Research Subcommittee Recommendations

- 1. We support and applaud the goal of the National Plan -- to prevent and effectively treat Alzheimer's Disease by 2025.
 - We recommend that interim milestones be set, through development of a clear roadmap of research and treatment discovery priorities and timelines, to assure continuing and successful progress toward achievement of this goal. For example, we recommend that an interim milestone be set to make available to the public by 2020 significant disease-modifying or substantially-enhanced symptom-mitigating behavioral or pharmacologic interventions.
 - While these goals of making new remedies for AD available by 2020 and 2025 are ambitious, they should not be interpreted as favoring translational drug development over basic discovery. New investment in basic research and drug discovery must reflect a critical balance between long-term investment and the urgency of immediate progress to our nation's public and fiscal health.
- 2. There is an urgent need for annual federal research funding to be increased to the level needed to fund a strategic research plan and to achieve the breakthroughs required to meet the 2025 goal. Initial estimates of that level are \$2 billion per year but may be more. That investment would be applied to Alzheimer's research initiatives spanning basic, translational and clinical research.
 - The Administration, working with the research and business communities, should develop an overall budget needed to achieve the 2025 goal, and should propose to Congress and support a rapid ramp up to a minimum \$2 billion in Alzheimer's research at NIH. The optimum levels of annual funding needed to achieve the 2025 goal should be determined in connection with the preparation of the President's budget, and should be reviewed and adjusted each year based on progress and new developments.
 - As part of the strategic research plan mentioned in the National Alzheimer's Plan, we recommend that NIH develop a system of accountability to monitor progress toward the 2025 goal.
 - We recommend that NIH coordinate with other federal agencies to ensure that overall federal Alzheimer's funding complements the NIH's investments and enhances progress towards the goal of preventing and effectively treating Alzheimer's by 2025. We also recommend that the strategic research plan identify and monitor not only existing resources within the Federal government, but also new resources outside the Federal government, including new private-public partnerships, incentives for

increased private investment, State-based research funding, and mobilization of global investments.

- 3. We recommend that HHS develop, execute and regularly update a strategic research plan and priorities to accelerate breakthroughs in AD research.
 - The process of developing that scientific research plan and accompanying priorities should be viewed as shared project of NIH, FDA, and other relevant government agencies; the academic and corporate research community; industry; and NGO's.
 - Given the global scope of the Alzheimer's challenge and the international character of the research enterprise, we recommend that the strategic research plan be coordinated with the research efforts of other nations and that stakeholders from other countries with Alzheimer's plans in place or in process be included in the planning process.
 - The structure of the scientific research plan should be framed with the National Alzheimer's Plan updating process in mind so that issues can be addressed not only annually, but also in synch with the plan updates and so that progress can be tracked using potential convening partners for different action or convening 'streams'.
 - The Director of NIH should monitor the Alzheimer's research portfolio across all Institutes and Centers of the NIH.
- 4. We recommend that the Administration designate specific Offices and officials within the White House and the Office of the Secretary of Health and Human Services with responsibility and accountability for effective implementation of, and timely, transparent reporting on, all aspects of the implementation of this National Alzheimer's Plan, including responsibility for issuing statutorily required reports to Congress on behalf of the Secretary, reports to the Advisory Council, and other reports as warranted.
 - The designated Office within the White House should be responsible for adequate monitoring across agencies and the designated Office within the Office of the Secretary of HHS should be responsible for monitoring within the departments of HHS.
 - We believe it important to develop a system of accountability for the achievement of the 2025 goal based on quantifiable metrics and milestones with respect to the action steps and strategies in the national plan.
 - We recommend that the Secretary, as part of her annual report to Congress and the Advisory Council, report on progress over the prior year in meeting the annual objectives, strategies and actions enumerated in the National Alzheimer's Plan, as well as providing a comprehensive, multi-year perspective, and mid-course corrective action steps, that are needed in order to meet the 2025 goal of this Plan.

- 5. We recommend that HHS, in partnership with the research community and industry, take steps to accelerate public access to new therapeutic interventions by compressing the current average time in the process of identification of therapeutic targets, validation of those targets, development of behavioral and pharmacologic interventions, testing of efficacy and safety, and regulatory review, including the following:
 - Convening expert advisory panels/conferences to identify genetic, family history, medical co-morbidities, biomarkers, and clinical features in asymptomatic persons that are risk or protective factors for AD neuropathological physiology and ultimately AD clinical symptoms.
 - Cataloguing existing Alzheimer's biological and behavioral marker initiatives including their current development and review, and identify gaps and a plan for addressing them.
 - Issuing, upon endpoint approval, of unambiguous guidance on the use of behavioral and biological markers to industry on their usage.
- 6. We recommend that the Secretary, in consultation with academic researchers, not-for-profit Alzheimer's organizations, and the private sector, including sponsors of investigational diagnostic and therapy trials, by year-end 2012 identify and prioritize the action steps needed to reduce the time for moving therapies from target identification and validation through clinical development, regulatory review, market approval, and reimbursement determinations.
 - The Secretary, in conjunction with NIH and FDA, should increase targeted public-private partnerships that bolster innovation and regulatory science progress.
- 7. We recommend, as part of the initiative to accelerate public access to new therapeutic interventions, that the Secretary examine and include as part of her annual report to Congress and the Advisory Council:
 - How the HHS uses existing authorities to reduce drug development barriers and accelerate development of new therapies;
 - Immediate steps the HHS will take to address any identified drug development barriers, including regulatory hurdles; patent, intellectual property, regulatory science, or clinical trial infrastructure weaknesses; and plans to advance regulatory science, guidance, and other initiatives under existing authorities;
 - Additional authorities or other legislative action that may be needed to accelerate development of therapies and diagnostics; and

