both personal and professional development, and indicated that their experiences might likely influence their area of specialization or the kind of environment in which they expected to work. In these situations, however, greater faculty supervision and involvement was essential to ensure uniform quality and effort. The dilemma of voluntary versus required service is under constant discussion among service learning educators. In the context of the HPSISN program where service was expected to be integrated with curricular learning objectives, achievement of program goals was greatest where service learning was viewed as the educational method, rather than an activity that was added on to an already full curriculum. This integration eliminated the need to structure “voluntary” (and therefore additional and extra-curricular) service learning experiences. It is unclear whether the voluntary, extra-curricular experiences achieved the HPSISN goals by themselves.

Across the sites, students in health professions programs were eager to be out of the classroom and engaged in an activity that had a clear purpose and gave them a sense of responsibility and leadership. Students involved in course-based service learning could make a linkage between service and course content, and articulated satisfaction with the chance to be involved in a community of students rather than an isolated student. These students also felt that they gained competencies in sensitivity to diversity by becoming more aware of and working with people from circumstances different from their own, which helped them to understand community needs and services. These effects were especially evident where service learning courses had specific learning objectives connected to these factors. This finding was affirmed by the 1998 survey. Students not only reported a greater awareness of community needs and issues, but also

realized they had much to learn from the community. Many spoke of community partners and clients as teachers from whom they learned a great deal about the non-clinical aspects of their future careers and roles.

Students were extremely concerned about continuity of service, even more than faculty or community partners. Strong attachments were often made to individual clients or organizations, and students craved assurance that the institution and community would sustain the effort, in particular given the greater involvement with the community that developed during the experience. In addition, students were extremely concerned about the quality of the experience for themselves and for the clients. They were quick to identify experiences that were shallow or not well planned to accomplish something specific.

However, while 90% of survey respondents reported that service learning helped increase their awareness of needs in the community, nearly 60% strongly disagreed, disagreed, or were neutral to the statement that working in the community helped to clarify their career or specialization choice. This may be explained by the fact that 100% of the respondents indicated that they agreed or strongly agreed that they have a responsibility to service the community. The respondents were probably a sample biased toward students who already felt commitment to service and who had already made career choices on that basis.

Students uniformly reported that service learning was both professionally and personally enriching. For example, the survey found that 83% of the respondents reported an increase in their sensitivity to diversity and their comfort in working with people different from themselves. In addition, 72% of the students agreed or strongly agreed that service learning made them more aware of their own biases and prejudices. A few said it seemed like "extra work" and was a drain on their time, but even those recognized that service learning had value and connection to their professional preparation. In all cases, students valued reflection activities related to their service experiences, especially when community partners were involved as facilitators of the reflection sessions. In some cases, students organized their own reflection sessions when the institution did not. The understanding of personal changes was often attributed to reflection -- whether through

journals, focus groups, debriefings, or other methods of expression that helped students to articulate their thoughts on and reactions to their service learning experiences.

In those sites that were successful in implementing and sustaining interdisciplinary service learning activities, objectives for interdisciplinary respect, collaboration and understanding were being achieved. The curricular component of the interdisciplinary learning experience was seen as essential to achieving the effect of mutual understanding and building team commitment. Interdisciplinary approaches also tended to foster expanded and sustained service learning efforts because of the development of a network of involved and committed faculty and students. As is being observed in other health professions education programs that are interdisciplinary, significant challenges were encountered by faculty and students tended to agree that the interdisciplinary experiences are particularly rich and rewarding.

When the HPSISN grantees were sorted according to disciplinary participation, the sample for each discipline became very small; therefore, the evaluation team cannot suggest any compelling conclusions regarding disciplinary implications for the implementation of service learning with regard to student impact. Comments on possible disciplinary differences in overall implementation of service learning in the curriculum will be discussed in the institutional section (Research Question #4).

Lessons Learned about Student Readiness for Careers

All sites strongly identified the importance of student preparation and orientation to HPSISN project activities as essential to successful achievement of career goals for students as future professionals. In addition some sites realized that many students arrive with real-life experiences and prior service experience that are assets to the learning efforts of HPSISN. Giving these students more varied choices as well as specific roles in designing and delivering service activities strengthened the benefits of their involvement. In addition, students often assumed leadership roles in advocating for the sustainability and expansion of service learning courses.

Within the areas of concern for this research question, the evidence was not as strong about what was learned with respect to some of the basic health systems concepts that service learning

might highlight. Cumulatively across the sites there was not clear documentation that students learned about community needs assessment, gained knowledge of barriers to health care and analyzed how to overcome these barriers, or spent as much time (as might have been anticipated) thinking about and discussing newly acquired insights into knowledge of the socioeconomic, environmental and cultural determinants of health and illness. The close working relationship with the community partner that is developed during service learning offers considerable opportunities to gain greater understanding of community and health system concepts, and there should be greater emphasis on such knowledge development in future service learning programs in the health professions. This will help to prepare students for their future careers as professionals who understand not only the science of health care but also the socio-cultural issues of communities and their members.

Although the impact of service learning on students was strongest when service learning is course-based, faculty must be attentive to the impact on students who have concerns about grading systems and performance outcomes. Students often expressed concern about how service learning activities affected grades – especially when students in the same program were placed in a variety of settings, and were doing different work or addressing different challenges. These variations raised issues of equity in assessment of student performance, and need to be carefully monitored by faculty. It helps if students can know the explicit goals and content of service learning activities early in a course, which will require faculty to more clearly articulate, purposes, needs, outcomes, resources, etc., related with individual service learning experiences.

A major lesson of the entire study was that the transformational impact of service learning on students (and on faculty for that matter) was more evident at HPSISN sites where the service learning was truly course-based, required, and did not involve an exclusive focus on community-based clinical work. Students were strongly affected by working with individuals in non-clinical settings where they learned about the daily context of individual lives, and experienced the complex and fragile network of support services upon which their clients depend. This awareness of the challenges of ordinary life experienced by potential clients led to the greatest transformation

of student views of the role of service in their future professions. Service learning in clinical settings can be valuable but is almost always overwhelmed by issues of clinical skill development and application. It is thus important for faculty creating service learning experiences to understand and clearly articulate the difference between service learning and traditional experiential clinical training, so that skill development through both methods may be achieved.

Service learning experiences had a substantial impact on students' sense of self, as provider of health services, and as a member of a larger community. The value of these experiences as integral parts of the curriculum was demonstrated, and there was a clear message that experiences designed as "add-on" activities have diminished impacts because of other curricular demands placed on these students. Individuals planning service learning experiences need to take into account the overall academic programs of these students, and ensure that community work is integrated in a seamless fashion.

In addition, all evidence suggested that service learning is primarily attracting and affecting students who already have a belief or tendency toward commitment to service. This may be explained somewhat by the fact that the health professions tend to attract caring individuals. It also suggests that such students will continue to provide service following completion of their educational program. However, it seems clear that more work must be done to attract and sustain participation from students who would benefit from the personal and professional development that is derived from service learning experiences. At some sites there was some discussion of the peer leadership roles assumed by students; service learning offers significant leadership development opportunities and individuals planning such experiences should take account of these opportunities to benefit as many students as possible.

In summary, the service learning experiences had a substantial impact on students' sense of self, as provider of health services, and as community participant. The value of these experiences as integral parts of the curriculum was demonstrated, and there was a clear message that experiences designed as "add-on" activities will have diminished benefit because of the other curricular demands placed on these students. Individuals planning service learning experiences

need to take into account the overall academic programs of these students, and ensure that the community based work is integrated in a seamless fashion.

Research Question 3:

To what extent have faculty embraced service learning as an integral part of the mission of health professions education?

The purpose of this question was to ascertain the level of commitment of faculty to the inclusion of service learning in health professions education. This question was approached from two perspectives: first, the way in which faculty are able to make curricular change through integrating service learning into the required curriculum and making the distinction between service learning and other experiential learning opportunities; and second, through the personal impact of engagement in service on scholarly work, personal service, and leadership roles of faculty. Table 4 on page 12 includes further information on this research question.

Faculty respondents to the end-of-program survey agreed that service learning had a largely positive impact, and that it positively affected student learning by linking classroom learning to everyday life. The majority of faculty also indicated that service learning enhanced faculty-student interactions for learning.

Despite these positive views of service learning's impact on students, how service learning was organized affected faculty involvement. HPSISN sites that were actively led by faculty who took visible and direct, hands-on responsibility for the project and had a key role in service learning implementation made the most progress toward program goals. Sites that relied on administrative staff to do most of the project management were less successful in extending the involvement in service learning to additional faculty, courses, or programs. However, administrative staff were often highly engaged in community relationships and were integral to the accomplishments of their respective sites. The commitment of faculty who were seen as leaders by their peers was strongly associated with sustained and expanding engagement in community service. The position of faculty leadership in an institution's academic hierarchy was less important. As was the case with students, faculty variables were most positively affected by the

grant at institutions where service learning was incorporated into courses and linked directly to learning experiences for all students.

This need for faculty involvement was associated with evidence that service learning is adopted and sustained by additional faculty when they see respected colleagues acting not only as advocates but also as active participants and role models. The HPSISN grant legitimized service learning for some faculty, but for others the involvement of respected faculty leaders was as important in making their decision to participate. In some institutions, other complementary efforts in service learning or health professions program changes helped to reinforce the work of the HPSISN grant, and accelerated the adoption of service learning. These efforts included internal grant programs to support service learning, integration of community-based learning in other elements of the curriculum, overall academic reform, or revision of promotion and tenure guidelines or practices to give greater emphasis to community-based teaching and scholarship. It can be anticipated that such complementary efforts would facilitate sustained and expanded engagement in service learning by faculty over time.

Involvement in service learning ironically presented a challenge to fostering faculty adoption of service learning in that most HPSISN institutions did not directly reward faculty for time and effort spent on community interactions. Some campuses, however, rewarded faculty for service learning through recognition of the role of teaching, where service learning was viewed as an innovative and appropriate teaching technique. Over time more institutions may come to embrace community-based teaching and scholarship as important elements in the faculty review and reward system.

Faculty involved in leading HPSISN projects reported that they invested considerable time in helping other faculty learn more about service learning. Many faculty remain confused about the distinction between service learning and other community-based experiential placements. The challenge appears to lie in distinguishing the concept of “service” to address community needs and respond to community assets, as compared to addressing clinical needs through the direct provision of health services. This is a challenge for many health professions educators, since they

are used to providing "service" that is driven by a medical problem that can be treated by a health professional, rather than a health problem that may relate more generally to prevention and wellness for which the "treatment" may involve many kinds of community resources beyond direct health services.

