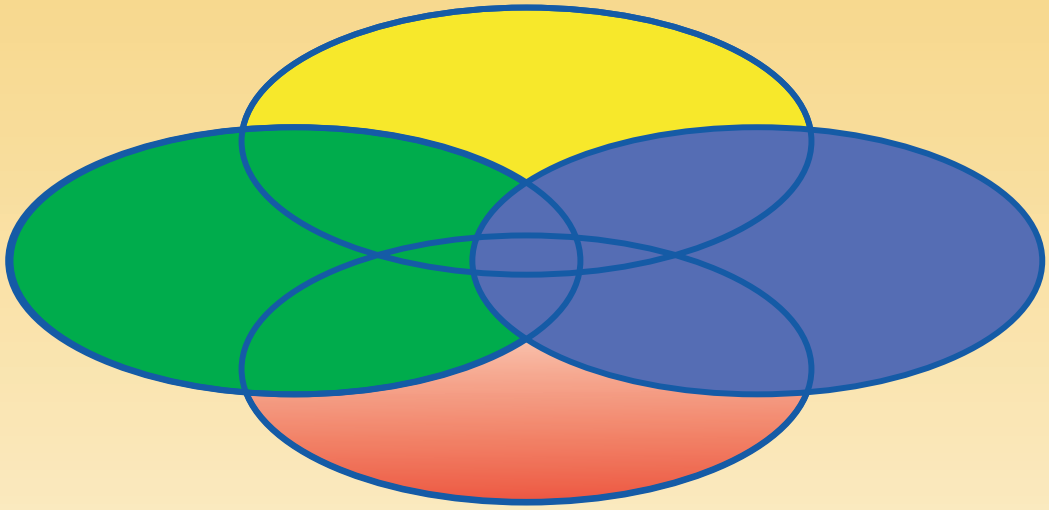
Report of the Blue Ribbon Task Force on Health Services Research at the National Institute on Drug Abuse



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January 30, 2004

Nora D. Volkow, M.D.
Director, National Institute on Drug Abuse
6001 Executive Boulevard
Bethesda, MD 20892

Dear Dr. Volkow:

We are pleased to present you with the report and recommendations of the Blue Ribbon Task Force on the National Institute on Drug Abuse (NIDA) Health Services Research. The Task Force was established at the request of Dr. Elias A. Zerhouni, Director of the National Institutes of Health (NIH) and was created at your request during the National Advisory Council on Drug Abuse meeting on May 21, 2003. The report and recommendations reflect the unanimous view of the Task Force members, and we take full responsibility for the contents.

The Task Force unanimously agreed that health services research at NIDA has accomplished a great deal in understanding access, utilization, and outcomes, as well as the organizational and financial factors that influence them. Our work has taken place at a critical and opportune time of increased NIH emphasis on developing evidence-based practices. We believe we have identified the issues that will clarify the role of health services research for the Institute and best position NIDA, particularly through its Division of Epidemiology, Services and Prevention Research, to address the future needs of the field.

The Task Force members want to thank the external reviewers of the Report. We acknowledge Denise Pintello, Ph.D., M.S.W., and Sarah Michaud for their great help in organizing our work and editing the Report. We believe that prevention and treatment services research are key components of NIDA's mission, and we thank you for the opportunity to participate in this work.

We would be pleased to meet with you and/or your staff to discuss our recommendations or answer any remaining questions.

Sincerely,

Constance Weisner

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BLUE RIBBON TASK FORCE ON NIDA HEALTH SERVICES RESEARCH

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I. CHARGE TO THE BLUE RIBBON TASK FORCE

In May 2003, the National Institute on Drug Abuse (NIDA) convened the Health Services Research Blue Ribbon Task Force to review the portfolio of health services research; and to advise the Institute on strategies for increasing its relevance and facilitating the utilization of research-based prevention and treatment interventions into practice and policies.

The charge to the Task Force was to produce a written report based on the following:

- A background presentation of NIDA's health services research program by the Division of Epidemiology, Services and Prevention Research (DESPR).
- Identification of strengths and gaps in NIDA's health services research program.
- Development of a set of recommendations for NIDA's health services research program with an emphasis on:
    1. Diffusion of research findings into practice
    2. Utilization of NIDA's Clinical Trials Network (CTN) as a platform for health services research
    3. The organization and management of health services research and the interactions among NIDA's Divisions and Centers with other Federal Agencies to ensure bidirectional approaches to conducting research based on field-identified needs and priorities.

To address these goals, the Task Force has written a document that includes a definition of health services research and a series of recommendations. The definition of health services research is designed to describe the Task Force's conceptual framework and to serve as a standard for communicating the essence of services research throughout NIDA. The recommendations are expected to provide guidance to DESPR and to NIDA as the health services research program unfolds over the next few years. The goal is to encourage development of bold and innovative research that will provide information to guide drug abuse health services.

II. DEFINING HEALTH SERVICES RESEARCH AND CRITICAL FIRST STEPS

DEFINING HEALTH SERVICES RESEARCH

An urgent task before NIDA is to generate information that, if properly used, will better enable people at risk for—or with drug abuse and dependence problems—to receive effective services. Through research we continue to develop and refine an array of safe and efficacious interventions, yet these interventions have not led to widespread improvements in prevention and treatment services in nonresearch settings. In addition, investigator-initiated research rarely examines or refines interventions that clinicians have found relevant and that are widely practiced. To address these problems, research is now needed to examine delivery systems and policies that facilitate provision of effective care in a range of real world settings. Findings from this research should have practical implications for the range of individuals and groups affected by or at risk for substance abuse and dependence. Examples include the following:

- **Patients and their families** have direct questions. What prevention and treatment interventions will help? How can we be sure that a specific intervention is both appropriate and of high quality? How can we afford to pay for the services?
- **Clinicians** have different, but related, questions. What is the best intervention for this patient or family or population? What should be recommended next if the first intervention is unsuccessful? How can interventions proven efficacious in clinical trials be integrated into practice? What clinical and financial barriers impede different approaches to drug abuse prevention and treatment?
- **Healthcare administrators** must address questions at a different level. What types and levels of care are appropriate for specific patient groups? What is the best way to organize treatment? What financial and human resources are needed to provide such care, and how should resources be delivered and integrated? For example, criminal justice settings and educational settings are frequently involved in the delivery of drug abuse services but there are important contextual differences that must be considered.
- **Policymakers, purchasers, and insurers** make important decisions regarding access to and coverage for patient care. For them, the questions are again different but no less urgent. What do effective interventions cost? Which services are cost effective? What will it cost, in terms of protracted disability and related costs, not to pay for prevention or treatment? What delivery systems and financial incentives encourage adoption of evidence-based approaches and facilitate optimal cost-effectiveness of care? How do purchasers receive value for their investment?

This brief review of the practical questions facing the multiple consumers of health services research sets the conceptual framework for how we have organized and structured our review and recommendations for services research at NIDA. The close organizational connection that existed between services and research during the formative years of the Alcohol, Drug Abuse and Mental Health Services Administration provided for the development of a unique synergy that has substantially influenced the development of health services research in the substance abuse field. Over the past 30 years, there has also been a shift from demonstrating the general effectiveness of prevention and treatment to a more detailed understanding of how to best organize the systems to provide prevention and treatment. Accounting for this unique history, an important next step for health services research at NIDA is the development of a shared, operational definition to guide the research.

Thus, an early recommendation of the Task Force to the DESPR Director was to develop and promote an operational definition of health services research that would:

- Capture and remain consistent with traditional health services areas of focus
- Capture the specific, unique elements of health services research that pertain to the study of drug abuse
- Put NIDA health services research into the mainstream of health services research.
- Promote the larger goal of broadening the services research portfolio.
- Promote a NIDA-wide acceptance and understanding of the role of DESPR relative to the broader mission of NIDA.

Based on these criteria and a number of published definitions of health services research, (Lamb et al., 1998; Aday et al., 1974; AcademyHealth, 2003; Agency for Healthcare Research and Quality [AHRQ], 2002), the Blue Ribbon Task Force on Health Services Research agrees on the following:

> Health services research is a multidisciplinary field of inquiry, both basic and applied, that examines how social factors, financing systems, organizational structures and processes, health technologies, and personal beliefs and behaviors affect access to and utilization of healthcare, the quality and cost of healthcare, and in the end our health and well-being. Ultimately, the goals of health services research are to identify the most effective ways to organize, manage, finance, and deliver high-quality care.

This NIDA definition is quite consonant with definitions used in the broader field of health care. At the same time, there are unique policy, financing, and service delivery aspects of the drug abuse field that demand special health services expertise—and in turn a special emphasis within NIDA:

- Drug abuse treatment services are often delivered outside healthcare settings by personnel with a wide range of educational backgrounds. These settings include nonmedical freestanding addiction programs, criminal justice institutions, and human services agencies.

- Prevention services are often delivered outside healthcare settings by personnel with a wide range of educational backgrounds. These settings include schools, community-based mental health organizations, youth service and recreational agencies, police departments, and voluntary organizations such as parent-teacher-student associations, membership organizations, and antidrug coalitions.

- A large proportion of those receiving drug abuse treatments are pressured into treatment and do not seek treatment voluntarily.

- Current drug abuse treatment typically includes a combination of therapies and educational and social services, but only rarely medications.

- Many interventions are delivered as part of full-scale programs rather than as stand-alone treatments.

- Government payments overall account for about 62 percent of spending for substance abuse services. This represents a larger role for Government than in other healthcare services. In addition, unlike most healthcare services, Federal block grants (primarily from Substance Abuse and Mental Health Services Administration [SAMHSA] and matched by State governments) fund a large portion of public-sector drug abuse prevention and treatment services in the United States.

These unique aspects of drug abuse health services exert significant influence on the nature of drug abuse treatment and prevention and can determine whether and how empirically derived interventions are adopted

in real-world settings. These special aspects of drug abuse policy, organization, financing, and regulation require a health services research approach with particular foci. The special context in which drug abuse prevention and treatment services are delivered has been a significant part of the background for the recommendations of the Task Force.

Our Report begins with four critical first steps, along with recommended responsibilities and performance indicators that the Task Force believes will be critical for achieving the remaining recommendations.

CRITICAL FIRST STEPS: PRIORITIES AND INDICATORS OF CHANGE

NIDA is facing demands from payors, policymakers, and the public at large for "evidence-based practices," practical and cost-effective interventions, therapies and medications that will reduce risks for initiating drug use among those not yet using, reduce substance use and its negative consequences among those who are abusing or dependent, and reduce the likelihood of relapse for those who are recovering.

A review of past performance suggests that scientific discovery, even coupled with dissemination, will not be enough to effect improved public perceptions, professional practices, or political policies in our field. The problems of "technology transfer" are not unique to the field of drug abuse. Indeed, these are serious problems throughout the health field as indicated by the recent reorganization of the National Institutes of Health (NIH) and the corresponding "Roadmap" to bring scientific discovery to broad, practical application. However, the prevention and treatment of drug abuse has several levels of complexity that are not found in the rest of NIH. Prevention and treatment of drug abuse involve a range of professionals outside the health and science fields—including teachers, police, judges, and human services caseworkers. Almost all treatments for drug abuse are delivered in "specialty" treatment programs—only a minority of which are affiliated with mainstream healthcare organizations. Substance abuse is rarely diagnosed, treated, or monitored by primary care physicians. Medications, laboratory testing, and general medical procedures are part of few contemporary treatment programs. Instead, contemporary drug abuse treatment is predominantly education and group counseling, provided almost exclusively by substance abuse counselors. Prevention services also are delivered by counselors and a wide range of providers including community officials, teachers, police, and clergy. Few of these contemporary practices have been studied, and there has not been evidence-based guidance for the range of services needed in the community. Instead, these services are based on tradition influenced by financing, policies, and regulations by agencies at Federal, State, local, and private-sector levels. Even when evidence-based practices are available, the field has often been slow to adopt them. Finally, unlike most other health conditions, substance abuse prevention and treatment is significantly affected by policies within national and State departments of education, justice, transportation, and human services.

