

Meaningful Music





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Meaningful Music© (MM)

While researchers continue to work to find ways to prevent and treat dementia, caregivers are in constant search for new techniques, tools, and resources to assist them with managing the symptoms and distress associated with the condition.

Music has been used for years as a therapeutic tool for many individuals. Music has the ability to change our moods, lift our spirits, and even lower our blood pressure. Music has also been proven to increase our IQ, verbal skills, and assist stroke victims to regain vision. It was not until recently that researchers discovered that music can also be therapeutic for those living with dementia. Based on current research, music not only has relaxing and entertaining effects on those living with dementia, it also has restorative and therapeutic effects as well.

Long term care facilities have used music for years as a source of entertainment and activity for their residents. Now we know that if music is incorporated into a resident's life in a meaningful way residents with dementia could benefit from the therapeutic effects of music as well.

The Meaningful Music© (MM) program was designed to further enhance the well-being of those living with dementia and other chronic illnesses in long term care. The purpose of the program is to incorporate music into the lives of residents in a meaningful way to bring both relaxing and restorative benefits. The program does not have the ability to cure or reverse the disease state. It is only intended to provide a potential positive response that could enhance the overall well-being of residents.

The MM program was built on the foundation of the Well-Being Model© (WBM) of care for those living with dementia. The WBM helps caregivers to understand that each individual living with dementia can still achieve a sense of well-being. This can only be done by treating each person as a unique individual and by learning to understand and interpret their moods and any distress. This is accomplished through a proactive, person-centered, strength-based approach.

Based on the WBM, activities such as music should never be used as a quick fix or as the sole intervention for someone with dementia. To gain the most benefit from music, music should be added to the resident's plan of care to optimize their well-being. This is accomplished by using the same proactive, person-centered, strength-based approach as the WBM.

The MM program also uses a resident-directed approach when possible.

What is resident-directed?

Resident-directed means that the resident leads the development of their care plan and makes active choices based on his or her individual preferences. This is determined by the ability of the resident to participate in this activity. The staff listens to the preferences of the resident and allows the resident to direct the plan of care under supervision from the staff to ensure safety.

In a person-directed music care plan, the resident may verbally make all the choices; what type of music to listen to, when and where they listen to music, if they are alone or in a group, or if they want headphones or speakers. In other cases, the staff may have to take cues and clues from the patient as to the type and timing of the music. This can be accomplished by monitoring the response of the resident. It is important that the response to music is communicated to the team and family when appropriate.

The staff will learn to monitor and evaluate the effects of the music and then use that information to further enhance future experiences.

How is the program proactive?

The program is intended to be used to enhance the well-being of the resident and not solely as a “rescue intervention” during a time of “behaviors” or distress.

Proactive is the opposite of reactive. Other music programs are more reactive. In a reactive approach, staff will attempt to use music when there is a moment of distress or a problem “behavior” in hopes of alleviating the distress. Sometimes this is effective, but using music this way limits the potential benefits that music could have on the resident. Using music in a proactive manner means integrating it into the resident’s routine so that it enhances his or her well-being in hopes of preventing distress or difficult behaviors.

How is the program person-centered?

Person-centered means that the music plan is resident-directed and has been carefully developed with the resident’s preferences in mind.

In addition to the resident’s preferences, the plan includes their mood, preexisting health conditions, and physical and cognitive abilities.

The staff will learn to incorporate information from the resident’s IPAGE, a tool within the WBM, to develop a musical experience that is personalized to meet his or her needs.

How is the program strength-based?

A strength-based approach means that the staff will focus on what the resident can do versus what they can no longer do. With this approach, the staff will work with the resident on developing a plan that allows the resident to actively participate as much as possible.

This approach may include instruments, dancing, singing, tapping a toe or clapping as a part of the plan.

Benefits of Music

The benefits of music have been studied for years. Music has been proven to have a positive effect on individuals’ health and well-being. Recent research on the effects of music on those living with dementia have demonstrated several positive effects (“10 Magical Effects,” 2017) (“Music, Rhythm, and the Brain,” 2017). Each individual is unique and may not experience all of the benefits, but the overall effect is considered therapeutic when used correctly.

It is believed that the receptive and expressive musical abilities are preserved in individuals with Alzheimer’s dementia long after their ability to process and express verbal language (Crystal, Grober, and Mauser 1989). In addition, one’s recent memory is usually lost whereas the remote memory stays intact longer. Therefore, it is theorized that carefully selected music can stimulate the remote memory eliciting positive emotions and feelings. Music also has the ability to change the focus of the resident’s attention to override any negative stimuli in the environment or feelings of discomfort.

