Mass General Brigham

Improved Communication for Patients Treated with DIBH

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Problem Statement

Studies suggest that more treatment-related knowledge results in less emotional stress and improved health-related quality of life. It has also been shown that language concordance improves patient satisfaction, engagement, and outcomes. Patient education materials are a great supplement to providers verbal explanations and can help ensure patients feel adequately prepared for their treatment. Unfortunately, most of our education materials are only available in English and rely on the patient reviewing these materials on their own via the internet.
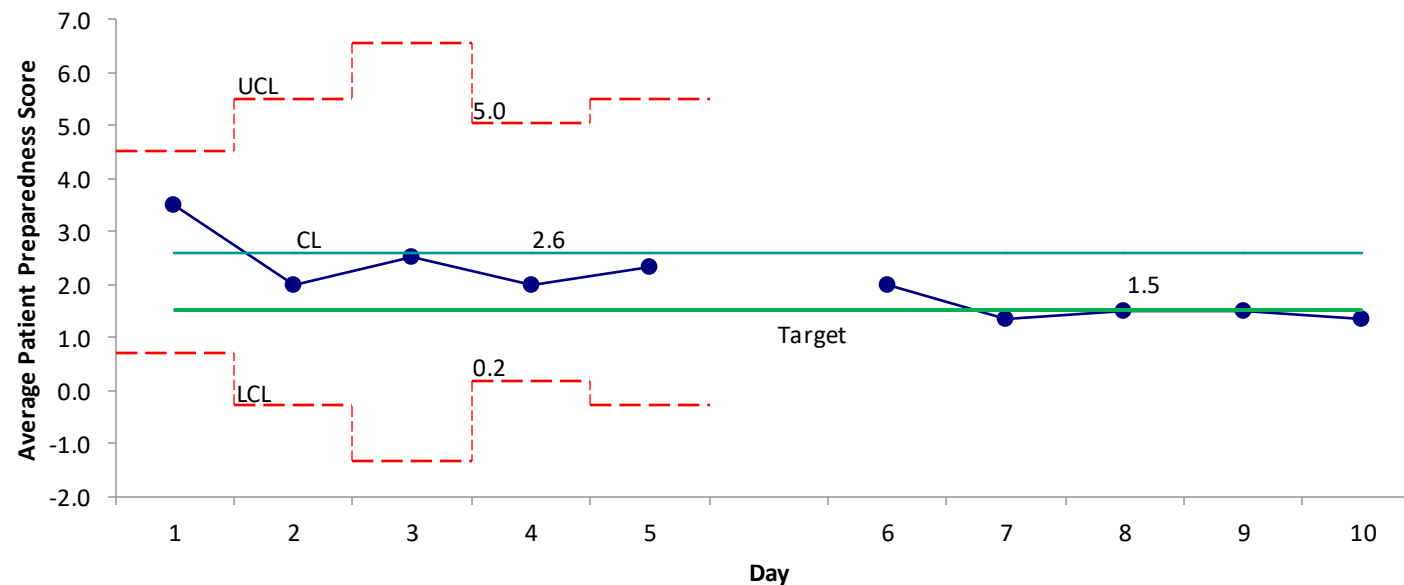
Some radiation therapy treatment techniques require more instruction and explanation than others. For example, Deep Inspiration Breath Hold (DIBH) technique, which is utilized by approximately 600 MGH/BWH patients each year, involves patients holding their breath for 10-20 seconds at a time while radiation is being delivered. This requires constant communication and coaching from the care team. **By improving the accessibility and quality of patient education materials, we hope to improve patients' experience by enhancing their preparedness for the DIBH procedure.**