While the need for improved health services research is generic throughout NIH, there are special needs and challenges within the drug abuse field. If we are to improve existing practices within our field, there is critical need for research on the special organizational, workforce, financing, and policy factors that are the major forces controlling addiction prevention and treatment services. It is clear from our review that these are complex factors that require specific types of expertise. In this regard, it was heartening to the Task Force to find that the new NIH and NIDA leadership appears to have a unified sense of the importance of services research in the overall technology transfer mission.

With this as background, the Task Force has presented recommendations regarding NIDA's role with other NIH Institutes, federal agencies, organizations, and the larger community of researchers, providers, and policymakers. These are particularly important and challenging times for drug abuse prevention and treatment and for NIDA's efforts to bring more effective services to the public.

Goal I. NIDA management at all levels must develop a clear understanding of and appreciation for what drug abuse services research is and how it can serve NIDA's broader mission of contributing to the health of the public.

The Task Force heard definitions of services research as "effectiveness research in real-world settings" and as research on "dissemination of scientific findings." These partially correct but oversimplified ideas must be replaced with a clear appreciation of the scope and sophistication of research involved in access, organization, financing, training, and outcomes. The Task Force believes that without this fundamental and shared understanding, it will not be possible to pursue the remaining agenda.

Responsibilities: *The primary responsibility for conveying the basic understanding of and appreciation for services research lies with the Director of DESPR and DESPR staff.* The important steps to accomplish the broad understanding include the following:

- Adopt the operational definition of services research provided in this Report as the NIDA standard definition. Present this definition as part of published reports within and outside of NIDA. Make the definition part of the NIDA Web site and part of all application materials (i.e., program announcements [PAs] and requests for applications [RFAs]). Present this definition to relevant research review groups and as a part of published reports.
- Develop a clear, illustrative presentation of prevention and treatment services research for communication by the NIDA Director and Institute leadership. The presentation should illustrate examples of <u>all types of services research covered within the definition</u>. Many elements of the presentation should be appropriate for basic research, applied research, provider, policymaker, and general public audiences. Several members of NIDA top management should show facility with presenting and discussing important elements of this presentation.
- The elements of the standard definition (e.g., organizational factors, financing and cost factors, access issues, and outcomes) should be important areas of research interest within DESPR; its portfolio should roughly reflect these interests, and the DESPR staff should be able to describe the important issues and research questions associated with each of the elements.

Performance Indicators: Evidence that this overall goal is being achieved should be available and evident at all levels. In general, the adoption of the standard definition should be the beginning of a broader understanding of the appropriate boundaries and areas of expertise within the services research field—and in turn—the basis for informed collaboration. The more prominent indicators will be as follows:

- The NIDA Director has included the standard definition of health services research in major presentations.
- Leadership within NIDA's Divisions, Centers, and Branches has incorporated elements of the services research definition in their presentations and in their planning for the scope of the research activities within their components. These examples will be available through the Web.
- DESPR staff consistently update illustrative prevention and treatment examples.

Goal II. NIDA/DESPR should increase its portfolio of research on prevention and treatment systems' organizational, management, financing, and other policies and practices.

There is limited information on how prevention and treatment programs are implemented in practice, the necessary conditions for adequate implementation, and the factors that influence their implementation and effectiveness. Thus, innovative research is needed to determine the necessary structure, functions, and personnel qualifications that permit adoption, adaptation, and effective delivery of policies, programs, and practices that influence substance use and abuse. Research is needed to understand how service systems and setting characteristics influence prevention and treatment program implementation and, in turn, program effects. This includes developing the methodology and infrastructure for conducting health services research aimed at improving performance in practice.

Responsibilities: *NIDA should fund studies of the impact of prevention and treatment system characteristics on substance use and abuse.* This will include descriptive studies of existing prevention and treatment systems, studies of the influence of prevention and treatment system characteristics on substance use, and studies of the influence of evidence-based practice on prevention and treatment systems and substance use outcomes.

- NIDA should encourage studies of how changes in environmental contexts and systems over time influence effectiveness.
- NIDA should encourage studies of how adaptations to evidence-based prevention and treatment practices influence effectiveness.
- Service research studies should determine the relationship of system characteristics to the choice of practices, the method/setting of delivery of those practices, and the quality of delivery of those practices.
- NIDA should fund studies on the effects of different methods of costing and financing drug abuse prevention and treatment services.
- NIDA should encourage timely prevention and treatment policy research.
- NIDA should provide technical assistance and funding to develop the methodology and infrastructure for conducting such research.

Performance Indicators: Evidence for increases in organizational, management, financing, and policy and practices research include the following:

- Increase in the number of funded studies that investigate the effect of prevention and treatment system characteristics on substance use and abuse.
- Increase in the number of studies that investigate the effects of organization and financing of prevention and treatment services.
- Increase in the number of funded studies that investigate treatment policy research.
- Workshops, publications, and grants aimed at improving the methodology and infrastructure for conducting such research.

Goal III. There is a need for NIDA leadership and collaboration in the development of standards for evidence-based practice.

There should be an agreement within the field on the criteria that must be satisfied in order to use the term "evidence-based practice." Currently, there are no conventions or generally accepted standards for this term. For example, many of the so-called evidence-based interventions have not been tested within community settings and with the broad spectrum of patients that are found in real-world settings. Similarly, within the provider community there is a sense that newer interventions may not fit the existing practices, may not be feasible, or are not better than what is currently available. Similarly, within the payor community, there is the sense that science has failed to examine issues such as financing (both public and private payors), organized care settings, regulatory environments, training and workforce issues, sustainability, and even patient acceptance in the development of evidence-based interventions.

It will be important for NIDA to take leadership in setting the standards for evidence-based practice. This should include developing an approach to rating the scientific strength of available evidence. It will be essential for NIDA to collaborate with key stakeholders including both Federal and non-Federal groups to develop agreement and shared acceptance of these standards in the policy and provider communities. These standards should be designed so that they can be fairly and reasonably applied to the testing and refinement of both new and existing interventions. Without broad acceptance across the scientific, provider, policymaker, and payor communities, these terms will lose meaning and the public will lose the hope of better services through scientific examination.

Responsibilities: The responsibility for developing a scientifically sound set of guidelines for an operational definition of "evidence-based practice" rests with the NIDA Director in collaboration with Division and Center Directors and staff. In turn, there will be a need for NIDA to work collaboratively with the leadership of the Center for Substance Abuse and Prevention (CSAP), the Center for Substance Abuse Treatment (CSAT), and perhaps the Office of National Drug Control Policy (ONDCP) to initiate broader acceptance through the provider and policy communities. Among the important steps to accomplish this goal are the following:

- NIDA should encourage research to establish the effectiveness and costs of at least three widely practiced—but relatively unstudied—services that are currently broadly practiced within the community. Reasonable candidates might be group counseling, program-based interventions (e.g., intensive outpatient treatment, American Society of Addiction Medicine [ASAM] placement criteria, and continuing care), community coalitions, and recovery communities.
- NIDA should include widely accepted community standard practices as control conditions in tests of new interventions, therapies, and services.
- NIDA should study the impact of efforts to tailor evidence-based practices to better fit community norms and funding. The key goal is to determine the degree to which adaptations impact effectiveness of evidence-based practices. Efforts to find the organizational, personnel, training and technical assistance, and funding "minimal requirements" needed to effectively deliver and sustain these evidence-based practices will be particularly important.

Performance Indicators: Indicators of shared agreement about what does and does not constitute "evidence-based" prevention and treatment interventions will include the following:

- Citation, utilization, and endorsement by outside agencies of these standards of evidence.
- Division of Treatment Research and Development (DTRD) citation of these standards of evidence in their staged process for behavioral therapies development.
- Increase in the number of funded studies that investigate widely practiced prevention and treatment interventions.
- Increase in the number of funded studies that investigate the disseminability and sustainability of evidence-based practices replicated in real-world conditions.

Goal IV: Given understanding of the complexity of the issues affecting drug abuse prevention and treatment as well as an understanding of the appropriate role of services research, it is imperative for NIDA to collaborate:

- *Across NIDA Divisions, Centers, and Branches to extend and enhance information return from existing resources and to develop a sense of shared mission among the various components related to health services research. The central location of health services research belongs within DESPR, where the full complement of expertise in each of the areas of services research (access, utilization, outcome, organization, and cost) exists, and the DESPR Director should lead the group that integrates health services research within the other NIDA Divisions and Centers.*
- *With other NIH Institutes to address fundamental research questions that affect all of "behavioral health."*
- *With SAMHSA (and other Federal Agencies) to address organizational, financing, policy, regulation, and reimbursement issues that affect contemporary prevention and treatment of drug abuse.*

While there has been an increased interest in interorganizational collaboration, there appears to be few institutional or organizational mechanisms available to foster the kind of shared funding and shared educational and promotional opportunities that are so needed. While the intragovernmental collaborations

are likely to be among the most important activities for the future of services research and for NIDA's broader mission, specific suggestions for these arrangements are beyond the purview of the Task Force. Thus, in the text that follows, we restrict our suggestions to the collaborations that are necessary to improve the results and the efficiency of the types of research that will ultimately require services research collaboration.

Responsibilities: The responsibility for developing a culture of collaboration within NIDA will of course come from the Director. In turn, the first goal of our prioritized set is the development of a clear definition for and broader sense of services research as a field. With this as background, it will fall to the Director and staff of the DESPR to seek ways in which to collaborate with all NIDA components, but particularly the Center of Clinical Trials Network (CCTN), the Center on AIDS and other Medical Consequences of Drug Abuse (CAMCODA), and DTRD.

Under the leadership of DESPR, the important steps to accomplish efficient and productive collaboration at this level include the following:

- Develop formalized mechanisms by which important and timely services research issues such as the institution of managed care practices, novel financing approaches to accessing drug prevention and treatment, and drug courts, are recognized within DESPR and their importance communicated to related NIDA Divisions and Centers.
- Integrate consideration of services research issues such as cost, financing, portability, and training burden into the early development and testing of medications, therapies, and interventions by CCTN, CAMCODA and DTRD.
- Integrate consideration of services research issues such as organizational function, reimbursement, regulatory and policy constraints, and diffusion of innovation into the later stages of medication, therapy, and intervention testing by CCTN, CAMCODA and DTRD.
- Integrate consideration of organizational factors, financing, policy, and other traditional services research consideration into services research projects that now focus only upon prevention or treatment outcomes.
- NIDA should engage in activities that (1) promote integration of drug abuse services research into the broader field of health services research and (2) aid in creating opportunities for NIDA services researchers to develop productive collaborations with other substance abuse researchers.

Performance Indicators: Evidence for greater collaboration should again be obvious in many areas within NIDA, but some of the more important signs that collaboration has improved include the following:

- Co-sponsored RFAs, PAs, and meetings between DESPR and CCTN, CAMCODA, and DTRD.
- Inclusion of expertise from the fields of organizational science, financing, diffusion of innovation and other services research disciplines in individual CTN, CAMCODA, and DTRD projects.
- Development and implementation of services projects jointly funded by NIDA and other NIH Institutes and/or SAMHSA.
- Sponsorship of sessions, workshops, and other activities at major health services research meetings.
- Sponsorship of conferences that link clinical and services researchers interested in drug abuse.

To accomplish these major health services goals and to begin work on the other important recommendations, the Task Force unanimously agreed that it will be critical to continue the practice of assigning at least 15 percent of NIDA's research allotment to health services research as defined in this document.

As a general performance measure, NIDA should require a yearly update to its National Advisory Council on Drug Abuse from the Director of DESPR on progress toward achieving the goals outlined in this Report. These presentations are designed to assure that this process remains a vital enterprise.

We believe that the time is ripe for these enhancements to the health services research program at NIDA as part of the new NIH Roadmap Initiatives. We have a unique opportunity to capitalize on the efforts to reengineer the clinical research enterprise, and to build research teams of the future. Health services research should play a prominent role as part of the Roadmap Initiatives. In particular, the interdisciplinary and public-private partnership goals of the Roadmap are areas where NIDA can seize the momentum and provide leadership. The changes and challenges envisioned in this Report will allow NIDA to fulfill its own mission and serve an important role throughout the evolving healthcare research system.

