In an effort to improve the care of residents with dementia and decrease the use of harmful medications, the Wisconsin Department of Health Services (DHS) used creative funding to bring personalized music to thousands of people in nursing homes, assisted living, and their homes. The success has spurred other states to promote similar programs after consulting with the Department. Since 2011, and for the next 20 years, 10,000 U.S. citizens will turn 65 every day. It is estimated that the following will have a diagnosis of Alzheimer’s: one out of seven, 65 and older; one out of four, 75 and older; and one out of two, 85 and older. One of every four residents with dementia living in a nursing home is taking harmful medications. This equates to a tremendous strain on our health systems.

In 2013, DHS staff watched a six-minute video clip of Henry, and it changed their lives. This video shows the power personalized music has on a person with profound dementia. Henry comes alive; communicating with his family, sharing long-locked memories and the joy he is feeling. Could Wisconsin bring this joy and excitement to the citizens of our state? DHS staff contacted Music & Memory (M&M) and told them we had a creative funding source to train and support staff and equip residents in 100 nursing homes. Following is a summary of the highlights of the Wisconsin Music & Memory Program and implementation and expansion efforts to date.

Program Structure

- Electronic mailbox to support and answer questions from participants – DHSMusicMemory@dhs.wisconsin.gov

Nursing Homes

1. **Phase I**

   Phase I was launched in the fall of 2013 and included 100 nursing homes certified as MUSIC & MEMORY™ facilities and the equipment to bring personalized music to 1,500 residents. Six months into the implementation, almost 50% of the facilities had expanded their program to bring personalized music to more residents in their facility through fundraising and community outreach. The University of Wisconsin-Milwaukee is conducting four evaluations to assess the effect personalized music has on resident outcomes. Phase I was funded, in part, through a grant from the Centers for Medicare and Medicaid Services (CMS).
2. Phase II
Phase II began in the fall of 2014 and included 150 nursing homes certified as MUSIC & MEMORY℠ facilities and the equipment to bring personalized music to 1,500 residents. The University of Wisconsin-Eau Claire is conducting an evaluation to assess the effect the Music and Memory program has on staff retention, working environment and job satisfaction. Phase II was funded through a grant from CMS.

3. Student Volunteer Program
The Student Volunteer Program launched in the fall of 2015 and includes 62 nursing homes certified as MUSIC & MEMORY℠ facilities and the equipment to bring personalized music to over 500 residents. The final phase of the program will include collaboration with up to 50 nursing homes and 50 high schools or colleges, bringing an intergenerational approach to the implementation. An evaluation conducted by the national MUSIC & MEMORY℠ organization will assess the impact of this intervention on residents and students. The Student Volunteer Program was funded through a grant from CMS.

4. Antipsychotic Medication Reduction Pilot
Six nursing homes currently in the Wisconsin Music & Memory Program were selected because antipsychotic medication use in their facility was over 25% during the last three quarters. The previous Music & Memory initiatives gave a limited number of devices to get their program started. This pilot looks at what happens with the reduction of antipsychotic medications if all residents with dementia who are receiving an antipsychotic medication have access to personalized music. Each of the six nursing homes will receive iPods, headphones, and adapters so all residents on antipsychotic medications have access to personalized music. In addition, each facility will receive a $150 iTunes gift card. The national MUSIC & MEMORY℠ organization is donating the equipment and iTunes gift cards for these 83 additional residents. The Division of Quality Assurance pharmacist consultant will be monitoring the National Partnership Antipsychotic Medication quarterly data and will track the progress of these six facilities over a nine-month period. The pilot begins April 2016.

Community Projects

1. Administration for Community Living (ACL) Alzheimer’s Disease Initiative: Specialized Supportive Services Grant
   Behavior Management Training/Consultation for Family Caregivers
Contract with the Alzheimer’s Association of Greater Wisconsin to pilot implementation of Music and Memory in the home, with a focus on tribal communities.

This pilot project will be administered by the Alzheimer’s Association Greater Wisconsin Chapter in collaboration with the national MUSIC & MEMORY℠ program and Wisconsin Music & Memory Program. The pilot will enable 50 tribal members with dementia to obtain an iPod, headphone, portable speaker, charger, and an iTunes gift card. Participants will receive initial screening to confirm memory loss and eligibility. A music assessment will be conducted with the person and caregiver. Subsequent interactions will be used to deliver the loaded iPod and share information about community resources. Staff administering the project will become certified in the national MUSIC & MEMORY℠ Program pro bono.