Some participating faculty seemed to gain a better sense of the complex web of community health needs and of the resources available or needed to ameliorate these problems. Variability was higher among faculty regarding the appropriate institutional response to these needs (collaborate vs. sole source provider as expert institution; or, service provision vs. service learning partnerships).

Faculty involvement in direct communication with community partners was the most important element in sustaining community partner involvement because of the value the community places on the relationship with faculty. Faculty/community interactions defined commitment and sustainability for both faculty and for community partners. This is where the sense of reciprocity and mutuality must be developed and nourished specifically. Skill in building effective communications patterns was associated with apparent commitment to service which is largely a predetermined orientation based on individual values. The exceptions were examples of strong faculty commitment arising from observed transformations of students as a result of course-based service learning activities. In addition, faculty respondents to the survey reported that service learning helped them become more aware of community needs. As with the student respondents, faculty revealed a predilection for service when 100% of the respondents said they have personal responsibility to serve the community and that they should be role models for students regarding commitment to service.

Because the primary motivator for faculty seemed to be personal values and/or a belief in the improvement of overall learning, a scholarly interest in service learning was not observed often. However, many faculty referred to personal excitement with career redirection prompted by their engagement in service learning, resulting in identifying new directions for scholarship and new professional networks with other faculty and community members. More interest in

scholarship was seen in the last year of the grant than in prior years. This may be the result of longer experience with assessment of service learning outcomes, and/or the more active identification of outlets for publishing and presenting scholarship on service learning within the disciplines and through CCPH.

Sites that provided regular and sustained faculty development activities were more successful in implementing program goals. A major challenge to sustaining HPSISN programs was the need to extend faculty participation beyond those who are early adopters, and to prevent these initial individuals from burning out. Many faculty chose to engage in service learning because of their own belief structures and the values of the institution or the profession. The opportunity to engage in interdisciplinary teaching through service learning and to develop new relationships with other faculty were also cited as incentives for the involvement of some faculty. By the end of the grant period, most sites continued to express concern about the need to engage additional faculty in service learning activities. Again, integration in the curriculum and internal institutional rewards contributed to broader faculty acceptance of service learning as a legitimate learning strategy. Availability of assessment data that demonstrated the impact on student learning also positively affected faculty commitment to service learning. In the absence of data, some faculty remained concerned about their impression that service learning is time consuming and/or extra work.

Faculty were dramatically affected in their own confidence in their teaching methods and skills where service learning was course-based and distinguished clearly from clinical experiences. An anticipated component of this impact on teaching methods was a change in the nature of faculty/student interaction. The data collected for this evaluation, unfortunately, did not provide or seek extensive evidence on this variable; however, anecdotal reports from faculty, program directors, and students suggested that in many circumstances new dynamics of faculty/student interaction were observed. The transformation of students had a similar transforming and rejuvenating effect on faculty.

A strong and unexpected finding was that faculty and program leaders highly valued the new collegial relationships with other faculty that developed through joint participation in service learning activities. Others found that the HPSISN project and involvement in service learning created a linkage between their professional lives and their personal commitment to service and volunteerism. In addition to responding to evidence of student transformation and new collegial relationships with other faculty, most faculty cited personal satisfaction that service learning created a connection between their professional lives and their personal commitment to service. This was especially strong among faculty leaders at the HPSISN sites.

Understanding of community needs, nature of faculty/community interactions, understanding of barriers to health services delivery, and awareness of determinants of health varied according to the way that campuses structured interactions with partners. Greater impact was found at sites where faculty and community partners held shared responsibilities for the success of the program, and exchanges of influence were apparent. Just as there was an opportunity for students participating in service learning to gain greater understanding of health systems concepts, there was a parallel opportunity for faculty to engage in deliberate reflection on, and discussion of, the community barriers to service and how these affect individuals access to service, and to plan future experiences in ways that will maximize utilization of community resources. In sites where strong campus service learning centers existed and were involved in HPSISN-related recruitment and communication, overall grant performance was enhanced, but individual faculty involvement in partner communications was still essential.

Lessons Learned about Faculty Engagement in Service Learning

To sustain and expand faculty involvement in service learning, there seems to be no substitute for regular and frequent faculty development opportunities and direct experience with service learning courses. It may be inevitable that most faculty who become engaged will do so in large part because of their personal value structure, but clearly an investment in regular assessment of learning and community impacts has a persuasive effect on some faculty who will respond to the transformative experience of students. While the institution can and should provide logistical

support to faculty, the direct relationship between faculty and community partners is vital to sustainability and a key component of mutuality and satisfaction.

Overall, attempts to reform health professions programs and curricula were most successful when the campus at large provided some context of support and safety for faculty experimentation with service learning. Centers and institutes that offered development activities and support made a major difference in faculty willingness to participate. For most programs and institutions, the adoption of service learning was deemed successful when a critical core of faculty who are viewed as leaders advocated and incorporated service learning. A lesson here is that such involvement need not and probably should not be a universal faculty commitment. Not every faculty member must embrace service learning; however, a critical mass must accept it as an appropriate learning and development tool that advances student abilities to meet learning objectives. As compared to students, where a wide effect is desired in order to transform future professionals, it may be adequate if not preferable that faculty engagement in service learning focus on those who are naturally inclined toward service.

The major challenge to faculty involvement seemed to be less a concern about reward systems than about frustrations in making service learning activities integral parts of the required curriculum, given the rigidity of health professions curriculum content and traditions. Finding time in the curriculum was the most common challenge cited. Cited less often, but still a perceptible issue, was the ongoing confusion about the definition of service learning and its relationship, if any, to clinical experiences. Knowledge of and commitment to understanding community needs and incorporating community leaders as teachers/learners helped faculty learn the distinction through direct input from the community. In addition, some institutions organized service learning in ways and forms that were rather labor intensive and will require specific internal allocations or new grants to support staff costs on an ongoing basis.

A greater engagement in scholarly work may be seen over a longer period of time. The values placed on service learning and professional development were strongly associated with each other, and with the faculty's role in service learning implementation. Faculty needed

developmental opportunities and direct experience with service learning course components to understand the differences from clinical experiences, and to support sustained engagement in service learning -- both as a teaching method and as a venue for scholarly activities. In the absence of a sustained effort such as that generated through a program such as HPSISN, institutions would be well-advised to develop a deliberate strategy to develop and support faculty to foster their continuing engagement in service learning.

Research Question 4:

As a result of the HPSISN grant, how has the institution's capacity to support service learning in the health professions changed?

The purpose of this question was to establish the extent to which institutions are involved in service learning activities and the factors which contribute to sustained commitment. As illustrated in Table 5 (page 13), the emphasis of the findings is on the institutional factors that facilitate service learning becoming integrated into the required curriculum, how barriers to such integration are addressed, and the establishment of an institutional infrastructure to support service learning. As well, an area of analysis within this question is the way that involvement in a national service learning network affected the institution and helped (or hindered) the local development of service learning.

The HPSISN grant was seen as giving higher status to service learning in the health professions on campus, especially as a means to catch the attention of other faculty. The grant offered a framework for developing a shared language and conceptual agreement on the role of service learning, resulting in more credibility for service learning. Status was also derived from the grant recipients' selection to participate in a national network and demonstration project, and the association with both The Pew Charitable Trusts (and indirectly the Pew Health Professions Commission) and the Corporation for National Service, though that was cited as more important in the year two evaluation than in the final.

Attention in the final year was focused on issues of sustainability and attention seemed to have turned significantly to "life after the grant." The findings from final reports, issues raised in

the 1998 focus groups, and reflections of program directors dwelled mostly on issues of institutional support. As sites faced sustainability without grant support, challenges of institutional conditions and commitments are highlighted. Indeed, these are the factors that best explain the factors that influenced the departure of three of the original grantees from the program by the beginning of the third year.

In addition, in the latter stages the grant and its reporting requirements came to be seen by some program directors as a nuisance or burden; these individuals articulated sentiments that since the grant award seemed small and was winding down, there was little incentive to invest time in analysis when future challenges loomed large on the horizon. Differences in institutional commitment to internal evaluation and to grant program expectations were highlighted through these observations.

While there is a general understanding that service learning is expanding nationally from a primarily liberal arts orientation to integration into many professional degree programs, many HPSISN program staff and faculty described ongoing difficulties with the curricular traditions of health professions education and the constraints that prevented them from fully realizing their service learning objectives and in ensuring ongoing departmental (or academic unit) involvement. In each of the health professions, one or more institutions devised creative approaches to overcome curricular constraints; others did not and continue to struggle to overcome these barriers. The differences seemed to be associated with faculty involvement, commitment of academic leadership, and institutional commitment to service learning (both within and outside of the health professions education programs). There also appeared to be a relationship with institutional orientation to teaching and learning, with those institutions that placed a high priority on teaching embracing service learning more readily than those that are primarily research-driven institutions.

As predicted in the last evaluation report, sites that implemented course-based service learning activities seemed to have more confidence in their ability to sustain or expand program efforts, and were less concerned about long-term investment of resources in support of service learning. These sites, with integration in the curriculum, seemed less concerned about the need for

continuing funding for staff positions or expenses than sites where experiences were parallel or separate from courses. Some sites that did not use course-based service learning or had only a limited curricular connection were planning for sustainability by attaching the project to other campus-based service activities and programs. These also tended to be institutions that were larger and had more flexible resources. Clearly, sustainability is more difficult at smaller institutions where resources are thin. In these cases, integration into the curriculum is critical and cost issues such as transportation and supplies represent real challenges for the future.

There was considerable variability across the institutions regarding attention to and investment in faculty development. Regular and multiple offerings of developmental activities were associated with broader faculty participation and faculty acceptance of service learning as a valid learning tool. This was discussed in greater detail previously in Research Question #3.

The strength of institutional commitment among academic leadership and commitment to service learning outside the health professions were both strongly associated with positive impacts on all other variables regarding institutional capacity. This finding reflects evidence of an overall institutional sense of mission, the effect of mission on the educational experience, and on faculty roles. These institutions have the capacity to create a positive environment that fosters deliberate investment of resources, sustained course-based service learning, broad campus involvement, plans for resource allocation and acquisition, and overall orientation to evaluating teaching and learning.

Variability in institutional capacity and the probability of sustainability were also associated with definitions of service learning. In some cases, HPSISN sites continued to use definitions that demonstrate ongoing confusion about definitions of service learning, clinical training, and volunteerism. Sites that did not articulate a definition such as the one promulgated by HPSISN had more difficulty meeting HPSISN objectives; however, they believed, in most cases, that they were meeting their own institutional objectives in ways that promoted sustainability of their efforts. This suggests that institutions and individual programs must be specific in their definition of service learning and that strategies for supporting the program and developing faculty must be

consistent with that definition. Different institutions are likely to have different levels of commitment to classic service learning, and variation is not a hallmark of failure. However, to best inform the work of institutions seeking to fully implement service learning as an integrated component of the health professions curricula, it is necessary and appropriate for this report to focus on the factors and strategies that contributed most strongly to the implementation of HPSISN goals.

