

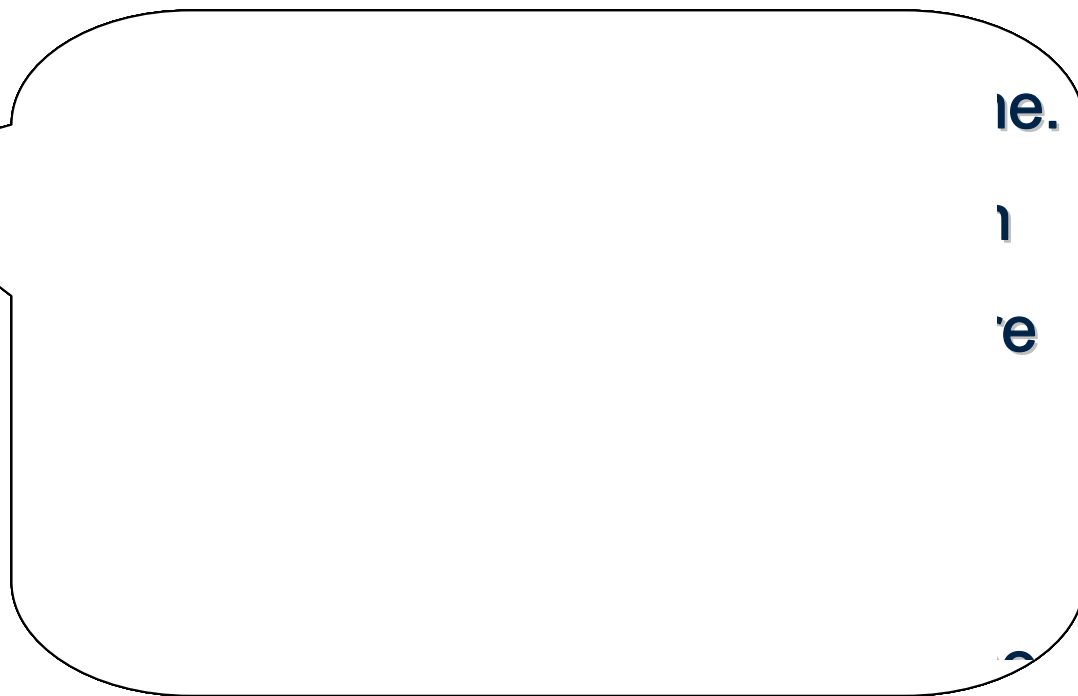
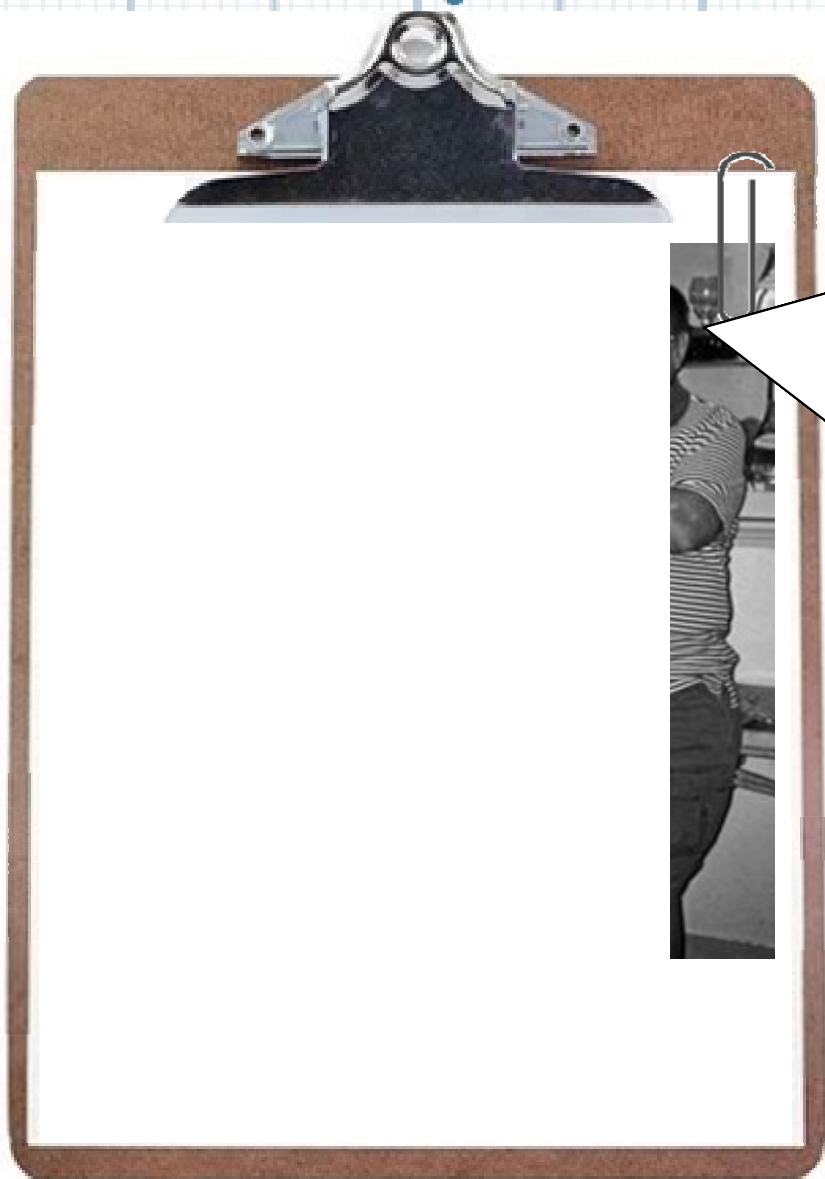
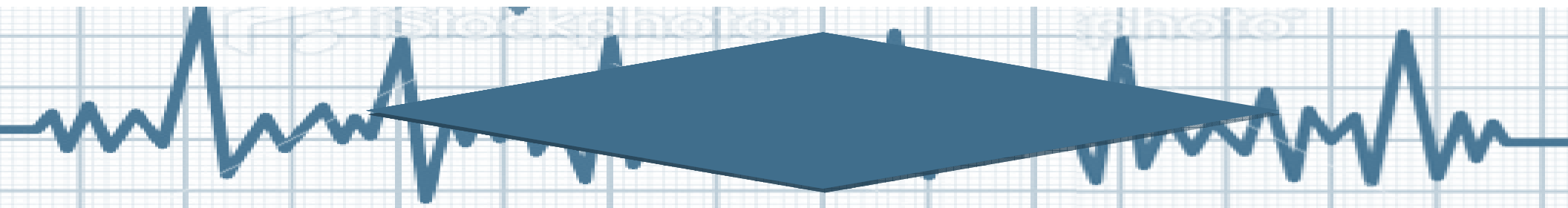
**Patient Experience..... page 3**

