### **CASE STUDY**

# **Digital Patient Engagement in Radiation Oncology**

A large mid-Atlantic health system piloted the 5thPort<sup>™</sup> Patient Engagement and eConsent Platform ("5thPort") in their radiation oncology department specifically to improve patient education, engagement, and teach back.

In order to positively impact the quality and consistency of patient education and improve its teach back survey scores, this large mid-Atlantic health system piloted 5thPort in its radiation oncology department. The 5thPort team worked with providers and administrators to implement the platform and operationalize the process of digitally engaging cancer patients who required radiation therapy as a part of their treatment.

### Headlines

- Patients were highly satisfied with the multimedia engagement,
- By completing the engagements remotely on their own time, patients reported less stress on the day of their appointments and greater empowerment to participate in their healthcare decisions,
- Patients spent 30 to 40 minutes less in the waiting room by completing all paperwork remotely on their own devices,
- Providers saved an average of 15 to 20 minutes per patient consultation, and
- Nurses reported that conversations with patients were **easier**, **shorter** and **more focused**.

### **Background**

The diagnosis of cancer strikes fear in the hearts of those afflicted and their families. The complexity of the disease and its treatment options makes patient education and empowerment that much more important.

Researchers have long maintained the importance of teach back as a method to improve the comprehension and retention of patient education, but given a lack of commercially available solutions, there is no consensus on how to operationalize the process. The measurement and reporting of teach back scores highlighted a problem faced

by this system but is endemic to most other health systems as well.

Delivering patient education verbally in an office setting can be ineffective for a number of reasons:

- Each provider communicates differently, and most providers are challenged to express complex medical jargon in a way that is easily understood by the lay person,
- Educating the patient during the consult is time consuming for providers and nursing staff, and
- Patients comprehend and remember very little of what is said during an office visit and do not have the time to process the information in order to actively participate in their healthcare decisions.
- The use of 5thPort helps me focus on the precise area that patients were lacking in comprehension. Ultimately, this simplifies my workflow and I can see it revolutionizing the nursing profession.

Nurse User

## The Objectives

As the leading commercially available patient engagement and eConsent solution, 5thPort was selected for a pilot initiative to validate the following:

- 5thPort's operational feasibility in an oncology setting,
- The effectiveness of remote digital, multimedia patient engagement and teach back to reduce patient stress and increase empowerment, and
- Its ability to reduce provider and staff burnout.



# 5thPort — Creating a New Standard of Care

The 5thPort platform was utilized to develop customized "engagement plans" for specific disease sites, type of treatment modality and stage of treatment regimen.

The 5thPort implementation team worked with the providers and administrative staff to determine the optimum workflow, and setup the engagement artifacts. The care team was trained on the proper use of the platform in under a week.

For breast cancer, the pre-consultation engagement plan comprised of a video (sourced in collaboration with ASTRO) explaining radiation therapy for breast cancer, a specifically created teach back style quiz, a digital brochure, several hospital specific notices (e.g., privacy and financial responsibility), multiple screening instruments (e.g., nutrition, psychosocial), the hospital specific treatment informed consent form (ICF) and a survey to gather information about the patient's experience.

Similar customized engagement plan variations were created for breast cancer post-treatment, prostate cancer pre- and post-treatment and H&N pre- and post-treatment.

For prostate cancer, the pre-consult engagement was tailored to provider patients with an overview of the different treatment options (i.e., external beam radiation, brachytherapy or a combination). This enabled the patient and provider to discuss and determine the best course of action for the patient. Following the consult, the patient was sent an engagement plan that was specific to the treatment protocol established for them.

Engagements were delivered to patients digitally via a branded and customized email and/or text message one to seven days prior to their appointment date. The communication contained instructions to complete the engagements ahead of the meeting with their provider. Automated reminders were sent to patients who had not completed their engagements.

A real time dashboard allowed staff to view the status of the engagements ahead of the patients appointment time.

Patients came to their appointments fully educated and having read the ICF. Patients had the ability to flag sections of 5thPort transformed this organizations' patient engagement routine with these 3 Simple Steps!

CONSENT INFORM **CONFIRM** Comprehension Multimedia **Testing with Teach** Education Back

- -STANDARDIZED, MULTI-LINGUAL content

-CONFIRM

- MEANINGFUL consent process.

- Delivered CONSISTENTLY.
- TEACH BACK to reinforce.

comprehension.

-Full REMOTE capability.

- -Consumed CONVENIENTLY.
- Acknowledgements DOCUMENTED Q&A. to VALIDATE "receipt".
  - -100% VERIFIABLE audit trail.

5thPort ensures that **EVERY** patient is educated and empowered **PRIOR** to giving their Informed Consent.

the ICF and note any questions that they had for discussion with their provider. At their appointment the provider reviewed and answered any questions they had and only then were they able to sign their ICF in the provider's office. The provider and a witness completed the ICF that was generated as a PDF document.

# The Learnings and Results

- 50% of patients completed their engagement on a mobile device.
- Patients overwhelmingly had positive feedback on the digital engagement experience and saw value, rating it a 4.33 on a 5 point scale.

On a 5 point Likert Scale (1=Strongly Disagree; 5=Strongly

- Patients rated the effectiveness of the multimedia artifacts used (videos and documents) a 4.58/5.0.
- Completing the digital activities at home reduced stress on the day of the appointment scored a 4.30/5.0.
- Patients rated feeling empowered after this digital engagement a 4.46/5.0.

The hospital is implementing the 5thPort platform across the entire radiation oncology department, ushering in a new standard of care where every patient is digitally educated at home prior to their appointment.

#### About 5thPort™

5thPort is a digital patient engagement and eConsent platform, that leverages multimedia, specifically designed for use in both acute care and clinical research environments. To learn more about 5thPort, please visit our website at www.5thPort.com or email us at info@5thPort.com.



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