

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
Centers for Disease Control and Prevention
National Center for Injury Prevention and Control**

Board of Scientific Counselors Open Session



**Eleventh Meeting
June 13-14, 2013
Summary Report**

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AGENDA
DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
BOARD OF SCIENTIFIC COUNSELORS (BSC)
Centers for Disease Control and Prevention (CDC)
National Center for Injury Prevention and Control (NCIPC)
Eleventh Meeting

June 13th, 2013
4770 Buford Highway
Chamblee Campus, Building 106, Conference Room 1B
Atlanta, Georgia 30341

June 14, 2013
Century Center, 1825 Century Boulevard, NE
Room 1042-1B
Atlanta, Georgia 30345

Summary Proceedings

The eleventh meeting of the National Center for Injury Prevention and Control (NCIPC) Board of Scientific Counselors (BSC) took place on Thursday, June 13 and Friday, June 14, 2013. The BSC met in closed session for secondary review, in accordance with the Privacy Act and the Federal Advisory Committee Act (FACA), on Friday, June 14, 2013. Dr. Carolyn Cumpsty Fowler served as chair.

Thursday, June 13, 2013

Call to Order, Roll Call, Welcome/Introductions, Announcements

Carolyn J. Cumpsty Fowler, PhD, MPH
Chair, National Center for Injury Prevention and Control Board of Scientific Counselors
Assistant Professor, Johns Hopkins University
School of Nursing and Bloomberg School of Public Health

Dr. Fowler called the eleventh meeting of the National Center for Injury Prevention and Control (NCIPC) Board of Scientific Counselors (BSC) to order at 8:56 am on Thursday, June 13, 2013. She thanked BSC members for their time and commitment to injury and violence prevention, and explained that the role of the BSC is to provide advice to the leadership of NCIPC on its injury prevention and control research and activities. The format of the meeting included short presentations and time to engage in conversations and informal exchange of ideas so that the BSC could provide guidance to NCIPC.

Mrs. Tonia Lindley, Committee Management Specialist for NCIPC, conducted a roll call of BSC members and federal liaison representatives who were present in person and on the telephone. A quorum of BSC members was present, and a quorum was maintained throughout the meeting. Following the roll call, BSC members and representatives from NCIPC introduced themselves.

BSC Members Present (In Person)

- Carolyn J. Cumpsty Fowler, PhD, MPH, Assistant Professor, Johns Hopkins University School of Nursing and Bloomberg School of Public Health (Chair, BSC)
- Deborah Gorman-Smith, PhD, Chicago Center of Youth Violence
- Sherry Lynne Hamby, PhD, Department of Psychology, The University of the South
- Stephen Hargarten, MD, MPH, Professor and Chair, Department of Emergency Medicine, Medical College of Wisconsin
- Robert M. Harris, MD, Medical Director of Orthopaedic Trauma, Orthopaedic Trauma, Johnson City Medical Center
- Angela D. Mickalide, PhD, MCHES, Executive Director, Emergency Medical Services, Children's National Medical Center
- Sherry D. Molock, PhD, Associate Professor, Department of Psychology, The George Washington University
- Maury Nation, PhD, Associate Professor, Department of Human and Organizational Development, Vanderbilt University
- Christina A. Porucznik, PhD, MSPH, Assistant Professor, Department of Family and Preventive Medicine, University of Utah
- Maria Testa, PhD, Senior Research Scientist, Research Institute on Addictions, University of Buffalo

BSC Members Present (Via Teleconference)

- John P. Allegrante, PhD, Deputy Provost, Teachers College, Columbia University
- John G. Borkowski, MD, Professor, Department of Psychology, University of Notre Dame
- Shelly D. Timmons, MD, PhD, FACS, Director of Neurotrauma, Department of Neurosurgery, Geisinger Medical Center

Federal Liaisons Present (Via Teleconference)

- David R. Boyd, MDCM, FACS, National Trauma Systems Coordinator, Office of Emergency Services, Indian Health Service
- Lisa J. Colpe, PhD, MPH, Chief, Office of Clinical and Population Epidemiology Research, Division of Services and Intervention Research, National Institute of Mental Health
- Elizabeth A. Edgerton, MD, MPH, Branch Chief, EMSC and Injury Prevention, Maternal and Child Health Bureau, Health Resources and Services Administration
- Thomas E. Feucht, PhD, Executive Senior Science Advisor, National Institute of Justice
- Jane L. Pearson, PhD, Associate Director for Preventive Interventions, Division of Services and Intervention Research, National Institute of Mental Health
- Farris K. Tuma, ScD, Chief, Traumatic Distress Disorders Research Program, Division of Adult Translational Research and Treatment Development, National Institute of Mental Health

A list of additional meeting participants is provided with this document as Attachment A.

Dr. David Williamson, Acting Associate Director for Science, NCIPC, reviewed the day's agenda. He noted that NCIPC had been very busy since the last BSC meeting. For instance, NCIPC recently assisted the National Institute for Occupational Safety and Health (NIOSH) in a Webinar for the Department of Health and Human Services (HHS) Healthy People 2020 where the focus was on violence across the lifespan.

Approval of Last Meeting Minutes and Charge to Pediatric Workgroup

Carolyn J. Cumpsty Fowler, PhD, MPH
Chair, National Center for Injury Prevention and Control Board of Scientific Counselors
Assistant Professor, Johns Hopkins University
School of Nursing and Bloomberg School of Public Health

Dr. Fowler called for a motion to approve the meeting minutes from the tenth BSC meeting on October 16-17, 2012. **Dr. Nation** moved to approve the meeting minutes. **Dr. Borkowski** seconded the motion. The minutes were approved unanimously with no abstentions.

Dr. Fowler directed the BSC's attention to the charge to the Pediatric Workgroup. The workgroup would be convened for the development of clinical guidelines for the management of pediatric mild traumatic brain injury (MTBI). **Dr. Mickalide** moved to approve the charge to the Pediatric Workgroup. **Dr. Porucznik** seconded the motion. The motion carried unanimously with no abstentions.

Director's Update

Linda C. Degutis, DrPH, MSN
Director, National Center for Injury Prevention and Control
Centers for Disease Control and Prevention

Dr. Degutis provided the BSC with updates on major issues and initiatives at NCIPC. She emphasized that the status of the federal budget and the government sequestration are having an impact on NCIPC and the Centers for Disease Control and Prevention (CDC), as well as on other federal agencies. Sequestration went into effect and created a 5% cut in each budget line. NCIPC grantees have received their awards with the adjustment. The budget for next year is not clear, as no appropriation is yet in place.

A mandate from Congress prescribes the use of a Working Capital Fund to manage operational expenses and business services throughout CDC. With this change, which takes effect on October 1, 2013, it will appear that each of CDC's centers will be funded at higher levels. In reality, the funds have to be repaid through the Working Capital Fund, based on usage, to support services such as Information Technology (IT), email, and telephone. This approach is designed to create more transparency, but it will take some time to put into place. A board comprised of CDC center directors and a representative from the agency's Office of the Director (OD) operates the Working Capital Fund. The board makes decisions about allocations and other aspects of the new system.

NCIPC is also experiencing impact from travel and conference restrictions. New criteria govern how conferences are reviewed. If CDC sponsors or co-sponsors a conference, strict deadlines are in place regarding approvals. Low spending limits are in effect, and the expenditures are approved through HHS. All aspects of conferences and their attendance are scrutinized, including where personnel travel, even when CDC does not have decision-making power over where conferences are held. Any travel is tied to NCIPC's mission and priorities.

The Institute of Medicine (IOM) recently released its report on a research agenda for the prevention of gun violence. In January 2013, President Barack Obama issued an Executive Order to resume gun violence prevention research. In addition to developing a research agenda, the President's budget proposes \$20 million to provide for all 50 states to be included in the National Violent Death Reporting System (NVDRS) and \$10 million for NCIPC to conduct firearm research. NCIPC is reviewing the recommendations in the IOM report for activities that can be incorporated into their current budget and work. For instance, some NCIPC grantee projects include violence that may relate to gun violence. Projects focused on intimate partner violence (IPV) or suicide could contain information that links to firearm violence and use of firearms. There is potential for sub-analyses in these areas and in the 18 states that contribute to the NVDRS. NCIPC is also working with the CDC OD regarding the agency's and HHS's priorities in this area. They cannot engage in much work without additional funding, as there is no appropriation for CDC and NCIPC to resume the work.

Dr. Thomas Frieden, CDC Director, asked NCIPC to accelerate activities regarding prescription drug overdose to respond to the current public health emergency in this area. In addition to ongoing work by the four individuals addressing this issue in the Division of Unintentional Injury Prevention (DUIP), NCIPC collaborates with other federal agencies and organizations. They are also seeking to leverage existing resources to ramp up the response to prescription drug overdose and perhaps to shift funds to do more to prevent it. Other parts of CDC are serving as partners in this effort. For example, the birth defects team, the environmental health team, and other partners that focus on illicit drug use and addictions are concerned about prescription drug abuse.

The Injury Control Research Center (ICRC) Funding Opportunity Announcement (FOA) has been released. Among the changes in the new FOA is the addition of funding for up to two developmental centers. These new centers will receive approximately half of the funds allocated to fully-funded centers in order to establish core functions and to be able to compete as a fully-funded center in the future. This approach is aimed at building the number of ICRCs and to expand the field. Eleven ICRCs are currently funded at approximately \$900,000 per year, and some former ICRCs are still very active. Sustainability is an important issue. Many ICRCs leverage research funding from other areas. They also engage in education and outreach, and they serve as a valuable resource.

NCIPC continues to link research and practice, seeking better opportunities in the field and internally to CDC. The ICRCs and the Core State Violence and Injury Prevention Programs (VIPPs) are aiding in this work and are linking together as well. NCIPC continues to foster cross-center collaborations within CDC, particularly with the noncommunicable disease centers. A panel will speak at an upcoming National Association of County and City Health Officials (NACCHO) meeting to highlight the importance of noncommunicable disease. NCIPC is working with Johns Hopkins and Emory Universities to plan for the 12th World Injury Conference, which will be held in Atlanta from October 19 – 24, 2014.

Searches are ongoing related to the recent reorganization of NCIPC. Interviews are being conducted for a director for the new Division of Analysis, Research, and Practice Integration (DARPI). A permanent deputy for the center will be named in the coming weeks. A Branch Chief will soon be hired for the Health Systems and Trauma Systems Branch. The ideal candidate will have clinical experience and background to understand health systems and to contribute to developing that branch, which includes the Traumatic Brain Injury (TBI) Initiative, the prescription drug overdose efforts, and health systems and trauma systems. Eventually, a

lead for the TBI Team will be hired. Candidates are being interviewed for the Associate Director for Science in DARPI and for a permanent Director for Communications.

Dr. Degutis briefly explained the new structure of NCIPC. The center has three divisions. The Division of Violence Prevention (DVP) addresses all areas of violence prevention, including youth violence, IPV, sexual violence (SV), suicide, homicide, and firearms. DVP also administers NVDRS and the National Intimate Partner and Sexual Violence Survey (NISVS), an ongoing, population-based survey that started in 2010. DUIP has two branches: 1) Home, Recreation, and Transportation Branch, which focuses on motor vehicles, sports concussions, falls among older adults, and other issues; and 2) Health Systems and Trauma Systems Branch. DARPI includes the Core VIPP branch, which has an evaluation team that considers evaluation strategies across NCIPC. This division also includes the Web-based Injury Statistics Query and Reporting System (WISQARS) and other statistics-related work, as well as teams to consider economics and policy research.