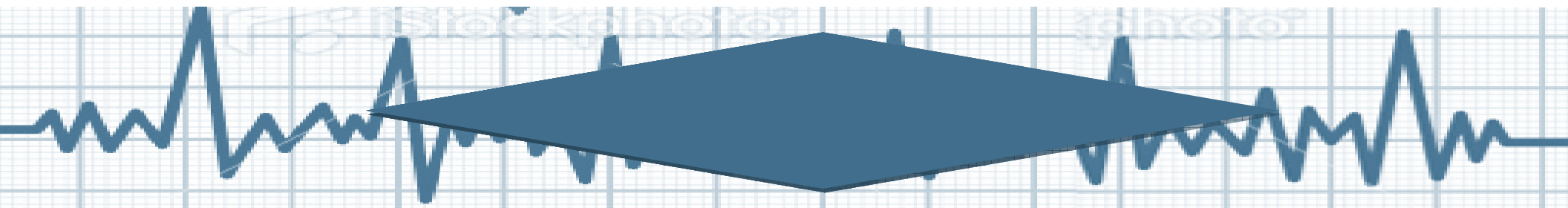
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John Dupal has been coughing so hard he can't even catch his breath. The times in between the coughs are becoming so infrequent that he is constantly gasping for air. His calves are swelling and his feet can barely fit into his shoes. What he thought had just been his bronchitis has worsened into something much more serious. He knows it's time to go to the hospital.

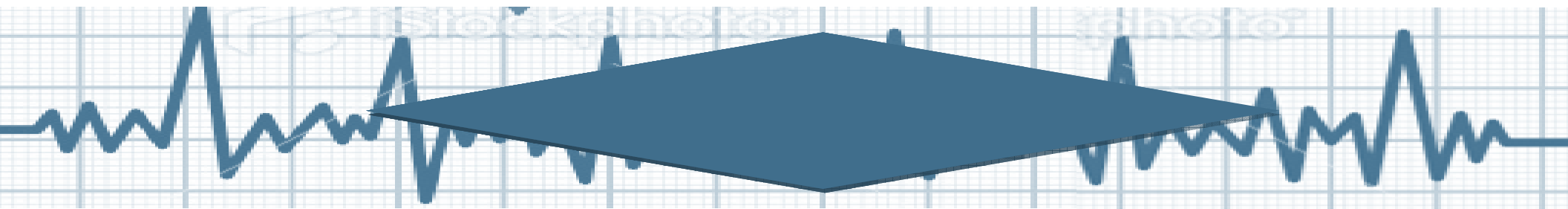
John Dupal makes his way to the Emergency Room, where they diagnosis him with pneumonia. "I don't know how they know, but they can just tell," he says of their ability to quickly tell what the problem is. They then take him to a private room, where they hook him up to an IV. He is put on antibiotics and lasiks – the former to fight the pneumonia, and the latter to fight the edema in his legs. John Dupal has Congestive Heart Failure, and because of his weak heart, he has a tendency to hold on to fluid. If the fluid gets into his lungs, he could suffocate and die. It's a serious situation, but once he's at the hospital and they've started treatment, it's just a waiting game. "And it's boring as heck!" John Dupal declares.

