BETA TEST REPORT
August 2015
BETA Test – FINAL REPORT

Background
Pathways is a singing program that enhances the quality of life and care for people living with dementia. Each Pathways collection is based on a theme and includes thirty-minute video episodes with sessions led by a singing host. Participants are invited into a singing experience that is non-threatening, warm and respectful. Each episode includes activities and an audio CD of songs that extend the usefulness of the singing session. Pathways is a turnkey music care resource that can be facilitated by singers or non-singers and is supported by online training tutorials. Pathways may be used in various settings like long term care, retirement homes, complex continuing care, hospitals, day programs, dementia support groups, hospices, and private homes. A team of music care experts has designed the program with input from consultants representing long term care, recreation therapists, the Alzheimer Society, music therapists, caregivers and music educators, using an evidence-based and collaborative approach.

A pilot study was conducted in 2011 by Dr. Amy Clements-Cortes, University of Windsor and the Room 217 Foundation in 15 LTC facilities across Canada showing positive outcomes of the Pathways design. In 2013, three focus groups of more than 30 dementia care experts, family caregivers, community stakeholders and people living with dementia were conducted in Durham Region, Toronto and Waterloo, Ontario. Presentation of content from the pilot as well as an implementation strategy was discussed. Feedback from these groups was overwhelmingly positive and provided helpful advice for program development and implementation. In 2014, 10 music and activity experts, most in dementia care, gathered to work through the values, categories and activities in the activities booklet. Activity ideas were gathered through a variety of creative methods.

In 2015, the Pathways Singing Program was BETA tested in 30 dementia care facilities or programs in Ontario with excellent results. The results of the BETA test are published in this report.

The BETA test was funded by supporters of the Room 217 Foundation.

The Pathways Program Components
The Pathways Singing Program is comprised of three components: video series of 13 30-minute episodes; activity booklets with 325 accompanying activation ideas; online training – Pathways basic training comprised of 6 short tutorials. Each program component has been produced based on values found in clinical practice, research, musical experience and artistry.

The aim of the video series is to provide an expert-led resource that can be used repeatedly by care providers who may not be confident in leading music sessions and in particular singing programs, on their own. The video series is hosted by Briar Boake, an experienced singer, actor, and yoga instructor in long term care.

Each episode uses 5 well-known songs that support the theme of the episode. The singing host invites participants to join her accompanied by the musical track. An audio CD of episode songs is
included separately in the program, as they may accompany various Pathways activities, or they may be used for other non-Pathways related activities i.e. dancing, background music etc.

The video series is comprised of 13 episodes in three DVD collections as follows:

<table>
<thead>
<tr>
<th>Collection</th>
<th>Episode</th>
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<tbody>
<tr>
<td>Journeys</td>
<td>United Kingdom</td>
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<td></td>
<td>North America</td>
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<td></td>
<td>Europe</td>
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<td></td>
<td>Caribbean</td>
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<td></td>
<td>French Canada - in French</td>
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<tr>
<td>Inspirations</td>
<td>Hymns &amp; Spirituals</td>
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<td></td>
<td>Beauty of the World</td>
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<td>Uplifting</td>
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<td>Love</td>
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<td>Seasons</td>
<td>Spring</td>
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<td>Fall</td>
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<td>Winter</td>
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Activity booklets enhance the singing experience by extending the song themes into stimulating activities. The activities have been designed to reach into all human domains, including physical, emotional, cognitive, social, and spiritual dimensions as defined by Room 217’s philosophy of whole person care. The activities provide internal and external triggers to encourage reconnecting neural pathways by association and/or possibly forming new ones. Some activity ideas are based on universal themes like love or hope. Some activities have been derived from the lyrics of the songs.

Activities can be modified or extended. While the activity booklet gives 325 unique activity ideas, activities need to be appropriate for participants. Modifications can be made according to cultural context, cognitive abilities, gender, age, mobility etc. Extensions can be made based on interest, integration, and responsiveness. Suggestions for materials needed, as well as preparation time, have been made.

The types of activities used in Pathways have been organized into 13 categories, with each category stimulating a specific area. This will assist in outcome-based and person-centred activation planning, and reporting. The categories include arts and crafts, costumes, food, nature, discussion, reminiscence, music-making, games, videos, auditory, vocational, sensory, and movement.