Among institutions that used the HPSISN grant to implement authentic course-based service learning activities, there seemed to be the greatest potential to expand and sustain efforts beyond the grant program. An unanticipated finding was that many of these sites offered evidence that the implementation of curricular-based service learning through HPSISN was being linked to and strengthening other campus change initiatives. This effect was especially evident at institutions where campus leaders and key administrators were well-acquainted with HPSISN project goals and activities. In these cases, site visits revealed that the institutions' faculty and administrators had worked together to make a conscious choice to pursue the HPSISN grant program because of its relevance to large organizational change objectives.

HPSISN goals were most advanced at institutions where there was a broad-based commitment to service learning among leadership and across the institution, and a campus infrastructure to support and foster service learning. Inevitably these were the institutions that had an image in the community of being engaged in community activities, rather than being viewed as an "ivory tower", inaccessible to most community groups. While in some instances a campus office of service learning was a valuable resource for HPSISN grantees, other sites did not make much contact with this office -- perhaps because the center was seen as related primarily to general or undergraduate education, or was located on another campus. This was particularly true at those sites where the grantee was located in an academic health center geographically separated from the rest of the university.

The strength of institutional commitment among academic leadership and commitment to service learning outside of health professions education was strongly associated with positive

effects on all other variables regarding institutional capacity. These two variables reflect evidence of an overall institutional sense of the relevance of service to mission and to the educational experience. These institutions had the capacity to provide a positive environment that fosters deliberate investment of resources, sustained course-based service learning, broad campus involvement, and plans for resource allocation and acquisition.

HPSISN grantees were positively affected by consonance between HPSISN goals and institutional values that promoted service and learning, whether by virtue of religious affiliation, location, or historic commitment to local communities. This seemed to affect the HPSISN grantee positively through validation, evaluation, professional development, and publicity/recognition. At other sites where other values were more paramount, service and service learning were more marginal and less likely to be broadly validated.

Lessons Learned about Institutional Capacity

In considering institutional impact, it is essential to take into account the considerable variation in institutional characteristics across the grant sites: such characteristics as large and small, public and private, urban and rural, research and teaching orientations distinguished each grantee as a unique representative of a sector of higher education. While real differences occurred across the individual sites, these findings reflect general patterns about lessons learned that are broadly applicable.

Grantees spoke favorably about the development of a network among the HPSISN grantees, and about the potential benefits for themselves and for their institutions through participation in ongoing networking activities through both individual disciplinary/professional associations and through CCPH. Substantial effort has been expended throughout the grant to facilitate various networking opportunities, and at the end of the grant program each grantee now possesses considerable resources for accessing other service learning activities (both within and outside of health professions education).

Most grantees made considerable progress within their institutions in establishing a service learning infrastructure and in addressing institutional barriers to service learning. The level of

progress varied considerably depending on institutional philosophy, leadership and commitment; nonetheless at a minimum there was progress within individual programs or academic units, while in others there was substantial institutional change. In these latter cases the HPSISN activity sometimes catalyzed university efforts, or occurred in tandem with other educational reform initiatives to give added momentum for change.

The actual integration of service learning into the required curriculum varied across the sites. An expectation of the grant, and a program objective with respect to institutional impact, was that each site would integrate service learning into at least two required courses in the curriculum. Some sites went beyond this expectation, integrating service learning into a number of courses. In contrast, as the evaluation team began working with the sites at the beginning of the second year of the program, some program directors stated emphatically that their definition of service learning meant providing opportunities other than course-based activities. Thus, these sites did not achieve this objective, although they did engage in initiatives that embodied elements of the HPSISN definition of service learning and fit their campus culture and expectations.

In addition, the end of the grant seemed to dampen grantee enthusiasm for reporting on program activities and relationships as they became, perhaps necessarily and inevitably, increasingly focused on internal institutional issues that may have some lessons for others, but are often situational in nature. An alternative view would say that the sites gained confidence in programmatic matters and were turning more toward managerial issues. Examples of each can be found among HPSISN grantees. In retrospect, a final site visit as part of the end-of-project evaluation would have given evaluators and program staff the benefit of direct observation of on-site issues and attitudes at the completion of the grant period.

In considering institutional impact, one must recognize the multiple and often conflicting demands placed upon faculty, students, community partners, and institutional administrators. However, the relevance of service learning as a means for institutions to engage more actively with their communities cannot be underestimated, and institutions engaged in service learning will face

continuing challenges to continue to build the necessary community relationships to support effective service learning.

Research Question 5:

What impact does service learning in the health professions have on the participating community partners?

The purpose of this question was to explore the effect of partnership with the institution and attendant service learning activities on community partners. A major part of the analysis of the findings on this question relate to the extent to which the partnership assisted the community partner to better identify and perceive unmet needs in the community, and develop/expand its capacity to serve the community. As well, several of the variables address the benefits that accrued to the partner from the relationship with the university – benefits of both a social and economic nature. Finally, this question addresses the partners' satisfaction with the relationship with the university, individual faculty and the students. More information on the methods for this research question is found in Table 6 on page 14.

A variety of partnerships were established by the HPSISN grantees; some examples have previously been referred to (see Appendix 5). The following discussion reflects data collected through focus groups, site visits, and observations in the periodic progress reports of the individual grantees. Additional data regarding community partners' perceptions about the service learning partnership was obtained through a post-grant survey of partners; 53 partners responded from nine of the HPSISN sites.

Overall the survey responses demonstrated a positive response from community partners to their participation in the HPSISN program. Sixty percent of respondents strongly agreed that service learning helped prepare health professions students for their careers and that service learning should be implemented into more courses. Eighty-five percent either agreed or strongly agreed that service learning helped students see how classroom learning can be used in everyday life. In general the respondents were favorable about the statement that the benefits of working

with students outweighed any burdens it may have added to their work; only three disagreed with that statement.

The findings revealed a strong effect on partners regarding awareness of the university; this had both positive and negative components. Partners became more aware of institutional assets and limitations, and gained an appreciation of the institution's attitude toward community needs and recognition of community resources. Most partners expressed a high level of satisfaction with the partnership. However, most partners also found that the institutions operated in bureaucratic ways that did not foster interdisciplinary cooperation -- seen as essential to addressing community needs. The institutions were described as appearing to be compartmentalized, political, and fragmented. Partners found that the burden of coordinating partnerships across disciplines often fell on them because university contacts were unaware of each other or unwilling to coordinate their work. They viewed these efforts at overcoming barriers as undue burdens, and at times expressed the desire that the university take more active responsibility to resolve these issues.

Consistently across all sites, partners reported that they placed the highest value on a trusted, direct and ongoing relationship with a faculty member who made the commitment to know and understand their organization and their context. Most university-community partnerships in the HPSISN projects were based on existing personal/social relationships. These direct relationships were associated with a positive impact on the variables regarding ongoing relationships, sense of participation, and satisfaction. Where relationships were less direct and were more coordinated through one or two faculty or staff on behalf of others, partners spoke more vaguely about program benefits and often seemed reluctant to say much that was negative or specific. This may reflect a lack of familiarity with campus goals and/or a dependent relationship on one or more campus individuals whom the partner did not wish to "hurt" in any way. These findings strongly suggest the need for faculty to invest the time with community organizations as a basis for these partnerships.

The most significant impact of service learning on the community partner was the introduction of new energy brought to the agencies by the students. Economic and social benefits

were also suggested as notable positive impacts. Fifteen percent of respondents chose monetary savings as the highest ranking impact of their involvement in the HPSISN program. Some partners, especially the larger and more sophisticated partner organizations, reported that participation in HPSISN gave them data and assets that assisted them in leveraging other funds or acquiring other grant resources. The duration of the study was not sufficient to collect data on the study variable regarding identification of future staff, but it can be anticipated that in some situations the student engagement with the partner might lead to a future working relationship.

Socially, the partners were favorable that student involvement had a positive impact on their networking with other community agencies. Additionally, 40% of the respondents agreed that participation in the service learning program had valuable social benefits. They also commented on the serendipitous opportunity to network with other community organizations with similar or complementary objectives and services. This positive impact on the variable of social benefits was seen in meetings and focus groups with partners which often featured extensive conversations among partners who were sharing information and discussing other collaborative options. The institution served as a convener and thereby had an indirect impact on community capacity. This is a role that institutions might wish to adopt on an ongoing basis -- providing a benefit for them and for their partners.

The partners' sense of participation was evident through their comments on level of involvement in defining and delivering the service learning experience. Partners saw themselves in teaching roles when working with students, and were most satisfied when the institution acknowledged and rewarded that role. Partners felt a responsibility for preparing future professionals who understand community problems and were prepared to take ownership for using their skills to help meet needs. This objective was more important to most partners than any sense that needs would be substantially met by the specific service learning project.

The survey findings also suggested that the partners perceived their involvement and their role in the service learning program to be diluted outside of their involvement at the site. The majority of respondents indicated a neutral response regarding their level of satisfaction with their

involvement in designing curriculum facilitating student reflection, and participating in the classroom. In contrast, almost 50% agreed or strongly agreed with the statement that they felt valued as a teacher by the university faculty. Additionally, 60% of the partners indicated they were very satisfied with their role as an on-site supervisor of the service learning students. In many cases, partners recognized that they brought assets and strengths to the partnership, but felt that the university did not recognize these, relying on a need rather than an asset approach. Almost all partners were eager to be called upon to share their expertise and to be considered as experts and teachers in some situations, rather than only as recipients of service.

In almost all cases, partners strongly indicated that community need was far greater than the capacity of the campus service learning effort, so that issues regarding the partner's capacity to serve the community remained. The partners recognized that they were getting unique services that would probably otherwise not be available or affordable to them, but they also realized that needs in general are greater than the student and faculty capacity. Therefore, mutuality and satisfaction were expressed in ways other than increased service capacity, especially in terms of respect, understanding, and communications. The university was able to help the partner increase its capacity to serve while students are present, but there was no evidence yet that this led to a sustained increase in capacity for service provision over the long term. Partners expected faculty and students to respect and understand the way their organizations operate. When communications were seen as truly two-way, the partners felt they had as much obligation and commitment to the partnership as they expected from the institution. Yet at the same time the partners recognized that the language they use is not necessarily the same as the language of the universities, and that there needs to be continued effort devoted to ensure that communication was clear.

Additional comments provided by the community partners suggested that the communication between the partners and the university needs improvement, particularly in areas of scheduling, attendance, and logistics. "We need more communication between the programs. We had numerous no-shows but didn't know who to call or why there was a change." Despite

communication difficulties, the majority of respondents demonstrated a favorable response to the idea of establishing extended partnerships with the university.