Goals:
- Bring personalized music to tribal members with dementia living at home
- Connect people to the array of programs within their community
- Decrease agitation and improve communication and pleasure for the person with dementia
- Decrease the use of antipsychotic medication for the person with dementia
- Decrease caregiver burden
2. **Helen Bader Foundation Grant**  
*Fox Valley Memory Project in collaboration with the national MUSIC & MEMORY<sup>SM</sup> program and Wisconsin Music & Memory Program.*

This pilot would serve 25 people with dementia to obtain an iPod, headphone, portable speaker, charger, and an iTunes gift card. The participant would receive initial screening to confirm the participant’s memory loss and eligibility. A music assessment would be conducted with the person and care partner. Subsequent visits would be used to pick up the loaded iPod and share information about community programs, the memory clinics, and other services for when participants come in to the Memory Loss Resource Center (MLRC). Staff administering the project would become certified in the national MUSIC & MEMORY<sup>SM</sup> program pro bono.

There would be an evaluation component to this project conducted by Susan McFadden, Ph.D., professor emeritus from the UW-Oshkosh, with one graduate student.

**Goals:**
- Bring the benefit of personalized music to persons living in their homes
- Connect people to the vast array of programs in this “Dementia Friendly Community”
- Evaluate the effectiveness and spread to other communities

3. **UW-Eau Claire Faculty/Student Research Collaboration Grants Program**  
*“Music + Memories = Magic”*

This pilot is to determine the effectiveness of providing personalized music to older adults suffering from dementia in their homes in the Eau Claire region of the state. The pilot will study 25 participants. The MUSIC & MEMORY<sup>SM</sup> non-profit organization has established programs in hundreds of nursing homes in the United States and Canada, including over 250 in Wisconsin. The pilot will test the early success of this treatment approach by moving it into the community where 70-80% of persons with dementia and Alzheimer’s disease are cared for primarily by family members.

Modeling after the Toronto iPod project, the study is at a small pilot (n=25) for people with dementia living in their own homes with a care partner. The Eau Claire Aging and Disability Resource Center (ADRC) has a dementia specialist who will recruit and identify possible participants, with the Division of Long Term Care supplying financial and technical support. The national MUSIC & MEMORY<sup>SM</sup> Program will provide the training pro bono to students who develop the personal playlists and implement the program.

The goals of the project are:
- Bring the benefit of personalized music to persons with dementia living in their homes
- Increase dementia screenings
- Connect people to the vast array of programs and resources in this “Dementia Friendly Community”
- Evaluate the effectiveness of the project and disseminate to other communities

4. **Wisconsin Assisted Living Association (WALA) MUSIC & MEMORY<sup>SM</sup> for Assisted Living**

DHS staff has collaborated with WALA and the national MUSIC & MEMORY<sup>SM</sup> organization to bring personalized music to assisted living. WALA launched the WALA MUSIC & MEMORY<sup>SM</sup> (M & M) project at the closing keynote at the WALA Annual Spring Conference in March 2015. WALA has created a dedicated fund to help kick-start Phase 1 and wishes to grow the fund to expand into as many assisted living communities as possible.

WALA requested support for the many speakers at the conference from their VIP sponsors to help grow the fund.
- 50% of all contributions sent to WALA will be dedicated to provide seed money for the WALA M&M Fund
- 50% will support the other conference speakers and other expenses

5. **M3 Insurance – Music & Memory Pilot in Assisted Living Communities**  
DHS staff has collaborated with M3 Insurance and the national MUSIC & MEMORY℠ organization to bring personalized music to assisted living. M3 funded six of their clients to receive the MUSIC & MEMORY℠ training and certification through a lottery as a pilot. The program has been so successful that they have expanded to seven additional communities and hope to expand to more communities over the next year. They will fund them to be certified through MUSIC & MEMORY℠ and then also provide the equipment and iTunes gift card.

6. **Neil E. Park Family Foundation**  
DHS staff has collaborated with the Neil E. Park Foundation and the national MUSIC & MEMORY℠ organization to bring personalized music to assisted living communities that are part of the Wisconsin Coalition for Collaborative Excellence in Assisted Living (WCCEAL). This pilot would serve six assisted living communities for six residents in each facility (N=36) with dementia to obtain an iPod, headphone, portable speaker, charger, and an iTunes gift card. In addition to the use of iPods, iPads will be introduced and evaluated in each of the six assisted living facilities. The wide breadth of software, applications, and internet access means that any resident's interests or hobbies can be easily tailored to, resulting in an increase in meaningful, pleasurable activities for the resident. YouTube, entertainment, family photographs, games, Alzheimer's applications, music videos, and Skype, for example, help reduce resident boredom and isolation while enabling greater independence, productivity, connection, and socialization. Eligible communities will primarily serve residents with dementia, have five to 15 licensed beds, and be WCCEAL members in good standing. WCCEAL is an innovative collaborative including the Wisconsin Department of Health Services, the state Ombudsman Program, the four assisted living provider associations, and the Center for Health Systems Research and Analysis (CHSRA). Two facilities would be selected from each of the Wisconsin Assisted Living Associations (LeadingAge Wisconsin, Wisconsin Assisted Living Association, and Wisconsin Center for Assisted Living). The evaluation conducted by CHSRA will provide a broader understanding of the effectiveness of the intervention in mitigating negative outcomes associated with dementia and help support expansion into other assisted living facilities.