The NCIPC OD includes the Associate Director for Science (ADS) and the Senior Advisor for Global Health. The Office of Policy and Partnerships and the Office of Communications are also under the OD. The Office of the ADS includes the Extramural Research Program Office (ERPO). NCIPC's four focus areas are prescription drug overdose, motor vehicle-related injury prevention, TBI prevention, and the prevention of violence against children and youth.

In terms of the Core VIPP, 20 state health departments are funded to address the challenge that violence and injury prevention is not traditionally perceived as a core function of health departments. The program includes Regional Network Leaders (RNLs) in each of five regions around the country. One program in each region receives \$50,000 extra per year to serve as an RNL. The RNLs are responsible for convening the states in their region and for providing technical assistance (TA) to states that are unfunded, as well as those that are funded under Core VIPP. This approach addresses the need to build capacity in states that do not have CDC funding to build violence and injury prevention as a key component of the health department.

In this area, Connecticut recently funded at least 1.5 Full-Time-Equivalents (FTE) for a violence and injury prevention program in its state health department. The Health Commissioner in Connecticut has consulted NCIPC regarding how to reestablish these efforts. Oregon recently enacted legislation to require an injury program in the state health office. Dr. Degutis recently met with the board of the Association of State and Territorial Health Officials (ASTHO), and there is recognition that injury and violence prevention should be part of what ASTHO does on a daily basis.

The Core VIPPs engage in intentional and unintentional violence prevention work. They utilize data from their states to frame their interventions based on state priorities. Each program chooses priority areas. Of the 20 states, 16 have chosen prescription drug overdose as a first priority. Many of the state programs engage in inter-agency work, especially given that the Prescription Drug Monitoring Programs (PDMPs) in many states require multi-agency involvement.

Regarding the priority area of motor vehicle-related injury prevention, NCIPC entered into a Memorandum of Understanding (MOU) with the National Highway Traffic Safety Administration (NHTSA) in December of 2010. The NHTSA Administrator has been extremely supportive, collaborative, and interested in working with CDC, particularly in terms of data, surveillance, and data analysis. For example, better analyses of the impact of motorcycle helmet laws are needed, and credible data from CDC helps NHTSA increase activity in that area. NCIPC's

Motor Vehicle Team has worked with NHTSA to develop a joint plan for addressing motor vehicle safety issues. The National Transportation Safety Board (NTSB) recently recommended lowering the Blood Alcohol Content (BAC) for impaired driving to 0.05. NCIPC provided NTSB with data as this recommendation was developed. They are raising awareness on this issue. Much of Europe has impaired driving BAC limits of 0.03 or 0.05, and some are lower.

Discussion Points

Dr. Nation asked whether the shift to the Working Capital Fund model will be framed as a net increase in funding for the centers.

Dr. Degutis answered that the budgets will appear to reflect increases for the centers, but the net effect will probably be “a wash.” They will message these changes clearly.

Regarding resuming gun violence prevention research, **Dr. Fowler** asked whether NCIPC anticipates “pushback.” **Dr. Degutis** does anticipate some pushback, but they will wait to see how the process unfolds.

Dr. Hargarten asked about discussions with other federal agencies regarding the IOM report.

Dr. Degutis replied that they have not yet held discussions with other federal agencies, but they are considering how to facilitate collaborations among federal agencies. There could be opportunities for combining FOAs or projects, or for sharing access to different data sets. The IOM report addresses improving researchers’ access to data.

Dr. Fowler asked whether the wording of the President’s order includes intentional and unintentional violence; that is, both suicide and homicide. **Dr. Degutis** said that the order covers all aspects of gun violence and is not restricted.

Dr. Hargarten commented that the Biden Commission Recommendations on Gun Violence call for funding for the NVDRS and asked about progress on this front.

Dr. Degutis answered that additional funds for NVDRS will need to come as part of an appropriations bill; therefore, no additional funds are available at this point. There is a proposed increase for Fiscal Year (FY) 2014 to expand NVDRS.

Dr. Fowler mentioned the results of a recent study from the University of Utah on distracted driving and hands-free technology. She asked about NCIPC’s relationship to this study and communication regarding these issues, and about new hands-free technologies that are being incorporated into motor vehicles.

Dr. Degutis answered that NCIPC focuses on high-priority areas. In a situation such as the study from Utah, the center will typically work with a Subject Matter Expert (SME) to identify whether the center can provide science to add to the discussion. Generally, however, NCIPC will not make a statement on an issue without sound science to support the statement. For example, Dr. Greenspan was recently asked to comment on “car surfing” after the death of an Atlanta-area teenager who was “car surfing.” The center declined the request for comment but provided a relevant article from a *Morbidity and Mortality Weekly Report (MMWR)*. “Car surfing” is obviously ill-advised, but it does not make sense for NCIPC to take resources away from other issues and responses to focus on it.

Dr. Grant Baldwin (Director, DUIP) added that in March 2013, an *MMWR* was released comparing distraction rates in the United States to seven European countries. Distracted driving remains a priority for NHTSA and the US Department of Transportation (DOT). Because NCIPC has experience creating a motorcycle helmet toolkit/guide, NHTSA sought their consultation and TA to develop a similar toolkit/guide for distracted driving. The science behind the efficacy of distracted driving laws remains an open question. The way forward in distracted driving may be engineering solutions as opposed to voluntary laws. Because distraction is a NHTSA priority, NCIPC seeks to support their work as much as possible.

Ms. Erin Connelly (Acting Associate Director for Communications, NCIPC) explained that there are certain institutional restraints on CDC regarding commenting on science that the agency did not generate. They are not allowed to comment on others' research as third-party experts and triangulate the comments back to their own research and messages. CDC is loath to comment on science that it has not funded or published.

Dr. Hargarten asked for clarity regarding the differences between health systems and trauma systems, as the two seem to be joined together. He asked whether the Branch Chief in this area will have the opportunity to remain clinically active while providing leadership to the branch.

Dr. Degutis answered that CDC has made the linkage between clinical medicine and public health a priority. There are opportunities for work in injury prevention not only within trauma systems, but also in other parts of the health system, including primary care. The field of research in public health systems and services addresses how public health systems function and opportunities for integrating public health systems and health systems, and how they can relate to and enhance each other. This approach is different from looking only at trauma systems. For example, the field of prescription drug overdose includes not only the trauma system, but also primary, secondary, and tertiary prevention. Regarding clinical opportunities, she said that people throughout CDC work clinically.

Dr. Hamby asked about NCIPC's impressions of the IOM report and how it might influence the development of their programs.

Dr. Degutis said that NCIPC obtained funding for the report and negotiated with IOM and the National Research Center (NRC) to create the panel and the report. That forum and method allowed for a third party to use their consensus process to identify critical issues and to develop the report. NCIPC relied on IOM to assemble the committee, which had a balance of various opinions, experience, and expertise regarding firearms. IOM creates different documents, and NCIPC felt that this document should be a consensus report, as opposed to a report of meeting proceedings. The time trajectory for the report was very short. There will inevitably be agreement with parts of the report, and disagreement with other parts of it. Because a neutral party developed the report, it is not solely applicable to CDC but can be used by other agencies as well to form a dialogue about the research that is needed to address the issue of gun violence. The report provides a baseline for moving forward. The last report on firearm violence that was conducted by the National Academy of Sciences (NAS) was completed by the NRC in 2006, and it did not have a health focus. This report was spearheaded out of the Executive Office of IOM and included a range of perspectives from criminal justice, public health, clinical health, and other areas.

Dr. Hamby asked whether NCIPC's primary focus in firearms will be on the analysis of existing data and the expansion of access to surveillance data sets. **Dr. Degutis** answered that their focus will depend on funding.

Dr. Nation asked about the potential profile that NCIPC will have pertaining to firearms. He acknowledged that funding is a “wild card” and that there may be no additional funding. Given those contingencies, he asked about implications for the existing structure of DVP.

Dr. Degutis replied that NCIPC’s funding line for intentional injury does not specifically include firearm research, but there is broad intentional funding available. They are considering their options, including the funds that DVP has already obligated as well as the potential for funds that may come off-line in the future that could be applied to firearm-related FOAs. The current ICRC FOA does not mention firearms because it was developed before the Executive Order was released. NCIPC expects that applicants for funds through the ICRCs will have firearm-related projects, however. Regarding NCIPC’s profile, they have certain niches, especially the provision and generation of data. Some data within NVDRS and WISQARS already exist and could be expanded upon or used for sub-setting. NCIPC has published information related to firearms in the past, as firearms are a cause of injury and mortality. They can consider the importance of firearms to all kinds of injuries and how to prevent negative outcomes.

Dr. Howard Spivak (Director, DVP) added that DVP has ongoing violence-related projects that have not been collecting firearms data, but which can incorporate firearm data into their existing work. Additionally, Academic Centers of Excellence (ACEs) work in communities and can begin to integrate firearm work.

Dr. Mickalide asked about NCIPC’s efforts regarding prescription pain medication and how the proliferation of these products in homes may be impacting poisoning among young children.

Dr. Baldwin answered that NCIPC is accelerating work in this area in three priority areas: strengthening surveillance; improving clinical practice; and informing laws, regulations, and policies. Their priority strategies within these areas include PDMPs; Patient Review and Restriction (PRR) Programs; integrating PDMP data into clinical guidelines, workflow, and decision-making; laws, regulations, and policies, especially evaluations of “doctor-shopping,” “Good Samaritan,” and “pill mill” laws as well as identification checks; and working with formulary and pharmacy benefit managers. The July 2013 *Vital Signs* will focus on closing the gap between men and women in the epidemic of prescription drug abuse. DUIP is focusing on high-risk patients and providers. The highest-risk population is middle-aged, but youth prescription drug overdose is also a concern. Among their activities is a partnership with the National Governors Association (NGA), ASTHO, and the National Safety Council (NSC) to work with a small number of state teams to develop state-based action plans. The number of people assigned to this work is small, and they look forward to expanding. They are exploring collaborations with their ICRC partners as well.

Dr. Mickalide was thrilled that CDC is working on this very important issue and found their efforts to be timely and appropriate.

Dr. Baldwin noted that a report to Congress from HHS is forthcoming regarding what the department should do about prescription drug overdose. Many entities within HHS, such as the US Food and Drug Administration (FDA) and the Substance Abuse and Mental Health Services Administration (SAMHSA), are engaged in this issue. Other federal agencies, including the US Drug Enforcement Administration (DEA) and the Bureau of Justice Assistance (BJA) are also involved, and NCIPC is communicating with all of them.

Dr. Mickalide asked whether any foundations are supporting these efforts.

Dr. Baldwin answered that there is interest from the Trust for America's Health (TFA), which is writing a report on prescription drug overdose. In addition, conversations have taken place with the Robert Wood Johnson (RWJ) Foundation. The Pew Charitable Trusts are also interested. It is important to be judicious when choosing partners, given their limited staff resources. Further, prescription drug overdose is now an "unofficial" winnable battle at CDC. There is great attention and focus on the issue across the agency.

Dr. Degutis explained that TFA generates reports on various issues. They often consider policy and state-level interventions.