Few partners indicated that working with service learning students was an excessive burden on themselves or their organization. This seems to be attributable to the attention given to advance effort to cement mutual agreements and orientations. However, some partners who had only minimal communications with the institution expressed mild cynicism about the partnership, saying that the experience was mostly for the benefit of the faculty and students, and did little to help the organization or clients and created additional work for the partner. Many partners reported that service learning students had an impact on them with regard to insights about their organizational operations. Partners were often impressed by student wisdom, experience, and creativity. They seemed satisfied that students were prepared to serve diverse constituents. In some cases, it seemed that partners learned more about the diversity of students from the institution, overcoming about previously held stereotypes.

The survey findings affirmed earlier observations that although the community wanted logistical aspects of the program to be smoother, more responsive and flexible, they were generally willing to tolerate some inconvenience and some extra work burden in order to meet their objectives. Across the partners, there was variability in their motivations for participating in service learning: to better serve clients or serve more clients; to affect the preparation of future professionals; to develop a relationship with the university and other service organizations. Though they had not anticipated it, most also reported receiving benefits in terms of the quality of the work of the students, and the impact students had on their internal operations and staff.

Lessons Learned about Impact on Community Partners

Clearly, partners saw themselves in teaching roles when working with students, and they aspired to have the university recognize and honor their role as co-teachers. This recognition needs to be explicit and consistent with institutional values on service learning and community interaction. While partners continued to value a trusted relationship with one or more faculty members, they seemed to place highest importance on the impact students have on their

organizations. Additionally, whether the university intended it or not, partners found that participation in service learning promoted networking among community organizations with related interests.

The inclusion of partners in overall evaluation activities and in setting student learning goals or in assessing student performance were areas where the community sought a stronger role in exchange for their sense of the value of the effort they expend. Still unclear, and a potential focus of further study, is the role of community advisory committees in supporting and sustaining partnerships or affecting institutional commitment to service. The sites took many different approaches to the use of advisory groups from highly directive and involved to none at all. Data is insufficient in this study to draw conclusions about these various approaches, other than to note that it was invariably important that the institution be purposeful, explicit and communicative regarding the level to which community partners were asked to participate in the program, and about the kinds of recognition or rewards they would be likely receive.

Strong sustained partnerships are essential to the future success of service learning initiatives. Such partnerships need to begin through an individual connection, but will perhaps be easier to sustain if they are not totally dependent on one individual from each participant in the partnership. Areas for continued effort clearly are how to build and sustain these partnerships, and how to continue to validate the important role the community partners play in health professions education. It is easy for partners to look at each other and say "I am doing you a favor", but the goal should instead be to express the benefits that accrue from the partnership.

An overarching theme of the analysis of such partnerships must inevitably come back to determine what has been achieved through the partnership. In the context of this research question, the particular concern was the impact on the community partners -- seen through issues such as the extent to which unmet health needs were addressed, the economic benefits, and the social benefits. Clearly there are other benefits related to participation in teaching and relationship(s) with the university, but in planning any service learning activity university-based

faculty and staff must be particularly attentive to the needs and context of the community partner, so as to ensure that the partnership is mutually beneficial.

V. PROGRESS TOWARD HPSISN OVERALL OBJECTIVES

The HPSISN program objectives are presented in Appendix 1. In general, there has been considerable progress made towards these objectives over the three years of the program. Program participants should be proud of their progress overall. Continuing attention to some of these objectives will be addressed through efforts now based in CCPH; the discussion below highlights achievement of objectives through the specific work of the HPSISN grantees. The original HPSISN objectives are presented in italics; observations are in regular typeface.

A. Community Impact

- 1. To create new or strengthen existing partnerships between sites and community organizations which address unmet health needs.*

A substantial number of partnerships have been created at each site, and these numbers have grown over the years of the project. While many of the partnerships are in health-related organizations, a large number are partnerships with organizations that address many other socio-economic issues, such as in housing, education, recreation and other human and social services. As a result these partnerships are addressing unmet health needs, as well as other correlates of health, and are providing universities and communities with the resources to address issues that otherwise might not be addressed. Examples of partnerships created through HPSISN are presented in Appendix 5.

- 2. To provide community-oriented, culturally appropriate health and social services in the defined communities participating in the service learning programs of 20 health professions schools.*

The services provided are clearly community-oriented, and illustrate the wide range of communities eager to collaborate with health professions education programs. There has been some concern at some of the sites about the extent to which these activities are culturally appropriate, reflecting the continuing need to identify carefully designed activities to enhance the cultural competency of both students and faculty. Some sites have developed teaching materials that help to prepare students for the experiences they will encounter so that issues of insensitivity do not emerge. There is a continuing need for such learning materials and for opportunities to practice communicating with cultures other than one's own; examples of these materials and the associated learning exercise might be made available through CCPH to ensure wide usage of them. It is particularly important that this material be integrated into the curriculum before students begin work in communities.

3. To enhance the community's meaningful role and involvement in service learning.

One of the highlights of the information collection over the past two years has been the varied interactions with community partners of the HPSISN grantees, and the ability to hear their stories about the nature of their involvement in service learning. Unfortunately, some of the institutions do not seem to recognize the incredible richness of experience the community can offer to the educational programs and appear to view the community agencies as recipients of service rather than as active partners. The sites were uneven in the degree to which the community had an influential voice in shaping the nature of the service experience, the goals for students, and the operating parameters of partnerships.

In order to create and enhance meaningful roles for community partners in service learning, university representatives need to be attentive to how to cultivate and establish partnerships, and how to share successful experiences which actively engage the community in service learning in a mutually beneficial and reciprocal way. Several examples from the grantees of strategies for enhancing partner roles include creating teaching opportunities for partners in campus settings (as well as in the community), offering "courtesy" appointments on the teaching faculty, establishing community-driven advisory committees, and facilitating access to a range of university services and opportunities. A suggestion for future work among the HPSISN grantee network and through CCPH would be to actively facilitate exchanging information among institutions and their communities on success strategies for engaging partners, so that many universities may learn from the experience of others.

B. Participant Impact

1. To engage students and faculty at 20 health professions schools in service learning activities as part of the required curriculum.

Students and faculty at the grantee sites have become engaged in service learning. The intent was to achieve this at 20 sites; due to various circumstances, three original grantees dropped out of the program and 17 sites completed the grant period (although some of these also faced internal challenges and therefore were unable to achieve some of their original goals).

A concern at the end of the program is that this objective clearly stated that service learning would become part of the required curriculum; even after three years of the grant program, there remain some sites where these activities have not been integrated into the required curriculum and as a result these sites have not truly met the national program objectives. Some of this may result from the continuing confusion at some sites as to the differentiation of service learning from traditional clinical training; while many participants across the grantee sites can clearly articulate the differences, this confusion persists among some faculty, program leaders, institutional leaders, and students at some sites. One explanation is that some grantees believe they have adopted a unique view of service learning that fits their campus culture.

There has also been some reinforcement of this confusion through the persistent efforts at some sites to ensure that the service experiences are voluntary. When the work is voluntary, there is an issue of student recognition that is explicitly linked to program performance. In many of these health professions, students are highly motivated to achieve excellent performance records as a step towards future training and professional development opportunities; thus something that is not directly performance related will have less impact than a learning opportunity which is graded and credited towards academic record.

It is not clear whether this remaining confusion about the nature of service learning could have been eliminated through even more efforts by HPSISN program staff, or is a function of local

institutional context and philosophy that prevents a recognition of the unique characteristics of the full scope of service learning. Whatever the cause, a concern remains that this lack of clarity of vision about service learning can persist after three years of intensive involvement in a collaborative and supportive program.

2. *To increase the knowledge of students and faculty at 20 health professions schools in the following areas:*

- *community needs assessment*
- *financial and other barriers to health care access*
- *socioeconomic, environmental and cultural determinants of health and illness*

This is the one objective where there appears to be the greatest deficiency. Service learning provides a phenomenal opportunity to engage students from all health professions in learning the basics of community needs assessment, in developing an understanding of the multiple barriers to health care access (particularly in an era of under or non-insurance of a large segment of the United States population), and in gaining knowledge and sensitivity to the multiple determinants of health and illness. Many health professions students profess a lack of understanding of why some individuals do not seek health services; service learning offers opportunities to exposure to situations that help student and faculty participants to better understand the health attitudes and behaviors of populations.

Yet, only in some of the cases of HPSISN grantees were students well prepared with skills in community needs assessment. Attention was devoted in few of the sites to building student and faculty awareness and understanding of barriers to health services access and to the various determinants of health and illness, other than the very obvious issues of health insurance and clinical disease status. In retrospect, much more effort should have been devoted across the sites to developing skills for both faculty and students (and perhaps also for the community partners) in both the traditional public health approaches to community health needs assessment and to the community development approaches to asset mapping and resource identification. The observed lack of attention to these areas may be due to limited time in curricula to introduce this content, or to lack of confidence on the part of faculty in this subject matter. The former could be overcome by the recognition that this content is central to a broad perspective on health services delivery; the latter could be addressed through working with faculty who have competence in these areas.

This need is true of health professions education in general; there is an opportunity now for the HPSISN grantee network and for CCPH to provide some leadership by testing methods by which students and faculty can increase their knowledge in these three main areas, and develop the complementary skills and expertise to be able to address these issues in a fluent manner. These are also areas receiving broad attention in recent years and still today as a result of the emphasis of the Pew Health Professions Commission on competencies that reflect these content areas; HPSISN participants would be well advised to continue to pay attention to these areas -- particularly for those professions which traditionally have given less emphasis to these health services organizational and behavioral issues.

3. *To provide leadership development opportunities for students and faculty engaged in service learning.*

Student leadership development was observed most directly through local initiatives among the grantees in specific roles assumed by students -- planning, leading, directing, evaluating, and supporting service learning implementation, let alone serving on various committees that supported the infrastructure of the service learning. In some sites students assumed specific leadership roles, often because the service learning was based in a student run clinic or program, or because a student organization assumed responsibility for some aspect of coordination of the service learning

activity. One student leadership conference was sponsored, and student representatives from several of the HPSISN grantees attended.

Faculty serving in key roles with HPSISN grantees have certainly developed their leadership skills. Leadership development should be a goal of any site embarking upon service learning activities to ensure that local faculty has the leadership with the requisite skills and expertise to champion service learning and be effective change agents over the long-term in their respective institutions and disciplines. CCPH has also provided a venue for demonstration of leadership through the annual conferences; there is a significant opportunity for HPSISN faculty who are now service learning experts to seek leadership roles in CCPH so that their learning may be disseminated widely and may benefit this young and growing organization. HPSISN faculty also have significant potential to demonstrate leadership by championing service learning within their respective disciplines, helping to promote these concepts through the individual disciplinary and specialty associations and educational groups.

