



# **Interventional Radiology Patient-Centric Procedural Videos: A Quality Improvement Project Designed to Increase Patient Understanding**

*Zak Boggs, MD<sup>1</sup>, Michela Paradiso, MD<sup>1</sup>, Luis Regalado, MSc<sup>1</sup>, and Mina S. Makary, MD<sup>1</sup>*

*<sup>1</sup>The Ohio State University College of Medicine, The Ohio State University Wexner Medical Center Dept of  
Interventional Radiology*

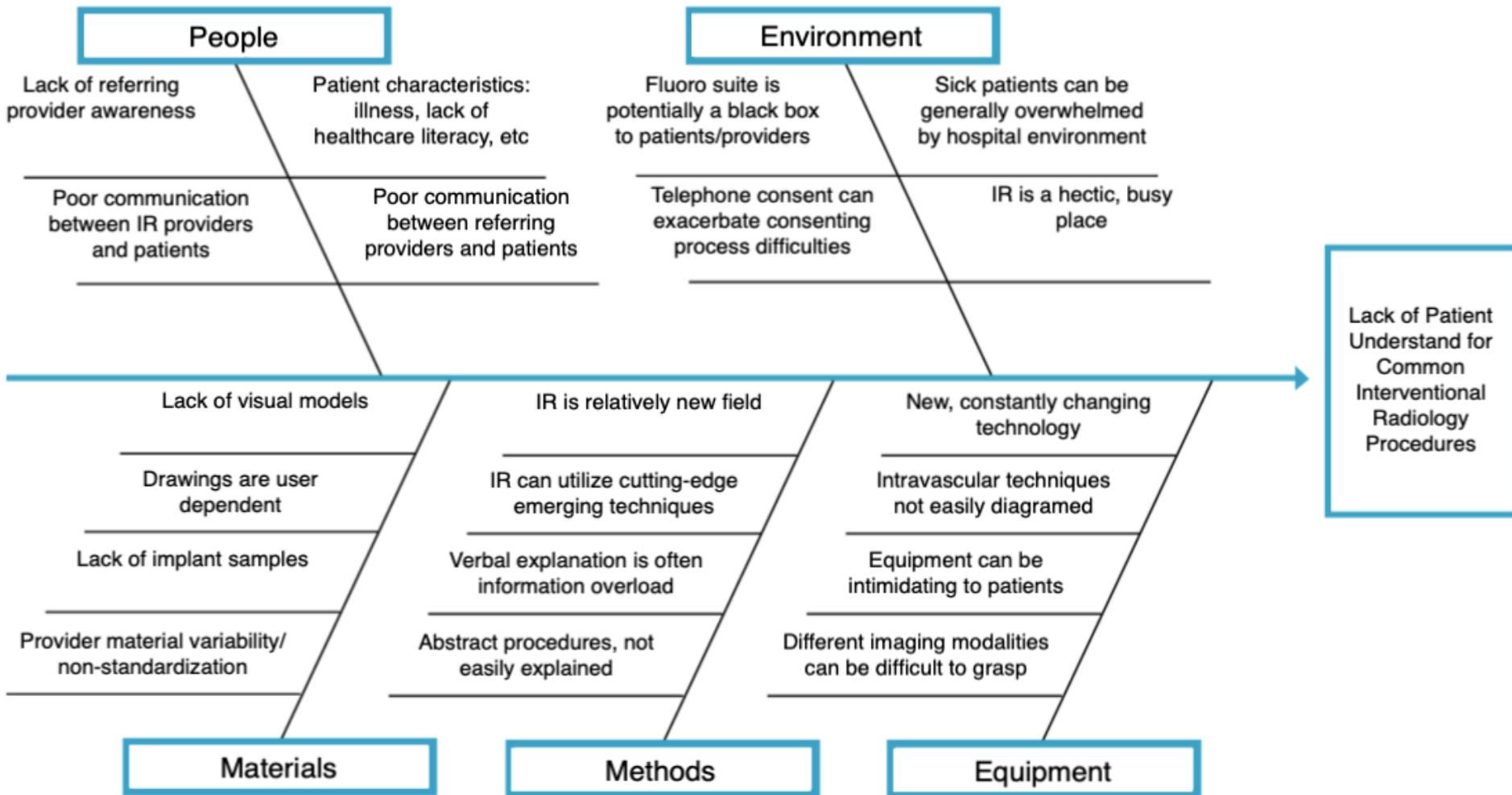
# Problem Statement

At The Ohio State University, anecdotally, interventional radiologists have noticed a lack of patient understanding about their procedures, both before and after the operation, raising concern for insufficient informed consent as a potential consequence.

In response, we aim to increase patient understanding on surveys from a baseline median of 3.5 on a 5-point Likert scale to a goal of 5 by February 2021.

These procedures include: central line placement, port placement, port removal, ablation, TACE, and TARE.