Year 1 Accomplishments - Overview

Our goal was to create a video that could be used across our joint radiation oncology departments to instruct patients on how to breathe during their treatments. It needed to be easy to understand, applicable to ALL DIBH patients, and easy to access at the right point in their treatment journey. During the CPIP course, we showed an existing video to several patients, and assessed their preparedness for treatment before and after the video, determining that there was in fact benefit to showing the video. We also learned that some patients wanted to be able to access the video before their CT simulation appointment, so they could have time to practice at home.
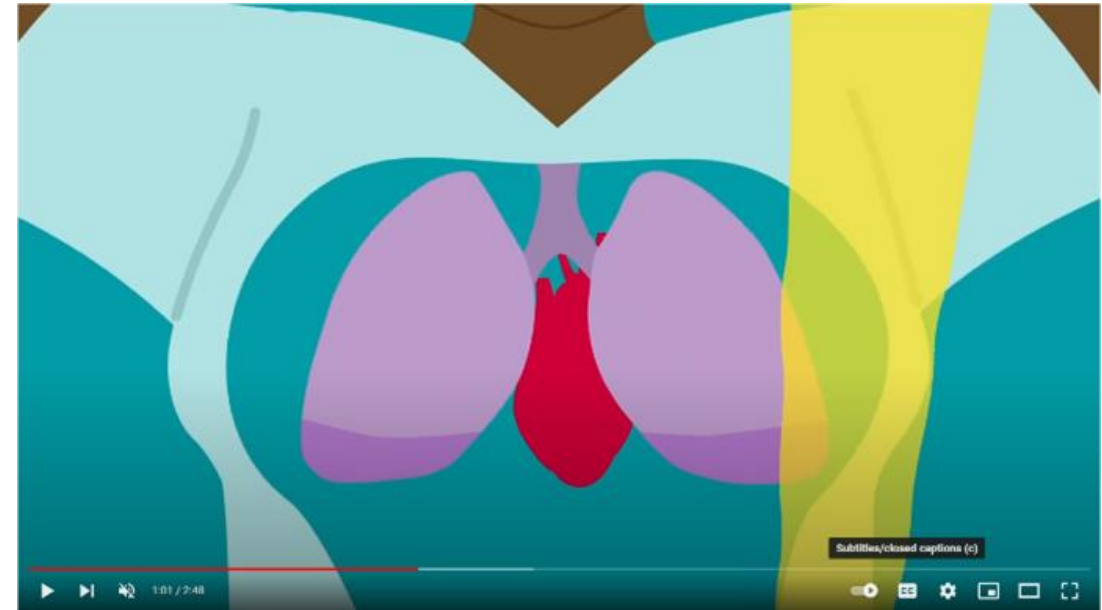

Average Preparedness Score by Day
X bar Chart, 3σ

Year 1 Accomplishments – Process Metrics

Accomplishments: developed a script and worked with Artists for Humanity to create the animated video

- Voiceover in both English and Spanish
- Videos were uploaded to their respective Cancer Center YouTube accounts in August 2022
  - Transcript has been translated into other languages most spoken by the MGB patient population (Arabic, Russian, traditional Chinese, Haitian Creole, and Brazilian Portuguese) for closed captions on YouTube
  - Survey for feedback linked in video description (no responses yet)
- Staff notified of video availability, with very positive feedback so far
- Working on printing handouts with the QR code/link to the video for providers to give to patients during consultation appointments
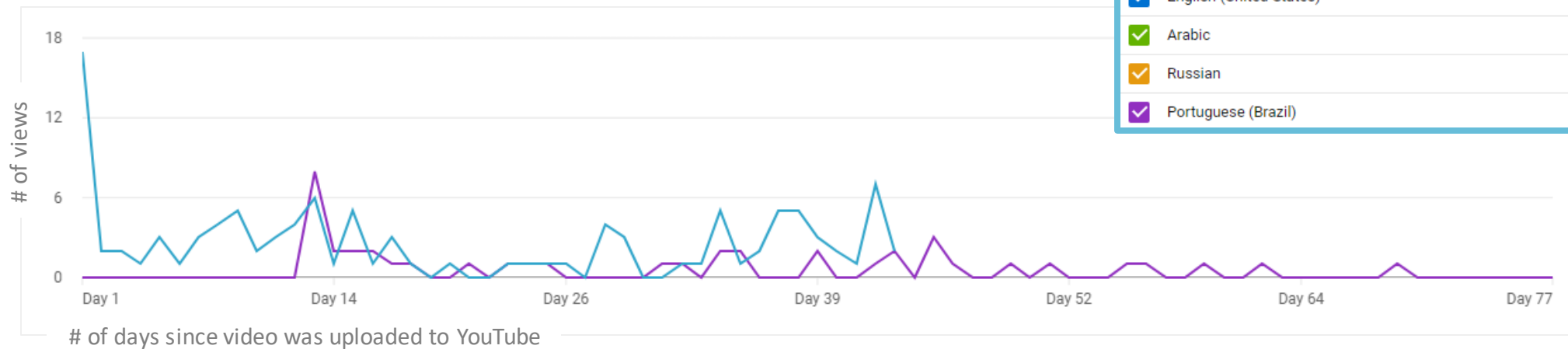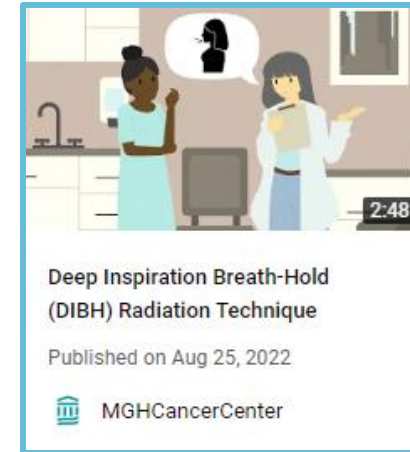