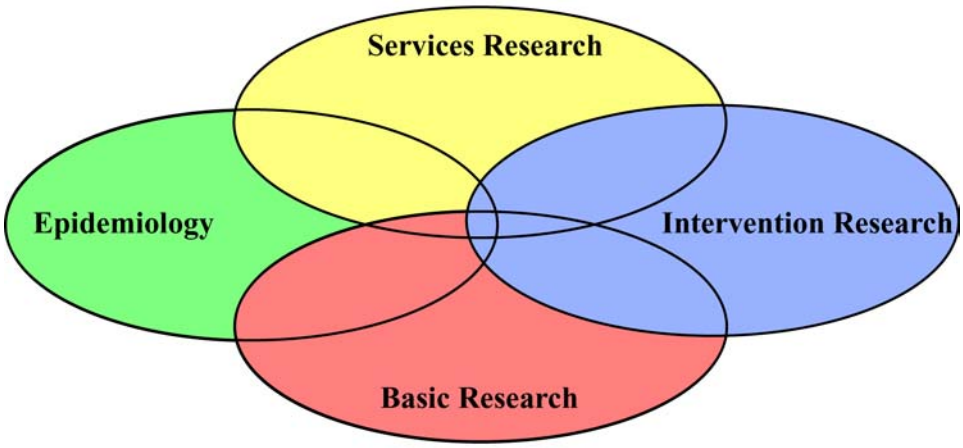
III. HEALTH SERVICES RESEARCH AT THE NATIONAL INSTITUTE ON DRUG ABUSE: HISTORY AND FUTURE DIRECTIONS

The health services research program at NIDA involves interdisciplinary study of the delivery and outcomes of drug abuse treatment, prevention, and related health services. To this end, NIDA has devoted 15 percent of its research budget to high quality research in the general domains of organization, management, and financing of drug abuse treatment and prevention services, and on the effects of these domains on the quality, cost, access to, effectiveness, and outcomes of care for drug abuse and addictive disorders. NIDA also has awarded grants for the development of innovative research methods including new instrumentation, data collection tools, and analytic procedures. Specific health services research topics within these domains include efforts to reduce health disparities among minority populations, studies of matching appropriate interventions to individual needs, studies of prevention and treatment process, and efforts to link drug abuse prevention or treatment to other health and social services.

Despite the many research advances in drug abuse service delivery, many science-based interventions have not been integrated into everyday practice. Thus, an increasingly important part of NIDA's health services research program has been identifying those research- and community-derived practices that are practical and cost-effective and blending these two types of evidence-based interventions into contemporary practice. In particular, NIDA has encouraged studies examining the transfer of knowledge, organizational adaptation, and the economics of new interventions and business practices.

As can be seen from the examples provided, drug abuse health services research overlaps with other types of drug abuse research. Figure 1 provides a visual representation of this overlap in research domains. These overlaps create opportunities for multidisciplinary and inter-Division collaboration within NIDA but can cause difficulties in the management and organization of research.

Figure 1: Overlap of Major Research Domains



The primary mechanisms for developing health services research within NIH and NIDA are and should be investigator-initiated projects usually in response to PAs and RFAs. PAs announce increased priority and/or emphasis of a topic. Applications directed to a PA are reviewed by standing review committees, and awards are made within the general program of funding. RFAs identify a more narrowly defined area for

which there are specially set-aside funds for awarding grants and often a specially constituted review committee.

A standing PA on health services research (PA-94-07) has existed since 1994 as the major vehicle to encourage submission of grant applications for health services research of interest to NIDA. Recently revised in 2001, the PA invites studies designed to "benefit the public health by improving the quality, efficiency, and effectiveness of drug abuse prevention and treatment through a better understanding of program and system structures, processes, and outcomes."

In addition, NIDA periodically issues other PAs and RFAs to alert the research community to NIDA's priorities in various health services-related studies. Recent examples are as follows:

- Drug Abuse Health Services Research (PA-01-097)
- Drug Abuse Prevention Intervention Research (PA-00-002) to specify interest in services research
- Economics of Drug Abuse Treatment and Prevention Services (PA-01-013)
- Economic Evaluation of Drug Abuse Treatment and Prevention Services for HIV/AIDS (PA-02-164)
- Services and Intervention Research With Homeless Persons Having Alcohol, Drug Abuse, or Mental Illness (PA-02-150)
- Services Research in the National Drug Abuse CTN (PA-03-011).

Critical Review and Suggestions of the Task Force—in Four Key Areas

The remainder of the Report is organized around four key areas that emerged as important considerations in the course of the Task Force's review process. These are:

1. Prevention Services Research
2. Treatment Services Research
3. Leading and Managing Health Services Research at NIDA
4. Services Research Collaborations Within the NIH and With External Partners.

These sections were logical starting points for a review as each of the sections is important for the overall function of the Institute, and each section has a particular historical and contemporary context that sets the stage for specific recommendations that follow. Within each of these sections, we first provide a brief overview and summary of key activities over the past five years as well as existing RFA and research announcements.

Following that, there is a critical discussion of historical problems and potential opportunities for enhancing drug abuse health services research. This critique and context is followed by general suggestions regarding approach and policy for each area; these are followed by more specific suggestions for particular ideas, issues, and actions pertinent to the area. **General findings and suggestions of the Task Force are highlighted in italics throughout the Report; specific recommendations are numbered and in *bold italics*.**

1. PREVENTION SERVICES RESEARCH

For the past five years, NIDA's substance abuse prevention research focus has evolved from a primary concentration on examining the efficacy and effectiveness of theory-based prevention approaches to one that incorporates prevention services research questions into the variety of types of studies supported by the Prevention Research Branch of DESPR. A central concern has been the availability of resources to conduct the types of research necessary to provide for sustainability of proven prevention practices, given the lack of prevention specific infrastructures and the lack of training and credentialing for prevention practitioners. By necessity, these constraints make conducting prevention research particularly complicated. During this period, the Branch has stimulated research on the following:

1. Underlying content and delivery factors that account for prevention program/strategy effectiveness.
2. Integration of critical services research questions (e.g., organization, management, and financing) into prevention studies.
3. Creation of, or access to, existing service systems appropriate for prevention services research and practice.
4. Development of prevention research methodologies suitable to the complexity of issues involved in addressing prevention services research questions.

NIDA supports the full range of prevention science from basic prevention science to efficacy studies, effectiveness studies, and systems trials. Prevention services research at NIDA is still relatively new, and the portfolio currently consists of 125 grants funded through the Prevention Research Branch of DESPR in six topical categories. The distribution of grants into those categories is shown in Table 1, followed by suggested areas for additional study within each category.

Table 1: Distribution of Funded Prevention Services Grants in Key Categories*

Availability Access	Effectiveness Outcomes	Organization Management	Economics Financing	Methodology	Technology Transfer
8	42	22	7	8	36

*Grants are coded in more than one category if they applied to both.

Availability, Access, and Utilization: Of the eight currently funded studies on these topics, seven were funded in 2002 or 2003. The remaining study is a series of independent replication effectiveness trials that include questions on recruitment and retention strategies into the study. DESPR staff, with the Task Force concurring, has identified the following areas as gaps:

- Identifying which drug abuse prevention interventions are available in communities, who is using them, why they were selected, and how communities obtained access to those interventions.
- Identifying barriers to the provision of scientifically validated preventive interventions.
- Developing and testing better methods for integrating prevention programming and messages into existing public health and social service systems.

Effectiveness and Outcomes: This includes research examining the effectiveness of drug abuse prevention interventions, including the influence of proximal moderators and mediators that may affect subsequent drug abuse and associated public health problems. For many years, the emphasis of these studies was on examining whether the intervention reduced initiation and progression of drug abuse. With these efforts showing some positive effects, more nuanced questions have evolved relating to underlying processes and mechanisms associated with proximal and distal outcomes.

Though relatively strong within the prevention portfolio, DESPR staff, in concurrence with Task Force members, identified several areas that require additional focus including the following:

- The effects of workplace sanctions (not legal sanctions) and other policies aimed at deterrence.
- Development and testing of brief interventions for nontraditional prevention settings (e.g., primary care and faith-based interventions).
- Sub-analyses to understand the contribution of gender, racial and ethnic characteristics—and of intervention compliance—on intervention effectiveness.
- Research on intraprogram features such as content sequencing, practitioner training, and practitioner-client fit as they relate to effectiveness.
- Studies of organizational structures and characteristics of agencies and community organizations that have carried out successful prevention programs. For example, community coalitions are viewed as an effective means for reducing substance abuse in communities. However, there are few studies on this topic.
- Establishing standardized management training and management practices to improve adherence to practice guidelines and fidelity of implementation.
- Studies of the influence of services organization and funding on the quality of service delivery and outcomes.

These issues are especially important and complex, given the multidimensional nature and rapidly changing environment of prevention services organization and funding.

Organization and Management: Research examining service delivery systems that provide drug abuse prevention services with attention to change over time in organizational structure, operations, and management defines this area. Until recently, schools and school-based interventions were virtually the only venue for primary prevention programs. However, many schools are reluctant to commit to participation in prevention research and to implementing multisession scientifically validated interventions. Several approaches have overcome these barriers, including integration of prevention programming into school curricula (e.g., infusion), using school-related activities for the implementation of prevention interventions (e.g., after-school and recreational programming). Other research has examined prevention strategies in other service delivery systems outside the schools (e.g., Cooperative Extension Service; 4-H; Women, Infants, and Children; and in new, specially designed prevention systems (e.g., Communities That Care).

Economics and Financing: This includes research on the costs, cost-effectiveness, cost-benefits, cost-utility, and/or financing of drug abuse prevention services. Only one of the seven economics studies in the current portfolio is actually fully dedicated to economics issues. DESPR staff and Task Force members considered the following gaps in knowledge:

- Understanding financial flows, economic incentives, and the level of financing for prevention.
- Determining the true implementation costs of those programs that have shown positive outcomes and extending that research to determine the cost-benefit, cost-effectiveness, and cost-utility of those prevention interventions with emphasis on long-term outcomes—particularly for high-risk individuals.
- Studies on financial decision-making about prevention practice: how funds are allocated, who makes the decisions, and how decisions influence program quality and sustainability.

Methodology: Methodology studies at DESPR are specific to prevention in general, but most have not taken on the larger issue of measurement, design, and methods specific to large-scale, multiprogram, multisite investigations where there is most need. DESPR staff and the Task Force identified the following areas in need of development:

- Development of instruments and approaches appropriate for use in complex multisite systems trials (e.g., multilayer hierarchical linear modeling and methods to convert similar measures into a common metric to permit group comparisons).
- Development and testing of methods for estimating the long-term cost-benefits of prevention interventions.
- Developing and testing community indicators of drug problems so that a community can have an indication of improvement over time following the adoption of prevention interventions.
- Methodologies to permit stronger levels of inference regarding causality or mediation in nonexperimental designs.
- Development of early indicators of unintended, harmful effects of experimental prevention interventions.

Dissemination and Technology Transfer: Research examining the processes by which community agencies learn about, train, adopt, adapt, implement, and sustain science-based drug abuse prevention strategies. These issues are major concerns for prevention at this time. A major problem with technology transfer in the prevention area is the low level of uptake of scientifically validated practices by schools and communities.

Critique and Suggestions Regarding Prevention Services Research

A review of the prevention services research portfolio suggests that the three strongest areas are Effectiveness/Outcome, Organization/Management, and Technology Transfer. While the strength of the portfolio has increased substantially over the past five years, even those grants that have shown positive effects in many cases represent first attempts. Many other grants are only in their first year of operation.

The three categories with the lowest numbers of grants are Availability and Access, Economics and Financing, and Methodology. In these areas, it has been difficult to develop successful RO1 applications and some nontraditional sources have been used to expand the portfolio, such as Small Business Innovation Research (SBIR) grants. Therefore, while progress has proceeded over the past several years, the portfolio will require substantial additional development.

Recommendation 1. NIDA should encourage randomized, controlled prevention trials when feasible because of their ability to produce strong evidence*. Randomized trials are not always the best approach for a particular research question. However, the Task Force felt that randomized trials have been underutilized in services research and this gap needs to be addressed.*

> *a. As randomized prevention efficacy and effectiveness trials are planned, services research elements, such as organization, financing, and dissemination, should be incorporated early in their development.*

DESPR has recently reevaluated its substantial focus on school-based prevention strategies in light of the increasing difficulty involved in performing these types of studies, the increasing resistance on the part of schools to adopting drug abuse prevention strategies, and the need for additional venues from which to deliver coordinated prevention interventions. For example, while a major prevention effort within ONDCP and within the Partnership for a Drug Free America been focused on parental prevention training, very little of the prevention services research portfolio has been devoted to parental prevention.