Division Discussion Topics: Ask the BSC

Economics and Policy Research at NCIPC

Dr. Curtis Florence
Team Lead, Health Economics and Policy Research Team
Statistics, Programming, and Economics Branch
Division of Analysis, Research, and Practice Integration
National Center of Injury prevention and Control
Centers for Disease Control and Prevention

Dr. Florence noted that his team was previously housed within DVP, but that their research is applicable to any area of injury and violence prevention. A great deal of economics and policy-related research activity has been underway at NCIPC. With the reorganization of the center, that work is coalescing so that NCIPC can demonstrate the value of the prevention of injury and violence in a manner that is accessible to people in the field as well as to policymakers. Examples of this activity include the following:

- The WISQARS website makes state-level data available on injuries of all types. Cost-related information is also available, including the cost of medical care to treat injuries and lost productivity due to time away from work.
- A study on the economic burden of child maltreatment was produced by the Health Economics Team and published in 2012. This study demonstrates the burden of child maltreatment as well as the value of prevention.
- NCIPC has conducted work on the impact of alcohol policy on violence and on alcohol and policy related to transportation.
- NCIPC has generated a business case for programs for older adult falls prevention.
- An ongoing project is measuring the benefits and costs of various types of motor vehicle crash interventions and policies.

The Health Economics and Policy Research Team works to translate this information so that it is useful to people who make decisions about implementing prevention. They propose developing a "Return on Investment (ROI) Calculator." The theme of National Public Health Week in 2013 was "Public Health is ROI." Generally, ROI in this context refers to benefit-cost comparison.

Limited information on program costs and benefits is available and accessible to decision-makers that may invest in these programs. For instance, a state may wish to address the problem of child maltreatment. Successful programs to address child maltreatment are available, but they require considerable resources. A state that implements these programs will bear almost all the cost of implementation and may not understand the benefits of preventing child maltreatment in terms that matter to them. They will see the costs of the program, but not the impacts on the state's budget. The scientific literature includes this cost-benefit information, but state policymakers and their staffers are not likely to consult the literature. NCIPC hopes to make that information more accessible.

The WISQARS platform is accessible and is used frequently by a range of different users, including the media. The Health Economics and Policy Research Team will use WISQARS to improve access to information about the costs and benefits associated with implementing given interventions. The calculations depend on a number of variables, some of which are unknown. The platform will include a means for users to input their specific information and will also clarify that the resulting calculations are estimates, not guarantees. The information can then be shared with policy-makers.

This idea is based on the RAND Cost of Crime Calculator, which incorporates research on the impact to crime levels when the size of a police force changes. The calculations are based on data from Los Angeles and show the likely effects and impacts associated with decreasing the police force by a number provided by the user.

The first topic area for the NCIPC calculator will be child maltreatment, given that NCIPC produces the Child Maltreatment Economic Burden report. They are confident in using that number as a measure of the benefit of prevention. NCIPC has also been involved in the evaluation of some child maltreatment prevention programs which are supported by peer-reviewed publications that demonstrate their implementation cost. Eventually, they hope to use the platform across the spectrum of injury and violence prevention. They can add a module for an injury or violence prevention topic area when sufficient evidence is available regarding the effectiveness of prevention programs, policies, and strategies, as well as for the costs of implementation and on the benefits of prevention.

Discussion Points

Dr. Fowler reminded BSC that their charge was to provide the NCIPC team with their thoughts regarding priority areas, the information needed, and costs.

Dr. Testa praised the effort but hoped that sufficient resources were available to ensure that people know that the tool exists and can use it.

Dr. Florence agreed and noted that the communications and policy staff at NCIPC will help disseminate the information. They can also publish the information through their extensive partner network with the states.

Dr. Hargarten found the calculator to be exciting. He asked how local the information from the calculator could be. In addition to targeting public health agencies and state health departments, he asked about potentially targeting Accountable Care Organizations (ACOs). Hospital executives are starting to think about populations. NCIPC has the opportunity to be in the forefront of informing hospital systems about population work. Injury prevention is a natural area for hospitals to address.

Dr. Florence answered that the way the information is targeted will depend on the issue. For instance, state health departments may not be targeted regarding older adult falls. Rather, information on that issue may be targeted toward federal partners such as the Centers for Medicare and Medicaid Services (CMS) and the Medicare Advantage Plans and Medicare Supplemental Plans that will cover people that are most at risk for large health expenditures resulting from a fall. Before the calculator is rolled out, the team and NCIPC will determine who needs the information and how to share the information so that they will see it.

Dr. Borkowski asked how the calculator for child maltreatment relates to the Strategic Plan for Violence and Injury Prevention and whether the calculator's information has been integrated with states that are supported by Core VIPP. There is a "golden opportunity" to derive information from programs at the statewide level, such as the Healthy Families Program in Indiana and other states, to provide states with cost-benefit analyses and to disseminate that information actively to other states so that they can either institute or modify programs based on the data.

Dr. Florence answered that the information has not yet been integrated. Given the team's new location in NCIPC in the same division as the Core program, there are natural interfaces for their activities.

Ms. Angela Marr (Chief, Practice Integration and Evaluation Branch, DARPI, NCIPC, CDC) clarified that Core VIPP uses its infrastructure to share information with the states. New publications or tools from NCIPC and its partners are shared, and they are making more connections.

Dr. Gorman-Smith agreed that the project is exciting and ambitious. A number of groups are working on cost-benefit analyses, and she asked about the standards on which the analyses are based. She further asked about the standard of evidence used to determine whether an intervention will be included in the calculator.

Dr. Florence said that there is not a Community Guide-level standard of evidence in terms of the effectiveness of the intervention. There may be multiple reviews of a given program. For example, the Positive Parenting Program (PPP) is offered as an example of an effective program since a trial of the program demonstrated its effects on child maltreatment. Nurse-Family Partnerships is another example of an intervention that is included in the calculator. Interventions that are currently operating and available, that meet standards of evidence, and about which information on the cost of implementation is available will be included. The calculator has not undergone clearance at CDC. Standards for cost-benefit analyses have been established by IOM and the World Health Organization (WHO). The new calculator demonstrates the believable potential variation around results.

Dr. Gorman-Smith noted that the IOM is convening another workgroup to revisit the economic standards.

Dr. Hamby agreed that this initiative is important and will provide meaningful information to a range of people. She noted that figures such as these are embraced by the advocacy community, but may be mocked by the scholarly and policy communities. It would be useful for NCIPC to focus on the basis for the estimates to avoid that potential pitfall. Cost-benefit analyses are sometimes divided into direct and indirect costs. The calculator includes three pieces of information: cost; program cost, which is relatively easy to assess; and the extrapolation from a single study to a population effect, which is often criticized in the field. Those extrapolations can be vague. For example, an analysis of the cost-benefit of the Violence Against Women Act (VAWA) included an extremely high estimate of cost savings and decline in partner violence and attributed the entire change in prevalence rates in the entire country to the implementation of VAWA. She advised NCIPC to express carefully how the costs were derived and which were direct and which were indirect. The future costs, such as lost time from work and potential future mental health costs, can be “fuzzy.”

Dr. Florence agreed that much information of this type in the public domain is not generated cautiously enough. For instance, when data are published by a group and generate attention, CDC is often asked about the data. Before January of 2012, NCIPC was not certain about the economic burden of child maltreatment. NCIPC went through a multi-year process of building estimates in a defensible manner that is based on peer-reviewed research and with a minimal number of assumptions. Because of this process, NCIPC’s data is often released more slowly, but the process ensures that the data are sound. CDC has excellent scientific credibility and they do not want to jeopardize their standing by releasing information that does not meet their standards. The calculator will go through a tremendous amount of internal review before it is rolled out, and the data in the calculator will have been vetted in other venues as well. Measuring indirect costs is a problematic aspect of economic analysis, but the costs are real and NCIPC does its best to account for them.

Dr. Molock asked about NCIPC’s confidence level in the surveillance data and how recent the data are. If policy is to be based on the data, it is important that it is of high quality so that policy is not grounded in, for instance, a spike or fluke.

Dr. Florence replied that information regarding child maltreatment is chiefly official information on cases that have been investigated and where a finding of substantiation is made. NCIPC is certain that the numbers are too low and do not capture the universe of child maltreatment that occurs. The data also likely contain false positives, but it is difficult to reach a substantiated case of child maltreatment. The findings are made by state and local agencies, so they are aware of trends. Rates are generally stable and they do not tend to see spikes. Other types of NCIPC surveillance show that the rates reflected in official records are too low.

Dr. Fowler praised the concept of the calculator and asked how the implementation costs are calculated. It is possible that the cost of a program may misrepresent the amount of money, or lack of money, that is invested in infrastructure. The costs could also misrepresent the in-kind financial and non-financial contributions of partners in communities. Two programs may spend the same amount of money, and one may succeed and the other may not. The difference in results could be due to how the program leverages the resources around it. Public health is generally good at leveraging other resources, but not as good at capturing how the resources are leveraged.

Dr. Florence answered that DVP has conducted effectiveness evaluations of the PPP. In a large-scale effectiveness evaluation, the funding requires grantees to include an expert in economic evaluation on their team. That person collects data on the cost of implementation. Standards in economic evaluation are related to measuring the total resources that are needed to implement a program. For instance, volunteer time is accounted and assigned a value. Collecting this information can still be problematic, but the evaluation intends to assess the total effort required to implement a program not just in budgetary terms, but by incorporating all resources.

Dr. Nation observed that the BSC is excited about the idea of the calculator as they recognize the complexities of being able to account for things that are relevant to their work. He asked who the calculator's primary audience will be. Some of the numbers may not compute to some audiences. For example, a police chief may not relate to the idea that a murder "costs" \$8.5 million. At the same time, specific costs should be documented. The total numbers cross several budgets so that no one person is invested in the big number, so it is not compelling.

Dr. Florence agreed. There is a strong academic influence on how these data are presented. Academic economists are trained to count the entire social costs and benefits of whatever is being evaluated. People tend not to care about the full social costs and benefits, however; people care about how an issue affects them. The data must be presented in a way that is meaningful. In the example of cost per murder, for instance, it is important to identify how much of that cost reflects tax revenue that a city budget will lose; how much represents the legal and social service response; and more. The majority of the economic burden of child maltreatment that has been identified is borne by the victims of child maltreatment. On average, they earn approximately \$5000 less per year than non-victims with a similar socioeconomic background. Approximately 40% of that \$5000 is taxes that are not collected.

State Strategic Plans for Violence and Injury Prevention

Angela Marr

**Chief, Practice Integration and Evaluation Branch
Division of Analysis, Research, and Practice Integration
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention**

Ms. Marr provided BSC with an overview of Core VIPP and an update on the program's progress. Core VIPP, in some iteration, has existed since 1997. Initially, the program consisted solely of capacity-building cooperative agreements. The program has now moved toward implementation and outcomes. NCIPC funds 20 Core programs at a level of approximately \$250,000 per year. The center made a series of strategic changes for the latest Core VIPP funding announcement. In addition to surveillance, the programs now engage in multiple activities, including long-term tracking, policy, implementation, and evaluation.

In 2010 and 2011, Core VIPP went through a portfolio review process. BSC made extremely useful recommendations based on the portfolio review. The review identified that a strong strategic state plan was highly indicative of success and higher capacity. Plans were rated based on whether they identified clear priorities, named specific partner organizations, outlined a detailed timeline for implementation, and identified implementation partners.