C. Institutional Impact

- 1. To create a national network of at least 400 health professions schools involved in service learning activities which will serve to strengthen the service learning infrastructure in health professions schools and assist schools new to service learning in developing service learning programs.*

The HPSISN grantees should view themselves as an essential core of any current or future national network of health professions educators engaged in service learning. They clearly were the core of the HPSISN-sponsored 1996 conference; with the creation of CCPH, and the increasingly strong role of CCPH in the 1997 and 1998 annual conferences some grantees felt that HPSISN has been "left behind". While CCPH will hopefully have the resources to facilitate a network on an ongoing basis, it is important that the HPSISN grantees take independent initiative to assume leadership roles and be recognized for the achievements they have made in implementing service learning. Service learning is just one of four strategies of CCPH; thus the grantees will need to position themselves to be major drivers of this strategy. The grantees cannot expect that these opportunities will simply be handed to them; on the other hand, they already have a network in place amongst themselves, and should use that collective energy to seed new initiatives within CCPH and propel service learning even further forward within health professions education.

- 2. To strengthen and expand service learning infrastructure within 20 health professions schools, consisting of at a minimum of a service learning advisory committee, service learning coordinator and faculty development program, enabling each school to integrate service learning into at least two required courses in the curriculum.*

While a service learning infrastructure has been created at each of the grantee sites, there is considerable variation in the structure and composition of this infrastructure. Four minimum criteria are specified in this objective; the results are as follows:

- Advisory committee: Some grantees created an advisory board to guide the development of the service learning program, with its scope being advisory only. Once a structure was in place, some sites felt they could disband the advisory committee and instead hold annual focus group meetings, which provided more productive input and served purposes of program development and evaluation. Other sites created a community advisory committee, which met on a regular basis (such as quarterly) throughout the entire program, and continues to play an active role in planning service learning activities with the university. Such committees usually include community partners as well as faculty and student representatives. In some cases these

committees also played important roles in providing recommendations on program functioning, advising on strategic planning, and helping to identify resources for ongoing funding.

At times sites reported that these committees were not that useful, either because they were too “faculty heavy” or because community partners had their own struggles in their own agencies, and seeking involvement in planning university activities was sometimes viewed as a major imposition. The value of an advisory committee needs to be judged in terms of its effectiveness; does it meet the needs of all parties (students, faculty, partners)? A benefit observed by some grantees was that the advisory group provided a clear forum for focused conversation between the university and community leadership. Only one grantee reported an explicit strategy to not create an advisory committee, and noted that they were better able to engage the community through one-on-one interactions with community agencies. At this site, however, there was an explicit strategy to bring partners to campus to meet with students, to encourage frequent contacts between the service learning program coordinator and agency staff, and to invite partners to participate in discussion and reflection groups.

- Service learning coordinator: Each site was expected to designate a service learning coordinator. Some sites were able to retain a coordinator who worked closely with the designated program director; in other sites both roles were assumed by one person. There is no clear trend as to which approach helped sites to better achieve their objectives. Where there was a coordinator who did not have other faculty or administrative responsibilities, there was usually more opportunity to work closely with students and community partners, as this was the primary emphasis of the individual’s position. Where a single individual was juggling site coordination, academic program planning, and carrying on their own personal program of scholarship, it was sometimes more difficult to devote the same level of attention to the service learning logistics. Often, however, the decision for hiring was driven by institutional budgetary priorities and culture, and was beyond the control of the HPSISN grantee.

There was also concern at some sites where all responsibility was designated to the coordinator, and the program director assumed a “hands-off” approach to the HPSISN activities; this was particularly disruptive when there was not continuity in the occupant of the coordinator position. The findings suggest that there needs to be strong faculty leadership for service learning to be viewed as an integral part of the academic program and to attract involvement of other faculty, but there are also strong arguments to be made for assistance from a coordinator to ensure close contact with the community partners.

- Faculty development program: Several of the grantees made a committed effort to developing and implementing various kinds of faculty development programs. In some cases these were tied to university-sponsored conferences on service learning or other faculty development initiatives. In other sites specific HPSISN-related faculty development workshops were designed to prepare preceptors for students in the community, and in some cases acted as a mechanism to enlist faculty into the planning and teaching process for the service learning experience. Some grantees had a deliberate strategy to invite faculty to these sessions who were viewed as individuals who would make excellent community-oriented role models.

In some cases the workshops were expanded beyond faculty to include community partners and students; this provided an opportunity to sensitize the university community to the importance of service learning from a variety of perspectives and to facilitate the integration of service learning into courses throughout the university.

Some grantees found that faculty were not that interested in these workshops, in particular given limited time for professional development and conflicting demands with discipline or program-specific activities. This resistance was overcome in some sites through integration of

the faculty development into community service grand rounds, offering presentations on community priorities and course requirements and then linking this content to needed faculty skills for such experiences. A community building meeting with community members was offered at some sites as a follow-up to this faculty focused program.

Certain faculty development programs proved helpful at individual grantee sites for providing a forum for discussion of barriers to interdisciplinary community-based discussion, for airing some of the concerns about community-based experiences and their role in the curriculum, and for offering networking opportunities among interested faculty and community partners. Such opportunities helped to enlarge the faculty's vision of education in community settings, and educate faculty about community-based service learning.

- Integration of service learning into at least two required courses: The results at some of the sites deviated from the original program objectives because of local preferences and environmental factors that occurred during the three year grant program. Nonetheless, some grantees went far beyond the expectation of integration of service learning into at least two required courses -- in some sites, service learning is now in place in anywhere from six to ten courses within a single professional curriculum.

Some grantees have achieved integration of service learning into the required curriculum by creating new courses which focus on reflection and complement other didactic courses where the students may be engaged in service opportunities with a faculty member around specific course content. The reflection classes are a unique opportunity to step away from specific discipline or competency-related topics, and consider the implications of the service. Some grantees found these sessions particularly powerful when community agencies came to campus to participate in and/or facilitate the reflection sessions.

Curriculum revision offers a unique opportunity to integrate service learning into the core curriculum. At least one grantee was completing a total revision of its curriculum during the time of the HPSISN grant, and was able to implement service learning across a four semester professional program with a sequence of unique service learning opportunities related to the development of professional competencies. The curriculum revision offered a path for implementation of service learning that was much smoother than experienced by other grantees who were attempting to integrate service learning into an existing curriculum; nonetheless there is much to be learned from this strategy that is relevant for any of the health professions and their respective programs of study.

At least two grantees appear to have not achieved this objective; their final case studies do not offer clear evidence of integration of service learning into two required courses. Future attention might be given to why these grantees were not successful in achieving this objective which was core to the program, and to considering how to help all grantees achieve core program objectives in future initiatives.

3. *To directly address three major institutional barriers to integrating and sustaining service learning in health professions education:*

- *the need for evaluation data to establish service learning as a credible educational method*
- *the need for outlets for scholarly activity in service learning*
- *the need to distinguish between service learning and the experiential clinical training that typically occurs in health professions education.*

This evaluation can make a substantial contribution to the knowledge base about the merits of service learning in health professions education as it is the first comprehensive evaluation to be conducted across a number of sites and for a sustained period of time. The learning for individual

sites, let alone for the HPSISN network as a whole, is considerable. It is clear from the findings service learning is a credible educational method for health professions education; hopefully this report and related publications and presentations by grantees, program staff and the evaluation team will be help to share that knowledge. The need exists for continuing scholarly activity to disseminate and continue this learning, and hopefully CCPH will harness some of the energy created through HPSISN to begin dissemination of scholarship on service learning by the individual grantees. The issue of distinguishing between service learning and experiential clinical training has been discussed previously in this report; there continues to be a need for much work to be done in this area, and this should receive considerable attention amongst the HPSISN grantees and by CCPH.

In conclusion, the HPSISN program made substantial progress toward the objectives originally set out in 1995 when the grant program began. There is variation across the grantees in the degree to which certain individual objectives have been achieved, and there is also variation in the level of achievement in some of the more global objectives.

Nonetheless, it should be remembered that this was the first project of its kind -- broadly testing the implementation of service learning in the health professions -- and thus there was no prior experience upon which to build this program. There had also been no comparable program and/or evaluation across other groups of cognate disciplines, so the HPSISN participants can be viewed as "pioneers" in many ways in terms of advocating and advancing service learning. The nature of the evaluation design was also much more comprehensive than is often found in comparable national programs testing an educational innovation, and the grantees should receive acknowledgement for the efforts they engaged in -- which have been a major contribution to the assembly of these findings.

VI. BENEFITS OF PARTICIPATION IN NATIONAL PROJECT

A series of benefits of participating in this national demonstration project emerged from this evaluation, as reported by the grantees. Most notably these relate to opportunities for collaboration, the facilitation of networking, rapid access to information, opportunities for dissemination of findings, and accelerated learning through development and assessment of the collective experience of the sites. In addition, individual grantee administrators and faculty have

experienced sustained increases in visibility and recognition in their institution as advocates for service-learning.

The benefits of participation in a national demonstration project and in a network of institutions pursuing similar goals seemed most powerful to grantees in the first two years of the grant. The validation offered by external funding and national recognition clearly gave a "jump-start" and critical kick-off to most of the site activities. New faculty and students were attracted to participate in a new programmatic effort and partners were honored to be invited to participate. The benefits were described in the context of individual learning and in high utility as a point of leverage within individual institutions. Grantees also praised the benefits of learning and networking at the various national conferences, and welcomed the chance to learn from each other as well as from non-HPSISN grantees who are making contributions to the knowledge base on the application of service learning in health professions education.

While some grantees viewed the site visit in the second year of the program as a burden to organize, nearly all grantees expressed positive sentiment about the site visits once they were completed, noting that the visit of a project management/evaluative team helped to raise the profile and visibility of the individual program on the campus, creating opportunities for leverage and the opportunity to convey some messages to senior leaders about the importance of the service learning activities. A particular benefit was the on-site comparison of that site with the experience of other grantees within the same program, often serving to build upon other existing relationships among the institutions.

There was overwhelming praise for the access to information resources facilitated by program staff -- via directories, the listserv, and frequent email communications. Grantees expressed considerable appreciation for the staff who have been very responsive to project directors' requests for information and referrals. Such access to information is frequently not available in programs where there is not the same explicit commitment to networking and information sharing as was found in HPSISN.