Recommendation 2. The Task Force recommends encouraging studies in nonacademic settings and with populations that may be at greater risk for onset of drug abuse. *For example, public housing*

developments, police athletic leagues, and parents are some of the more obvious venues and populations for targeted prevention strategies.

> *a. Prevention studies should include interventions for youth who have not begun using drugs and brief interventions for those using, but not dependent, on drugs.*
>
> *b. Studies should examine the comparative efficacy of culturally specific, gender-specific, and age-specific programs versus generic prevention programs.*

Recommendation 3. To provide a framework for conducting prevention services research in a wide range of settings and populations, DESPR should encourage the development of epidemiological monitoring systems to provide benchmarks for prevention effectiveness. *Epidemiological measures of drug use, abuse and dependence, and risk/protective factors need to be adopted and standardized so that communities can assess local effectiveness of their effort.*

The Task Force also found that the prevention services research area was particularly appropriate for collaborative effort between NIDA and SAMHSA's CSAP. The high cost of these trials and the need for an existing organizational structure, training, and funds to support effective prevention strategies argues persuasively for collaborative work.

Recommendation 4. NIDA should encourage research on best practices for organizing and sustaining prevention policy and services at the program/agency, community, State, and Federal levels. *There is limited information on how prevention programs are implemented or the necessary conditions for adequate implementation. Thus, research is needed to determine the necessary structure, functions, and personnel qualifications that permit adoption, adaptation, and effective delivery of policies and practices. Refinement of methods is necessary to understand how service systems and setting characteristics influence prevention program implementation and, in turn, program effects.*

> *a. There is a need for studies of the organization, financing, and management characteristics of existing, effective prevention programs and policies.*
>
> *b. NIDA should encourage studies of how adaptations to evidence-based prevention programs change their effectiveness—this is one way to identify the essential elements of programs.*
>
> *c. NIDA should encourage studies of how changes in environmental context and systems are related to their effectiveness—this is another, natural context way to identify the essential elements of programs.*
>
> *d. NIDA should fund development of methods of costing prevention programs and benefits.*

Recommendation 5. NIDA should encourage research to understand the elements of effective diffusion of prevention practices and policies—especially the factors that affect the choice (by communities and institutions) of prevention practices and policies. *Research should examine the relationship between diffusion methods and acceptability by policymakers, key stakeholders, consumers, and practitioners.*

> *a. NIDA should encourage timely prevention policy research. This includes the effects of policy, as well as the study of policy development.*
>
> *b. Prevention services studies should determine the relationship of system characteristics to the choice of prevention practices, the method/setting of delivery of those practices, and the quality of delivery of those practices.*
>
> *c. NIDA should encourage research that examines the effectiveness and cost-effectiveness of various prevention training methods and technical assistance delivery systems, on adoption and maintenance of prevention practices and policies.*

2. TREATMENT SERVICES RESEARCH

Since 1999, approximately 225 treatment services grants have been funded by the Services Research Branch in DESPR, organized into six major topic areas: Availability and Access, Effectiveness and Outcomes, Organization and Management, Financing and Economics, Methodology, and Technology Transfer. Although substantial research on each of these topics predates this period and has had an important impact, we focus on the more current portfolio where grants are recently active. Table 2 provides a numerical breakdown of those treatment services grants. The first four areas are then described, followed by the Task Force's recommendations that cut across these topics.

Table 2: Distribution of Funded Treatment Services Grants in Key Categories*

Availability Access	Effectiveness Outcomes	Organization Management	Economics Financing	Methodology	Technology Transfer
82	139	59	68	56	22

*Grants are coded in more than one category if they applied to both.

Description of DESPR's Treatment Services Research Portfolio

Availability and Access Studies: Services research on access is concerned with understanding who enters and receives drug treatment as well as how to decrease barriers and improve access. There is a critical lack of available treatment, especially to the full range of detox, rehabilitation, and aftercare services, and the literature shows that most individuals with drug problems do not access treatment. Many are seen in other parts of the health, mental health, social, and judicial systems and may receive some services there. At the same time, we do not fully understand how individuals access treatment. The major research approach has been to examine individual, enabling, organizational, and financial factors. Unique to addiction treatment compared with medical utilization is the role of coercion in entering treatment; in both public and private sectors, high proportions enter treatment with legal, workplace, human services, or family pressures.

Research on treatment utilization aims to improve treatment engagement and retention. Unfortunately, many of those who enter drug treatment drop out before receiving even a minimally effective dose of care. This is especially true for individuals with co-occurring disorders. Research suggests that treatment engagement and retention are associated with individual factors (motivation to change drug-using behavior, degree of support from family and friends, presence of co-occurring disorders, and whether there is pressure to stay in treatment) and with program-level factors (establishing a positive, therapeutic relationship with the patient, developing a comprehensive treatment plan, linking the patient with indicated medical, psychiatric, and social services, and providing "aftercare" following completion of formal treatment). Less is known about how organizational and cost factors influence retention.

Research on access and utilization also studies approaches to linking and integrating services across health and social service systems and their relation to outcomes. Large numbers of individuals meeting drug abuse or dependence criteria are found in criminal justice, human services, medical, and workplace settings. During the past decade, NIDA has encouraged research on integrating drug treatment services with other health and social systems with medical, mental health, and social services in utilization and outcome studies. There is evidence that providing these services improves retention and outcome. However, studies show that the availability of medical and psychosocial services in treatment has continually declined over the past two decades. Few programs have access to medical care, and few managed care health plans require substance abuse screening by primary care practitioners. Several studies have examined "seamless" linkages between criminal justice and addiction treatment. There also is evidence that case-managed patients have higher treatment retention rates and are less likely to be involved in criminal activity than non-case-managed patients.

Specific areas of access and utilization research which the DESPR program staff have identified as requiring further development, with the Task Force concurring, include:

- Studies of individual, program-level, and environmental barriers to existing treatments.
- Strategies for overcoming geographic barriers in sparsely populated and remote geographic areas.
- Development of low-intensity, low-cost strategies for engaging patients, perhaps using telephone and Internet services.
- Research on integrating drug abuse treatment services into other services (e.g., medical, housing, job/vocational training, criminal justice, and human services).
- Research on improved treatment integration and linkage models, especially for underserved populations.

Effectiveness and Outcomes Studies: Drug treatment aims to assist individuals in overcoming their dependence on substances and to return them to productive functioning in the family, workplace, and community. Outcome studies include randomized trials of interventions in real-world settings as well as naturalistic effectiveness studies. Measures of outcome typically include levels of drug use, criminal behavior, family functioning, educational achievement, employment, and medical problems. State-of-the-art studies examining short- and long-term outcomes focus on patient characteristics, program characteristics, and the organization and financing of treatment.

Findings suggest that drug abuse treatment outcomes appear to be related to demographic characteristics, the extent and nature of the patient's presenting problems, the appropriateness of the treatment components and related services used to address those problems, the degree of the patient's active engagement in the treatment process, and the nature of the patient's social support network and involvement in aftercare or 12-step participation. In general, studies show a strong association between drug treatment and reduced rates of drug use, HIV risk behaviors, and criminal activity and improved prospects for employment.

In the past few years, attention has shifted to viewing addiction as a chronic condition, like diabetes, hypertension, or asthma. Descriptive studies have examined the question of how much treatment is needed for individuals whose problems are chronic, with studies suggesting there may be a "threshold" for positive effects of drug treatment. These studies have not been replicated with experimental designs. At the same time, a focus of treatment services research is on methods of identifying individuals before their problems become severe and to assess the effects of less intensive interventions outside the specialty treatment system.

Achieving greater improvement in drug abuse treatment will ultimately depend not only upon the development of effective interventions but also on understanding and improving the overall treatment process. Consistent with this shift in approach, there has been a need for treatment performance measures to promote quality and accountability in the delivery and management of drug abuse services by organized systems of care.

DESPR program staff and Task Force members identified the following specific areas of research as needing further development:

- Methods to better understand the key elements of the drug treatment process, including clinical decisionmaking.
- Effectiveness and efficiency of drug treatment provided in various service delivery settings with differing populations.
- Understanding how services and resources are identified and met based on patient needs throughout the entire recovery process.
- New approaches to drug abuse treatment based on chronic care service delivery models.
- New models for evaluating drug abuse treatment.

Organization and Management Studies: Studies of treatment organization and management embody a relatively newer, but growing, area of research at NIDA. Organizational factors can affect access and utilization, as well as treatment effectiveness. Traditionally, the primary focus of this research has been on understanding the evolving structure of the drug abuse treatment system in the United States. More recently, organizational and management research has begun to focus on improving the effectiveness of drug treatment programs with respect to both the delivery of therapeutic services and the management of treatment delivery. Current studies are examining how different organizational systems, such as managed care, affect access and outcomes, decision processes in adopting new business practices and treatment technologies, as well as the efficient and effective implementation of new practices.

Substantial research effort has been devoted to understanding the real-world context in which drug abuse treatment occurs, and a key area of research has been studies of how and why new, empirically derived treatments become adopted, organized, and managed. Studies suggest that transferring research to practice is associated with organizational factors such as leadership attitudes, staff turnover, organizational stress, regulatory and financial pressures, management style, and tolerance for change. These findings are leading to the development of an integrated framework of organizational change that can enhance the systematic study of research application.

Specific areas of organizational and management research identified by DESPR staff with Task Force concurrence as requiring further development include the following:

- Studies of different organizational and integration models of service access, utilization, retention, satisfaction, and outcomes.
- Studies of institutionalized performance indicators (e.g. Joint Commission on Accreditation of Healthcare Organizations [JCAHO], National Committee for Quality Assurance, Washington Circle) and their relationship with traditional assessments of patient progress and outcomes.
- Strategies to improve the adoption and implementation of evidence-based treatment innovations.
- Studies of current managed care and behavioral healthcare organizations as they relate to quality, access, outcomes, and costs of service delivery.

Financing and Economics Studies: Studies of how payment systems, insurance design, social program design, and different organizational arrangements affect the costs, access, quality, and outcomes of treatment are central issues in treatment research. Equally important are studies of the cost impact on quality of life, as well as societywide benefits—such as medical costs and criminal justice costs—of various treatments. This is an area that could also benefit from development of new methodologies.

Financing and economic studies have demonstrated that addiction treatment can be cost-effective in reducing drug use and its associated health and social costs. Treatment is less expensive than alternatives, such as not treating or simply incarcerating drug-addicted persons. Cost studies have contributed to better understanding practical application of different models of care. For example, integrating drug abuse treatment and primary care may be beneficial to patients with substance-abuse-related medical conditions. For such patients, cost savings can be realized by decreases in hospitalization rates, in-patient days, and emergency room use. However, how to implement benefit cost studies for drug treatment is not yet well understood.

Specific areas of financing and economics research identified by the DESPR staff, with Task Force concurrence, as requiring further development include the following:

- Studies of different methods of financing drug abuse treatment services—within and outside of traditional health insurance and payment mechanisms.
- Development of and testing the application of new methods of benefit cost, cost-effectiveness, cost-utility analyses, and quality-of-life indicators of drug abuse treatment.

- Evaluations of performance-contracting models designed to provide payment contingent upon patient performance.
- Studies of different models of risk adjustment of payments to health plans and providers.

Critique and Suggestions for Treatment Services Research

The Task Force identified six broad areas of treatment services research in need of development or expansion. Each cuts across the four domains of access and utilization, effectiveness, organization, and cost. They include *research on treatment-as-usual interventions and programs; broadening the venues of treatment research; representing the full continuum of care and patient groups; research on diffusion of innovation; research on organizational and cost issues; and development and refinement of methods*. We summarize these areas and their recommendations.

