

**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

**Thirteenth Meeting
June 5, 2014
Summary Report: Closed Session**

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**DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)
NATIONAL CENTER FOR INJURY PREVENTION AND CONTROL (NCIPC)**

BOARD OF SCIENTIFIC COUNSELORS (BSC)

Thirteenth Meeting: June 5-6, 2014

4770 Buford Highway
Chamblee Campus, Building 107, Conference Room 1B 01206/1C 01210
Atlanta, GA 30341

SUMMARY PROCEEDINGS

The thirteenth meeting of the National Center for Injury Prevention and Control (NCIPC) Board of Scientific Counselors (BSC) took place on Thursday, June 5 and Friday, June 6, 2014. The BSC met in closed session for a secondary review in accordance with the Privacy Act and the Federal Advisory Committee Act (FACA) on Thursday, June 5, 2014. Dr. Maury Nation served as chair. The BSC met in open session on Friday, June 6, 2014. Dr. Carolyn Cumpsty Fowler served as chair.

Thursday, June 5, 2014: CLOSED TO THE PUBLIC

OPENING / ROLL CALL

**Maury Nation, PhD
Associate Professor
Department of Human and Organizational Development
Vanderbilt University
Member, NCIPC Board of Scientific Counselors**

**Gwendolyn Cattledge, PhD, MSEH
Deputy Associate Director for Science
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention
Designated Federal Officer, NCIPC BSC**

Dr. Gwendolyn Cattledge called the first day of the thirteenth meeting of the NCIPC BSC to order at 1:14 pm on Thursday, June 5, 2014. She introduced the new Director of the NCIPC Extramural Research Program Office (ERPO), Dr. Mildred Williams-Jackson.

Dr. Maury Nation introduced himself as acting chair of the secondary review for Funding Opportunity Announcement (FOA) CE14-001: Grants for Injury Control Research Centers (ICRCs). He directed the group's attention to the recommendations from the peer review committee and the NCIPC staff recommendations and noted that the secondary review is not intended to redo the work of the peer review and staff. The secondary reviewers' role is to provide additional feedback and to determine whether to accept the funding order as recommended or to make different recommendations based on their knowledge of the science, shifting priorities, or gaps in the field.

Mrs. Tonia Lindley conducted a roll call of meeting participants in the room and on the telephone and determined that a quorum was present. A list of meeting attendees is provided with this document as Attachment A.

CHARGE FOR THE SECONDARY REVIEW PROCESS

Paul Smutz, PhD
Acting Director, Extramural Research Program Office
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention

Dr. Paul Smutz explained the BSC's role to perform a secondary review of the applications received in response to FOA CE14-001. The secondary review committee does not revisit the scientific and technical merit of the applications, which took place during the primary peer review on April 14 – 18, 2014.

Criteria used by the BSC in making recommendations may include:

- Scientific and technical merit of the proposed projects as determined by the scientific peer review
- Availability of funds
- Relevance of the proposed projects to program priorities
- Geographic balance

Geographic balance of the applications is not a requirement of this FOA, but if a sufficient number of scientifically meritorious applications are received, geographic balance across the US and regions of the US may be taken into consideration when final funding decisions are made. This approach addresses a situation from the previous funding cycle. Of the seven applications approved for funding, two were from New York City and another was from the State of New York. The program does not want to fund less-worthy applications just to achieve geographic spread, but geography may be taken into consideration if need be.

The primary peer review scored each application on a range of one to nine, with one being the best and nine being the worst. Each application was given an overall impact score, which was a weighted average of the scores of the sub-components of the application. The overall impact scores were then multiplied by 10 so that the final scores are in a range from 10 to 90, with 10 being the best.

The National Institutes of Health (NIH) scoring calibration includes three categories of impact. High-impact applications have scores between 10 and 30, medium-impact applications have scores between 40 and 60, and low impact applications have scores between 70 and 90. All of the applications slated for discussion in the secondary review of CE 14-001 were deemed to have high impact.

The BSC was provided with summary statements for the six top-scoring applications for developmental and for comprehensive centers. These statements include written critiques from the peer review panel members who reviewed the application in detail, as well as a resume that captures the discussion by the entire panel at the peer review.

Regarding conflict of interest, Dr. Smutz emphasized the importance that no participants in the review have conflicts of interest, or the appearance of conflicts of interest, with the applications to be discussed. Conflict of interest forms were completed in advance of the meeting. Reasons for conflicts of interest may include the following:

- If a person has a vested interest in the outcome of the review, or could be seen by a reasonable person as having the appearance of a vested interest in the outcome.
- The BSC member or families must not benefit from the outcome of the review.
- If the BSC member has a relationship with an applicant involving consulting trustee or prospective employment, then the member is in conflict and cannot participate in discussion of the application.
- If the BSC member has a co-authored publication in the last three years, he or she is in conflict.

All of the information discussed in the review is confidential. The applications, summary statements, and any notes taken during the review are also confidential and must be left in the room after the meeting. Electronic files pertaining to the applications must be destroyed as well. The panel recommendations will not be released and cannot be obtained by the applicants. BSC members are not to discuss the proceedings or the outcome of the review at any time.

If an applicant or anyone other than appropriate CDC staff associated with the announcement contacts a BSC member, the BSC member should politely decline to discuss the review and suggest that the applicant contact CDC. In this event, the BSC member is requested to inform CDC. Applicants frequently want to know whether they have been funded, how many applications were received, what the scoring range was, and where they fit into the scoring range. All of this information is confidential and must not be discussed with applicants.

Dr. Smutz reviewed the meeting procedure, explaining that an overview of the FOA would be provided, the staff recommendations would be presented, and the BSC would discuss the recommendations and vote on them. Voting by the BSC panel does not have to be unanimous; however, if two or more members of the panel vote differently from the rest, they must prepare a Minority Report stating their reasons for their vote.

OVERVIEW OF FOA: CE14-001; Grants for Injury Control Research Centers

Paul Smutz, PhD
Acting Director, Extramural Research Program Office
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention

Dr. Nation confirmed that the BSC panel members with identified conflicts of interest were not present. He asked panel members to disclose any newly-discovered conflicts of interest. Hearing none, he began the formal review.

Dr. Smutz indicated that the purpose of the ICRC program is to develop centers that conduct high-quality research and help translate scientific discoveries into practice for the prevention and control of fatal and non-fatal injuries, violence, and related disabilities. The ICRCs serve as training centers and information centers for the public and the nation. The ICRCs are more than a “collection of research projects.” They are multidisciplinary and strengthen the field by integrating resources at the local, state, and national levels. They also conduct outreach and training programs.

In the past, the funding opportunity has only included ICRCs. This cycle divided the centers into two categories: comprehensive, which is similar to the existing center structure, and developmental. The developmental centers are smaller than the comprehensive centers, and the category was designed to give smaller groups an opportunity to “break into the field.” The award states that two comprehensive and one developmental center will be funded.

The comprehensive centers have a project period of five years with a budget up to \$900,000 per year. The organizational structure is comprised of an administrative core, an outreach core, and a training and education core. The centers also planned three or four research projects. The developmental centers also have a project period of five years, with a budget of up to \$450,000 per year. Their structure includes an administrative core and a training, education, and outreach core. They proposed one research project. This approach focuses on building infrastructure, which takes more time for a new center than conducting cutting-edge research.

The FOA stipulates that the research for both types of centers either have to address one of NCIPC’s current research focus areas, or address a high-burden injury and/or violence prevention and control topic area. Neither option is preferred over the other, but if an applicant opted to focus on a high-burden topic that is not one of NCIPC’s focus areas, the application needed to justify that choice and its importance to the field and CDC.

NCIPC’s current focus areas are:

- Motor vehicle-related injuries
- Violence against children and youth
- Prescription drug overdose
- Traumatic brain injury

Approximately \$2.1 million is available to fund three centers in fiscal year (FY) 2014 for both direct and indirect costs. The anticipated start dates for the new awards is August 1, 2014. The average award amount for the first budget period for the two comprehensive centers is \$829,000. They could request up to \$900,000, but because of the budget, the award is lower. The award for the developmental center is \$450,000. The staff proposes not to reduce the developmental center award in order to help them “get off the ground.”

For this funding announcement, 30 applications were received. Of these, 9 applications were received for comprehensive centers and 21 were received for developmental centers. CDC staff conducted a responsiveness review on all of the applications to determine whether they met the FOA criteria. One comprehensive center application and three developmental center applications were deemed to be non-responsive, and they were not peer-reviewed. The remaining 26 applications, 8 comprehensive and 18 developmental were peer-reviewed.

Three review panels were convened because of the number of applications and their size and complexity. Because of limited funds, the peer reviews were a combination of reviewers

traveling to Atlanta to participate in person and of reviewers participating via telephone. Approximately 40 percent of the reviewers came to Atlanta, and the other 60 percent were on the phone. The reviewers who attended in person served as primary reviewers on their applications, and telephone participants served as secondary and tertiary reviewers.

Two panels met simultaneously to review the comprehensive center applications on April 15-16, 2014. None of the 8 applications was triaged, so they all received a full, detailed review. The overall impact score for the comprehensive centers is an average of the average of the three center cores, and the average of the proposed research projects. The scores for the eight comprehensive applications ranged from a high of 23 to a low of 36. Scores are presented to two decimal places for secondary review discussion, as the scores of the third-, fourth-, and fifth-highest scoring applications are very close. The applicant will receive a whole-number score.

The peer review of the developmental center applications took place on April 17-18, 2014. Through a triage process, the panel determined that eight of the applications were not competitive. Those applications were not discussed in detail. The remaining ten applications received a full, detailed review. The overall impact score for the developmental centers was Administrative Core: 30%, Training, Education, Outreach Core: 30%, and Research Project: 40%. The scores for the developmental centers ranged from a high of 18 to a low of 40.

NCIPC staff recommended funding the top two scoring comprehensive centers in rank order:

- Johns Hopkins University
- The University of North Carolina

NCIPC staff recommended funding the top scoring developmental center:

- The University of Pennsylvania

Johns Hopkins and the University of North Carolina are currently-funded ICRCs. That funding ends on July 31, 2014. The total funding for the three applications is \$2,108,061. Because the comprehensive centers will be awarded slightly less than they requested, NCIPC staff will work with them regarding how changing the scope of work. It is hoped that more funds will be available next year to bring the centers to the \$900,000 per year level.

Further, NCIPC staff recommended that if additional resources become available, comprehensive center applications with priority scores better than 30, and developmental center applications with priority scores 32 or better, be funded in rank order.

Discussion Points

Dr. Hamby asked how many ICRCs are currently funded.

Dr. Smutz answered that 11 ICRCs are currently funded on two different funding cycles. Seven were funded in 2012, and their project period ends in 2017. Four currently-funded ICRCs are coming off-line this year: Johns Hopkins, the University of North Carolina, Emory University, and Washington University. The Medical College of Wisconsin, Harvard University, and the University of Pittsburgh have been funded by CDC in the past, but they were not competitive in 2009 or 2012. The University of Hawaii has a center, but it has never been funded by CDC. Because funding for Emory and Washington University will end this year and they are not

recommended to be funded for the next cycle, NCIPC hopes that they are self-sustaining enough that they can continue without CDC funding.

Dr. Allegrante asked how many prior cycles of funding have been received by the centers.

Dr. Smutz said that the first four ICRCs were first funded in 1987. Since then, there have been staggered five-year funding cycles. At one point, a high of 14 centers were funded. In some cases, institutions that were not initially funded were able to convince their congressional representative to secure a budget for them. The University of North Carolina was one of the original centers and has been funded continuously for 25 years. Johns Hopkins University has also been funded for some time. The current FOA includes language indicating that in future funding cycles, NCIPC may consider restricting or reducing funding for comprehensive centers that have been funded for 10 continuous years. This approach caused a stir, but it is intended to encourage "new blood." The current FOA also focuses on sustainability in case future NCIPC funding is not awarded. The developmental centers are intended to be for one award only. The developmental centers are expected to compete for a comprehensive center award after the initial five-year cycle. This policy has not been finalized.

Dr. Allegrante expressed concern that some of the centers have been funded for more than a decade. Most of the centers are concentrated on the East Coast and in the Northeast. The needs of the nation are broader. The developmental center is another Eastern-based institution. The longtime centers have been able to build capacity and assemble institutional resources and intellectual talent, which is important, but the geographic distribution of the funded centers may ignore other significant national needs.

Dr. Smutz agreed and said that discussions are ongoing regarding how to approach this situation. This FOA does not penalize the centers that have been funded for a long time, but it does indicate that if two centers have good and very close scores, then geography will be taken into consideration.

Dr. Allegrante observed that the proposed research projects do not seem to include work on gun violence, which is surprising given NCIPC's focus area of violence against children and youth and the problem of school shootings. Further, many of the projects seem to be oriented toward individual behavior change rather than policy, structural, and organizational changes.

Dr. Smutz noted that one of the research projects examines lethal means of suicide, which incorporates guns. He said that NCIPC struggles with how much to specify research project topic areas in FOAs. If they are too restrictive, then they run the risk of stifling innovation and of not receiving the best-quality projects. At the same time, it is important to address the research focus areas. This FOA indicated that the projects should either address an NCIPC focus area or another, justified high-burden area. In the future, they might consider a more restrictive approach or a way to incentivize projects in certain areas.

Dr. Borkowski said that after 25 years of funding, a center has a wealth of experience and is in a strong position to generate research projects from a wide variety of investigators from different disciplines. He asked about the history of funding of the ICRC at the Medical College of Wisconsin.

Dr. Smutz replied that the Medical College of Wisconsin ICRC had received CDC funding for at least two cycles, which they lost in 2012.

Dr. Borkowski suggested that in the future, research projects may be funded through a different mechanism, and the center funding could focus on the cores and perhaps a new investigator. The weighting of the research project proposals may not be necessary, given the current financial situation.

Dr. Morlock observed that most of the centers are located in urban areas. It is often more difficult to build an integrated infrastructure in rural communities, where people and institutions may be more dispersed.

Dr. Smutz agreed and said that the rural-urban difference was not in the criteria for this FOA. NCIPC has considered reserving funding for a high-scoring center that focuses on rural populations. At one time, they considered stipulating specific, underserved populations. The BSC's comments will inform how NCIPC moves forward with this funding announcement. The ICRCs have been funded at the \$900,000 level for many years, and that money does not go as far as it used to. NCIPC balances how to approach this problem, considering whether they should reduce the number of centers and give each more funding, or whether they should require that the funds be devoted only to the cores.