While Pathways is a dynamic, flexible resource that is adaptable to a variety of contexts, optimizing the benefits of Pathways involves preparation and planning. Pathways tutorials provide
guidance and tips to help do this. They enhance understanding on how to use the program, expand ideas for optimization and provide content about music in memory care. Tutorials include:

1. **Understanding Dementia** – Recognize the signs
2. **Why Singing Works in Memory Care** – What’s the evidence?
3. **How Pathways Works Part 1: Video Series** – Guiding values and road map
5. **How Pathways Works: Part 3: Using Pathways** – Optimizing the program
6. **Strengthening Relationships through Pathways** – Stories that will inspire you!

**BETA Test methodology**

The geographical location for BETA testing was determined by Room 217’s relationship with the lead financial sponsor of Pathways, the Ontario Trillium Foundation. Room 217 agreed to run the BETA test in the catchment area where the grant was given. 30 sites in the Durham/Kawartha/Peterborough/Haliburton area were recruited to participate in the 3-month BETA test.

In order to participate in the BETA test, each facility had to agree to participate in a 3 hour training, a 30 minute webinar part way through the 3 months, a final phone interview post-test, as well as obtain any ethical approval from their facilities. In addition, each participant had to complete a reflective online survey at the end of the 3 month period.

Facilities sent 1 or 2 people to be trained, for a total of 49 individuals, and thus were designated Pathways facilitators in that site. All were given a DVD with 4 of the 13 episodes and an activity book with activities from those 4 episodes. The expectation was that Pathways would be delivered at least once a week for at least 10 weeks.

Pathways provided Room 217 with a unique opportunity to visually capture via video some portions of sessions being conducted, along with participant interviews. Upon informed consent, participants were provided with an opportunity to express their own thoughts and feelings on the Pathways program.

**Results**

Various facilities participated in the Pathways test (see Figure 1.) Within these facilities the program was delivered by a wide range of individuals from varying backgrounds, including program managers, activity aides, student interns, volunteers, and family members. Pathways reached approximately 447 unique participants.
The Pathways basic training that was offered prior to the delivery of the program was felt to adequately prepare the majority of participants (95%); the other 5% of individuals were not able to attend the training and sent other colleagues in their place.

During the delivery of Pathways the majority of our participants (56%) administered the program for 10 or more sessions. These sessions occurred most commonly either once or twice a week, with 14% of facilities offering Pathways 3 or more times a week. The duration of these sessions most frequently lasted for 1 episode and 1 activity. The favourite type of activity was discussion (35%) followed by reminiscence (29%).

Facilitators found that the specific time of day affected the delivery of the program, with early afternoon being the best time for 42% of participants. Typically these sessions included 7-15 individuals from the facility, with 32% of groups including 10-15 participants. The most popular episodes of the four beta episodes for these sessions were Spring (41%) and Europe (41%). Some of the reasoning for these favourites were that they were found to be more engaging, images were bright and interesting, music was more upbeat, and they started conversations between individuals that were reminiscing on places they had travelled to in their past.

Participant response was tracked by observation. Several responses were indicated including responsiveness to music (see Figure 2), socialization (see Figure 3), reduced behaviours (see Figure 4) and changed behaviours (see Figure 5) in participants.

Responding to external stimuli is something that is negatively affected in the later stages of dementia when individuals become withdrawn from their surroundings. Through Pathways, the most common ways of showing responsiveness were through singing, which 100% of participants engaged in, followed by feet tapping and humming, experienced by 95% of participants.
Socialization, interaction, and engagement are all influential components of a high quality of life, and often times are the first aspects of life that can be negatively affected with a diagnosis of dementia or placement into a facility. Pathways was found to increase participation and pleasure in 97% and 95% of participants, respectively.

Figure 2. Participants’ Responsiveness to Music

Figure 3. Participants’ Socialization through Pathways
Pathways had a strong influence on behavioural disturbances that are common symptoms of dementia. These behavioural issues can be a significant barrier to delivering effective care and Pathways managed to reduce agitation in 82% of participants and reduce wandering in 73%.

Did you observe any reduced behaviours in participants?

![Bar chart showing behavioural changes in participants](chart.png)

**Figure 4. Behavioural Changes in Participants**

While reducing negative behaviours, Pathways also simultaneously improved changes in facial expression, attention, verbal communication, heading turning, and eye contact. The greatest improvement was seen in facial expression (97%) and attention (97%).
Did you observe improved changes in behaviour of participants?

