AGING BRAIN CARE INC.

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Industry Sector(s): Healthcare
Product Category: Specialized Health Services

Opportunity Overview

With the shift in focus for reimbursement being centered on population health, one of the most vulnerable and costly patient populations that are often overlooked is the aging brain population, the population age 65 and older that have either dementia and/or depression. More than five million people in this age group suffer from dementia and three million are afflicted with depression. These conditions often co-occur, and account for significant health care resources and expenditures. The ability for health care delivery systems to care for and treat this patient population will be essential for decreasing overall costs of care, as well as increasing the potential cost savings that can be achieved. In addition to the shift in reimbursement, Centers for Medicare and Medicaid Services (CMS) has also identified both dementia and depression as high-priority conditions for quality improvement due to the prevalence, morbidity and costs.

In the current market, there are several dementia consulting firms that exist to provide guidance, information and education to family members and health care organizations, such as nursing facilities and assisted living, respite, adult day care, and residential care centers. What appears to be lacking in the current market is a firm that provides health care executives, especially acute care and integrated health system executives, all of the above tools, and a model of care targeting the aging brain population with demonstrated sustainable results to withstand the future environment.

Aging Brain Care Inc. can meet the needs of health care delivery systems by providing models of care that have been tested and proven successful in improving patients’ quality, efficiency, outcomes and overall costs of care for multiple conditions affecting the aging brain.

Markets & Applications

Aging Brain Care Inc. will target executives leading the following health care sectors:

1. Integrated health care delivery system (outpatient and inpatient services)
2. Hospital systems
3. Payors
4. Home and hospice delivery systems
5. Long term care
6. Ambulatory care systems

The initial target audience will be executives from an integrated health care delivery system, hospital system, or health care payors. To ensure future financial sustainability for Aging Brain Care Inc., these sectors have been strategically selected due to their financial viability.
Competitive Advantage/Value Propositions

The models of care that have been developed are referred to as the Aging Brain Care (ABC) programs. The ABC programs have improved access for patients and informal caregivers, improved patient satisfaction, enhanced quality of care, and reduced acute care utilization. In July of 2012, CMS awarded lead scientist Malaz A. Boustani, MD, MPH with an Innovation Award for the exceptional accomplishments the ABC programs have been able to achieve. Overall, the implementation of these cost-effective models of care has led to a substantial decrease in 30-Day readmissions, ED utilization, acute care utilization and length of stay (LOS).

- **Healthy Aging Brain Care (HABC) Monitor**: This is a standardized and reliable monitoring tool that can provide confirmation of dementia presence and management of dementia care plans. Results from the HABC monitor can help clinicians determine the nature, severity and degree of change of the patient’s cognitive, functional, behavioral and psychological symptoms, as well as the level of caregiver stress.

- **eMR-ABC**: This is a web-based tracking system that provides decision support, decision support being defined as a computer-based information system that supports clinical decision making, patient tracking and population statistics.

- **Anticholinergic Cognitive Burden (ACB) Scale**: This is a tool that identifies and classifies prescription and over-the-counter medications that have negative effects on cognition. This tool also suggests alternative medications that would be safer, cognitively, for the patient.

- **ABC Center Replication Manual & ABC Medical Home Replication Manual**: These manuals offer a step-by-step guide for adoption by outlining how ABC’s dementia care discoveries were translated into an ABC Center within Wishard Health Services and an ABC Medical Home. The manuals outline the minimum specifications and materials for implementation of the programs, the care delivery processes, and the logistical and operational details such as staffing, space and IT requirements.

- **Caregiver Resource Handbook**: This tool is created for caregivers, outlining useful tips and information on how to better take care of their loved ones and themselves. This tool addresses topics across the spectrum, from learning about memory loss to handling problem behaviors like sundowning, paranoia, inappropriate sexual behavior and hallucinations.

- **Multiple Mini Interview Process**: This is an innovative interview process that is used to screen candidates and evaluate each candidate on the following:
  a. Attributes that are predictive of compassionate care for the elderly.
  b. Non-cognitive abilities such as critical thinking, ethical decision making, communication skills, team competencies, and knowledge of essential elements for providing compassionate and comprehensive care within a health care system for elderly patients and caregivers.

- **Smart phone app for HABC Monitor**: This tool provides convenient access for caregivers to help them manage and track their loved ones’ dementia progression. It also provides tips on how to address various issues they or their loved ones may face, along with providing resources that can be used to help them along the way.

Researcher Biographies

**Nadia M. Adams, MHA**

Nadia Adams is the Program Manager for the Innovation and Implementation Science Initiative (IISI). This initiative focuses on bridging the gap between research and care delivery. The work that has been accomplished through the Aging Brain Care program is a prime example of how innovation and implementation science was used to take Alzheimer’s and dementia research to the next level. By using implementation science, the ABC team implemented innovative, evidence-based programs and practices (EBP) into the real world, and has demonstrated increased quality, better health and better care, as well as significant cost savings.

Ms. Adams has had a variety of experiences in healthcare delivery, including roles within an academic healthcare system and for-profit hospital system. Most recently, she worked at the system level in Quality and Safety for a nineteen hospital healthcare system, focusing on improving inpatient efficiencies. By using her background in healthcare delivery, coupled with implementation science knowledge, her responsibilities will be to ignite innovation and spread the use of implementation science across multiple healthcare systems. Ms. Adams received a Master of Healthcare Administration from Indiana University.
She also obtained a Bachelor of Public Health with a concentration in Healthcare Administration and Business from Indiana University.