The portfolio review took place as NCIPC was planning the next iteration of the funding announcement, so they were able to incorporate the recommendations and findings into the next round of cooperative agreements. Knowing that a strong state strategic plan is an important element of success, NCIPC incorporated strengthening of state plans into the new cooperative agreement. Core VIPP is cross-cutting and addresses both violence and unintentional injury. States have flexibility in the topics that they can address and in how they operationalize their programs. The programs work to build on existing infrastructure at state health departments to create pathways for delivering and implementing interventions. NCIPC does not impose artificial deadlines, but gives guidance. States update their strategic plans for violence and injury prevention on a yearly basis.

NCIPC learned from other areas at CDC, including the obesity prevention teams, to understand what makes a strong state strategic plan. With that information and the information from the Core VIPP portfolio review process, they are creating a workbook for state partners to use as they are updating their strategic plans. The evaluation cooperative agreement will include a thorough re-evaluation of the state plans.

This year, NCIPC is focusing on rolling out the workgroup and providing TA through the joint cooperative agreement held with Safe States Alliance and the Society for the Advancement of Violence and Injury Research (SAVIR) as well as through program consultants. Every state and territory, whether funded or unfunded, has a project officer. The officers foster collaborative relationships. Many states are able to achieve capacity through other partners, and the most successful states have a broad range of funding. The officers hold monthly calls with the states, and the states also gather for regional network meetings. Another factor for state success is having a wide range of partner organizations, which has an impact on the state strategic plans, as states are encouraged to state clear roles, expectations, and timelines for partners.

Discussion Points

Dr. Fowler asked for updates on other recommendations included in the Core VIPP portfolio review. One of the recommendations was to “pull back” from program implementation until capacity is secured. Another recommendation concerned data capacity, and another focused on building states’ position and leverage within the state health department. Many of the programs are “low on the food chain,” which inhibits their ability to move forward. Dr. Fowler applauded the progress in improving planning, but indicated that the real concern in the portfolio review was that implementation planning should not take place before the programs have positioned themselves to be effective. Additionally, there was concern regarding evaluating what the states do and the resources they use. Successful programs serve as leveraging agents. Those recommendations are critical to ensure that the strategic plans will work.

Ms. Marr agreed and said that \$250,000 is not enough funding for implementation. The goal of the cooperative agreement is to support the injury burden at the state level. States use their data and planning groups to make those decisions. In the past, the programs have been quite flexible and dynamic. They moved frequently from topic to topic, which may have impeded them from building leverage in a given area and moving forward with a concerted effort. In the latest iteration of the cooperative agreement, each state identifies focus areas for the five-year period of the agreement. NCIPC provided feedback, and they settled on focus areas in which evidence-based interventions could be implemented. NCIPC worked with states regarding how the implementation will be tracked and which partners will do the implementation. Each of the activities and strategies should support the states’ specific goals and “move the dial” on certain issues. The states still have flexibility, as they choose their focus areas based on their needs

and the availability of programs, but the focus areas are sustained for five years. NCIPC offers TA regarding how to leverage, for instance, surveillance data from the Core VIPP cooperative agreement to secure resources from other areas. Building visibility within the states has been an incremental process. NCIPC advocates that the state health officer and, when possible, the governor's office sign off on the state strategic plans.

Dr. Mickalide asked about the outcome metrics associated with strong state strategic plans and whether NCIPC can track whether there have been reductions in morbidity and mortality in excess in states with good state plans.

Ms. Marr answered that they can consider morbidity and mortality on a case-by-case basis. The portfolio review process adopted a systematic approach for all funded states. The performance measures from the cooperative agreement relate to capacity, accessibility of data, and utilization. They are not directly tied to statewide measures for morbidity and mortality reduction. Given the modest funding level, state plans do not always focus on a statewide outcome. States partner with other organizations to implement programs and utilize the Core VIPP for strategic planning, coordination, and tracking. Their reach is typically at a local level because implementation funds are often available to work with a specific city, county, school district, or hospital. Because the reach of the programs varies, it would be a disservice to the program to expect statewide outcomes.

Dr. Mickalide asked whether examples of state plans could be provided to the BSC.

Ms. Marr said that the state plans were part of the portfolio review. They are also on the websites of the state health departments. She said that she would work with Dr. Cattedge to share examples with the BSC. **Dr. Harris** requested that BSC members see the plans from their home states.

Dr. Fowler said that Core VIPP only funds 20 states, and there has been a dramatic decrease in the funding level since the program was initiated in 1997, after adjusting for the current value of the dollar. The issue of evaluation arises often. The outcomes evaluation project from Safe States Alliance and SAVIR is funded, but there is still a large gap in the ability of the states to use evaluation to decide what they should do, how they should do it, and how to monitor interim outcomes. If a violence and injury prevention program brings an additional \$2 million to a state or serves as a convener for a strong coalition, then those outcomes are significant. As NCIPC works on indicators for ICRCs, Dr. Fowler encouraged them to think about state-level practice indicators as well. She recalled a recent comment from a state program staffer, who said that states do not want to engage in direct program implementation and that their skills are better utilized as they serve as an agency of convening, leveraging, and providing technical support.

Ms. Marr agreed. In addition to the evaluation cooperative agreement with Safe States Alliance and SAVIR, in-house evaluation TA is available from the NCIPC Evaluation Team. The reorganization of the center allows for better access and utilization of that resource. The work involves not only evaluating programs as CDC rolls them out, but also building states' capacities to conduct their own evaluation. In-house NCIPC evaluators work one-on-one with states to build that capacity. NCIPC also provides educational training opportunities. State health departments are at varying levels of capacity. The recent "Evaluation 101" series was helpful for states that are more recently funded, and individual TA is available to help states, whatever their capacity. States are tracking outcomes as they progress. Using NCIPC funding to lead and coordinate is important, especially since \$250,000 is not sufficient for full, direct program implementation. NCIPC tracks leveraged dollars through the states' progress reports. This

information could be collected more rigorously, and there is wide variance in the way it is reported. At this point, for every dollar that Core VIPP provides, states are able to leverage four additional dollars for violence and injury prevention. A more rigorous assessment of these efforts will provide a clearer picture of how states are leveraging their funds.

Dr. Fowler noted that a number of states have identified prescription drug abuse and mortality as a priority and asked how those states are connected to expertise at NCIPC on this issue.

Ms. Marr said that they utilize their SMEs within the center, as prescription drug overdose cuts across NCIPC. Dr. Baldwin and his team at DUIP have worked collaboratively with Core VIPP, and the program also works with Dr. Spivak and DVP on violence issues related to prescription drug overdose. NCIPC SMEs reviewed all of the strategies that states selected related to the issue. They utilized a Best Available Research or Evidence (BARE) analysis to encourage states to move forward and enhance their strategies to work with key in-state partners.

Dr. Baldwin noted that sixteen states have identified prescription drug overdose as a priority. NCIPC provides TA in various ways, including the NGA/ASTHO/NSC State Action Teams. Participants in a focus group at a recent Safe States Alliance conference acknowledged wide variability in state-level capacity to address prescription drug overdose. This issue requires unique technical expertise and a clinical lens, which some states are in the process of developing. Safe States Alliance will produce a summary document from that focus group to help states define a way forward, including how high-performing states can continue to succeed and how other states can learn from that success.

Dr. Borkowski asked about outreach efforts to the 30 states that are not funded and whether they are able to participate in activities such as "Evaluation 101."

Ms. Marr answered that NCIPC strives to make its educational opportunities and meetings open to all states and territories. Project officers are assigned to unfunded states to provide additional support. Other parts of NCIPC also work to include non-funded states. DUIP recently hosted a meeting on prescription drug overdose and reached out to Core VIPP to ensure that unfunded states were represented. More can always be done in this area, but their efforts are increasing. States that are designated as RNLs are tasked with supporting unfunded as well as funded states in their regions.

Dr. Porucznik said that work on prescription drug overdose in Utah has been ongoing for some time. Much of the work has taken place as part of partnerships between academic institutions and health departments. States have data, and academic entities can operate it. Bridging the divides between the two groups has been a challenge. They have different timelines and priorities, for instance. She encouraged CDC to support states as they work with partners who can help them.

Ms. Marr agreed and noted that Dr. Degutis champions the concept of bringing science and practice closer together. The funding announcement includes language that specifically prescribes that grantees work with academic partners. ERPO and ICRC cooperative agreements also require academic grantees to work with state health departments. There is variance in how these partnerships are carried out. Not every state has an ICRC, for instance. They hope for positive, incremental change as they foster these relationships, focusing on successful partnerships and showing the benefits to academic and state partners.

Dr. Baldwin commented on the additional struggle of the notion of evidence-based practice, which is uneven in the violence and injury prevention field. Some states want to do work in this area, but because evidence behind some approaches such as policy solutions is in process, they may pursue approaches that are not necessarily optimal. NCIPC works to help states focus on the most promising approaches.

Dr. Hargarten said that trauma centers address kinetic energy, and poison centers address chemical energy. There may not be an ICRC in every state, but poison centers may be comparatively better-networked and are the leaders of chemical injury, both unintentional and intentional. Including poison centers as partners in these emerging efforts would be timely. Additionally, ICRCs are required to have reporting mechanisms in place as part of their application. The core states could also have a requirement that the secretary sign off on the application to ensure that a hierarchy is in place. Getting attention at the state level can vary according to who is in office. It is important to ensure that clear authority transcends changes in governments. Finally, he observed that linking injury prevention more objectively to Medicaid may garner more attention, given the current climate in which Medicaid expenditures are receiving a great deal of focus at the state level.

Ms. Marr agreed and said that in the current funding announcement, they hoped for a “happy medium” regarding hierarchy at the state level. Having high-level support within the state bolsters an application’s score, but the application is not ineligible if that support is not indicated. Core VIPP works with partners such as ASTHO to ensure that they are not overly proscriptive.

Dr. Williamson added that other partners in the environmental arena may be ideal. The Agency for Toxic Substances and Disease Registry (ATSDR) and the National Center for Environmental Health (NCEH) have a surveillance system that collects information on chemical exposures through releases of chemicals and ties it to public health implications such as hospitalizations, evacuations, injuries, and deaths.

Dr. Hargarten said that poison centers are increasingly directed by emergency physicians who see the work as a broad set of activities. They can be strong partners as they strengthen their population health approaches with states and in partnership with other stakeholders.

Dr. Williamson said that the ATSDR/NCEH surveillance system is in several states. It receives information from trauma centers, emergency rooms (ERs), and other sources in order to understand the events that occur and the prevention activities that are in place. Each of the states provides success stories and evaluations.

Dr. Fowler asked which states have active partnerships with poison prevention. **Ms. Marr** answered that each state provides lists of the active participants in their Injury Community Planning Groups.

Dr. Fowler addressed NCIPC’s expertise in supporting capacity development in the states. Strong partnerships have been built between practice in Safe States Alliance and research in SAVIR. Trauma centers are required to have prevention programs for their accreditation, which presents a great opportunity. She asked how Core VIPP and/or ICRCs can work to build capacity for trauma center violence and injury prevention programs.