Research on Commonly Used Treatment Therapies, Interventions and Services: There was strong agreement by Task Force members that a limitation of the treatment services field was its lack of research on commonly used interventions, therapies, and services in contemporary drug abuse treatment programs. Investigator-initiated research traditionally has not often addressed current treatment practices. Reasons include the fact that most drug treatment in the United States takes place within programs with multiple components, and its major models are group-based, rather than individual-based. Through many recent publications (e.g., the SAMHSA/CSAT National Treatment Plan and the Institute of Medicine (IOM) Study on "Bridging the Gap"), the Task Force was aware that treatment providers have no way of gauging whether new NIDA-researched interventions would have better outcomes than the interventions they have traditionally used and which they believe are working. Indeed, outcomes monitoring and outcome studies in their programs often show results to be similar to those of clinical trials of interventions.

The Task Force applauds recent efforts of NIDA to study the effectiveness of individual-level therapies applied in group settings as a start in this direction. At the same time, existing program- and group-level interventions are very difficult to study, and traditionally have not been well received by study sections. Knowing these outcomes will be important to facilitate benchmarking against new interventions and also will likely facilitate the implementation of new treatment interventions when providers see those outcomes are better. Related recommendations on this topic are included in the Leadership and Collaboration sections, as well as the following:

Recommendation 6. NIDA/DESPR should include studies of commonly used interventions and practices, particularly those programs and groups that are the mainstay of standard treatment today. *It is important to foster research on pressing questions related to access, delivery, effectiveness, efficiency, and cost-effectiveness of treatment-as-usual. Treatment outcomes should include employment outcomes, criminal justice outcomes, medical utilization, and cost.*

> *a. NIDA should fund research to identify usual practices that are believed to be effective and subject those practices to the same types of rigorous study now used to examine new interventions, medications, therapies, and services. This will enable NIDA and the treatment community to develop an evidence-based perspective on existing treatment. This includes studying program and group therapy outcomes, rather than the historical focus on individual-level therapies. DESPR should encourage the development of analytic methods to adjust for variation in components of usual care.*
>
> *b. NIDA should put increased effort and resources into studying major new programs and policies in a timely manner.*

Broadening the Venues of Treatment Research: The Task Force was concerned with the relatively narrow range of settings in which most treatment services research has been conducted. In the specialty drug abuse treatment system, studies have traditionally been conducted within the public sector, and there was agreement that NIDA should continue to encourage studies in the full range of public and private specialty treatment organizations. There also was universal agreement of the need to develop and assess

drug abuse treatments in nontraditional settings such as primary care, physician offices, drug courts, human services settings, churches, and private practice therapist settings. To date, much of the research has taken place in the specialty sector. The Task Force felt that NIDA had been proactively encouraging such research in new venues and that this should continue. Cost studies should be included in these settings as well.

The Task Force was encouraged by the work that has been initiated in criminal justice settings (National Criminal Justice Drug Abuse Treatment Research Studies [CJ-DATS]) and the plan to develop a focus on treatment research in primary care settings. Beyond these special foci, there is still room for encouragement of research in these nontraditional settings. In particular, the widespread merging of substance abuse and mental health departments (at the State and county levels) and agencies (at the health plan and healthcare agency level) into "behavioral health programs" suggests the need for special efforts to examine various drug abuse treatment models within these blended settings.

Within the specialty treatment sector, the Task Force encouraged DESPR to continue to encourage studies in the range of organizational systems in which treatment occurs, particularly managed care, both in public and private sectors.

Representing the Full Continuum of Care and Patient Groups: There was further concern by the Task Force that the full spectrum of individuals in need of treatment was not sufficiently represented in past studies. In addition to representation of gender, age, race/ethnicity, socioeconomic status, and sexual orientation, these groups include those whose problems are not severe (e.g., in primary care and other health and social service settings) for whom screening and brief interventions may be effective. They also include those with co-occurring psychiatric and medical problems whose outcomes may be heightened by receiving services for those related problems. The Task Force also took note of the lack of organizational and cost studies of these services, while recognizing that studying costs across multiple treatment episodes and across institutional systems is complex and methods development is required.

Recommendation 7. The DESPR portfolio should be representative of the range of settings in which individuals with substance use problems can be treated and the population groups with substance abuse problems.

> *a. The settings included in studies of treatment access and interventions should be representative of the major organizational forms and financing of treatment, including public and private sectors, and across managed care and other prominent organizational and payment mechanisms.*
>
> *b. The treatment services portfolio should include the range of settings outside the drug treatment system where treatment services are delivered (e.g., criminal justice/drug courts, primary care, emergency rooms, human services, faith-based organizations, and rural and frontier service systems).*
>
> *c. NIDA should support studies of access and utilization, effectiveness, and cost-effectiveness using the full mix of patients (e.g., gender, age, race/ethnicity, socioeconomic status, and cultural differences) to which the treatment is to be generalized. Instruments should be developed with the capability of screening for drug abuse for different population characteristics.*
>
> *d. NIDA should emphasize studies of interventions for population groups with multiple co-occurring (psychiatric and medical, including HIV/AIDS) and social disparities.*

Recommendation 8. The NIDA/DESPR portfolio should be representative of the full spectrum of service needs for individuals with hazardous use patterns and for those with acute, as well as chronic, problems.

> *a. NIDA should conduct research on screening and on brief and acute interventions with less severe substance users across the range of settings where they naturally are found.*

b. NIDA should fund the development of continuing care models of treatment for persons with chronic dependence within the specialty drug treatment system, including case management and management across episodes and to different levels of care. This would include research informing evidence-based guidelines for transitioning clients through the continuum of care (e.g., ASAM, JCAHO, and managed care).

c. NIDA should fund the development of continuing care models of treatment for persons with chronic dependence that reach across other systems, such as linkages with primary care and mental health treatment.

d. NIDA should fund studies of the role and effectiveness of faith-based services, and of recovery-oriented social networks, self-help, and other informal influences in extending the benefits of treatment, and to develop clinical methods to facilitate this engagement during treatment.

Research on Diffusion of Innovations: An important NIH-wide issue, and particularly relevant for DESPR, is the lack of implementation of evidence-based treatments in practice. There are many ways in which NIDA should improve this process, including increased collaboration with SAMHSA. However, the treatment service research recommendations involve research on understanding the models for implementation and the barriers to adoption. These include studying patient, provider, organizational, and cost factors. The Task Force noted the prominent role played by NIDA in the IOM study, "Bridging the Gap Between Research and Practice," as well as in its RFA, "Bringing Drug Abuse Treatment From Research to Practice," and notes that this is an area where DESPR has taken a lead. It is recommended that this leadership continue.

Recommendation 9. NIDA/DESPR should increase its portfolio of research on the diffusion of innovations. *NIDA should fund studies that examine the process and barriers to implementation of evidence-based practices, including financial, organizational, purchaser, provider, clinical, and patient factors.*

a. DESPR should encourage studies on how new treatment technologies are implemented in practice, including research on fidelity and the boundaries of legitimate modifications. This should include identification and evaluation of different models to support the diffusion of innovations (e.g., technology transfer models and consumer reports).

b. NIDA should support the identification and evaluation of different models of staff selection, training, supervision, and quality assurance to support and maintain organizational change. Studies should also examine the extent to which experimental findings are replicated when put into more routine practice.

Research on Organizational and Financing Issues: The Task Force found that development of research on organization and financing issues was urgently required across each of the research domains shown on Table 2. Similar to research on "treatment-as-usual," this is a relatively new area in drug abuse research, and investigators on their own have not moved to these topics or developed research agendas at the rate at which they are needed. In addition, the Task Force felt that efforts should be intensified in recruiting new investigators to the field (see Section III).

There was agreement among Task Force members that there have been missed opportunities to better understand how organizational and management factors and cost are related to moving new interventions into practice. In addition, cost studies have not often been included in the feasibility of interventions in earlier stages of development. Other missed opportunities have included research on organization and cost which could have informed policy decisions for substance abuse treatment, such as insurance parity (as well as Medicaid and Medicare coverage) and drug court costs and their cost-effectiveness, as well as costs to healthcare and to society of medical marijuana legislation. New models for understanding organizational factors, including those adapted from other fields, would stimulate the field.

Research on cost in the substance abuse field is more developed than that on organizational factors. DESPR staff has developed symposiums on cost, and studies on measuring treatment cost and cost offset have been funded. More direct infusion through training and funding mechanisms is encouraged.

Recommendation 10. DESPR should increase its portfolio of research on the impact of organizational and management factors, financing, and other policies on outcomes. *This includes implications for costs of networking, mainstreaming services in other health and social service settings, and developing linkages. Costs of new policies should be studied in a timely way.*

> *a. DESPR should encourage more research on the effects of organizational structures (e.g., managed care, integrated and behavioral health carve-outs, co-location of services, and coordination of services across episodes of care), policies (e.g., impact of staff or organizational accreditation), and organizational culture (e.g., readiness for change and use of performance monitoring or performance contracting).*
>
> *b. NIDA should fund studies, including infrastructure development, that examine how organizational, operational, financial, and regulatory factors account for differences in substance abuse treatment programs and their outcomes.*

Recommendation 11. DESPR should continue integrating financial/economic research into its portfolio in order to provide sound information for clinical, management, and policy decisions. *Research on cost should be conducted in the context of treatment outcomes. Thus cost-effectiveness, cost-benefit, and cost offset research should be emphasized.*

> *a. DESPR should encourage research on different approaches to rationing services in substance abuse treatment systems. This includes tracing the impacts of different rationing schemes on outcomes and costs.*
>
> *b. NIDA should fund studies on methods of financing drug abuse treatment services—within and outside of traditional payment mechanisms. Different models of risk adjustment of payments to health plans and providers should also be developed and studied.*

Refinement of Methods: Key issues for the Task Force revolved around research methodology. This included the balance between experimental and descriptive studies as well as the development and refinement of methods. Within the treatment services research program at DESPR, there have been several longitudinal, descriptive studies of treatment in the real world (e.g. Drug Abuse Reporting Program, Treatment Outcome Prospective Study, and Drug Abuse Treatment Outcomes Study). There has been excellent productivity from these studies, and the information from them has been important in demonstrating the benefit of treatment, and describing a general lack of treatment availability, coupled with general deterioration of treatment infrastructure and services. This work also has generated important theoretical models regarding treatment process and the mechanisms by which treatments may have effects. At the same time, there is an acknowledged need for more information on mechanisms and mediators of treatment effectiveness. This is a level of inference that may not be available from this genre of studies—at least without the development of analytic methods that may allow for causal inference. The Task Force believed that health service researchers have not used randomized studies in real-life agencies as frequently as could have been used. They also considered there to be a need for descriptive studies in areas where much less is known (e.g., in populations that have not often been studied, as well as in clinical epidemiology and other studies that follow the natural course of problems and treatment). The Task Force noted that because of what is known about treatment effectiveness, it would not usually be ethical to include a no-treatment condition in studies, but marginal effectiveness of services or comparisons of different services can be studied in controlled studies.

Recommendation 12. The Task Force recommends a careful focus on the fit of the research question with decisions between descriptive or experimental studies. DESPR should educate prospective researchers on the research questions that benefit, or do not benefit, from randomized trials.

a. On the whole, DESPR should move toward experimental designs and the development of nonexperimental methods that permit greater causal inference (e.g., analytic models used in economics).

The Task Force further notes the need for development and refinement of service methodology. In the past few years, advances have been made within the DESPR portfolio in the development of statistical techniques for examining treatment outcomes and costs. However, the newer areas of health services, particularly organizational studies, and studies that examine access and outcomes of newer approaches (e.g., linkages across systems, including organizational and patient-level characteristics together), as well as making causal inferences from observational studies, would benefit from methodology development.

Recommendation 13. NIDA should support the development and refinement of methods to address critical treatment intervention questions.

a. NIDA should support research on the development of methods for making causal inference about interventions and treatment programs from nonexperimental research opportunities. These include observational data and quasi- or natural experiments.

b. NIDA should fund research on the development of benchmarks and approaches to case mix adjustments.

c. DESPR should encourage the development of statistical and analytic methods for evaluating program-level and group intervention effects.

d. DESPR should encourage timely policy research that may impact treatment access, utilization, and outcomes. This includes the effects of policy as well as the study of policy development.

3. LEADING AND MANAGING HEALTH SERVICES RESEARCH AT NIDA

Health services research at NIDA is primarily the responsibility of DESPR. Within the Division, there are two Branches that focus on health services: the Prevention Research Branch and the Services Research Branch.