**Stephanie Munger, MPH, CHES**

Stephanie Munger is the Program Manager for the Aging Brain Care program as well as for the Senior Health Implementation Center at the Regenstrief Institute at Indiana University. She also serves as Operating Officer for the Indiana Discovery Network for Dementia. Her responsibilities include developing training programs; creating standardized study manuals, protocols, abstracts, papers, and educational materials; program and project-specific budgeting and financial management; creating logic models based on system needs; promoting change in health care systems using the Hartford Consultancy model and the Reflective Adaptive process, and educational grant development and management.

Ms. Munger received a Master of Science in Public Health with a Concentration in Behavioral Health Science from Indiana University School of Medicine in 2009 and a Bachelor of Science in Psychology from Indiana University–Purdue University at Indianapolis in 2002. Ms. Munger has also co-authored numerous peer-reviewed papers.

**Christopher M. Callahan, MD**

Christopher M. Callahan, MD is the Cornelius and Yvonne Pettinga Professor in Aging Research at the Indiana University School of Medicine, the founding Director of the Indiana University Center for Aging Research and a Research Scientist in the Regenstrief Institute. Dr. Callahan led the PREV E NT study, a medical home/collaborative dementia care model for diagnosing and managing Alzheimer’s disease and other related dementing disorders within an integrated health care system that is the basis for the Aging Brain Care model. He serves as an advisor to ABC.

Dr. Callahan’s major research interest is improving the care of older adults with late life depression, dementia, and related conditions as well as systems-level interventions to enable primary care physicians to deliver excellent care to older adults. Dr. Callahan recently joined the Editorial Board of the *Annals of Internal Medicine*. He is a member of the national council for the Society of General Internal Medicine. He is the author of more than 92 peer-reviewed publications.

**Michael LaMantia, MD, MPH**

Michael LaMantia, M.D., MPH, is Medical Director of ABC Medical Home project. Dr. LaMantia is a geriatrician and an Assistant Professor of Medicine at Indiana University’s School of Medicine, as well as a Center Scientist with the Indiana University Center for Aging Research and an Investigator with the Regenstrief Institute. Dr. LaMantia's research focuses on the coordination of care for older, vulnerable patients as they transition across sites of healthcare delivery. He has a particular interest in the care of seniors in the emergency department and especially the care provided to seniors with delirium and dementia.

Dr. LaMantia received an MD from the Albert Einstein College of Medicine in Bronx, NY, completed his internship and residency in Internal Medicine and a Fellowship in Geriatric Medicine (research track) at the University of North Carolina Hospitals, Chapel Hill, NC. He received his MPH from the Gillings School of Global Public Health at UNC and completed a post-doctoral fellowship at the Institute on Aging there.

**Mary Guerriero Austrom, Ph.D.**

Mary Guerriero Austrom, PhD, leads the workforce development core for the $7.8 million CMS Innovation Award that Aging Brain Care recently received to support its expansion and further testing among 2,000 Medicare beneficiaries at 11 Wishard Health Services community health centers in Marion County, Indiana. She is a leading expert in non-pharmacological interventions for caregivers of persons with dementia and education of both family and professional caregivers and developed the original non-pharmacological protocols for the PREV E NT study, on which the ABC model is based.

Dr. Austrom is the Wesley P. Martin Professor of Alzheimer Disease Education in the Department of Psychiatry at IU School of Medicine. She has been the Director of the Education Core at the Indiana Alzheimer Disease Center since its inception at IUSM in 1991. Dr. Austrom is also on the Board of Directors of the National Alzheimer’s Association. Mary Guerriero Austrom received a BA and a BEd
from Brock University, St. Catharines, Ontario, Canada and her MA and PhD from York University, Toronto, Canada.

**Cathy Alder, MSW, LSW**  
Cathy Alder, MSW, LSW, is the Chief Administrator for Aging Brain Care, a Research Coordinator at the Regenstrief Institute and the project manager for the $7.8 million CMS Innovation Award that Aging Brain Care recently received to support its expansion and further testing among 2,000 Medicare beneficiaries at 11 Wishard Health Services community health centers in Marion County, Indiana. She brings 15 years of experience as a social worker and care coordinator in a memory care clinic to her work on all aspects of the grant, as well as providing clinical expertise for the Workforce Development Core in developing the tools and processes required to screen, hire, train, and evaluate the new workforce.

**Malaz Boustani, MD**  
Malaz A. Boustani, MD, leads the Aging Brain Care program. Dr. Boustani is a geriatrician, Associate Professor of Medicine and Adjunct Associate Professor in Public Health at Indiana University School of Medicine. He is associate director of the IU Center for Aging Research, a Research Scientist with the Regenstrief Institute and medical director of the Healthy Aging Brain Center at Wishard Health Services. He leads the Indianapolis Discovery Network for Dementia and is the president-elect of the American Delirium Society. Dr. Boustani's main research focuses on rapid translation of aging brain research discovery into health care delivery by using the lens of complexity science, the tools of medical informatics, and the methods of public health epidemiology.

Dr. Boustani received an M.D. degree from Damascus University in Damascus, Syria, and an MPH degree from the University of North Carolina, where he also completed a fellowship in geriatric medicine. He is the author of more than 80 peer-reviewed publications.

**Development Plans/Needs**

1. Feedback
2. Validation of business model
3. Funding