Ms. Marr said that many trauma centers are high-functioning partners within the regional networks. They have seen many successful relationships in states where trauma centers are participants in the Injury Community Planning Groups. Each state is required to create one of

these groups as part of the Core VIPP cooperative agreement. The groups include individuals from across a state and participants from outside state agencies to include the health systems community. Through the RNLs, regional projects could focus on that relationship.

Dr. Fowler noted that the group in Maryland is now a 501(c)3 partnership.

Dr. Degutis said that the American College of Surgeons (ACS) Committee on Trauma (CoT) also presents opportunities for creating linkages. NCIPC will give a talk at their annual meeting in the fall of 2013.

Ms. Marr said that capacity is necessary in order for evidence-based interventions to be implemented effectively through state health departments. However, building capacity and infrastructure are “not sexy.” It is important to draw a direct line from these efforts toward how lives are saved and injuries are prevented. Core VIPP states serve as conveners, but they also need a logic model, data, and surveillance to show how the efforts have direct impact. To this end, the recent funding announcement stipulates that states focus on four areas and utilize specific, measurable, achievable, realistic, and time-phased (SMART) objectives for outcomes in Years Four and Five of the agreement. This approach will show how a somewhat homogenous group of activities “moves the needle” in specific injury morbidity and mortality areas and cost. If they cannot show how Core VIPP saves lives and prevents injury and violence, then the program will not be sustainable.

Dr. Testa emphasized that \$250,000 is a small amount of money. She wondered whether the money might be better leveraged if more money were given to fewer recipients.

Ms. Marr replied that previous Core VIPP funding levels were \$120,000 per state. Cutting the number of states to double the funds to each state was difficult. Even if only 20 states are funded, they aim to build on a platform of success as they focus on what the states were able to do. This approach may build a case within CDC or with partners for additional resources for the program. NCIPC strives to achieve a good balance with every funding announcement for the program. Some state partners would prefer a population-based formula, but that approach would not be likely to achieve success.

Dr. Fowler said that NCIPC contracted with an evaluation company to conduct the evaluation of Core VIPP. A secondary panel reviewed those results, which led to recommendations from the BSC. The evaluation process addressed the funding distribution issue. Many states indicated that while the funding level is too low to achieve significant results without leveraging, the fact that CDC funds the state is important to get “on the radar screen” at the state level.

Dr. Degutis added that cutting the number of states would send a message that NCIPC does not support Core VIPP and does not feel that it is important. As state health departments struggle with funding, \$250,000 is not much, but they are able to leverage the funding in many ways. Reducing the number of funded states could be a “death knell” for the program.

Dr. Hargarten asked about the potential for opportunities to leverage resources as part of the Patient Protection and Affordable Care Act (ACA).

Dr. Degutis replied that the Prevention and Public Health Fund was created to support various programs, but those funds have been shifted to enrolling people in the health marketplace. While there are not necessarily opportunities for increased funding, there are opportunities for NCIPC to work with insurers and providers to include injury and violence prevention as part of

their benefits packages. The Secretary of HHS's priority is the implementation of the ACA, and CDC is considering how to work with its grantees to create strategies for identifying people who do not have health insurance and encouraging them to enroll through the ACA.

Dr. Porucznik added that significant opportunity through the ACA is that groups such as ACOs that have not previously thought about populations are now thinking outside their agencies and budget lines. The more that public health can communicate messages, the better.

ICRC Directors' Meeting / ICRC Indicators Project

Arlene Greenspan, DrPH, MPH
Associate Director for Science
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention

Dr. Greenspan provided the BSC with an update on NCIPC's recent work with the ICRC Directors and the ICRC Indicators Project. Two separate meetings were held with ICRC Directors and staff on May 1 and 2, 2013. In the past, ICRCs and the intramural programs at NCIPC have rarely intersected, as they operated with parallel processes. At times, firewalls have dictated what could and could not be shared, which has led to a lack of awareness on both sides about what the other is doing. The May 1 meeting was convened to foster collaboration and change this culture. The May 2 meeting focused on the ICRC Indicators Project, which came about as a result of the portfolio review of the ICRC program.

The May 1 meeting included intramural staff and included rich discussion. The day was based on the three tenets of the ICRCs: science, training, and outreach. Regarding science, the participants discussed how ICRCs and NCIPC can better collaborate. The field is too small not to work together and to build on each other's work. ICRCs are extensions of NCIPC, and there should be better methods for interaction and collaboration. The group discussed several ideas, including the following:

- Creating interest groups around topic areas
- Using the ICRC monthly meetings more effectively, perhaps by focusing on certain topics
- Disseminating information on each other's projects
- Linking intramural SMEs with ICRC SMEs

Intramurally, NCIPC is assembling lists of scientists and their ongoing projects. They may utilize Webinars and conference calls to find intersections with work in the ICRCs. Even holding the meeting has spawned some collaborations as the opportunity to meet and share information breeds ideas. Federal travel budgets are tight, but they can use opportunities at meetings that NCIPC does attend for discussion and collaboration. There are times when only funded ICRCs should be involved in calls and programs, but often, non-funded ICRCs can be included in Webinars and conference calls.

The group also discussed institutionalizing internships. All ICRCs have graduate students, and there are opportunities to exchange interns. An intern is coming to NCIPC this summer from the University of Michigan. These exchanges have been informal in the past, but the FOA now includes language that encourages ICRCs to set aside funding for interns to work within NCIPC

at opportune times. NCIPC has Epidemic Intelligence Service (EIS) officers and medical students who work within the center, and they could collaborate with ICRCs. The more the two entities understand each other, the more they will build the field and keep students involved in injury and violence prevention.

The meeting also included discussions regarding outreach and support. The RNLs are mechanisms for reaching out. There was also discussion about how ICRCs can tap into NCIPC's media resources and share other resources, such as by coordinating press releases.

Before addressing the ICRC Indicators Project, Dr. Greenspan described the portfolio review process. CDC requires centers to conduct internal reviews of either research or programs on an annual basis. NCIPC has conducted reviews in a number of areas, including Core VIPP and the ICRCs. The reviews are a means for evaluating whether programs are meeting their goals. The process begins with a core group of internal NCIPC personnel, who create evaluation questions and work with an external, contracted evaluator. Primary data collection focuses on programs' products, direction, and impacts. Next, an external panel of experts is convened to provide recommendations to the BSC based on the evaluation data. The recommendations typically address suggested future directions, observations regarding whether resources are being used wisely progress toward goals, and improvement of the program.

The ICRC portfolio review revealed that NCIPC did not have a set of universal indicators to document the success of the program. The external panel encouraged NCIPC to move toward creating these indicators. The ICRCs met this idea with some concern, but NCIPC assured them that the project is aimed toward demonstrating their successes and value to the field. In times of limited funding, all activities are called into question, and large programs such as ICRCs are often subject to additional scrutiny. It is important to demonstrate that the whole of an ICRC and of the ICRC program is bigger than a group of RO1s.

The process of creating indicators has been long. An initial scan was conducted through SAVIR. Dr. Carol Runyan led the effort, which included interviews, focus groups, and other approaches for discovering the most important products and impact measures of the ICRCs. The initial step resulted in over 100 potential indicators. NCIPC then awarded a contract to Cloudburst and a sub-contract to Practical Applications. They are in the process of refining the initial list of indicators.

The indicators will capture the value of the ICRC program. Providing the data should not be overly burdensome to the ICRCs. If too much information is required, then the data will not be delivered. At the same time, it is important to ask for the right information. The indicators reflect the priorities of NCIPC and accommodate variations across the 11 ICRCs. Some of the centers are broad and address all injuries, while some of the centers focus on specific topic areas, such as suicide, TBI, and children. The indicators will be broadly applicable to the different approaches of ICRCs and will apply to newer ICRCs as well as those that are more established.

Refining the indicators has been a consensus-based process. NCIPC has aligned the indicators with the main evaluation questions that they are designed to answer. A draft report was created, and the subcontractor conducted interviews with nine of the ICRCs and two of the seven previously-funded ICRCs. The indicators were further refined based on those interviews. Then, NCIPC hosted an ICRC meeting with current directors and directors of previously-funded ICRCs. The next refinement of the indicators took input from that meeting into account. In order to get input from the broader injury community, NCIPC held a meeting at the Safe States/SAVIR conference in June 2013 to gather more feedback.

At this point in the process, there are ten draft ICRC indicators:

1. ICRC-affiliated personnel
2. Funding from all sources
3. Completed and ongoing studies
4. Publications by ICRC-affiliated personnel
5. Academic training and mentoring
6. Partnerships with external collaborators
7. Community outreach
8. Research tools developed and disseminated
9. Practice tools developed and disseminated
10. Narrative stories of innovation and impact

In determining how much of the data should be quantitative and how much should be qualitative, it became clear that the numbers of grants and publications from an ICRC do not necessarily illustrate the impact of the centers that the indicators are intended to capture. The most useful information will probably come from the 10th indicator, *narrative stories of innovation and impact*, which will demonstrate the richness of the ICRC program. For instance, if an ICRC conducts a research study that leads to an intervention, which then leads to other developments, that success will not be captured by any one indicator.

The next steps are to finish revising the indicators and then conduct a small pilot with a subset of ICRCs to assess whether they can gather the data that they hope to gather. It has been suggested that the project draw information from previously-funded ICRCs. SAVIR and the Council of Centers could help gather information from non-CDC-funded centers as they broaden their efforts.

Discussion Points

Dr. Hargarten commented that the efforts to improve collaboration between ICRCs and NCIPC are exciting and timely. The issue of parallel tracks of intramural and extramural funding is not a new one, and encouraging collaboration is an excellent direction. It would be limiting to focus only on currently-funded ICRCs. The collection should be inclusive from the start. The Council of Centers is a strong potential partner in this work. Other potential participants could be the ACEs and Level One trauma centers, which are dedicated to research in injury prevention. All of this work represents opportunities to stimulate activity in injury and violence prevention. The difficulty may lie in funding and what these collaborations will mean. There are good collaborations between and among ICRCs. For instance, the University of North Carolina, the University of Washington / St. Louis, and the Medical College of Wisconsin combined successfully for a National Institutes of Health (NIH) training grant for post-doctoral students. Inter-ICRC collaborations strengthen grant applications and coalesce disciplines around subjects.

Dr. Greenspan said that discussions are ongoing with ERPO regarding how to create future FOAs that will bring ICRCs together. She explained that all of NCIPC's grants and cooperative agreements are created intramurally and peer-reviewed through ERPO. This model is similar to NIH. NCIPC's research contracts are administered intramurally.

Dr. Hamby asked about non-funded and previously-funded ICRCs. ICRCs may not necessarily be defined officially as centers that have CDC funding, especially when creating collaborative FOAs.

Dr. Greenspan answered that at times, communications are specific to the funded ICRCs. However, discussions about broader aspects of collaboration and the FOAs are not limited to CDC-funded centers. NCIPC has been somewhat insular in the past, but they are now more inclusive not only of previously-funded ICRCs, but also of ICRCs that have never received CDC funding.

Dr. Hamby observed a tendency to focus on funding as a major carrot for advancing and encouraging collaborations. Other approaches to promote the injury agenda may also be effective, such as a certification program in which a center that meets certain criteria could be certified and have a tool for leveraging funds from foundations or other agencies. The certification could also serve as a stepping-stone for further development.

