



INSTITUTE OF MEDICINE

OF THE NATIONAL ACADEMIES

Board on Health Sciences Policy

RECEIVED DEC 21 2012

December 18, 2012

Dear Trustees of the McKnight Brain Research Foundation,

Thank you for sponsoring the Institute of Medicine Planning Meeting: Gaps and Opportunities in the Field of Cognitive Aging. I am pleased to report the results of that meeting and would welcome the opportunity to talk further with you and answer any questions you may have.

At the November 27, 2012 planning meeting, 35 individuals representing a range of relevant disciplines met to discuss gaps and opportunities in the field of cognitive aging with a focus on the public health aspects of cognitive aging and next steps needed to move the field forward. The meeting was organized into four presentation and discussion sessions:

- Definitions, epidemiology, and the public health perspective
- Overview of the science of cognitive aging—basic and clinical research
- Interventions
- Public awareness and the role of health care providers.

Presenters for each session and meeting participants were asked to consider the following questions:

- What are the gaps and opportunities in this area?
- Could an IOM study move this area forward? What issues would an IOM study explore in this area?
- Who are the major stakeholders for recommendations in this area?

A final session provided an opportunity for the participants to synthesize and summarize the day's discussions.

The planning group members agreed that cognitive aging is a topic that would greatly benefit from an Institute of Medicine (IOM) study. The meeting participants identified a number of public health and clinical challenges (discussed in more detail below) throughout the meeting that would benefit from a comprehensive review and corresponding recommendations from the IOM. The participants saw IOM as the site for such a study based on its independence, scientific credibility, and policies that require efforts to balance biases and avoid conflicts of interest. The IOM also offers access to a full range of expertise in the health professions, sciences, technology development, and policy through its honorific and committee membership. The planning meeting participants believe that the timing is right for a thorough review of the public health aspects of cognitive aging given the demographic shifts toward an older population, anticipated changes with health care reform, new advances in cognitive sciences and the neurosciences, and the

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growing number of options available to consumers that aim to enhance cognitive abilities and prevent or ameliorate cognitive decline.

Once initial determinations were made about the benefits of an IOM study, the planning meeting participants discussed the major gaps and challenges that the field faces. This discussion led to the development of the following scope of work, which provides the charge and sets forth the task to an IOM ad hoc committee. This scope of work is a starting point for discussions with potential sponsors and can be revised by the sponsors, in conjunction with IOM leadership, in the development of an IOM study.

Draft Scope of Work

The potential for decline in cognitive abilities with increasing age and the consequences of decline present serious concerns for older adults, their family members, and society. Cognitive decline spans the spectrum from forgetfulness to mild impairments (that do not meet disease criteria, but affect quality of life and functioning) to more serious impairments and dementias. The science and understanding of the natural course of cognitive health, cognitive aging, and cognitive decline, along with risk and protective factors, is limited but growing. The demographic shifts toward higher percentages of older adults—particularly individuals over 85 years of age, the lack of public understanding and awareness, and the challenges associated with educating health care professionals about the multiple facets of cognitive aging are among the many reasons for conducting an IOM study.

The Institute of Medicine is charged with convening an ad hoc committee to examine cognitive health and aging, as distinct from Alzheimer's disease. The committee's work will focus on the public health aspects of cognitive aging with an emphasis on the following:

- *Definitions and terminology* – The study will explore relevant definitions and terminology with consideration given to preventing unintended consequences of terminology.
- *Epidemiology and surveillance* – The focus of the study will be on identifying efforts needed to better understand the public health implications of cognitive aging and its risk and preventive factors, as well as the development of relevant surveillance or monitoring tools and methodologies.
- *Prevention and intervention opportunities* – The study will take into account the multiple aspects of enhancing cognitive aging, prevention of impairment, and amelioration of cognitive decline. Other areas to be considered include the multiple domains of cognition, its non-linear progression, multi-modal interventions, potentially reversible iatrogenic contributors to cognitive decline, role of comorbidities, use of emerging technologies, regulatory and public policy concerns associated with products aimed at enhancing cognition and preventing decline, innovative sites for care delivery in the community, and access to high quality health

care.

- *Education of health professionals* – This study will explore the education of health professionals related to cognitive health and decline and will identify examples of best practices for educating health professions to ensure high quality care and education for older adults and their families about cognitive aging and its possible consequences.
- *Public awareness and education* – The study will consider new approaches for enhancing awareness and disseminating information (with cultural, ethical, and health literacy considerations) to the public and to older adults and their families and caregivers.

The committee's work should be grounded in the scientific evidence and use practical and real-world approaches that take into account the ethical and cultural considerations relevant to aging and independent living. Further, efforts across scientific disciplines and sectors of the community that are relevant to decision-making by older adults and their families (e.g., financial, transportation, community services) should be included in the work of the committee.

The committee will hold information-gathering workshops open to the public during the course of its work. The report will not focus on setting an agenda for basic and biomedical science research as this has been the topic of recent reports and forums. Biomedical research will, however, inform the committee's deliberations and will serve as the foundation for the evidence base of the report. The committee's report will provide recommendations relevant to the topics discussed above and to other public health aspects of cognitive health and aging as identified by the committee.

Additionally, during the planning meeting a number of potential sponsors for an IOM study on cognitive aging were identified including McKnight Brain Research Foundation, National Institute on Aging, Department of Veterans Affairs, Centers for Disease Control and Prevention, Retirement Research Foundation, Foundation for the National Institutes of Health, MetLife Foundation, AARP, John A. Hartford Foundation, Robert Wood Johnson Foundation, American Geriatric Society Foundation for Health in Aging, and others.

