

# Adolescent Health

*SPRANS Abstracts FY 1989*

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NCEMCH  
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Maternal and Child Health  
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Office of Maternal and Child Health  
Bureau of Maternal and Child Health  
and Resources Development

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# **Adolescent Health**

***Selected SPRANS Abstracts FY 1989***

***The National Center for Education in Maternal and Child Health (NCEMCH)*** provides information services, educational materials, and technical assistance to organizations, agencies, and individuals with maternal and child health interests. The Center was established in 1982 at Georgetown University, within the Department of Obstetrics and Gynecology. NCEMCH is primarily funded by the U.S. Department of Health and Human Services, through its Bureau of Maternal and Child Health and Resources Development.

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## PREFACE

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This publication provides information regarding the adolescent health component of programs supported by the Federal Office of Maternal and Child Health (OMCH). The health of America's children and youth has been a continuing concern of maternal and child health programs beginning with the Children's Bureau. Title V of the Social Security Act, passed in 1935, has provided ongoing funding for child health services as part of health programs for mothers and children. Such support continues today through the Maternal and Child Health Services Block Grant, with 85 percent of the appropriation allocated to State health agencies to assist them in promoting, improving, and delivering maternal and child health care and services for children with special health needs and 15 percent set aside for the Federal Office of Maternal and Child Health to award on a competitive basis to Special Projects of Regional and National Significance (SPRANS).

The purpose of this monograph is to identify and describe the particular efforts to address the health needs of youth that are supported through SPRANS. It documents the diversity of demonstration, research, and training projects in which adolescent health is the primary focus or a significant interdisciplinary component. Maternal and Child Health **Improvement Projects** (demonstration projects) address specific program priorities determined on an annual basis. Adolescence is the major focus of some projects and is an integrated component of others. **Research Projects** are investigator-initiated projects which show promise of substantial contribution to the advancement of maternal and child health services and have potential for immediate application in health care delivery programs. **Training Projects** funded by OMCH are intended to produce health professionals with the knowledge base, skills, and attitudes which enable or facilitate leadership in the field. Fellowship training in adolescent health is provided through interdisciplinary training projects for medicine, nutrition, nursing, social work, and psychology. The Adolescent Health Training Programs also provide continuing professional education for the provision of adolescent health care.

The 36 projects having an adolescent health focus which are described in this document have been selected from the compendium of abstracts of the almost 500 active projects which the OMCH supports in all areas of maternal and child health. The project abstracts are organized by the major categories of demonstration projects (MCHIP), research projects, and training projects. The demonstration projects are subdivided into program emphases. An appendix is included which lists the State Adolescent Health Coordinators.

# DEMONSTRATION PROJECTS (MCHIP)

## COMPREHENSIVE, COMMUNITY-BASED SERVICES

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**Better Health for Rural Teens**  
Arkansas Department of Health  
4815 West Markham Street  
Little Rock, AR 72205-3867  
(501) 663-6812

MCHIP  
MCJ-053001  
10/1/88—9/30/91  
Project Director(s):  
Louise Dennis

**PROBLEM:** Adolescents are confronted with some of the most serious health risks that children face. Because of the dramatic physical changes and the developmental tasks that adolescents face, they have unique health needs related to growth and development, risk-taking behavior, sexuality, and the psychological transition to adulthood.

The problem lies in achieving compatibility between the health needs of adolescents and the ability of the health system to respond to those needs. The challenge in delivering adolescent health care is to organize a collection of prevention and intervention services which are affordable, accessible, and age appropriate.

**GOALS AND OBJECTIVES:** The goals of the project are to (1) develop a community-based model to address adolescent health needs, and (2) improve the health of Lake View youth ages 10-19.

The objectives for the first goal are to:

1. Establish a methodology for the identification of adolescent health problems during the first year;
2. Demonstrate a strategy for collecting and organizing community services and resources to address unmet adolescent health needs by the end of the project period; and
3. Establish a methodology for evaluating changes in health status.

Related to the second goal, four health status improvement objectives have been developed based on a preliminary survey. They are to:

1. Reduce by two-thirds the number of youth engaged in unprotected intercourse, from 43.6 percent to 15 percent;
2. Decrease by one-third the number of youth who seldom or never wear seat belts, from 34.9 percent to 20 percent;
3. Reduce by one-half the number of youth skipping breakfast, from 21.7 percent to 10 percent; and
4. Decrease by two-thirds the number of youth skipping dinner, from 8.6 percent to 4 percent.

A comprehensive survey of all youth in the Lake View catchment area was completed December 1, 1988. Final health status outcome objectives, based on the survey, were developed in January 1989. These health status outcome objectives cover depression, self-esteem, incidence of sexually transmitted disease, weight reduction, and physical fitness.

**METHODOLOGY:** To improve the health status of Lake View adolescents, three approaches to service delivery will be undertaken. A weekly teen clinic will be conducted at Lake View School for all Lake View youth ages 10-19. The clinic will provide nursing, social work counseling, and peer counseling. Physician referrals will be made to the community health center branch clinic. Mental health referrals will be made to the county mental health center. Case management will be provided to all youth needing referral services.

Comprehensive health education will be incorporated into the curriculum at Lake View School. Project staff will work jointly with school personnel to develop teaching plans, identify resources, select presentation methods, and coordinate evaluation techniques.

An after-school teen program will be initiated to promote physical fitness and positive lifestyles. Recreational activities, teen health computer programs, and group education sessions will be offered.

Project providers will include the Arkansas Department of Health, Lake View Hospital, Lee County Community Health Center, Arkansas Children's Hospital, Phillips County Community College, and the community volunteers.

**EVALUATION:** A Lake View Youth Survey will be administered at 1-year intervals. A panel approach to survey research will be used to allow monitoring of changes at the individual and aggregate community level. The panel surveys will also provide information for both period and cohort analyses.

The detailed annual information will be used to evaluate specific activities, which can then be modified as needed to enhance their effectiveness.

**YESS Project (Youth Enrichment Support Services)**

San Francisco Department of Public Health  
101 Grove Street  
Room 115B  
San Francisco, CA 94102  
(415) 554-2560

MCHIP  
MCJ-063000  
10/1/88—9/30/91  
Project Director(s):  
Geraldine Oliva, M.D.

**PROBLEM:** Adolescence is a period of rapid change. Young people need to negotiate complex physical, cognitive, and psychosocial challenges in order to move successfully into productive adult lives. Balboa High School is an environment where the youth, 95 percent of whom are from minority groups, typically engage in a constellation of high-risk behaviors, such as substance abuse, gang activity, drunk driving, and unsafe sex. Factors contributing to such behaviors include low self-esteem, family dysfunction, poor academic performance, social isolation, and poor health habits. These youth, distrustful of care providers, often are poor candidates for treatment.

**GOALS AND OBJECTIVES:** Our first goal is to provide a structure of services which will enable low-functioning adolescents to overcome environmental barriers so that they can successfully negotiate their way to productive adult lives. In pursuit of this goal, we have established objectives to:

1. Promote mental and physical health by providing a continuous psychosocial counseling program and support system to at least, but not limited to, 120 high-risk, multiproblem adolescents in order to motivate and enable them to replace high-risk health and mental health behaviors with positive behaviors;
2. Develop a working linkage with at least 10 identified agencies which serve the adolescent community, and effectively refer to these agencies and work for a high rate of appointment compliance; and
3. Integrate services offered by the YESS Project staff into the structure of services currently provided by the school.

Our second goal is to further elucidate and mitigate the contributing factors which lead to high-risk behaviors. We will use the following objectives to attain this goal:

1. We will identify high-risk adolescents by demonstrating the efficacy of a battery of tools designed for this purpose;
2. By 1 month following intake, each student in conjunction with a youth counselor will have identified three risk-taking behaviors;
3. By 3 months following intake, students will demonstrate decreased participation in identified risk-taking behaviors; and
4. By 6 months, students will demonstrate increased ability to choose behaviors which enhance their capacity to successfully negotiate the tasks of adolescence.

Our third goal is to create a positive environment which will support the positive changes in behavior made by adolescents enrolled in the YESS Project. This goal will be accomplished by providing at least three support activities to parents during the school year to strengthen the family support system (these will include both direct and indirect services).

**METHODOLOGY:** The YESS Project is a school-based, continuous counseling model which will provide outreach to youth engaged in multiple high-risk behaviors. Project staff will work with faculty and staff at Balboa High School, the Teen Health Center, families of referred students, and community agencies to make effective interventions which directly affect the contributing factors which lead to high-risk behaviors. YESS Project counselors will provide role modeling, assistance with problem solving, and support in

developing coping and decision-making skills. They will also help the youth to access and make appropriate use of community health, educational, and vocational resources.

**EVALUATION:** Three instruments will be used to meet the dual needs of assessment of the youth and evaluation of our service model. The CBCL (Child Behavior Checklist) and THRAS (Teen Health Risk Assessment Survey) will be used to identify youth engaged in high-risk behaviors, while GAS (Goal Attainment Scale) will be used as both a treatment tool and a tool for evaluating service provision.

These tools will be administered by the youth counselors and their coordinator, with assistance by outside evaluation consultants.

Instruments will be used at intake and biannually, and the CBCL will be administered in 8-week cycles.

**Partners in Action for Teen Health (PATH)**

Colorado Department of Health  
4210 East 11th Avenue  
Denver, CO 80220  
(303) 331-8360 or 331- 8372

MCHIP  
MCJ-083296  
10/1/87—9/30/90  
Project Director(s):  
Daniel J. Gossert  
Barbara Schricker Ritchen

**PROBLEM:** Local communities in Colorado need technical assistance from the State to develop a system for dealing with teen health problems. While Colorado has made adolescent health a priority, the State has not developed a model for providing the necessary assistance to communities. These communities need help in completing needs assessments and planning programs for the prevention and remediation of adolescent health problems. A model program development process would include representation from all segments of the community.

**GOALS AND OBJECTIVES:** The goals of the project are to:

1. Prevent and/or reduce the nine health problems identified in "Adolescent Health in Colorado, 1986" among Colorado adolescents ages 10 through 19;
2. Develop a model community development process for adolescent health programs. This model will demonstrate a collaborative, community-based approach to preventing and intervening in adolescent health problems. Specifically, it will show how to conduct a local needs assessment, to involve the nine "Partners in Progress" identified in "Adolescent Health in Colorado, 1986," to set priorities for community concerns, and to develop a community action plan;
3. Develop a data management system for the regular collection and analysis of county-specific adolescent health information; and
4. Replicate the model community development process for adolescent health programs throughout Colorado, Region VIII, and the Nation.

**METHODOLOGY:** Under the direction of the Colorado Department of Health, Partners in Action for Teen Health will plan community-based prevention programs and services at four sites. Each community selected contains a unique adolescent population, different community resources, special parental concerns, and a discrete history out of which existing services and relationships have grown. For these reasons, the methods by which improvements in adolescent health, attitudes, knowledge, and health behavior are achieved must be tailored to each unique situation. The development and evaluation processes will be modeled on the five replicable project phases outlined below:

Phase I. Forming a core work group (community adolescent advisory council);

Phase II. Assembling a community needs assessment;

Phase III. Developing a community action plan for the improvement of adolescent health;

Phase IV. Implementing the community action plan; and

Phase V. Evaluating the program as part of the continuing planning process;

**EVALUATION:** Measures will be designed for both process and outcome evaluations. During the first year of the project, the evaluation has focused on the community development process. Specific measures have been developed for each step in the development process.

By the end of the first year, each demonstration community will have designed measures for the outcome evaluation, which will take place in the second and third years of the grant period. These measures will

quantify the objectives derived from the community needs assessment and the State 1990 Objectives for Adolescent Health.

**EXPERIENCE TO DATE:** Partners in Action for Teen Health has succeeded in bringing adolescent health issues to the foreground and in gaining active participation from a wide spectrum of community leaders and members in four demonstration communities. The model adolescent health programs are well established. With the State's assistance, there has been considerable progress toward completing the local needs assessments and developing the collaborative programs. The following milestones have been reached:

1. Formation of community adolescent advisory councils at the demonstration sites, which meet on a monthly basis;
2. Completion of three community needs assessments, which include surveys of key informants, community opinion, and other community characteristics, and publication of a separate report on the results of each needs assessment;
3. Successful community forums with decision-makers from three demonstration communities to share the results of the needs assessments, increase public awareness of adolescent health problems, arrive at a consensus on setting priorities for reducing the problems, and establish a broader base of support for the project;
4. Review of existing resources and the formation of a core work group at three sites;
5. Selection of youth to participate in the focus groups at all sites;
6. Expansion of advisory councils following the community forums at three sites;
7. Documentation and review of the planning process, including decisions, assigned tasks, and their completion dates;
8. Implementation of a community planning process evaluation and development of plans for summative evaluation;
9. Completion of planning for the first steering committee meeting with site coordinators and administrators;
10. Literature review and consultation with a demographer, program evaluators, and Minnesota adolescent database staff;
11. Compilation of county- and community-specific adolescent health data profiles with the cooperation of the Colorado Department of Health, Health Statistics and Vital Records Division;
12. Structural progress on the manual about the community development process; and
13. Coordination between the PATH projects and other related community programs to avoid duplicating services.

One of the demonstration projects is behind the others due to a delay in hiring the community coordinator. Otherwise, the projects are progressing toward the objectives in a timely manner. The guidance of the health planning specialist and the dedication of the local community coordinator have contributed greatly to the project's success to date.

**Maternal and Child Health Adolescent Network  
(MCHAN)**

Hawaii Department of Health  
Maternal and Child Health Branch  
741-A Sunset Avenue  
Honolulu, HI 96816  
(808) 735-3056

MCHIP  
MCJ-153422  
10/1/87—9/30/90  
Project Director(s):  
Lisa A. Simpson, M.D., M.P.H.

**PROBLEM:** The increase in the national adolescent morbidity rate is reflected in Hawaii's large adolescent population. Accidents, suicides, and homicides account for 55 percent of the deaths in the 15-24 age group. The phenomenon of gang violence is resurging. Alcohol use is high among intermediate and high school students. Eighty-six percent of senior high school students report using alcohol. Many eighth grade students have reported smoking cigarettes and using marijuana and over-the-counter drugs. In 1986, the adolescent pregnancy rate in Hawaii was 35.6 per 1000 for the 13-19 age group.

**GOALS AND OBJECTIVES:** The goal of this project is to develop a health network to improve the health status of youth from 10 to 19 years of age. By the end of the project period, a permanent unit for adolescent health will be established within the Department of Health, a system to coordinate adolescent health services at the State level will be developed, and case management systems will be operating in three communities. The quality and quantity of data on adolescent health will be improved by gathering baseline data and setting minimum reporting requirements for other information.

**METHODOLOGY:** The Adolescent Health Network will improve coordination of the adolescent health services system at three levels. These levels include policy and systems development, administration, and local delivery of health services.

The Adolescent Health Network Advisory Committee will coordinate health policy and systems development by planning integrated adolescent health services and designing an adolescent health data set. Interagency agreements will be developed to foster communication between program administrators. The local health delivery services will be improved by establishing case management systems in the three demonstration communities. Interactions between agencies that serve clients will be designed to improve individual client case coordination.

**EVALUATION:** It is not anticipated that adolescent health indices in Hawaii will be significantly affected by the project during the 3-year grant period. A process evaluation method will be used to monitor and evaluate the project based on appropriate activities identified for each of the stated objectives. Community advisory bodies will work with the staff to establish appropriate measures for the case management system objectives.

**EXPERIENCE TO DATE:** The central administrative unit has been established. One community has been selected for a case management system, and a community coordinator has been designated. Funding for the other two community coordinators is being sought.

Adolescent data have been located concerning population distribution, suicide, violence, traffic fatalities, substance abuse in schools, pregnancies and their outcomes, and alienation among students. Three community case management systems for adolescent pregnancy and parenting have been researched for application to this project. The key planning body for the project has begun to meet. The interagency media effort on adolescent smoking prevention is under way. Finally, an interagency committee has been assembled to implement a school-based computer health counseling program entitled "Teen Health Advisor."

**Pilot Project for the Establishment of a Health  
Services System for Llorens Torres High-Risk Youth**  
San Juan Health Department  
P.O. Box 21405  
Rio Piedras, PR 00928  
(809) 763-6560

MCHIP  
MCJ-723455  
10/1/87—9/30/90  
Project Director(s):  
Carmen Feliciano, M.D.

**PROBLEM:** The City of San Juan is the capital of the island of Puerto Rico. This metropolitan area has one of the world's highest population densities and many associated socioeconomic problems. The estimated adolescent population is 55,756, and approximately 60 percent of these youth are medically indigent. This population also suffers from high rates of alcohol and other drug abuse, smoking, violent and risk-taking behaviors, suicide, venereal disease, teenage pregnancy, incest, and sexual abuse. Many of these youth drop out of school and have poor nutritional habits and exercise records. The State and local communities lack a comprehensive approach for addressing these adolescent health problems. Thus, the San Juan Health Department needs to plan an integrated system of youth services.

**GOALS AND OBJECTIVES:** The overall goal of this project is to develop strategies to improve the lifestyle and the physical, emotional, and mental health of Llorens Torres high-risk adolescents in San Juan, and to share those strategies with metropolitan areas in Puerto Rico and across the United States, where many high-risk Puerto Rican youth reside. The overall objective of this project is to establish an adolescent health promotion, disease prevention, and risk reduction program as part of a multiservice, community-based health project for Llorens Torres adolescents.

**METHODOLOGY:** This project uses innovative techniques to develop a multiservice, multidisciplinary, community-based health services system for high-risk adolescents in the Llorens Torres Health Services Area. The project has three phases. Phase one included expansion of the network of available health services for youth to include civic and religious organizations within the community. Phase one also included the establishment of health clinics in the target area to provide health-related services and to screen and select youth to serve as Partners for Health (PFH) and adults to serve as Adults Pro Youth (APY). During phase two, multidisciplinary health teams will train PFH youth and APY adults to serve as positive role models for their communities and peers.