Dr. Degutis said that a great deal of injury work goes on in places other than the 11 CDC-funded ICRCs, and with other funding support. A certification process may not be practical. A center may not have to meet certain criteria in order to engage in collaborative work with NCIPC or the ICRCs.

Dr. Hamby likened this issue to the previous discussion about states that are funded under Core VIPP and those that are not, and whether they are eligible for the same training activities and opportunities. Considering only entities that CDC funds versus “the rest of the world” may not promote NCIPC’s mission.

Dr. Degutis said that NCIPC’s grantees promote the center’s agenda and priorities. The center also pursues its funding priorities. They work with states and groups that do not have funding. For instance, in the linkages with NCIPC SMEs, there are opportunities to connect with any injury researcher, not just those based in ICRCs. They hope to open up new opportunities and not just give money to people that already have money.

Dr. Greenspan added that funded ICRCs have some accountability due to their funding, but NCIPC is also broadening its reach to be more inclusive of ICRCs and researchers that do not have CDC funding.

Dr. Borkowski suggested that each of the ICRCs is developing expertise in various core areas. A pilot program could determine whether those cores could be of value across the field and could be made more broadly available.

Dr. Hargarten said that CDC might not provide certification, but SAVIR and the Council of Centers could develop criteria and provide certification.

Dr. Mickalide asked about the second indicator, which refers to funding “from all sources.” She suggested changing the wording to “from *other* sources.”

Dr. Greenspan clarified that the indicators need to capture how the ICRCs leverage funding. Similarly to Core VIPP, ICRCs are not awarded a great deal of funding, so their ability to leverage their funding to do more is a great component of their success.

Dr. Fowler observed that one of the indicators refers to academic training. She noted that practice and workforce development training are other important aspects of the ICRCs' work. Some of the indicators are somewhat "fuzzy." For instance, there is not a specific indicator for policy. She recognized the value of culling the long list of indicators to a more manageable number but wondered whether more indicators could be included in order to ensure that they tease out important details.

Dr. Greenspan answered that the practice-based work is captured in the indicator on community outreach. She clarified that the 10 indicators are broad categories. Specific instructions are provided for each indicator regarding what it should include.

Dr. Fowler said that it is useful and valuable for the ICRCs to use the indicators to monitor themselves. If the indicators will also be used for accountability with other, external audiences, then it might be wise to be more explicit about the functions that are absorbed by the ICRCs.

Dr. Nation asked whether performance indicators are included as part of this project and whether the indicators can demonstrate whether a center is "doing well."

Dr. Christine Morrison (Director, ERPO, NCIPC, CDC) replied that performance is important, but the indicators will not be used to assess the performance of individual centers. The ICRCs complete regular progress reports to track their performance. The progress reports are a separate entity from the indicators, which look at the ICRC program in general. The indicator information will show that the ICRC program is worthwhile and will justify requests for increases in funding.

Dr. Nation said that the approach makes sense. The individual ICRCs will help tell the story of the program as a whole. Giving the centers a sense of what might be considered a success in each category might be helpful. For instance, should they hope to leverage one additional source of funding, or three, or more? There should not be a proscriptive number, but perhaps a range to guide the centers' thinking.

Dr. Greenspan said that the explicit instructions under each topic area include detailed guidelines. There is also room for additional explanation. She offered to share the draft report with the BSC.

Regarding the indicator that captures publications, for example, **Dr. Degutis** said that one center could have 100 publications in relatively low-impact journals, while another center could have 15 publications in high-impact journals. One approach is to ask each center to identify and describe its three highest-impact publications, partnerships, et cetera. The indicators will tell the story of the value and the impact of the ICRCs in decreasing injuries and violence and the impact that they have on public health.

Dr. Greenspan said that the 6th indicator, which focuses on partnerships with external collaborators, has been revised based on feedback from the ICRCs. This indicator will capture long-term partnerships and the ICRCs' role in them as well as the impact that the ICRCs have in the partnerships. The community outreach indicator will capture activities such as training sessions and their specific value and impact. The indicators ask for the highest-impact partnerships, activities, and publications. When ICRCs provide context to support the data, NCIPC can tell the story of the impact of the ICRCs' research, including how the research is disseminated and used.

Dr. Fowler recalled conversations about how to measure the value-added components of the ICRCs. Centers may develop great capacity because of their trust-based partnerships and relationships and their ability to leverage those relationships. It is important to capture this element of the centers' work to show how the ICRCs drive the field.

Dr. Hargarten agreed and noted that those relationships evolve. It is important to show how these relationships work to demonstrate externally how the ICRCs are effective. The partnerships are an opportunity for more people to enter the injury field. For instance, trauma centers are supposed to be engaging in community outreach and research. The ACEs are part of this work as well and could make great contributions to strengthen the field and secure those relationships.

Dr. Harris said that in working with other partners, they can dovetail their work with the US Department of Defense (DoD) and other funders.



Health Communication Portfolio Review

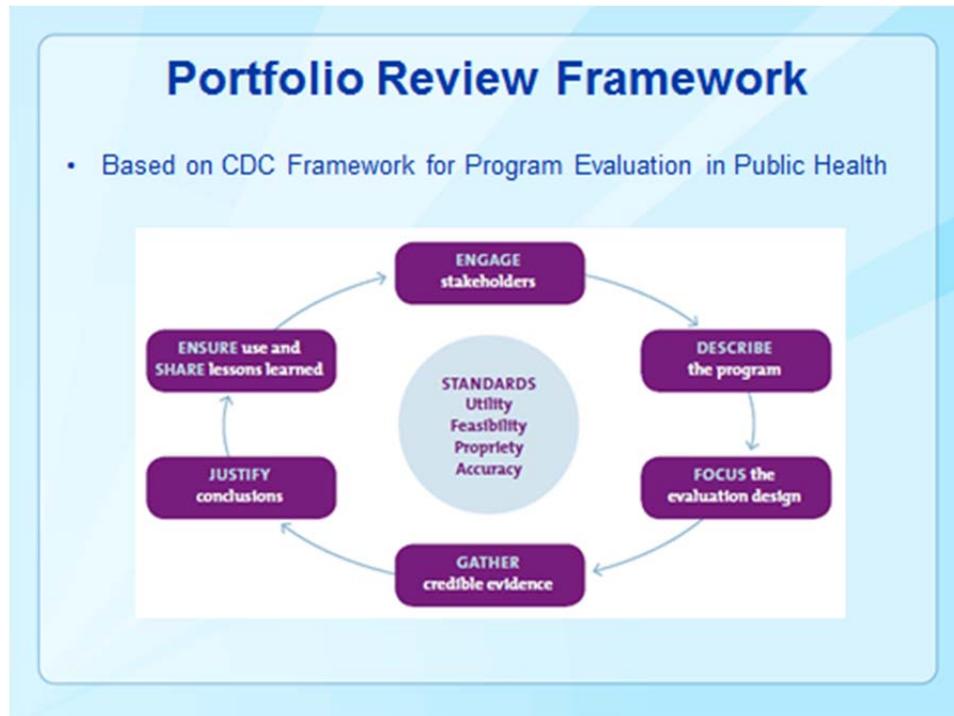
Arlene Greenspan, DrPH, MPH
Associate Director for Science
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention

Erin Connelly, MPAff
Acting Associate Director, Office of Communications
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention

Dr. Greenspan reminded the BSC that portfolio reviews are mandated by CDC. When the reviews began in 2002, they focused on research. In 2008, the portfolio reviews were expanded to include programs as well. The review process highlights program achievements, considers areas for improvement, assesses gaps, and includes intramural and extramural programs. The mechanism for the portfolio review and definitions are left to the discretion of each center. Within CDC, NCIPC has among the most rigorous, if not the most rigorous, portfolio review approach. Most of the previous portfolio reviews have been topic-specific, including the Core VIPP, the ICRCs, and the NVDRS. NCIPC is now conducting a cross-cutting portfolio review of its health communication, an area of vital importance.

Ms. Connelly provided the BSC with an update on the status of the health communication portfolio review, explaining that the primary goal of this review is to produce actionable recommendations to improve health communication practice within NCIPC. The topic area is cross-cutting and is also a function as opposed to a campaign or set of projects, so it has required a different approach to assess it. The process has been challenging but informative, and communicators across CDC are interested in it, as this review represents the first time the agency has applied a rigorous and systematic assessment to the health communication function. The portfolio review will also document the health communication functions at NCIPC and build understanding of the center's health communication capabilities. It will document the depth and breadth of activities included as part of health communication. The review will also document and assess whether NCIPC is following best practices as defined by a range of communication disciplines, including health communication, health marketing, public relations,

media relations, digital communication, and others. The review will identify strengths and opportunities for further investment as well as weaknesses and areas for change. The actionable recommendations that result from the review will ensure that NCIPC's health communications activities have an impact on the center's programmatic and scientific objectives. The following diagram illustrates the portfolio review framework:



Early in the review process, communicators from across NCIPC convened to serve as an advisory group. They worked with two different contractors to develop the logic model and evaluation questions and to conduct the evaluation and draft the initial report. The draft report has been presented to an external expert panel. The panel generated initial recommendations and is finalizing them for presentation to the BSC in the fall of 2013. It was challenging for the panel to assess the function of health communication, but they have shared strong ideas.

The portfolio review process is important for health communication as NCIPC seeks to ensure that it makes smart investments and pursues effective strategies and channels. All of their activities must have maximum impact. There is strong will at the center to act on the recommendations from the review. The review process was ongoing during the reorganization of NCIPC, so they were able to apply some of the knowledge from the portfolio review process to various recommendations regarding health communication during the reorganization.

Health communications staff have created their own actions based on the recommendations from the evaluation contractor and the expert panel. They are considering creating a digital metrics dashboard to improve the availability of data from various channels and to make better decisions about how to invest in them. They will hire a Communication Evaluator, who will assess and advise the portfolio of NCIPC communication activities across campaigns and channels. They are building a business case for new projects and partnerships and creating a cover sheet for FY 2014 to establish programmatic or scientific objectives, communication strategies, evidence that the strategies will work to advance the objectives, ROI, and NCIPC's

place versus competitors'. This approach will be applied to existing products as well as to new ones to ensure that the communications efforts are good investments that are moving in the right direction.

Discussion Points

Dr. Hargarten asked about the audience for NCIPC's communications.

Ms. Connelly said that the audience varies. NCIPC is building the case with influencers that injury and violence are major public health problems, solutions are available, and NCIPC should be funded to implement programs that work. The center's overarching communications objective is to build that case so that CDC can save lives and protect people by ending injury and violence. Different channels and initiatives have different audiences. Some campaigns and initiatives are consumer-focused.

Dr. Fowler added that the expert panel discussed this issue at length. Separating public relations and branding from strategic communications was a significant theme of their deliberations. She noted that the panel expressed disappointment in the dichotomous response options for reviewing communication issues. The Core VIPP portfolio review expert panel voiced similar concerns. It would be helpful to inform the panels about the design of the evaluation, and perhaps to ask the BSC to vet the evaluation before it is conducted. Since the BSC reviews the recommendations from the review, it might be helpful for BSC to review the methodology as well.

Dr. Mickalide asked whether other portfolio reviews are planned for other areas, such as policy or program implementation.

Dr. Degutis answered that the health communications portfolio review is the first of its kind at CDC. NCIPC has discussed policy as a potential area for a crosscutting review.