Dr. Porucznik asked about the composition of the peer review panel and their areas of expertise.

Dr. Smutz said that the reviewers were assigned to review topics that aligned with their areas of expertise. Some topic areas are quite broad, and NCIPC worked to enlist as many experts as possible, given the limitations of the number of reviewers who could travel. The panel included experts on centers and infrastructure as well as experts in different injury fields.

Dr. Nation asked about the timing of the next FOA, noting that some of the BSC's feedback would not require major restructuring as much as adding wording and specific guidance.

Dr. Smutz answered that the next funding announcement will be for an award in 2017. The FOA will be released in 2016 and will be available for six months. The FOA will be in place by January 2016, so discussions are ongoing about how to craft it with the new NCIPC director and the new ERPO director. The FOAs evolve as NCIPC applies lessons learned.

Dr. Allegrante asked whether the BSC will be involved in crafting the next set of announcements.

Dr. Cattledge answered that the BSC input can only be at a broad or conceptual level, as some BSC members will apply for the opportunity. **Dr. Smutz** welcomed their ideas and input.

Dr. Gorman-Smith observed that three of the comprehensive centers had essentially the same score. She asked whether the staff recommendations took issues of research topic areas and geographic distribution into account.

Dr. Smutz said that those issues were part of the discussions, but only two comprehensive centers will be funded, and the close scores are the third, fourth, and fifth applications. There is a jump of almost a point between the University of North Carolina and the third application. Regarding geographic balance, there is an ICRC in Ohio and one in Iowa, so there is no clear advantage to funding a center in Wisconsin as opposed to another location. If funds become available to support another center, they will have to decide among the close scores of the third,

fourth, and fifth applications from the Medical College of Wisconsin, Harvard University, and Emory University.

Dr. Nation commented on measurement error throughout the Harvard and Wisconsin applications. **Dr. Porucznik** agreed and observed that in the summary statements, one reviewer gave scores of ones and twos, while another gave fours and fives.

Dr. Smutz concurred and added that the peer review process is not perfect. Reviewers tend to give inflated scores, even when they are encouraged to use the range of scores.

Dr. Porucznik is from an under-represented part of the country. She said that if there are changes in priority, it will be important to make those changes well-known. Because of the effort required in preparing applications, some groups that have never received funding may wonder what the point is in applying.

Dr. Smutz appreciated the comment and said that NCIPC struggled with this idea as they were creating the requirements for the developmental centers. The Principal Investigator was required to have three senior-authored papers, and certain supports and infrastructure had to be in place. It is important that the developmental centers will be productive, but if the requirements are so stringent that only an existing center has a chance to receive funding, then they may exclude promising applicants. Even with the relatively strong requirements, 21 applications were received for the developmental centers. They might consider building geographical balance into the developmental centers. Years ago, the FOA was structured so that there would be one ICRC in each of the US Department of Health and Human Services (HHS) regions. CDC does not want to fund a center just because of its location, but at the same time, continuing to fund institutions in big cities may not be beneficial.

Dr. Morlock commented that the places that struggle the most with infrastructure also often have higher suicide rates. Prevention and intervention strategies are being developed that do not work in these communities. It is important to advance the science within different contexts.

Dr. Hamby agreed with the need to consider geographic spread and addressing rural areas. She wondered about a way to conduct training or create a process to encourage institutions from under-represented areas to apply and to be competitive.

Dr. Smutz said that the FOA lists eligible applicants, which include a range of entities, but the top scores all come from academic institutions. If they want more variety, then they may need to conduct different trainings so that other groups understand how to write good applications.

Dr. Porucznik said that if additional funds become available, especially if the funding is not sufficient to fund another comprehensive center, it might be worthwhile to consider funding a second developmental center rather than awarding partial funding to one of the comprehensive centers with scores that are essentially a tie.

Dr. Smutz said that the BSC could make a recommendation to that effect. The staff recommendation states that the centers should be funded in rank order if money becomes available, but does not specify whether the center should be comprehensive or developmental.

Dr. Allegrante endorsed that approach to encourage new groups.

Dr. Forjoh said that the funding for one comprehensive center could support two developmental centers and help them become competitive.

VOTING

Motion 1: CE14-001

Dr. Porucznik moved that the BSC approve the NCIPC staff recommendations to fund in rank order one developmental center and two comprehensive centers from the applications submitted in Response to CE14-001: Grants for Injury Control Research Centers. Dr. Forjoh seconded the motion. The motion passed unanimously.

Discussion Points

Regarding making a recommendation to fund a developmental center rather than a comprehensive center if funds become available, **Dr. Hamby** said that the points about the importance of supporting new centers are important, but she supported prioritizing a comprehensive center if additional funds are available. The top six comprehensive center applications are of very high quality. Regarding the developmental centers, the top-ranked application is clearly stronger than the others and does have gun violence as an outcome of interest. The next applications appear to have substantial weaknesses and limitations, and the next center in rank order has concerns related to the Principal Investigator's credentials and a relatively weak research project.

Dr. Gorman-Smith and **Dr. Borokowski** agreed.

Dr. Morlock asked whether the panel reviewers were aware that the developmental centers were from applicants who were less seasoned than the comprehensive centers.

Dr. Smutz said that that the reviewers were aware of the FOA language which stated the purpose and criteria for the developmental centers. A separate panel reviewed all of the developmental center applications.

Dr. Morlock said that if reviewers are not given instructions that an application is coming from a new investigator, they may give lower scores.

Dr. Gorman-Smith said that the developmental centers were not necessarily from new investigators.

Dr. Smutz said that in a perfect world, there would have been two different announcements for the two types of centers. There were different criteria for the centers, though. The FOA included requirements for the developmental centers to ensure that the investigators would be experienced in injury prevention publication and funding.

Dr. Nation said that they were balancing the importance of building capacity versus assuring the best science. In the FOA, it is not entirely clear which of those philosophies is the priority.

Motion 2: CE14-001

Dr. Allegrante moved that the BSC approve the NCIPC staff recommendations that if additional resources become available, comprehensive center applications with priority scores of better than 30 and developmental center applications with priority scores of 32 or better will be funded in rank order. Dr. Gorman-Smith seconded the motion. The motion passed unanimously.

WRAP-UP AND ADJOURN

Dr. Nation thanked BSC for their review and discussion, and Dr. Smutz and the NCIPC staff for their hard work on the FOA.

Dr. Cattledge provided housekeeping notes for the evening and the next day's meeting. She thanked the BSC for their comments, which will be taken into consideration for future planning. She reminded them to leave all materials in the room so that they could be shredded. The next secondary review will take place in July.

With that, the meeting adjourned at 2:39 pm.

CERTIFICATION

I hereby certify that to the best of my knowledge, the foregoing minutes of the June 5, 2014 NCIPC BSC meeting are accurate and complete:

Date

Maury Nation, PhD
Chair, NCIPC BSC

ATTACHEMENT A: MEETING ATTENDANCE**BSC Members Present:****John P. Allegrante, PhD**

Deputy Provost
Teachers College
Columbia University

John G. Borkowski, MD (via phone)

Professor
Department of Psychology
University of Notre Dame

Samuel Forjough, MD, MPH, DrPH, FGCP

Department of Family and Community Medicine
Texas A&M Health Science Center College of Medicine

Deborah Gorman-Smith, PhD

Chicago Center of Youth Violence

Sherry Lynne Hamby, PhD

Department of Psychology
Sewanee The University of the South

Angela D. Mickalide, PhD, MCHES (recused)

Executive Director
Emergency Medical Services for Children's National Resource Center
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 (via phone)

Senior Research Scientist
Research Institute on Addictions
University at Buffalo

Federal Liaisons Via Telephone**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

Lyndon Joseph, PhD

Health Scientist Administrator
Division of Geriatrics and Clinical Gerontology
National Institute on Aging

BSC Members in Conflict:**Carolyn J. Cumpsty Fowler, PhD, MPH**

Assistant Professor
Johns Hopkins University
School of Nursing & Bloomberg School of Public Health

Stephen Hargarten, MD, MPH

Professor and Chair
Department of Emergency Medicine
Medical College of Wisconsin

Angela D. Mickalide, PhD, MCHES

Executive Director
Emergency Medical Services for Children's National Resource Center
Children's National Medical Center

ATTACHMENT B: ACRONYMS USED IN THIS DOCUMENT

Acronym	Expansion
BSC	Board of Scientific Counselors
CDC	Centers for Disease Control and Prevention
ERPO	Extramural Research Program Office
FACA	Federal Advisory Committee Act
FOA	Funding Opportunity Announcement
FY	Fiscal Year
HHS	(Department of) Health and Human Services
ICRC	Injury Control Research Center
NCIPC	National Center for Injury Prevention and Control
NIH	National Institutes of Health

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Board of Scientific Counselors

**Thirteenth Meeting
June 6, 2014
Summary Report**

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**DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)
NATIONAL CENTER FOR INJURY PREVENTION AND CONTROL (NCIPC)**

BOARD OF SCIENTIFIC COUNSELORS

Thirteenth Meeting: June 5-6, 2014

4770 Buford Highway
Chamblee Campus, Building 107, Conference Room 1B 01206/1C 01210
Atlanta, GA 30341

SUMMARY PROCEEDINGS

The thirteenth meeting of the National Center for Injury Prevention and Control (NCIPC) Board of Scientific Counselors (BSC) took place on Thursday, June 5 and Friday, June 6, 2014. The BSC met in closed session for secondary review, in accordance with the Privacy Act and the Federal Advisory Committee Act (FACA), on Thursday, June 5, 2014. Dr. Maury Nation served as chair. The BSC met in open session on Friday, June 6, 2014. Dr. Carolyn Cumpsty Fowler served as chair.

Friday, June 6, 2014

CALL TO ORDER/ ROLL CALL/ LOGISTICS

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 thirteenth meeting of the NCIPC BSC to order at 8:04 am on Friday, June 6, 2014. She thanked BSC members for their time and commitment to injury and violence prevention. She explained that the meeting format was designed for BSC to have ample opportunities for discussion to provide guidance to NCIPC leadership. They would engage in an informal exchange of ideas, questions, and feedback regarding NCIPC's research and program activities.

Mrs. Tonia Lindley conducted a roll call of BSC members present in person and on the telephone. She established that a quorum was present. CDC and NCIPC staff introduced themselves. A list of meeting attendees is provided with this document as Attachment A.

ANNOUNCEMENTS /MEETING LOGISTICS / APPROVAL OF LAST MEETING MINUTES

Daniel Sosin, MD, MPH, FACP
Acting Director
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention

Dr. Sosin welcomed the BSC members and thanked them for their time and effort, and particularly for their commitment to the secondary review process. He hoped that their conversations would focus on NCIPC's work, why they do it, and how they might do it better. An inclusive decision-making process makes the center's work stronger, and input from outside experts in the injury field is critical.

Ms. Kendra Cox presented housekeeping notes on behalf of Mrs. Lindley. **Dr. Fowler** indicated her thanks for the quality of the meeting minutes and entertained a motion for their approval.

Motion: December 2013 BSC Meeting Minutes

Dr. Angela Mickalide moved to approve the minutes from the twelfth meeting of the NCIPC BSC. **Dr. Samuel Forjoh** seconded the motion. The motion passed unanimously.

DIRECTORS' UPDATE

Daniel Sosin, MD, MPH, FACP
Acting Director
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention

Dr. Sosin reported the following recent organizational changes within NCIPC:

- Dr. Amy Peeples is the NCIPC Acting Deputy Director
- Dr. Rod McClure is the new Director of the Division of Analysis, Research, and Practice Integration (DARPI)
- Dr. Bob Ruiz left NCIPC to join the Office of Public Health Preparedness and Response (OPHPR) as their Deputy Director
- Dr. Robin Forbes is serving as the Acting Management Official

The Deputy Director of CDC, Dr. Ileana Arias, is a former director of NCIPC. She has a great deal of influence over CDC's priorities. Because of her position, injury and violence prevention receive a lot of attention, visibility, and opportunity not only within CDC and HHS, but also at the White House level. At the same time, NCIPC is a small center with a small budget and a broad scope. Keeping up with the national-level attention can be challenging.

Dr. Tom Frieden, CDC Director, recently published an article on the six components of an effective public health program; that is, interventions that are feasible, sustainable, scalable, and cost-effective. He looks to CDC centers to bring those six components to their advanced work, as well as their developmental work, to sustain meaningful change:

- ❑ Innovation: Innovation can be technological or a different way to frame a problem. It is important to understand how to use findings from new technologies and new tools. For instance, sensors in helmets that can monitor traumatic brain injury (TBI) will become less expensive and better understood as they are better linked to outcomes.
- ❑ Technical Package: There are limited approaches to addressing a problem that are simple enough and that have enough collective impact to change the nature of the problem. It is important to show cost-effective and cost-appropriate approaches to changing the trajectory of injury and violence and to create compelling technical packages.
- ❑ Effective Performance Management: Mechanisms such as data feedback loops can track whether interventions are working. If not, adjustments should be made and progress should continue to be monitored. NCIPC is focusing on creating a real-time data loop that can affect programs and inform change. Dr. Frieden believes that if feedback is gathered on a monthly basis, meaningful change can be expected over the course of a year. If the feedback loop is annual, then changes can be expected over a decade. Some of NCIPC's data loops are at two, three, or four years and thus cannot inform timely and meaningful change.
- ❑ Partnerships: Injury and violence prevention incorporates a breadth of issues, disciplines, and partners. No one can do this work alone, and it is important to understand how, with whom, and how effectively they can partner on common interests to accomplish common goals. The BSC *ex officio* members represent a sample of critical federal partners, and NCIPC also has important partners at the state and local levels and in the public and private sectors.
- ❑ Communication: Accurate and timely information-sharing with the healthcare community, decision-makers in government, the private sector, and other audiences is very important. NCIPC has the tools to make change, and engaging communities through effective communication is an important complement to their strong scientific work.
- ❑ Political Commitment: Political commitment is not guaranteed, and Dr. Frieden's interactions with HHS, the White House, and Congress have shaped his appreciation for building nonpartisan partnerships in the political sphere in order to make change. Without that commitment, a government agency cannot make change. The prescription drug overdose epidemic has spurred political will at several levels.

As NCIPC develops evaluations of community interventions, they are thinking proactively about their scalability and their ability to bring partnerships together, their ability to provide data, and other important elements.