7. **Clark Street Community School, Middleton Pilot**  
DHS staff developed a pilot with staff at the Clark Street Community School for a three-week term in May and June of 2015. The goal of the pilot is to provide students with information and resources on dementia and to offer opportunities for community engagement and career exploration. A general outline of the pilot is:

- Pre and post survey determining knowledge of dementia, biases of aging, and career aspirations
- Instruction from the dementia curriculum developed by DHS and the Department of Public Instruction (DPI) (Kris Felten)
- Viewing of the documentary *Alive INSIDE*
- Overview of the Wisconsin Music & Memory Program
- Visit with residents participating in the Wisconsin Music & Memory Program and tour of Oakwood Village
- Interview and develop a playlist for parent/guardian
- Visits with various departments within the Wisconsin Alzheimer's Institute
- Interview a dementia friendly business in Middleton
- Visit a Memory Café meeting at Captain Bill’s in Middleton
• Students demonstrate what they have learned by creating a piece of artwork, presentation, etc., which will be highlighted on the DHS dementia website

This successful three-week term expanded into a full 15-week term in the fall of 2015. The full term incorporated a community service project where the students volunteered at a local Wisconsin Music & Memory-certified nursing home, developing playlists for residents and running an iPod/shuffle community/school drive to expand the program. The students took what they learned about dementia and adapted the information for elementary school children, “teaching” classes at the local elementary schools.

This pilot became the template for other schools across the state to partner with their local nursing homes to create an intergenerational service project as part of the Student Volunteer Program expansion.

8. Aging and Disability Resource Centers (ADRCs)
DHS staff has collaborated with ADRCs and the national MUSIC & MEMORY℠ organization to bring personalized music to caregivers and their loved ones who are living in their own homes.

These pilots would serve people with dementia to obtain an iPod, headphone, portable speaker, charger, and an iTunes gift card. The participant would receive initial screening to confirm the participant’s memory loss and eligibility. A music assessment would be conducted with the person and care partner. Subsequent visits would be used to pick up the loaded iPod and share information about community programs, the memory clinics, and other services. Staff administering the project would become certified in the national MUSIC & MEMORY℠ program at a discounted rate.

9. County Aging Units
DHS staff has collaborated with county aging units and the national MUSIC & MEMORY℠ organization to bring personalized music to caregivers and their loved ones who are living in their own homes.

These pilots would serve people with dementia to obtain an iPod, headphone, portable speaker, charger, and an iTunes gift card. A music assessment would be conducted with the person and care partner. Subsequent visits would be used to pick up the loaded iPod and share information about community programs, the memory clinics, and other services. Staff administering the project would become certified in the national MUSIC & MEMORY℠ program at a discounted rate.

Potential Impact

Many of the people benefiting from MUSIC & MEMORY℠ in Wisconsin nursing homes, assisted living, other care facilities, and the community are Medicaid recipients or may become Medicaid-eligible in the future. At this time, we cannot put a reliable number on the cost savings to the Medicaid program with the implementation of MUSIC & MEMORY℠, but we will have a better understanding after the 10 evaluations conducted by the four Wisconsin academic institutions, the Department, and MUSIC & MEMORY℠ organizations are completed. Preliminary information and stories we are hearing and seeing in the news are indicating the following:
Nursing Homes and Assisted Living:
- Improved quality of life for the person with dementia
- Reduction of antipsychotic and antianxiety medications*
- Reduction in pain medications
- Reduction in falls due to the reduction in antipsychotic medications
- Reduction in bed and chair alarms
- Increased staff retention due to improved morale and decrease burden
- Decreased staffing costs due to decrease in behaviors, medications, alarms, etc.
- Increased family engagement
- Decreased in regulatory noncompliance in the area of responding to resident behaviors
- Decreased workman’s compensation due to decrease in behaviors
- Decreased liability due to decrease in behaviors
- Increased census and financial stability due to all of the above

In the Community:
- Improved quality of life for the person with dementia
- Reduction of antipsychotic and antianxiety medications
- Reduction in pain medications
- Reduction in falls due to the reduction in antipsychotic medications
- Decreased caregiver stress
- Increased family engagement
- Delay in admission to a long-term care facility
- Delay in enrollment into public long-term care funding program (Medicaid)

*https://www.nhqualitycampaign.org/dementiaCare.aspx

National Reach

The success of the Wisconsin Music & Memory program has led to other states inquiring about how Wisconsin has accomplished and implemented their program. In addition, when MUSIC & MEMORY™ is covered nationally, many times Wisconsin is highlighted as a successful model. So far, DHS staff has collaborated with the following states: Alabama, California, Connecticut, Colorado, Delaware, Illinois, Indiana, Louisiana, Maryland, Minnesota, Nevada, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Texas, Utah, Vermont, Washington, and West Virginia. DHS staff has also collaborated with Canada, Australia, and Holland.