



# A Change to Wait is a Chance to Educate: Exploring Virtual Technology for the Delivery of Patient Health and Wellness Information at Mayo Clinic

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## Objective

Patients and family members who access health care services at Mayo Clinic in Arizona often travel long distances and have multiple appointments during their episodes of care. In order to maximize the time that patients have "with quality waiting time" options, a grant proposal was written and approved through the Clinical Practice Innovation Grant program at Mayo Clinic to provide educational and relaxation/stress management content utilizing virtual devices that could be used throughout the facility, away from the confines of the Patient and Health Education Library.

With the support of the Integrative Medicine Subcommittee, an interdisciplinary group was formed to work collaboratively to review and choose virtual technologies best suited for the population of patients that we serve.

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- Darin V. Goss – Operations Administrator
- Carol Ann Attwood, MLS, AHIP, MPH, RN, C – Medical Librarian
- Kay E. Wellik, MLS, AHIP – Director of Libraries
- Karen M. Seifert, MSN, RN, CDE – Clinical and Patient Education
- Katherine C. Kough – Humanities in Medicine
- Tyson Robinson – Historical Unit

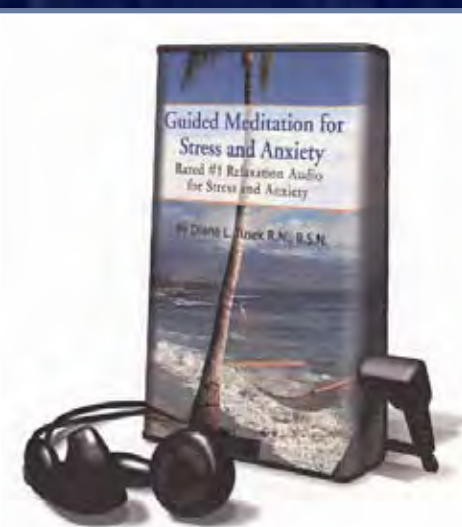
Technologies explored were Notebook computers, MP3 players, and iPad® tablets. The Patient and Health Education Library and the Patient and Health Education Subcommittees reviewed, evaluated and approved content provided. Because of concerns regarding cost per unit, education required, and length of time of the demonstration project (four months) PLAYAWAY®, preloaded MP3 players were chosen for usage. Content was to be reviewed on a semi-annual basis based on evaluation results and would cover the topics of health and wellness, stress management strategies, musical offerings, Mayo Clinic historical information and tours of artwork within the facility.

### PLAYAWAY® MEDIA PLAYERS NOW AVAILABLE FOR PATIENTS "A CHANCE TO WAIT IS A CHANCE TO EDUCATE"

The Patient and Health Education Library will have PLAYAWAY® media players available for patients and family members to check-out as they access care at the Mayo Clinic Building beginning on August 1, 2010. As part of a Continuous Practice Innovation (CPI-10) grant and the support of the CPC Integrative Medicine Subcommittee, portable MP3 players will be preloaded with content including relaxing music and meditations which will be helpful before and after procedures.

Instructions for usage will be shared at the time of check-out and we hope that this virtual information will help you, our patients and family members, during your visit here at Mayo Clinic.

The Patient Library is located on the Concourse P level, behind the fountain and across from the Development Office. Feel free to call the Patient Library at 480-301-8946 for additional information on the PLAYAWAY®.



## Methods

The group gathered various virtual devices (including MP3 players, (PLAYAWAY®), and tablet computers (Ipad®), to determine which devices were easiest to use, cost considerations, time of demonstration project, and amount and type of education necessary for the devices chosen. Due to the lower cost of MP3 technology, the group decided to purchase 30 devices for use in targeted areas of the Clinic with costs ranging from \$15-\$25 per unit. The areas targeted for the initial project were the areas in which patients and family members spent the largest amount of time waiting for procedures to be completed: Radiation Oncology, Chemotherapy Unit, Endoscopy, Dermatology/Moh's surgery, and Ophthalmology.

Initially, titles chosen were those that were available from the PLAYAWAY® roster of titles and focused on decreasing the patient and family members' stress through guided imagery and music on a variety of topics. The group wanted to further amplify the content by adding specific content to tapes (service provided by the PLAYAWAY® company) on artwork tours within the facility as well as Mayo Clinic specific history, and health and wellness topics. The devices and the initial selections were approved for distribution among our patients and family members by the Patient and Health Education Subcommittee.

Marketing utilized various methods including visiting targeted clinical areas to share with physicians and allied staff members, announcements in employee and departmental newsletters, posters and flyers, and site visit "house calls" by the consumer health librarian to the targeted areas.