During phase three, PFH and APY members will organize educational and counseling activities to help high-risk youth and their families.

**EVALUATION:** During the project's first year, a multidisciplinary team evaluated the data collection forms. The forms included an adaptation of the "Minnesota Adolescent Health Survey" and other forms for specific data-gathering purposes. The project plans to recruit an evaluation technician to ensure that the project approaches and activities fit agree with the stated objectives. The team administered the pretest from the Minnesota Survey to obtain a profile of the PFH youth. A followup questionnaire will be administered to evaluate the effectiveness of the PFH training program.

**EXPERIENCE TO DATE:**

1. The project personnel have been recruited. Interest, commitment, and ability to deal with the target population were major considerations in the selection process. The San Juan Health Department offered its services and personnel to help train the team and coordinate the project development. Once they were trained, the members of the multidisciplinary team began working directly with the Llorens



Torres community to develop the action plan. In coordination with community agencies and schools, the team began its identification of potential PFH youth and APY adults.

2. After developing criteria for the PFH and APY qualifications, the team conducted interviews and selected members for the PFH and APY groups. The PFH and APY training programs and evaluation plans were designed.
3. The team translated, adapted, and validated the "Minnesota Adolescent Health Survey" to conform to the sociocultural characteristics of the Llorens Torres community. The survey will be used as part of a pretest-posttest evaluation design.
4. One training session each has been conducted for the PFH and APY members. An additional PFH training session is planned at a summer camp sponsored by the San Juan Health Department and Family Services. It will include not only training, but also recreational and other social activities for the PFH youth. A second APY and a third PFH training session are planned. After all of the training sessions have been completed, the project hopes to have reached its PFH and APY expected recruitment levels. A job referral program for unemployed APY members has been established in coordination with the Interagency Committee. Other achievements include the publication of educational brochures.

## PROGRAM DEVELOPMENT ISSUES

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**Improving Health Insurance Coverage for  
Adolescents**

Institute for Health Policy Studies  
University of California at San Francisco  
1326 Third Avenue  
Box 0936  
San Francisco, CA 94143  
(415) 476-3896

MCHIP  
MCJ-063500  
10/1/87—9/30/90  
Project Director(s):  
Paul W. Newacheck  
Margaret McManus  
Harriette B. Fox

**PROBLEM:** Adolescence is a period of major transition in physical, psychological, and social development. This developmental process is accompanied by a unique set of health problems and health care needs. Unfortunately, many adolescents and their families are without adequate health insurance to help defray the costs of needed health services. In fact, all adolescents after reaching a certain age, employment status, educational level, or residence change are no longer eligible under their parents' or guardians' policies. They are on their own to purchase private insurance or to determine eligibility for public coverage. This is the only time in a person's life when being uninsured for some period of time is likely and predictable.

**GOALS AND OBJECTIVES:** The goal of this project is to improve access to appropriate health care services for adolescents, especially for those adolescents with special health care needs, by removing or alleviating existing financial barriers to the receipt of health care services.

We envision achieving this goal through a multistep process. First, we will examine and assess the health insurance status of adolescents as a group and of specific target populations with unique access problems, including low-income teens, pregnant teens, chronically ill (including mentally ill) youth and adolescents, adolescents with substance abuse problems, and teens with financially catastrophic problems. Second, we will review and assess the adequacy of group and individual health insurance policies, Medicaid and EPSDT, Title V, and CHAMPUS, both for adolescents in general and for those with special health care needs. Third, we will identify and evaluate alternative mechanisms for alleviating existing financial barriers to the use of appropriate health care services, including expanded eligibility options under public and private insurance mechanisms; improvements in the amount, duration, and scope of benefits; reductions in premiums, deductibles, and coinsurance levels; changes in existing restrictions on service settings and providers; development of catastrophic protection options; more efficient and coordinated use of residual payers; and education concerning the importance of health insurance. Finally, we will prepare state-of-the-art reports on important issues for policymakers and providers of comprehensive health care for children and adolescents.

**METHODOLOGY:** The methodology to be used in this project directly follows the project objectives identified above. Requisite information on the health insurance coverage of the adolescent population is available through several surveys conducted by the National Center for Health Statistics and the Bureau of the Census. These surveys include the National Health Interview Survey, the National Medical Care Utilization and Expenditure Survey, the Survey of Income and Program Participation, the National Longitudinal Survey of Labor Market Experience of Youth, and the Current Population Survey. To provide current and relevant information on the health insurance characteristics of adolescents, we are analyzing microdata (raw data) from each of the surveys. This will permit us to provide an up-to-date profile of the health insurance characteristics of the adolescent population, including presence or absence of coverage; length of coverage; type of coverage; type of plan; depth of coverage; and reasons for absence of coverage. This information will provide policymakers with a detailed and accurate profile of the health insurance coverage of the adolescent population.

Using national survey data, we are also examining the extent to which health insurance coverage influences barriers to the receipt of needed health care services by comparing the use of health care services by

adolescents with various levels of health insurance coverage (including no coverage) while statistically controlling for health status and demographic characteristics. The results of this analysis are expected to reveal the extent to which improvements in health insurance coverage would lead to reductions in existing inequities in access to appropriate health care services.

The project's second objective encompasses a comprehensive evaluation of existing public and private health insurance mechanisms for adolescents. Project staff are conducting a State-by-State review of Medicaid eligibility policies for adolescent recipients, especially those 18 to 21 years of age. We are also examining State variations in mandatory and optional benefits and limitations, with particular attention to the EPSDT program. Data for this analysis will come from the Health Care Financing Administration, the Intergovernmental Health Policy Project, the National Governors' Association, and our own State survey. Project staff have prepared a report on Medicaid eligibility, benefits, and reimbursement policies as they affect adolescents. During the second and third project years, we will work with selected States and national organizations to implement public insurance expansions.

Private health insurance plan policies are being examined by reviewing recent survey reports of the Employee Benefit Research Institute, the Health Insurance Association of America, and other major insurance associations. These surveys often indicate levels of deductibles and copayments, maximum benefits, and services included and excluded under various private health insurance plans. A review of college and university health insurance policies will be included in this task.

Project staff will also examine the role and variation of State Maternal and Child Health (Title V) agencies as residual payers of noncovered services for the adolescent population. Questionnaires will be mailed to State Maternal and Child Health directors to identify their policies related to providing financial coverage for specific adolescent services. With this information, we will be able to suggest areas where private insurance, Medicaid, and other public financing mechanisms can be integrated to better serve adolescents.

While these approaches should greatly increase our knowledge of where coverage is sufficient and insufficient for the adolescent population, they will be less useful in identifying the adequacy of coverage for adolescent subpopulations with special health care service needs. Very little information is currently available on the adequacy of public and private health insurance benefits for low-income and minority teens, chronically ill adolescents, pregnant teens, adolescents with substance abuse problems, and adolescents with financially catastrophic health problems. Even less information is available on adolescents in transition to adulthood and the effect on health care coverage of their loss of dependent status. To compensate for the absence of reliable information in these areas, we will conduct a special purpose telephone survey of health insurers and employers. This survey, based on a stratified random sample of private health insurers and employers, will be designed to identify and examine limits in covered services, availability of flexible benefit management, use of COBRA insurance continuation services, and annual or lifetime expenditure limits for adolescent subpopulations with special health care needs. It will also be designed to elicit information on special benefits that may be offered to eligible adolescents (e.g., substance abuse programs) and options for extending coverage for new or part-time employees.

The ultimate purpose of this project is to develop a series of key Medicaid, private insurance, Title V, and CHAMPUS policy reforms to enhance insurance coverage for adolescents. Each of these major reforms will be critically analyzed in terms of the expected costs (based on expansion in the number of those eligible, scope of expanded benefits, participation rates, reimbursement estimates, and cost offsets), the benefits (based on projected changes in utilization patterns and reductions in uncompensated and catastrophic expenses), political feasibility, and ease of implementation. In-depth interviews will be conducted with leading public and private insurance officials, representatives of the business community (including the National Alliance for Business), congressional staff, health care financing researchers, State MCH/CSHN directors, BMCHRD, the American Academy of Pediatrics, and the Children's Defense Fund to evaluate these alternate approaches toward improving health insurance coverage and reducing financial barriers for adolescents.

Over the course of the project, several reports will be prepared and disseminated, including a comprehensive state-of-the-art final report on adolescent insurance status and policy recommendations for reducing financial barriers to needed health care services. These reports will be made available to State MCH directors, SPRANS grantees, and others working in this area through target mailings. We will attempt to reach broader segments of the MCH audience through journal publications and conference presentations.

Finally, a series of technical memoranda and reports on various topics pertaining to the public and private financing of care for children and adolescents with special health care needs will be prepared over the 3-year

grant period. Reports will include, but not be limited to, three memoranda on the Annual Budget Reconciliation Acts for 1987, 1988, and 1989; a report assessing disabled children's and adolescents' access to Medicaid through the Supplemental Security Income (SSI) program; a memorandum on the long-term care financing options learned from the elderly population; and a report on the nature and extent of health services furnished to chronically ill and other high-risk children and adolescents enrolled in HMOs.

Each of these memoranda, as well as others that will be produced over the course of the project, will be comprehensive in scope and written in a style appropriate to the intended audience of State MCH directors, directors of programs for children with special health care needs, and State Medicaid program directors. Preparation of these memoranda will involve indepth examination of Federal and State laws and regulations; surveys of State agencies, program directors, and insurers/providers; and indepth review of the literature.

**EVALUATION:** Evaluation of whether the project is meeting its stated goals and objectives will be based on a combination of informal and formal review processes. Draft versions of reports and other project products will be reviewed by faculty and staff at the Institute for Health Policy Studies through individual critiques of reports and group meetings designed to provide review and commentary. These reviews are critical to ensuring high quality products and permitting project staff to benefit from the advice and criticism of Institute faculty and staff. We anticipate that major documents will be reviewed during the draft stage by other interested MCHIP grantees, selected State MCH/CSHN directors, child health researchers at other academic institutions, the American Academy of Pediatrics, Children's Defense Fund, insurance experts, and other professionals suggested by DMCH. In addition, to achieve broad circulation of project findings, we plan to submit major project reports for publication in widely read journals in the pediatric/adolescent health field. The peer review process provided by these journals should also ensure that our final products are of the highest quality.

**EXPERIENCE TO DATE:** The project is proceeding smoothly, and no major obstacles have been encountered thus far. Work is currently under way toward partial achievement of three major objectives of the project: (1) Assessment of the health insurance status of adolescents and subpopulations with unique health care needs; (2) examination of major gaps in existing private and public health care programs for adolescents; and (3) preparation of state-of-the-art reports on maternal and child health financing issues. To date, project staff have presented reports on the health insurance status of adolescents and young adults at the 1988 Society for Adolescent Medicine meeting and have prepared one draft paper on health insurance.

**Developing Policies to Promote Healthy and Strong Families: A Focus on Promotion of Adolescent Health**  
AAMC (AAMFT Research and Education)  
Foundation  
Family Impact Seminar  
1717 K Street, N.W.  
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Washington, DC 20006  
(202) 429-1825

MCHIP  
MCJ-113002  
10/1/88—9/30/92  
Project Director(s):  
Theodora Ooms

**PROBLEM:** Adolescent health problems—such as unwed pregnancy and parenthood, substance abuse, and suicide—are drawing increased public attention as their high personal and social costs become more fully understood. Many of these problems are a result of teenagers' risk-taking behavior. New research and clinical experience underscore the need for holistic approaches to promoting adolescent health that recognize the important role parents and other family members play in prevention and treatment. Yet, policy development is lagging behind this new knowledge. Policies and programs continue to be fragmented, focusing on only one problem at a time. They typically fund only inpatient treatment and fail to provide support for outpatient services and work with family members. It is critical that policy staff become better informed about the need to involve teenagers' family members in prevention and treatment efforts and about effective models for doing so.

**GOALS AND OBJECTIVES:** The major project goal is to improve family involvement in adolescent health through providing the best information available about the family's role, exemplary program models, and supportive policies to staff at the Federal and State levels. The project's two basic assumptions are: (1) That sound information is an essential foundation for good policymaking, and (2) that mid and high level policy staff have considerable influence over policy design and implementation. An estimated 500 Federal and 1000 State policy staff will benefit directly from the project's activities.

**METHODOLOGY:** The project consists of three separate but related activities conducted over 3 years:

1. **Federal Policy Seminars:** As part of a monthly series of family policy seminars to be held on Capitol Hill, project staff will hold two seminars each year for congressional and executive branch staff on issues relating to adolescent health.
2. **Background State-of-the-Art Reports:** As background for each seminar, staff will prepare and publish a report of 10-15 pages providing a synthesis of the data and research, the best program models, policy responses, dilemmas, and options, and a list of key references and organizational resources. (These reports will be made available for dissemination to nonparticipants as well.)
3. **Replication of Seminars in Selected States:** Staff will identify and provide technical assistance to organizations in selected States to conduct similar seminars in State capitals. These sites will make a commitment to focus 20 percent of their activities on issues concerning the promotion of adolescent health. Four State sites will be identified and will be active by the end of the first year, and 10 additional States will be active by the end of the third.

The project will be conducted under the auspices of the Family Impact Seminar (FIS), a program of the American Association for Marriage and Family Therapy (AAMFT) Research and Education Foundation, by the FIS Director, Theodora Ooms. Since its founding in 1976, FIS has conducted policy research, seminars, and conferences, and published reports, books, and articles on a wide range of family issues, including four projects concerned with adolescent health. It is a nonprofit, nonpartisan organization with a strong reputation for scholarly work. In 1988, FIS became the policy unit of the AAMFT Research and Education Foundation. The project is cosponsored by the Coalition of Family Organizations, comprised of four national organizations representing over 55,000 family scholars, family service agencies, and professionals.

The project will establish a large group of national advisors to include key representatives of the maternal and child health network, Society for Adolescent Medicine, and parent organizations (such as the National PTA). State seminar projects will create similar statewide advisory networks.

Specific topics for the seminars will be chosen in consultation with project advisors. They will include examining family involvement issues in the following topics:

1. Models of collaborative approaches to adolescent health needs;
2. Health services to multiproblem, high-risk youth;
3. Models of family involvement in adolescent health care; and
4. Financing mechanisms to promote health care utilization.

**EVALUATION:** Measurement of the desired outcomes (e.g., improved policymaking) will not be possible in this project. Hence, the evaluation will focus on measures of process objectives (e.g., numbers of participants), and will seek feedback from participants in order to improve the effectiveness of its activities.

**Development of a Child and Adolescent Health  
Profile**

Welfare Research, Inc.  
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MCHIP  
MCJ-363753  
8/1/85—7/31/89  
Project Director(s):  
Linda Simkin, M.Phil.

**PROBLEM:** Statistical data that are reliable, recent, and geographically appropriate are needed for sound policymaking, program planning, and resource allocation. Data about child and adolescent health status are often difficult to find, however, because they are collected by different agencies, or even different bureaus within a single State agency. Moreover, data sets may not be comparable, because available reports are inconsistent with regard to age groupings, time periods, and geographical areas. It was this discontinuity, and its dysfunction for decision making, that prompted Welfare Research, Inc., the New York State Department of Health (NYSDOH), and the New York State Council on Children and Families (CCF) to develop the Child and Adolescent Health Profile Project.

**GOALS AND OBJECTIVES:** The goal of the Child and Adolescent Health Profile (CAHP) project is to increase the access of State and local planners and decision-makers to recent child and adolescent health data. To achieve this goal, objectives were proposed to:

1. Develop a prototype statistical report of the key indicators of child and adolescent health status;
2. Prepare a directory of NYS data sources for child and adolescent health used in the profile; and
3. Produce and disseminate to MCH directors, planners, and administrators in other States a manual on the development of a statistical health profile.

**METHODOLOGY:** The CAHP Project is a collaborative endeavor relying on the strengths and resources of the three participating agencies.

The first step in developing the child and adolescent health profile was to select the key indicators of child and adolescent health, including traditional mortality data and demographic, socioeconomic, and services statistics. To aid in the selection process, project staff convened an expert advisory group and undertook a thorough review of the literature to identify major concerns regarding child and adolescent health and pertinent health indicators. The selection of indicators was guided by criteria established by the advisory committee.

In addition, interagency meetings at the county level were held in four different types of geographical regions in the State. Participants (including data users and compilers) provided feedback on their data needs and the proposed data sets and report format.

Approximately 50 percent of the data for the profile was obtained from the NYS Department of Health, and the rest was obtained from nine other State agencies and two New York City agencies. To compile these data, CAHP staff met with agency staff who were directly responsible for data collection and reporting to ensure that data definitions and limitations were clearly understood. The design of the data base and report has taken into account considerations such as user accessibility, ease of reporting, and replicability by other States. In the final profile reports, indicator data will be presented for the State as a whole, New York City, and upstate regions and counties. Data will be arranged by age groups, sex, and race or ethnicity, as appropriate.

Prior to release of the first report, there will be a final review by the expert advisory committee. Development of a directory of data sources was proposed as a companion to the profile to provide technical information about the data sources and to inform users about the availability of data that may exceed the



level of detail contained in the profile. Descriptions of each data source will be presented in a standard format, covering such information as purpose, data sources and method of collection, content, limitations, availability, and contact person.

To facilitate the transfer of profile production to the NYSDOH, a staff member has been assigned by NYSDOH to attend the biweekly CAHP staff meetings. At the end of year three, the CAHP project will have provided NYSDOH with a packet of instructions and materials (including computer programs, a data dictionary, profile reports, and the Directory of Data Sources) to assist profile production.