YouTube Account:	English Video Views/Likes:	Spanish Video Views/Likes:
Mass General	111 views/1 like	42 Views/1 like
BWH	169 views/2 likes	85 views
DFCI	116 views/2 likes	50 views

YouTube Analytics – Mass General

Deep Inspiration Breath-Hold (DIBH) Radiation Technique
Published on Aug 25, 2022
MGHCancerCenter

Mantener una técnica de radioterapia de respiración profunda
Published on Aug 3, 2022
MGHCancerCenter

	Views ↓	Unique viewers	Likes	Shares
English:	111	94	1	6
Spanish:	42	36	1	1

☑ Total		111
No subtitles/CC	64	57.7%
☑ English (United States)	42	37.8%
☑ Arabic	2	1.8%
☑ Russian	1	0.9%
☑ Portuguese (Brazil)	0	0.0%

# of views

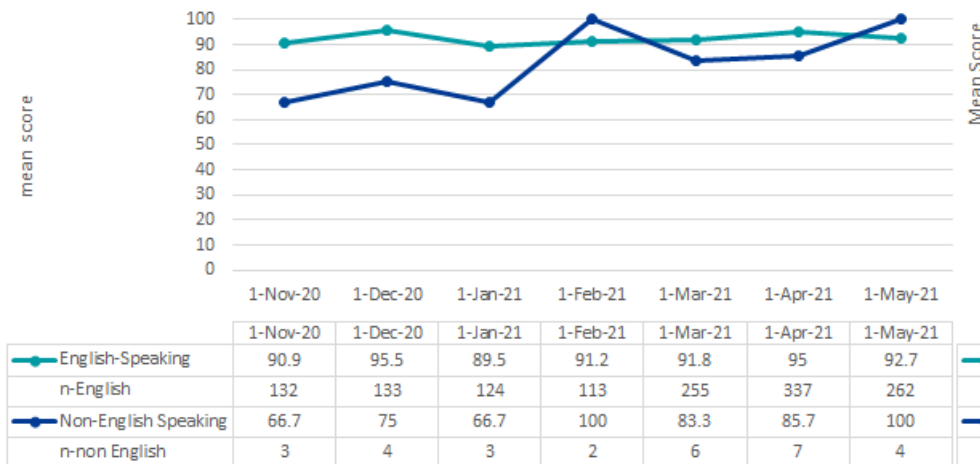# of days since video was uploaded to YouTube