In the latter stages of the grant, the effects of the grant and participation in the project began to be more individualized across the institutions, and often were a reflection of overall institutional commitment to service as a component of the institution's mission. Sustainability and expansion will depend strongly upon an institutional context that values service learning as a learning tool for students and for linking the university and the community. It is very difficult to implement service learning in the absence of this larger context because it is complex, places new demands on faculty and faculty development, and stresses the nature and structure of traditional curricular formats.

These grantees were subjected to a fair but demanding evaluation plan that required more constant attention to data collection, analysis and reflection than most other grants. While it is too early to tell for certain, this commitment to participation in a comprehensive and objective evaluation has produced significant lessons and case reports that may be helpful to other institutions. Although progress reports and case studies were time-consuming for grantees to prepare, participation in this kind of evaluation has given most of the grantees considerable new or expanded knowledge and skills relative to program evaluation, and their programs and institutions will benefit greatly from their knowledge of the value of evaluation in affirming intuitive and anecdotal observations.

There also appears to be an increasingly strong set of sub-networks among various groups of grantees who have similar views and interests regarding service learning and overall health professions education reform. In addition, it is hoped that HPSISN grantees will use their collective experiences and findings to stimulate further efforts and affect the future of service learning in health professions through many other venues where networking on curriculum may occur. Such venues include CCPH, the professional and disciplinary educational associations (such as the Association of American Medical Colleges, the various nursing education groups, the American Association of Pharmacy Education, the American Public Health Association, etc.), the American Association of Higher Education, and Campus Compact (both the national and state organizations).

The HPSISN network has a significant opportunity to shape the future of service learning in health professions education, and the presence of individual grantees and various collaborations within many related organizations will be important to fulfill this agenda.

VII. OPPORTUNITIES AND CHALLENGES

The definition of service learning in health professions education remains perhaps the greatest overall challenge to its further influence on curriculum in all health professions disciplines. While some local variation is important to reflect local traditions and culture of the institution, it is important to recognize that service learning is a tool meant to change the preparation of future health care professionals and, therefore, must inevitably affect the nature of the overall curriculum. Of particular importance is the need to define the intended consequences of service learning on student learning of curricular content, on student commitment to service, and on their understanding of the community. Across the sites, the definitions of service learning and service learning experiences varied widely, especially in the stated experience-specific learning objectives. Most specified that service learning was a structured academic experience meant to improve content learning and skill development while also meeting community needs and developing civic responsibility; others insisted that service learning was experiential but voluntary.

Frequently in this evaluation we have been impressed with the critical role of the definition of service learning. This definition reflects institutional mission and becomes a strong message to faculty, students, and community partners regarding what is expected, how it will work, and what outcomes are projected. Any institution must give careful and deliberate thought to its definition before it embarks upon service learning activities, and must make this definition as explicit as possible. People will read much into such definitions and will define their own level of interest according to their perception of the fit between the definition and their own views, values and expectations.

A reflection of these different views of the definition is that the grantees represent somewhat of a continuum that is a microcosm of the views across higher education regarding

service learning. The experience of grantees ranges from those still working with a limited and narrow interpretation of service learning and its role in health professions education, to those who have embraced its full potential as a strategic tool to transform students personally and professionally, link higher education to society purposefully, and meet critical community needs.

These findings reinforce other experiences of the evaluation team where experience with service learning parallels an organizational maturity from novice to master in terms of expertise and organizational learning regarding the impact and challenges of service learning. Again, institutions may have variations in their interpretations that are justifiable in local contexts but, for sustainability, we believe that it is essential that each institution consider the role of service in its mission, make choices about service learning forms and goals in a deliberate way and then engage in extensive evaluation to ensure that actions, outcomes, and rhetoric of service are all in alignment.

Another key finding that represents a challenge to institutions is the need to foster faculty development and leadership in service learning. It is hard to imagine that any institution of higher education would not have a core group of faculty who can believe in service learning and understand its purposes and forms. These are people who will form the foundation of an institution's capacity for community engagement and service, and they must be nurtured and recognized if service involvement is to be sustained or expanded. Promotion and tenure guidelines were rarely mentioned as a direct obstacle to service learning at HPSISN sites; more common was a concern about peer acceptance and disciplinary recognition, particularly in the health professions where "hard science" may be the benchmark for professional scholarship. An additional obstacle often encountered was the rigidity of traditional health professions curricula. For institutions to implement service learning as a tool to transform curricula, faculty must be recognized, if not rewarded, and they need to know that a commitment to service will not compromise their academic careers. Institutional commitment and academic leadership were among the most important issues driving sustainability from the faculty perspective. This is another issue where factors of

institutional size, culture, mission, and traditions of faculty scholarship may be determinants of diverse institutional responses.

The role of advisory committees in promoting and sustaining university-community partnerships for service learning was examined only minimally in this evaluation. The data document differences in the forms of advisory committees that were created across the sites and some of the challenges in working with them: for all, the burdens of multiple time commitments, the balance of faculty to students to community, the delegation of powers and duties, the committee's role in influencing institutional choices, and appropriate methods to assess effectiveness of the group. This is an area that urgently needs further study and critical review in order to inform the larger community on the potential value of such committees.

Faculty development was a key factor in institutional success in meeting HPSISN goals and in confidence regarding sustainability or expansion. While the evaluation captured data regarding the quantity and form of faculty development activities, there was no opportunity to evaluate the comparative effectiveness of various strategies or their relevance to particular institutional missions and contexts. In order to foster a broader acceptance of service learning in the health professions curricula, documentation on the outcomes of approaches to faculty development will be needed. In this area, experience from many disciplines and from general education will be a useful way of informing interested parties across academic programs.

Management of service learning continues to be a challenge. Variations in approaches to design, implementation, and evaluation of service learning programs was seen across the HPSISN grantees. Inevitably, when a staff person can make a major commitment, and works closely with community partners and students to ensure experiences occur as planned, there is a high level of effective delivery of the program. Yet when all responsibilities are delegated to a staff person, and faculty are only tangentially involved, partners are less satisfied with their working relationship with the university and it is challenging to involve other faculty. While faculty frequently lament the multiple demands upon their time, effective service learning requires that faculty make the personal commitment to spend time working with the partner, helping to arrange the overall design

and objectives of the experience(s), visiting the site to gain personal knowledge of the partner's organization, and collaboratively evaluating the impact of the partnership.

There may also be some opportunities and challenges related to discipline-specific factors. The nursing programs in HPSISN seemed to be able to readily embrace service learning because of a natural "fit" with the profession of nursing. Some of the medical and dental programs found this "fit" more difficult as the service learning was viewed as a "soft" activity which did not blend well with the highly structured curriculum necessary for students to achieve competence so as to be successful on professional examinations. There appeared to be more flexibility within the nursing and allied health curricula with regard to community-based academic experiences. There may be some change in this over time, given recent changes in accreditation standards of some of the health professions (such as dentistry and pharmacy) where the curriculum will now become much more community and population-health oriented, and there will be increased expectations that students have more "real world" community experiences.

A caution here, however, is that institutions not muddle the concept of service learning with other community-oriented programs – whether community-oriented primary care, community health improvement initiatives, or other activities where the word "community" may be the entrée to new funding sources. All of these initiatives value engagement in the community highly; however, all are not explicit about the key tenets of service learning, including partnerships, critical reflection, and mutuality of purpose, and thus a caution needs to be stated about the need to ensure that service learning not become a catch-all term for all community-based education in the health professions. Health professions programs will continue to need to address the challenge of how to make curricular planning decisions for required vs. voluntary community-based experiences, and will continue to need to invent strategies to engage students who are not predisposed to service in these service learning experiences.

VIII. CONCLUSIONS AND ACKNOWLEDGMENTS

Most individuals will read this report and find a grant site within the HPSISN network or individual experiences which will provide a relevant and useful comparison for them in terms of size, mission, location, history and capacity. However, any transposition of these findings to another site should consider the multiple and often conflicting demands placed upon faculty, students, community partners, and institutional administrators -- in advocating service learning, in program conceptualization and design, and in implementation and evaluation. While the HPSISN evaluation highlights differences in institutional responses to the implementation of the specific goals of this program, the findings should not be interpreted as suggesting a single model for implementation and sustainability. Lessons learned suggest both general and specific strategies that seem to facilitate or obstruct the adoption of service learning into health professions curricula. Local traditions and issues will undoubtedly provide many exceptions as others experiment with service learning and encounter new challenges, devise new strategies, and add to the collective knowledge about service learning in the health professions.

A major finding from the evaluation team's work across these sites is the dramatic effect of the community on the possibilities for institutional adoption of service learning into the curriculum. Most of the institutional reports focus on internal institutional challenges, limitations, and opportunities. During the site visits and various meetings with students and community partners, it became clear that there are also external issues of culture, expectations, traditions, and leadership that very directly affect, if not limit, the ability of an institution to become engaged in community service and service learning. A conclusion, therefore, is that institutions must begin their consideration of service learning by tapping the expertise of faculty and community already engaged in partnerships so that the factors that shape community expectations are incorporated into the planning from the beginning. Further, institutions must be attentive to not stopping there, but must also seek to gain access to the deeper fabric of the community in order to fully develop an interactive relationship through which the institution may hope to have a positive affect on human and social conditions.

In addition, the evaluation team has reflected upon the experience of designing and conducting a multi-site evaluation where there are common goals but diverse local responses and conditions. The following are key factors that we believe affect the ability to design a successful evaluation for a multi-site program that will derive data both about the project's overall performance and findings that will inform the work of others.

- Institutional commitment to the grant and its purposes is essential. It is especially important to have the direct involvement and commitment of key institutional leaders, and to ensure that this work captures their attention periodically. This ensures that participants are supported in their local environment for both the project work and the intensity of the evaluation experience, and that findings will inform local improvement efforts.
- Participants must be willing to engage in self-assessment and work to learn more about their own performance and opportunities for improvement. This includes an acceptance of both reporting and external evaluation requirements as a condition of grant participation. Ideally, evaluation requirements should be incorporated in grant RFPs so that applicants understand the expectations in advance.
- Multi-site grant evaluation is complex and is necessarily focused on the collection of data for both continuous improvement and summative findings. The iterative nature of this kind of evaluation should be incorporated into initial project agreements and grantee orientation, so that expectations with regard to evaluation are clear.
- Grantees should be able to give and/or ask for technical assistance regarding evaluation methods and techniques. Our initial proposal of a uniform approach to evaluation quickly identified those grantees who had evaluation methods experience and those who did not. Multi-site grants would be well-served to create specific mentoring and training opportunities for sites with less confidence in evaluation techniques. The design and subsequent campus responses affirmed that it was useful and practical to have overall evaluation goals and objectives, while permitting site individuality in choosing evaluation methods. However, more training in design, methods and application would be beneficial to all and ease the burden of evaluation and reporting.
- Other technical assistance opportunities may be needed to respond to the differences among grantee sites including assistance on program development, management, and implementation; monitoring of progress; and faculty and professional development. While technical assistance was offered throughout HPSISN's existence, only a few sites took full advantage of the resources; most seemed unclear about what kind of assistance they needed. New strategies for promoting access to technical assistance need to be explored.
- Participants must commit from the beginning of the project to report openly, share candidly, and learn together. Early grant activities should promote development of a sense of community among grantees. Multi-site grants would benefit from opportunities for campus visits with other grantees within the program, frequent exchanges of communication, and more face-to-face opportunities for sharing and mentoring.
- In multi-site programs, there is no substitute for (at minimum) early and late stage site visits by evaluators and program staff. This is a critical and useful tool for observing projects in action, detecting areas of unidentified technical assistance needs, understanding campus and community culture, collecting data from the multiple constituents of such a project, and offering on-site, personal and timely consultation.