To promote replication of this profile in other States, staff plan to meet with our DHHS regional representatives and several MCH directors and their staff to plan a CAHP development manual. Upon completion, the manual will be disseminated to all State MCH directors and DHHS MCH regional representatives. Staff also plan to make several formal presentations about the project at professional meetings and plan to inform planners and policymakers about the project through articles in professional newsletters.

**EXPERIENCE TO DATE:** Project staff began work on the health profile by thoroughly reviewing the literature pertaining to the following areas: Current key child and adolescent health issues, child health indicators and health status measures, child health profiles, and health indexes. Recent literature (a) has defined health broadly, to encompass a continuum spanning illness and wellness, and (b) has acknowledged the impact of social, economic, and family environments on children's health. The literature review also revealed that the most widely used statistical indicators were measures of mortality, illness and health conditions, risk factors, and access to care. Although gaps in measurement of health status could not be directly ameliorated by this project, it was evident that one of CAHP's key contributions would be the collection of data from a wide array of sources to provide a comprehensive overview of the health and socioeconomic status of New York's children and adolescents.

Based on the literature review, project staff prepared an annotated bibliography, which was disseminated to State directors of MCH and CSHN programs; MCH departments in schools of public health; leaders in MCH at the local, State, and national levels; and national information clearinghouses.

Following completion of the literature review, staff endeavored to select a manageable set of indicators for the child and adolescent health profile, using a list of statistical indicators recommended by the advisory committee together with those identified through the literature review. The following selection criteria were then applied to each proposed indicator:

1. Considered a valid measure of health status (with "health" broadly defined);
2. Regarded by experts in the field as reflecting important health and/or policy concerns;
3. Considered significant by and understandable to the public and professionals;
4. Related to a disease or condition, or death, that is preventable or could be greatly reduced; and
5. Measured by data that are relatively easy to obtain, affordable, reasonably reliable, and comparable among counties.

As a result of this process, the first Child and Adolescent Health Profile will contain the following data set:

1. Demographic indicators: Population (0-19 years), distribution by age, and race/ethnicity;
2. Socioeconomic indicators: Median family income, poverty status, unemployment, mother's education, living arrangements, and children in residential care;
3. Indicators of access to income reports: AFDC, Home Relief, and SSI;
4. Indicators of access to nutrition programs: WIC, Food Stamps, and school lunch;
5. Health care access indicators: Health insurance coverage, prenatal care, immunization, and dental care;
6. Infant health status indicators: Prematurity, low birthweight, and congenital malformations;
7. Adolescent pregnancy indicators: Pregnancies, births, and number of adolescents having two or more pregnancies or abortions;
8. Handicapping conditions: Developmental disabilities, and handicapping conditions of school-age children;

9. Other morbidity indicators: Immunizable conditions, nonimmunizable conditions, hospital discharges, cancer, AIDS, and lead poisoning;
10. Injury, abuse, and maltreatment indicators: Abuse and maltreatment, and motor vehicle injuries and deaths; and
11. Mortality indicators: Crude death rates, leading causes of death, and external causes of death.

Six types of data will be used: Census, survey, registry, administrative, estimations, and projections. Strengths and limitations of each of these data sources will be described in the profile report. Deficiencies in available data or lack of data have resulted in several gaps in the profile. Most troublesome are gaps in prevalence of chronic disease, incidence of nonfatal injuries, mental health data, and measures of wellness.

Although we encountered some difficulty in obtaining requested data, response time should improve in the future since computer programs for filling CAHP data requests are already written. Despite these delays, staff had sufficient data to compile a resource document for the DHHS Region II Conference "Youth 2000: Imperatives for Action." The conference conveners used the CAHP report as a model for presentation of data from New Jersey, Puerto Rico, and the Virgin Islands.

The Directory of Child and Adolescent Health Data Sources used to compile the profile will be a resource to profile users who need more recent data or need to array data differently. The directory will accompany the profile report and provide a description of sources and list contact points in each agency.

Project activities have already had a positive impact for the NYSDOH MCH programs by fostering an increased awareness of external data sets for program planning. Interagency linkage between NYSDOH and CCF has been strengthened. At the county level, participants at our interagency meetings have helped staff to solve problems related to presentation of small numbers, confidentiality, data presentation, and report organization. Meeting participants from a wide range of agencies were very enthusiastic about using the profile data for needs assessment, program planning, resource allocation, and policy development. Staff are confident that these data will provide comparable benefits at the State level.

## PROMOTING HEALTHY BEHAVIORS

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**A Program to Improve the Social/Emotional  
Functioning of Adolescents with Physical Handicaps**  
The University of Illinois College of Medicine  
at Chicago  
Center for Craniofacial Anomalies  
Department of Pediatrics  
P.O. Box 6998 - M/C 588  
Chicago, IL 60608  
(312) 996-7546

MCHIP  
MCJ-173103  
10/1/87—9/30/91  
Project Director(s):  
Kathleen Kapp-Simon, Ph.D.

**PROBLEM:** The general health status concern being addressed by this project is the social/emotional functioning of adolescents with physical handicaps. Research has shown that the combination of physical handicaps and the normal stresses of adolescence places this population at high risk for serious long-term mental health problems. They are therefore in need of, and deserving of, special programming. The number of affected youth is nationally significant. In 1986, there were 3.7 million babies born in the United States. Of these, 1 in 33, or approximately 111,000, had major birth defects.

**GOALS AND OBJECTIVES:** The goal of this project is to improve the social and emotional functioning of adolescents with physical handicaps. Particular emphasis will be placed on decreasing social inhibition and increasing positive attitudes about appearance, self-awareness, empathetic communication, and the ability to be appropriately assertive in a social situation. These skills will help the youth adapt to their deformity and the stresses of adolescence in order to enhance their desire to go to school, to work, and ultimately, to live independently. In a correlative program, parents will be taught how to reinforce the skills learned by their children. The model program will be applicable to most adolescents with physical handicaps (this definition does not apply to mentally retarded or deaf children).

**METHODOLOGY:** To reach the goal of this project, a program has been chosen which has as its primary aim the promotion of social competency in the adolescent. This program is the Social Skills Training Program (SSTP), developed by Kapp and Simon (1977). SSTP instruction has already been given to more than 1200 adolescents in the Chicago area schools. Research findings have demonstrated that the skills can be taught and have a significant positive impact on the adolescent's ability to interact with his or her peers. This carefully structured program is unique because it teaches specific social skills using the adolescent's own experiences. Although the SSTP was developed for use with normal adolescents, Drs. Kapp and Simon will adapt the program to more specifically address the concerns of the physically handicapped population. The SSTP methodology is to teach specific skills within a small group situation. The training techniques used by the SSTP are multifaceted and tailored to meet the needs of each particular group. A variety of training modalities, including discussion, art, role playing, and systematic teaching and practicing of communication skills, are utilized by the group leaders. The content for group sessions and skills training will be drawn from the adolescents' own experiences and issues of concern (e.g., dating, sex, drugs, and peer pressure).

**EVALUATION:** During the first year, the following activities were tracked:

1. **Publicity:** Publicity mailers were developed and sent to appropriate families, agencies, and organizations prior to each group cycle. Followup phone calls were made. A press release regarding the availability of the program was issued to local newspapers. The response to these efforts was tabulated.
2. **Adaptation of the SSTP:** The text of the SSTP has been adapted for the physically handicapped. Activity sheets geared to the special social/emotional needs of this population have been developed for each unit. The material to be included in the manual undergoes constant revision as progress and techniques are reviewed.

3. **Training and Supervision of Group Leaders:** Group leaders participated in a specific training program and were familiarized with the data collection mechanisms and evaluation procedures. Leaders meet weekly with the project director to review videotaped sessions and group progress.
4. **Data Collection and Management:** A detailed data collection system has been developed for the project. The primary mechanisms for collecting pregroup data are a family interview, a family background questionnaire, and the completion of psychological test forms by the parents, teachers, and adolescents. Postgroup data consist of repeated psychological testing given to both parents and adolescents. A group evaluation form for parents to complete at the end of the group cycle has been developed. These data have been scored and entered into a computer data base. Families requiring psychological intervention beyond the group program have been identified and referred for psychotherapy.
5. **Group Formation and Implementation:** Interview data, along with the age, sex, and degree of deformity, are used to determine group placement. Group attendance is recorded and participants are phoned after missing a session without giving notice to encourage continuation in the program. One group has completed a cycle; four more groups are in progress.
6. **Program Coordination:** A steering committee has been formed to coordinate efforts and address issues as they arise. The steering committee consists of the program director, program coordinator, and program consultant, who meet monthly. This committee oversees data collection mechanisms, evaluation procedures, and progress reports. Minutes are taken so that records of proceedings and decisions can be disseminated.

**EXPERIENCE TO DATE:** Six groups (three craniofacial, two mixed physically handicapped, and one spina bifida) were initiated during cycle one of this project. It is too early for definitive outcome data; as we near completion of the first cycle of group programming, however, several encouraging trends can be reported. First, progress toward the achievement of the program goals has been observed by parents, group leaders, and other health professionals involved with the adolescents. Specifically, reported observations show a decrease in social inhibition and an increase in self-awareness and self-assertion. These observations were made about the adolescents' behavior by parents at home, by leaders in group sessions, by videotape review, by health professionals during clinic visits, and by the adolescents themselves.

Second, there has been a positive response from regional agencies. Referrals have been obtained from the Spina Bifida Organization; the Illinois Association of Craniofacial Teams; the Center for Handicapped Children, State of Illinois; the Division of Services for Crippled Children, State of Illinois; and mental health agencies and schools.

Third, networking among agencies has enabled us to expand the program within the community. The SSTP has been established within the Chicago public school system at the Spalding School for the Physically Handicapped. Two groups are currently being conducted. Plans are under way to provide training in group leadership skills for school social workers and counselors, enabling them to continue the program in the school after the demonstration project is completed.

Fourth, adolescent and parent response to the group experience has been extremely positive. In particular, the adolescents have expressed gratitude for the opportunity to talk about the emotional pain associated with growing up with a visible physical handicap. Families are also reporting that the group experience has been a powerful force for positive change in their lives. Families nearing the completion of their first group have requested continuation of the programming.

**South Carolina Adolescent Reproductive Risk  
Reduction (3R) Project**

South Carolina Department of Health and  
Environmental Control  
Office of Health Education  
2600 Bull Street  
Columbia, SC 29201  
(803) 734-4650

MCHIP  
MCJ-453702  
10/1/85—9/30/89  
Project Director(s):  
Joanne G. Fraser, Ed.D.

**PROBLEM:** Reduction of infant mortality is a priority goal for the Nation. In 1982, 10 of 11 States with the worst infant mortality rates were in the South, with South Carolina's rates among the highest. In analyzing South Carolina's high infant mortality rate, two associated factors stand out: Low birthweight and teenage pregnancy. In 1983, South Carolina had 8.9 percent low birthweight births compared to 7.6 percent in the southeast region and 6.3 percent in all other States. Approximately 12 percent of South Carolina's teenage mothers account for 25 percent of all low birthweight births, 10 percent of all fetal deaths, and 9.8 percent of all infant deaths. The prospect for black teens is at least twice as bad as for white teens. The highest teenage pregnancy rates consistently occur in poor, rural counties with a high proportion of disadvantaged, primarily black populations. In order to reduce South Carolina's high infant mortality rate, an essential goal is the reduction of teenage pregnancy.

**GOALS AND OBJECTIVES:** The South Carolina Adolescent Reproductive Risk Reduction (3R) Project intends ultimately to reduce fetal and infant mortality rates and related incidence of low birthweight infants through (a) delaying initiation of early sexual activity, (b) reducing the pregnancy rate among teenagers 17 years of age or younger, (c) delaying or preventing initiation of reproductive risk behaviors that can adversely affect pregnancy outcomes, and (d) encouraging parent-teen communication.

**METHODOLOGY:** The primary target population for program activities is preteenage students in grades seven and eight in rural counties selected because of high rates of teenage pregnancy, birth, fetal and infant death, and low birthweight, and a high proportion of low-income and minority youth. These students will be instructed through a 30-hour reproductive health curriculum, with instruction sequenced over a 2-year period. The 3R Project replicates an earlier successful South Carolina reproductive education project (RHETTA). The project targets rural, disadvantaged preadolescents with instruction on reproductive health and adolescent health behaviors designed to (a) reach students with limited reading skills, (b) teach students to apply knowledge, and (c) give authoritative guidance on risk reduction choices. The project has a planned component for gaining school, community, and parental support for the program. An extensive teacher training component is built into the program, including 50 hours of course work, observation of classroom demonstrations, and supervision by master teachers. The training helps teachers to utilize audiovisual aids and to provide knowledge application opportunities and authoritative guidance in risk reduction choices. The project is revising and packaging the 30-hour curriculum for subsequent dissemination and is developing an accompanying set of audiovisual teacher, student, and parent instructional materials under a contract with South Carolina Educational Television (SCETV).

**EVALUATION:** Since the project's ultimate goal is the reduction of infant mortality, health status indicators (i.e., pregnancies, births, deaths, and low birthweight rates), as well as teenage family planning enrollment, will be monitored. Evaluating these indicators within the project period is not appropriate, however, since the intervention is directed to young teens who will just be 14 at the conclusion of the grant period. The program will be evaluated on meeting its immediate objectives of increasing knowledge of reproductive risk factors, applying such knowledge with the intent of delaying sexual activity, and improving parent-child communication.

The evaluation design includes pre- and post-testing of intervention and control groups with the 3R test instrument, which includes knowledge, belief, behavioral intention, and health risk appraisal subscales. Students will be followed longitudinally with an annual posttest for 3 years. Pregnancies, births, deaths, low birthweight rates, and teen family planning enrollment are being monitored for participating counties. Supportive community and parent education programs will also be tracked and parent satisfaction and communication with teens will be measured.

Pre- and post-intervention and control group testing is proceeding as course instruction is implemented. Some control group attrition occurred as a result of the statewide controversy over sex education. Preliminary analysis of seventh grade results in three school districts shows students achieving substantial knowledge increases, positive attitude changes, and increases in intent to delay sexual activity.

**EXPERIENCE TO DATE:** Counties eligible due to high rates of teenage pregnancy, birth, fetal and infant death and low birthweight, and a high proportion of low-income and minority youth were identified by analyzing vital data and ranking counties using trend data and additional project criteria, such as per capita income, percent minority population, and percent disadvantaged students. School districts in eligible counties were invited to participate in the project, and asked to submit implementation proposals, commit district resources, and cooperate with evaluation needs. Of the 31 districts submitting proposals, 20 were selected for participation; 4 districts are supporting all their costs and 5 are sharing materials so that more can participate.

**Teacher Training:** Three 50-hour teacher training courses have been taught, training 78 teachers and school support staff, and 5 public health educators. All teachers have received three recertification credits for course work. Teacher training evaluations have been highly positive; pre- and post-training knowledge scores increased significantly and participant evaluations rated the course instruction as exceptional.

**Course Implementation:** Ten school districts have completed implementation of the 7th grade curriculum, with over 95 percent of eligible students participating with written parental permission. Teacher supervision and monitoring showed that 3R teachers adhered closely to the curriculum and exhibited skillful use of the instructional methods learned in training. Eight additional districts began implementation in 1987.

**3R Curriculum:** Four concepts provide structure for 3R course objectives: (a) Knowledge of the reproductive process is helpful information; (b) sexual activity has damaging health and social risks and consequences for teenagers; (c) there are ways to reduce the risks and protect oneself and others from these damaging consequences; and (d) mature relationships require mutual respect, assertive communication, and acceptance of responsibility for one's actions.

Curriculum guides are completed and audiovisual material selection has been updated. Each lesson in the course includes homework for students to do with their parents. A unique feature of the 3R curriculum is its authoritative guidance messages and the 3R structured discussion framework used to answer questions and focus student attention on key messages and concepts in the audiovisual materials. The 3R program also emphasizes building basic values of responsibility and respect for self and others, and restraint in relationships. The healthful value of abstinence during the teen years is stressed as the best way to eliminate risk. Assertive communication and decision-making skills are practiced in the course.

**Community Support:** All school districts are implementing the project with school board approval. Each district has developed procedures and activities for informing parents of the content, providing for parent review of materials, and obtaining written parent permission for students to participate. Parent meetings have been held and parent-community advisory groups have been formed. Local Healthy Mothers-Healthy Babies and Teen Pregnancy Reduction Network groups have strongly supported the program.

During the second project year, a statewide controversy about sex education erupted in South Carolina in reaction to recommendations in the State Plan for Preventing Teen Pregnancy. Highly vocal opponents of sex education targeted the 3R program for attack. Two districts did not start implementation as a result, but 18 of the 20 have remained steadfast and committed to the curriculum. Students, teachers, and parents wrote letters to public officials in support of "their" program, and one 3R teacher was awarded the Intellectual Freedom Award from the Library Association in defense of students' rights to access materials. Eight additional school districts have asked to send teachers to 3R training, and requests have also been received from other States. Part of the support strategy is the involvement of churches and the clergy (supportive parent education training has been held for clergy). A credible statewide telephone poll showed over 80

percent public support for sex education in schools and strong support for reproductive health protection skills.

**Resource Development:** The 3R curriculum currently uses 35 videotapes and films to support instruction. Under a contract with SCETV, a 13-part videotape series is being produced as a less expensive means to support the curriculum. Field tests are planned in comparison with original instruction. Teacher, parent, and student materials will also accompany the video series. Third year plans include development of teacher training and implementation guides.