Because of the planned overlap in topic areas across the NIDA organizational components, and because collaboration is essential for maximizing the impact and the cost-effectiveness of research throughout NIDA, the Task Force was particularly interested in the number and quality of the collaborations between DESPR and several other components of NIDA—including, CCTN, CAMCODA and DTRD. Following is a description of health services activities in these other administrative units of the Institute.

DTRD is responsible for developing innovative pharmacological and behavioral approaches for the treatment of drug abuse. Health services research builds on treatment development research by examining factors that influence adoption and implementation of findings into real-world practice settings. Recent requests for applications with services components include the RFAs on group psychotherapies (DA-04-008) and behavioral health knowledge and skill enhancement for treatment providers (DA-03-005).

The CCTN manages NIDA's National Drug Abuse CTN, a multisite research project of behavioral, pharmacological, and integrated treatment interventions to determine effectiveness across a broad range of community-based treatment settings and diversified patient populations. The CTN provides an important foundation for conducting services research to better understand how these interventions can best be incorporated into practice. Under DESPR leadership, a request for applications was issued in 2000 to use the CTN as a platform for health services questions and this was followed up by a PA issued in 2002, "Services Research in the National Drug Abuse Clinical Trials Network" (PA-03-011). To date, five studies have been funded through these mechanisms.

CAMCODA coordinates research activities and collaborates with and provides leadership to the Institute components on issues concerning HIV/AIDS and other infections and medical/health, mental health, and developmental consequences of drug abuse. In an effort to stimulate relevant economics and financing studies, DESPR has worked with CAMCODA and collaborated on a PA in 2002 titled "Economic Evaluation of Drug Abuse Treatment and Prevention Services for HIV/AIDS" (PA-02-164). Recently, DESPR collaborated with CAMCODA in the release of a request for applications to support studies on HIV/AIDS prevention and treatment for criminal justice populations in community settings.

Critique and Suggestions Regarding Leading and Managing Health Services Research

The history and current status of leadership and management of NIDA's DESPR is important context for the content and tone of the Task Force's review. The Division Director and the Services Research Branch Chief are relatively new following a period of more than one year in which there were acting directors. In addition, there is a recently appointed NIDA Director, following a period of more than a year of an Acting Director.

The health services portfolio is strongest in the area of treatment and prevention effectiveness. In addition, over the past 10 years DESPR-sponsored research has added a great deal to what is known about systems, technology transfer, and economics of substance abuse services.

The operational definition of health services research has been endorsed by the Task Force in Section II. We believe it is an excellent start toward broader understanding of the DESPR mission throughout NIDA and may assist the DESPR Director and the NIDA Director to foster collaborations.

Recommendation 14. DESPR leadership should communicate a consistent definition of, and understanding about, health services research throughout NIDA and to potential applicants. The definition should include rethinking the role of health services research within the "linear" clinical research process. That is, health services principles and components should be included in earlier stages

of research and in all types of clinical research. *This will facilitate collaborative work and help DESPR prioritize its efforts.*

> *a. The definitions, priorities, and guidelines should be made consistent across NIDA documents and should be placed on the Web site and distributed.*
>
> *b. NIDA should establish formal liaisons in, CCTN, CAMCODA and DTRD to work with DESPR on services concepts and questions. Further, the NIDA Director should encourage the DESPR Director to take the lead in this effort.*
>
> *c. To develop and maintain a cohesive NIDA-wide health services research program, DESPR, under the supervision of NIDA leadership, should conduct a bi-annual review of the health services research portfolio to identify areas of success and weakness, as well as new priority areas. The review should include the work of all relevant NIDA administrative units (especially DESPR, CCTN, CAMCODA and DTRD) and SAMHSA. The findings should be presented to the NIDA National Advisory Council on Drug Abuse.*

Mission Definition, Boundaries, and Organizational Overlap Within NIDA: Since there is a very clear need for DESPR to work with the other NIDA Divisions and Centers, the Task Force offers the following commentary and suggestions for NIDA's management.

The review identified two main areas in which overlap can occur if a structure is not in place to address it. First, there is appropriate topical and contextual overlap across the many types of research settings (e.g., community treatment and prevention programs) where the various NIDA Centers and Divisions support investigators and studies. Specifically, later stages of the staged Treatment Research Division model for developing medications and behavioral therapies intersect in an unavoidable way with some of the DESPR efforts to study treatments in real-world settings. Similarly, the CTN efforts to study and disseminate evidence-based practices to community treatment programs also intersect with some of the traditional lines of research sponsored by DESPR.

Second, some of the main themes of traditional health services research—translation of basic findings into practical products, efforts to conduct research in real-world environments, and efforts to make research clinically and policy relevant—are now much more politically prominent and more widely embraced throughout NIH and NIDA. Specifically, the doubling of the NIH budget has been followed by an understandable wish to see more effective products emerge that can be instituted directly into wide use. Consequently, many NIDA Divisions and Branches have begun efforts that would traditionally have been initiated by DESPR. There has been a lack of consistent outreach from these other organizational components to benefit from the expertise within DESPR.

Because of these forces, overlap will likely be a continuing management issue. There will be a need for the NIDA Director to be mindful of these forces and issues, as they are expected to continue and even grow in prominence. In addition, there will be a need for the new DESPR Director to become an active spokesperson throughout NIDA for the types of services research topics and expertise that are available and potentially useful to the other NIDA Divisions and Centers. This role in relation to other Federal Agencies is discussed again under ***Collaboration****, below.*

Recommendation 15. NIDA should develop strategies to integrate services research across the extramural Divisions and Branches—specifically, CCTN, CAMCODA and DTRD —to effect efficient utilization of research resources; and to assure that issues of feasibility, practicality, and usefulness are early considerations within those research portfolios. However, the central location of health services research belongs within DESPR, where the full complement of expertise in each of the areas of services research (access, utilization, outcome, organization, and cost) exists, and the DESPR Director should lead the group that integrates health services research within the other NIDA Divisions and Centers.

> *a. The CTN should play an important role as a platform for health services studies. The CTN is one of the settings that are well structured for a key role in conducting effectiveness studies. It*

provides a good bridge between efficacy trials and actual practice settings and is a program that can participate in identifying treatment-as-usual practices that should be investigated. Prior to a broad dissemination of interventions, or "real-world" effectiveness trials, the CTN can provide one important laboratory to work out the implementation details.

b. DESPR should collaborate with DTRD to integrate health services research concepts of applicability, acceptability, feasibility, and cost earlier in the process of development of interventions when appropriate.

c. DESPR should collaborate with CAMCODA on studies of HIV/AIDS, sexually transmitted diseases, hepatitis C, and other infectious diseases to integrate concepts of cost, organization, financing, and service delivery.

Integrity of Health Services Research as a Unique Discipline: While there was unambiguous support for greater collaboration between DESPR and the other NIDA Divisions and Centers, there also was concern by the Task Force that, within the laudable goal of greater collaboration, there might be reason to consider reducing the role of a separate Division devoted to health services research, and to simply blend the traditional health services activities into other Centers and Divisions within the Institute, or to use the CTN as the only platform from which to pursue treatment services research.

The Task Force believes that inter-Division collaboration is extremely important, but to be successful it requires central leadership and the continued critical mass of services research conducted under the auspices of DESPR. It would not be productive to dissolve health services research into other Centers and Divisions, nor to expect any single venue to be adequate to host most of the services research issues that are important for NIDA's mission. For example, there are many important research opportunities in research sites outside the CTN. These should not be overlooked, because they provide important variability in real-world clinical and organizational opportunities as well as access to other researchers. Thus, the Task Force urged the continuance, and, indeed, the expansion of the DESPR health services research and a continued commitment to dedicate at least 15 percent of the research budget to health services research to build on the critical mass of recent research to focus on the new areas highlighted in this Report. The Task Force considers this to be consistent with the new NIH Roadmap Initiatives and essential in reaching its goals.

Recent articles (e.g. L'Enfant, 2003; Glasgow et. al., 2003) have discussed the historical problems in bringing potentially effective medications, devices, and interventions to wide public use. Among the more prominent of those problems are lack of understanding of the healthcare systems and the populations they serve, healthcare financing, and healthcare organizational forces.

Recommendation 16. Treatment and prevention research applications focused upon effectiveness, organization, management, cost, and service systems research should remain at NIDA for scientific review by the Health Services Initial Review Group (IRG). DESPR should continually update review criteria appropriate to health services research as well as orient IRG members about new and evolving issues.

a. Review criteria related to innovative and high-risk/high-impact studies should be instituted to stimulate research on questions that are important, but difficult, to study (e.g., program- and systems-level interventions).

b. NIDA review should emphasize criteria on applicability, acceptability, portability, feasibility, and sustainability in the announcements, review criteria, and funding decision considerations for research on new prevention interventions and new treatments.

c. NIDA should encourage the use of low-cost funding mechanisms, such as the R-21, R-24, and U-24 to test new approaches prior to expending larger efforts and funds to pursue ideas that may not work.

d. NIDA should release a PA that focuses on the secondary analysis of existing health services research-related data.

Clarifying the Role of Health Services Research in Dissemination: There is a well-acknowledged need to bring empirically supported treatments into broad general use. To much of the research community, this has often seemed to be a relatively straightforward process under which those practitioners in the general public, hungry for new, more effective methods, would happily adopt the new practices endorsed by NIH scientists—if only they could be made aware of the findings. Thus, the term "dissemination" has come to be used synonymously with "technology transfer." In turn, there has been an increasing expectation that NIDA (in conjunction with SAMHSA) would provide dissemination as part of its mission, leading ultimately to widespread adoption.

Such a view ignores much of the health services' research mission as defined above. The idea that empirically derived interventions, treatment services, or medications will be absorbed by a waiting public elevates the influence of science beyond its limits and ignores powerful—but researchable factors—such as providers' views that the evidence obtained from relatively small-scale studies with carefully chosen subject populations does not pertain to their populations; organizational readiness to accept change, the costs and financing for the new interventions; and the burden on clinical staff for training, supervising, and maintaining the organization's delivery of the new intervention. Moreover, the NIH mission is not designed to ensure widespread dissemination or implementation of practices but rather to develop knowledge about the factors that affect dissemination and technology transfer. One exception to this principle is that the Small Business Innovation Research (SBIR) program has a goal of encouraging development and dissemination of innovations. DESPR has been quite successful in using this funding mechanism to develop interventions that are explicitly designed to be exportable to broad audiences. This program is a strength of prevention and treatment services research and should be maintained. In addition, as we discuss below, an important part of this process is for NIDA to test existing practices that have not been brought forward by the investigator-initiated research process on its own. It would be an error to measure the success or failure of the health services research program based on whether evidence-based practices are adopted widely. The Task Force clarified that the role of NIDA is to encourage the development of interventions that are feasible to implement and to conduct research on the diffusion of research to practice.

The Task Force considers it to be an important leadership task of the NIDA and DESPR Directors to communicate the scope of the DESPR mission and the reciprocal role for SAMHSA. Indeed, the DESPR portfolio shows significant progress in using services research to inform the overall process of technology transfer, but there is much more to be done. This work will proceed more smoothly if there is shared understanding about the differences between research on "dissemination" and the process of "technology transfer." The Task Force sees this as a key leadership task, especially for the DESPR Director.

Recommendation 17. DESPR should work with other NIDA Divisions and Centers to enhance the dissemination and technology transfer of health services research findings. *The NIH consensus panel model is one approach to use—although it may underemphasize the special organizational, workforce, funding, and training problems in the drug abuse field.*

a. Program staff should work closely with NIDA's Office of Science Policy and Communication to synthesize and promote communication and the dissemination of findings to multiple audiences.

b. NIDA's science education program should include an emphasis on the importance of scientists' ability and duty to communicate with policymakers, practitioners, consumers, and key stakeholders.

More Rapid Recognition and Response to Emerging Factors: One of the recurring issues raised in the Task Force discussions was the ability of NIDA to recognize and respond to emerging policy changes and phenomena that affect the delivery and/or effectiveness of prevention and treatment services. Recent examples include the rapid spread and growth of managed care, first in private and then in public (Medicaid and Block Grant) settings, the dramatic growth in drug courts, changes in criminalization policies about

marijuana in many States, the movement to force Temporary Assistance to Needy Families recipients with substance abuse problems into treatment, and systemwide policies of broad drug abuse testing in schools, among others. Members of the Task Force provided many examples of lost opportunities to mount potentially informative research projects or programs. These examples often have significant policy relevance and would be potentially informative to policymakers such as ONDCP and State authorities—if explored in a timely manner. Moreover, research in response to these emerging issues is likely to require innovative study designs based on behavioral and/or organizational science theory not traditionally applied to drug abuse research.