John Dupal, age 77, is a father of four and a grandfather of four. He lives with his wife of over 50 years, and they both have been frequenting the hospital much more in the past couple of years. One of his sons was just diagnosed with Guillain-Barré Syndrome, an immune system disorder that leaves the person affected unable to feel their arms and legs, over the summer, but John Dupal does not like to spend too much time visiting him in recovery. "Even visiting is boring," he says. "Hospitals are just very boring."

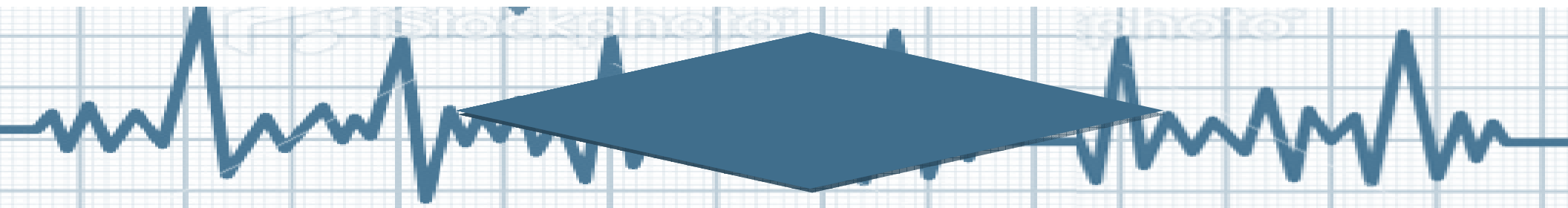
John Dupal goes to St. John's Westshore Hospital, in Westlake, Ohio. While they only have private rooms there, even if he had a roommate, John does not believe it would improve the situation. "Sometimes you'll get a guy who is moaning all night. It's really hard to listen to," he says. When asked if he's ever talked to a roommate, John replies, "The curtain's there. People rarely talk through that."

To pass him time, John watches TV and reads the books his sons bring him when they visit. His hospital stays are only for a few days, but it's enough to remind him just how much he doesn't like being there. Not because it's depressing or stressful, but just because "it's boring."





**“They give me antibiotics for a few days and in the meantime, it’s boring as heck. You get the paper, and you read the whole paper through. You read *everything*, I mean *everything*. Every section, even the ones you wouldn’t normally look at. I have an IV drip, but it’s only for a certain time. Most of the time, you’re just lying in bed. I’ve learned to take my own pajamas now when I go in and not to depend on their clothing. And you just lay there.. There’s no use looking out the window, because all you see is a parking lot. So you’re just waiting there. And you eat, you eat three times a day. So that takes up a little bit of time. Then sometimes you have visitors, like [my wife and my sons.] When people come to visit you, that helps a little bit to pass the time away. I’m not that sick, not where I have any pain. So I’m just sitting in bed watching TV until I’m better. It’s very boring.” – John Dupal**



from Corbis Images

Elderly patients experience a hospital differently.

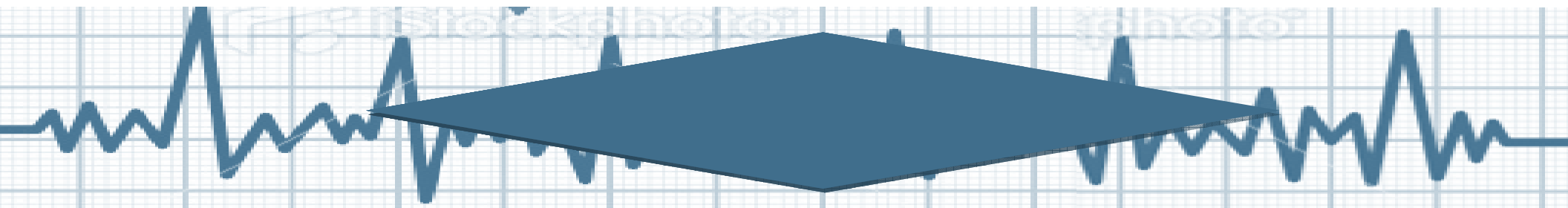
They do not feel anxiety as much as they feel trust and security – hospitals will keep them living longer.

Elderly patients do, however, feel a sense of boredom.

Having a roommate does not decrease boredom in many situations, especially if the roommate is very sick and in a lot of pain. The curtain barrier between the two beds, while it does not keep out the sounds of coughing or moaning of a coping patient, does serve as a symbol of separation that discourages socializing among roommates.