**South Carolina Resource Mothers Project**  
South Carolina Department of Health and  
Environmental Control  
Division of Maternal and Child Health  
2600 Bull Street  
Columbia, SC 29201  
(803) 734-4640

MCHIP  
MCJ-453665  
8/1/85—7/31/89  
Project Director(s):  
Sara E. Woolbert, M.S.N., C.N.M.

**PROBLEM:** South Carolina had the highest infant mortality rate in the Nation (14.2 deaths per 1000 deliveries) in 1985. This is not a statistical anomaly. For decades, South Carolina has consistently ranked among those States reporting the worst infant survival. A significant component of the problem is adolescent pregnancy. Pregnant adolescents are at greater risk for low birthweight infants, high maternal and infant morbidity and mortality, babies with delayed development, and parenting inadequacies. These indicators of poor perinatal health could be prevented or reduced by adequate prenatal care and parenting education. The South Carolina Department of Health and Environmental Control (DHEC) has developed and implemented a Resource Mothers Project as an alternative strategy to reduce the high incidence of infant morbidity and mortality and to improve perinatal health among adolescent mothers. The Resource Mothers Project is a mechanism for utilizing paraprofessional women as social support to supplement and reinforce prenatal and infant clinical services to assist adolescents with problems related to pregnancy, childbirth, infant care, and parenting.

**GOALS AND OBJECTIVES:** The goals of the Resource Mothers Project are to reduce the mortality and morbidity of infants born to primigravida adolescents, 17 years of age and under, and to increase health and parenting activities of those adolescents to positively affect pregnancy outcome and child development.

Specific objectives are:

**Impact Objective One:** By the end of the project period, the birthweight of 85 percent of infants born to primigravida adolescents participating in the Resource Mothers Project will be at least 2500 grams.

**Process Objective:** Implement the Resource Mothers Project in six public health districts. Teens participating in the project will begin prenatal care in the first trimester, gain the recommended amount of weight during pregnancy, and breastfeed their infants.

**Impact Objective Two:** By the end of the project period, 90 percent of all infants born to mothers participating in the project will have received the immunizations recommended for their age.

**Process Objective:** Infants born to mothers participating in the project will attend the recommended number of well-child clinics and will receive immunizations appropriate for their age.

**Impact Objective Three:** By the end of the project period, 90 percent of all teens participating in the project will not become pregnant for at least 1 year postpartum.

**Process Objective:** Teens participating in the project will be enrolled in the Family Planning Program and will be re-enrolled in school within 2 months after delivery.

**Impact Objective Four:** By the end of the project period, 90 percent of the teens participating in the project will have demonstrated increased knowledge of health behaviors related to pregnancy and child development.

**Process Objective:** Teens participating in the project will reduce health risk behaviors and parenting deficits as measured by a standard assessment.

**METHODOLOGY:** The basic strategy for implementing the Resource Mothers Project is to establish it in six public health districts during the entire grant period. The project will operate in two different districts each year during the grant period. Each year the project will staff eight resource mothers, two district coordinators, and one State coordinator. Once established, funding for the project in succeeding years will be assumed by the State agency.

Selection criteria for a district's participation in the project include an examination of age-specific birth rates; inadequate prenatal care; low birthweight, pregnancy, and abortion rates; fetal, neonatal, and postneonatal mortality; and high rates of mortality and morbidity.

DHEC is committed to the resource mothers concept and has incorporated it into its ongoing maternal and child health programs.

**EVALUATION:** Several methods will be used to track the implementation of project activities. The home visit report form filed by resource mothers after each home visit will provide information on patients' current status, support systems, attitudes, risk factors, and the curriculum covered during the visit. This information will be monitored by supervisory staff at the local and State level to see that the patients receive all necessary services, and to ensure that the instructional activities are carried out on schedule. Measures of the patients' knowledge and attitudes regarding pregnancy and child care are included in the initial interview protocol and a followup assessment is made after 4 months of participation.

For reporting purposes, the health status of participants and their infants will be monitored through a computerized patient tracking system. The system is comprised of a linked mother and infant patient record that is updated with new information as changes occur in patient status or service use. These files are used to evaluate each patient's social support system, weight gain, pregnancy outcome, service utilization (e.g., prenatal care, immunizations, well-baby clinic visits, family planning, and other services) and change in health risks. Educational interventions are tailored to meet each patient's specific needs.

Data from the Resource Mothers Project will be evaluated to determine whether the intended goals and objectives of the project were met. By the end of the project period, resource mothers services will be available in six public health districts within the State which will have evidenced high priority for services to pregnant teenagers. The findings of the evaluation will be used to guide the development of services in the remaining nine public health districts.

**EXPERIENCE TO DATE:** All service components of the project have been established and, to date, the project has assimilated a full-time staff of 21 employees. They include 18 resource mothers (paraprofessionals), four district coordinators (M.S.W. supervisors), and one State coordinator (M.S.W. consultant). All staff members have participated in initial and periodically updated training sessions.

Implementation of activities to meet the stated objectives is being carried out and the enrollment of pregnant teens into the project is progressing rapidly.

Changes in patients' health status and support systems are being monitored on each home visit and documented by the resource mothers. Resource mothers staff also collect data relative to patients' health knowledge and parenting skills. A computerized data processing system to measure the outcome objectives is presently being developed. Preliminary analysis of project data has been accomplished through hand tallies of client information cards. Two test files have been constructed, and data entry was begun upon completion of the file indexing program.

## VIOLENCE AND INJURY PREVENTION

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**Break the Chains of Violence**

Contra Costa County Health Department  
Prevention Program  
75 Santa Barbara Road  
Pleasant Hill, CA 94523  
(415) 646-6511

MCHIP  
MCJ-063220  
10/1/87—9/30/90  
Project Director(s):  
Larry Cohen  
Nancy Baer

**PROBLEM:** Among adolescents, high rates of suicide, assault/homicide, and sexual assault in dating relationships occur, with high incidences of alcohol and drug abuse as contributing factors. A fragmented health care delivery system, which encourages the division of interrelated problems into separate components (in terms of preventive efforts), perpetuates the cycle of personal violence (intentional injury) and drug and alcohol abuse.

**GOALS AND OBJECTIVES:** The two major goals of the Break the Chains of Violence Intentional Injury Prevention Project are to:

1. Reduce the incidence of suicide, assault/homicide, and dating violence among adolescents in three diverse target communities in Contra Costa County, California; and
2. Improve the coordination of violence prevention services to ensure the adoption of multifaceted prevention strategies over single focus interventions.

The central concept involved in reaching these goals is that the community must become involved in prevention activities at several concurrent levels in order to effect positive change.

**METHODOLOGY:** The project builds on activities which already exist within the scope of local preventive efforts. Adults, teens, and preteens will each be the focus of tailored project activities. Major components will take place with both students and teachers in schools, in workplaces, and through the media to create a comprehensive, communitywide system. The connection between intentional injuries and alcohol and drug abuse will be stressed in all project activities.

School-based activities include: (1) The adaptation of an existing classroom series to the junior high setting and the expansion of the series to high-risk school sites, such as continuation schools; (2) the establishment of conflict management programs and teen health councils on high school campuses in the target communities, following models already being used locally; and (3) intentional injury prevention training, emphasizing the relationship of these injuries to alcohol and drug abuse, for teachers in each district.

Within selected workplaces, written information and "brown bag" seminars will assist parents in gaining knowledge and skills pertaining to adolescent development, parenting, risk factors, and the use of community resources for preventing intentional injuries. This will be done in cooperation with management, union, and employee assistance staff, who will additionally explore other methods of reaching parents with intentional injury prevention information.

To involve the community more broadly, a community college training program developed in 1986 will be adapted and conducted within other educational settings and formats. Building on existing public information efforts, a broad-based media campaign involving local radio, newspapers, and television will be developed to publicize key events, issues, and concepts regarding the prevention of suicide, assault and homicide, and sexual assault among adolescents.

In order to maximize the use of resources and expertise, the prevention program has responsibility for overall planning, administration, coordination, and evaluation of project activities. Many of the specific

training and education activities within workplaces and schools will be conducted through the Teen Age Program (TAP) and the agencies represented in the Alternatives to Violence and Abuse Coalition.

**EVALUATION:** With the assistance of an evaluation consultant, extensive baseline data will be established for incidents of attempted suicides, assaults, homicides, and dating violence among adolescents, and the extent of drug and alcohol use will be determined. Evaluation instruments will be developed to monitor changes in these health status problems over the course of the 3-year grant period. The effectiveness of the individual project activities will be evaluated as well as the effect of a coordinated delivery system on reducing intentional injuries. To track project activities, a detailed workplan, timeline, and monitoring scheme will be developed and updated regularly. This information will be reviewed by the project team and advisory team to form the basis for overall project management.

**Health Promotion Program for Urban Youth —  
Violence Prevention Project**

Trustees of Health and Hospitals of the  
City of Boston, Inc.  
Nurses Education Building  
Room 112  
818 Harrison Avenue  
Boston, MA 02118  
(617) 424-5196

MCHIP  
MCJ-253420  
10/1/87—9/30/90  
Project Director(s):  
Alice Hausman

**PROBLEM:** Injury and death from acquaintance violence are problems of major proportions in the United States. Inner-city adolescents living in poverty are at particularly high risk of homicide or intentional injuries. The intimate and behavioral characteristics of violent acts render them unlikely to be affected by punitive, after-the-fact interventions by the criminal justice system, but amenable to prevention and early intervention.

**GOALS AND OBJECTIVES:** The goals of the project are to reduce the incidence of negative health outcomes of violence by making the clinical setting more responsive to the needs of youth at risk of, or engaged in, violent behavior, and to link primary and secondary prevention services to generate a comprehensive approach to the problem.

**METHODOLOGY:** Two neighborhood health centers, each located in high-risk neighborhoods, will become fully functional in primary prevention activities, including education, screening, and referral. All staff will be trained in violence prevention educational techniques. Violence prevention will be incorporated into the medical protocol in the form of anticipatory guidance and will be offered to all adolescent patients using the centers. Educational materials, such as posters, pamphlets, and video presentations, will be deployed in the waiting rooms. A screening instrument will be developed to identify high-risk youth who are in need of more supportive services. These more troubled youth will be referred for help.

The emergency room of Boston City Hospital, the primary hospital provider for the target neighborhoods, is another site of violence prevention. All adolescents coming to the emergency room for intentional injuries will be screened for general counseling needs and specific needs arising from the injury event. These patients will be referred to secondary level violence prevention services.

Subspecialty clinics will be opened in community and hospital settings to provide more indepth services for troubled youth. These services will include comprehensive assessment, educational intervention, counseling therapy, outreach, and advocacy. These clinics will be available for emergency room, health department, and community agency referrals.

A referral network of secondary services has been generated to link the community-based primary prevention services to the hospital-based intervention services. Both community and hospital providers will be able to access the referral network through a directory and referral protocol which will be published and distributed.

All of these activities are supported by a larger violence prevention initiative that is functioning in the two target neighborhoods. Changes in attitudes and behaviors will be supported through the community level efforts.

**EVALUATION:** The primary outcome objective is the reduction of intentional injuries to adolescents over time. This will be measured by injury and fight surveillance systems in the Boston City Hospital and the neighborhood health centers.

The screening and referral activities will be evaluated by their ability to identify and refer youth who are in need of services. The number of adolescents identified and successfully referred to secondary services will be important indicators of productivity. The ability of the hospital clinic to engage, sustain, and maintain

referred youth through service and educational components will also be measured. Adolescents seen in the clinic will be followed for recidivism through telephone contact. Testing both before and after the educational component is administered will monitor program impact on participants' knowledge and attitudes about violence.

Because the clinical intervention is part of a larger community-based intervention, the clinical output will be the sole focus of the SPRANS-funded evaluation. Effects of the total intervention on other outcomes of interest, such as arrests and school suspensions, will be investigated through the evaluation of the larger project.

#### EXPERIENCE TO DATE:

1. **Community Personnel Training:** Four health centers in the pilot neighborhoods have conducted inservice sessions to train staff in the violence prevention curriculum. The Education Development Center (EDC) is working with the Violence Prevention Project (VPP) to develop the provider protocol. EDC and VPP staff are working with health center members to identify the parameters of anticipatory guidance and the potential barriers to provider compliance.
2. **Clinical Treatment Services:** Clinical efforts are currently being coordinated with the Barron Assessment and Counseling Center, formed by the Boston Public Schools for youth who have been caught with a weapon in school. VPP staff provide violence prevention education and counseling at the center. Youth from the center, as well as those hospitalized for intentional injuries, are recruited for the clinic. Two clinic sessions, servicing 26 adolescents, have been held since January 1987.
3. **Secondary Service Network and Directory:** We have identified existing secondary prevention services in the communities and established a referral process for community personnel. We have produced a directory of services, covering 60 agencies, which was distributed to community providers at an April 1988 workshop for primary prevention and secondary service agency personnel.
4. **Media Product Development:** A major advertising company, under the auspices of the Advertising Club of Greater Boston's Public Service Award of 1987, developed two television public service announcements (PSAs) for the project, which have aired since September. The PSAs focus on the ability of friends to both generate and prevent conflict situations, using the slogan "Friends for life, don't let friends fight." Posters, tee shirts, and brochures based on this concept have been designed and produced using MCHIP funding.

With the support of MCHIP funding, the VPP and WBGH-TV are developing two video projects. The first is an hour-long documentary dealing with family and adolescent violence and effective interventions, which will be aired locally and nationally. The second project is a series of five short educational videos, based on the violence prevention curriculum, to be distributed to community agencies locally and nationally. Written materials to accompany the short video presentations in more formal educational settings are being developed.

A video produced by VPP staff is currently used in the waiting rooms of three health centers. The video combines newscasts of project coverage with narratives about violence prevention.

5. **Screening Tool Development:** Results of surveys of a full range of adolescents are being used to generate a sociodemographic and psychological profile of violence risk against which other youth can be compared and ranked. The profile will be refined into an instrument to identify youth at risk of violence. The instrument will be tested in two neighborhood health centers.

**Native American Adolescent Injury Prevention  
Project**

New Mexico Health and Environment Department  
(HED)  
P.O. Box 968  
Santa Fe, NM 87504-0968  
(505) 827-0192

MCHIP  
MCJ-353717  
8/1/85—7/31/89  
Project Director(s):  
Lydia Pendley

**PROBLEM:** Adolescents represent the only age group for which the mortality rate has risen in the last 20 years. A significant factor in this rising death rate has been the role that unintentional injuries play in adolescent death and disability. New Mexico adolescents are at a particularly high risk, with a 50 percent higher mortality rate than the rate for 15- to 24-year-olds in the United States as a whole (96.9 versus 64.2/100,000).

Native American teenagers residing in New Mexico face an even greater risk, with an injury mortality rate more than twice the adolescent rate for all races (214.0 versus 96.9/100,000). Motor vehicle injuries represent the majority of injury-related deaths among our Native American New Mexican adolescents. The recent mortality data collected by the SPRANS staff show that, of the reported deaths for 1980-85, 70.5 percent were motor vehicle related. Additionally, the data show that greater than 72 percent of the motor vehicle-related deaths involved alcohol use, an alarming statistic.

Clearly, there is a critical need to plan both active and passive injury prevention programs which will be effective in reducing mortality and morbidity rates among teens. All adolescents present unique needs because of their developmental status. Risk-taking behaviors, denial, experimentation, erratic growth spurts, and conforming to peer standards increase the vulnerability of adolescents to injuries. Native American teens have additional and unique problems. They face the typical adolescent changes of physical and emotional development, but are also forced to relate to two different cultures, their American Indian heritage and the dominant Anglo society. All of their special needs and issues must be considered when developing injury prevention programs.

The scope of the problem warrants an increased public health emphasis through the development of prevention programs which work specifically for Indian teens, and generally for all teens.

**GOALS AND OBJECTIVES:**

**Overall Goal:** To reduce the rate of unintentional injuries and deaths among Native American adolescents in New Mexico and the Southwest.

**Goal One:** To improve the specificity of existing data bases on Indian teen deaths from unintentional injuries and disabilities from unintentional injuries.

**Objectives:**

1. Select one intervention and one control group in each of three tribal populations (Navajo, Apache, and Pueblo); and
2. Collect 2 years of retrospective data on unintentional injuries.

**Goal Two:** To improve the quantity and quality of culturally relevant injury prevention materials and methodologies for Native American adolescents.

**Objectives:**

1. Establish a clearinghouse of injury prevention practices and methodologies aimed at teenagers; and
2. Identify at least 5 health promotion strategies determined to be effective for Native American teens.



**Goal Three:** To improve the knowledge, attitudes, and prevention practices regarding unintentional injuries among Native American adolescents in New Mexico.

**Objectives:**

1. Survey the knowledge, attitudes, and prevention behaviors of 90 percent of the teens in 6 target communities;
2. Conduct observational surveys of injury-specific behaviors and environmental characteristics in each of the target communities;
3. Posttest the knowledge, attitudes, and prevention behaviors of 90 percent of the teens in 6 target communities; and
4. Measure the pre- and post-test differences in knowledge, attitudes, and prevention behaviors of 90 percent of the teens in 6 target communities.

**Goal Four:** To increase the availability of injury prevention materials and methodologies in Native American junior and senior high schools.

**Objective:**

1. Train interested teachers in newly developed injury prevention methodologies in Albuquerque area and Navajo area offices.

**Goal Five:** To increase the quality and quantity of injury prevention services to Native American adolescents given by relevant health care and tribal agencies.

**Objectives:**

1. Provide the results of the Native American Adolescent Injury Prevention Project to the Indian Health Service, the Bureau of Indian Affairs, and the Tribal agencies.
2. Hold a conference for involved community, school, and tribal leaders.