Service learning clearly is a relevant pedagogy in health professions education, and the experience of the HPSISN grantees has highlighted many of the factors which will facilitate service learning implementation, others which serve as barriers to its success, and strategies for overcoming these barriers. As the health professions focus increasingly on issues of population health and on community-oriented service, the role of educational reform initiatives such as service learning will gain in importance. There will be continuing debate about how service learning is similar to or different from other forms of experiential learning; the importance in this debate is not to demand that learning go one way or the other, but to recognize the fundamental objectives of these respective learning experiences and to ensure that students achieve all of them. In this way students will achieve the knowledge and skills necessary for effective clinical practice, as well as gaining insights and personal competencies related to working effectively with individuals, special populations, and communities.

The evaluation team wishes to conclude this report by acknowledging the support and active participation of faculty, staff, students, and partners at each of the HPSISN sites, as well as that of the HPSISN program staff (see Appendix 6). We could not have conducted the evaluation without this engagement and interest in our work and the larger purpose of learning about service learning in the health professions. We have learned a great deal about service learning in health professions education during the last two years, and about the conduct of multi-site evaluation programs. The sites worked diligently to understand and interpret evaluation activities into their local contexts, and have benefited from the formative learning that took place as a result. The effort was formidable, but the learning developed through the individual and collective activities of the HPSISN participants will make a significant contribution to health professions education in particular, and higher education in general. The increased skills and competencies of new health practitioners will be of considerable benefit to our many communities.

November 1998

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APPENDIX 1

HPSISN PROGRAM OBJECTIVES

A. Community Impact

1. To create new or strengthen existing partnerships between sites and community organizations which address unmet health needs.
2. To provide community-oriented, culturally appropriate health and social services in the defined communities participating in the service learning programs of 20 health professions schools.
3. To enhance the community's meaningful role and involvement in service learning.

B. Participant Impact

1. To engage students and faculty at 20 health professions schools in service learning activities as part of the required curriculum.
2. To increase the knowledge of students and faculty at 20 health professions schools in the following areas:
 - community needs assessment
 - financial and other barriers to health care access
 - socioeconomic, environmental and cultural determinants of health and illness
3. To provide leadership development opportunities for students and faculty engaged in service learning.

C. Institutional Impact

1. To create a national network of at least 400 health professions schools involved in service learning activities which will serve to strengthen the service learning infrastructure in health professions schools and assist schools new to service learning in developing service learning programs.
2. To strengthen and expand service learning infrastructure within 20 health professions schools, consisting of at a minimum of a service learning advisory committee, service learning coordinator and faculty development program, enabling each school to integrate service learning into at least two required courses in the curriculum.
3. To directly address three major institutional barriers to integrating and sustaining service learning in health professions education:
 - the need for evaluation data to establish service learning as a credible educational method
 - the need for outlets for scholarly activity in service learning
 - the need to distinguish between service learning and the experiential clinical training that typically occurs in health professions education.

APPENDIX 2

EVALUATION FRAMEWORK

Innovation or Investment	Key Performance Indicators	Measurement Methodology	Data Source	Frequency	Reporting Period
Renewable Energy	Renewable energy capacity (MW)	Government energy department reports	Annual energy reports	Quarterly	2020-2025
Sustainable Agriculture	Sustainable agriculture practices (e.g., organic farming)	Agricultural extension services	Farm surveys	Annual	2020-2025
Water Conservation	Water conservation programs (e.g., rainwater harvesting)	Water utility companies	Water meter data	Monthly	2020-2025
Waste Management	Waste management practices (e.g., recycling, composting)	Waste management authorities	Waste audits	Quarterly	2020-2025
Green Building	Green building certification (e.g., LEED, BREEAM)	Green building certification bodies	Certification reports	Annual	2020-2025
Sustainable Procurement	Sustainable procurement practices (e.g., ethical sourcing)	Procurement departments	Supplier questionnaires	Annual	2020-2025
Sustainable Marketing	Sustainable marketing practices (e.g., green advertising)	Marketing departments	Marketing campaign analysis	Quarterly	2020-2025
Sustainable HR	Sustainable HR practices (e.g., employee development)	HR departments	Employee surveys	Annual	2020-2025
Sustainable Finance	Sustainable finance practices (e.g., ESG investing)	Finance departments	ESG risk assessments	Annual	2020-2025
Sustainable Innovation	Sustainable innovation practices (e.g., R&D in green tech)	R&D departments	Patent filings	Annual	2020-2025

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TABLE 1**Research Question #1**

How has the HPSISN project affected university-community partnerships with respect to service learning in health professions education?

What will we look for?	What will be measured?	What method is used?	How often?	Date of most recent use?	Date of next use?
Establishment of university-community relationships	Number of community partners				
	Duration of partnerships				
Involvement of community partners	Number of service learning leaders designated by partners				
	Perceptions regarding interaction between partners and institution				
Role of community partners	Contribution of community partners to program design and decision-making				
Levels of university-community interaction	Institution's attention to community-identified priorities				
Capacity to meet unmet needs	Types of services provided				
	Number of clients served				
Communication between partners and university	Nature of relationship				
	Form and patterns of community involvement in university processes				
Nature of partnership	Kind of activities				
Awareness of university	Knowledge of programs, activities				

TABLE 1 (CONTINUED)**Research Question #2**

Through the HPSISN program, how has the introduction of service learning into health professions education affected the readiness of students for a career in the health professions?

What will we look for?	What will be measured?	What method is used?	How often?	Date of most recent use?	Date of next use?
Type and variety of student service learning activity	Content of service learning activities				
Awareness of community needs	Knowledge of community conditions and characteristics				
Understanding of health policy and its implications	Understanding of local health policy and its impacts				
	Linkage of experience to academic learning and content				
Awareness of socioeconomic, environmental and cultural determinants of health	Perception of unmet health needs				
	Changes in awareness of links between community characteristics and health				
Development of leadership skills	Attitude toward involvement				
Commitment to service	Level of participation over time				
	Plans for future service				
Career choice (specialization)	Influence of service learning on career plans				
Sensitivity to diversity	Quality of student-community interactions				
	Attitude toward community				
	Reaction to clients with low health knowledge				
Involvement with community	Quality/quantity of interactions				
	Attitudes toward involvement				
Personal and professional development	Changes in awareness of personal capacity, communication skills, self-confidence				

TABLE 1 (CONTINUED)

Research Question #3

To what extent have faculty embraced community-based service learning as an integral part of the mission of health professions education?

What will we look for?	What will be measured?	What method is used?	How often?	Date of most recent use?	Date of next use?
Role in service learning implementation	Number of faculty implementing service learning				
	Number of service learning courses				
Understanding of community needs	Ability to characterize community conditions and needs				
Awareness of socioeconomic, environmental and cultural determinants of health	Perception of unmet health needs				
	Awareness of links between community characteristics and health				
Development of leadership skills	Perceptions of role as a service learning facilitator				
Commitment to service	Attitude toward involvement				
	Level of participation over time				
	Plans for future service				
Sustained and expanding engagement in service learning	Placement of service learning in curriculum over time				
	Integration of service learning into other course components				
Nature of faculty/student interaction	Time spent on service learning components				
	Student mentoring				
Nature of faculty/community interaction	Relationship to community partners				
Scholarly interest in service learning	Influence of service learning on articles, presentations, conference participation, grant proposals				
Value placed on service learning	Ability to distinguish service learning and clinical experience				
Understanding of barriers to community health services delivery	Knowledge of community history, strengths, problems				
Teaching methods and skills	Use of methods				
	Implementation of new methods				
Professional development	Attendance at seminars, workshops, etc.				

TABLE 1 (CONTINUED)

Research Question #4

As a result of the HPSISN grant, how has the institution's capacity to support service learning in the health professions changed?

What will we look for?	What will be measured?	What method is used?	How often?	Date of most recent use?	Date of next use?
Departmental involvement	Number of faculty involved in service learning coursework				
	Establishment of departmental agenda for service				
Commitment among academic leadership	Pattern of recognition/rewards				
	Involvement in national service learning network				
Investment of resources in support of service learning	Evidence of organizational infrastructure to support service				
	Investment in faculty development related to service learning				
Image in community	Nature of institution/community communications				
	Role/scope of community-university service learning advisory group				
	Perception of contribution of service learning to meeting unmet needs				
	Media coverage				
Overall orientation to teaching and learning	Focus/content of professional development activities				
	Number of faculty involved in service learning				
	Focus/content of dissertations and other major student projects				
Relationship of service learning to clinical training	Nature of service learning activities integrated into required curriculum				
Commitment to service learning outside of health professions education	Number of non-HPE faculty involved in service learning coursework				
	Relationships with other academic departments or institutions regarding service learning				
Resource acquisition	Contribution levels				
	Targeted proposals				
	Awards for service				

TABLE 1 (CONTINUED)**Research Question #5**

What impact does service learning in health professions education have on the participating community partners?

What will we look for?	What will be measured?	What method is used?	How often?	Date of most recent use?	Date of next use?
Establishment of ongoing relationships	Number and duration of partnerships				
Changing perceptions of unmet needs	Changes in goals of service learning activities				
	Changes in overall program structure and function				
Capacity to serve community	Number of clients served				
	Number of students involved				
	Variety of activities				
Economic benefits	Cost of services provided by faculty/students				
	Funding opportunities				
Social benefits	New connections/networks				
	Increase in level of volunteerism				
Sensitivity to diversity	Comparison of partners' descriptions of community health concerns/needs				
Nature, extent and variety of partnerships	Level of community participation in service learning advisory groups				
Satisfaction with partnership	Changes in partner relationships				
	Willingness to give both positive and negative feedback				
Community's sense of participation	Level of community-faculty-institution communication				
	Changes in self-image, confidence, and knowledge of service learning programs				
	Willingness to participate in evaluation activities				
New insights about operations/activities	Changes in goals, activities, operations				
Identification of future staff	Actual hiring				

TABLE 2**Research Question #1**

How has the HPSISN project affected university-community partnerships with respect to service learning in health professions education?