Beyond increasing visitor hours and reading materials available, what other ways can we entertain elderly patients more as they heal in a hospital? How can we help them feel connected to other patients without increasing their risk of infection?





from Premier Telesolutions



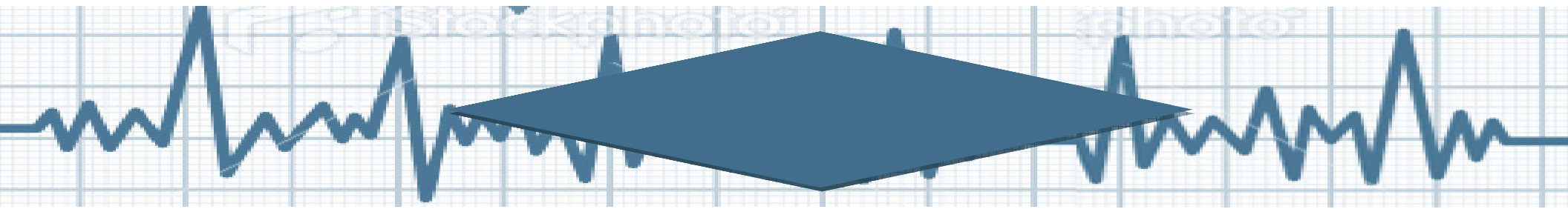
from Montreal Gazette

**Innovation:** In England, the “Premier Bedside” system is used in facilities like West Suffolk Hospital, Doncaster Royal Infirmary, and Bassetlaw Hospital. A touchscreen device, it offers phone services, TV, movies, internet, and radio opportunities to patients. Aside from entertainment, the system can display x-ray images, Electronic Health Records, and meal ordering options, as well as general hospital information (Premier Telesolutions, 2009).

**Problem:** With touchscreen activation and internet accessibility, this is widely geared towards younger generations and those comfortable with technology. Much of the elderly population is still not handy with technology and does not embrace it the way the younger generations do. While innovative, the system’s most relevant applications for older adults are the phone and TV features, which standard hospital rooms already include. Furthermore, most of the entertainment features have a price tag, with only the radio, incoming calls, and occasional “free TV periods” provided at no cost. Even more importantly, the Premier Bedside, apart from the inclusion of the ordinary telephone, does not serve to make the patients feel more connected or less lonely.

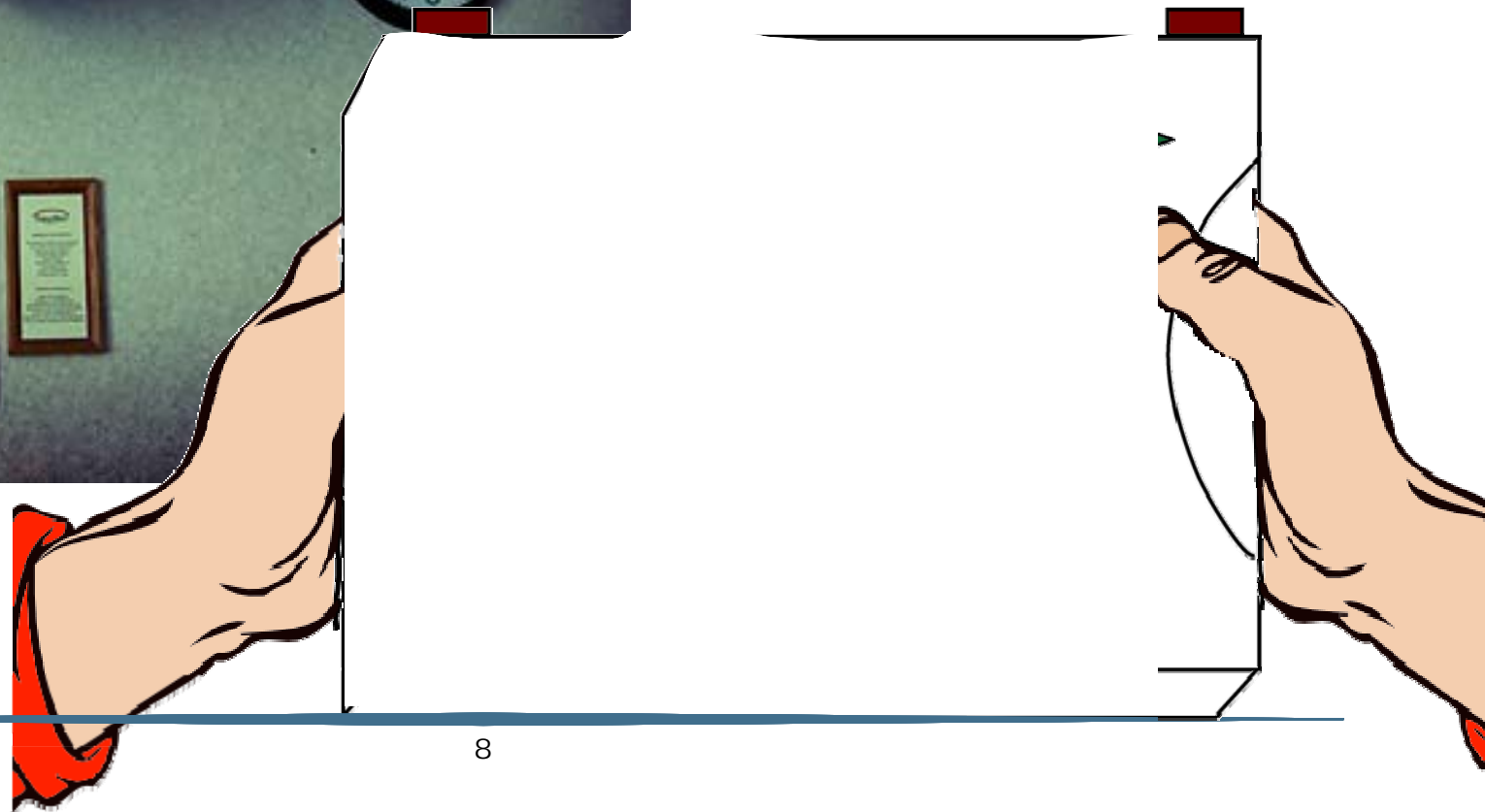
**Innovation:** Much like nursing homes do, the Veterans Hospital offers activities to its patients, including bowling (the kind used for kids), light balls to play toss, Bingo, horseshoes, and ring toss.