Year 1 Accomplishments – Clinical Outcome Metrics

- No clinical outcome metrics yet
- Will be assessing Press Ganey/NRC metrics regularly
  - Survey used during the CPIP course would place too much added strain on clinical staff moving forward, patients already fill out too many surveys/questionnaires
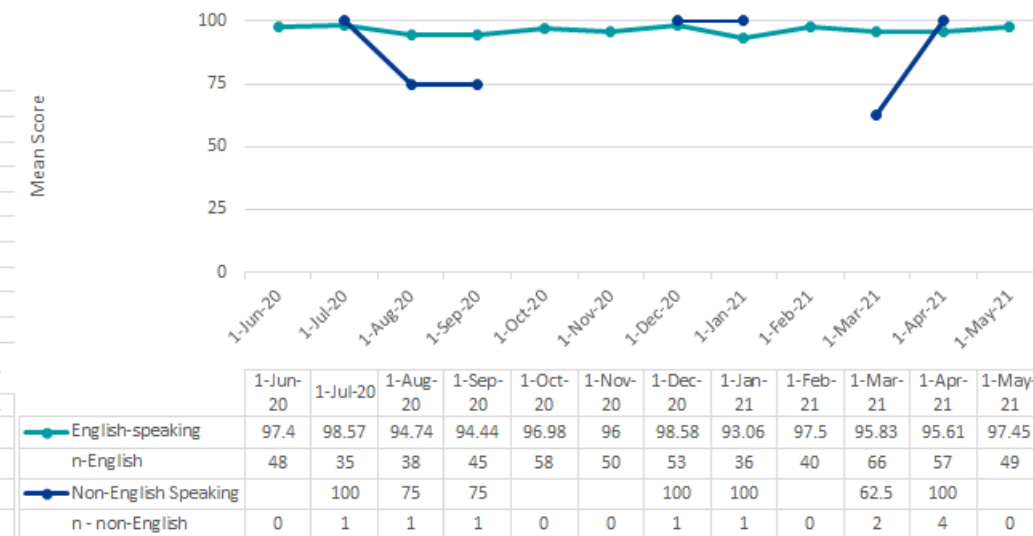
From NRC Survey Results @ MGH: mean score

"Did this care provider explain things in a way you could understand?"

	1-Nov-20	1-Dec-20	1-Jan-21	1-Feb-21	1-Mar-21	1-Apr-21	1-May-21
English-Speaking	90.9	95.5	89.5	91.2	91.8	95	92.7
n-English	132	133	124	113	255	337	262
Non-English Speaking	66.7	75	66.7	100	83.3	85.7	100
n-non English	3	4	3	2	6	7	4