Dr. Frieden is a driven and focused director who pressures the agency to think about scalable models. He has identified three priority areas:

- ❑ Health security at home and abroad: This agenda is broad and speaks to CDC's infectious disease mission. A number of innovations in public health have grown out of resources for public health preparedness and response, particularly the ability to connect public health resources to a broader response capabilities at the local, state, and federal levels. Public health must be part of this conversation. It is important to focus on public health's key strengths and contributions through data, laboratories, and systems.
- ❑ Primary causes of injury, disability, disease, illness, and death: Most public health problems are in this category, where priorities for the injury and violence field reside.
- ❑ Building stronger partnerships between public health and healthcare: These partnerships are getting stronger, in part because of healthcare reform efforts. As an agency, CDC has a long history of working effectively to provide public health guidance and perspective in clinical settings.

The burden of injury and violence in the United States (US) is significant. The field is diverse and extremely critical, as injury and violence cause 180,000 deaths per year. These issues are immediate and represent remarkable opportunities to have an impact on the health of the nation and the world. NCIPC must set priorities because of the volume of work to be done and the few resources that are available. The center engages in surveillance and monitoring to discover emerging problems. The center also scales programs and engages the community to focus on areas where they can make a big impact. The center remains flexible, but has made strong commitments in the areas of motor vehicle-related injury, traumatic brain injury (TBI), violence against children and youth, and prescription drug overdose.

NCIPC's budget saw changes in fiscal year (FY) 2014. The overall budget is \$150 million, which represents an increase of \$11.9 million over the FY 2013 post-sequestration budget, but only an increase of \$4.6 million over FY 2012. The increases came to the National Violent Death Reporting System (NVDRS), for which \$7.9 million was allocated to expand the number of participating jurisdictions. There has been good response to the Funding Opportunity Announcement (FOA) for this project. NCIPC is excited to increase resources for the NVDRS and to focus on supporting justifications as they use the data and demonstrate the value of the system. The center is also focusing on increasing the timeliness of the data.

The other adjustment to NCIPC's budget was the merging of the unintentional and "other violence" budget lines. NCIPC has some discretion in determining the necessary investments in injury and violence prevention as it responds to critical needs. The budget line increased by \$2.3 million over the post-sequestration FY 2013 level. The resources are currently committed, so any adjustments will be gradual. The increases will likely be directed to efforts in prescription drug overdose.

NCIPC is visible in the President's budget for FY 2015, largely thanks to the CDC Director's and Deputy Director's commitment to violence and injury issues. The proposed budget includes an increase of \$15.6 million in new funding for prescription drug overdose research. This funding is proposed to be conducted through the Core Violence and Injury Prevention Program (VIPPP) cooperative agreement to increase the number of states receiving resources, and to focus resources on prescription drug overdose in high-priority states.

The President's proposed budget also carries over increases to further supplement the NVDRS so that every jurisdiction in the US can participate in the system at some level. The budget also includes \$10 million in new funds to conduct research on gun violence. The budget adds support to evaluate sexual violence prevention through the Rape Prevention and Education (RPE) program. NCIPC has been the steward of the RPE program for many years, but has not had the opportunity to study its impact or to identify the most effective elements of the program in order to inform change. It is important to evaluate program effectiveness without drawing funds away from the programs themselves.

DISCUSSION POINTS

Dr. Fowler asked whether the budget includes any decreases.

Dr. Sosin said that there were no decreases. The ICRC and falls prevention activity budget lines were level with the FY 2012 sequestration levels, and other lines increased slightly.

Dr. Hamby asked how much funding is proposed to be allotted for the RPE evaluation, and whether those funds would be directed specifically toward breaking down the prepackaged programs to assess which of their components has the most impact. Little is known about the individual elements of programs, as they are mostly evaluated as total packages. There have been advances in this kind of component analysis in prevention and intervention science.

Dr. Sosin replied that there is little detail in the President's proposed budget; rather, the budget acknowledges that evaluation of the program and of the block grant is an appropriate and important investment. He anticipates that the evaluation will include considering variations within jurisdictions and how they implement the programs as well as considering opportunities to study variations in outcomes as a result of variations in implementation. Resources may look at adding components systematically to gain greater understanding of the approaches that appear to be more effective and to shift the programs to those approaches, not at stopping ongoing efforts.

Dr. Hargarten commented on recent editorials and public discussions about the National Institutes of Health (NIH) budget. He has seldom seen references to major universities or entities calling for increases for CDC. He asked how that situation can be improved so that CDC leadership is more grounded in universities to encourage similar calls for budgetary adjustments.

Dr. Sosin replied that this challenge is not new to NCIPC and CDC, which has perennially been a "little sister" to NIH. He did not envision a change in this dynamic, particularly since CDC does not provide a high level of funding, and is therefore less important to universities. CDC is very important to some programs within some universities and they have a strong foothold to train scientists and conduct research, but he does not expect deans and chancellors to promote increases to CDC's budget. They continue to work on and encourage those partnerships, but they are likely to make more progress by continuing to do good work. CDC and NCIPC must focus on their unique contributions, which include their ability to identify problems quickly, bring data resources to bear, and understand context to drive attention and interventions to problems. CDC gets attention because of the ability to identify and respond to acute events, and the agency relies on its partners to draw attention to that strength.

Dr. Hargarten was encouraged to hear about Dr. Frieden's priority area regarding strengthening public health and healthcare linkages. These partnerships are strengthening in hospitals and poison centers, which have real-time data. Now that healthcare organizations are thinking about population health, there could be an opportunity to build CDC's local presence with hospital systems.

Dr. Sosin agreed that there is a great deal of opportunity in that area, particularly in work on prescription drug overdose. There are significant differences between federal data and data at the state and local levels, such as the opportunity for timeliness and depth. The ability to work within healthcare systems with partners in academia and public health has been shown in other areas, such as antimicrobial resistance and infectious disease. CDC can focus on a problem and bring unique data in a timely fashion to identify impediments to improvement. CDC can then assess a rapid feedback loop to determine adjustments that need to be made within the culture of the healthcare setting to move toward a population benefit.

Dr. Allegrante commented on efforts to develop an equivalent to Research America for CDC. Beginning 15 years ago, a coalition of national health education organizations, led by the Society for Public Health Education, has been working on Capitol Hill on behalf of CDC. There is a natural constituency within those organizations that are interested in all of CDC's centers.

Dr. Sosin agreed and added that the Injury and Violence Prevention Network (IVPN) is an example of a combination of a range of injury and violence prevention organizations with a strong presence in Washington. The work on NVDRS would not have transpired without the efforts of strong coalitions championing the importance of data in violence and injury prevention. NCIPC and CDC can support and encourage these efforts by providing good information and good results from program activities.

Dr. Mickalide asked for more details regarding TBI and how additional injury risk areas, such as bicycle crashes, falls, and sports injuries, are included in that area.

Dr. Sosin said that TBI is a unique area because it incorporates multiple mechanisms of injury. Therefore, interventions come through programs that address the different mechanisms, including falls, motor vehicle injuries, and recreation-related injuries. The TBI Team has developed a strategic plan that identifies surveillance as a core element of the work, pulling data from various systems to describe the problem. The plan also addresses programmatic interventions and the need for programs to highlight opportunities for prevention and to have an impact on TBI. The strategic plan also addresses mild TBI. Last fall, the Institute of Medicine (IOM) called upon CDC to develop a national system to capture sports-related concussions, which requires a great deal of definitional and data resource defining work. The TBI Team is developing a response to the IOM call as well as to Congressional interest in this issue. The response incorporates programs such as Heads Up! as well as data so that more can be understood about mild TBI incidence, prevalence, and long-term trajectory. The strategic plan addresses quality of healthcare and quality of life for persons with TBI and how NCIPC can better understand the needs of persons at all levels of the TBI spectrum. The creation of DARPI as a cross-cutting division allows for consideration of risk and protective factors that have an impact on many problems that have been segmented in budget lines and in advocacy, outreach, and program areas. NCIPC will focus on where to scale up significant programmatic opportunities to prevent injury and violence while executing primary prevention.

Dr. Nation asked about the profile of firearm-related injuries and deaths within NCIPC and how the center is conceptualizing its role in addressing those issues.

Dr. Sosin answered that a number of external partners provided support through the CDC Foundation for work with the IOM on addressing priority research needs in gun violence prevention. The IOM report frames five broad categories of research and provides examples of work that CDC can do. The report is a good foundation for NCIPC as well as NIH, the Department of Justice (DOJ), and other entities that are receiving resources to address gun violence research to ensure that the groups are working in the same direction. Additionally, NCIPC has followed up with federal partners to discuss each partner's focus areas, primary mission and goals, where overlap exists in their activities, and where they have opportunities to work together. An initial project is identifying each partner's data resources that could be used to answer questions about gun violence and gun violence prevention. It is important to understand the potential variables, which are available across a wide variety of data sources at the national level, and also at local levels. Consolidating this information to answer research questions will reveal more opportunities to consider these issues across a variety of perspectives and disciplines. A broader question concerns how visible CDC should be in this work. Congress never forbade CDC from conducting gun violence research, but it was very clear that the issue is political and that CDC's funding would be tied to the agency's engagement in the area. In one sense, they are fortunate that the President called this issue out and created a forum in Congress to find common ground in the political system to support further science. NIH has an FOA on gun violence research, and DOJ funds work in this area. Congress has not yet reached agreement regarding CDC's involvement. NCIPC will not release FOAs specific to gun violence, but the center will aggressively expand and effectively implement the NVDRS, which Congress has identified as a priority area. NCIPC will also work within programs such as violence prevention and suicide to use available data to further research the role of firearms within those areas.

Dr. Molock asked how suicide prevention is integrated into NCIPC's four focus areas.

Dr. Sosin replied that he has not seen suicide imbedded in the focus areas. Certainly, suicide should be at the top of Dr. Frieden's focus area on the primary causes of injury, disability, disease, illness, and death. CDC has a major initiative on cardiovascular disease and also focuses on cancer. Regarding suicide, scalable programs to address the problem have not been identified or articulated. As long as the problem looks like an extensive set of causes that require broad, social-changing interventions, it is less attractive to policymakers. He recently attended a meeting of the Action Alliance on Suicide Prevention and he was heartened to hear about work in suicide; however, significant prevention opportunities have not been defined in a manner that will attract attention and support.

Dr. Grant Baldwin (Director, Division of Unintentional Injury Prevention, NCIPC) added that the work on prescription drug overdose prevention incorporates all intents, which includes suicide.

Dr. O'Connor noted that a variety of data sources are available for prescription drug overdoses, such as poison centers and the Prescription Drug Monitoring Programs (PDMPs). He asked about the possibility of utilizing those data sources to assess where diversion happens.

Dr. Sosin pointed out that prescription drug overdose would be discussed in depth later in the day's proceedings, and noted that PDMPs are a major focus of their work. Poison Control Center data have not been a primary data source at CDC, partially because of the need to understand the denominator to use the data effectively.

Dr. Porucznik asked about training grants and other ways to reach new generations of researchers and how they fit into the center's priority areas.

Dr. Sosin answered that training grants are important to build the field and to assure the sustainability of external research and knowledge generation. The Injury Control Research Center (ICRC) program is one mechanism for this work. Sustainability of research funds is also important so that NCIPC is not training people to conduct injury research who then pursue other avenues because there are no career opportunities in injury research. NCIPC intends to encourage work in their priority areas with program implementation requirements. For example, there are great expectations in the field regarding prescription drug overdose and how CDC can support training grants or mechanisms to help understand the healthcare environment and how to bring change through collaboration with public health. NCIPC's research needs to balance broader innovation and opportunities to discover new problems and opportunities to intervene that are not on the priority list. This work will represent a smaller portion of the investments but will show that the field of public health is a good investment.

Dr. Fowler asked about the extent to which Dr. Frieden's six components of a good public health program will be represented in NCIPC's funding announcements.

Dr. Sosin said that there are aspects of the components in the NVDRS. Dr. Baldwin has been working to internalize the components within the Division of Unintentional Injury Prevention (DUIP). There will be a thoughtful approach to planning so that the components are addressed.

Dr. Fowler recalled the portfolio review for Core VIPP. The top recommendation of the review panel was to pay attention to the infrastructure of a program before providing funding for intervention work, but the infrastructure support appears to have been reduced.

Dr. Sosin agreed that in an ideal world, an infrastructure is built and then programs are executed; however, when Congress allocates funding to address a problem, it is for that specific problem. NCIPC will have to move away from the ideal model, maintaining commitment to building infrastructure while acknowledging that work continues as the programs they are funded to address are executed.

Dr. Fowler commented on private investments in concussion research and asked about NCIPC's opportunities for public-private work in the future.

Dr. Sosin said that public-private work is ongoing in TBI and sports concussion. The Blank Foundation in Atlanta has funding opportunities related to mild TBI. The center and CDC must think carefully about their relationship to the National Football League (NFL), just as they think carefully about their relationships with other private groups and fields, such as the alcohol industry. Many of the currently-involved partners in TBI and sports concussions are sports organizations with significant resources. The partners are acknowledging the problem and indicating a desire to be part of the solution. Much of the funding in the recent partnership announcement is for NIH and others, but there is a place for CDC. Dr. Frieden is calling on partnerships like these across the agency not only to get the work done, but also to make investments. Injuries and their prevention have major impact on business and private sector interests. There are opportunities to affect change.