**METHODOLOGY:** The project will address Indian adolescent injury prevention by the following methods:

1. Have core group participants nominated by school staff, by local coordinators, and by teacher invitation;
2. Generate unintentional injury data on Native American teens in New Mexico;
3. Develop youth-oriented injury prevention methodologies;
4. Support local implementation of adolescent injury prevention strategies; and
5. Support increased policy and political emphases on adolescent injury prevention.

**EVALUATION:** The goals of the evaluation are to assess the project's effectiveness in developing adolescent injury prevention resources for Native American teens and to determine the practical applicability of the prevention materials. The evaluation methodology will include impact and process components. During the final project year, outcomes affecting mortality and morbidity can be projected. The following units of measurement will include individuals, institutions, and agencies:

1. Student surveys administered before and after the intervention;
2. Baseline and followup observational surveys; and
3. Baseline and followup surveys on injury incidence;

**EXPERIENCE TO DATE:** The project coordinator is in place. Local coordinators at intervention sites are meeting regularly with student core groups. Regular communication is being maintained between school and community leaders.

The injury data tapes from the Indian Health Service have been produced in hard copy. Analysis of injury-specific information on morbidity has been performed. Frequency distributions for the initial Native

American Adolescent Risk Survey (which was administered in 1986) have been examined, and pre- and post-test comparisons have been investigated.

The student core groups have implemented numerous schoolwide interventions. Design and production of road signs to be placed at dangerous curves in the community, school newspaper articles detailing injury prevention activities, improvisational skits to educate students, and a presentation of an injury prevention resolution to the school board and Tribal leaders are examples of the student-initiated interventions. Central office staff and local coordinators organized activities such as presentations by motivational Indian speakers and visits to other schools to share improvisational skits. The dedication and enthusiasm on the part of the local coordinators and the student core groups produced overwhelming results in the intervention period.

The establishment of a clearinghouse on adolescent injury prevention continues and will include the video production of curriculums to accompany publications for distribution. Activities toward this end will continue through this grant cycle and into the final project year. The video module will include examples of adolescent-designed prevention strategies, as well as a training handbook for teachers and/or coordinators.

Monthly meetings with representatives from the Indian Health Service, the New Mexico Department of Transportation, HED/Emergency Medical Services Bureau, HED/Health Promotion Bureau, and the New Mexico Poison Control encourage networking for the improvement of existing injury delivery systems.

**Longitudinal Program to Reduce Drinking-Driving  
Among Adolescents**

University of Washington  
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MCHIP  
MCJ-533704  
9/1/85—11/30/88  
Project Director(s):  
James A. Farrow, M.D.

**PROBLEM:** Young drivers have been identified as being over involved in traffic accidents. In 1981, 49,268 highway deaths involving 62,662 drivers occurred in the United States; young drivers (ages 16-24 years), constituting 17 percent of the total population, were involved in accidents resulting in 48 percent of these fatalities. Fatal injury rates in general, and those due specifically to automobile accidents, were higher for teenagers and young adults than for any other age group except the elderly.

The high degree to which alcohol is involved in fatal automobile crashes has been amply documented. Nationally, over 50 percent of the drivers in fatal car crashes are, by accepted standards, intoxicated. Morbidity and mortality due to alcohol/drug-related traffic accidents among young drivers in the local area appear comparable to morbidity and mortality data nationwide. In a study completed by the principal investigator, 61 percent of all dangerous driving incidents described by 16- to 19-year-old drivers occurred under the influence of alcohol and/or drugs. This same study (The Adolescent Traffic Safety Project) identified 16-year-olds as constituting the highest proportion of dangerous drivers where alcohol and drugs were concerned.

Development and implementation of a prevention/early intervention program to decrease unintentional alcohol- and drug-related accidents among 16- to 19-year-old drivers has national significance. The Longitudinal Program to Reduce Drinking-Driving Among Adolescents is based on the previously described study by the principal investigator.

**GOALS AND OBJECTIVES:** The objectives of the current program are to:

1. Develop a questionnaire based on previous research by the principal investigator as well as an exhaustive literature search which will identify those students at highest risk for drinking and driving;
2. Develop and implement within high school driver-training classes, a state-of-the-art curriculum specifically designed to deter drinking and driving among students;
3. Reinforce this information and the techniques presented in the curriculum at 6, 12, and 18 months subsequent to the original curriculum presentation;
4. Reevaluate the students' knowledge and utilization of the curriculum material as well as to document self-reported driving incidents at the same intervals;
5. Validate the questionnaire and curriculum via the utilization of a control group;
6. Provide specialized, intensified programming for those students thought to be at high risk for drinking and driving; and
7. Disseminate the program findings and intervention methodology via workshops, to be presented under the auspices of the local health departments, at six sites throughout the region.

**METHODOLOGY:** The high-risk for drinking and driving cohort has been identified through use of a questionnaire containing several validated inventories measuring anger and hostility, stressful life events, internal-external locus of control, and the level of sensation seeking. In addition, items were included which inquired about current substance abuse by students, modeling of drinking and driving by peers, older siblings, and adults, and items designed to evaluate students' perceptions of the psychological issues present in teenage driving, such as the value of car ownership beyond actual transportation.

The overall strategy has consisted of the development and implementation of a state-of-the-art curriculum implemented within two school districts, which impacted more than 360 driver-training students. The curriculum focused on teaching young drivers how to analyze common dangerous driving situations, generate options, and practice other styles of dealing with high-risk situations. Program components consist of cognitive, behavioral, and affective instruction and are reinforced at 6-month intervals.

Within each school district, approximately 75 students attending high schools different from the "experimental students" were administered the assessment measure (questionnaire), but they were not exposed to the curriculum material. These students will be reassessed at 12 months and the incidence of drinking and driving episodes will be compared with that of the "experimental students."

Students from the experimental group identified by project staff as "high risk for drinking and driving" will be invited to a summer conference intended to provide intensified programming and processing of personality issues relating to potential drinking and driving situations.

**EVALUATION:** Monitoring and evaluation include time-trend analysis of the number and character of student-reported dangerous driving episodes prior to each reinforcement session, repeat analysis of drinking/driving knowledge and problem-solving skills during the reinforcement sessions, and a review of actual student driving records conducted at the close of the project.

Furthermore, project staff will compare the longitudinal information on students who have received the specialized curriculum to those control students who have been evaluated and reassessed without intervention from the project.

**EXPERIENCE TO DATE:** The first year of the project (September 1985 - August 1986) was devoted to planning and development of the curriculum and assessment package (questionnaire). In addition, both curriculum and assessment measures were piloted in school districts within driver-training classes. Feedback was obtained from school personnel, administrators, and students. Subsequent to this, both the assessment measure and curriculum package were modified in accordance with this feedback.

During the first year, as well, project staff interviewed representatives of eight school districts within the Seattle area and selected two districts within which the overall project would be implemented. Working relationships were established by project staff with key school district personnel and the subject population was identified.

During the second year of the project (September 1986 to August 1987), project staff implemented the curriculum and assessment measure with the subject population. The curriculum and assessment measure were presented to more than 360 driver-training students within the two selected school districts. An additional 150 plus students from the same districts, but attending different high schools, were administered the assessment measure only.

The curriculum was taught to students by two outstanding driver-training instructors within one of the districts. In the other district, an instructor from outside the district was brought in to present the material. All curriculum presentations were monitored by project staff to ensure the consistency and quality of the presentation.

The data from the assessment measure generated by the students who received the state-of-the-art curriculum have been analyzed and a high risk for drinking and driving cohort has been defined statistically. Students who were administered the assessment measure, but did not receive the program curriculum, comprised the control group. The data from this group are still under analysis.

The "high risk for drinking and driving" cohort was invited to a summer conference for more intensive work than is possible within a high school classroom. The conference curriculum was developed by project staff in concert with a conference advisory group. Facilitators for the conference were identified, and training sessions to familiarize them with the tenets of this project, as well as the uniqueness of the student population, were conducted. The conference took place from July 25-29, 1987, at Fort Worden State Park in Port Townsend, Washington.

Not all students invited were interested or available to attend the conference; however, as it became apparent that vacancies existed, other "high-risk" students were invited to fill them. Approximately 80 students attended the conference along with 20 staff members, allowing for a very favorable staff-to-student ratio.

Project staff have also recently completed the first of the three scheduled reinforcement/reevaluation sessions with all students who received the curriculum. These sessions took place at the students' high school and were comprised of a mini-reevaluation designed to evaluate driving experiences as well as drinking and driving episodes during the past 6 months (which is the first 6 months of driving for these students), as well as the presentation of a 2-hour refresher curriculum reviewing the most important principles and techniques taught during the curriculum presentation last fall.

## YOUTH IN TRANSITION

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**Youth in Transition—The Alabama Experience**  
Division of Rehabilitation and Crippled Children  
Services  
2127 East South Boulevard  
Montgomery, AL 36199  
(205) 288-0220

MCHIP  
MCJ-013630  
7/1/85—6/30/89  
Project Director(s):  
Della T. Kenny

**PROBLEM:** In Alabama, as well as nationally, adolescents are at risk for poor adjustment in their transition to maturity because of chronic illnesses and/or disabilities. Contributing factors are the lack of a coordinated and linked system of service delivery, and the lack of advocacy and management skills on the part of the adolescent and his or her family to access the needed service systems.

**GOALS AND OBJECTIVES:** Alabama Crippled Children's Services proposes to design, develop, implement, monitor, and evaluate a community-based, outcome-focused service model to assist physically disabled and/or chronically ill adolescents at risk in their transition to maturity. Four objectives are designed to achieve this goal:

1. To create an administrative structure at the State level and two pilot sites (urban and rural) for the provision of an integrated continuum of health and education services;
2. To enable service providers, through training and collaboration, to coordinate service planning for the target population of 40 adolescents at each site;
3. To enable the adolescents and families, through counseling and training, to function as their own case managers; and
4. To monitor and evaluate the model continuously to determine the feasibility of replication in Alabama and/or other States.

**METHODOLOGY:** Implementation activities include: Establishment of a State advisory council to provide oversight and direction and to address administrative barriers to coordinated service delivery; establishment of local task forces at each site to assess needs/resources and to address issues in service delivery; development of a common interagency data base to allow effective tracking, reduce duplication, and permit data collection; delivery of training and counseling to the target adolescents/families to develop management and advocacy skills; and delivery of interdisciplinary and cross-agency training for service providers to enhance skills in understanding adolescents, effects of disabilities, and collaboration of services.

**EVALUATION:** Project activities will be monitored at the local level by the task forces and at the State level by the advisory council through monthly reports. An external evaluator will be hired to evaluate and monitor project accomplishments for feasibility of replication in other sites in Alabama and other States.

**EXPERIENCE TO DATE:** The project offices, State advisory council, and local task forces are in full operation. Training modules and resource directories are being developed. Cross-agency training has been ongoing at the local level. A database tracking system has been developed and linkage with other agencies is in progress. Transition plans have been developed and are in place for the target adolescents at each site and new referrals are being accepted. Training and counseling are being carried out by the local transition coordinators for the adolescents and their families in coordination with the local task forces.

**The Development of a Prevocational Training Center**  
Children's Hospital National Medical Center  
111 Michigan Avenue, N.W.  
Washington, DC 20010  
(202) 745-5483

MCHIP  
MCJ-115011  
7/1/88—6/30/90  
Project Director(s):  
Patience H. White, M.D.

**PROBLEM:** The health status concern this project addresses is the negative impact of childhood chronic illnesses on the development of vocational competence. Between 50 and 75 percent of young adults with disabilities are jobless; 67 percent of those without work want to work (Harris Poll, 1986). In this country, the Special Education system is designed to supply prevocational guidance to chronically ill adolescents, but it has been ineffective thus far.

The literature and a pilot study done at Children's Hospital National Medical Center showed that chronically ill adolescents were vocationally immature as compared to controls. Since no other prevocational programs are known, we propose to develop such a program within the health care system.

**GOALS AND OBJECTIVES:** The goals of this project are to determine if early vocational guidance can improve vocational readiness in adolescents with rheumatic disease and to expand the project to encompass adolescents with other chronic illnesses. The 3-year project has two main objectives:

1. **Service**—The Comprehensive Pediatric Rheumatology Center provides comprehensive, coordinated health care to children with rheumatic diseases and will broaden its service to include a prevocational training program, which will be available to adolescents with chronic illnesses; and
2. **Education**—The project will increase awareness among the public, school personnel, professionals, employers, and affected children and their parents.

**METHODOLOGY:** To attain the project goals and objectives, several approaches will be used.

**Service:**

1. A prevocational team will be established, including a vocational rehabilitation counselor, a social worker/financial counselor, a nurse/outreach coordinator, physical and occupational therapists, an educational coordinator, and a psychologist;
2. Through regular meetings, the program of individual and group services will be offered, including work assessment, work readiness programs, referral to appropriate community resources, job groups, and assistance in summer job placement; and
3. A job bulletin board, a quarterly newsletter, and a prevocational materials library will be established.

**Education:**

1. Group services provided by the program include group vocational and career conferences for teens and adults, educational and vocational advocacy seminars, school and community seminars on chronic illnesses and employment, and educational programs for professionals and employers. Professionals are encouraged to visit and learn about the model. To improve awareness, the model will be presented at regional and national meetings.

**EVALUATION:** The project includes a research design that uses a matched group comparison and longitudinal data collection. Adolescents with chronic illnesses or disabilities who participate in either individual or group services of the program (experimental group) will be matched by age, sex, disability



condition, and socioeconomic status with adolescents receiving any kind of service unrelated to the project at Children's Hospital National Medical Center. Both the adolescents and parents in each group will be asked to complete a standardized set of questionnaires about career maturity at the start of the project and every 6 months thereafter for the following 2 years.

In addition to the research study, an advisory board will monitor the progress of the project.

**EXPERIENCE TO DATE:** The project has had a productive first year. Fifty adolescents with thirteen different types of chronic illnesses participated in the individual and group services of the newly created Adolescent Employment Readiness Center (AERC). The team is in place and the program established. Forty adolescents and their parents attended a Vocational Day and 10 parents attended the Next Steps/Educational Advocacy Workshops. Both received excellent evaluations. All participants to date have completed the career maturity assessment tools, and controls are being solicited from clinics at Children's Hospital National Medical Center.

The project has started to offer the group programs in the surrounding region of Virginia, West Virginia, Maryland, and the District of Columbia. An advisory board has been chosen and meetings have been held. Networking with agencies and employers has been initiated. A *Directory of Resources for Vocational Information* has been expanded and will be disseminated throughout the region.

**Transgenerational Project for Children with Learning Disabilities, Their Parents, and Schools**  
Howard University Child Development Center  
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MCHIP  
MCJ-113853  
7/1/86-6/30/89  
Project Director(s):  
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**PROBLEM:** Nationally, children who experience failure in school are vulnerable during the transition period from childhood to adolescence. Poor academic functioning has been noted to be pervasive among low-income, developmentally disabled youth. Specific developmental disorders predispose children who gain little from the political, social, or economic systems in our society to be underachievers or school dropouts. The transgenerational effect of school failure upon culture and society is being recognized as a link in a continuous cycle of poverty, teenage pregnancy, and school dropout. The absence of parental involvement is a serious void that hampers the provision of health and education services to preadolescent and adolescent children. Parental involvement in meeting the needs of their children is crucial, and can make a significant difference in their children's well-being and success. Due to overriding social and economic concerns and needs that have gone unmet from childhood through adulthood, healthy lifestyles and educational achievements are seldom seen as realistic priorities for parents who were often teenagers themselves when they became parents.

**GOALS AND OBJECTIVES:** The Transgenerational Project approaches the problem of school failure from three directions. The goals are as follows:

1. To interrupt the cycle of school failure and to reduce school dropout rates by providing diagnostic, treatment, and intervention services and recommendations for learning disabled preadolescent children;
2. To enable parents to effectively negotiate systems, secure services, and provide support to their children by providing training and counseling for parents of developmentally disabled preadolescent children who are failing in school; and
3. To assist schools in developing strategies to increase parent and family involvement in educational programming for their children with specific developmental disorders.

Specific project objectives are to:

1. Perform interdisciplinary evaluations of 24 children at Howard University Child Development Center and assure appropriate school recommendations;
2. Increase the capabilities of 24 parents, demonstrable after 6 weeks of training and counseling by HU-CDC; and
3. Increase professional competencies regarding developmental and other learning disabilities through continuing education workshops sponsored by HU-CDC.

**METHODOLOGY:** The recruitment strategy represented a cooperative alliance between HU-CDC, the D.C. Office of Maternal and Child Health; the D.C. Commission of Public Health, School Health Division; and the School Counselors, D.C. Public Schools. Referral criteria included:

1. Age range of 10.0 -12.11;
2. Residence in the District of Columbia;
3. Repetition of one grade;
4. No special education services being received at the time of intake; and

5. Priority placement for mothers who were 19 years or younger at the time of their child's birth.

The project coordinator conducts a structured training and counseling session for the parent(s) during the time parents usually spend waiting at their child's visit. A basic 6-week session and related followup sessions at 3 months are initiated.

**EVALUATION:** The evaluation was designed to (a) monitor changes and improvements in the status of the health problem, and (b) track whether or not planned project activities were carried out. Three sessions have been completed to date; in all but one session, the goal of having six parent-child pairs was achieved. Three groups of parents (N=17) began the education and counseling sessions. All parents were black females (16 mothers, 1 maternal grandmother), ranging in age between 29 and 52 years. All but one parent had been a teenager (19 years or younger) at the time of her first child's birth.