# What can lead to misunderstanding?

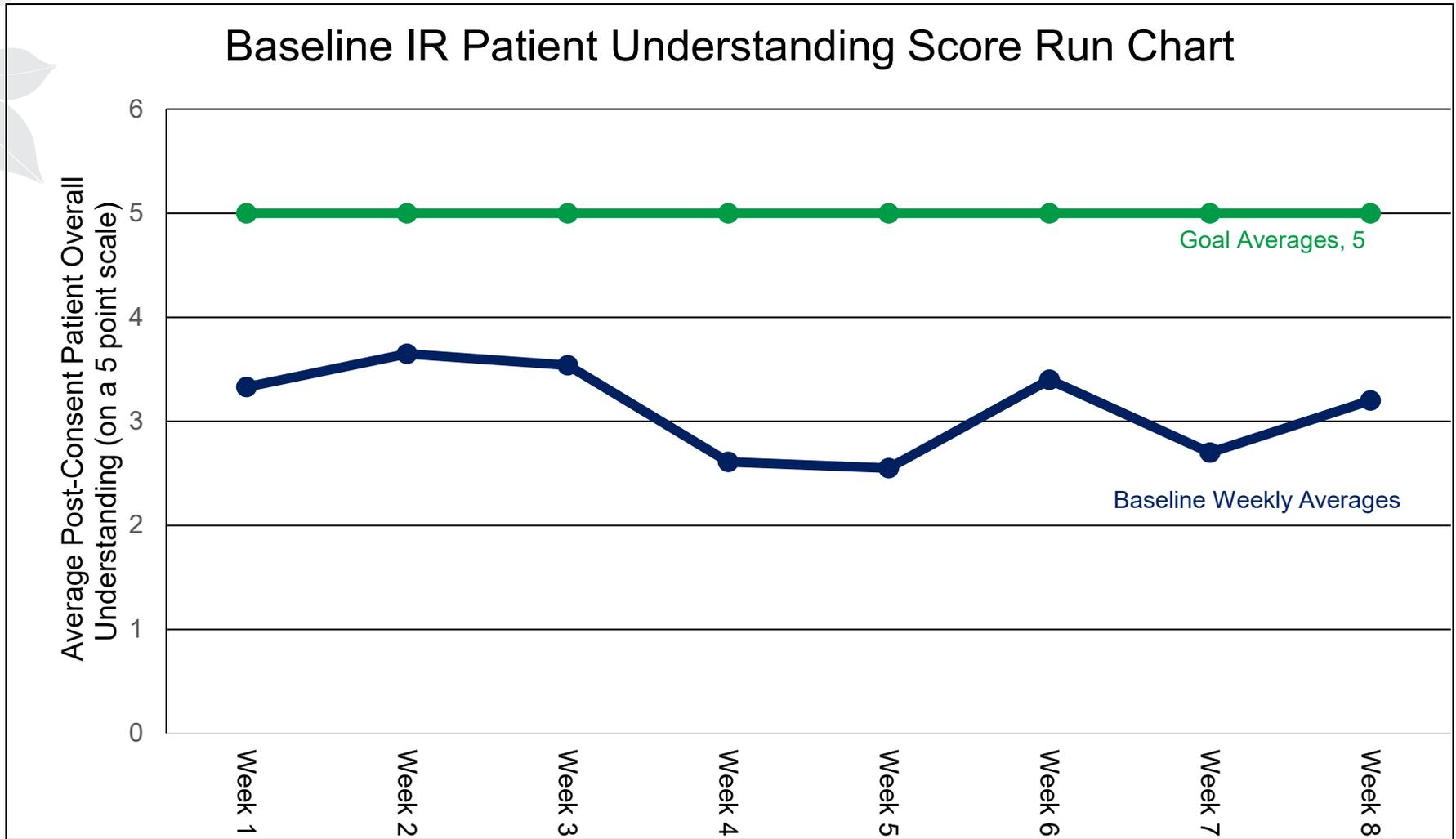


# Patient Survey

- The IR physician or resident obtained verbal consent.
- The patient was given the below survey to assess understanding before and after being consented.
  - 1 is strongly negative. 5 is strongly positive.