OPERATIONALIZING THE DARPI CONCEPTS

Roderick McClure, PhD, MBBS

Director, Division of Analysis, Research, and Practice Integration

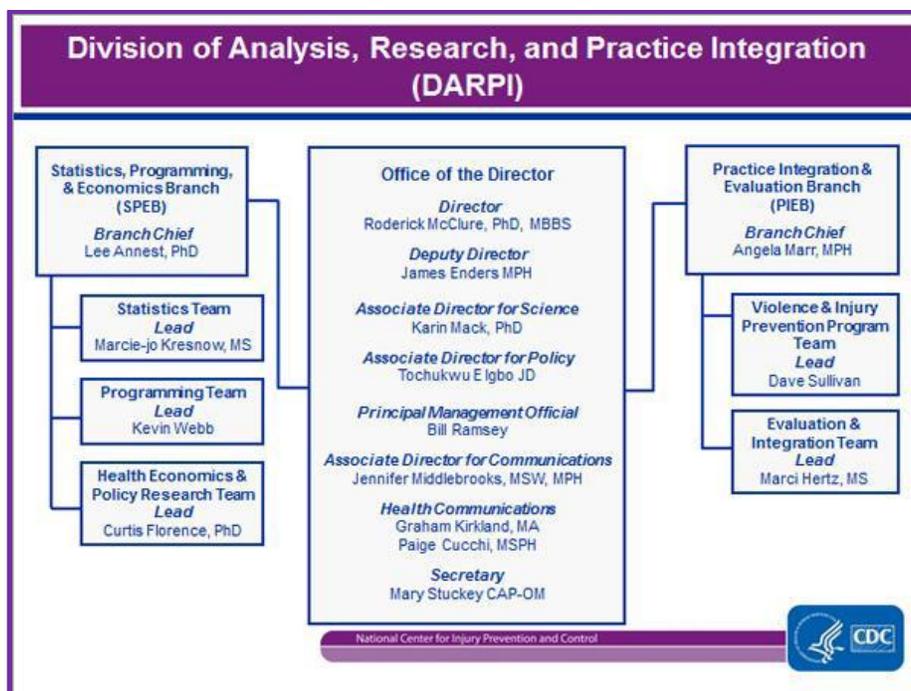
National Center of Injury Prevention and Control

Centers for Disease Control and Prevention

Dr. McClure greeted the BSC and commented on the injury field's challenge to achieve real change at the population level. This work requires more than releasing brochures or providing technical advice or evidence-based information. DARPI's mission is to prevent violence and injuries and reduce their consequences. The division's contribution to NCIPC will be to think through how to actualize this challenge and how to work with the public to make changes.

In order for a group to work effectively, it needs a strong identity, purpose, clearly-articulated vision, mission that has been collectively identified and agreed upon, and a clear means for achieving its goals. DARPI does this work within the context of the expectations of its constituency and according to its responsibilities in the organizational structure of the center. Being open about the division's challenges ensures good feedback and advice from constituencies regarding how they can fulfill their expectations.

NCIPC has been challenged to create scalable interventions. DARPI has a very committed, talented, and experienced staff. Dr. McClure joined the division three months ago and has been impressed with their skills and commitment. DARPI's organizational structure is depicted in the following chart:



DARPI's program activities are well-established and include the Web-based Injury Statistics Query and Reporting System (WISQARS); the ICRCs; and the Core VIPP, which has addressed building capacity within states to address violence and injury problems.

CDC's traditional approach is to support states in addressing their problems, and DARPI has articulated a linear pathway from gathering data to identifying risk factors to program development and implementation. In the past, the division has provided independent advice, recommendations, and evidence that others can implement. The challenge for the public health field as articulated by Dr. Frieden is to induce change, not simply to provide evidence.

DARPI's challenge is to operationalize internally to induce change so that its impact can be measured. The directors of NCIPC's other divisions have been extremely supportive and have welcomed the creation of cross-cutting relationships.

Discussion Points

Dr. Fowler asked about the engagement of constituents such as the ICRCs and the Core VIPPs in discussing DARPI and its operations.

Dr. McClure answered that opportunities for those conversations are being created. They are holding monthly teleconferences with the ICRCs to solicit feedback. The state programs have more informal and frequent conversations. He has attended a regional network meeting with different ICRCs, a Safe States conference, and a Prevention Network meeting to glean as much information as possible. It is important to formalize the engagement and feedback process from their constituents.

Dr. Hargarten asked about Dr. McClure's background. **Dr. McClure** responded that MBBS is the Australian equivalent of an MD. His initial clinical training was in emergency medicine and public health. He developed an understanding that a population approach to preventing injury is preferable to a case-by-case approach.

Dr. Hargarten commented on the similarity of the acronym DARPI and Defense Advanced Research Projects Agency (DARPA). The US Department of Defense (DoD) invests a great deal of funding in injury, and he asked about opportunities to consider collaborations with other federal agencies. He asked about DARPI's constituency, noting that CDC's traditional constituency has been state public health. Other groups, such as poison centers and trauma centers, have been raised as potential constituencies.

Dr. Sosin noted that DARPA focuses on high-risk, high-yield research investments for DoD. The US Department of Homeland Security (DHS) has created an equivalent. CDC focuses on applied research and research that affects practice. There are opportunities for partnerships with the DoD and other entities that invest in injury and violence prevention.

Dr. McClure added that ultimately, their constituency is comprised of the citizens of the US. Among their charges is considering how to use existing social institutions for packages of activity.

Dr. Baldwin said that NCIPC is in the process of finalizing a Memorandum of Understanding (MOU) with the DoD Center of Excellence on TBI and Psychological Health. This MOU incorporates work in TBI, suicide prevention, and prescription drug overdose prevention. These groups have rich data sets and significant budgets, and they will be strong partners.

Dr. Fowler observed that new guidelines are being released for the accreditation of trauma centers. The “orange book” states that prevention does not necessarily take place within trauma centers, but can be more strategic and population-based, and that they must be evidence-based.

Dr. McClure added that the guidelines include the appointment of an Injury Prevention Officer in many cases. He was aware of the opportunity, and DARPI is engaging in conversations to learn more. In some states that are not funded by CDC, injury prevention programs have been maintained through the trauma system.

Dr. Sosin said that each division and office director in NCIPC has been asked to name their commitments for 2014. He asked Dr. McClure to speak about one or two of DARPI’s priorities and how they related to the center’s focus areas.

Dr. McClure said that DARPI has chosen areas of activity as the basis of an ongoing program so that they can achieve big changes and to drive the division’s long-term goals. DARPI will maintain its three program areas: WISQARS, the ICRCs, and the Core VIPP. They are generating excitement in surveillance to prime for future work across the other NCIPC divisions, particularly concerning urgent data issues such as TBI and prescription drug overdose. Among their challenges is ensuring that data are not relegated to a bookshelf, but are used to affect policy. This year, DARPI is focusing on identifying ways for users to interact with data regarding finances in order to convince policymakers to invest in problems. A return on investment indicator helps, using a fixed-resource environment to show policymakers where monies are best spent for the best results for population health. The division recognizes that policy decisions are based on more than just dollars. Incorporating other agendas into the mix, such as competing interests and opportunities for cross-cutting work, will require additional data, perhaps from less-traditional sources. Regarding the ICRCs, DARPI is integrating their work into other program activities as well as engaging with other activity within the states and CDC. DARPI is demonstrating the value of the ICRCs to the injury prevention world. Cross-cutting activity to address core interests of the other two NCIPC divisions is another priority of DARPI’s. The current two content focus areas are child maltreatment and prescription drug overdose. DARPI has a process for actualizing the goals of content experts by providing program management and engagement with the ICRCs in data collection. DARPI is discovering the best way to work across NCIPC’s divisions in order to provide a real service to the entire center. DARPI’s goal is to demonstrate actualized internal processes in at least the two focus content areas to have a real-world effect.

Dr. Hamby was glad to see division-level focus on these issues. She was also glad to hear about the data feedback loop and about knowledge generation. Medicine may be ahead of other academic disciplines in thinking about informatics and knowledge management. She observed a crisis in the field. Because of unintended systemic issues, the field has “put all of its eggs in the knowledge generation basket,” when knowledge generation is just a first step. Federal agencies, universities, and healthcare systems tend not to focus on knowledge integration, knowledge synthesis, and knowledge dissemination. As the field has grown in knowledge generation, even some of the informal means of integrating, synthesizing, and disseminating information have atrophied. Journals and conferences adopt a traditional structure for knowledge delivery, which may not be the best use of time. This crisis applies not just in research-to-practice, but also in research-to-research. Many people devote enormous energy to the field of violence and injury prevention, but do not have a systematic way to learn about the current state of the field. Another dynamic is the practice-to-research direction.

Front-line practitioners often want data on questions that are not captured in research. She wondered what systemic changes DARPI or NCIPC might make to help shift the balance of knowledge generation, integration, synthesis, and dissemination.

Dr. McClure agreed and agreed that communication is an important focus. DARPI has an office that works on understanding the constituency and feeding information back regarding what is important and what is not important, addressing the practice-to-research direction. They develop their processes with help from the communication staff. He is working to understand the systems. They must learn not only how to communicate what works for a certain issue or problem, but how to ensure engagement with the issue or problem.

Dr. Sosin said that effective knowledge management in the violence and injury prevention field relates to all of Dr. Frieden's components of an effective public health program. The issue incorporates communication; performance management; partnerships and making connections among the disparate activities in research, program, and advocacy; innovation in looking at problems differently and bringing pieces together differently. NCIPC does not have sufficient budget to create novel knowledge management platforms to change the field, but a number of investments are ongoing in the healthcare sector, such as electronic health records. As an agency, CDC is learning how to leverage common platforms better to bring surveillance data, program data, and partners together. There may be opportunities to find others who have already invested the resource base. He asked about the kinds of platforms that are accessible and routinely used that can convey information.

Dr. Hamby observed that the current state of the field focuses on "inbound traffic," and searches drive the way that people interact with knowledge. People tend to look for their "known unknowns," which doesn't present opportunities to learn about emerging or breaking news and trends and how to access that information. Some literature in the medical field leads her to believe that the violence and injury prevention field needs to shift the ways their organizations and institutions communicate with their constituencies. The traditional "newsletter" model, with articles about a range of different subjects, is probably not the best way to share information anymore. Some literature indicates that an effective model is to invite people to join a topic-targeted blast. This approach is a time-limited commitment to a specific topic and it can also bring opportunities to introduce new ideas. For a conference that she co-chairs, she has experimented with mixing styles of sessions. People still attend conferences regularly, which presents chances to browse different topics. Further, the violence and injury prevention field can learn from how other fields are using big data.

Dr. Gorman-Smith said that CDC has built platforms that are useful in the field. In her work in youth violence prevention, she spends a lot of time in communities. She is shocked at how many agency-level and staff-level personnel use the Striving To Reduce Youth Violence Everywhere (STRYVE) website. They find the website useful because it is interactive and includes modules that distill information in useful ways. CDC has a unique brand and may underestimate the ways that it can leverage its public credibility, particularly in these areas.

Dr. Molock agreed and added that those within the organization may not understand their reach. CDC has more reach and credibility than NIH. CDC has real partnerships in real communities, which is challenging for other agencies. She works in suicide prevention in faith communities and frequently learns that the question that she is asking is not the question that communities are asking. It is important to engage communities from the beginning to understand those questions. Her church focuses on mental health and has a different awareness theme every month. Last year, all church members had a physical. All of the males

had prostate cancer screening. The parents committed to serving meals that represent all of the food groups, and the Sunday School and other groups committed to not serving processed foods. For all of these initiatives, they use CDC materials. CDC's development grants go to real community people who would not have a chance of getting a grant from NIH. Community groups do not have expertise in the language and norms of grantsmanship, but people who know how to write grants can find out what is important in a community and help write those grants. Her suicide prevention work in churches does not directly focus on suicide, because suicides are relatively rare and churches are more interested in substance abuse, depression, and healthy marriages. Suicide can be imbedded in those issues and in issues that are important to communities. CDC's credibility in areas such as immunization and nutrition make the agency relatable and builds the agency's credibility in other issues. CDC's website is user-friendly, with excellent and accessible fact sheets. Continuing these partnerships will be valuable.

Dr. Allegrante said that academics and public health practitioners in other fields are thinking and talking about the problem of research-to-practice and practice-to-research. They are ultimately interested in saving lives. He wondered about a supplement issue to address the issue of knowledge translation from the violence and injury prevention perspective. Focusing on this issue and utilizing the talent and resources of ICRCs could be valuable. There may be good examples of this work in the field.

Lee Annest, PhD (Branch Chief, Statistics, Programming, and Economics Branch, DARPI, NCIPC) agreed that public health and CDC have major challenges ahead regarding big data. They are considering data visualization techniques to provide data in real-time and in graphic form. It will be challenging to make sense of the volume of big data. Further, it is not clear how CDC will receive the data. The flow may go from a hospital to the state health department to CDC, and a number of mechanisms will be required. Once CDC has the data, they will organize it into data sets and create tools so that it can be used. Big data represents a significant shift in the way that CDC looks at data.

Dr. Mickalide recalled that early in her career in public health, she asked several experts in the field for their advice. One piece of advice was that only 40 people are in any given field. If you know those 40 people, then you will rapidly understand the field. She has come to realize that those 40 people tend to think and act alike. They see the world through the same frame. To really hear from the field, DARPI should look beyond the ICRCs. The ICRCs are the researchers who have successfully garnered resources from CDC to do their work. There is a plethora of other individuals with remarkably good ideas. She challenged DARPI to reach out to those individuals to hear their ideas about the field. DARPI needs a "win" in 2014, preferably within the priority areas. She recommended focusing on TBI. Virtually all of the issues within violence and injury prevention may result in a TBI or death, including sports and recreation, motor vehicle crashes, falls, and problems that result in insufficient oxygen to the brain, such as drowning, airway obstruction, prescription drugs, and physical and psychosocial effects of violence.

Dr. Baldwin participated in the White House Summit on Youth Sports Concussion. The summit represented a milestone for the field and for CDC's contributions. The only website that the President named in his remarks was CDC's. The President also mentioned the CDC website during an appearance on "Live with Kelly and Michael."

Dr. Fowler said that if attention is focused on TBI because of sports concussions, it presents a good segue to all of the other elements of TBI on which NCIPC works.

Dr. Hargarten suggested focusing on TBI and framing the work in a manner that builds on the concepts of knowledge translation and practice-to-research, that incorporates other fields and disciplines, and that frames TBI as a sterile injury as opposed to a biological injury. Framing it in this way builds on CDC's leadership in biological threats to sterile injuries where the agency can make contributions. He further commented that the injury field appears to be stuck as a "field," though it is a scientific discipline.

Dr. Fowler said that CDC does more than conduct pure research. She noted relatively small investments in formative evaluation and implementation evaluation. DARPI can help in this area at the state and hospital levels. Evaluation expertise resides in many universities, but DARPI can address building capacity for careful evaluation.

Dr. Nation commented that resources are scarce, and he wondered about how to think strategically about particular target audiences that need to understand what NCIPC and CDC bring to the table and who could bring more resources. Certain audiences may have greater sway with people who wield influence regarding funding.

Dr. Sosin replied that education is important for all of NCIPC's work. They ensure that Congress understands issues, but frequently Congress comes to CDC because they are interested in an issue and ask CDC for more information. The new priorities in the President's budget have provided opportunities to talk more about what CDC does. He asked for recommendations for how to broaden engagement, interest, and understanding of what they do in communities.