A 30-item test was used before and after the 6-week session to measure parents' knowledge about child development, parent and child rights in the educational process, and learning disabilities and other handicapping conditions. Most of the parents (14 of 16, or 88 percent) showed increases in their knowledge scores when administered the posttest. After concluding the 6-week session, 16 parents completed a Session Evaluation Form. Parents were asked to rate the information received, the atmosphere, and the adequacy of the travel reimbursement. The results were overwhelmingly positive. All 16 parents reported that the provision of transportation and lunch were helpful. All aspects of the program appeared to be useful, but parents especially liked knowing their children's rights and learning ways to deal with the educational system. Upon completion of the first session, three of the four parents (75 percent) contacted the schools and some progress was made in securing appropriate placements and/or services.

The project has presented a seminar on diagnosis and intervention for developmentally disabled children for 60 school health nurses of the D.C. Commission of Public Health and 2 workshops, one for an entire elementary school staff and the other for elementary school counselors. The teachers' evaluations of the August workshop were very positive.

**EXPERIENCE TO DATE:** Planned project activities have been completed as scheduled. First project year activities included the hiring of new personnel; recruitment of 24 parent-child dyads; completion of interviews for interested applicants; completion of 4 program sessions for parents and children; completion of one of the 3-month followup sessions; and completion of a summer pilot workshop. Children are included in structured activities throughout their involvement in the center. A brochure was prepared for the Transgenerational Project in September 1986 and revised in 1987. Over 500 brochures have been distributed. Recruitment efforts have necessitated multidimensional approaches. Intensive recruitment and persistence proved to be the most effective means during the course of the first year.

Good attendance has been a strong point of project participation. Parents and children have been consistent in their attendance and children have been eager to attend their sessions at the center. Many parents have developed a special camaraderie with other parents.

Third-party payment for health services remains a significant factor in the availability and accessibility to health care. Although this has not interfered with project participation, the lack of third-party coverage has seriously hampered followup and referral for additional diagnostic and therapeutic services.

Local, regional, and national conferences have provided forums for the dissemination of information about the Transgenerational Project model. Exhibits and poster sessions have been presented.

The project was selected as a Case Management Information System Beta Test Site. The project was also selected to present a panel discussion at the Surgeon General's Conference entitled "Campaign '87: Commitment to Family-Centered Coordinated Care for Children with Special Health Care Needs."

**National Center for Youth with Disabilities**

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MCHIP  
MCJ-273616

10/1/85—9/30/89  
Project Director(s):  
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**PROBLEM:** The adolescent with a chronic illness or disability is faced with a number of major life changes which transcend the traditional demands of this age group. These young people and their families are often unprepared to deal with the complex issues of approaching adulthood. The transition from school to work, home to community, and pediatric to adult health care calls for a range of choices about career options, living arrangements, social life, health services, and economic goals that often have lifelong consequences. For youth with chronic illnesses or disabilities, this transition is frequently made even more difficult by the limitations that can be imposed by others' perceptions of disabilities, by the disability itself, and by the complex array of services intended to assist adjustment to adulthood. It is clear that the problems are complex and thus require coordinated efforts of health, education, legal and social services, and rehabilitation agencies; yet, services remain fragmented and collaboration infrequent. In addition, integrated service models are needed at the practice, planning, and administrative levels in order to meet the complex needs of youth with disabilities in transition to adulthood.

**GOALS AND OBJECTIVES:** The National Center for Youth with Disabilities (NCYD) is a collaborative project with the Society for Adolescent Medicine and the Adolescent Health Program at the University of Minnesota. The goals of the project are to expand the health and health-related knowledge and involvement of individuals, agencies, and programs providing services to youth with chronic illnesses and disabilities; to demonstrate service system models which allow adolescents to grow, develop, work, and participate in community life to the fullest extent possible; and to support the design and implementation of State and community programs to plan and deliver services to youth. The objectives of the center are to:

1. Provide professionals, advocates, parents, and youth an easily accessible resource network where they can retrieve information related to bibliographies, programs and projects, laws and legislation, and training/education materials;
2. Improve the services provided to disabled youth in transition to adulthood and their parents through interagency collaboration at the State and national levels, and through the provision of technical assistance where appropriate;
3. Improve the expertise of professionals who work with youth and their families through improved communication between parent and professional organizations; and
4. Increase and improve the essential services for disabled youth with disabilities in transition to adulthood and their parents through increasing public and professional sensitivity to the issues and needs of such youth and their families.

**METHODOLOGY:** The National Center for Youth with Disabilities is developing a resource network (computerized data base) to facilitate retrieval of a broad range of information focused on adolescents with chronic illnesses or disabilities, with particular emphasis on issues surrounding their transition to adulthood. The data base will be comprised of five separate files, four of which will be publicly accessible. These are:

1. A bibliographic file containing information from relevant journals, books, monographs, and unpublished information references from 1980;

2. A model program and project file addressing such areas as health care needs and services, social maturation, education, employment, community living, recreation, policy, and legislation;
3. A law file containing listings of significant Federal and State case laws which impact youth with disabilities and their families; and
4. A training and educational file containing materials on issues surrounding transition, e.g., self-esteem, sexuality, interagency collaboration, vocational planning, and training.

A fifth file, a technical assistance network, while not publicly accessible, can be searched by an information specialist at the center. This file will be comprised of professionals with expert knowledge of adolescence and chronic illnesses and disabilities who will provide consultative services on a variety of subjects related to youth in transition. The network will include professionals from a variety of disciplines, including health, education, psychology, nursing, social work, law, rehabilitation, and dentistry.

A range of national networking activities will afford the opportunity to raise issues and needs related to youth with disabilities in transition and foster the development of collaborative services by health professionals, other disability professionals, and parent groups across the country. This will be accomplished through presentations at national meetings, the establishment of a national network of States actively developing interagency services for youth in transition, the establishment of linkages with parent and other organizations to jointly compile special materials and cosponsor forums or workshops, and the development of resource materials identified as needed by State and community organizations.

**EVALUATION:** Evaluation will occur on four levels: Process evaluation of project implementation, relevance, appropriateness and use of data base, and impact on the service delivery system.

The National Center for Youth with Disabilities will routinely monitor and review progress toward accomplishment of project objectives and activities through the following internal management mechanisms: (a) Bimonthly staff meetings, (b) monthly management team meetings, (c) quarterly written progress reports, and (d) biannual meetings of the center and the Society for Adolescent Medicine coordinating council.

A management information system is part of the database software. This system will provide quarterly information on the amount of usage, type and/or category of user and information requested, and user satisfaction. The system will make it possible to adjust the resource network, as necessary, to meet needs. A random sample of users will provide evaluation of the data base and will be completed on an annual basis.

It is often not possible to separate the impact a center such as this has on the health status of youth with disabilities from other variables that affect health outcomes. An underlying assumption is that increased and improved collaboration will reduce fragmentation and improve services. Because of this, the following activities will be monitored to identify the impact and effect of center efforts: Interagency collaboration related to the planning and development of services for youth with disabilities; agency-specific priorities for research or demonstration projects which address adolescents in transition to adulthood; and the extent to which national children's, parents', or advocacy groups address the needs of youth in transition.

**EXPERIENCE TO DATE:** Considerable efforts have been expended this past year in defining the structure and content of the data base. It has been a more difficult process than originally expected to design a system that has relevance for a multidisciplinary audience and remains easy to use. A national survey of 400 individuals and agencies was completed by NCYD in 1987, soliciting nominations of model programs, technical assistance consultants, and training and educational materials. Journals across professional disciplines (approximately 200) comprise a major source of information for the bibliographic file. Data collection instruments were designed and information specific to each program consultant was collected. Data were then entered, and the system field-tested.

The telecommunication needs of the center have been identified. The resource center has been designed to be easily accessible, either directly or through computer linkages.

A marketing plan was designed and will be implemented as the data base goes online. It includes a variety of approaches, such as direct mailings, articles in targeted newsletters, the center's own newsletter, and demonstrations of the data base to key organizations and individuals.

Through presentations at national meetings and other networking activities, the center has had the opportunity to raise issues which relate to youth with disabilities in transition to a multidisciplinary group of professionals and parents. An interagency committee of Federal agencies all sponsoring transition projects was established and has met to exchange information. A proposal is being developed by the center to organize a conference that would bring together five States and federally funded interagency transition projects in order to exchange information and establish a national network of those working on the health-related needs of youth with disabilities. The center facilitated a meeting of the Office of Maternal and Child Health "Youth in Transition" Projects during the year. This group will strengthen the network of health projects addressing transition and look at issues such as barriers to transition, the role of public and private health agencies in transition planning, and the mechanisms which will assure dissemination of information and materials relevant to youth.

The center has begun to establish linkages with parent and professional organizations which will lead to the development of special topical materials designed to heighten awareness of the issues surrounding transition to adult life.

**Implementation and Evaluation of Psychosocial  
Services for Adolescents with Genetic Diseases**

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Genetics  
MCJ-361005  
10/1/84—9/30/90  
Project Director(s):  
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**PROBLEM:** Modern advances in medical knowledge and technology have contributed to the prolongation of the life expectancy of genetically affected individuals. Previously, the high mortality rate of this patient population obviated the need for long-term habilitative planning and coordination of supportive services into adult life. In recent years, however, the potential for significant societal contributions by these individuals has been realized and the treatment focus has shifted from the sole emphasis on medical management to the psychological and social needs of adolescents and young adults who have genetically affected conditions and who are living longer lives.

Perhaps one of the most important public health policy issues for adolescents with chronic genetic disease is building linkages between services for children and services for adults that will provide for continuity of care for the adolescent. At the community level, there must be coordination of health, social, educational, vocational, and financial planning services to ensure an orderly transition of care and support. The changing role of the family and full life cycle planning must be addressed in the development of comprehensive services.

**GOALS AND OBJECTIVES:** The overall goal of the project is to improve the quality of life for adolescents with chronic genetic diseases and their families by providing psychosocial support services to ease the transition to productive adulthood. Specific objectives are to:

1. Develop a model psychosocial support program for the coordination and integration of services to meet the special needs of genetically affected adolescents and their families;
2. Educate the patients, their families, and the communities about what it means to be an adolescent with a genetic disease; and
3. Evaluate the effectiveness of the psychosocial intervention for adolescents with genetic diseases.

**METHODOLOGY:** Program implementation involves the establishment of five demonstration sites within hospital departments of pediatrics and/or medical genetics. Under the supervision of a senior level physician, each site is staffed with a minimum of a full-time coordinator, who functions as overall case manager, and a part-time project assistant who assists with interviews, data collection, and followup. Each site establishes an interdisciplinary team made up of physicians, nurses, and social workers, which develops, implements, and periodically reviews the individual service plan. This plan addresses the psychosocial, vocational, educational, and financial needs of the patient and family. Increasing patient awareness about community resources and educating the community about adolescents with genetic diseases are also the responsibility of the demonstration sites.

**EVALUATION:** The program employs a pre-post evaluation methodology, using a uniform interview protocol to assess the impact of the psychosocial case management program on the patient's baseline indicators of physical and mental health, social support, health services utilization, and functioning at school or work. Additionally, quarterly progress reports on program progress (e.g., number of patients served and types of services delivered) are also required.

**EXPERIENCE TO DATE:** Five demonstration sites have been established at three urban and two suburban hospitals. The individual service plan and pre-post interview protocol have been developed.

Publicity of the program and linkages among medical specialists, primary care physicians, nurses, social workers, and community-based programs have been established and referrals have been initiated. A variety of diagnoses are represented. We have begun intake data collection at all five demonstration sites.



**Networking Services for Adolescents with Sickle Cell Disease: An Interdisciplinary Demonstration Project**  
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Genetics  
MCJ-481003  
10/1/87—9/30/90  
Project Director(s):  
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**PROBLEM:** Sickle cell disease is a chronic illness which results in a variety of biological, psychological, and social problems that are not amenable to the explanations or treatments suggested by standard biomedical disease models. Abram (1980) states that, due to the variety of disorders experienced by the chronically ill individual and impairment of bodily function over a period of time, the individual is faced with long-standing conflicts, adjustments, and psychosocial situations to which he or she must adapt. Adolescence is a time when young people are faced with a compelling need to achieve a sense of themselves, and to establish a direction for their lives. The adolescent must form a stable personal identity, one that will transcend his or her many social roles and changing experiences (Stevens, Long, and Cobb, 1983). During this period, peer group acceptance, physical maturity, and independence are all important aspects of self-discovery. These same developmental milestones, however, may hinder a smooth transition from childhood to adulthood for the adolescent with sickle cell disease.

**GOALS AND OBJECTIVES:** This project will develop a network of coordinated psychological services designed to address the unmet psychosocial needs of adolescents with sickle cell disease and to assist these individuals in preparation for productive adulthood. The goal of the proposed project is to enhance the self-concept and self-esteem of the adolescents enrolled in the program. Enrollment of 250 adolescents between the ages of 9 and 21 was expected by March 1989. The project objectives are to:

1. Identify client needs and survey existing resources;
2. Expand services to ensure that a minimum of 85 percent of the categories of needs are made available through networking or direct provision;
3. Increase the number of project participants from 85 to 250; and
4. Assess the efficiency and effectiveness of using a case management approach to deliver psychosocial services to adolescents with sickle cell disease.

**METHODOLOGY:** Following the selection and training of project staff (including a project director, nurse, social worker, special projects coordinator, and secretary), we will:

1. Design and administer an assessment instrument to determine needs in the areas of medical, psychosocial, and educational services;
2. Design and implement a survey instrument to determine the nature and extent of existing resources;
3. Establish referral procedures and formal agreements with existing resources and begin a process of advocacy with other possible resources;
4. Gather baseline data on each client enrolled in the program;
5. Develop a program plan for each adolescent with the client, his or her family members, and those who are significant in the development of the adolescent's life;
6. Coordinate the delivery of identified services; and

7. Develop materials that can be utilized by the adolescent, his or her family, and the medical, psychosocial, and educational communities, and that will encourage new client participation, volunteer involvement, and perpetuation of the project beyond the grant funding.

**EVALUATION:** An evaluating and monitoring system to assess program performance and impact is an important component of this project. Key elements of the evaluation system are: An implementation evaluation to describe and analyze how the project is being implemented and to compare planned versus actual implementations; evaluation of ongoing project processes, including program operations, activities, resources, and participant characteristics; and a description of how each factor contributes to or hinders the achievement of project objectives. Finally, there will be an evaluation of the project's impact on participants to assess how the project activities affected their functioning, attitudes, and lifestyles.

**EXPERIENCE TO DATE:** The following items were completed by April 15, 1988:

1. Needs assessment data have been analyzed for 58 percent of the target population;
2. A Resource Information Directory has been established, containing responses from 57 of the 125 agencies canvassed; and
3. A project brochure has been designed and distributed to physicians, hospitals, social service agencies, educational institutions, and the media.

**The Family Autonomy Program**  
Kluge Children's Rehabilitation Center (KCRC)  
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MCHIP  
MCJ-515019  
10/1/87—9/30/90  
Project Director(s):  
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**PROBLEM:** Adolescents with physical disabilities or chronic illnesses frequently fail to make successful transitions to adulthood. Families and health care professionals often have unrealistic future expectations for these adolescents. The health care system provides a significant obstacle through its persistent focus on pathology and family dysfunction. Staff attitudes and behaviors often clash with the family's role in goal setting.

**GOALS AND OBJECTIVES:** The Family Autonomy Project (FAP) proposes to facilitate the successful transition of adolescents to adulthood through interventions with families, the health care team, and the adolescents themselves. The intervention activities are intended to empower families as decision-makers and collaborators with the health care professionals; (2) to modify staff behaviors and institutional practices toward the promotion of adolescent and family autonomy; and (3) to expand adolescent treatment goals to include health maintenance and realistic future planning.

**Family objectives (50 percent effort):**

1. To facilitate family support through recognition of family strengths and needs, encouraging family reliance on natural support systems;
2. To enhance parent-to-parent support by facilitating access to support services, including organized support networks;
3. To promote parent advocacy through empowerment of families; and
4. To support parent-professional collaboration through recognition of the competence of families as equal partners with professionals and through increased family involvement in the health care planning process.

**Staff objectives (40 percent effort):**

1. To modify staff behaviors toward promoting adolescent/family autonomy;
2. To effect attitudinal changes in staff to support family empowerment; and
3. To develop a process to provide regular feedback to the staff on adolescent- and family-identified expectations for the admission.

**Adolescent objectives (10 percent effort):**

1. To identify the adolescent's future expectations and health concerns and to incorporate these issues into the patient's treatment plan; and
2. To facilitate information sharing related to wellness issues.

**METHODOLOGY:** FAP staff positions were established through the University of Virginia personnel system after prolonged negotiation. The parent position required a complete job analysis. Parent consultants were recruited through the ongoing inpatient parent group, the outpatient clinics, the local Parent Resource Center, and outreach conferences. Policies and procedures were established to facilitate parent involvement, i.e., reimbursement for child care, transportation, and time.

Family support needs were identified through KCRC staff and parent groups. Parent-to-parent support was initiated by the piloting of a preadmission parent-to-parent videotape, an inpatient parent support group and scheduled family activities, and a parent newsletter. A pilot phone network is being planned. Existing parent-to-parent materials were reviewed and adapted. Parent advocacy was enabled by the establishment of parent positions on the KCRC Advisory Board, the KCRC Building Committee, the Children's Medical Center (CMC) Advisory Board, and the KCRC Parent Interest Committee. Parent skills building is ongoing, both formally (through conferences and seminars) and informally. A parent's bill of rights is in the planning stages. Parent-professional collaboration was modeled for the KCRC through conferences which focus on families as equal partners with professionals, collaboration in planning the conferences, parents as Grand Rounds speakers, the inclusion of a parent as an FAP staff person, and the ongoing FAP itself.

Staff behaviors and attitudes are being modified toward viewing parents as consumers and evaluators of health care delivery through parent participation in goal setting and regular feedback to staff on their performance. Over 200 surveys of staff and supervisor attitudes toward family participation in the rehabilitation process are being incorporated into staff intervention procedures.