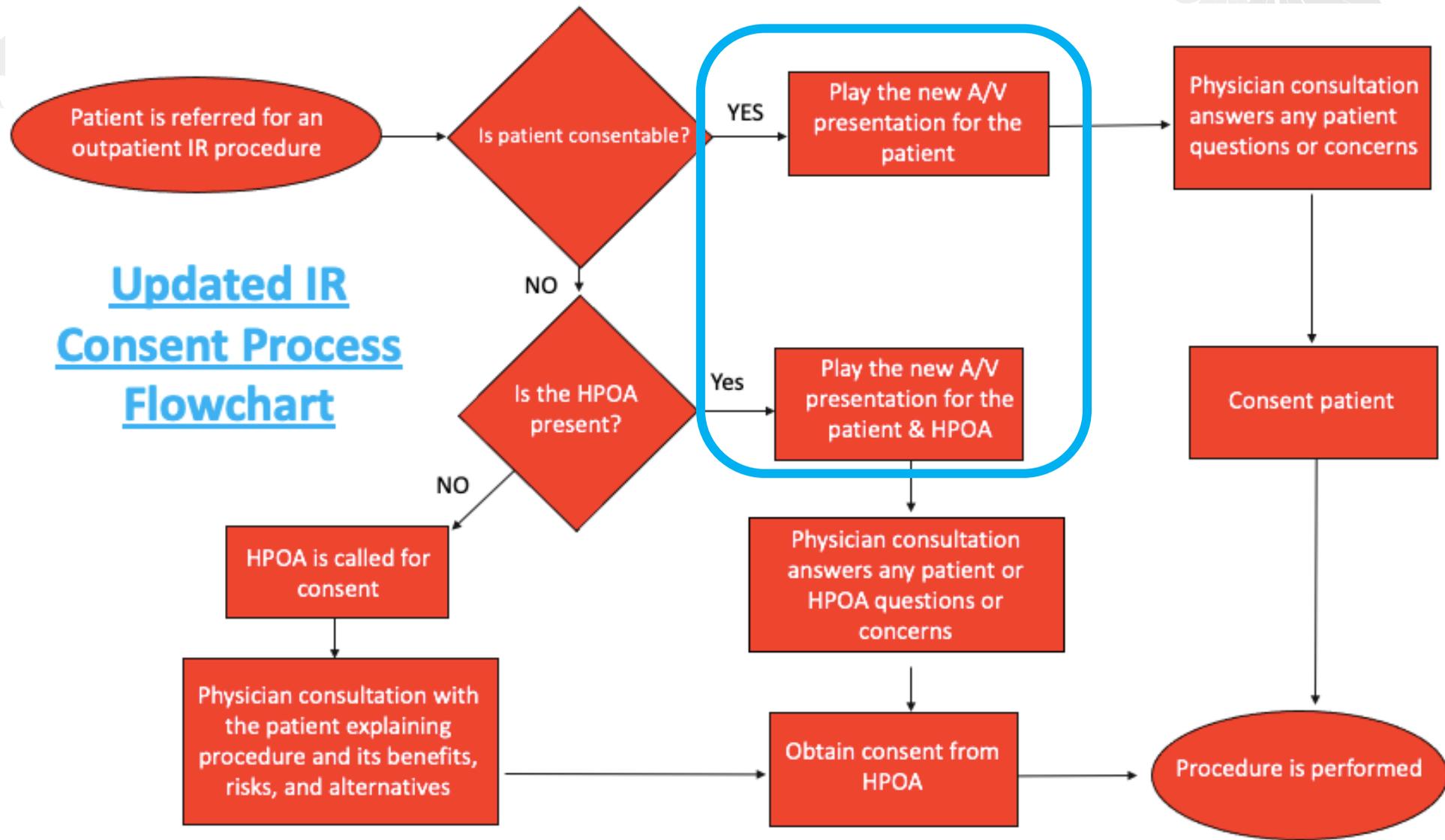
| # | Question  | <u>Before Education</u> |                       |                       |                       |                       | <u>After Education</u> |                       |                       |                       |   |
|---|---|-------------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|---|
| 1 | How would you rate your <u>overall understanding</u> of this procedure?               | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |   |
|   |   | 1                       | 2                     | 3                     | 4                     | 5                     | 1                      | 2                     | 3                     | 4                     | 5 |
| 2 | How would you rate your understanding of the <u>anatomy/body structures</u> involved? | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |   |
|   |   | 1                       | 2                     | 3                     | 4                     | 5                     | 1                      | 2                     | 3                     | 4                     | 5 |
| 3 | How would you rate your understanding of the <u>risks</u> of the procedure?           | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |   |
|   |   | 1                       | 2                     | 3                     | 4                     | 5                     | 1                      | 2                     | 3                     | 4                     | 5 |
| 4 | How would you rate your understanding of the <u>benefits</u> of the procedure?        | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |   |
|   |   | 1                       | 2                     | 3                     | 4                     | 5                     | 1                      | 2                     | 3                     | 4                     | 5 |
| 5 | How would you rate your understanding of the <u>alternatives</u> to this procedure?   | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |   |
|   |   | 1                       | 2                     | 3                     | 4                     | 5                     | 1                      | 2                     | 3                     | 4                     | 5 |
| 6 | What is your <u>overall satisfaction</u> with the consultation/explanations?          | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |   |
|   |   | 1                       | 2                     | 3                     | 4                     | 5                     | 1                      | 2                     | 3                     | 4                     | 5 |

# Previous State (based on overall understanding\*)



\*For included procedures: central line placement, port placement, port removal, ablation, TACE, and TARE

## Updated IR Consent Process Flowchart



We chose to focus on creating consistent, standardized provider to patient communication by creating patient-centric procedural videos

# Video Creation & Implementation

- Dr. Makary and the OSUWMC Marketing Department created videos to aid the consenting process.
- After patient arrival to the preprocedural area, the patient was shown the video by a member of our team.
- After video completion, the patient was asked to voluntarily fill out an identical survey to the one administered to patients prior to video implementation (slide 4).