**Problem:** These games are often done in conjunction with events sponsored by another party and also include veteran participants not in the hospital. Also, these activities may not be viable in a full hospital setting that has a wider variety of patient care needs.

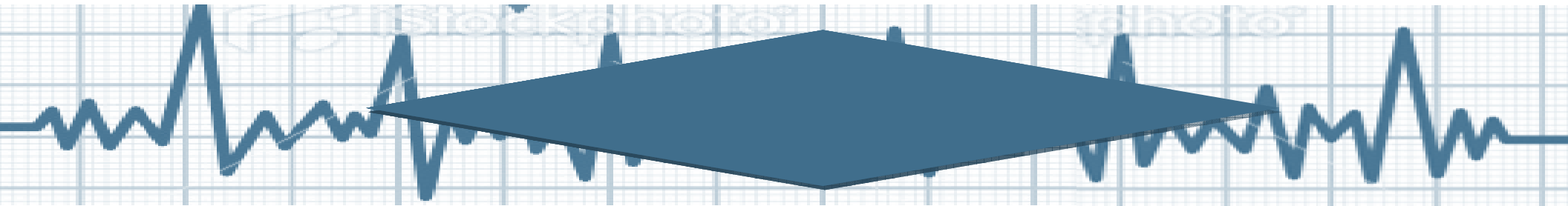


from flickr.com

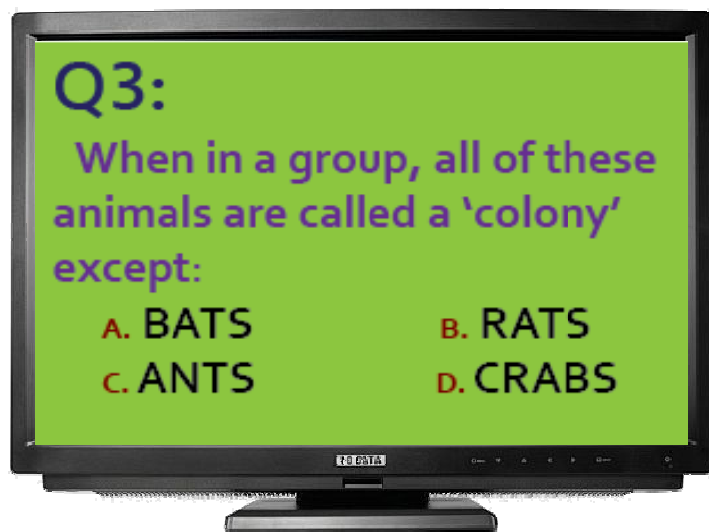
Interactive trivia games, set up through the TVs already existing in patients' rooms, create a network that allow patients to play against each other. A handheld clicker transmits a patient's answers. The game engages the patients in something fun and somewhat challenging, while also allowing them to feel connected with others in the hospital - without even leaving their room. Visitors of patients can even join in on the activity and help patients answer questions.