Adolescent concerns about future planning and current health will be surveyed as a basis for program development. Wellness education is being developed for ongoing patient implementation.

**EVALUATION:** To track project implementation, each FAP component team (family, staff, adolescent) meets monthly to discuss progress and/or problems involved in completing project activities, and the entire FAP team meets monthly to review project progress and proposed activities. Other meetings are scheduled as needed. The principal investigator, project manager, and evaluator attend all regularly scheduled meetings. Parent participation in the planning and implementation of the project was solicited. The resulting core of "parent consultants" are consistently involved with FAP components of interest. All meetings are open to KCRC staff and interested parents from the community. Project review is accomplished quarterly with FAP staff, parents, KCRC staff, and young adult consumers.

To conduct project evaluation, the evaluator developed an evaluation plan based on the Discrepancy Evaluation Model (DEM). This model provides information about projects for the purposes of improvement (formative evaluation) and decision making (summative evaluation). Evaluation activities include: Instrument development and evaluation, maintenance of the activity log, product evaluation, and data collection.

**EXPERIENCE TO DATE:** The following activities have been accomplished to date:

**A. Family Component:**

1. Family support activities have included parent bulletin boards, community needs assessments, inpatient schedules of parent activities, speaker phones, and continuation of an inpatient parents' group.
2. Parent-to-parent support activities have included the piloting of a preadmission parent-to-parent videotape, parent-to-parent group linkages, and a parent newsletter.
3. Parent advocacy activities have included changes in policies, parent involvement on KCRC and CMC Advisory Boards, KCRC Building Committees, and the Parent Interest Committee; skills training seminars; and full FAP participation.
4. Parent-professional collaboration activities have included FAP activities, parent participation in conferences as planners and presenters, KCRC Grand Rounds, parent-professional panels/responders, parent/professional participation in Federal/State legislators' internships, parents on paid FAP staff, videotape planning on collaboration tensions, and inpatient and discharge parent interviews and feedback.

**B. Staff Component:**

1. Behavior modification toward parent and adolescent autonomy has included policy changes regarding parent participation at the KCRC Advisory Board and supervisor levels, the charting of parental expectations of admission on the medical chart, and a staff intervention plan (including inservices and orientation) based on survey data in process.
  2. Attitudinal change has included KCRC staff and supervisor attitude baselines surveying and analyzing orientation planning, and parental representation on governing groups.
  3. Feedback to staff has included medical record charting and team inclusion of parental/adolescent expectations, feedback from parent interviews, a summary of parent interview data to supervisors with a call for action plan to the KCRC Advisory Board, and feedback regarding tensions evolving from policy changes.
- C. Adolescent Component:
1. An expectations and general wellness issues survey process has been initiated.
  2. Information sharing activities have included peer counseling at IRC, a gynecology clinic at KCRC, and the gathering of health educational materials.

Materials developed to date include a parent-to-parent videotape, a Questions about the Future Survey, a transition slide show, a KCRC Parent Survey for inpatient/discharge, a workbook on transition with Georgetown University, and two articles submitted to the *Journal of Children's Health Care*.

**University of Washington Adolescent/Young Adult  
Transition Program**

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MCHIP  
MCJ-535032  
10/1/88—9/30/91  
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**PROBLEM:** As a result of improvements in technology, many patients with a chronic pediatric condition are now living well into adulthood. The adult health care system in the past, however, has not been ready and, in many instances, not willing to take on these patients because of a lack of knowledge of disease and the developmental issues involved and because the patients themselves have been reluctant to move into the adult health care system. These patients often have difficulty in finding an adult health care setting where professionals are knowledgeable about their conditions and where the model of care provides the level of support they have received in pediatric care settings.

In addition, patients themselves find that there may be differing financial indications for them depending upon the setting of care. Finally, there has been a need for information about how to help patients and their families successfully negotiate the transition from childhood to adulthood within the health care system, and perhaps equally important, within the family and community.

**GOALS AND OBJECTIVES:** The proposed University of Washington Transition Program has a number of components, some of which rely on defined and tested models demonstrated in other MCH-funded transition programs. The goals of the proposed program are three-fold:

1. Improvement in care for chronically ill adolescents and young adults who are in need of transition to adult care;
2. Assessment of health care costs in order to understand and facilitate the transition process and its financial impact on institutional and community health care systems; and
3. Development of a transition model applicable to community general hospitals allowing maintenance of the health status of patients in their local communities.

The proposed program will establish a core interdisciplinary transition team to carry out various components of the transition program. The program will involve at least 25 selected patients and families in the first year and 50 in each successive year of the project in the process of orientation, transition evaluation, transfer, and followup. The program proposes to establish a cost of care analysis system which compares cost of care in the pediatric hospital with the adult general hospital and which allows for projections of costs of care in the community hospital setting. Lastly, the program will develop a package of training organizational materials and charge its core team of experts with disseminating the model in two regional hospitals in Region X.

**METHODOLOGY:** The proposal calls for creation of a core interdisciplinary transition team to carry out important components of the program, including:

1. Promotion of the transition program with university-based and community physicians;
2. Patient orientation to and education concerning the transition program;
3. Patient/family selection and evaluation for transition utilizing assessment measures developed by the Georgetown Child Development Center (CDC);
4. Patient health education and autonomy training utilizing the methods of the Children's Rehabilitation Center at the University of Virginia;

5. Assessment of the educational/vocational, family, and community service needs of patients and families involved in the transition program utilizing guidelines developed by the University of Washington's Youth in Transition Program;
6. Identification of adult care providers who will take primary responsibility for patient care and facilitate modification of the adult care system where appropriate;
7. Facilitation of the establishment of a transition inpatient unit at University Hospital for the care of hospitalized adolescents who require inpatient care;
8. Facilitation and implementation of the patient data management system at University Hospital;
9. Coordination and provision of interdisciplinary teaching of physicians, nurses, and other health care staff in transition care and disease-specific health care issues; and
10. Promotion of research in the area of adolescent/young adult transition health issues.

The core team will also be charged with disseminating the model to community general hospitals after it has been demonstrated with 125 patients who have a variety of chronic illnesses, including cystic fibrosis, congenital defects, sickle cell anemia, chronic renal failure, epilepsy, and cardiac defects.

**EVALUATION:** The process of evaluating the project will be ongoing. The program evaluator will work closely with the consultant from the Georgetown CDC in this process. All material development, program replication methods from other transition projects, monthly and quarterly team meetings, and twice yearly State advisory meetings will continue to evaluate the project's progress in meeting its goals and objectives.

Outcome objectives will be measured and the success of transitioning patients maintaining their health status will be judged based on a series of post-transition assessments and interviews of physical, emotional, and functional health status and patient/family satisfaction.

# RESEARCH PROJECTS



**Risk-Taking Behavior in Adolescents: Impact of Puberty**

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Research  
MCJ-060564  
12/1/87—11/30/90  
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**PROBLEM:** Adolescence is generally viewed as a period of optimal physical health. In reality, adolescents represent the only age group in the United States in which mortality increased between 1960 and 1980. Mortality in the 15- to 24-year-old category in 1983 remained high at 95.8 per 100,000. Approximately 75 percent of the deaths in this age group are due to accidents, homicide, and suicide. The major causes of morbidity in youth include the consequences of sexual activity (e.g., pregnancy and sexually transmitted diseases), substance abuse, and motor and recreational vehicle accidents. The behaviors associated with these outcomes account for more than half of the morbidity and mortality occurring in adolescence, including most hospitalizations. They have a profound impact upon the short- and long-range physical and mental health of our youth. These problems are widespread, prevalent in all socioeconomic groups, and have their onset early in adolescence. They are interrelated and behavioral in nature.

The types of behaviors associated with the major morbidities and mortalities share a common theme—risk taking. Young people with limited experience engage in potentially destructive behavior without understanding the immediate or long-term consequences of their actions. Although some risk taking is necessary in the developmental process, too often the results of risk taking are disastrous.

**STUDY OBJECTIVE:** The purpose of this project is to examine the relationships between timing of physiological development and three risk-taking behaviors: Sexual activity, substance use, and accident-related behaviors. The underlying hypothesis driving this research is that the timing of physiological maturation predisposes adolescents to engage in certain risk-taking behaviors which fulfill critical developmental needs, both psychosocial and physiological, during the second decade of life.

**METHODOLOGY:** This study represents a cohort sequential longitudinal design, with data collection at three points in time. During phase one (the first 3 months) of the research, a large cross-sectional sample of adolescents (N=1760) was assessed on their pubertal status. This data collection phase identified sufficient numbers of physiologically early and late maturing adolescents to take part in three longitudinal components of this research.

During phase two (the next 5 months), a subsample of 592 early, normal, and late maturing adolescents underwent extensive assessment procedures to examine their biological and psychosocial maturational status, perceptions of risk and of the social environment, and their risk-taking behaviors. This cross-sectional sample of 10- to 16-year-old adolescents is being followed 1 year later.

Phase three will be a 1-year followup. Subjects from the subsample will be assessed again. This assessment will take 5 months.

The longitudinal design will allow for more accurate assessment of timing of pubertal onset. In addition, it will allow for examination of changes in psychosocial and conceptual functioning, and identification of precursors of risk taking.

**The Nature, Origins, and Consequences of  
Concepts of Parenting**  
Iowa State University  
Department of Sociology and Anthropology  
107 East Hall  
Ames, IA 50011  
(515) 294-9894

Research  
MCJ-190572  
10/1/88—9/30/90  
Project Director(s):  
Ronald L. Simmons, Ph.D.

**STUDY OBJECTIVE:** The purpose of this study is to investigate the nature, origins, and consequences of adult and adolescent views of the role of the parent (conceptions of parenting). Specifically, the study aims to: (1) Investigate the nature of conceptions of parenting, identifying various dimensions and components (with attention given to the manner in which either the nature and/or salience of these dimensions varies by age, sex, and social class); (2) analyze the manner in which various dimensions of conceptions of parenting influence parental behaviors, especially those behaviors that have been shown to affect the physical and mental health of children; and (3) identify the origins or determinants of variations in conceptions of parenting.

Several unstated hypotheses guide the collection of data and the plan for data analysis. These are: (1) Life stress, combined with personality and social background variables, determines parents' conceptions of parenting; (2) parents' conceptions of parenting influence the socialization style and parenting practices used with their offspring; and (3) parents' conceptions of parenting and parenting behaviors influence adolescent views of the role of the parent and the extent to which these images are associated with attitudes and behaviors related to premarital sex, pregnancy, and prenatal care. These hypotheses are subsumed in a path analytic model positing one-way flow of causation between several constructs of relevance (i.e., conceptions of parenting, psychological resources, etc.).

**METHODOLOGY:** The study sample will be composed of 200 families residing in central Iowa, each of which consists of two parents, a seventh grader, and a sibling who is no more than 4 years younger or older than the seventh grader. These families will be participating in a panel study supported by the National Institute on Drug Abuse (NIDA), which is designed to investigate changes in family dynamics brought about by social and economic changes.

A two-wave, passive, panel design is proposed. Participation in the study will be sought at the local school district level by means of a letter jointly signed by the principal investigator (PI) of the study and the local school principal. The names and addresses of those parents not objecting to being contacted by the project staff will be forwarded to the Indiana State University (ISU) Statistical Laboratory. The laboratory will make an initial telephone call, or personal visit if there is no phone, during which it will be determined if the family meets the requirements for inclusion in the study. If so, appointments will be made to visit the family for a period of approximately 2 hours, normally in the evening. During the visit, a written description of the project will be reviewed with the family. The remainder of the evening will involve the independent completion by the family members of the several questionnaires and rating scales to be used in the study. After these instruments have been administered, the interviewer will arrange a second appointment during which a research assistant will videotape the four family members as they engage in structured tasks for approximately 90 minutes. The NIDA investigation calls for study families to be paid \$100 at the end of the videotaping session. A third family visit will be scheduled at the end of the videotaping visit to collect data on conceptions of parenting, and the fee paid will then be increased to a total of \$150, which will be paid at the end of the third visit. After explaining the agenda for the third visit, interviewers will audiotape the seventh graders' and siblings' responses to a set of open-ended questions on conceptions of parenting. These interviews will be completed in a different room, out of the presence of the parents, who will be completing questionnaires during this time. Once the interviews are completed, the two children will begin completing the questionnaires, and tape-recorded interviews will be conducted with the parents.

To encourage continued participation, families will immediately be sent a followup letter thanking them for their participation. Every 3 months thereafter, they will receive a card indicating the progress of the study and an approximate date when they will be contacted again.

The questionnaire items, rating scales, and standardized instruments embedded in the questionnaires and open-ended interviews have either been pretested or are in the process of being tested. These instruments are intended to tap the key constructs of the study, which are conceptions of parenting; empathy; view of human nature; attitudes toward sex, pregnancy, and prenatal care; and psychological resources.

**ANALYSIS:** Structural model techniques such as LISREL VI will be employed to test the validity of the conceptual model guiding the study. After composite measures of the study constructs have been developed using confirmatory factor analysis to maximize the reliability and construct validity of the indicators of specific constructs, analyses will proceed by constructing a series of structural equations to describe the model of socialization into conceptions of parenting contained in the path analytic model guiding the study. As in any path analytic problem, an equation will be established for each of the endogenous variables. These equations will then be tested through a sequence of regressions which regress each of the endogenous variables upon those factors in the model posited to occur causally a priori. The planned second wave of data collection will allow for stronger tests of the causal assumptions which are a part of the study model of conceptions of parenting. Following collection at time 2, the structural equations will be reanalyzed regressing dependent variables at time 2 upon changes on the independent variables between times 1 and 2, while controlling for time 1 scores on the dependent variable.

**The Infants of Depressed Adolescent Mothers**

Boston City Hospital  
818 Harrison Avenue  
Boston, MA 02118  
(617) 424-4235

Research  
MCJ-250559  
12/1/87—2/28/90  
Project Director(s):  
Howard C. Bauchner, M.D.

Childbirth during adolescence is a major concern to clinicians and public health officials because research indicates that these births are associated with increased developmental, social, and medical hazards for both mother and child. Despite the enormity and complexity of this problem, however, little information is available regarding potential mechanisms that may account for the adverse effects. Recently, the striking similarity in the developmental, health, and behavioral outcomes of infants of adolescent mothers and the infants of depressed mothers was described. Research is accumulating suggesting that depression among adolescents is more common than originally believed. The purpose of this study is to determine if infants of depressed adolescent mothers have poorer outcomes than infants of nondepressed adolescent mothers.

Utilizing an already existing research structure and well described population of adolescent mothers, 120 infants born to these mothers will be followed prospectively from birth and assessed at 1 year of age. Maternal depressive symptomology will be measured using the Beck Depression Inventory (BDI). Mothers will complete the BDI when their infants are 6 months and 1 year of age. Infant outcomes at 1 year will include behavior, development, health, growth, and number of accidents. Multiple regression analyses will be used to identify if there is an adverse effect of maternal depression on infant outcome that is independent of other possible confounding factors, such as younger age or level of social support.

The study will determine whether maternal depression has an adverse effect on the growth, development, and health of infants of adolescent mothers in the first year of life. Since the effect on infants of depression among adolescent mothers has not been previously studied and may be amenable to intervention, the results will have important implications for the care of these mothers and their infants.

**Determinants of Adverse Outcome Among Toddlers of  
Adolescent Mothers**

Research Foundation for Mental Hygiene, Inc.  
New York State Psychiatric Institute  
722 West 168th Street  
Box 10  
New York, NY 10032  
(212) 960-2298

Research  
MCJ-360540  
11/1/86—10/31/89  
Project Director(s):  
Gail Wasserman, Ph.D.

This study proposes to follow longitudinally 100 black and Hispanic adolescent mothers and their young children, and to compare child outcome to a group of matched older women and children. In addition, a second aim of the study is to investigate the environmental factors that are involved in child outcome, including caretaking situation, stressful events, coping skills, social support, and mother-infant interaction. An addition to the study is the examination of the role of caregivers, in particular grandmothers, as they affect the child's outcome.

**Neonatal Outcome and Weight Gain of Black  
Adolescents**

University of Rochester  
Strong Memorial Hospital  
601 Elmwood Avenue  
Rochester, NY 14642  
(716) 275-4673

Research  
MCJ-360534  
1/1/86—3/31/89  
Project Director(s):  
Elizabeth R. McAnarney, M.D.

This application proposes a 3-year, prospective, observational investigation of the relationship between maternal weight gain, maternal age, and neonatal outcome (primarily birthweight and gestational age) in 180 black primiparous adult women of lower socioeconomic status. Sixty study subjects will be 16 years of age or younger, 60 will be 17 or 18 years of age, and 60 will range from 19 to 30 years of age. The adolescents will be recruited from the Rochester Adolescent Maternity Project (RAMP), and the adults from other prenatal clinics at Strong Memorial Hospital. The independent variable in the study is maternal weight; the dependent variables are birthweight, gestational age, and birthweight for gestational age. The major specifying variable is maternal age.

**Study of Home Visitation for Mothers and Children**

University of Rochester Medical Center  
Department of Pediatrics  
601 Elmwood Avenue  
Rochester, NY 14642  
(716) 275-3738

Research  
MCJ-360579  
9/30/88—8/31/93  
Project Director(s):  
David L. Olds, Ph.D.

**STUDY OBJECTIVE:** The object of this study is to determine the effectiveness of prenatal and postpartum nurse home visitation services as a means of enhancing the life course development, social resources, and caregiving skills of parents living in a high-risk urban environment, and to ascertain whether these services can prevent a wide range of health and developmental problems in their children. The proposed study is an attempt to validate some of the findings of the previously completed Prenatal/Early Infancy Project (PEIP) conducted by the principal investigator in Elmira, New York, several years ago.