While it is the case that NIDA now has research projects in virtually all of the above area examples, the Task Force believes that potentially important services research opportunities have not been capitalized upon for two reasons. The first reason is lack of timely recognition. This may be due to insufficient contact between NIDA's top management and community and treatment providers. It was suggested that a regular meeting should be convened for the purpose of developing early warning signs of potentially significant organizational, legal, economic, or political events or phenomena that could be an appropriate focus of research. Such meetings should include members of the State substance abuse representatives, CSAT, and CSAP. Of course not all phenomena become important trends and even important trends are not always researchable. Nonetheless, the Task Force suggests that these meetings should be convened—or that there be efforts to develop this "early recognition" agenda within existing meetings or new mechanisms.

The second, and more frequent, reason for a delayed response to potentially researchable phenomena is the lack of sufficient initial response mechanisms within NIH and NIDA. The Task Force was made aware of existing options (e.g., the National Institute on Mental Health [NIMH] rapid review mechanism), and these may be used to better effect—budget permitting. There may be other collaborative options that are not currently being pursued (e.g., supplementing existing research), and this appears to be an important avenue of exploration. It should be clear that the Task Force does not endorse efforts to circumvent the existing and legitimate NIH competitive application and review process. It believes that these mechanisms should be rarely used. Indeed, the Task Force felt that all NIDA-funded research efforts should ultimately undergo standard review. However, if there were funds available for one year of funding to permit initial studies of phenomena that require timely action, it would enable valuable data collection to occur and would provide time for the investigators to develop a standard proposal for regular review and continuation.

Finally, missed opportunities have often existed because the field did not take advantage of them. Several cases were noted where DESPR staff conducted considerable outreach to encourage submission of applications. One example was the California Proposition 36 legislation. The Task Force also notes that DESPR played a key role in the development of the Department of Health and Human Services evaluation of parity in Federal healthcare supported through the Office of the Assistant Secretary for Planning and Evaluation. However, in addition to the reasons mentioned above, in some cases the drug abuse field has not had the expertise to respond. In other circumstances, program staff were not able to convince NIDA management to release an RFA or PA.

Recommendation 18. NIDA should take a more proactive stance and develop a planning process toward the development of RFAs and other funding mechanisms.

> *a. The RFA process should be part of the overall research agenda-setting process, and the lead-time for RFA submission should be extended with their release spaced throughout the year.*
>
> *b. NIDA should facilitate rapid response to important or unique research opportunities with great public health significance by using short-cycle review mechanisms for these grants.*
>
> *c. NIDA should encourage innovative study designs based on behavioral and/or organizational science theory not traditionally applied to drug abuse research.*

Recommendation 19. NIDA should increase its efforts to encourage new investigators and methods in the drug abuse services research field.

a. Existing training mechanisms and development of specific announcements (e.g., Behavioral Science Task Award for Rapid Transition should be emphasized and advertised to prospective applicants.

b. NIDA should make broader use of early career awards to attract promising young investigators and develop a cadre of future health services investigators. Barriers in using career and other training mechanisms include the low indirect cost rate and lack of support for mentorship that many institutions cannot support. We recommend that NIDA work with the NIH to address these barriers.

c. NIDA should provide technical assistance and funding to develop the methodology and infrastructure for conducting such research.

4. SERVICES RESEARCH COLLABORATIONS WITHIN THE NIH AND WITH EXTERNAL PARTNERS

Collaborations between any NIH Institute and Federal Agencies outside of the NIH are key factors in transferring research into practice. Within the field of drug abuse prevention and treatment, collaborations between NIDA and other NIH Institutes and extra-NIH Agencies are unique and important. Within NIH, NIDA has regularly—but not always smoothly—collaborated with the National Institute on Alcohol Abuse and Alcoholism (NIAAA), the NIMH, and the National Institute on Allergy and Infectious Diseases. Other agencies with whom NIDA has collaborated include the Department of Justice (drug treatment in prisons, drug courts), the Department of Education (i.e., drug-free schools policy and schools as the setting for prevention efforts), the ONDCP (central role in all Federal policies regarding drug abuse issues), and SAMHSA, (as the largest single payor for drug abuse treatment and prevention services).

NIDA collaborations have historically taken on a variety of forms from informal consultations with other Agency staff members, to regular interactions based on mutual needs and goals, and to jointly sponsored research programs. One recent key example of collaboration across Agencies is the joint NIH/SAMHSA "Science to Services Workgroup" established in Spring 2002. The workgroup is part of an inter-Agency collaboration to accelerate the process of identifying and translating effective substance abuse and mental health treatment and prevention interventions into widespread practice. Activities as part of the "Science to Services Workgroup" including the following:

- Ongoing consultation to SAMHSA regarding selection of prevention and treatment interventions with strong scientific evidence.
- A technical assistance workshop for SAMHSA project officers about the NIH funding process and research priorities of the three NIH Institutes (Fall 2002).
- A technical assistance grant writing workshop for SAMHSA grantees (April 25, 2003).
- $1.5 million annual support for NIDA/CSAT Research/Practice Liaisons.
- To enhance the likelihood of research adoption and implementation, NIDA has collaborated with SAMHSA and other Federal Agencies in supporting a number of other health service research studies, including the following:
  - CJ-DATS
  - Course of Problems in Adolescent Drug Treatment Intakes
  - Early Family-Centered Prevention of Drug Use Risk
  - Science-Based Prevention: Testing Communities That Care.

Other efforts are under way to more formally link federally supported research and practice programs through funding mechanisms. For example, in December 2002, NIDA issued an RFA, "Improving Behavioral Health Services and Treatment for Adolescent Drug Abuse" designed to conduct health services research on improving access to treatment through innovative identification and referral systems. Priority was given to applicants who proposed studies of activities supported under SAMHSA's initiative, "Cooperative Agreements for Strengthening Communities in the Development of Comprehensive Drug and Alcohol Treatment Systems for Youth." A similar approach is being considered for future RFAs, depending on willingness for collaboration between NIDA and other Federal Agencies.

Critique and Suggestions Regarding Services Research Collaborations

SAMHSA and NIH operated separate programs of health services research until 2002 when SAMHSA was reorganized to focus on delivery of services and technology transfer. This change means that the NIDA program of health services research is the primary means of testing research questions and for suggesting evidence-based practices. In turn, SAMHSA, if adequately funded, should provide the majority of translational effort, training, continuing support, and dissemination that will be needed to assure effective

application of the evidence-based prevention and treatment interventions. Moreover, SAMHSA's long history of direct working relationships with providers and State agencies suggests an experience that is complementary and valuable to NIDA's research expertise.

A specific example may illustrate the need for formalized, institutional collaboration. A major area of emphasis for NIDA has been the development of new medications for opioid dependence treatment and new manual-guided therapies for cocaine treatment. In this regard, NIDA-sponsored research indicates significant deterioration of the substance abuse treatment infrastructure (program closures, workforce turnover, absence of physicians, nurses, and psychologists) and significant resistance to absorbing new treatments by the Medicaid carve-out reimbursement systems in most States (e.g., refusal to place new medications on formularies). The fact that CSAT is now the largest institutional payor for substance abuse treatment services suggests that their policymaking and budgetary efforts will either enable these promising new treatments to advance into real-world settings—or will stop that progress in its tracks.

For these reasons, collaborations with SAMHSA have become particularly important for the future development of the drug prevention and treatment service delivery systems. The preceding list of recent collaborations includes some good-to-excellent examples, usually created by individuals within the Agencies. The Task Force endorses the development of specific organizational or institutional mechanisms by which opportunities for future collaborations can be instituted and maintained. Task Force review indicated that there has rarely been formal or institutional support for inter-Agency collaborative efforts at the level of top management. Indeed, personality conflicts and institutional defensiveness at the highest levels of these Agencies have sometimes delayed or prevented collaborations. Many of the progressive, collaborations have occurred due to informal efforts by individuals whose seniority and skill permitted them to circumvent institutional barriers to effect collaborative grant announcements, conferences, work groups, and funded projects.

The importance of these efforts for the addiction field requires a focused effort toward enhancing interinstitutional collaboration at the highest levels. The still relatively new tenure of the NIDA, NIAAA, NIMH, and SAMHSA Directors with the NIH-wide emphasis upon transitioning scientific findings into real-world services and products. Given the new NIH Roadmap activities focusing on interdisciplinary research teams, there may be additional opportunities for collaboration of NIDA's health services researchers with basic scientists and intervention specialists.

The Task Force was unanimous in its enthusiasm for inter-Agency collaboration and calls upon top management to effect leadership toward developing a culture of, encouragement for, and a formal mechanism by which important collaborative opportunities can be recognized, supported, and monitored.

Recommendation 20. NIDA should collaborate with other Federal Agencies, State directors, providers, and consumers to establish a formal, ongoing process for developing and monitoring its services research agenda. *The Task Force believes that relevant services research issues change rapidly in the real world and that efforts to address these issues will require broad understanding and collaboration. Specific efforts that would assist this goal would include joint announcements on areas of shared priorities, jointly sponsored RFAs, and teaming agreements.*

> *a. NIDA, through DESPR, should solicit input in the development of its portfolio from Federal (SAMHSA and ONDCP) and outside organizations (including researchers, health and educational systems, criminal justice, human services systems, rural and frontier areas, recovery networks, community treatment providers, Single-State Agencies, and faith-based organizations), to inform the ongoing services research agenda.*
>
> *b. Mechanisms, such as town hall meetings, Web-based technologies, trade association meetings, and professional meetings should be used as sources of input.*
>
> *c. There should be special efforts to identify and address technical and policy obstacles to jointly supported RFAs and other funding mechanisms. In the past, these technical issues have included different timelines, review criteria, or mechanisms and funding cycles. Ideally, there should be a*

single, shared application process, timeline, and format that would encourage and simplify joint funding for such projects.

d. The Task Force unanimously recommends expansion of the interinstitutional collaboration of NIDA with CSAT and CSAP toward the goal of enhancing technology transfer/dissemination efforts in several major areas of common interest. Examples include descriptive and operations research on the capacities of the treatment and prevention systems to adopt new technologies, evaluations of the effectiveness, and cost-effectiveness of new interventions, and development of financial incentives and training/technology transfer/dissemination efforts to spread the use of the most promising interventions and treatments.

Recommendation 21. Special collaborative effort is needed among NIDA, SAMHSA, and ONDCP and with the Department of Education, Centers for Disease Control and Prevention (CDC), NIAAA, NIMH, and other NIH Institutes to move effective interventions to practice. *While inter-institutional collaboration is broadly needed, this is an area of special importance to the field and the public; and an area with a long history of poor performance. As suggested previously, there has been a view that "dissemination" of efficacious practices would automatically produce effective treatments and broad adoption. There has been inattention to research on how forces such as cost, financing, regulations, organization, and workforce can shape adoption of new interventions and services. In addition, there has been inattention to the special needs of, and special regulatory and financing mechanisms of, the substance abuse treatment and prevention fields. Thus, this area in particular will require an interinstitutional commitment to collaboration and learning. Innovative methods, such as the Department of Veterans Affairs' Quality Enhancement Research Initiative to import evidence-based practices into routine care, are being developed, and more work such as this is needed.*

a. NIDA should work with SAMHSA's CSAP and CSAT, the Department of Education, AHRQ, the Department of Veterans Affairs, and other Agencies to develop and evaluate technology transfer materials, dissemination practices, and training materials/procedures. Examples include studying how to most effectively disseminate information about tested effective prevention and treatment interventions to policymakers and practitioners and developing knowledge of the research base (etiology, predictors, risk, and protective factors) for prevention and treatment program development.

b. When a NIDA-funded prevention or treatment intervention is determined to be efficacious, collaborative learning and funding relationships should be developed between NIDA, SAMHSA, AHRQ, the Department of Education, the Centers for Disease Control and Prevention, and others. Early collaboration is essential for the timely development of user-friendly manuals along with related field review, dissemination, and technical assistance of these manuals. This is not simply the responsibility of NIDA but is at the heart of the transfer of responsibility of NIDA to service delivery agencies.

c. As new prevention or treatment interventions show early evidence of effectiveness (e.g., real-world impact) NIDA and SAMHSA should initiate efforts to investigate possible barriers to adoption, such as State regulations or payment mechanisms, workforce training issues, and costs to maintain.