Research demonstrates potential benefits to:

- Improve memory recall
- Produce positive changes in mood and emotional status
- Provide a nonpharmacological approach to management of pain and discomfort
- Lead to stimulation that promotes interest
- Promote rhythmic continuous movement and vocal fluency
- Increase opportunities to interact socially with others
- Promote improved coordination and motor function
- Increase the release of “feel good chemicals” (melatonin, serotonin, norepinephrine, epinephrine and prolactin)

How does it work – Brain Function

Several areas of the brain are activated when listening to music. Even more areas of the brain are stimulated when playing or performing music (“Music, Rhythm, and the Brain,” 2017).

Listening to music begins with the auditory nerves of the brain. As the sensation moves through the nerves it connects to other areas of the brain. As the individual listens to music and begins to recall the lyrics the temporal and frontal lobes are activated. If an individual is performing music (playing an instrument) they activate the areas of the brain responsible for planning and their motor and sensory cortex. Playing an instrument requires the coordination of motor and sensory touch and auditory control.

At a deeper level, music stimulates activities of the amygdala and brain stem. The amygdala regulates emotion and emotional responses. The brain stem is the control center for vital functions such as breathing, heart rate, blood pressure, and even digestion. Music has shown to improve function in these areas (Brain Structure and Their Functions, 2017).

The cerebrum or cortex is the largest part of the human brain. The cerebral cortex is divided into four lobes.

1. **Frontal lobe** – Carries out higher mental functioning like problem solving skills, decision making, judgment, reasoning, ability to multi-task, planning, attention, emotional expression, and sexual behavior. This is what many refer to as our filter. The frontal lobe is also responsible for being able to speak fluently and meaningfully.
2. **Temporal lobes** – Right and left associated with perception and recognition of auditory stimuli, memory and speech. Each temporal lobe contains the auditory complex.
 - a. Auditory complex – analyzes the information from music such as volume, pitch, speed, melody, and rhythm.
 - b. Left temporal lobe – responsible for language, articulation, and comprehension. It is often referred to as your vocabulary bank. The left is usually the first of the two lobes to be affected in Alzheimer’s dementia. When the left lobe becomes impaired, individuals start relying more on the right temporal lobe.
 - c. Right temporal lobe – where we store speech of rhymes and rhythm. Also speech of idle chit chat, slang, and curse words.

3. **Occipital lobe** – associated with visual processing. This lobe helps us to name an object after we have seen a picture or subject.
4. **Parietal lobe** – movement, orientation, recognition, and perception of stimuli.

Motor cortex – responsible for movement which is necessary for playing an instrument.

Cerebellum – the cerebellum is associated with regulation and coordination of movement, posture and balance. Tapping and clapping along with music stimulates your cerebellum.

Limbic system – is often referred to as the emotional brain. It is located beneath the cerebrum. It contains the thalamus, hypothalamus, amygdala, and the hippocampus. Music stimulates the limbic system. The limbic system is responsible for emotions, memory, stimulation, and rhythm and tonality processing.

Amygdala – controls the way we respond to stimuli or an event that causes an emotion that we perceive as potentially threatening or dangerous. It is often referred to as our fight or flight system. Music stimulates the auditory nerve, which is connected to the amygdala. When the auditory nerve is stimulated arousal occurs. At that time, an individual is either startled or pays attention. This part of the brain is normally inhibited when listening to music.

Hippocampus – responsible for learning and memory. It is responsible for converting short-term memories into long-term or permanent memory and for recalling spatial relationships in the world around us. It is usually the first part of the brain affected in Alzheimer's dementia.

Brain stem – located underneath the limbic system. It is responsible for basic vital life functions such as breathing, heart beat, and blood pressure. Listening to music has been proven to lower heart rate and blood pressure, and aid in digestion.

How music boosts the brain activity of those living with dementia

Recent research shows that individuals with dementia and Alzheimer's can benefit from the effect music has directly on their brains. A recent study shows how music can boost the brain activity ("5 Reasons Why Music," 2014).

1. Music stimulates emotions that bring memories
2. Musical aptitude and appreciation are still present and stimulated
3. Music can lead to emotional and physical closeness
4. Singing stimulates both right and left sides of the brain
5. Music can change a mood thus help manage anxiety and reduce agitation

Benefits of singing

Singing offers many benefits for individuals with dementia. Singing offers benefits by acting as a catalyst for biochemical and neurological change (Reid, 2017).

