Patient Centered Imaging

Good for the Patient, Good for the Clinic

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Thought Experiment

Your first MRI exam...



Thought Experiment II

• Their first MRI exam...







How We Got Here

- Not our initial goal
- Review of our MRI services
- Due diligence and vendor selection
- Design and installation



MR Imaging at Beverly Hospital

- Extensive review of our MRI services
 - > In general, excellent

- Opportunities for improvement
 - Nervous patients and patients with larger body habitus
 - Breast MRI patients



Due Diligence + Vendor Selection

Due diligence:

- We initially focused on a state of the art wide bore magnet.
- > RFPs, multiple site visits, all major vendors for wide bore magnet
- Vendors offering imaging suites that address the "patient experience"
- We refocused goals to include a patient centered imaging suite
- Vendor selection Philips
 - Superb image quality + Ambient Suite
 - Had used competitor scanners for >25 years





Philips Ingenia 1.5T + Ambient Suite



Ambient Suite

Design Principle

Create a soothing, relaxing environment that makes the patient as comfortable and stress free as possible

- Physical elements
- Multimedia lighting, video, and audio





Ambient Suite Design Elements



Ceiling halo





Recessed LED lighting





Rounded room corners





All equipment and supplies...





...behind closed doors, out of patient view





Large window between patient and technologist



Ambient Suite Themes

- A key feature of the Ambient Suite is the user selectable audio-visual experience
- 40+ themes that coordinate room lighting, color, video displays, and ambient audio
- Landscape, wildlife, abstract, and children themes
- Gives a sense of control to the patient by allowing them to personalize their environment













Patient selects theme from wall mounted touchpad





Video is displayed on wall, room color and lighting is matched





Video is displayed on 55" LCD screen on the back wall of the scanner room...





...so that the patient can watch the video while they are inside the magnet...





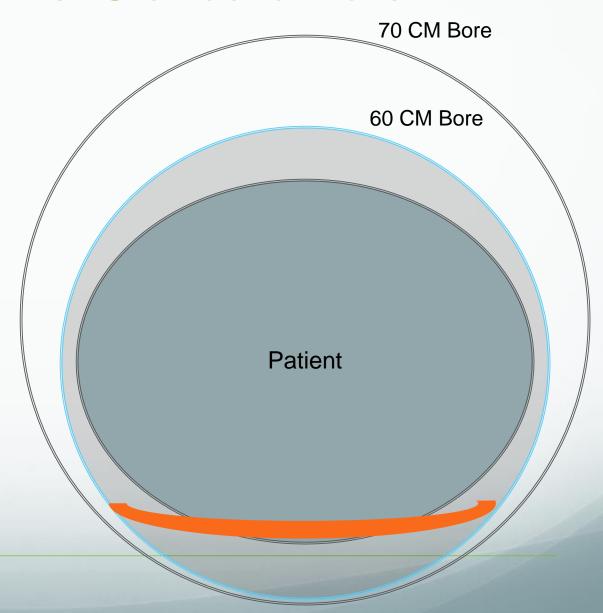
...by using a headset with mirror
This is the Philips In-Bore experience



Wide Bore vs. Standard Bore

- Larger bore, or opening
- Increased space between patient's face and top of bore
- Larger body habitus
- Table limit = 550 lbs.





Philips Ingenia Wide Bore

Designed for Patient Comfort

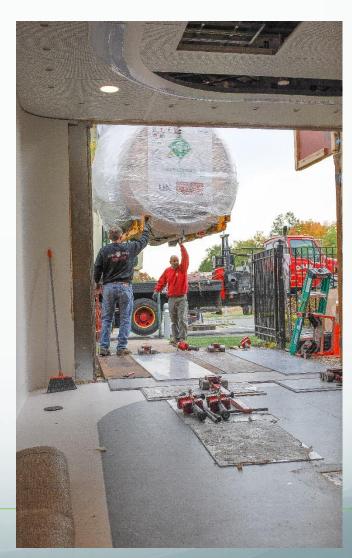
- Clean lines and uncluttered facade
- Bore is illuminated
- Compact front-to-back
- Table limit = 550 lbs.
- ComforTone technology reduces acoustic noise