Infection control issues and cleansing of the devices was of paramount concern. With the advice of our colleagues in Infectious Disease and Occupational Health, our plan for disinfection was to cleanse the devices after usage with Cavicide® cleanser, using appropriate personal protective equipment (gloves, masks). Disposable earbuds were provided for each user, and users were allowed to keep them after using the PLAYAWAY®.

Training patients and family members to be able to use the devices correctly was enhanced by having specific information on the use of the buttons on the unit itself as well as having the information on the inside cover of the case that held the devices. For those patients or family members with visual challenges, the information on usage was placed on an 8 1/2 x 11 inch handout. In addition, with each unit checked out, the medical librarian carefully demonstrated the device along with a return demonstration from the user to ensure that they could start and stop the device, change tracks, increase or decrease volume and change the batteries. Also encouraged throughout the demonstration project was having employees and volunteers check out and utilize the devices so that they could troubleshoot any issues which might arise.

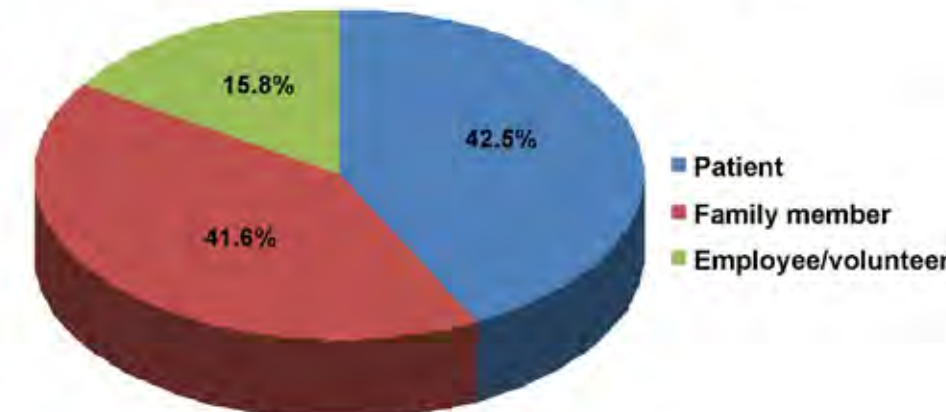
With each device checked out, an evaluation was given to the user to return with the device. Since we were concerned about the possibility of the loss of the devices, we worked with our Legal Department to develop a usage form that included the user's name, address, phone number and device utilized. Also, we checked out the devices for the day of care only so that they could be more frequently checked out during our evaluation period.

The evaluation was one page, including eight questions including demographics of users, whether or not they had ever used an MP3 device previously, the type of instruction that most helped them to use the system, what content they checked out, benefits gained, decrease in anxiety or distress, and whether or not they would recommend this service to others. An additional area allowed the user to suggest other titles that they would have liked to hear.

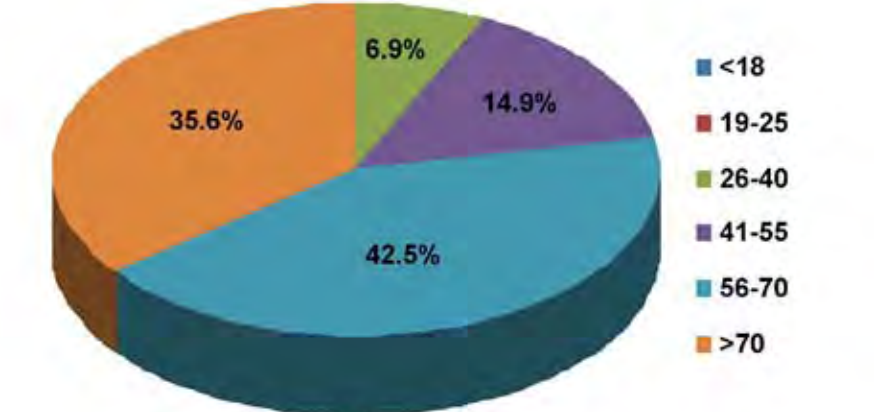
## Results

The following graphs include information from patient and family member evaluations. The total number of devices checked out during the four month evaluation period was 220. Of that number, there were a total of 517 usage days. There were 169 evaluations returned (76.8% completion rate).

