

## Gaming for Fun and for Therapeutic Applications

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Playing, in its many forms, has long been recognized as a key element for both maintaining and regaining good health. In hospitals and clinics, play can be used as pure entertainment or as part of a customized recreational therapy regimen that targets measurable results.



Electronic gaming has long been an entertainment outlet in everyday life, but in the past it was an activity primarily for teens. With the introduction of motion sensing systems, like the Nintendo Wii, and the continued improvement in touch screen driven computers, electronic entertainment opportunities now exist for all ages, from young children all the way up to adults and seniors.

For almost 20 years Touch2Play, Kidzpace Interactive and David Meyer Associates have been providing healthcare facilities with complete entertain systems built into cabinets, carts and kiosks. We offer flexible, convenient and durable solutions for patient use and protection of the electronic components.

### *Gaming for Entertainment*

When choosing a popular video game option, we offer a wide variety of designs that come complete with monitor, game system, controllers and a game title.

The Touch2Play option features a flat screen monitor with complete hardware and software installed within it. The Touch2Play has a wide variety of games and activities, many with multiple options, pre-loaded and ready to be enjoyed by people of all ages and interests. Children as young as age two, older kids, adults and even seniors, can have fun with this amazing system.

We create systems that can be free-standing, wall-mounted, used on a tabletop, or placed on one of three mobile cart options. We also have several multi-station models.

This variety of console designs allows facilities to use our products in lobbies, lounges, waiting areas, play rooms, patient rooms and other locations within hospitals and clinics.

For all ages, electronic play provides the opportunity for entertainment that will be enjoyable, mentally stimulating and stress relieving, all at the same time.

For kids, gaming offers many other positive benefits. Having access to video games may help to restore a sense of normalcy and also provide a distraction from the resulting tension that can occur during a stay in a hospital or clinic.





Electronic activities can help impart a positive frame of mind for patients as they enjoy the challenges that gaming provides. This positive mental state not only helps relieve stress but can expedite the healing process for both the patient and their families. The stress on parents and other family members of hospitalized children can also be reduced just by observing their

child or sibling having fun.

The use of video game systems in hospitals, clinics and rehab centers, as a tool for helping make a patient's stay more pleasant, is becoming increasingly common across the country, and with good reason.

### ***Gaming for Recreational Therapy Applications***

Our products and systems deliver many powerful and measurable therapeutic applications. The Nintendo Wii and Touch2Play incorporate the user's motion to control the games they play; rather than simply pressing buttons on a controller to manipulate the actions of a game, the user's motion controls the game for the Wii, while the Touch2Play system is controlled by the user touching the screen after making many cognitive determinations.

Benefits for entertainment systems like these in the healthcare industry are nearly unlimited. Doctors and rehabilitation therapists can tailor these systems to be ideal therapeutic tools to aid in making patient stays shorter, healthier, and more pleasant. Games for both the Wii and the Touch2Play can be specifically chosen to fulfill a variety of purposes that can benefit patients in a variety of ways.

#### **Physical/Motor Skills**

- Increasing strength and endurance Increasing range of motion
- Improving fine & gross motor function
- Improving balance while sitting, standing and dynamic standing positions

#### **Cognitive Skills**

- Attention & concentration exercises
- Listening & following directions
- Sequencing & prioritizing
- Memory, recall & recognition exercises

#### **Sensory Integration Improvement**

- Improving balance & the vestibular system
- Improving spatial orientation
- Increased body awareness
- Improving hand-eye coordination



Since gaming systems present a challenge for the user, it is easy to chart measurable progression as a patient uses these games in rehabilitative programs. One can observe how successfully a patient scores on short-term memory tests, the time required to solve puzzles, the score attained in strategic games, etc. to chart day-to-day cognitive improvement.

The Nintendo Wii also allows users to partake in specific balancing and motor skills activities using the Wii Fit along with other software programs. Altogether, these systems provide a way for patients to



perform fun, entertaining tasks that can easily become goal-oriented interventions for clinicians and provide measurable outcomes for patients.

Studies have been conducted to find the benefits of using gaming systems like the Touch2Play and how it affects its users in a number of different categories. The results of the study have shown that users of these games have been positively affected in several different areas, as shown in the diagram below.

In addition, Mike Sutherland, CTRS, at Miami Valley Hospital in Dayton, OH, has found several anecdotal benefits for users of the Nintendo Wii and the Wii Fit. These studies are drawing doctors and rehab specialists to re-think methods that can benefit patients' recovery to injuries, sicknesses, and surgeries. Many more studies are currently being conducted worldwide.\*

### Proven Benefits of Touch2Play

- Long-term memory retrieval
- Increased short-term memory capacity
- Development of vocabulary
- Improved analytical/logical reasoning abilities
- Improving small muscle movements that aid in hand-eye coordination

### Anecdotal Benefits of Nintendo Wii/Wii Fit

- Improvements in balance & coordination
- Increased cognitive speed & accuracy
- Improved hand-eye coordination
- Increased attention span
- Improved problem solving abilities & sequencing
- Higher motivation & increased short-term memory

In addition to providing a unique experience that lets you become involved first-hand with the games that you play by stimulating body movement, the Nintendo Wii and Touch2Play also have a variety of games that can be easily adjusted to fit different age groups, interests, and skill levels.

Both the Wii and the Touch2Play have controller or action functions that are relatively simple. This makes it easier for people, of all ages, that are new to video games, to dive right in. They can enjoy the experience without taking large amounts of time getting accustomed to how the games work.

Along with all of the benefits outlined above, incorporating Nintendo Wii and Touch2Play systems into your facility offers evidence that you provide up-to-date rehabilitative options and cutting edge care. And, delivering fun to help improve a patients' visit to your facility.



**For more information, contact David Meyer Associates/DMA4Families**

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