

Medical outcomes like length-of-stay in the hospital, likelihood of needing a second surgery, elapsed time before returning to normal activity, etc., are critically important considerations when it comes to measuring care quality. But to what extent do medical outcomes matter to referring physicians and patients when selecting a provider? Are some outcomes more important than others and, if so, what is the impact on volume?

MII's Healthcare Provider Predictive Scorecard (HPPS) can inform strategic decisions about your care products (e.g., ACL repair, MRI of the brain, appendectomy) by measuring the impact that medical outcomes will likely have on a physician's decision of where to refer a patient or a patient's decision of where to seek care as factor in how your organization can compete on *value*. We illustrate below how MII has evaluated the impact of medical outcomes in the context of ACL repair to help a client grow market share and understand the achievable premium for their pioneering ACL Repair technology.

## Outcomes of ACL Repair Surgery

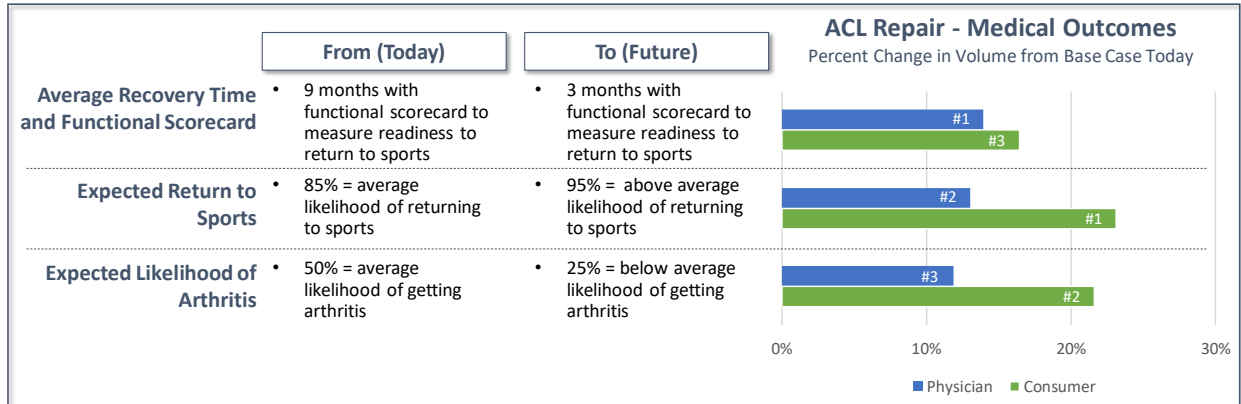
In our work with this client, we evaluated three medical outcomes for a "typical repair":

- 1) Average recovery time for patient to gain at least 90% of their mobility back and whether the orthopedist used a functional scorecard to measure readiness to return to sports (e.g., mobility, agility, range of motion)
- 2) Expected likelihood of whether the patient could return to sports
- 3) Expected likelihood of whether the patient would have arthritis in an ACL-repaired knee in the future

HPPS estimated the impact of medical outcomes by looking at the Client's current offering compared with potential improvements (in terms of medical outcomes) to their offering. The graphic below presents detailed results for all three outcomes broken down by referring physician response (blue bars) and patient's response (green bars). There are three important findings from the graph:

- 1) **Volume shift measure** – the bars reflect the percent change in volume from today's world to a future world. For example, with the first medical outcome (i.e., a patient's recovery time is 9 months and the orthopedist uses a functional scorecard to assess the patient's progress) HPPS would compare "today's world" to a future offering where this same outcome is improved (i.e., a patient's recovery time is 3 months and the orthopedist uses a functional scorecard to assess this). HPPS reports that referring physicians and patients view this change in Average Recovery Time and Functional Scorecard positively and about 15% of the volume would shift toward the future offering
- 2) **Physicians compared to patients** – With Average Recovery Time and Functional Scorecard, both referring physicians and patients respond in a similar way (about 15% increase in volume if improved). However, with Expected Return to Sports and Expected Likelihood of Arthritis, an improvement in this service offering will drive about 2x as much volume for patients as it will for referring physicians

3) **Decision priorities** – With HPPS, one can focus on the order of priorities as well. For physicians, Average Recovery Time will drive the most volume with an improved offering; however, the other two medical outcomes do not lag by much. With patients, however, Expected Return to Sports and Expected Likelihood of Arthritis drive about 7% more volume (i.e., are more important) than the number one priority of referring physicians (i.e. Average Recovery Time)



This example clearly demonstrates that medical outcomes are an important driver of patient and referring physician decision-making. Noting that that improvement of medical outcomes often requires long-term, strategic investments and decisions tied to innovative, leading-edge techniques. HPPS can be used to help our clients evaluate the likely incremental volume associated with improved medical outcomes prior to investment.