### Population Served (I am a . . . )



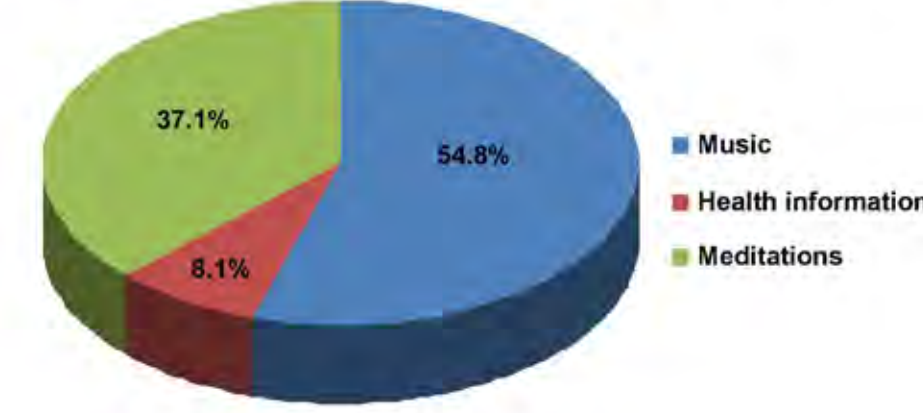
### Age Group



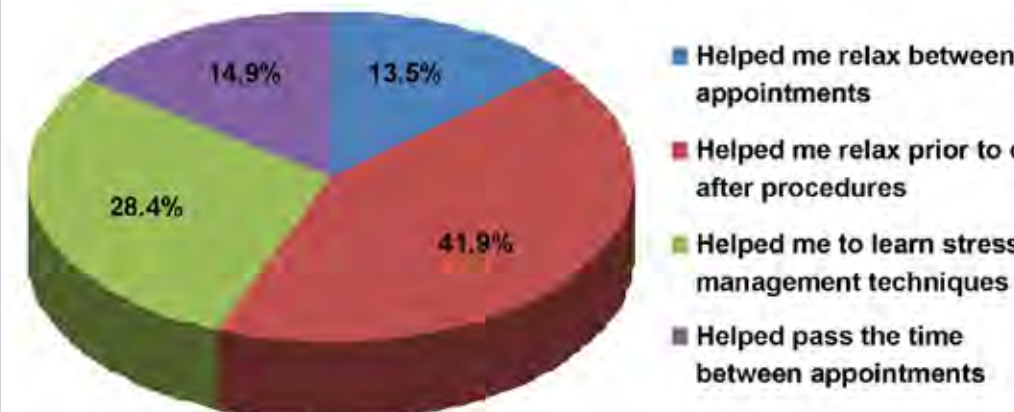
### Was the instruction that you were given helpful in using the PLAYAWAY®?



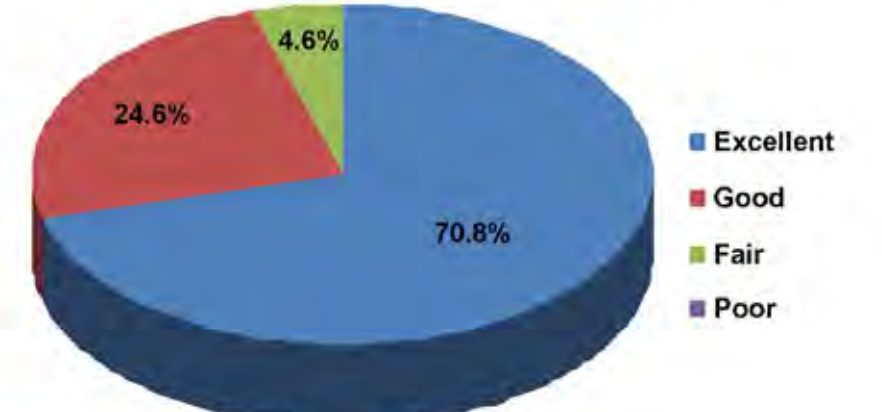
### How did you use the PLAYAWAY®?



### What benefits did you have from the PLAYAWAY®?



### Overall, how would you rate this service?



## Conclusions

- At the end of the study and after careful review of the evaluation data, the following were observed and/or reported:
  - Improved episodes of care with decreased stress and anxiety reported by PLAYAWAY® users
  - Increased visibility of the resources found in the Patient and Health Education Library
  - Helped to introduce relaxation techniques during waiting times
  - Encouraged patients to report experiences with new technology for information sharing
  - Loss/breakage was minimal
  - Popular titles were reordered and other titles added dependent upon patient and family member input
  - Multiple day usage will be explored for future utilization
  - Testing will be conducted on PLAYAWAY® video units as they are available
  - Plans currently underway to maintain current program and expand to hospital and primary care settings