Dr. Greenspan added that because of changes in policy within CDC, they opted to wait to conduct that review until they receive guidance from the agency. All of NCIPC's divisions engage in policy work, and it is an important function to evaluate. Other potential areas for review include child maltreatment and economics/statistics. The timing for a review is a topic for discussion. Some of these programs are fairly new, and it may be beneficial for them to mature before they are reviewed. Conversely, it could be helpful to conduct a review on a younger program, even though little information is available on it, to help guide it. For instance, the Economics Team is new and under-resourced. It may be helpful to evaluate their existing portfolio and then build the program and its priorities. A portfolio review was conducted on TBI several years ago, and their strategic planning process is ongoing. Another portfolio review early in the strategic planning process could inform the plan; however, a review may be more helpful later, when more information is available.

Dr. Porucznik suggested that a "mini-review" might be appropriate in some cases to determine whether a full review is possible. Public health program evaluation can be frustrating when the necessary data elements are not available.

Dr. Hamby supported the idea of a "mini-review," lauded the crosscutting approach and noted its potential to advance programming, and asked about an internal process to ensure that the benefits of the portfolio review are adopted by different topic areas.

Ms. Connelly answered that the review will inform decision-making and practice within NCIPC, both within the Communications Office and with each division's communications team. The results of the review will inform the entire NCIPC portfolio of projects and communications. The review will also ripple to other areas of CDC. Four Associate Directors for Communication from other areas of CDC attended the expert panel meeting; there is great interest in this novel approach to assessing health communication activities.

Dr. Fowler chaired the expert panel, as a BSC member usually chairs the expert panel. She was grateful for the flexibility in how the panels go about their reviews. They receive a formal charge from NCIPC and questions to answer, but they are free to respond to the charge and questions as they deem appropriate. The panels can evaluate the portfolios with a "broad brush," considering principles and priorities. This approach has led to rich conversations and recommendations that can be applied across NCIPC. The programs that were evaluated as part of the portfolio review were a subset of all of the health communication activities across the center. Rather than evaluating the whole based on a convenience sample, the panel considered the overarching process.

Dr. Greenspan said that the portfolio process is conducted through the office of the ADS. The NCIPC ADS is held accountable by the CDC ADS. When recommendations are made, programs digest, prioritize, and implement them. They do not "sit on a shelf."

Dr. Mickalide asked about communication back to the individuals that serve on the expert panel.

Dr. Fowler said that the expert panel generates initial recommendations and then reconvenes to create a final report for NCIPC. That report comes to the BSC for approval or for changes based on the BSC's input. There is not necessarily direct communication to the expert panel after their report is complete. A formal feedback mechanism may be needed, especially for the health communication expert panel. The feedback loop may be more natural in other areas, such as Core VIPP.

Dr. Greenspan noted that many recommendations are brought to the BSC as they are implemented.

Update on Pediatric Mild Traumatic Brain Injury Workgroup Activities

Kelly Sarmiento
Designated Federal Official
BSC Pediatric Mild TBI Workgroup

Ms. Sarmiento reported that in 2013, the BSC established a workgroup on pediatric MTBI. The workgroup was formed to develop a clinical guidance report to submit to the BSC on the diagnosis and management of acute MTBI resulting from both intentional and unintentional injuries among children and adolescents 18 years of age and younger. Drs. Robert O'Connor and Shelly Timmons from the NCIPC BSC serve on the workgroup, and Dr. Timmons is its chair.

To date, the workgroup has completed the first step of the project. It has formulated and selected six clinical questions, which were created to address an area of concern, controversy, confusion, or practice variation related to the diagnosis and management of MTBI among the pediatric population.

The workgroup is in the process of completing the second, and longest, step of the project. The workgroup determined the parameters of a literature review, and a medical librarian has completed the literature search. The workgroup members are in the process of reviewing over 12,000 scientific abstracts that were identified. Each abstract is reviewed by at least two members of the group for inclusion or exclusion.

The next phase of the project will begin in the summer of 2013 and will include a review of the full text of the articles that are selected. The in-person meeting of the workgroup to draft recommendations for healthcare providers as part of the guidelines is tentatively scheduled for March or April, 2014, in Atlanta, Georgia. In this meeting, the workgroup will convene to discuss the scientific evidence, classify it, and draft recommendations for healthcare professionals for each of the clinical questions.

The final step of the project is to develop a report for submission to the NCIPC BSC. The report will describe the evidence reviewed and recommendations for healthcare professionals. The BSC will review the report. If the BSC approves the report, then a scientific manuscript that summarizes the evidence and recommendations will be written and submitted for publication.

The workgroup is highly motivated. There are 20 core workgroup members, and an additional 20 ad hoc experts also participate. The group members represent a range of expertise, including neuropsychology, neurosurgery, pediatrics, athletic training, physical therapy, emergency medicine, rehabilitation medicine, school-related health, child maltreatment, motor vehicle safety, bicycle safety, sports safety, and others. Because of the extent and diversity of MTBI, a broad sweep of expertise and type of clinician was included. Given the large amount of scientific literature identified, the timing for the project was extended by approximately eight months to allow enough time to review the abstracts.

Discussion Points

Dr. Timmons stressed that Ms. Sarmiento has done an excellent job of organizing the group and the vast amount of material.

Ms. Sarmiento thanked Dr. Timmons for serving as the group's chair. She noted that the motivation and commitment of the workgroup has been impressive. The implementation of the recommendations will be exciting. She hopes to incorporate the findings into the Heads Up! program and to take advantage of existing channels and partnerships to share the recommendations with the healthcare provider community.

Dr. Fowler asked about possible translation of the guidelines into different professional areas.

Ms. Sarmiento answered that they are beginning work on a robust communications plan. Members of the workgroup are providing input into the plan based on their areas of expertise and are also utilizing their connections with different associations, medical organizations, sports leagues, and schools. The workgroup members can serve as champions to help implement the information. Electronic distribution of the recommendations will be important. Many healthcare providers and medical schools are no longer using books, but instead using electronic tablets.

Electronic distribution is not only cost-effective, but it is also a preferred means for healthcare providers to receive information. In the past, she has worked with vendors in emergency departments to disseminate information. Partnerships with the private sector have provided successful means for sharing clinical information.

Dr. Hargarten asked about the potential for “decisional fatigue” among the workgroup members as they review a large volume of abstracts and then articles.

Ms. Sarmiento said that the workgroup decided to make their inclusion/exclusion criteria somewhat broad. The age range is 18 years and under. The workgroup opted to include newer military studies that include persons 18 and under, eliminating those that do not define by age group. The workgroup has completed the 12,000 abstract reviews, each abstract being reviewed twice, and is now reviewing between 6000 and 8000 abstracts per clinical question. The volume of work led to an extension of the project timeline.

Dr. Hargarten asked about dissemination of the recommendations and how to determine whether they have been integrated into practice so that they can affect practitioner behavior change.

Ms. Sarmiento said that practice integration can be assessed in several ways. For instance, they can assess organizational protocols that are adapted. When the Concussion in Sports Consensus Guidelines were released, they were able to determine which of the 47 Concussion in Sports Laws included copied content from the guidelines. Additionally, league-, sport-, and school-specific programs integrate CDC’s information. CDC’s role is not to require the use of guidelines, but many of CDC’s partners do make those requirements. Reviewing how the guidelines are implemented and working with groups that have dissemination power is important. They will also consider knowledge, attitude, and behavior in standard evaluation practices, as well as diagnosis and management of MTBI in the pediatric population.

Dr. Fowler encouraged NCIPC to think now about what translation will look like and how it will be measured. She asked Dr. Timmons about managing the volume of reviews.

Dr. Timmons described a concerted effort to split the abstracts and sections by area of interest. Workgroup members review abstracts based on a well-defined clinical question. The process has worked well. The timeline was extended to allow ample time to review the full manuscripts. Regarding dissemination, she said that one of the key metrics after the guidelines are disseminated will be how they generate further research in this area. When the severe TBI guidelines were completed, they identified key questions in each chapter to generate further research.

Ms. Sarmiento said that she would provide updates on the communication plan and would welcome input into it before the dissemination process begins.



WISQARS Mobile Application

Lee Annest, PhD, MS
Chief, Statistics, Programming, and Economics Branch
Division of Analysis, Research and Practice Integration
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention

Dr. Annest provided an update on the WISQARS mobile application. WISQARS began in 1999. At the time, the Injury Center was receiving a number of ad hoc requests for injury data, and they were able to develop an internet application to allow users to access fatal injury data. Prior to the internet application, the fatal injury data were released in standard tables in a “Red Book.”

Since its development, WISQARS has remained state of the art, adding new modules for nonfatal injuries, the NVDRS, mapping, and cost using the latest technology. All of the newer modules were developed using a similar approach. A contractor developed a prototype based on a design provided by NCIPC. Then, the contractor transferred knowledge to NCIPC programming staff so the application can be managed and updated in-house. The modules are set up to be updated in a timely manner so that they remain current.

The mobile app was developed by BNL Consulting, a contractor that NCIPC has utilized before. The beta version of the app is complete, and knowledge is being transferred to NCIPC programming staff in order to move the application toward production. NCIPC will conduct usability testing in September, and it will undergo review for 508 and CDC standards compliance. Ultimately, the app will be available for download through the Apple iStore.

The mobile WISQARS app is different from WISQARS on the internet. The mobile version includes more graphics to provide an overview of injuries. The underlying cause of death data by intent and mechanism of injury comes from the National Vital Statistics System (NVSS). TBI data are included based on the Multiple Cause of Death Data by body region at diagnosis of injury. The app also includes cost information, including unit cost estimates, work loss costs, and medical costs. That information was provided by the Pacific Institute of Research and Evaluation and is comprised of the same data provided by the WISQARS Cost of Injury Reports module on the internet. Denominators used to calculate rates are based on US Census data.

The project began in the fall of 2012 and is slated to last for three years. The app is developed on Adobe Flash Flex, using a local data store in SQL (Structured Query Language) Lite. The death counts and rates provided in the app are from pre-summarized NVSS data generated using Statistical Analysis System (SAS), which is converted to SQL Lite files that can be compiled and used by the app. The data takes up approximately 23 megabytes of space. All of the information is processed within the app, so it is very dynamic and fast.

The first year of the project focuses on developing the app for the iPad. There are plans to make the app available for a smartphone in the second year of the project, but they began with the iPad because of its larger screen. The third year of the project will include adaptation for other platforms, such as Android, Microsoft, and BlackBerry.

When the app opens, it shows a map of overall injuries. Graphs at the bottom of the screen include leading causes of death by age, sex, race, and more. The map colors and range can be changed:



Rates can be crude or age-adjusted. The app can link directly to WISQARS on the internet to reach more detailed information. Another link to “injury topics” will link to an NCIPC web page with information on injury prevention in different areas. Eventually, the states may wish to provide links to their state health department injury program sites as well. A ribbon across the top of the app gives the user the ability to pull down and select cause of death, gender, race/ethnicity, age, and state. The age groups were collapsed in order to get stable rates. Suppression rules were built into the app to accommodate data use agreements with NCHS. The map and graphs at the bottom of the screen change quickly according to the category selected. They can also be rearranged. Hovering over an area of the map will show specific information about deaths and rates. Data can be sorted as well. A reset button at the top of the screen will restore the default settings. The app includes a chart on the leading causes of death for age 1 – 44 years, which include unintentional injury, suicide, and homicide.