Dr. Nation agreed that CDC is very well-known at the grassroots level. He has learned the importance of being "on the radar screen" of certain advocates in his state. Those relationships allow for a higher profile and greater familiarity, which is important when budgets are created. He encouraged NCIPC to think about their friends not only in Congress, but also in other key positions. People such as former New York Mayor Bloomberg have the ability to champion issues and raise the profile and need of CDC.

DIVISION DISCUSSION TOPICS: ASK THE BSC

Prescription Drug Overdose: Challenges in Engaging Insurers and Researchers in Evaluating the Effectiveness of Innovative Strategies and Disseminating Findings

David Sugerman, MD, MPH, FACEP
Medical Officer
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention

Dr. Sugerman explored opportunities for enhancing the public health – healthcare connection and encouraging providers to engage in public health work. A strategy for this engagement is reimbursement through insurance.

Two of CDC's focus areas, antimicrobial resistance and prescription drug overdose, are caused by providers. CDC is therefore moving from community-based interventions to work within the healthcare domain.

The increase of prescription drug overdose coincides with increases in sales and use of opioids in primary care and specialty clinics across the US. As other modalities for treating pain have been disincentivized and not covered by insurance, there are increases in solo therapy with opioids as opposed to cognitive behavioral therapy, physical therapy, occupational therapy, or complementary and alternative medicine. Opioids are increasingly used in isolation, and the shift from short-acting to long-acting medications has increased the risk of overdose. Further, synthetic analogs have increased risk. Deaths due to prescription drug overdose are a much larger percentage of overall drug overdose deaths than illicit preparations such as heroin and cocaine.

States with higher rates of opioid sales and prescriptions have more overdose deaths. All of the drugs come from prescribers, but two-thirds of the drugs are used for medical reasons, and one-third is diverted for recreational use. The costs of prescription drug overdose are enormous. \$7.5 billion in healthcare costs are attributed to recurrent doctor visits, the costs of the drugs, the costs to insurers, the cost of substance abuse treatment, and trips to emergency departments, among others. Opioid abusers generate, on average, annual direct health care costs 8.7 times higher than non-abusers.

CDC's goal is to reduce and restrict prescribing to patients who need it and not to consider opioid prescription as a first-line approach. CDC also seeks to improve access to other, more effective strategies such as physical therapy, occupational therapy, and counseling. NCIPC's response to the prescription drug overdose epidemic has three pillars that are similar to how CDC effectively addresses other epidemics:

- ❑ Enhance data and surveillance: How can data be used to highlight the epidemic and to discover new trends, new and dangerous preparations, and to evaluate what is working in states? The data are complex, with large data bases from federal agencies and electronic health records as well as syndromic surveillance in hospitals. This work can build on CDC's infectious disease platforms.
- ❑ Strengthen state public health capacity: A number of interventions can contribute to this goal, such as improving insurer benefit design and mechanisms and evaluating successful state policies, such as eliminating "pill mills."
- ❑ Improve evidence-based clinical decision-making: This work takes place through electronic health records and decision support. It can also include training and providing academic detailing to providers that are high-risk. Twenty-five states responded to a new FOIA for a prevention boost, a \$6 million effort to improve public health interventions at the state level focusing on clinical guideline support, state policy, and insurer mechanisms.

Insurer/Pharmacy Benefit Manager mechanisms can ensure better adherence to guidelines on appropriate prescribing. Patient Review and Restriction (PRR) programs, or "lock-in" programs, limit high-risk patients to one pharmacy and one provider. Medicaid has used this approach in several states. Drug Utilization Review is an insurer review of medications that are being used by a patient. The review looks for the number of pharmacies, overlapping medications, and multiple prescribers, which are risk factors for misuse and abuse. Formulators can limit the total quantity allowed and require prior authorization. Maine Medicare requires dose authorization for any dose greater than 15 days.

There is little published literature on the effectiveness of Insurer/Pharmacy Benefit Manager for prescription drug overdose. Most of the 16 studies in this arena examined cost savings and

changes in utilization. Few have evaluated impact on health outcomes. The study limitations include a lack of comparison groups, short-term follow-up, inadequate statistical settings, and other events occurring simultaneously that could be responsible for the effects. The approaches hold promise, and there is a need for additional studies to evaluate the impact of the programs on health outcomes.

One of the promising studies focused on a PRR program in Louisiana, which was able to reduce polypharmacy and the use of Schedule II narcotics. Pharmacy costs were evaluated after the program was implemented. Another study reviewed a Health Maintenance Organization (HMO) program in New York that used a drug utilization review that identified patients that were using more than three pharmacies or receiving more than three prescriptions from any one provider. The study showed nearly a one-quarter reduction in the number of prescribers, pharmacies, and filled prescriptions among the intervention group. A study of prior authorization among Medicaid enrollees in 49 states showed a one-third decrease in prescriptions in states with strict requirements, and states that had no prior authorization showed a six percent increase in prescriptions. Prior authorization is one of the most potent mechanisms within insurer strategies.

NCIPC posted a cooperative agreement with the National Institute on Drug Abuse (NIDA) to solicit research demonstrating the impact of insurance mechanisms with robust design. Only a handful of applications were received, in part because this domain is very new within the academic community.

There is innovation within the field. A study from Harvard assessed patients who had suffered a heart attack. Adherence to medical regimens after a heart attack is very important. The study randomized patients receiving employee-based Aetna coverage and showed that people whose co-pays were covered had better adherence to their medication regimen. The study also examined different benefit designs in which one program covered the co-pay and one did not, and studied differences in outcomes. Other partners are encouraging the use of low-cost randomized controlled trials (RCTs) to further innovation agendas. The Coalition for Evidence-Based Policy is also promoting low-cost RCTs to evaluate social policy.

There are challenges associated with low-cost RCTs. Not all insurers are willing to make their programs available to research and potential negative publicity. If large insurers work together, there are concerns regarding anti-trust laws and collective negotiation. Commercial insurance markets have high turnover, and patients may be skeptical of these studies and require in-depth question-and-answer sessions to allay their fears, as well as easy opt-out policies. There are long time lags to get information from claims. Plans can also change and shift the types of medications that are covered or reimbursed. Currently, partnerships are limited between academic institutions and insurers.

Dr. Sugerman asked BSC to reflect on how better to engage insurers, pharmacy benefit managers, and researchers in evaluating the effectiveness of innovative strategies as well as on addressing the problem of prescription drug overdose with this approach.

DISCUSSION POINTS

Dr. Hargarten asked about the interaction of alcohol with prescription drugs and overdose, noting that benzodiazepine carries low risk of overdose.

Dr. Sugerman answered that alcohol may be listed as a cause of death or listed in toxicology reports. The use of alcohol will contribute to the situation, but it is not largely driving the epidemic. Alcohol consumption has not increased as sharply as opioid use and sales. Co-prescription of benzodiazepine and opioids is highly risky.

Dr. Allegrante asked whether industry representatives have been included in formative discussions. They may provide ideas for practical and feasible solutions at the point of purchase.

Dr. Sugerman answered that a call was scheduled with the Chief Executive Officer (CEO) of Cigna to discuss insurer strategies. They have also consulted with Maine Medicare, and will reach out to Massachusetts Blue Cross/Blue Shield (BCBS). They have not reached out to Aetna and BCBS nationally.

Dr. Baldwin added that they have fielded an expert panel of individuals who have administered state Medicaid PRR programs to identify best practices. There have been substantial cost savings, particularly in Washington State, demonstrating the utility of these programs in the public sector.

Dr. Allegrante said that pharmacists are underutilized for patient education. **Dr. Sugerman** said that pharmacists are encouraged to consult PDMPs in states that have them. The issues can be problematic, however, because once a prescription has been written, the pharmacist has a duty and obligation to fill it. NCIPC's work focuses on providers, because if prescriptions for high-dose, long-acting, high-quantity-limit medications do not originate, then the problem can be eliminated.

Ms. Castillo commented on the work of the National Institute for Occupational Safety and Health (NIOSH) in this area. NIOSH works with worker's compensation insurance for occupational injuries, and they have encountered similar challenges. They convened a workshop with academic researchers and insurers. The focus of the workshop was on helping each group understand the other's perspectives. NIOSH learned that they were projecting unintentional biases in their language that were off-putting to the insurers. They were not blatant, but their underlying message was perceived by the insurers as, "We can't understand why you guys won't work with us." The insurers took offense, but the groups were able to identify and understand the common goals of better management of work injuries and of reducing work injuries. The insurers also have proprietary concerns to which federal partners must be sensitive, as well as market and liability issues. They have come to common understanding of mutual goals and learned how to be more respectful in their interactions. An Office of Worker's Compensation Studies has been established within NIOSH to serve as a coalescing body.

Dr. Sugerman said that NCIPC will work closely with that office. He asked whether the insurers at the workshop felt that CDC was "too anti-opioid."

Ms. Castillo answered that opioids were not an issue. The issue was utilizing worker's compensation data as a tool for understanding occupational injury burden and potentially effective mechanisms.

Dr. Sosin commented that it is critical to invite those who will be affected to the table. Insurers have common interests in containing costs that will bring them to the table regarding prescription drug overdose. Healthcare providers do not have the same common issues. Any language that raises the specter of this problem as a national public health emergency that is caused by the healthcare system that is designed to care for the population has benefits and risks. Because they are moving quickly, they may make mistakes. Pharmacies have a role in education regarding pain and pain treatment.

Dr. O'Connor remarked that if a medical procedure resulted in 17,000 deaths per year, there would be efforts to fix it. He agreed that providers own this problem, and providers need to be empowered to fix it. The data resides in PDMPs, which are in 49 states but which have varying levels of funding, and some have no reciprocity or no ability to look up contiguous states. In certain cases, multiple providers are writing full amounts of long-acting, high-dose opioids. There is a critical point in a patient's treatment in which the patient makes the transition from the acute pain syndrome to chronic use, and the PDMP data will help identify who these patients are and at what point the transition occurs. This problem may not need to be a medical licensure issue, but it could be.

Dr. Sugerman said that PDMPs are effective for surveillance, but when enforcement is not built into them, there is no course of action when a provider is identified as a high prescriber. A number of recent publications show that simply having a PDMP in place is not curtailing the epidemic.

Dr. O'Connor said that state boards can contribute by providing targeted education. When there are outliers who abuse the system, licensure may come into play.

Dr. Baldwin described ongoing conversations with the Federation of State Medical Boards, which focus on protecting physicians' rights to practice medicine. Regarding PDMPs, one of NCIPC's signature programs is the Prescription Behavioral Surveillance System (PBSS), a joint effort with the Food and Drug Administration (FDA), the Bureau of Justice Assistance (BJA), and the Brandeis Center of Excellence. PBSS links de-identified PDMP data from eight states to create metrics to document and define "doctor shopping," for instance, and how to develop metrics that can be imbedded within state PDMPs to govern state-based practice. There is tremendous variation among PDMPs. In Georgia, a pharmacist who looks at the PDMP and identifies a high-risk patient cannot, by law, alert the physician. The success of PDMPs hinges upon components of the law. The Center of Excellence has identified 36 best practices for state PDMPs, including elements such as mandated use and real-time data.

Dr. Hargarten had not fully realized the extent of the prescription drug overdose problem. Because the problem is linked to medical providers, it can be viewed in the context of a medical injury. Over 10 years ago, a conference was convened after an IOM report on the harms caused by medical injury to consider ways to build on the principles of injury prevention and control, applying what is known about kinetic injury to chemical injury. Framing the problem as a medical injury brings it to providers in the healthcare system, and the time is right to pull in healthcare systems and providers, especially those who treat patients in emergency departments and primary care providers, so that systems can recognize outliers. The timing is good for multidisciplinary discussions within healthcare systems to consider readmissions and

management of emergency medicine patients. Having CDC guidelines for best care will be useful. This problem is causing not only deaths, but also long-term disabilities and injuries that have consequences for insurers. Insurers can be brought in with the understanding that all groups are working together to save money and save lives.

Dr. Timmons agreed and added that from the provider perspective, it is important to have back-up, especially for providers in specialties that prescribe narcotics for painful conditions. There are ongoing issues associated with pay-for-performance and other metrics in which providers are judged based on patient satisfaction. She has found that patient satisfaction scores are poor in instances when patients have chronic pain and are not provided with long-term pain medication. Unfortunately, many physicians are moving away from prescribing these drugs, so that there are no referrals available. It would help to have clear guidelines from CDC regarding how to manage pain and where to acquire help.

Dr. Sugerman said that a group of experts would be convened to develop guidelines on opioid prescribing in 2015. The guidelines will likely focus on primary care and chronic opioid therapy, looking at maximum daily thresholds and the requirements for patient-provider agreements and random urine drug screening, as well as moving toward not considering these drugs as front-line attempts for pain management. They hope to tether this work to utilizing guidelines and building clinical decision support within electronic health records, which can serve as platforms for guidelines into appropriate prescribing. Coordinated care plans will be supported within major US healthcare systems, so that every provider in a major healthcare system will prescribe in the same way and according to institutional policy.

UPDATE ON PEDIATRIC MILD TBI ACTIVITIES

Kelly Sarmiento

**Designated Federal Official, BSC Pediatric Mild TBI Workgroup
Health Communication Specialist
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention**

Ms. Sarmiento thanked BSC for the opportunity to provide an update on the workgroup's activities. She reported that the Pediatric Mild TBI Workgroup was established by the BSC in 2012 to develop pediatric mild TBI guidelines. The guidelines are specific to the diagnosis and management of acute mild TBI for children and adolescents ages 18 and under resulting from both unintentional and intentional injuries. Drs. O'Connor and Timmons serve as representatives from the NCIPC BSC on the workgroup. Dr. Timmons serves as chair.

Since the last update to BSC, the workgroup has completed several steps in the guideline development process. The group selected the following six clinical questions:

- For children or adolescents with suspected mild TBI, do specific tools as compared with a reference standard accurately diagnose mild TBI?
- For children and adolescents presenting to the emergency department (or other acute care setting) with mild TBI, how often does routine head imaging identify important intracranial injury?
- For children and adolescents presenting to the emergency department (or other acute care setting) with mild TBI, which features identify patients at risk for important intracranial injury?

