



# Video Games and More: Research and Development of Interactive Health Games

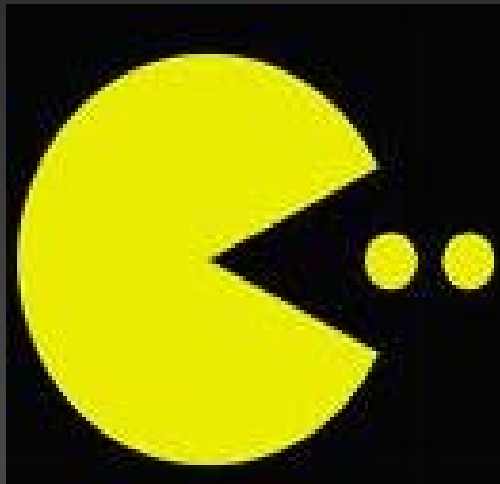
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**Presentation to American Telemedicine Association,  
Pediatric Telehealth**

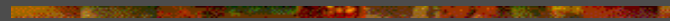
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University of California, Santa Barbara  
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Games have gone from this...



...to this!



What is a game?

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**A “rule-based activity involving challenge to reach a goal”**

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# Who plays games?

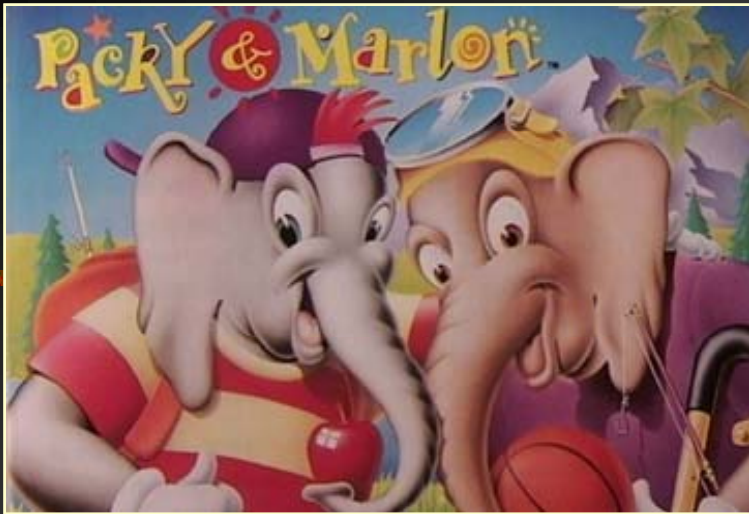
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- **Nearly everyone!**
  - **More than half of the people in US play regularly**
  - **All socio-economic backgrounds**
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## Evidence from research: Interactive health games can be very effective

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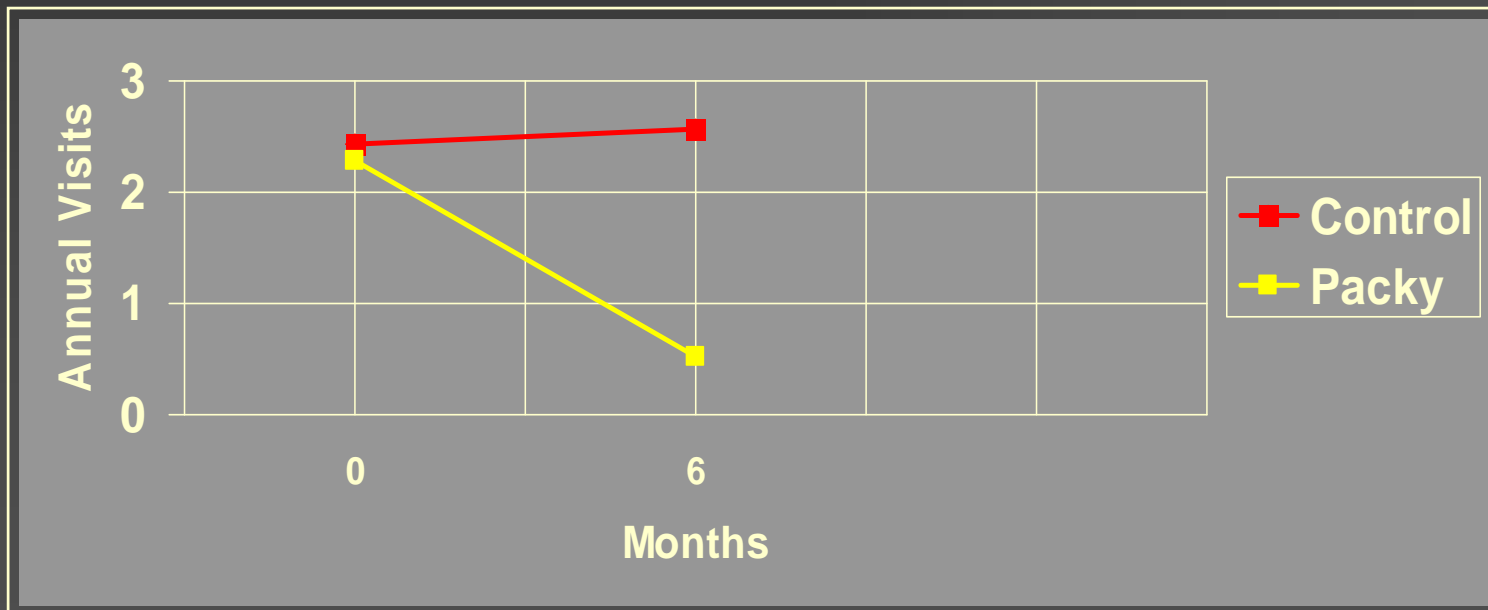
- **A nutrition game increased players' daily servings of fruits and vegetables**
  - **An asthma self-management game reduced asthma-related emergencies by 40%**
  - **Evidence that people are increasing physical activity playing active games similar to the Wii fit or DDR**
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### Clinical Trial Results *Medical Informatics, 22(1), 1997*

- Stanford and Kaiser outpatients
- 59 diabetic children, ages 8 - 16
- Randomized, controlled
- 6-month trial
- Voluntary, at-home use
- 34 hours of play per child

77% reduction in urgent care and ER visits





# Health Games Research National Project

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- \$2 million in research grants in 2008 and another \$2 million in 2009
  - Next Call for Proposals in January 2009
  - We now have 12 grantees
  - Field building, collaboration, research resources
  - Join our mailing list by sending contact info to [healthgamesresearch@isber.ucsb.edu](mailto:healthgamesresearch@isber.ucsb.edu)
  - See our web site at [healthgamesresearch.org](http://healthgamesresearch.org)
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# Repurposing – using entertainment games for health promotion

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- **Aerobic fitness and weight loss**  
Dance games DDR, In the Groove, Wii Fit
  - **Mental acuity**  
Scrabble, Sudoku, Tetris, etc.
  - **Physical Therapy**  
EyeToy
  - **Phobia reduction**  
Auto racing games
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# Games and telehealth

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- Icebreaker between clinician and patient
  - Prescription for information, practice
  - Avenue to increased understanding at home
  - Avenue to on-line social support
  - Make simple things game-like
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**Thank you.**

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