• Immediate steps to shorten time from market approval to coverage decision for innovative therapies and diagnostics.

8. We recommend that the FDA review and periodically report to the Advisory Council:

- Recommendations to further accelerate FDA review processes without compromising current standards of safety and efficacy.
- 9. We recommend that the HHS Secretary develop a continuing process by which research priorities aimed at accelerating the delivery of effective treatments would be set, including input from scientific experts.
 - In our view, a joint NIH/NIA and Industry Working Group should be established, which can serve as an opportunity to create a true partnership between government and industry to inform research priorities.
 - In order to accelerate the process of discovery, we recommend that this Working Group identify strategies for increasing the increased standardization, disclosure, pooling and analysis of pre-clinical, clinical and electronic health data.
- 10. To address disparities, we recommend that clinical research studies and activities aimed at translation of research findings into medical practice and to the public include specific targets for outreach to specific populations by racial/ethnic group, sex, and socioeconomic status, as well as to populations at high risk for AD (e.g., people with Down Syndrome).
 - Specific recommendations for recruitment and outreach goals for diverse populations should, in our view, be integrated into planned AD research meetings/summits.
 - Resources and "formulas for success" of NIH-funded RCMARs, ADRCs, and R01 awards that have successfully recruited large numbers of ethnic minorities and socioeconomically diverse people for clinical aging research can, in our judgment, be leveraged to inform any future recruitment efforts taken via NAPA initiatives.
 - In our view, private and public entities can collaborate to increase diversity
 within clinical trial participation through open-architected prevention
 registries such as the Alzheimer's Prevention Initiative, Alzheimer's
 Association TrialMatch, and NIA-funded RCMARs, producing increased
 identification of ethnically and socioeconomically diverse people for
 participation in clinical studies of AD.

- 11. We recommend that HHS develop accurate and relevant metrics for assessing the impact of Alzheimer's on the U.S. economy.
 - We believe it important to develop a system of accountability for the achievement of the 2025 goal including estimates of the impact of prevention and effective treatment of Alzheimer's Disease on the US economy, families and costs to Federal health care programs.
 - Identify and rectify the shortcomings of the data needed to assess the prevalence, costs (financial, fiscal and economic), and deaths relevant to Alzheimer's disease.
- 12. We recommend that HHS commit to an effort to maximize private investment in the development of treatments and improvements in disease monitoring technology by identifying policies that would encourage private industry to invest aggressively in disease-modifying interventions, to support technologies that improve our ability to detect the disease as early as possible, and monitor the disease accurately so that the effectiveness of interventions can be tested.
 - As part of the larger NAPA agenda, we recommend that a process or mechanism for securing sustained industry input on topics such as measures to spur discovery and streamline regulatory review, tax, and Intellectual Property be established, with a particular emphasis on diminishing the barriers to sharing both basic scientific and clinical data), and other incentives.
 - We believe a strategic use of SBIR, STTR and other co-investment initiatives can be used to promote advanced research and support from small businesses engaged in this work.
 - Through a joint public-private process, we believe that we can advance other related actions included under other recommendations (e.g., the industry engagement with NIH, research prioritization, behavioral and biomarker and endpoint validation, etc.) that are already known to be of importance to industry.
- 13. We recommend that the Administration expand and enhance meaningful coordination with global partners and move forward to establish a Global Alzheimer's Action Plan to respond to the global scope of the problem.
 - Moving that objective forward might start with convening a meeting of all nations or regions with National/Regional Alzheimer's Plans in place or under development by 2013 in order to compare approaches and identify mechanisms to foster global coordination and progressively address the global problem.

- The responsibility for such an initiative would require the identification of a single high-level U.S. official as the point person for the National Alzheimer's Plan and appointment of that person to represent the nation as part of an ongoing dialogue with global counterparts.
- We believe that such a Global Alzheimer's Action Plan can be built upon existing global collaborative research initiatives and lead to greater global collaboration and coordination of research funding on a global level.
- Any Global Alzheimer's Action Plan should foster ongoing international dialogue and potential coordination on Alzheimer's regulatory review and related issues.