1. Full brain workout
2. Stimulates neurochemical release
3. Provides respiratory benefits

4. Builds up immunity
5. Increases socialization opportunities.

A key pointer for singing is for the staff to remember that it is often necessary for the staff to start the song, so that the resident can hear and potentially remember the rhythm. They are more likely to join in singing than start a song.

There are many structured singing programs and resources such as Alzheimer Scotland, Dementia Choir, and SingFit™.

Clinical benefits of SingFit™ PRIME's Active Program demonstrated a 43% average mood elevation, increased socialization and improved speech and a 40% reduction in anti-anxiety medications, reduced wandering and reduced agitation (www.singfit.com/white-paper).

Choosing the type of music program

1. Singing (active) – there are many benefits of singing music. Remember, staff may have to get the song or rhythm started for the resident and then he or she is more likely to join in.
2. Dancing (active)
3. Listening to music (passive)
4. Playing instruments (active) – some may still have the ability to play an instrument like the guitar or piano. Some may even find enjoyment in holding, touching, or seeing a familiar instrument. Drums are a good source of rhythm, easy to use and bring enjoyment. Drums can produce active participation and movement. A tambourine and maracas are other good examples of easy-to-use instruments.
5. Group settings
6. Individual experiences
7. Background Music – i.e. Mood Media

When choosing the style or type of music

1. Choose music from the resident's formative years, teens to mid 20's.
2. Use the IPAGE to personalize a music plan (Appendix A).
(Ask resident and family to become involved with the developing of the plan.)
3. Use Meaningful Music personal assessment tool (Appendix B and Appendix C).
4. Use soft music to assist with relaxing (useful during times of anxiety or stress, pain or discomfort, and during meal times).
5. Consider upbeat songs for stimulation or during times of performing activities of daily living.
6. Consider fast music to encourage movement.
7. Consider gentle music to calm agitation and refocus negative behaviors.

When to use music

A proactive approach is best practice. However, there will be times that music can assist with acute issues, such as anxiety or pain.

1. Before anticipated anxiety or stress or during times of anxiety or stress
2. Before anticipated pain or discomfort or during times of pain or discomfort
3. When preparing for or during therapy sessions and exercise classes (to promote movement, balance, and coordination)
4. Meal times
5. Social gatherings (not always helpful, may be overstimulating)
6. Alone for relaxing or entertainment purposes
7. To bring joy

Music alone or in a group setting

Not all residents will benefit from music. Each resident's preferences should be considered and then each resident should be monitored for their response to music. The staff should learn from past experiences and take note of the details (i.e. what was the response, was the resident in a group setting, what was the time of day, and level of stimulation).

Music may lead to over stimulation in some situations. This can happen if there are other activities happening in the resident's environment and he or she becomes distracted. This may lead to the brain having difficulty processing all of the stimuli, which leads to a negative response to the music.

When using headphones for the first time the staff should consider starting this activity in a quiet, calm environment and staying with the resident to monitor the response. Residents with end stage dementia may benefit most from using music in this type of way. The staff will have to determine this.

What to do after the music experience

One of the key domains of well-being is connectedness. This means engaging with the resident. Residents feel valued when people (staff and family) take time to have conversations with them. Many times when residents begin to lose their ability to use words the staff will forget to talk to residents thinking they can no longer understand.

Research has shown a residual effect after music is over. Sometimes nonverbal residents will be stimulated enough to speak a few words or to hold their heads up and engage with staff. It is important that the staff not just remove the headphone and move on to their next task, but to pause and engage the resident. This can be easily done by asking the resident if they enjoyed the music and how it made them feel. Staff should take time to see if there are any basic needs to be met (thirsty, hungry, need to toilet, etc.).

How to implement music therapeutically

1. Staff should use the proactive approach as the gold standard.
2. Involve the resident and family as much as possible (patient-directed).
3. Use the resident IPAGE to gain insight into resident's history and preferences.

4. Observe and document the resident's responses to music.
5. Remain flexible, willing to adjust and modify the use of music as needed. Be cautious of not becoming too routine or rigid.
6. Always be mindful of the resident's changing condition and functional status.

How to create an individual music experience

Many times music will be enjoyed in a group setting. At other times music should be experienced on an individual basis. Enjoying music is a personal experience. Music can elicit different emotions from different people. What may bring comfort to one, may cause sadness in others.