Patient Experience – First 10 Months

- First patient scanned in December 2015
- > 2000 patients to date
- Patient feedback obtained from
 - Patient survey
 - Direct conversation with the patient by technologists and radiologists





- Patient S.B., 62 year old female
- 5'2", 250 lbs.
- "I loved the new Ambient experience technology. I was very nervous about my MRI – having had two previous unpleasant experiences with MRI's. This ambient experience was completely different. I loved the beautiful pictures of spectacular beaches and the very soothing spa music (my choice) and I felt comfortable. I actually sailed through the testing process, and would not [hesitate] to have another MRI at the Ambient Experience."



- Patient J.W., 65 year old female
- Extreme uneasiness
- From the technologist: "The patient was extremely uneasy and needed an eye mask to walk in the room. After putting on the glasses and seeing the relaxing video, she got through the exam and was beaming at the end, saying her fear of MRIs is over."



- Patient E.H., 13 year old male
- Uneasy teenager
- From the technologist: "Patient attempted brain and cervical MRI at a teaching children's hospital in Boston, but could not tolerate the study due to nervousness. The patient's mother heard of our [patient centered suite] and rescheduled with us. The exams were performed in the Ambient Suite with no issues. The patient and his mother were ecstatic."



- Patient W.M., 62 year old male
- Multiple MR Enterography studies
- Highly nervous
- From the technologist: "Patient scheduled his most recent MR
 Enterography at our facility after learning about the Ambient Suite.
 He had such a wonderful experience, in fact, he said he did not have one minute of stress...He loved the Ambient Suite, video, and music. He would definitely recommend our facility. He said there is 'none like it' and he 'actually enjoyed' his experience."



Additional Patient Feedback

- "Honestly, the best MRI experience, and I have had over 10."
- "Having had 4 MRI's in the past, this was by far the best experience."
- "Absolutely the best! I had an enjoyable experience!!!"
- "If I weren't there for medical reasons, I would think it was a spa!"



Additional Patient Feedback

- "I was a lot nervous but the viewing of pictures made it more relaxing."
- "This was the very best MRI scan that I have ever had and I have had many."
- "The Ambient experience has taken the dread out of my yearly MRI."
- "It was lovely. Do not need to vacation for a while."



Return on Investment

- > Increased patient satisfaction
- Decreased cancellation
- > Improved patient workflow
- Technologist/staff satisfaction and retention
- Key hospital/imaging center differentiator



Increased Patient Satisfaction

- ➤ Patient retention more likely to return
- Word of mouth and online reviews attract new patients
- > Clinician satisfaction
- > Important factors in growth of patient volume



Decreased Cancellation

- ➤ Calendar year 2015 = 2.9%
- > Q1 + Q2, calendar year 2016= 1.7%
- Prior magnet was open magnet
- > Obvious financial benefits



Improved Patient Workflow

- > Patients transition on/off table quicker
- > dStream helped us to reduce scan times
- > Shorten appointment time slots
- ➤ Increase productivity





Technologist Satisfaction

- > Ambient Suite is tech favorite
- > Improved job satisfaction
- Lower employee absenteeism
- > Lower staff turnover





Hospital/Imaging Center Differentiator

- ➤ Increase prestige of facility
- > Patients are savvy consumers
- > Healthcare is very competitive
- Attract new patients from outside your catchment area



Summary

- A patient centered suite considers the physical and emotional needs of patient
- Provides relaxing, comfortable environment during imaging exam
- Major improvement for all patients, but particularly for nervous, larger, and breast imaging patients
- > Key hospital/imaging suite differentiator
- > In my opinion, should become the "Standard of Care"



Thank you very much....Any Questions?



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