- ❑ For children and adolescents with mild TBI, what factors identify patients at increased risk for ongoing impairment, more severe symptoms, or delayed recovery?
- ❑ For children and adolescents with mild TBI, which factors identify patients at increased risk of long-term (greater than one year) sequelae?
- ❑ For children and adolescents with mild TBI with ongoing symptoms, which treatments improve mild TBI-related outcomes?

After selecting the questions, the workgroup determined parameters for a literature search. A medical librarian completed the search, which identified over 12,000 scientific abstracts. Each abstract was reviewed by two members of the workgroup based on the inclusion and exclusion criteria. If there was disagreement between the two readers, a third workgroup member reviewed the abstract to make the decision.

Over 1700 articles were identified as relevant for review in full text. The majority of the articles were retrieved through CDC's library in the National Library of Medicine to help ensure cost-effectiveness. The article retrieval process can be costly at \$45 - \$60 per article, so they worked strategically through internal systems to retrieve the articles at no cost. A logistics contractor based in Washington, DC sent personnel to the National Library of Medicine to photocopy articles, which was a less-expensive approach; however, it did add to the timeline.

The workgroup is currently reviewing the full-text articles. At last count, only eight reviews are outstanding. Each article is reviewed by at least two reviewers for inclusion and exclusion criteria. Data from the articles is being extracted by workgroup members using a data extraction form, and the readers will grade the evidence and construct evidence tables.

When all of the articles are reviewed and data are extracted, an in-person meeting will be held in Atlanta to draft recommendations for healthcare professionals as part of the guideline. The meeting is tentatively scheduled for October 16 and 17, 2014, in Atlanta, GA. The group will classify the evidence and draft the recommendations. Additionally systematic review will take place through December 2014. The final step is a report to the NCIPC NSC for review at their June 2015 meeting. If the BSC approves the report, it will be reviewed internally by CDC. Upon approval, a scientific manuscript will be written and submitted for publication. CDC is working on a dissemination and implementation plan for the guideline. Ms. Sarmiento thanked Dr. Timmons and the workgroup members who have taken on this significant task

DISCUSSION POINTS

Dr. Timmons stressed that the workgroup has been putting in a number of volunteer hours. They are excited to meet for the face-to-face meeting. She thanked Ms. Sarmiento and her team for their hard work.

Dr. Sosin asked whether, based on the 1700 articles being reviewed in-depth, each of the six questions is expected to be addressed in the face-to-face meeting, or whether that meeting will draw a different set of conclusions about the literature and about the research needs.

Ms. Sarmiento answered that the articles are spread somewhat unevenly, and certain clinical questions have more articles than others. Also, there is some overlap and some questions are more distinctive than others. The October meeting will not include all workgroup members, but subsets of the group that will address each of the clinical questions. The goal is to address all of the questions at the meeting and use the evidence tables to create recommendations. Currently, there is not an evidence-based guideline for mild TBI in the pediatric population.

Dr. Timmons said that if the evidence is insufficient to create a guideline, the group can identify key questions to guide future research.

Dr. Hargarten congratulated Ms. Sarmiento, her team, and the workgroup for the volume of work that they have taken on and accomplished. This field is exploding, and the science is advancing rapidly. He suggested an approach similar to the IOM's consensus report, with an interim step of sharing the report with pediatric head injury experts who are not represented on the workgroup. These experts can help indicate whether the recommendations are appropriate and add another element of advancing the science.

Ms. Sarmiento agreed and said that the process includes three components of public comment period. The public comment is released through the *Federal Register*, and also is announced through medical organizations. The core workgroup includes approximately 20 members, and 20 other experts are providing assistance with the review because of the workload. Many of them have connections to or represent different medical organizations and are helping to promote the public comment period through those channels. When the report is drafted, they will conduct another sweep of the literature and will send the draft for medical organizations to review and input as well as for endorsement and participation in implementation. If the guidelines are approved, then they will be included in Heads Up! for clinicians. Many external experts are available to review content for Heads Up! and clinician and patient education materials will be reviewed by the workgroup and external experts.

Dr. Sosin wondered whether the BSC could share the document with experts who they know and bring that input to the BSC deliberations. For instance, if Dr. Hargarten knows experts who can read the draft and provide feedback to contribute to the BSC, would he be able to share the document with them? If sensitive material is involved, then that issue will need to be addressed. A number of experts are already weighing in, and there are multiple opportunities for input, but it may be acceptable for BSC members to share the document as well.

Dr. Cattledge said that a BSC member could share the document at that stage as long as the BSC approved it, in an ad hoc capacity. She said that she would consult with CDC's Management Analysis and Services Office (MASO).

Dr. O'Connor asked how this approach would differ from public comment. **Dr. Cattledge** replied that it depends on the stage of the document.

Dr. Hargarten said that when a draft is complete, IOM invites four or five reviewers to conduct a dispassionate and critical review of the document.

Dr. Sosin added that IOM does not have a public input process, which CDC does. There may be a way to reach out to specific individuals during the public comment period who are working in this area to provide feedback, which they can submit or which a BSC member could bring.

Dr. Timmons said that their approach has been a hybrid of the two methodologies. During the public comment, workgroup members that are members of various medical organizations encourage members of those organizations to vet the document.

Dr. Molock suggested that in addition to content experts, they might consider consulting with individuals who might be outside the content area, but who are methodologists. She has utilized this model before, and it has been helpful to hear from people with broader perspectives who are not devoted to certain methodologies.

Ms. Sarmiento agreed. Recently, a professor from Yale University gave a presentation on how to write a clinical guideline in a clear manner. They were considering inviting him or someone similar to present techniques prior to the October meeting.

Ms. Tamara Haegerich said that there are “tricks of the trade” in guideline recommendation statements that make it easier or harder to integrate into clinical workflow and into clinical decision support. Eventually, these guidelines may be linked to specific clinical support to enhance translation efforts.

Dr. Molock pointed out that it is also important to hear from people who conduct research in another area, but whose methodology may be more advanced and who may bring new ideas.

Dr. Hargarten endorsed that idea and the benefits of an external review with diverse thinkers. It will be interesting to see the implementation of these guidelines with electronic medical records. He hoped that they would be able to assess these guidelines in three to five years. Guidelines are picked up notoriously slowly, and these guidelines could serve as a great model with Heads Up! to be adopted more quickly and rigorously evaluated.

Ms. Sarmiento said that they have thought about evaluation, especially given the growth of concussion issues in sports clinics and other settings. Their goal is to make implementation cost-effective with electronic dissemination

Dr. Fowler asked about the timing of the dissemination and implementation processes, including the planning.

Ms. Sarmiento answered that the planning for dissemination and implementation has begun, but noted that the timeline for the entire project had to be adjusted because of the time-consuming article retrieval process. The workgroup serves as an excellent expert base and has provided ideas for implementation. They are also valuable contacts with medical organizations. Even though dissemination and implementation are two years away, they have begun planning. When the materials are drafted, they will conduct formative testing and explore dissemination and implementation further.

Dr. Hamby thought that in order to ensure a certain level of expertise in public comment, the proactive approach to seeking that expertise is a good one. The project is an excellent example of the kinds of integration and synthesis that the BSC has been discussing. She commended the team for their good work. The volume of volunteer work that the workgroup members have committed to the project is a testament to their dedication and recognition of the importance of the work. She hoped that there would be ways to secure more resources for these kinds of efforts in all of the center’s core areas so that they are not “scrambling for Xerox money” at this stage.

Dr. Mickalide asked whether the project was showcased at the White House summit. **Ms. Sarmiento** answered that it was included as one of NCIPC’s commitments in the press materials.

Dr. Mickalide asked about the development of additional research questions that need to be answered.

Ms. Sarmiento said that the TBI Team is working on that process. She observed that while this work is filling a gap because there are no evidence-based guidelines for treatment of mild TBI in children, there is also a gap pertaining to guidelines specific to prevention. The literature review may not have captured some information on prevention because of the inclusion and exclusion criteria, but the area of prevention represents an opportunity for advancement. This project is not specific to sports and incorporates all injury. NCIPC does a great deal of work in sports and recreation activities, but it is important to ensure that children have the best care regardless of where the injury occurs. The notion of “return to school” is another area that is ripe for additional work and is growing. NCIPC has created Heads Up! materials for schools, but more study is warranted in clinical research and recovery time.

UPDATE ON WISQARS PORTFOLIO REVIEW

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Ms. Kresnow explained that WISQARS is an interactive, online database that provides fatal and nonfatal violent death and cost data from a variety of trusted sources. The system was initiated in 1999 with the goal of providing user-friendly, ready access to these data to CDC’s partners and the public in order to meet the needs of the injury field. The audience for WISQARS has since been expanded to include researchers, educators, public health professionals, policymakers, injury prevention organizations, and the media.

The objectives of WISQARS are to promote awareness of fatal and nonfatal injuries of a significant public health and economic burden; raise awareness of these injuries as a preventable public health concern; increase the use of injury data for monitoring purposes; provide geographic-specific fatal injury rates to assist in priority-setting for prevention programs; and communicate the benefits of injury prevention to various stakeholders and partners.

WISQARS is comprised of several modules, including fatal injury reports, nonfatal injury reports, violent deaths, fatal injury mapping, and the cost of fatal and non-fatal injuries. Collectively, these modules allow quick and easy access to counts and current age-adjusted injury rates at the national, regional, state, and county levels both overall and by selected demographic characteristics. The information is displayed in tables, charts, and maps with the option to download data and images for further analysis or for presentations. Additional modules allow users to identify leading causes of injury and injury death as well as years of potential life lost.

The modules are updated as new data become available. NCIPC is in the process of updating the cost of injury data. The data are currently based on base year 2005, and the update is to 2010. They anxiously await the arrival of Vital Statistics data from 2011 so that the rest of the mortality modules can be updated. Recently, selected features from the modules were bundled into a mobile application for the iPad. They are working on moving this capability to other platforms. The portfolio review is collecting information on additional platforms to target.

Ms. Thigpen said that the WISQARS portfolio review process is led by the NCIPC Associate Director for Science (ADS) office; however, it is a cross-center project. The division-level ADS offices are also heavily involved in the process. Ms. Thigpen coordinates the review as the Lead Evaluator, and two co-chairs have been named for a workgroup. The co-chairs are Ms. Kresnow and Ms. Jennifer Middlebrooks, who has expertise in communications and usability testing. Both have experience with WISQARS. An evaluation contractor has been enlisted.

The purpose of the portfolio review is to determine that the vision for WISQARS is being borne out. The review considers the following four aspects of the system:

- Utility and usability, including how the system is easy to use, how it is challenging, and how a more user-friendly WISQARS might be created
- Enhancement and visualization, which may include translation for various users as well as next stages beyond plans to expand to iPhone and Droid platforms
- Data and whether additional data sources might be considered or whether stronger partnerships can be built
- Training needs that may be more innovative than a User Guide that will help people understand how to use the system better and how to apply the data that they gather from it

Four evaluation questions relate to the above categories:

- Are WISQARS data being fully utilized for scientific and programmatic purposes by key stakeholders?
- How can modern technology and innovation enhance the use of WISQARS?
- What are the opportunities to expand the data sources/datasets?
- What training, tools, and resources would facilitate actionable data translation?

During a prior meeting, BSC provided input regarding the scope of the review, and that feedback has informed the process and the evaluation questions. The methods for completing the portfolio review include a literature review, environmental scan, stakeholder interviews, and an expert panel review.

A literature search has been conducted through CDC's Library Services. It revealed 44 articles with key search terms related to the usability of web-based data sources. The contractor is conducting a separate search for additional articles. The literature on this topic is fairly sparse. When all of the articles are gathered, the contractor will summarize the literature in a report. The contractor is also conducting an environmental scan of different data systems. The scan will likely utilize the portfolio review's evaluation question of other systems.

Stakeholder interviews are ongoing. The interview questions are being refined by the workgroup. The list of potential interviewees has been created. They are limited by Office of Management and Budget (OMB) requirements to nine external interviews, and the contractor will conduct eight additional internal interviews. There are opportunities to expand the pool of internal interviewees, and they intend to reach a cross-section of internal input inside NCIPC,

across CDC, and with external partners. The same guides and methods will be used for all interviews to ensure consistency.

All of this information will be subsumed into a draft report for an expert panel, which will review the report and offer recommendations. The results from the panel will be presented to the BSC.

The inputs to the review include the following:

- WISQARS data system
- Injury Center senior leadership, project work group, project evaluator
- Evaluation contractor
- Evaluations that complement the Portfolio Review: the Communications Office is creating user profiles, conducting interviews with similar questions, and conducting surveys on the web-based WISQARS system and the mobile applications
- Expert panel
- NCIPC BSC

With respect to progress on the portfolio review thus far, the literature search is complete. A workgroup has been assembled to represent each division, as well as individuals who can represent the policy and communications perspectives. Evaluation questions have been completed. Stakeholders (interviewees) have been selected based on function and how they utilize the data. Initial feedback on the list has suggested including interviewees with topical expertise to identify different challenges and barriers to users who come to WISQARS for specific topical needs. Interview questions and guides have been drafted. The next steps are to complete environmental scan, contact stakeholders and conduct interviews, analyze the data, draft a report, present the draft report to the Expert Panel, and present the final report and recommendations to the BSC.

DISCUSSION POINTS

Dr. Fowler said that the first evaluation question might not only assess whether WISQARS data are being used, but also how they are being used. Users may be using the data creatively.

Dr. Sosin said that the portfolio review process is one of the ways that BSC provides NCIPC with formalized input and feedback. The process is administered internally to develop the data, and is then presented to the BSC for discussion.

Dr. Fowler noted that the BSC suggested the WISQARS review because they appreciated the cross-cutting nature of the communication portfolio review and felt that WISQARS was another cross-cutting issue.

Dr. Forjough asked about ways to determine how many people are using WISQARS data.

Ms. Kresnow answered that in 2013, WISQARS received approximately 2400 visits per day to the landing page and approximately 1800 data requests per day.

Dr. Mickalide referred to the third evaluation question and asked about opportunities to include income and/or socioeconomic status data of persons who are injured in WISQARS. There is much work to be done to reach all populations regarding important strategies to keep individuals and families safe. The ability to target questions more specifically to various populations might help with that work.

Ms. Kresnow answered that WISQARS was developed so that there is flexibility to add additional demographic characteristics. The ability to add variables depends on the available data sources and whether the information is collected.

Dr. Annest said that income and socioeconomic status data are not available. It would be ideal if it were possible to tie census data to fatal and nonfatal data, but that link is not possible. WISQARS has nationally-representative data and state-level data for mortality, but personal identifiers are not available to link data. The system also does not have information on where people lived and died.