Because the original Elmira study was carried out with whites in a rural/small city environment, the primary question addressed by the proposed validation study is whether the nurse home visitation services model will work with blacks living in urban settings. Because the Elmira program was most effective with young adolescents and smokers during pregnancy, and among unmarried women once their babies were born, the proposed new study will enroll only unmarried women and will make special efforts to ensure that a large portion of the sample consists of young teenagers (under 17 years of age) and smokers.

In general, it is hypothesized that the home visitation program will promote the health and well-being of the participating women and children, and that the effectiveness of the program will be greater for women and children at higher risk for the particular problems under consideration. It is also hypothesized that the financial investment in prenatal and postpartum nurse home visitation will be recovered by avoiding subsequent costs associated with maternal and child dysfunctions.

**METHODOLOGY:** Approximately 1468 unwed, pregnant women bearing their first child will be recruited for the study through existing health centers in Memphis, Tennessee, during a 15-month period. The 1468 women will be divided approximately as follows:

1. There will be 1350 black women and 50 white women;
2. There will be 388 women under age 17, 416 women ages 17-18, and 664 women ages 18 years and older; and
3. There will be 968 women living below the poverty level, and 500 living above the poverty level.

A randomized clinical trial design will be employed. In this design, 24 age X race X smoking status X poverty subgroups within specific health centers will be randomly assigned to one of two prenatal treatment conditions (home visitation services during pregnancy vs. no home visitation) using Pocock and Simmons' procedures to ensure balanced and filled subclasses.

The 734 women assigned to the treatment condition (i.e., home visitation) will be provided intensive nurse home visitation services during pregnancy, in addition to transportation to regular prenatal care services. A randomly selected subset (N=250) from this group will be visited by a nurse after delivery, until the child's second birthday. This subset will also be provided sensory and developmental screening services at the 12th and 24th months of the child's life. Those who are followed only during pregnancy (N=484) will not be followed with services or with data collection procedures after their post-delivery hospital visit.

The 734 women assigned to the comparison group (no nurse home visitation services) will be provided transportation for regular prenatal care. Only a subset of the families will be followed after delivery of the child; a randomly selected subset (N=500) will receive periodic sensory and developmental screening services

for their children (at the children's 12th- and 24th-month anniversaries), including referral and followup through the routine health care system. The primary function of providing the transportation and screening services is to encourage participation in the program and to allow the project a means of meeting ethical responsibilities by helping to ensure more regular use of available routine health care services and by detecting serious health and developmental problems so that they can be treated. Those families who are followed only during pregnancy (N=234) will not be followed with either services or data collection procedures after delivery.

One of the attractions of the proposed intervention program is its versatility in addressing a wide range of factors that interfere with the optimal health and development of the young mothers and their children. In the home visits, the nurses will be engaged in three basic activities: Parent education regarding influences on fetal and infant development, the enhancement of parents' information support, and the linkage of parents with needed health and human services. The nurse will use a detailed protocol to guide the educational activities, but will adapt the specific content of their home visits to the individual needs of each family. Sensitivity to parental concerns and an emphasis on family strengths are considered cornerstones of the nurses' work with the families. Behavioral change on the part of the participating women will be facilitated by the nurses' provision of information, encouragement, and praise, and by modeling of appropriate behavior. Each of the visitation components is designed to work in an integrated, complementary way to improve pregnancy outcomes, early childrearing, and each woman's own life course development.

While the protocols guiding service delivery contain developmental and health promotion curriculums to structure the plan for each visit, the nurse will carry out her visits using a process approach. Each visit will begin with an assessment of the current condition of the mother and family and the mother's goals. The plan for the visit will then be modified and shaped by the assessment. Using a self-care perspective, with the mother as active participant, the nurse will help the mother develop current and future resources with which to meet or reduce the demands of pregnancy and early childrearing in the context of poverty. The content of the visit thus represents a continuous accommodation between mother and nurse. The nurse will use the current situation of the mother to help the mother develop her knowledge, self-esteem, sense of mastery, problem-solving abilities, and interpersonal skills.

**ANALYSIS:** For the outcome variables of interest, the plan is to test program vs. control differences, controlling for other important influences, and to examine whether program effects are stronger for, or limited to, certain sample subgroups. The intention is also to generalize to larger populations of clinics and nurses. Questions of this type are appropriately examined with the general linear model and its analogues, i.e., alternative exponential linear models for dependent variables that are dichotomous or in the form of counts. Decisions about the specific choice of method for hypothesis testing, and choice of method for estimating variance components, will be made at the time of analysis and will be specific to a given model. To obtain a complete understanding of the interrelationships among the study variables, certain analyses will be carried out specifying simultaneous equations.



**Mothering in Adolescence: Factors Related to Infant Security**

University of Washington  
Child Development and Mental Retardation Center  
Seattle, WA 98195  
(206) 543-9200

Research

MCJ-530535

4/1/86—3/31/89

Project Director(s):  
Susan J. Sieker, Ph.D.

This project proposes to study 300 adolescent mothers under 19 years of age from a semirural area in Washington State in order to understand the determinants of individual differences in attachment security within this high-risk population. Three hundred mothers will be recruited from Whatcom County, Washington, during their last trimester of pregnancy. Of these 300 families, 60 will be studied solely when their infants are at 12 and 13 months of age. The major purpose of the study is to examine a set of psychosocial and environmental factors presumed to influence the quality of mother-infant interaction and, thereby, the developing attachment relationship.

# TRAINING PROJECTS

**Adolescent Health Training**

University of Alabama at Birmingham  
Division of Adolescent Medicine  
Department of Pediatrics  
University Station  
Birmingham, AL 35294  
(205) 934-5262

**Training**

MCJ-000979

10/1/77—6/30/92

Project Director(s):

Ronald A. Feinstein, M.D.

**PROBLEM:** Many adolescent health problems are the result of the adolescent's propensity to attempt potentially destructive behavior, along with the increased stresses created by poverty, unemployment, illiteracy, and single parent families. Adolescent medicine has not been able to generate the support necessary to change the health care system in order to better address these problems.

**GOALS AND OBJECTIVES:** The goals of this program are to:

1. Provide comprehensive disciplinary training to health care professionals in adolescent health;
2. Maintain clinical programs that provide comprehensive, interdisciplinary health care for adolescents and their families for the purpose of training and also to serve as model programs for other health professionals;
3. Promote clinical research and the dissemination of information related to adolescent health care; and
4. Provide leadership and act as advocates for adolescents at the local, State, regional, and national levels.

**METHODOLOGY:** Individual plans for discipline-specific training include clinical practicum, education, research, and leadership training. The trainees are expected to provide service under close supervision by their preceptor. Protocols pertaining to case management and case staffing facilitate role expectations. Case staffings are interdisciplinary, and are attended by faculty who provide supervision after the trainees have completed their presentation of assessments and case management planning. At least once a month, case staffings are videotaped and evaluated the following day by faculty and trainees. All trainees periodically function as team leaders. During the second and third quarter, trainees accept assignments through the adolescent clinic. The primary training facility is the William A. Daniel, Jr., Clinic for Adolescents, located at the Children's Hospital of Alabama. The adolescent program is linked to other Title V agencies, community agencies, and sites within the medical center, such as the Renal Dialysis Unit.

**EVALUATION:** For each of the four major goals, there is an evaluation tool which covers attitudes and perceptions, knowledge, skills, program and faculty evaluation, and followup of trainees.

**Interdisciplinary Adolescent Health Training  
Project**

University of California at San Francisco  
Division of Adolescent Medicine  
400 Parnassus Avenue  
San Francisco, CA 94143  
(415) 476-2184

Training  
MCJ-000978  
10/1/87—9/30/92  
Project Director(s):  
Charles E. Irwin, Jr., M.D.

**PROBLEM:** In the next generation, there will be a 10 percent increase in the number of adolescents in the United States. More adolescents will be living in central urban areas. These children will more frequently be raised in single female-headed households and live below the poverty level than their adolescent cohorts during the past 20 years. These future adults will also continue to be at greater risk for victimization than any other group. Health problems include: (1) Substance abuse; (2) sexually transmitted diseases; (3) accidents or violence; (4) nutrition deficits; and (5) chronic illnesses. The preparation of health care professionals to meet these needs remains inadequate.

**GOALS AND OBJECTIVES:** Our overall goal is the training of leaders in interdisciplinary adolescent health care who will:

1. Continue to develop model comprehensive health care services for youth;
2. Create training programs for health professional students and community-based professionals;
3. Initiate innovative research; and
4. Formulate developmentally sound health policy that will create an environment which fosters successful transition from adolescence to productive adulthood.

**METHODOLOGY:** A plan is in place for each goal and objective in the areas of training, service, consultation, continuing education, technical assistance, research, fiscal support/resources, and timelines. The training methodology is divided into four sections:

1. Long-term trainees (by discipline and level of training);
2. Core interdisciplinary methods;
3. Core methods and discipline-specific methods; and
4. Short-term trainees and methodology.

**EVALUATION:** The evaluation plan measures the effectiveness and efficiency of the project in accomplishing its goals, objectives, and major purposes. The project is evaluated through external review by the university and through internal review by project faculty and trainees. Use of standardized or validated evaluation is emphasized. The process is coordinated by the administrative coordinator of the project.

**Graduate Education in Adolescent Health Care**

University of Maryland  
Walter P. Carter Center  
630 West Fayette Street  
Room 5-686  
Baltimore, MD 21201  
(301) 328-6495

Training  
MCJ-000980  
7/1/82—6/30/92  
Project Director(s):  
Felix P. Heald, M.D.

**PROBLEM:** When the physiology of puberty interacts with a disease state, special problems may arise which will have an impact on the health care of the adolescent. The health care provider must look beyond the medical needs of the young to all of the psychological pressures which may provoke actions such as suicide, homicide, motor vehicle accidents, and death by drowning. In order to address and resolve these special physical and psychological needs, professionals from a variety of disciplines must work together in the planning and management of adolescent health care.

**GOALS AND OBJECTIVES:** The goal of this project is to train medical, nursing, nutrition, social work, and psychology students to deliver comprehensive health care to adolescents and to develop skills which will allow them to assume leadership positions in the field of adolescent health care.

**METHODOLOGY:** The setting for the project is the Department of Pediatrics, School of Medicine, University of Maryland. The hospital is located in an inner-city environment where there are high incidences of poor nutrition, rape, teenage pregnancy, sexually transmitted diseases, and psychological problems. This setting allows the trainees to have a continuing opportunity to put the interdisciplinary approach to health care into practice.

The program includes a core curriculum of didactic material, professional development with an emphasis on role modeling, supervised training in direct patient care, and research training and implementation. The research component is carried out under the supervision of a faculty advisor, with the trainees undertaking the design and implementation of their own research endeavor or conducting a smaller project complementary to one of the major ongoing faculty projects. The interdisciplinary process is heavily emphasized and is a central part of the training program. The major health problems which have been identified as requiring interdisciplinary intervention in the Baltimore area are sexually transmitted diseases, teenage pregnancy, and trauma.

**EVALUATION:** Evaluation occurs at the program level by the chairman of the department and by the trainees. Evaluation is also conducted on the basis of trainee performance.

**Adolescent Health Training Program**

University of Minnesota  
Box 721  
UMHC  
Harvard Street at East River Road  
Minneapolis, MN 55455  
(612) 626-2820

Training  
MCJ-000985  
10/1/79—6/30/92  
Project Director(s):  
Robert W. Blum, M.D., M.P.H., Ph.D.

**PROBLEM:** As patterns of adolescent morbidity and mortality have shifted over the last 30 years from being predominantly disease or biologically based to being psychosocial in origin, the complexity of providing health care services and developing health promotion programs to this segment of our population has increased. No longer can a single discipline significantly impact the health status of the youth population. To be effective, interdisciplinary collaboration is fundamental and training in interdisciplinary adolescent health care is essential.

**GOALS AND OBJECTIVES:** The goal of the University of Minnesota's program is to improve the health status of American youth by developing leadership capabilities among those who will assume responsibility in the adolescent health care field, in both the academic community and in the public sector. The Adolescent Health Program seeks to recruit and train health care professionals from the fields of medicine, nursing, nutrition, psychology, and social work who wish to have an impact extending beyond individual patient care, and those whose work efforts will benefit the field of adolescent health care through the training of others, the development of service models, applied research, and other creative efforts in the field of adolescent health care.

**METHODOLOGY:** The University of Minnesota Adolescent Clinic, run by the Adolescent Health Program and located in the Pediatric Clinic, is a primary setting for all fellows to develop interdisciplinary clinical collaborative skills. Several community- and school-based clinics offer training experience.

The program offers three focus tracks:

1. Adolescent sexuality;
2. Chronic illness and disabilities of youth; and
3. Ethnocultural factors/minority health.

The 3 months of training consist of reinforcing basic skills, and the succeeding 9 months include didactic, clinical, and leadership components. The third phase is for those fellows pursuing a second year and is 12 months in duration. During the final phase, fellows will develop advanced and focused academic or program development skills in chronic illness, sexuality, or ethnocultural issues.

**EVALUATION:** Monitoring and evaluation include a review of program activities by faculty, staff, and fellows; conference and workshop evaluations; quarterly review of fellows' progress by a faculty mentor; and an evaluation by interdisciplinary objective.

**Interdisciplinary Training Program in Adolescent Health Care**

University of Cincinnati College of Medicine  
Children's Hospital Medical Center  
Division of Adolescent Medicine  
Elland and Bethesda Avenues  
Cincinnati, OH 45229  
(513) 559-4681

Training  
MCJ-000964  
10/1/77-6/30/92  
Project Director(s):  
Joseph L. Rauh, M.D.

**PROBLEM:** Widespread biological-psychosocial problems such as adolescent pregnancy, substance abuse, depression and suicide, poverty, and the restructuring of the American family have focused national attention on adolescent issues and needs. Linked to this is concern for the future availability and viability of effective adolescent health care delivery systems and model service programs.

**GOALS AND OBJECTIVES:** The three goals of the project are to:

1. Maintain an interdisciplinary faculty and training program in adolescent health care for the instruction of health science and health care trainees from six disciplines: Medicine, nursing, psychology, social work, nutrition, and special education;
2. Maintain an exemplary service base to serve as a national model for the delivery of adolescent health care as well as a clinical setting for multidisciplinary trainees; and
3. Over the 5 years of the grant, develop the Adolescent Center for Education, which will produce and distribute printed and audio/visual educational materials for professionals, patients, and adolescents at a regional and national level.

**METHODOLOGY:** This program is constructed around dual curriculums: First, an interdisciplinary core curriculum for professional trainees who desire knowledge of the health needs and problems of adolescents; and second, a discipline-specific curriculum supplied primarily by the trainee's immediate faculty supervisor and secondarily by parent university programs. Another facet of the program involves continuing education and training. The 1-year core training consists of:

1. Multidisciplinary aspects of adolescents;
2. Core seminars;
3. Interdisciplinary case conferences;
4. The Adolescent Center for Education;
5. Research methodology and projects;
6. Community experience; and
7. The Adolescent Developmental Disabilities Program.

The setting for the project is the Children's Hospital and University of Cincinnati Medical Center (CHMC). The major training site is the Adolescent Clinic in the Division of Adolescent Medicine. CHMC has an adolescent inpatient unit as well as emergency room and extensive ambulatory specialty clinics. Outside clinical facilities, such as Planned Parenthood, Job Corps, Children's Home, and others, will also be used.

**EVALUATION:** Evaluation of interdisciplinary training and discipline-specific training includes an evaluation by the trainees of case seminars and field trips; faculty observation of trainees at case conferences; monthly interdisciplinary meetings; a written final exam for participants enrolled for academic credit; and evaluation of individual trainee performance.

**Adolescent Health Training Project**

University of Washington  
Division of Adolescent Medicine  
Child Development and Mental Retardation Center  
(CDMRC)  
WJ-10  
Seattle, WA 98915  
(206) 545-1249

Training  
MCJ-000970  
10/1/77—6/30/92  
Project Director(s):  
James A. Farrow, M.D.

**PROBLEM:** There is a national shortage of health care professionals with specialized skills. This shortage is based, at least in part, on the recognition that the health care needs of adolescents are increasing.

**GOALS AND OBJECTIVES:** The first goal of the adolescent program at the University of Washington is to provide comprehensive health care and intervention services to adolescents and their families in the greater Seattle/King County area. A second goal is to provide local, regional, and national leadership in:

1. The identification of major adolescent health issues;
2. The development of effective intervention strategies to meet the specialized health needs of adolescents; and
3. The development of effective methods of training health care personnel in the skills required to meet those needs.

**METHODOLOGY:** This project is administered by the University of Washington, Division of Adolescent Medicine. The adolescent program is located primarily within the Child Development and Mental Retardation Center on the Health Sciences Campus of the University of Washington in Seattle. The program provides supervised training in 12 settings, including school-based clinics, Children's Hospital and Medical Center, and the Residential Treatment Center for Juvenile Offenders.

Specific methods for implementing the training goals include:

1. A comprehensive, multidisciplinary approach to service delivery;
2. Specialized clinics;
3. Patient screening and referral;
4. Diagnostic evaluation, intervention, followup, and referral;
5. Clinic accessibility;
6. Counseling services to youth, parents, and community health agencies;
7. Cooperative relationships with public and private agencies;
8. Public school consultation; and
9. A clinic for alienated youth to address sexual identity problems, parent-child conflicts, substance abuse, and the like.

**EVALUATION:** Plans for monitoring and evaluation include case review by special clinics, bimonthly chart reviews, written reports of consultative activities, evaluation of core faculty members, and feedback from trainees.



## APPENDIX

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## STATE ADOLESCENT HEALTH COORDINATORS

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