Figure 5. Improved Behaviours in Participants

The effects of the Pathways program were seen to go beyond the individual sessions and positively affect 75% of participants’ lives outside of the program. These changes were seen in increased humming and singing in the facilities, and overall happier moods from all that were involved.

Future Considerations

Suggestions were compiled for new themes for future Pathways programs. Some examples of the most popular were: travelling, food, holidays, nature, campfire songs, and gender specific topics. One of the main benefits of BETA testing is the ability to compile suggestions and feedback from your participants. Fortunately, Room 217 was able to address most of these suggestions prior to final production of materials. The following is a list of things to improve on. All but the first suggestion have been incorporated into the final materials. Closed captioning is being investigated for future episodes.

- Adding closed captioning to the whole DVD
- Instrumental CDs – include tracks with lyrics
- In long instrumental sections, have an increased number of images
- No blackouts between songs

Suggestions for future collections of Pathways were made including:

- Upcoming episodes with a song or two in a different language would be beneficial
- Including more relevant music for some of the younger clientele
- To have more than one singing host could be interesting, so participants feel they are singing in a group not just by themselves
- Potentially being able to use on a tablet, making it mobile or hand-held to move around
- End more episodes with an upbeat song
What BETA testers are saying about Pathways

Facilitators -

• Someone you thought couldn’t remember words is singing along
• Pathways is the whole package
• She put on the instrumental CD and one of her wanderers, a former dancer, stopped and wiggled her butt to the music
• It has been really successful for everyone from experienced activity aides accustomed to working with people with dementia, to new volunteers and students without experience. All have been able to take the program and run with it
• Cannot believe how much impact it has on individuals - it seems to bring them back to life
• I’ve never come across a program like this
• Some of the residents who are cognitively impaired and often don’t participate or are unresponsive lit up and started to sing or move their feet
• Residents were craving that kind of input (music)
• They want to do Pathways again and again and that is welcome news for an activity aide. The connections have been amazing – between residents themselves and between staff – lots of meaningful moments and connective points.
• If it wasn’t for Pathways, they may never have had the conversations.
• A lot of participation from clients AND staff. Pathways makes them laugh and smile, brings back old memories and makes new memories. It’s very positive.
• The wordless (instrumental) music is beautiful, relaxing and engaging and we can use it in other programs as well.
• Anybody can do it. If music isn’t your forte, Pathways makes you feel very comfortable.
• Every time, it’s been a success! Residents are singing, tapping their toes, engaging in conversation, clapping with Briar.
• The men get just as involved as the ladies.
• So many great ideas in the activity book.
• Singing together is different from talking together because it involves our imagination and our emotions and what we do with our bodies – tapping our feet, clapping our hands, moving.
• I love that it is ready to go. It’s animated. It’s engaging. It’s moving and not dull.
• The effect is that we feel closer. We enjoy each other’s company. It allows for natural expression of affection.
• It’s been relaxing and inviting. Briar draws you in easily and gently. It’s a sweet experience.
Participants –

- Whenever I sing, I live the words. I like all of it. I like music period. It brings back memories.
- I love it! I love the music, the people and what they say.
- I like this program. It’s entertaining. It’s good for the mind. For the brain.
- I like the pieces that I know. I love singing. I sang in quartets. Music brings me back quite quickly. I’m glad they started this.
- I feel happy.
- I like it all. I feel better. Have fun. Enjoy myself. I laugh and carry on. You know what I mean?
- I’m not a real singer, but love it with this group. Everybody is having a ball. We get up dancing and singing – it’s a nice change. It’s enjoyable.
- I like the old time songs. They take me back to when I’m 16.
- Each song brings back memories of a different boyfriend.
- I just like it, whether it’s morning, noon or night.
- I like the star (Briar). I like all the songs we sing. I like the songs from my era. It makes me feel good. I enjoy it very much. I enjoy being with the people.
- I like this with them (the children) when they come in. It’s very different.

Summary

The BETA test was valuable for a number of reasons. It gave Room 217 the opportunity to do a final test of the materials before taking Pathways to market. In this way, user suggestions and responses have been incorporated into final revisions. The stories of real users of Pathways, both facilitators and of participants, will be used to inform the tutorials as well as market Pathways. BETA results have strengthened the initial findings from the Pilot test.

Further study of Pathways is recommended. Some of the topics could include:

- The effects of a daily morning Pathways session on activities of daily living in persons living with dementia
- Testing with regard to specific behavioural changes i.e. wandering, agitation, humming
- Impact of Pathways on verbal communication in persons living with dementia