On behalf of the Institute of Medicine, I would like to thank you for sponsoring this planning meeting. By convening experts in the field of cognitive aging, we were able to have a well-informed and highly-engaged discussion of the gaps and opportunities in the cognitive aging field. We hope the planning meeting's deliberations will be useful in moving this field forward.

Trustees of the McKnight Brain Research Foundation

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In following up on this planning meeting, IOM staff members, including Andrew Pope, Andrea Schultz, and Cathy Liverman, will be in touch with Dr. Lee Dockery to answer any questions and to discuss next steps. The IOM welcomes the opportunity to consider how best to move this effort forward.

Thanks again for sponsoring this important planning meeting.

Sincerely,



Dan G. Blazer, M.D., Ph.D.

Chair, IOM Planning Group on Cognitive Aging

cc: Andrew Pope
Cathy Liverman
Andrea Schultz
Planning Meeting Participants

Attachments: Planning Meeting Participant List
Agenda

INSTITUTE OF MEDICINE
Board on Health Sciences Policy

**Gaps and Opportunities in the Field of Cognitive Aging:
An IOM Planning Meeting**

Tuesday, November 27, 2012
National Academy of Sciences
2101 Constitution Avenue, NW, Washington, D.C.
Room 125

MEETING OBJECTIVES AND TASKS

- Identify gaps and opportunities in the field of cognitive aging with a focus on:
 - Epidemiology and the public health perspective
 - Research and interventions
 - Public awareness and the role of health care providers
- Determine if there is potential value in having an IOM study at this point on cognitive aging; if there is a need and the value added is identified, determine the scope of work for a future IOM study

AGENDA

- 8:00 – 8:30 a.m. **Sign-in**
Breakfast and coffee, Room 125
- 8:30 – 8:45 **Welcome, Meeting Goals, and Participant Introductions**
Dan Blazer, Chair, Planning Group
- 8:45 – 9:00 **Charge to the Group**
Lee Dockery, McKnight Brain Research Foundation

9:00 – 10:15 **Topic 1: *Understanding Cognitive Aging: Definitions, Epidemiology, and the Public Health Perspective***
Discussion Facilitator: *George Rebok*
Rapporteur: *Kristine Yaffe*

9:00 – 9:20 **Perspective on the Gaps and Challenge to the Group**

- *George Rebok*, Johns Hopkins University
- *Kristine Yaffe*, University of California, San Francisco

9:20 – 10:10 **Group Discussion**

10:10 – 10:15 **Summary by the rapporteur**

Session Questions/Points of Discussion

- What are the gaps and opportunities in this area?
- Could an IOM study move this area forward?
- Who are the major stakeholders for recommendations in this area?

10:15 – 10:30 **Break**

10:30 – 11:30 **Topic 2: *Overview of the Science of Cognitive Aging: Gaps and Opportunities***
Discussion Facilitator: *Molly Wagster*
Rapporteur: *Sharon Inouye*

10:30 – 10:50 **Perspective on the Gaps and Opportunities and Challenge to the Group**

- *Michela Gallagher*, Johns Hopkins University
- *Sharon Inouye*, Harvard University

10:50 – 11:25 **Group Discussion**

11:25 – 11:30 **Summary by the rapporteur**

Session Questions/Points of Discussion

- What are the gaps and opportunities in this area?
- Could an IOM study move this area forward? What issues would an IOM study explore in this area?
- Who are the major stakeholders for recommendations in this area?

11:30 – 12:45 **Topic 3: *Interventions: Gaps and Opportunities***
Discussion Facilitator: *Art Kramer*
Rapporteur: *Adam Gazzaley*

11:30 – 11:50 Perspectives on the Gaps and Opportunities and Challenge to the Group

- *Art Kramer*, University of Illinois, Urbana-Champaign
- *Adam Gazzaley*, University of California, San Francisco

11:50 – 12:40 Group Discussion

12:40 – 12:45 Summary by the rapporteur

Session Questions/Points of Discussion

- What are the gaps and opportunities in this area?
- Could an IOM study move this area forward? What issues would an IOM study explore in this area?
- Who are the major stakeholders for recommendations in this area?

12:45 – 1:30 **Lunch** NAS Cafeteria

1:30 – 1:45 **Afternoon Opening Remarks**
Marie Bernard, Deputy Director, National Institute on Aging

1:45 – 2:45 **Topic 4: *Public Awareness and the Role of Health Care Providers: Gaps and Opportunities***
Discussion Facilitator: *Lynda Anderson*
Rapporteur: *David Weir*

1:45 – 2:15 Perspectives on the Gaps and Opportunities and Challenge to the Group

- *Lynda Anderson*, CDC
- *Tom Prohaska*, George Mason University
- *Malaz Boustani*, Indiana University

2:15 – 2:40 Group Discussion

2:40 – 2:45 Summary by the rapporteur

Session Questions/Points of Discussion

- What are the gaps and opportunities in this area?

- Could an IOM study move this area forward? What issues would an IOM study explore in this area?
- Who are the major stakeholders for recommendations in this area?

2:45 – 3:00 **Break**

3:00 – 4:30 **Next Steps**

Dan Blazer, Chair

- Review the issues raised in each of the topic area discussions
- Decide on next steps
 - Would an IOM study be useful? Is the time right for an IOM study?
 - If so, what would be the scope/major questions?
 - Potential funders?
 - Types of expertise needed?
- Draft and revise draft scope of work (if needed)

4:30 **Adjourn**

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National Academy of Sciences
2101 Constitution Avenue, NW, Washington, D.C.

MEETING PARTICIPANTS

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