

Attachment 3*Research Activities*

1. Develop and evaluate protocols that provide onsite interventions in acute care settings or linkages to off-site services for patients at risk of injury or psycho social problems following injury.

Clinical preventive services for patients treated in emergency departments (ED), hospital trauma units, and other acute care settings can help reduce the risk of injury and mitigate the effects of injuries that do occur. Such services might include instruction in the proper use of safety restraints and screening and interventions for alcohol problems, intimate partner violence, or child abuse. For injured patients, ED visits and inpatient hospital admissions for trauma care may provide crucial opportunities for early identification of and intervention for post-traumatic stress disorder and other psycho social problems that can follow or be exacerbated by injury.

Decision makers are often reluctant to fund preventive clinical services because they believe the investment needed to implement a single service in one clinical setting is too high. Research should demonstrate the effectiveness and value of such services and examine ways to implement multiple services simultaneously to amortize operational costs. Medical staff from the clinical setting should be actively involved in carrying out this research.

2. Develop and apply methods that can be used to calculate population-based estimates of the incidence, prevalence, costs, and long-term consequences of SCI and non-hospitalized TBI.

Development and validation of methods is needed to assess and describe both the spectrum of outcomes following "mild" TBI and the magnitude of those outcomes. Such methods are lacking for some subgroups of people with TBI, particularly those with "mild" TBI. Research should focus on increasing uniformity of case identification methods to improve the comparability of national-level data for people with TBI. Considering available resources and the language in the TBI Act Re-Authorization for 2000, case identification for people with "mild" TBI, including those who do not receive medical care, should receive highest priority.

The NCIPC conducts population-based surveillance to develop nationally representative estimates of the incidence, prevalence, nature, and causes of injuries that result in long-term disability. This activity includes conducting population-based follow-up studies to identify and track the long-term outcomes of disabling injuries. Research should investigate the unique outcomes and special needs of specific subgroups of TBI and SCI populations, such as those violently injured. Better information about outcomes could improve estimates of the true burden of disability for individuals with "mild" TBI by helping to document long-term problems resulting from these injuries. These improved estimates should also include screening persons for previous history of TBI, including "mild" TBI. Research should also identify the service

needs of people with TBI and SCI, providing useful information for injured persons, service providers, and policy makers.

The direct medical costs and indirect costs associated with disabling injuries are not well documented; however, this information is important to guide decisions about resource allocation and other policies. For TBI, the study most often cited was published 10 years ago. Research should provide comprehensive, up-to-date information about the direct and indirect costs of TBI and SCI. In addition, research should estimate the costs associated with secondary conditions, e.g., pressure sores, depression, and alcohol abuse.

3. Identify methods and strategies to ensure that people with TBI and SCI receive needed services.

People disabled by an injury often do not receive the help they need. A CDC-funded follow-up study of TBI in Colorado found that one year after injury, about one third of people with a disability said they had not received any services since their discharge from the hospital. According to a 1998 General Accounting Office report, people who have cognitive or behavior problems, but not physical problems, resulting from TBI are among those most likely to have unmet service needs. Without treatment, people with behavior problems are the most likely to become homeless, be committed to mental institutions, or be sentenced to prison. A recent study showed that people with TBI who received the services they needed reported a better quality of life. Research should increase understanding of the gaps between needed and available services for people with TBI and SCI and should identify strategies to close those gaps. Development and validation of methods are needed to better identify persons with the mildest forms of central nervous system injury (including "mild" TBI) and to explore the possibility of using these identification methods to link these injured persons with services.

People with "mild" TBI may not even be diagnosed with a TBI, making it even more difficult for them to get assistance. Research should explore the possibility of adapting case identification methods to help link people with TBI and SCI to services. To that end, the Injury Center has already funded two small, pilot projects to investigate the feasibility of using state-based TBI surveillance to identify people hospitalized with TBI who may need help finding out about services. Studies should investigate specific methods for linking people to information and services, such as evaluating the usefulness of toll-free telephone numbers that serve as single points of entry to the service delivery system. Studies should also describe the spectrum of rehabilitation services and trends in service provision, and they should evaluate access to medical, rehabilitation, and social services to prevent disabling outcomes and secondary conditions.

Attachment 4*Errata Sheet*

Special Instructions for PHS-398, Rev. 11/2002

Announcement # PA Title**Section I—Preparing Your Application***B. General Instructions (Page 3)*

Use English only and avoid jargon and unusual abbreviations. Type the application.

Format Specifications

The Content section of the Program Announcement refers to "the narrative." The narrative should consist of items listed in the program announcement. Use only standard size fonts in black print that can be photocopied and easily read, do not use photo reduction or compressed print. Draw all graphs, diagrams tables, and charts in black ink. Do not include photographs, oversized documents, or materials that cannot be photocopied in the body of the application.

The ONLY item that should be used to keep the application together is a rubber band. Please do not use spiral binders, 3-ring notebooks, envelopes, binder clips, etc.

Do not submit an incomplete application. An application will be considered incomplete and returned if it is illegible, if it fails to follow the instructions, or if the material presented is insufficient to permit an adequate review. Unless specifically required by these instructions (e.g., human subjects certification, vertebrate animals verification, changes in other support), do not send supplementary or corrective material pertinent to the application after the receipt date without its being specifically solicited or agreed to by prior discussion with the Grants Management Specialist.

Page Limitations and Content Requirements (Page 4)

Disregard Page Limit under Research Plan, Sections a-d and adhere to the prescribed guidance in the Program Announcement.

*C. Specific Instructions**Budget Instructions (Page 11)*

CDC does not use the modular budget format. Disregard instructions regarding the dollar limitations. PHS 398 Form Page 4 and Form Page 5 are required to be submitted by all applicants regardless of the dollar amount requested.

Human Subject Research (Section 8.e., Pages 18–19)

Ensure that the application addresses the issue of Women and Minority Inclusion in Research Involving Human Subjects. The application could be determined as non-responsive if this issue is not covered within the research plan.

Section II—Submitting Your Application

Send the Application to the following address: Technical Information Management—PA#, CDC Procurement and Grants Office, 2920 Brandywine Road, Atlanta, Georgia 30341–4146. *Please do not send the application to the National Institutes of Health.*