Developing a list of music or songs that is personalized optimizes the therapeutic effect of music. There are several ways to accomplish this for an individual by:

1. Gathering old records and playing them in the resident's room on a record player
2. Finding a radio station that plays the genre of music the resident likes
3. Finding a station on the television that plays the genre of music the resident likes
4. Developing a playlist of music individualized for the resident and playing it on a device like an iPad, iPod or some other form of an electronic tablet

How to download music and create a playlist

There are a few options for purchasing music and downloading it onto a device. The first option is through Apple's iTunes. Here, an account is created in iTunes and music is purchased and downloaded (saved) onto a device. iTunes has very specific Terms and Conditions as to how this is done. It is very important that you read and understand the Terms and Conditions before establishing an account.

The second option is using a service called Spotify. Here, an account is established and music can be downloaded and purchased for a monthly fee. They do offer a family account that allows up to 6 users on one account. Spotify also has very specific Terms and Conditions for the use of their product. Read and understand the Terms and Conditions before you begin.

You should choose the program or service that works best for your music program. However, it is very important that you understand and comply with the Terms and Conditions set forth by each company.

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How to download music

See Appendix D

When to use headphones

You may choose to use headphones for some residents. Using headphones can be very therapeutic. Headphones help remove the distractions of background noises, the closeness of the music makes it a more intimate personal experience and helps those with hearing impairments hear the music more clearly. Headphones have proven more effective and comfortable for older adults than using ear buds.

The Alive Inside™ program provides a set of headphones and a SIM card to download music onto for a one-time fee. These can be purchased from the Alive Inside™ website. They also provide examples of playlists that may assist you in developing your own playlist for an individual.

How to select equipment

Having devices for downloaded music can be expensive. There are several ways to accumulate enough devices for the residents who would benefit the most from having a personal device.

The first option could be to ask the family to purchase a device for their loved one. There are devices available that are reasonably priced. Examples include tablets, iPods and iPod Shuffles. You can offer the family your assistance after they purchase the device to help them develop a playlist and download music to the device.

Another option is contacting community service organizations that might want to donate devices for the music program. Churches have been known to collect old devices to give to facilities.

You will find that there are many groups that would enjoy being a part of a meaningful program that produces such positive effects. You could start an “Adopt a Grandparent Program.” In this program, teens could buy a device and work with the resident and staff to develop a playlist. The teen could visit the resident and they could enjoy music together. The teen could learn from the resident by asking questions about the music they have chosen. This causes the resident to be engaged, reminisce, and experience the benefits from the music.

How to monitor and evaluate the effectiveness of music

Each resident exposed to music, whether it is in a group setting or alone, should be monitored for their response to the stimulus. If the individual is responding well and appears to be enjoying the music (singing, clapping, tapping their toes, dancing, smiling) this is a win and should be shared so we can learn from the experience. If the resident does not seem to be responding (flat effect, no movement) consider changing the setting, type of music, or the time of the experience. If the music seems to be overstimulating for the resident then staff should monitor and adjust.

The facility may choose to monitor the effect of music on behaviors to use as part of their quality improvement process.

Final thoughts

To gain the most benefit from music it should be a meaningful experience for the individual. Using a proactive, person-centered, strength-based approach will guide you in developing a successful Meaningful Music© program.

RESIDENT I-PAGE

(Identity-Page)

- What name do you prefer to be called? _____
- Are you/have you been married? _____
- Do you have children/grandchildren/great-grandchildren? _____
- What type of relationship do you have with your family? _____
- Do you consider yourself spiritual or religious? _____
- What is important to you? _____
- What are you most successful at? _____
- What were you known for? _____
- What's your favorite food? _____
- What are your hobbies? _____
- Do you enjoy the outdoors? _____
- What type of music do you enjoy? _____
- Do you enjoy arts or crafts? _____
- Do you enjoy traveling? _____
- Do you like animals? _____
- What makes you happy? _____
- What makes you sad? _____
- Do you enjoy visiting with others? _____
- Do you enjoy playing games? _____
- Do you like dancing? _____
- Do you enjoy reading books? _____
- Are you a sports fan? _____
- What's your favorite holiday? _____
- What are your routines at home? In nursing home? _____
- Is there anything else special I need to know about you? _____

(Based on domains of well-being by Dr. Allen Power)

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APPENDIX B

Assessment of Personal Music Preference

Please complete the questionnaire based on your music preferences.

Before illness, how important a role did music play in your life?

_____ 1. Very Important

_____ 2. Moderately Important

_____ 3. Slightly Important

_____ 4. Not Important

Do/did you play a musical instrument?

If yes, please specify (example: piano, guitar).

Do/did you enjoy singing?

If yes, please specify (examples: around the house, church choir).