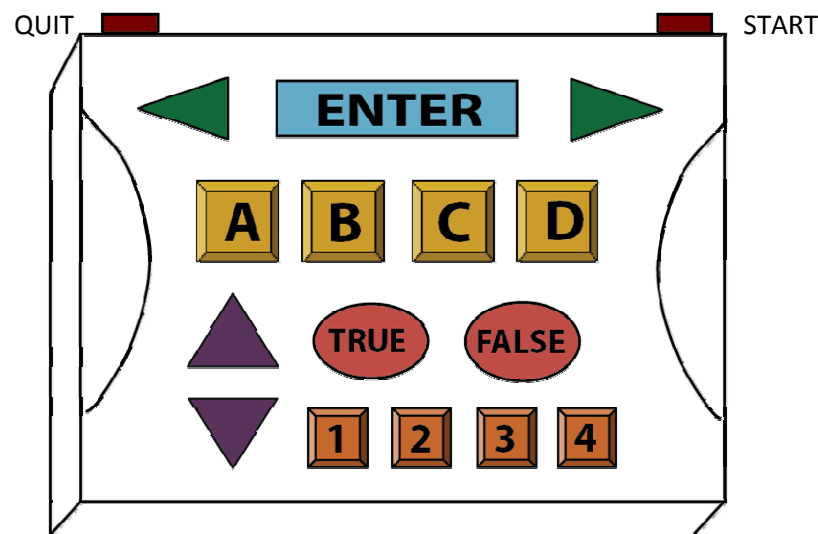


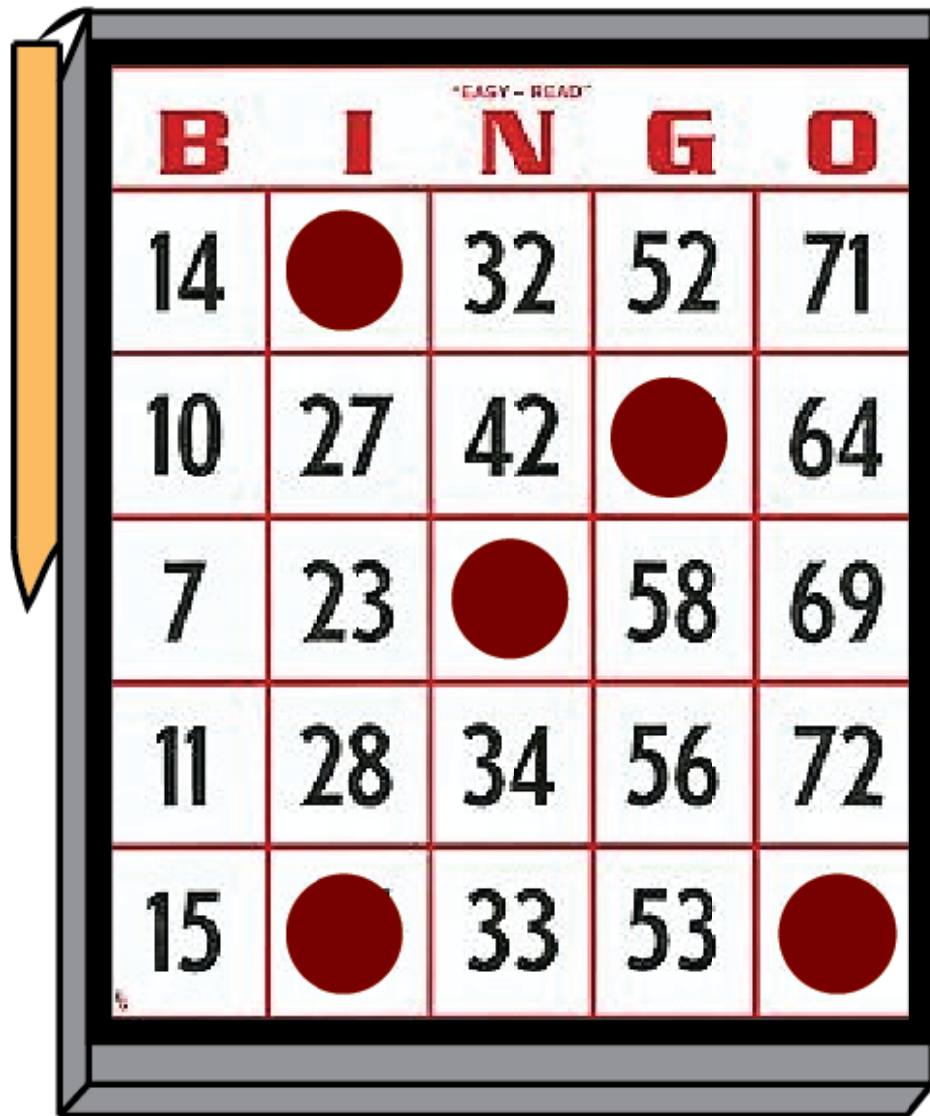


**The game:** To give everyone a chance to score points, everyone can answer the question, even if it's been correctly answered by someone else. Points are distributed by how quickly the question was answered during the time limit. The faster you answer the question, the more points you receive. As the amount of time remaining decreases, the game will start to give you hints at the correct answer. Scores are kept by room number and tallied at the end of each round. Each round is 15 questions. After each round, the player can choose to stay in their current trivia topic or change to a different one. The game can be quit at any time.