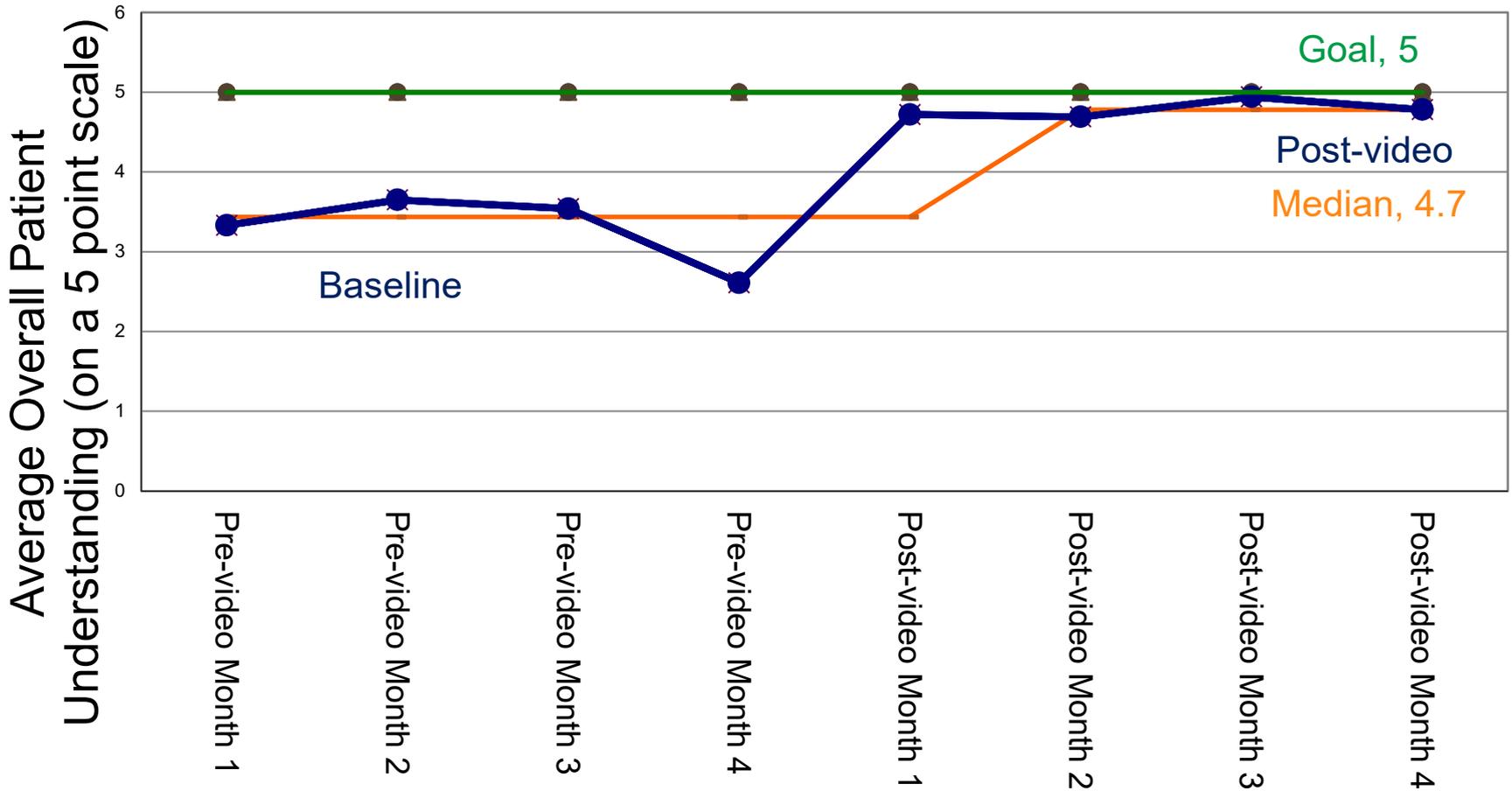
# Videos



Scan for OSUWMC IR Video Playlist

# Post Video Implementation Overall Understanding\*

## IR Patient Understanding Score Run Chart Baseline vs. Post-Implementation



# Conclusion

- A patient-centric audiovisual method of IR procedure explanation to establish informed consent can be superior to the traditional verbal methodology.
- This quality improvement project demonstrated that a multimedia presentation can improve patient understanding of the anatomy, risks, benefits, alternatives, and overall comprehension of common IR procedures.
- More data is needed to establish power for the individual procedures.