For some causes of injury and death, a pie chart can show the mechanisms of injury. The causes of death are priorities for NCIPC, and more can be added, but they hope to keep the app relatively simple. Clicking on a state will provide information about that state. The charts and trends for different states can be explored and compared. Hovering over the chart of a trend will show the death counts, death rates, and percentages.

This tool will be useful in different settings, such as PowerPoint presentations for students, policymakers, or audiences that may not know a great deal about injuries. Users can also take a snapshot of the screen and use it in their presentations. The app provides notifications when new data are available, and users can update the app to include current information. Overall, the app is dynamic and will enhance the ability to access injury data quickly and in a user-friendly way.

Discussion Points

Dr. Molock was enthusiastic about the app. She asked whether it can aggregate age into smaller units.

Dr. Annest answered that the app cannot regroup the age groups at this point, as the groups had to be collapsed to get stable rates. However, more details are available at the WISQARS site, which is accessible through the app.

Dr. Hargarten echoed the enthusiasm and asked whether the process could be sped up to make the app available.

Dr. Annest said that the CDC Director is also eager for the app to be ready. It has to undergo usability testing, accuracy assessment, and clearance, but they hope that it will be ready before the planned release of January 2014. The contractor has done an excellent job, and they have been moving more quickly than expected. They will utilize 2011 mortality data when it is available, perhaps in August or September 2013.

Dr. Fowler said that preparation for the launch of the app should include thought regarding its potential users. Educators are an obvious audience, and the launch can serve as a communication device for those groups. She wondered about capturing user information as part of the app to get a better sense of who is using the app, and why.

Dr. Annest said that they will be able to determine how many people are downloading the app, but they may not be able to capture other user information.

Dr. Fowler suggested that a quick, self-report survey could help get a sense of whom this app is appealing to. That information could help them in designing future modifications to meet user's data needs..

Dr. Nation suggested a registration process when the app is first used.

Dr. Annest said that they could pursue that avenue with the help of the health communications staff at NCIPC. He agreed that it would be helpful to understand how people are using the app. Most of their information about WISQARS users is anecdotal. Users share how they use the product and provide ideas for improvements. For instance, there is an interest in splitting drug and non-drug poisonings.

Dr. Baldwin suggested that self-reported information could be collected after a certain amount of usage of the app. If personal information is collected at the first use of the app, users might be less likely to use it.

Dr. Williamson said that a group in the Office of Surveillance, Epidemiology and Laboratory Services (OSELS) has worked with Apple on implementing apps. They have inroads into various education-related groups and organizations, which may provide a means for facilitating distribution of the app or of announcing its availability.

Dr. Annest said that a laboratory at CDC has been advising NCIPC on the process for clearing the app, for getting an Apple ID, and other aspects of working in the mobile field.

Dr. Molock added that they should be sensitive about asking too much information upfront because of the possibility of stigma. Devices such as e-readers capture when users highlight passages or information, so software might be available to learn how people are using the app.

Dr. Porucznik said that as users click through the different data indicators, it would be helpful to include a box with information linking to resources. For instance, an adolescent using the app could need help, and a link to a hotline or other resource could “reach them where they are.”

Dr. Annest said that the app can include such links and features. He noted that the app will include a section of Frequently Asked Questions (FAQs). The FAQs are geared toward technical issues about the app and the data in it, but they could also include links to help.

Dr. Hargarten asked about the groups that are included in the beta testing process.

Dr. Annest answered that the beta testing process is internal. Usability testing must be conducted in-house and not outside the government. They usually ask CDC personnel who are not affiliated with injury to participate and provide feedback. Usability testing is extremely useful in helping to identify gaps and areas to improve user friendliness of the application.

Dr. Hargarten said that another audience for the app will be print media. Berkeley Media Studies, among others, will be interested in learning more about the app and could provide useful insight. Presenting the data in a dynamic fashion will generate interesting questions.

Dr. Annest agreed and added that the challenge associated with presenting data dynamically is to ensure that the data file is not too big so that it does not take up too much space and does not take too much time to run. This app will spur the field, as there is nothing else like it available.

Dr. Fowler wondered about including information about protective policies in different states, such as where helmet laws are in effect. Governor’s Associations and other groups could be potential audiences for that information. The app can show differences in rates and in proportions.

Dr. Annest said that the ability to compare data between states will likely generate thought about prevention.

Dr. Fowler said that the app will be very useful in education. The undergraduates that she teaches enjoy utilizing WISQARS.

Dr. Harris commented on the paradigm shift in education, wherein young people use their phones for everything. It is not possible to change the culture, so building on it will get information to people who need it.

Dr. Fowler said that other audiences include Emergency Medical Services (EMS) workers and firefighters.

Dr. Mickalide noted the differences between 65-, 75-, and 85-year-olds. She asked whether CDC has reconsidered the definition of the “65+ age category.” Youth categories have been divided, and she encouraged more definition for older adults. **Dr. Annest** agreed, especially in areas such as falls.

Dr. Molock encouraged NCIPC to move quickly to develop the app for mobile phones, as different cultural groups use their phones for their internet use.

Dr. Annest agreed and said that now that they are confident that the app will work on the iPad, the next step will be to adapt it to the Apple iPhone and other tablet/mobile phone formats (e.g., Android, Microsoft, Blackberry).

Public Comment Period

Carolyn J. Cumpsty Fowler, PhD, MPH
Chair, National Center for Injury Prevention and Control Board of Scientific Counselors
Assistant Professor, Johns Hopkins University
School of Nursing and Bloomberg School of Public Health

Dr. Fowler opened the floor for public comment at 3:41 pm. No public comments were offered at this time.

Conclusion and Adjourn

Carolyn J. Cumpsty Fowler, PhD, MPH
Chair, National Center for Injury Prevention and Control Board of Scientific Counselors
Assistant Professor, Johns Hopkins University
School of Nursing and Bloomberg School of Public Health

After reminding the telephone participants to email Ms. Lindley to confirm their attendance, and confirming logistics for the next day’s closed meeting, **Dr. Fowler** adjourned the eleventh meeting of the NCIPC BSC for the day at 3:43 pm.



I hereby certify that to the best of my knowledge, the foregoing minutes of the June 13, 2013 NCIPC BSC meeting are accurate and complete:

Date

Carolyn Cumpsty Fowler, PhD, MPH
Chair, NCIPC BSC

Attachment A: Meeting Participants**CDC Staff Present**

John Allegrante, Ph.D
Lee Annest, PhD., M.S.
Grant Baldwin, PhD, MPH
Gwendolyn H. Cattledge, PhD, MSEH, FACE
Erin Connelly, MPH
Linda Dahlberg, Ph.D
Linda Degutis, DrPH, MSN
Audria Dunson
James Enders, MPH
David Ederer
Connie Ferdon, Ph.D
Susanne Friesen,
Carolyn J. Crumpsty Fowler, Ph.D. M.P.H.
Marquisette Glass, MA
Arlene Greenspan, DrPH, MPH
Tamara Haegerich, PhD
Sherry Hamby, Ph.D
Stephen Hargarten, Ph.D.
Robert Harris, MD
Daniel Holcomb
Tochukwu Igbo
Lynn Jenkins, MA
Christopher Jones
Michele LaLand,
Tonia Lindley
Angela Marr, MPH
Sherry D. Molock, Ph.D
Christina Morrison, Ph.D
Angela Mickalide, Ph.D. MCHES
Maury Nation, Ph.D
Erin Parker
Sara Patterson, MA
Christina Porucznik, Ph.D
Roberto Ruiz, MPA
Heather Susan Ruturi
Thomas Simon,
Deborah Gorman-Smith, Ph.D
Paul Smutz, PhD
Howard Spivak, MD
Maria Testa, Ph.D
Mikel Walters, Ph.D
Joann Yoon

Others Present / Affiliations

Sydney S. Vranna, Conference Planner, Seamon Corporation

Kendra Cox, Writer / Editor, Cambridge Communications & Training Institute

Jim Evans, AV, Sound on Site

Stephanie Henry-Wallace, Writer / Editor, Cambridge Communications & Training Institute

Attachment B: Acronyms Used in this Document

Acronym	
ACA	(Patient Protection and) Affordable Care Act
ACE	Academic Centers of Excellence
ACO	Accountable Care Organization
ACS	American College of Surgeons
ADS	Associate Director for Science
ASTHO	Association of State and Territorial Health Officials
ATSDR	Agency for Toxic Substances and Disease Registry
BAC	Blood Alcohol Content
BARE	Best Available Research or Evidence (Analysis)
BJA	Bureau of Justice Assistance
BSC	Board of Scientific Counselors
CDC	Centers for Disease Control and Prevention
CMS	Centers for Medicare and Medicaid Services
CoT	Committee on Trauma
DARPI	Division of Analysis, Research, and Practice Integration
DEA	(United States) Drug Enforcement Administration
DoD	(United States) Department of Defense
DOT	(United States) Department of Transportation
DUIP	Division of Unintentional Injury Prevention
DVP	Division of Violence Prevention
EIS	Epidemic Intelligence Service
EMS	Emergency Medical Services
ER	Emergency Room
ERPO	Extramural Research Program Office
FACA	Federal Advisory Committee Act
FAQ	Frequently Asked Question
FDA	(United States) Food and Drug Administration
FOA	Funding Opportunity Announcement
FTE	Full-Time Equivalent
FY	Fiscal Year
HHS	(United States Department of) Health and Human Services
ICRC	Injury Control Research Center
IOM	Institute of Medicine
IPV	Intimate Partner Violence
IT	Information Technology
<i>MMWR</i>	<i>Morbidity and Mortality Weekly Report</i>
MOU	Memorandum of Understanding
MTBI	Mild Traumatic Brain Injury
NACCHO	National Association of County and City Health Officials
NAS	National Academy of Sciences
NCEH	National Center for Environmental Health
NCIPC	National Center for Injury Prevention and Control
NGA	National Governors Association

NHTSA	National Highway Traffic Safety Administration
NIH	National Institutes of Health
NIOSH	National Institute for Occupational Safety and Health
NISVS	National Intimate Partner and Sexual Violence Survey
NRC	National Research Council
NSC	National Safety Council
NTSB	National Transportation Safety Board
NVDRS	National Violent Death Reporting System
NVSS	National Vital Statistics System
OD	Office of the Director
OSELS	Office of Surveillance, Epidemiology and Laboratory Services
PDMP	Prescription Drug Monitoring Program
PPP	Positive Parenting Program
PRR	Patient Review and Restriction (Program)
RNL	Regional Network Leader
ROI	Return on Investment
RWJ	Robert Wood Johnson (Foundation)
SAMHSA	Substance Abuse and Mental Health Services Administration
SAS	Statistical Analysis System
SAVIR	Society for the Advancement of Violence and Injury Research
SMART	Specific, Measurable, Achievable, Realistic, and Time-Phased
SME	Subject Matter Expert
SQL	Structured Query Language
SV	Sexual Violence
TA	Technical Assistance
TBI	Traumatic Brain Injury
TFA	Trust for America's Health
VAWA	Violence Against Women Act
VIPP	(Core State) Violence and Injury Prevention Program
WHO	World Health Organization
WISQARS	Web-based Injury Statistics Query and Reporting System