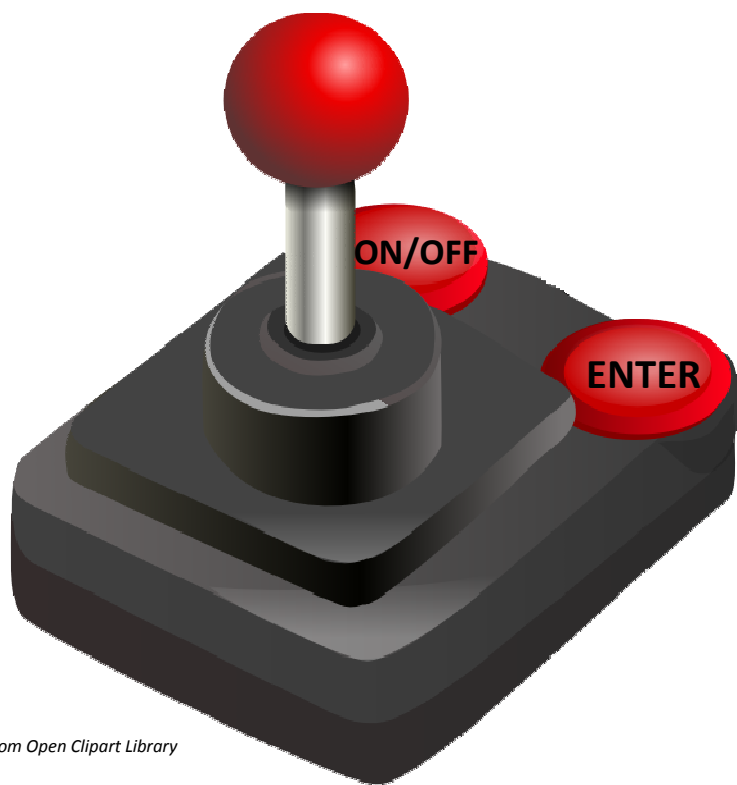
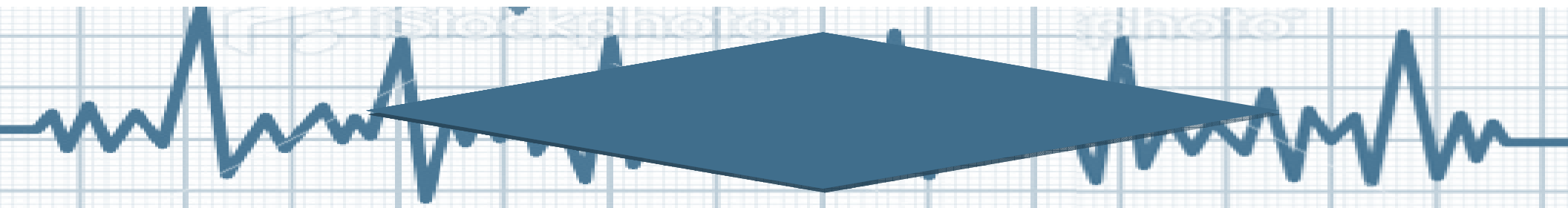
**The clicker:** This device is wider and easier to hold than standard clickers used for classrooms or bar games, so that patients - specifically the elderly - are able to handle it. Patients are often hooked up to IVs and other machines, limiting their mobility, and the elderly, in general, tend to have less dexterity with their fingers and hand movement. The sides of the clicker are rounder and sunken in to fit the shape of the hand. Moreover, the numbers and letters are big and the colors are diverse and contrasting to make it easier to read and differentiate. Pressing "A," "B," "C," or "D" on the clicker would immediately submit the answer to the question on the screen. The 'start' and 'quit' buttons are not on the same side as the operating buttons to distinguish their operations.





Another possible game would be an interactive Bingo. This would require a different device than the clicker, since Bingo cards vary and they are changed during their use in play. (Tokens accumulate as they conceal numbers called, for example.) This device, while still interactive with the TV, would be more expensive to implement since it is specialized and can only be used for one purpose. A yellow stylus is attached to each Bingo device. The player would use the stylus to mark off a number that has been called: once the stylus touches the screen, a token icon would appear over that number automatically. When a “Bingo” is made, the device would know and alert the network. This would then clear everyone’s board. Bingo is a favorite among the elderly and usually results in a prize. Giving out prizes constantly to patients may not be feasible, so a virtual prize could be included within the game system. (For example, every “Bingo” gives you 5 points. Once you reach 20 points, you can choose a virtual icon out of the choices given on the TV screen. This can be anything from animals to cars to sports memorabilia. Every time you increase your point earnings by 20, you can upgrade your virtual prize. )