From Press Ganey Survey Results @ BWH: mean score

Explanation of what to expect during your radiation therapy

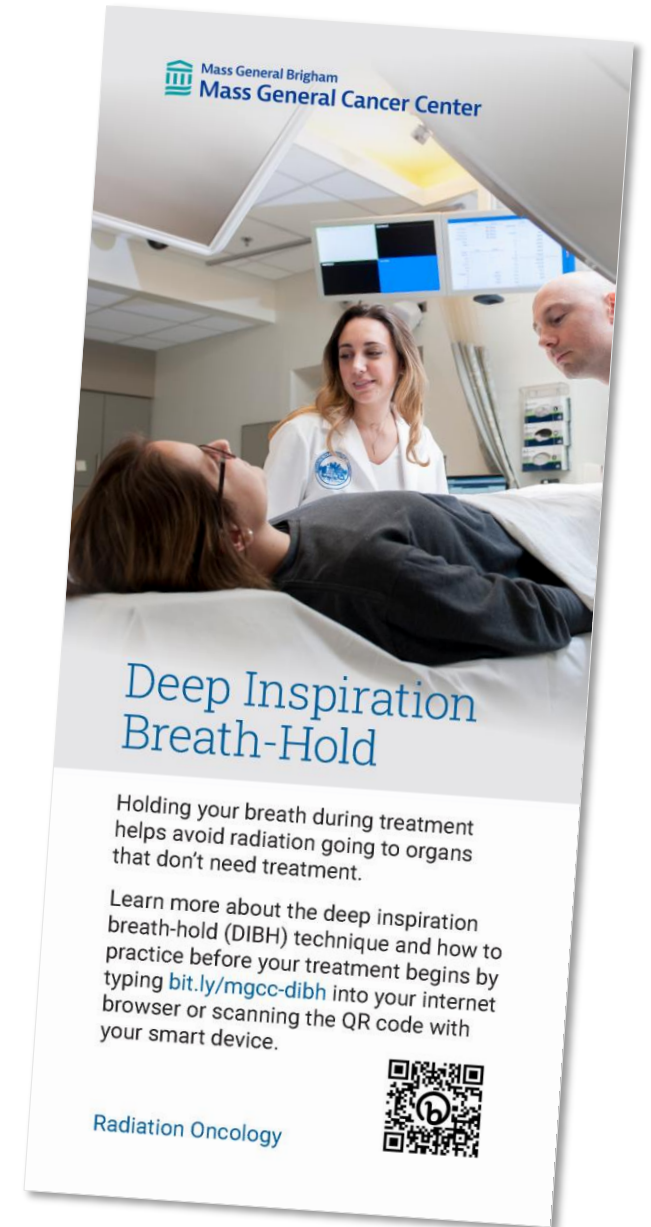|	1-Jun-20	1-Jul-20	1-Aug-20	1-Sep-20	1-Oct-20	1-Nov-20	1-Dec-20	1-Jan-21	1-Feb-21	1-Mar-21	1-Apr-21	1-May-21
English-speaking	97.4	98.57	94.74	94.44	96.98	96	98.58	93.06	97.5	95.83	95.61	97.45
n-English	48	35	38	45	58	50	53	36	40	66	57	49
Non-English Speaking		100	75	75			100	100		62.5	100	
n - non-English	0	1	1	1	0	0	1	1	0	2	4	0

Year 1 Challenges

- **Standardization:** Making sure the video is detailed enough to be helpful to patients, but doesn't include anything that is specific to any one department
  - 2 main campus sites (MGH, BWH/DFCI) + 4-5 network sites for each
- **Branding:** MGB/MGH/BWH/DFCI affiliations – ended up needing 3 versions of each video (1 for each affiliation) in English & Spanish
- **Implementation:** Working with MD teams at all sites to figure out how best for patients to access video
  - Heterogenous workflow difficult, differing practice patterns
- **Data collection:** video view counts skewed from staff watching final version
- **Staff turnover:** recent changes in the MGH breast team

![Brigham and Women's Hospital – Founding Member, Mass General Brigham](logo)

Looking Ahead: Plans for Year 2

Next Steps...

- Print handouts for MDs to use in the clinic for patients to access the video at home
    - bit.ly link/QR code will give us a better idea of patient views
- Follow up with MDs and clinical staff to see how process is going
- Assess Press Ganey/NRC survey results regarding education to see if there's any improvement
- Proceed with next educational video
    - Working with our next largest patient diagnosis group: prostate cancer
    - Focusing on another treatment technique that causes a lot of anxiety among patients

Appendix

Team Members

Name	Credentials	Role/Discipline (i.e. hospitalist, nurse manager, analyst, etc.)
Project Leaders:		
Sarah Wiley		Communications & Project Manager, MGH
Ron Shiloh	MD	Attending Physician, BWH
Julie Hudson	MS, DABR	Physicist, BWH
Team Members:		
Kellie Welsh		Project Manager, BWH
Stephanie Batchis	MPH	Manager Admin Ops & Training, MGH
Kathryn Stockflesh	RTT	Radiation Therapist, CT Team Lead, BWH/DFCI
Laura Warren	MD	Attending Physician, BWH/DFCI
Michelle Physic	RTT	Chief Radiation Therapist, BWH/DFCI
Alissa Fischer	RTT	Radiation Therapist, BWH/DFCI
Karen Hidalgo		Patient Service Coordinator, MGH
Barbara Rodriguez		Practice Assistant II, BWH
Project Sponsors:		
Jennifer Bellon	MD	Attending Physician, BWH/DFCI
Rachel Jimenez	MD	Attending Physician, MGH