Recommendation 22. NIDA should provide leadership and collaborate with NIAAA, NIMH, and external organizations such as SAMHSA and AHRQ in the development of shared standards for evidence-based interventions.

Recommendation 23. NIDA, SAMHSA, and ONDCP should convene Agency representatives to explain and publicize scientifically supported, evidence-based interventions and treatments. This is suggested toward the goal of creating a broad, shared understanding of the processes by which Federal Agencies are collaborating to define and promote best practices. Examples of Agencies that should be invited include the Departments of Education, Justice and Veterans Affairs, as well as the CDC.

Recommendation 24. NIDA should collaborate with other NIH Institutes (particularly NIAAA and NIMH) and other Federal Agencies (particularly AHRQ, SAMHSA, and the Department of Education) to facilitate new developments in health services-related prevention and treatment methodology. *These developments should include efforts to create more useful measures, better data analytic techniques, and more broadly applicable study designs. NIDA should host technical assistance workshops and conferences that are focused on these topics. To promote collaboration and contact between substance abuse and other areas, special efforts should be made to invite investigators representing related areas.*

> *a. NIDA should emphasize the development of methods for studying multicomponent or "program-based" interventions and systems, not just single-component interventions.*
>
> *b. NIDA should emphasize the use of randomized controlled trial designs to answer questions of treatment effectiveness.*
>
> *c. NIDA, in collaboration with SAMHSA and other organizations should facilitate a consensus on a core set of low-cost/high-feasibility process, outcomes, and cost-effectiveness measures. These measures should be used for benchmarking existing practices and new interventions.*

On a final note, the Task Force believes that the time is ripe for these enhancements to the health services research program at NIDA as part of the new NIH Roadmap Initiatives. There is a unique opportunity to capitalize on the efforts to reengineer the clinical research enterprise, and to build research teams of the future. Health services research should play a prominent role as part of the Roadmap Initiatives. In particular, the interdisciplinary and public-private partnership goals of the Roadmap are areas where NIDA can seize the momentum and provide leadership. The changes and challenges envisioned in this Report will allow NIDA to fulfill its own mission and serve an important role throughout the evolving healthcare research system.

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V. APPENDICES

APPENDIX A: MEETING AGENDAS

National Institute on Drug Abuse
Health Services Research Blue Ribbon Task Force
July 24–25, 2003
Marriott Gaithersburg Washingtonian Center
9751 Washingtonian Boulevard
Gaithersburg, MD 20878

Day 1 – July 24, 2003

OPEN SESSION

9:00 – 9:15 am	**NIDA's Strategic Plan: The Role for Services Research** *Nora D. Volkow, M.D.*
9:15 – 10:00 am	**Introductions** **Health Service Research Task Force Mission and Charge** *Constance Weisner, Dr.P.H., M.S.W., Tom McLellan, Ph.D.*
10:00 –10:30 am	**Review of NIDA's Services Research Portfolio** *Jack Stein, Ph.D., Liz Robertson, Ph.D., and Services Research Program Staff*
10:30 – 10:45 am	**BREAK**
10:45 –12:00 noon	**Review of NIDA's Services Research Portfolio**
12:00 – 1:15 pm	**LUNCH (on your own)**
1:15 – 2:00 pm	**Review of Services-related NIDA Programs** *Lisa Onken, Ph.D., Betty Tai, Ph.D., Henry Francis, M.D.*
2:00 – 2:45 pm	**Discussion and Summary**
2:45 – 3:00 pm	**BREAK**
3:00 – 5:00 pm	**Moving into Action: Reaching Task Force Goals** – Goals of final report – Implementation steps – ***Additional information needs*** *Constance Weisner, Dr.P.H., Tom McLellan, Ph.D.*

Day 2 – July 25, 2003

OPEN SESSION

9:00 –12:00 noon	**Moving into Action: Reaching Task Force Goals (continued from Day 1)** – Timeline – Next Steps – Task Force Assignments *Constance Weisner, Dr.P.H., M.S.W., Tom McLellan, Ph.D.*

National Institute on Drug Abuse
Health Services Research Blue Ribbon Task Force
October 29-30, 2003
Jurys Doyle Hotel
1500 New Hampshire Avenue, NW
Washington, DC 20036

Day 1 – October 29, 2003

OPEN SESSION

9:00 – 10:15 am	**Health Services Research Task Force: Mission and Definition** – Introduction – Framework – Guiding Principles *Constance Weisner, Dr.P.H., M.S.W., and Thomas McLellan, Ph.D.*
10:15 – 10:30 am	**BREAK**

EXECUTIVE SESSION

10:30 –12:00 noon	**Breakout in Separate Review Subcommittees** – Treatment Research – Prevention Research – Organization and Managing Services – Collaboration
12:00 – 1:00 pm	**LUNCH (on your own)**
1:00 –1:15 pm	**Individual Subcommittee Reports to Entire Task Force**
1:00 – 2:00 pm	**Treatment Research** *Thomas McLellan, Ph.D.*
2:00 – 3:00 pm	**Prevention Research** *Richard Catalano, Ph.D.*
3:00 – 3:15 pm	**BREAK**
3:15 – 4:15 pm	**Organization and Managing Services** *Constance Weisner, Dr.P.H., M.S.W.*
4:15 – 5:15 pm	**Collaboration** *Mady Chalk, Ph.D.*

Day 2 – July 25, 2003

EXECUTIVE SESSION

8:00 –10:15 am	**Task Force Discussion** – Cross-cutting Issues and Gaps – Identification of Primary Issues *Constance Weisner, Dr.P.H., M.S.W., Tom McLellan, Ph.D.*
10:15 – 10:30 pm	**BREAK**
10:30 – 12:00 noon	**Finalizing the Health Services Research Report** – Review Outline – Timeline – Impact of Report on the Field *Constance Weisner, Dr.P.H., M.S.W., Tom McLellan, Ph.D.*

National Institute on Drug Abuse
Health Services Research Blue Ribbon Task Force
January 21 to 22, 2004
The Latham Hotel
3000 M Street
Washington, DC 20007

Day 1 – January 21, 2004

OPEN SESSION

9:00 – 9:15 am	**Health Services Research Task Force: Summary of Current Report** *Constance Weisner, Dr.P.H., M.S.W., and Thomas McLellan, Ph.D.*

EXECUTIVE SESSION

9:15 –10:30 am	**Task Force Discussion** – Key recommendations
10:30 – 10:45 am	**BREAK**
10:45 –12:00 noon	**Task Force Discussion** – Next steps
12:00 – 1:15 pm	**LUNCH (on your own)**
1:15 –3:00 pm	**Task Force Discussion** – Next steps (continued)
3:00 – 3:15 pm	**BREAK**
3:15 – 5:00 pm	**Task Force Discussion** – Executive summary

Day 2 – January 22, 2004

EXECUTIVE SESSION

9:00 –10:15 am	**Task Force Discussion** – Executive summary
10:15 – 10:30 pm	**BREAK**
10:30 – 12:00 noon	**Finalizing NIDA's Health Services Research Report** – Impact of report on the field

APPENDIX B: TASK FORCE MEMBERS

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APPENDIX C: SELECT HEALTH SERVICES RESEARCH RFAS AND PAS

NIDA Services-Related Requests for Applications (RFAs) Since 2000

- Stress and Drug Abuse: Epidemiology, Etiology, Prevention, and Treatment (RFA-DA-04-001)
- Drug Abuse and HIV Prevention in Youth (RFA-DA-03-012)
- Transdisciplinary Prevention Research Centers (RFA-DA-03-008)
- The Impact of Child Psychopathology and Childhood Interventions on Subsequent Drug Abuse (RFA-DA-03-007)
- Improving Behavioral Health Services and Treatment for Adolescent Drug Abuse (RFA-DA-03-003)
- National Criminal Justice Drug Abuse Treatment Services Research System (RFA-DA-02-011)
- NIDA's National Prevention Research Initiative: Using Basic Science to Develop New Directions in Drug Abuse Prevention Research (RFA-DA-02-010)
- New Approaches to Prevent HIV/Other Infections in Drug Users (RFA-DA-02-009)
- Modifying and Testing Efficacious Behavioral Therapies to Make Them More Community Friendly (RFA-DA-02-006)
- NIDA National Prevention Research Initiative (NNPRI): Transdisciplinary Prevention Research Centers (RFA-DA-02-005)
- NIDA National Prevention Research Initiative (NNPRI): Community Multi-Site Prevention Trials (CMPT) RFA-DA-02-004)
- Expansion of the National Drug Abuse Treatment Clinical Trials Network (RFA-DA-02-003)
- Inhalant Abuse: Supporting Broad Based Research Approaches (RFA-DA-02-002)
- Therapeutic Community Research (RFA-DA-01-015)
- Responding to Club Drugs and Other Emerging and Current Drug Abuse Trends (RFA-DA-01-010)
- The Next Generation of Drug Abuse Prevention Research (RFA-DA-01-009)
- Health Disparities: Drug Use and Its Adverse Behavioral, Social, Medical, and Mental Health Consequences (RFA-DA-01-008)
- HIV/AIDS and Drug Use Among Adolescents (RFA-DA-01-007)

- Services Research on the National Drug Abuse Treatment Clinical Trials Network (RFA-DA-01-003)
- HIV Therapy for Drug Users, Access, Adherence, Effectiveness (RFA-DA-00-007)
- The Next Generation of Drug Abuse Prevention Research (RFA-DA-00-004)
- National Drug Abuse Treatment Clinical Trials Network (RFA-DA-00-002).

NIDA Services-Related Program Announcements (PAs) Since 2000

- Drug Abuse Health Services Research (PA-01-097)
- Services Research in the National Drug Abuse Clinical Trials Network (PA-03-011)
- Economics of Drug Abuse Treatment and Prevention Services (PA-01-013)
- Economic Evaluation of Drug Abuse Treatment and Prevention Services for HIV/AIDS (PA-02-164)
- Behavioral Therapies Development Program (PA-03-066)
- Prescription Drug Abuse (PA-01-048)
- Women, Gender Differences and Drug Abuse (PA-03-139)
- Drug Abuse Aspects of HIV/AIDS and Other Infections (PA-01-023)
- Women's Mental Health in Pregnancy and Postpartum (PA-03-135)
- Research on Children Exposed to Violence (PAR-030096)
- Planning Grants for AIDS and TB (PAR-03-072)
- Risk Factors for Psychopathology Using Secondary Data (PA-03-044)
- Services and Intervention Research with Homeless Persons Having Alcohol, Drug Abuse, or Mental Illness (PA-02-150)
- Social Work Research Development Program (PAR-00-008)
- Implementation of Screening and Brief Interventions for Alcohol-related Problems (PA-02-168)
- Methodology and Measurement in Behavioral and Social Sciences (PA-02-072)
- Building Translational Research in Behavioral Science (PAR-02-062)
- Translational Research Grants in Behavioral Science (PA-02-061)
- Research on HIV/STD Prevention Messages (PA-01-139)
- HIV Treatment Adherence Research (PA-01-073)

- Effectiveness, Practice and Implementation Research in CMHS' Children's Service Sites (PA-00-135)
- Minority Institutions Drug Abuse Research Development (PAR-02-016)
- Behavioral and Substance Abuse Research with Diverse Populations (PA-01-096)
- Research Supplements for Underrepresented Minorities (PA-01-079)
- SBIR, STTR Programs (NOT-OD-03-053, PA-03-154)
- B/START Program (PA-03-146)
- Small Research Grant Program (PA-03-108)
- Exploratory/Developmental Research Grant Awards (PA-03-107)
- Mentored Clinical Scientists Development Program (PAR-02-076)
- Science Education Drug Abuse Partnership (PA-02-070)
- Drug Abuse Dissertation Research: Epidemiology, Prevention, Treatment, Services, and Women and Gender Differences (PA-02-055).