Ms. Thigpen added that the review process includes questions in interviews to understand enhancements that the system needs.

Dr. Fowler said that after the Core VIPP and the Communication evaluations, BSC pointed out that response options to some of the questions were “yes/no” and strongly encouraged more open-ended questions.

Ms. Thigpen said that they have been careful to avoid “yes/no” questions, or even forced-choice questions, because they limit the responses.

Dr. Fowler said that in past portfolio reviews, the evaluation contractor attended meetings and had informal conversations with users, which provided value-added information.

Dr. Sosin wondered whether interviewing members of the BSC might not fall under the OMB restrictions, as the interviews could be part of BSC’s role in supporting the center.

Dr. Hargarten asked whether WISQARS data drill down to the county level. The nationwide Healthy Counties Initiative was spearheaded in Wisconsin and funded by the Robert Wood Johnson (RWJ) Foundation. The initiative has gained national recognition. They have experience in how state- and county-level reports are being used.

Ms. Kresnow answered that some WISQARS data drill down to the county level, but most of the data is at the state level. The system incorporates confidentiality and data use agreements.

Dr. Hargarten asked whether alcohol-related deaths are nested in WISQARS. Addressing that issue will be vital. **Ms. Kresnow** said that WISQARS does not currently have that data available.

Dr. Hargarten commented on the frequency with which the media does in-depth reports in injury-related problems. Representatives from the media, such as the Berkeley Studies group, would be strong stakeholders to include in the portfolio review process.

Dr. Hargarten asked about links within WISQARS. For instance, if he queries motorcycle crashes in WISQARS, is the system able to “pop up” a link to publications or references that complement the query? The timing is perfect to expose users to the *Morbidity and Mortality Weekly Report (MMWR)* or other sources. He also noted that the Society for the Advancement of Violence and Injury Research (SAVIR) is a potential stakeholder as well.

Ms. Kresnow said that links are built into the mobile application to lead users to different injury topics and states.

Dr. Annest said that they have reached out to SAVIR to ask for people who are willing to participate in the interviews.

Dr. Fowler said that WISQARS is a wonderful teaching tool. Her undergraduates were taken with its accessibility.

Dr. Annest noted that work is ongoing on a WISQARS iPhone application. They are usability testing it now, and it should be available in September.

Dr. Gorman-Smith said that the data would be used more if they were timelier.

Dr. Annest replied that CDC is moving toward an electronic death record system. Some states already have electronic systems. In order for the National Center for Health Statistics (NCHS) to release data, they need data on all deaths in all states. There were coding and processing errors with the automated program this year, but it is anticipated that the data will be available soon for 2012 and that 2013 will be available in early 2015.

Dr. Fowler wondered about creating supplementary materials demonstrating how users can utilize WISQARS data. The portfolio review is reaching stakeholders are using WISQARS, but there may be groups who have not thought about using it.

Dr. Mickalide suggested considering the effects of prescription pain medications on other types of injuries, such as injuries that occur when parents are impaired and driving or are not supervising their children.

Dr. Fowler thanked the presenters and emphasized BSC's appreciation of Dr. Annest and the team that works on WISQARS.

UPDATE ON THE IMPLEMENTATION OF THE RECOMMENDATION'S FROM THE HEALTH COMMUNICATIONS PORTFOLIO REVIEW

Erin Connelly, MPA
Associate Director for Communication
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention

Dr. Fowler commented that feedback on the Health Communications Portfolio Review was received from the BSC. It has not fully been integrated into the report, and she apologized for the delay.

Ms. Connelly said that the expert panel that convened for the portfolio review generated seven recommendations. Each recommendation included short- and long-term activities that focused on improving the portfolio; setting priorities; "doing less and doing it better;" considering improved monitoring and performance and consistent evaluation across all activities, channels, and projects; and planning for sustainability internally within the larger CDC communication resources as well as with external partners in the injury field.

Since receiving the recommendations and the draft report, the information in the report was submitted as part of the report that NCIPC ADS provides the CDC ADS on the status of the center's portfolio reviews. Ms. Jennifer Middlebrooks has led a workgroup of the

communications leads within each division and from the center-level communications office to assess the recommendations and sub-recommendations and to develop action items and next steps. The group is also considering how to vet the recommendations internally and secure buy-in and support needed to implement the recommendations.

One of the possible strategies will be to hire a communication evaluator at the center level who is not tied to a specific campaign or initiative, but who conducts consistent performance management to ensure that the communications work is making the right investments with its resources. Another strategy is a consistent concept clearance process before projects are initiated so that they can ensure that the activities are aligned appropriately with the center's direction and topic priorities. It is also important that the NCIPC communications work is appropriate for their niche as opposed to a partner.

Another potential action item is the development of an incident command process to be better prepared for communication responses to mass casualty events. There is a negotiation process with CDC's Office of the Director (OD) and the US Department of Health and Human Services (HHS) regarding what information can be disseminated. It is important to be mindful of the state of health communications science and to continue to build capacity and tap into CDC-level communication. A Communication Council can be revived to bring together technically specialized communicators at CDC. The NCIPC communications staff has worked with other centers at CDC to brainstorm and share ideas.

Upcoming activities include continuing to work with NCIPC leadership to ensure that there is agreement on top-priority actions. The Office of Communication will also consider long-term plans to address additional recommendations. It is important to share the findings and implementation lessons with CDC health communication leadership. No other portfolio review has been conducted for communication at the agency.

The position of Lead for Digital Communication and Marketing was created so that all web and social media channels work through that person, who has been in place for approximately 18 months. A digital strategy has been created, and they have established baseline metrics for all major digital channels. It will now be possible to evaluate the channels and make decisions about their effectiveness.

An OMB package has been developed to move toward collecting feedback from web users about the web-based products and services. In the meantime, a standardize process has been created to look at metrics and build a proxy profile of users. The coaches' training is extremely popular, but those users rarely look at other elements of the website. Users may come to the website for statistics and data and not look at training. Learning about these behaviors has helped inform the office's choices.

HHS has a new communication clearance platform. The old process focused on cost containment and issues such as printing. A new electronic clearance platform focuses on the strategic communication planning process and emphasized documenting reach and impact. CDC has been negotiating with HHS regarding this system, as CDC generates much more communication than its sister agencies. When complete, the tool will be useful as they learn more about dissemination and what happens with their communications.

DISCUSSION POINTS

Dr. Fowler said that the report had recommendations that apply to CDC as well as NCIPC and asked about how the recommendations might be shared with CDC leadership.

Ms. Connelly said that they will share the recommendations with CDC, and they have had a great deal of interest and engagement from the communication leadership.

Dr. Mickalide asked whether CDC would launch a public education campaign on prescription drug abuse and overdose. Most of the work in that arena seems to focus on providers and insurers. Given that two-thirds of the users of prescription pain medications are within the medical system and one-third are involved in diversion activities, she wondered about their collective responsibility to educate the public about the short-term benefits and potential long-term harms related to the medications. The issue is highly complex.

Ms. Connelly said that prescription drug abuse and overdose is a timely example of an issue for which CDC must consider its role versus the roles of other partners. There is a great deal of interest in a public awareness campaign, and their internal discussions have focused on what CDC's message might be beyond their consistent media release messages, given that their solutions are systems-oriented. A strategy could be to invest in boosting press outreach and raising awareness through mass media. The Substance Abuse and Mental Health Services Administration (SAMHSA) and others have been partnering on medication misuse and abuse campaigns. Other efforts look at the problem through different lenses, such as Drug-Free Kids, which focuses on informing parents about the potential dangers of medication. Other work focuses on misuse and abuse, not necessarily about the risk of overdose death. NCIPC must concentrate on what they can do successfully with their resources. She supported the idea of boosting media presence, because those channels reach a large number of people and keep the issue visible.

Dr. Sosin added that the question is deeper than just communication. Engaging the public in prescription drug overdose is critical. The complexity of this issue relates to CDC's relatively small role in its size and what it can contribute to the broader issue of substance abuse. There is strong interest in CDC being part of a large public awareness campaign due to CDC's credibility and other factors. CDC does not intend to take on substance abuse as a primary focus within NCIPC or CDC as an agency. An entire agency in HHS and an NIH institute are dedicated to that issue. Questions arise regarding how CDC can most effectively do what it does best and average its opportunities to make an impact. CDC's credibility is important and must be balanced with the challenges of reigning in the agency's scope or responsibility. The focus on the healthcare system is manageable.

Dr. Mickalide suggested that NCIPC could generate talking points or a fact sheet that providers can give to patients, using the provider as a dissemination channel at a one-on-one level.

Dr. Hamby asked about the baseline metrics for NCIPC's digital channels and whether one or two channels have more reach than others.

Ms. Connelly replied that the website has a large volume of content, but little of that content is viewed. Approximately 200 pages see the most traffic, and nearly 4000 pages are rarely viewed. The center has three Facebook pages, one of which is Parents Are The Key, which will sunset in 2014. NCIPC used to have Twitter handles for the Center Director and for Injury. The Center Director handle did not get traction, which is consistent with many center directors across the agency. The Injury Center has 7000-8000 followers. From time to time, they engage with celebrities such as Dr. Richard Besser for Twitter chats. NCIPC is considering whether they should maintain their own channels or concentrate on shifting their content to bigger channels within CDC and externally. The web content with the most hits is TBI, much of which is from the Coach's Curriculum, largely due to promotional efforts and laws that mandate the training.

Dr. Hargarten commented that communication is dynamic and exciting. He wondered about ways to frame communication so that NCIPC is reaching out where things are happening, as opposed to relying on users coming to them. He recalled a shooting in his area in which six people were injured and three were injured. CDC has materials that could help affected agencies in real time and could scan for and respond to events and outbreaks. He said that during an anthrax scare, he went to the CDC website to get information about anthrax quickly. There are opportunities to take better advantage of media opportunities to frame injury and violence. For instance, emergency providers are queried about injury issues frequently and could be encouraged to share important information quickly. This secondary information would allow the press to shape their stories with a broader public health approach.

Dr. Fowler said that in the portfolio review, the expert panel understood the clearance and time constraints, but unfortunately, many of these events are not unique. The panel suggested pre-emptive development and clearance of materials that could be rapidly released. For instance, they could be prepared for a bus crash with educational materials to push out quickly.

Ms. Connelly said that CDC has traditionally worked with partner organizations in "planting that evergreen material." Physicians associations could be good partners in addition to state-level public health and public information officers.

Dr. Fowler said that fire departments and emergency medical services (EMS) have worked on training their personnel in the effective use of communication channels.

Dr. Hargarten described a recent study on how the media reports injury events. The media turn to police and fire. Police tend to view these events as an adversarial situation and not as an opportunity to frame a message.

Dr. Hamby wondered why the coach's training materials have had more reach than other campaigns. **Ms. Connelly** said that the dissemination channels for the training are strong, with partnerships with youth sports leagues and other groups working on the issue. **Dr. Sosin** added that state laws and institutional policies on "Return To Play" require coaches and trainers to have the training. **Dr. Mickalide** added that parents are also driving demand as they hear media reports about TBI and ask about protocols in place at their institutions.

Dr. Fowler commented on a recent media report on a fire in a major retirement community in her county. The event was significant, with large response, and there were no injuries because the buildings had sprinklers. This kind of messaging "when things don't happen" can be powerful.

Dr. Hargarten noted that the National Weather Service is engaged in strong injury prevention work. Regarding incident command structures, there should be a public health investigation of injury events such as shootings as there would be a public health investigation of an *E. coli* outbreak. Such an investigation would complement the investigations of the criminal justice system, which focuses on assigning blame as opposed to investigating the event to prevent it. The National Transportation Safety Board (NTSB) fully investigates airplane crashes and motor vehicle crashes with multiple victims. If there is an opioid drug death outbreak in a community, CDC can partner in the investigation.

Ms. Haegerich said that there have been Epi-AIDS on prescription drug overdose in some cities, and the reports from those are published in the *MMWR*. They can think about other ways to communicate and disseminate that work to show CDC's immediate response.

OPEN QUESTION SESSION

Dr. Hamby expressed her appreciation for the meeting's format and open schedule, which allowed for conversation. She appreciated the opportunity for discussion.

Dr. Hargarten echoed the sentiment, noting that the balance of brief presentations and good back-and-forth discussion was productive. In the future, it would be helpful to receive an overview of budget allocations among the divisions, providing a broad picture of where NCIPC's resources are going.

Dr. Sosin said that the information could be provided in materials outside the meeting context. He spent the last decade in preparedness and response, which has approximately 10 times the budget of NCIPC and only 3 budget lines, compared to NCIPC's 10, which gave them more adaptability.

Dr. Hargarten suggested that between the face-to-face meetings, the BSC members might participate in conference calls to provide advice on specific subjects. The BSC serves NCIPC and would welcome regular interactions to complement their full meetings.

Dr. Sosin acknowledged the time and effort that BSC members devote to their roles. It is critical for NCIPC to take advantage of their insights and perspective, particularly from the field where NCIPC cannot be. They will consider other ways to gather feedback.

Dr. Fowler raised the possibility of subgroups of the BSC that could serve in that capacity. **Dr. Sosin** agreed and said that they have traditionally applied the full FACA requirements to their subcommittees. They will determine the appropriate balance and should work with BSC members more than twice per year.

Dr. Molock said that it would be helpful to frame the scope of NCIPC's work, including their limitations and how other partners also work on similar issues.

Dr. Sosin said that listing all of the topics and areas where NCIPC works as well as the other perspectives that work on the issues can be overwhelming. He hoped that they could focus on priority topics where the center invests resources and demonstrate who else works in the space and how the center has carved out its niche.

Dr. Nation commented on targets for information and partnerships. Each of these meetings brings excitement about what NCIPC is doing, but also concern that the budgets are not even

keeping up with the rate of inflation and are in effect decreasing over time. They may not recognize the impact over time because they are shrinking gradually. He hoped that they could think about how to change that dynamic and building political and social will.

Dr. Sosin said that preparedness focused on building infrastructure, systems, and relationships to prepare for all possibilities. The problems in injury and violence are so large, acute, and solvable, and the individuals in the field are passionately committed to them; the work is conducted “on a shoestring” and is only scratching the surface of what needs to be done. They must choose priorities, but in doing so, something is left behind. Their goal is to demonstrate what public health can do in a few areas and to build momentum. Prevention is challenging because it is not as palpable and personal as clinical care. It is more difficult to demonstrate the impact of prevention, but they must focus on demonstrating the impact of public health. The BSC can help them focus on priorities where they can have cross-cutting issues, open communities, and building social capital to address violence and injury behavior change.