Do/did you enjoy dancing?

If yes, please specify (examples: attended dance lessons, participated in dance contests)

The following is a list of different types of music. Please indicate your three (3) most favorite types with 1 being the most favorite, 2 the next, and 3 the third favorite.

_____ 1. Country Western

_____ 2. Classical

_____ 3. Spiritual/Religious

_____ 4. Big Band/Swing

_____ 5. Folk

_____ 6. Blues

_____ 7. Jazz

_____ 8. Rock and Roll

_____ 9. Easy Listening

_____ 10. Cultural or Ethnic Specific (Examples: Czech polkas, Ravi Shankar Indian sitar)

_____ 11. Other _____

Please put a check (✓) beside the most correct choice to the following questions.

What form does your favorite music take?

_____ 1. Vocal

_____ 2. Instrumental

_____ 3. Both

Please identify specific songs/selections that make you feel happy.

Please identify specific artist(s)/performer(s) that you enjoy listening to the most.

Please identify specific albums, audio cassettes, or compact discs contained in your personal music library.

APPENDIX C

Assessment of Personal Music Preference

Please complete the questionnaire based on your knowledge of your family member's music preference.

Before illness, how important a role did music play in his/her life?

_____ 1. Very Important

_____ 2. Moderately Important

_____ 3. Slightly Important

_____ 4. Not Important

Does/did he/she play a musical instrument?

If yes, please specify (example: piano, guitar).

Does/did he/she enjoy singing?

If yes, please specify (examples: around the house, church choir).

Does/did he/she enjoy dancing?

If yes, please specify (examples: attended dance lessons, participated in dance contests)

The following is a list of different types of music. Please indicate the individual's three (3) most favorite types with 1 being the most favorite, 2 the next, and 3 the third favorite.

_____ 1. Country Western

_____ 2. Classical

_____ 3. Spiritual/Religious

_____ 4. Big Band/Swing

_____ 5. Folk

_____ 6. Blues

_____ 7. Jazz

_____ 8. Rock and Roll

_____ 9. Easy Listening

_____ 10. Cultural or Ethnic Specific (Examples: Czech polkas, Ravi Shankar Indian sitar)

_____ 11. Other _____

Please put a check (✓) beside the most correct choice to the following questions.

What form does the individual's favorite music take?

_____ 1. Vocal

_____ 2. Instrumental

_____ 3. Both

Please identify specific songs/selections that make your family member feel happy.

Please identify specific artist(s)/performer(s) that the individual enjoyed/enjoys listening to the most.

Please identify specific albums, audio cassettes, or compact discs contained in your family member's personal music library.

APPENDIX D

How to Download iTunes and create an iTunes account

1. On your computer, use a web browser and type in the search bar www.apple.com/itunes/download. Click on the rectangular blue button towards the bottom of the screen labeled “Download Now”.
2. Click on the file that says “iTunesSetup.exe” and hit “Run.”
3. After it completes the downloading process, click on the “iTunes” Icon.
4. Once the window opens, click “Sign In” (it is a small button next to the search bar). Another log-in window should pop up.
5. Click “Create Apple ID” in the bottom left of the pop-up window.
6. After you finish creating your account, you can then search whatever song you would like to download in the search bar at the top right corner of the screen.
7. When the song of your choice pops up on the screen, you click the price and then it will download to your music library.

How to Set Up Apple Music on iTunes

1. Open iTunes.
2. If you do not immediately see a splash screen that welcomes you to Apple Music, click the For You tab along the top of the app.
3. Select “Join Apple Music” to begin the registration process.
4. Choose a membership plan: either the \$9.99/month individual plan, or the \$14.99 family plan, which supports up to six members of your family. (You will not be charged until your three-month trial ends.)
5. Once you have signed up, you can type in any song you would like. When you find the desired song, press the “+” sign beside the song and it will download to your music library.

How to Set Up Spotify

1. Go to the app store on your phone, and type “Spotify” in the search bar. Download the application onto your device.
2. Open the app and you will have two options: 1.) either get Spotify for free, or 2.) get Spotify Premium (\$9.99 per month).
3. Next, you will fill out the account information and registration is complete.

How to Download Music on Spotify

1. On the bottom of the screen in the middle you will find a search button. Tap on the button, and at the top of the screen there will be a search bar.
2. Type whatever song you wish to download in the search bar.
3. After you type the song selection in the search bar, scroll to the bottom of the page and you will see all of the songs that come up under that listing.
4. Tap the three dots to the right of the song selection you would like, hit save, and it will download to your Spotify music library.

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