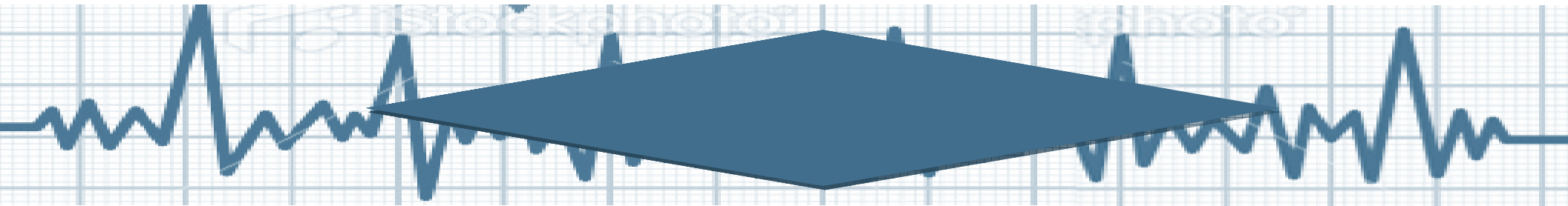


*from Open Clipart Library*

A joystick offers a way to navigate the interactive TV game in a less complicated - and possibly less costly - way than the clicker device. This is a simpler solution, though also less original, but it does offer something to hospitals with less funding and who don't want to incorporate something too complex initially.

The game would still work the same way, but instead of clicking "A," "B," "C," or "D" to answer, the joystick would allow the user to highlight on the screen the answer they wish to select. The player would then use the button on the joystick marked "ENTER" to submit their answer. Players can still choose their virtual prize using the joystick and the "ENTER" key.

The one problem with the joystick is how simple it is, so more directions about its use might need to be supplied to the patient. This could be done through the TV screen, although too much text can be hard to read on a screen. Additionally, more buttons could be added to the joystick to present a better variety of distinguishable functions.



Premier Telesolutions. "Premier Bedside: Watch, Talk, Enjoy." Date accessed: 19 November 2009.  
<<http://www.premierbedside.co.uk/products/bedside.asp>>

### **Images:**

*Title page: Hospital Hallway:* [http://www.skeptic.com/eskeptic/08-08-13images/hospital\\_hallway.jpg](http://www.skeptic.com/eskeptic/08-08-13images/hospital_hallway.jpg)

*Guy with crutches:* [http://www.istockphoto.com/file\\_thumbview\\_approve/4472452/2/istockphoto\\_4472452-discouraged-man-waiting-in-hospital.jpg](http://www.istockphoto.com/file_thumbview_approve/4472452/2/istockphoto_4472452-discouraged-man-waiting-in-hospital.jpg)

*heartbeat:* [http://www1.istockphoto.com/file\\_thumbview\\_approve/832406/2/istockphoto\\_832406\\_ekg\\_heart\\_monitor.jpg](http://www1.istockphoto.com/file_thumbview_approve/832406/2/istockphoto_832406_ekg_heart_monitor.jpg)

*hospital bracelet:* <http://www.fotosearch.com/bthumb/BNS/BNS346/bn254058.jpg>

*page 6: old woman by window:* <http://www.corbisimages.com/images/NT5469712.jpg?size=67&uid=5550E105-7F27-4D7B-99DA-A92DCC02E6A3>

*page 7: Premier Bedside system:* [http://www.dbh.nhs.uk/Library/Press\\_Releases/young-lady-main-menu-1024.jpg](http://www.dbh.nhs.uk/Library/Press_Releases/young-lady-main-menu-1024.jpg)

*x-ray on premier bedside:* <http://www.premierbedside.co.uk/products/bedside.asp>

*veterans bowling:* <http://www.montrealgazette.com/health/veterans+families+lash/1937261/1939019.bin?size=620x400>

*page 8: TV in hospital:* [http://farm3.static.flickr.com/2078/1556753533\\_2ae9414d4d.jpg?v=0](http://farm3.static.flickr.com/2078/1556753533_2ae9414d4d.jpg?v=0)

*Hand clipart:* <http://www.webweaver.nu/clipart/img/people/hands/hand-holding-paper.gif>

*Page 9: TV:* [http://media.akhilabaranews.com/13331/LCD\\_TV241XBR\\_2\\_2.jpg](http://media.akhilabaranews.com/13331/LCD_TV241XBR_2_2.jpg)

*Page 10: bingo card:* <http://www.cromers.com/mmCPI/Images/60-13065.jpg>

*Page 11: joystick:* [http://upload.wikimedia.org/wikipedia/commons/thumb/d/d8/Joystick\\_black\\_red\\_petri\\_01.svg/619px-Joystick\\_black\\_red\\_petri\\_01.svg.png](http://upload.wikimedia.org/wikipedia/commons/thumb/d/d8/Joystick_black_red_petri_01.svg/619px-Joystick_black_red_petri_01.svg.png)