Dr. Fowler said that it is smart to focus on a few areas where resources are limited. There is no place in life that injury does not touch, and they must continue to show connections and interactions with other funding streams. For instance, a case can be made for safe play and physical activity with the goal of reducing childhood obesity.

Dr. Porucznik said that a great deal of work occurs in states and in practice organizations that will never be published in a journal because publication is not the role of state and local health departments, and the work may not be a high-quality RCT. Resources and time are wasted because it is not likely that negative results will be published, and then efforts are duplicated or ineffective programs are implemented. She hoped that they could find ways to share public health practice stories and results. She has been working in prescription drug overdose since 2004 and has a great deal of experience with what works and what does not, but without a comparison group the papers will not be accepted by a journal. She recalled academic-practice partnerships, which can raise the level of methodology at the practice level. The challenge persists that there are different timelines, standards, and motivations for the groups. If a state health department does not have a publication goal, then they may not be willing to expend that level of effort. CDC could serve as an editor or disseminator of an electronic publication capitalizing on CDC’s reach to share ongoing work. Regarding the notion that injury touches all aspects of life, there are potential unintended consequences of “balloon-squeezing effects” in focusing on one area as opposed to another. It is difficult to think of pedestrian safety and encouraging physical activity when the two ideas are at odds. There are opportunities to address injury and safety within other issues.

Dr. Hamby said that CDC documents are not always easily accessed through Google Scholar and Psych Info, or even PubMed.

Dr. Forjough said that there has been a change in leadership of the *International Journal of Injury Control and Safety Promotion*. There are some articles from areas where English is not the first language. They paired those authors with editors or co-authors in order to get them published, and this strategy has resulted in the publication of excellent articles.

Dr. Allegrante said that *Health Promotion Practice* was founded ten years ago by the Society for Public Health Education to address the issue of sharing field experience.

Dr. Mickalide has tried to create sessions at conferences called “Yeah, We Tried That” to shared lessons learned from the field. A mechanism could be created for a column in an injury

journal to share what has been tried. Many agencies will not allow individuals to admit non-successes because it would reflect poorly on the institution. This information is important, however, not to waste future resources.

Dr. Fowler recalled a previous discussion about changing the final reporting requirements for CDC grants to build in what went wrong, what new partnerships were built, and what was leveraged. Maryland adopted this approach with its state program grants. Rather than asking whether anything went wrong, the report asked “what went wrong this time that you learned from?” The practitioners had the ability to reflect on their work, which was helpful.

Dr. Gorman-Smith referred to CDC’s role in communication, sharing information, and synthesizing knowledge. CDC’s role is not just synthesizing the science, but also building the science. No other federal agency is responsible for the scientific aspects of injury and violence prevention. She has been concerned about the “whittling away” of the science.

Regarding a forum for publishing, **Dr. Molock** said that the Division of Community Psychology of American Psychological Association has a newsletter that publishes information about pilot studies and methodological issues that do and do not work. Her group did a systematic review for suicide prevention and found that the gray literature is more likely to report what did not work. Suicide prevention as an area lacks strong studies with good methodologies.

Dr. Hargarten agreed that injury science should be conducted consciously and thoughtfully, and perhaps in partnership with NIH, the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), the National Institute on Alcohol Abuse and Alcoholism (NIAAA), the National Institute on Aging (NIA), National Institute of Mental Health (NIMH), and others who are interested in injury-related scientific topics. There are opportunities to advance from a field to an objective discipline.

Dr. Sosin wondered about CDC’s role in the larger efforts. They work with DOJ and NIH, sharing their actionable, applied research questions. Resources are growing in other agencies for this science and not within CDC. He was not sure whether that dynamic should change or whether CDC’s role lies in synthesis and application, focusing on practice-to-research but not conducting the research because they are not going to receive funding for it from Congress.

Dr. Hargarten said that the topic deserves a concerted, thoughtful approach to who will advance the scientific discipline and who will play other roles. He attended a conference in the Netherlands, where the environment is friendly for bicycles and where no one wears helmets. Some European colleagues argue not to promote helmets, but to change the message to changing the environment and make it safer for pedestrians and bicyclists. They have much to learn from colleagues in other countries about ways to think about injury prevention by promoting environments that are healthy and safe.

Dr. Sosin said that there is a great deal to learn and show communities to affect change, but those changes are hard to make in US society and with US culture. He is striving to understand the evidence base and approaches to violence prevention. The broad, socio-ecological approaches can have important community-level ecological changes in areas such as the density of alcohol distribution and the built environment. There is a larger push to understanding the entire context within which injury and violence occur, and perhaps more impetus to change environments to reduce risk, which will be good for all of injury and all of public health.

Dr. Allegrante's journal published a review of the journal's publications and whether they were adhering to their concerns about moving to ecologic, structural, and organizational-level policy interventions. Health promotion efforts, including injury, still focus on a paradigm of changing individual psychology and not focusing on environmental and larger policy-level structures. There are lessons in the Safe Communities movement and others that seek higher-level changes.

Dr. Gorman-Smith agreed with the need for focused conversation regarding where to focus finding for science. NIH will never fund this kind of research, which is one of CDC's niches and areas where CDC advances the science in ways that others cannot. The conversation can include how to advocate and communicate the need for support. Two years ago, the violence prevention line was zeroed out in the budget; stakeholders had good information about why those funds should be restored, and they were.

Dr. Hamby said that CDC is the home of prevention science for violence and injury. This role is hugely important.

PUBLIC COMMENT SESSION

At 2:22 pm, **Dr. Fowler** called for public comment. Hearing none, the meeting continued.

FAREWELL TO THE RETIRING BSC MEMBERS

Daniel Sosin, MD, MPH, FACP
Acting Director
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention

Dr. Sosin thanked the retiring BSC members for their active participation in guiding, steering, and advising CDC and NCIPC. He presented thanks from NCIPC and from the Secretary of HHS to the follow departing members:

- Dr. Carolyn Fowler
- Dr. John Borkowski
- Dr. Maury Nation
- Dr. Robert O'Connor
- Dr. Deborah Gorman-Smith

ANNOUNCEMENTS / CONCLUSION / ADJOURN

Mrs. Lindley shared final travel instructions.

Dr. Fowler indicated that the July teleconference meeting for secondary would be confirmed. She thanked Dr. Cattledge, Mrs. Lindley, and Ms. Keitha Williams for organizing the meeting. She thanked Kendra Cox and Jim Evans for supporting the meeting.

Dr. Borkowski commented that NCIPC's and CDC's role in research has evolved over time. There is a role for research that is not funded by NIH and other organizations that focus on theory and methodology as primary criteria for funding. There is important applied research from research to practice and also for practice to try out and evaluate new programs that are implementable at the state level. That niche should be reserved for CDC in the research agenda.

Dr. Gorman-Smith thanked CDC staff for their support.

Dr. O'Connor encouraged NCIPC and the NSC to continue their fine work in important areas, and said that it has been his pleasure to serve on the BSC.

Dr. Nation expressed his gratitude for serving on the BSC, particularly as someone who grew up in Atlanta and reveres what CDC does. He offered his continued support, even not as a BSC member.

Dr. Fowler added her thanks, noting that her first meeting as chair of the Advisory Committee for Injury Prevention and Control (ACIPC) was in April of 2005. She has continued participating in advisory groups because of NCIPC's commitment to bridging practice and research. She commended the center's work in that area and thanked them for the opportunity to participate.

With that, the thirteenth meeting of the NCIPC BSC adjourned at 2:49 pm.

CERTIFICATION

I hereby certify that to the best of my knowledge, the foregoing minutes of the June 6, 2014 NCIPC BSC meeting are accurate and complete:

Date

Carolyn Cumpsty Fowler, PhD, MPH
Chair, NCIPC BSC

Attachment A: Meeting Attendance

BSC Members Present

John P. Allegrante, PhD
Deputy Provost
Teachers College
Columbia University

John G. Borkowski, MD (via telephone)
Professor
Department of Psychology
University of Notre Dame

Carolyn J. Cumpsty Fowler, PhD, MPH
Assistant Professor
Johns Hopkins University
School of Nursing & Bloomberg School of Public Health

Samuel Forjough, MD, MPH, DrPH, FGCP
Department of Family and Community Medicine
Texas A&M Health Science Center College of Medicine

Deborah Gorman-Smith, PhD
Chicago Center of Youth Violence

Sherry Lynne Hamby, PhD
Department of Psychology
Sewanee The University of the South

Stephen Hargarten, MD, MPH
Professor and Chair
Department of Emergency Medicine
Medical College of Wisconsin

Angela D. Mickalide, PhD, MCHES
Executive Director
Emergency Medical Services for Children's National Resource Center
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

Robert O'Connor, MD

Professor and Chair
Department of Emergency Medicine
University of Virginia

Christina A. Porucznik, PhD, MSPH
Assistant Professor
Department of Family and Preventive Medicine
University of Utah

Maria Testa, PhD (via telephone)
Senior Research Scientist
Research Institute on Addictions
University at Buffalo

Shelly D. Timmons, MD, PhD, FACS (via telephone)
Director of Neurotrauma
Department of Neurosurgery
Geisinger Medical Center

BSC Members Absent

Robert M. Harris, MD
Medical Director of Orthopaedic Trauma
Orthopaedic Trauma
Johnson City Medical Center

Robert L. Johnson, MD
Dean
University of Medicine and Dentistry, New Jersey Medical School

Federal Liaisons Present

Dawn Castillo, MPH
Director, Division of Safety Research
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

Lisa J. Colpe, PhD, MPH (via telephone)
Chief, Office of Clinical and Population Epidemiology Research
Division of Services and Intervention Research
National Institute of Mental Health

Elizabeth A. Edgerton, MD, MPH (via telephone)
Branch Chief
EMSC and Injury Prevention
Maternal and Child Health Bureau
Health Resources and Services Administration

Iris R. Mabry-Hernandez, MD, MPH (via telephone)
Medical Officer
Senior Advisor for Obesity Initiatives
Center for Primary Care, Prevention and Clinical Partnerships
Agency for Healthcare Research and Quality

NCIPC Staff Present

Lee Annest, PhD
Branch Chief, Statistics, Programming, and Economics Branch
Division of Analysis, Research, and Practice Integration

Grant Baldwin, PhD, MPH
Director, Division of Unintentional Injury Prevention

Gwendolyn Cattledge, PhD, MSEH
Deputy Associate Director for Science

Erin Connelly, MPA
Associate Director for Communication

Corinne Ferdon, PhD
Health Scientist

Tamara Haegerich, Ph.D
Deputy Associate Director for Science
Division of Unintentional Injury Prevention

Mildred Johnson, PhD, DABT
Director Extramural Research Program Office

Marcie-Jo Kresnow, MS
Statistics Team Lead, Statistics, Programming, and Economics Branch
Division of Analysis, Research, and Practice Integration

Rod McClure, MBBS, PhD, FAFPHM, FAICD
Director, Division of Analysis, Research, and Practice Integration

Sara Patterson, MA
Associate Director for Policy

Amy Peeples, MPA
Acting Deputy Director, NCIPC

Kelly Sarmiento
Designated Federal Official, BSC Pediatric Mild TBI Workgroup
Health Communication Specialist

Dan Sosin, MD, MPH, FACP
Acting Director, NCIPC

David Sugerman, MD MPH FACEP
Medical Officer

Sally Thigpen, MPA
Health Scientist
Division of Analysis, Research and Practice Integration

Tonia Lindley
Committee Management Specialist for the NCIPC Board of Scientific Counselors

Others Present

Keitha Blackburn,
TCG Consulting, Inc.

Kendra Cox, MA
Senior Writer / Technical Writing Lead
Cambridge Communications, Training, & Assessments (CCTA)

Shawn Cooper
TCG Consulting, Inc.

Jim Evans
Sound on Site

Attachment B: Acronyms Used in this Document

Acronym	Expansion
ACIPC	Advisory Committee for Injury Prevention and Control
ADS	Associate Director for Science
BCBS	Blue Cross/Blue Shield
BJA	Bureau of Justice Assistance
BSC	Board of Scientific Counselors
CDC	Centers for Disease Control and Prevention
CEO	Chief Executive Officer
DARPA	Defense Advanced Research Projects Agency
DARPI	Division of Analysis, Research, and Practice Integration
DHS	(United States) Department of Homeland Security
DoD	(United States) Department of Defense
DOJ	(United States) Department of Justice
DUIP	Division of Unintentional Injury Prevention
EMS	Emergency Medical Services
FACA	Federal Advisory Committee Act
FDA	Food and Drug Administration
FOA	Funding Opportunity Announcement
FY	Fiscal Year
HHS	(Department of) Health and Human Services
HMO	Health Maintenance Organization
ICRC	Injury Control Research Center
IOM	Institute of Medicine
MASO	Management Analysis and Services Office
<i>MMWR</i>	<i>Morbidity and Mortality Weekly Report</i>
MOU	Memorandum of Understanding
NCHS	National Center for Health Statistics
NCIPC	National Center for Injury Prevention and Control
NFL	National Football League
NIA	National Institute on Aging
NIAAA	National Institute on Alcohol Abuse and Alcoholism
NICHD	(Eunice Kennedy Shriver) National Institute of Child Health and Human Development
NIDA	National Institute on Drug Abuse
NIH	National Institutes of Health
NIMH	National Institute of Mental Health
NIOSH	National Institute for Occupational Safety and Health
NTSB	National Transportation Safety Board
NVDRS	National Violent Death Reporting System
OD	Office of the Director
OMB	Office of Management and Budget
PBSS	Prescription Behavioral Surveillance System
PDMP	Prescription Drug Monitoring Program
PRR	Patient Review and Restriction (Program)
RCT	Randomized Controlled Trial
RPE	Rape Prevention and Education

Acronym	Expansion
RWJ	Robert Wood Johnson (Foundation)
SAMHSA	Substance Abuse and Mental Health Services Administration
SAVIR	Society for the Advancement of Violence and Injury Research
STRYVE	Striving To Reduce Youth Violence Everywhere
TBI	Traumatic Brain Injury
VIPP	Violence and Injury Prevention Program
WISQARS	Web-based Injury Statistics Query and Reporting System