What will we look for?	What will be measured?	What did you find?
Establishment of university-community relationships	Number of community partners	
	Duration of partnerships	
Involvement of community partners	Number of service learning leaders designated by partners	
	Perceptions regarding interaction between partners and institution	
Role of community partners	Contribution of community partners to program design and decision-making	
Levels of university-community interaction	Institution's attention to community-identified priorities	
Capacity to meet unmet needs	Types of services provided	
	Number of clients served	
Communication between partners and university	Nature of relationship	
	Form and patterns of community involvement in university processes	
Nature of partnership	Kind of activities	
Awareness of university	Knowledge of programs, activities	

TABLE 2 (continued)**Research Question #2**

Through the HPSISN program, how has the introduction of service learning into health professions education affected the readiness of students for a career in the health professions?

What will we look for?	What will be measured?	What did you find?
Type and variety of student service learning activity	Content of service learning activities	
Awareness of community needs	Knowledge of community conditions and characteristics	
Understanding of health policy and its implications	Understanding of local health policy and its impacts	
	Linkage of experience to academic learning and content	
Awareness of socioeconomic, environmental and cultural determinants of health	Perception of unmet health needs	
	Changes in awareness of links between community characteristics and health	
Development of leadership skills	Attitude toward involvement	
Commitment to service	Level of participation over time	
	Plans for future service	
Career choice (specialization)	Influence of service learning on career plans	
Sensitivity to diversity	Quality of student-community interactions	
	Attitude toward community	
	Reaction to clients with low health knowledge	
Involvement with community	Quality/quantity of interactions	
	Attitudes toward involvement	
Personal and professional development	Changes in awareness of personal capacity, communication skills, self-confidence	

TABLE 2 (continued)**Research Question #3**

To what extent have faculty embraced community-based service learning as an integral part of the mission of health professions education?

What will we look for?	What will be measured?	What did you find?
Role in service learning implementation	Number of faculty implementing service learning	
	Number of courses with service learning component	
Understanding of community needs	Ability to characterize community conditions and needs	
Awareness of socioeconomic, environmental and cultural determinants of health	Perception of unmet health needs	
	Awareness of links between community characteristics and health	
Development of leadership skills	Perceptions of role as a service learning facilitator	
Commitment to service	Attitude toward involvement	
	Level of participation over time	
	Plans for future service	
Sustained and expanding engagement in service learning	Placement of service learning in curriculum over time	
	Integration of service learning into other course components	
Nature of faculty/student interaction	Time spent on service learning components	
	Student mentoring	
Nature of faculty/community interaction	Relationship to community partners	
Scholarly interest in service learning	Influence of service learning on articles, presentations, conference participation, grant proposals	
Value placed on service learning	Ability to distinguish between service learning and clinical experience	
Understanding of barriers to community health services delivery	Knowledge of community history, strengths, problems	
Teaching methods and skills	Use of methods	
	Implementation of new methods	
Professional development	Attendance at seminars, workshops, etc.	

TABLE 2 (continued)**Research Question #4**

As a result of the HPSISN grant, how has the institution's capacity to support service learning in the health professions changed?

What will we look for?	What will be measured?	What did you find?
Departmental involvement	Number of faculty involved in service learning coursework	
	Establishment of departmental agenda for service	
Commitment among academic leadership	Pattern of recognition/rewards	
	Involvement in national service learning network	
Investment of resources in support of service learning	Evidence of investment in organizational infrastructure to support service learning	
	Investment in faculty development related to service learning	
Image in community	Nature of institution/community communications	
	Role/scope of community-university service learning advisory group	
	Perception of contribution of service learning to meeting unmet needs	
	Media coverage	
Overall orientation to teaching and learning	Focus/content of professional development activities	
	Number of faculty involved in service learning	
	Focus/content of dissertations and other major student projects	
Relationship of service learning to clinical training	Nature of service learning activities integrated into required curriculum	
Commitment to service learning outside of health professions education	Number of non-HPE faculty involved in service learning coursework	
	Relationships with other academic departments or institutions regarding service learning	
Resource acquisition	Contribution levels	
	Targeted proposals	
	Awards for service	

TABLE 2 (continued)**Research Question #5**

What impact does service learning in health professions education have on the participating community partners?

What will we look for?	What will be measured?	What did you find?
Establishment of ongoing relationships	Number and duration of partnerships	
Changing perceptions of unmet needs	Changes in goals of service learning activities	
	Changes in overall program structure and function	
Capacity to serve community	Number of clients served	
	Number of students involved	
	Variety of activities	
Economic benefits	Cost of services provided by faculty/ students	
	Funding opportunities	
Social benefits	New connections/networks	
	Increase in level of volunteerism	
Sensitivity to diversity	Comparison of partners' descriptions of community health concerns/needs	
Nature, extent and variety of partnerships	Level of community participation in service learning advisory groups	
Satisfaction with partnership	Changes in partner relationships	
	Willingness to give both positive and negative feedback	
Community's sense of participation	Level of community-faculty-institution communication	
	Changes in self-image, confidence, and knowledge of service learning programs	
	Willingness to participate in evaluation activities	
New insights about operations/ activities	Changes in goals, activities, operations	
Identification of future staff	Actual hiring	

APPENDIX 3

EVALUATION ADVISORY COMMITTEE

Evaluation Advisors

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APPENDIX 4

CASE STUDY FORMAT

Note: This report is to be completed by June 1998. This document describes the structure of the final case study report format. Some of the information is already available through prior reports. Other data and changes will be collected in stages through remaining progress reports.

Project Overview

1. In one or two paragraphs, describe the focus of your HPSISN project. In other words, what did you do? How does this differ from what you originally proposed? Some of the points you might address include: nature of project (include goals and objectives); which students are involved (disciplines, level, and numbers); nature of student activity (length of required experience with agency, kind of service provided); number of iterations completed; faculty development activities; names and titles of key faculty and administrative personnel involved in the HPSISN project
2. Briefly describe the "service learning" component of this project. What is your definition of service learning? How does this differ from what you were doing in the area of service or in experiential learning before HPSISN?

Community Partnerships

3. Describe all your community partnerships, including: names of agencies and key contacts (name, title and phone number); how/why was partner selected/recruited; nature of service provided by the agency; role(s) played by the partner in HPSISN project; HPSISN project's impact on unmet needs within the community served by the agency; assessment, if any, of partner satisfaction with service learning project activities
4. How did your relationships with your community partners evolve during the HPSISN project?

Project Performance

5. Please describe the progress you made over the three year project towards achieving your project objectives. Please address each of your objectives specifically, with reference to students, faculty, the institution, and community partners.
6. If there were any major changes in your project (activities, resources [human, fiscal, or physical], other support) since your initial proposal, please describe these. Please indicate how these changes affected your project plans and activities.
7. Briefly list and describe (or append) materials you produced as a result of the HPSISN grant. In particular, describe how and when these were used and what future application they may have. Examples might include: syllabi, other teaching materials (printed, electronic, or other media); faculty development workshop handouts; newsletters.
8. Please describe the activities of your advisory board including: terms of reference (operating policies and procedures); membership (names, titles, agencies); frequency of meetings; scope of activities in general (planning, advisory, decision-making, etc.); role in evaluation.

Project Performance (continued)

9. What factors facilitated your progress toward achieving your objectives? How did you identify these facilitators? How can you continue to employ them in the future?
10. What were the major barriers and challenges you encountered? For each, did you overcome them and how, or how do you anticipate overcoming them in the future?

Evaluation Framework

11. What has been your philosophy of evaluation of your HPSISN project? What are the student, faculty, client, and community partner contributions to evaluation goals and strategies?
12. What methods provided you with the most useful data/information? For what purpose? Please describe or instruments, methods, techniques used. What uses will evaluation findings have for future program planning and management?
13. Please complete Table 1 of evaluation variables and indicators to describe your evaluation activities. Refer as needed to the HPSISN Evaluation Prospectus (December 1996), ensuring that you indicate your selected mechanisms for responding to each of the required variables.
14. Please complete Table 2 to describe what you found from your evaluative work for each of the specified variables.

Sustainability

15. What university policies, services, funds or programs supported your efforts in service learning? What will be required in the future?
16. What is the future of service learning in your academic unit? At your institution in general? Do you believe that the initiatives begun under the HPSISN grant will be sustained? Will they expand? Why? What will be needed?
17. If there are other complementary health professions education reform initiatives underway at your university, how does the HPSISN initiative relate to these other programs?

HPSISN Project Identity

18. Describe the value for your site of being a participant in the national HPSISN demonstration project. Please be very specific (e.g., networking, opportunities to present/publish, prestige, local leverage and influence, access to program or evaluation strategies, validation, sustainability, etc.).

Concluding Comments

19. What advice or most important lessons learned would you give to another institution seeking to initiate service learning in your discipline?
20. What do you think have been the most significant impacts of service learning on your community partners? What will be your future relationship with existing or additional partners?
21. Please provide any concluding summative comments which you feel enhance your case study.

APPENDIX 5

EXAMPLES OF PARTNERSHIPS

AIDS Task Force
American Diabetes Association
American Red Cross
Arapahoe House (drug and alcohol rehabilitation)
Boys and Girls Club
Cancer Wellness House
Children and Youth Behavioral Health
CHOICE (educational materials for third world countries)
Child Sexual Abuse Prevention Programs
Clinica Tepeyac (services to Hispanic population)
Community Coalitions (blindness, deaf, hunger)
Community Development Corporations
Community Health Fair
Community Nursing Services
County Councils on Aging
County Health Departments
County Senior Centers
DDI Vantage (early intervention for disabled children)
Foster Care Program
Elementary and Middle Schools
Free Clinics
First Homes, Inc. (assist church members to own own homes)
Group Homes
Habitat for Humanity
Head Start
Healthy Habits (school based health education)
High Blood Pressure Center
Holy Redeemer Catholic Church
Home Health Services and Hospice Services
Home Instruction Program for Preschool Youngsters
Homeless Shelters/Healthcare Projects
Hospitals (acute, children's, psychiatric)
Housing Authority of County
Life Care Services (food packages delivered to house bound)
Long-term Care Centers/Assisted Living
Mental Health and Counseling Services
Planned Parenthood
Rocky Mountain Respiteers (respite care)
Salvation Army
School Age Mothers Program
Senior Citizens Community Center
Sheltered Workshop
Skinner's Great Kids (tutoring to high risk inner city middle school children)
Success by Six (preschool families)
Veterans Center
Youth Center
Wilderness on Wheels (builds camping/outdoor facilities for disabled)
WIC Program

APPENDIX 6

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