



Patient-Reported Outcomes As A Clinical Vital Sign: Breast-Q Implementation Lessons And Clinical Reference Values

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Purpose

- To describe institutional improvements to BREAST-Q implementation in clinical practice through increasing patient engagement and creating reference values

Background

- BREAST-Q is a frequently used patient-reported outcome measure for satisfaction and quality of life following breast reconstruction.
- Routine, longitudinal implementation of BREAST-Q has been challenging → **BREAST-Q underutilized in patient care**
- Reference values and strategies to engage patients can improve BREAST-Q clinical utility.

Methods

- Retrospective review of BREAST-Q completion rates of postmastectomy breast reconstruction patients at Memorial Sloan Kettering Cancer Center (MSK) in 2011-2020.
- Descriptive statistics of MSK BREAST-Q scores to generate reference values
- External validation of reference values by comparing to BREAST-Q scores from Mastectomy Reconstruction Outcomes Consortium (MROC)

2011-2017:
Timepoint-based BREAST-Q administration through Webcore

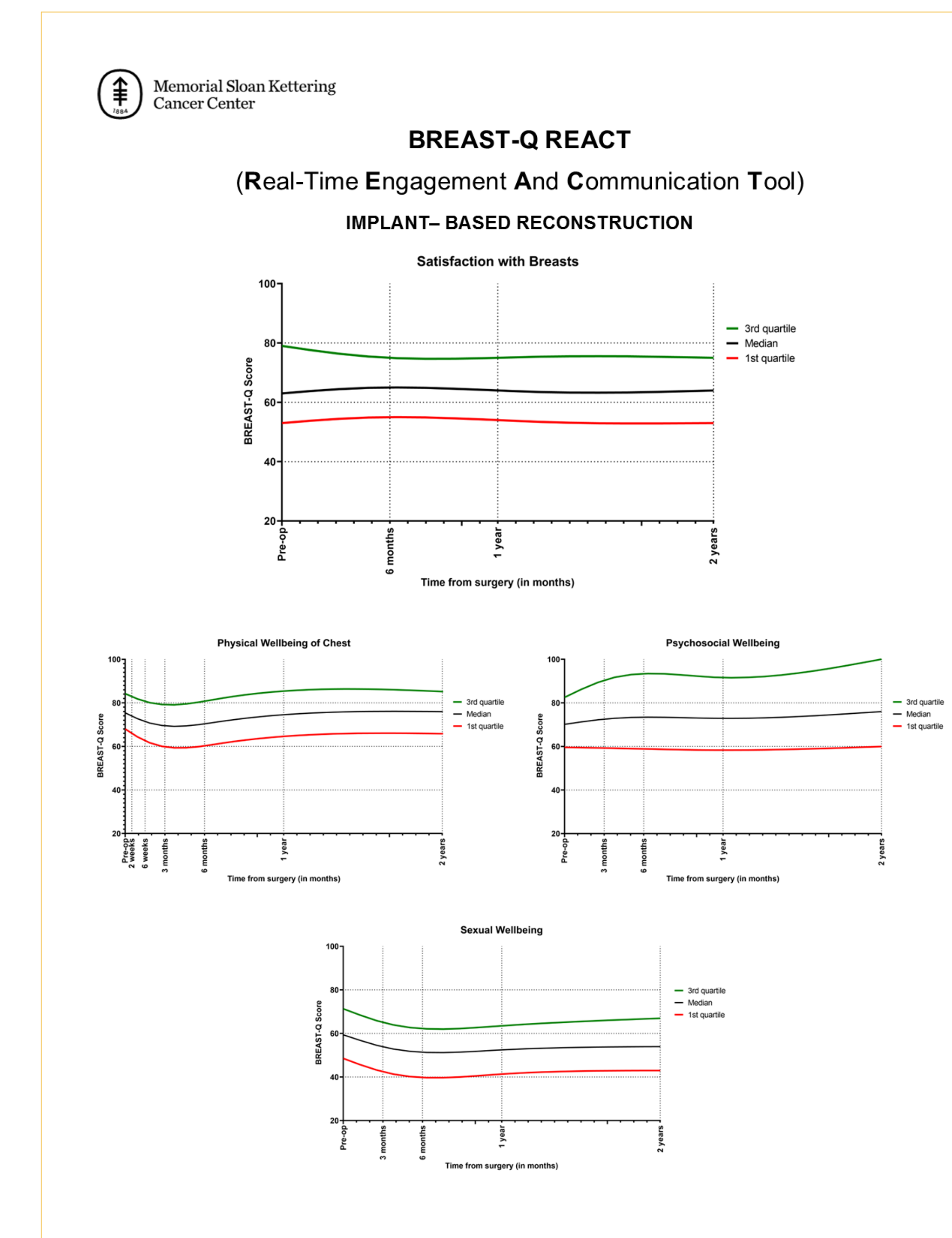
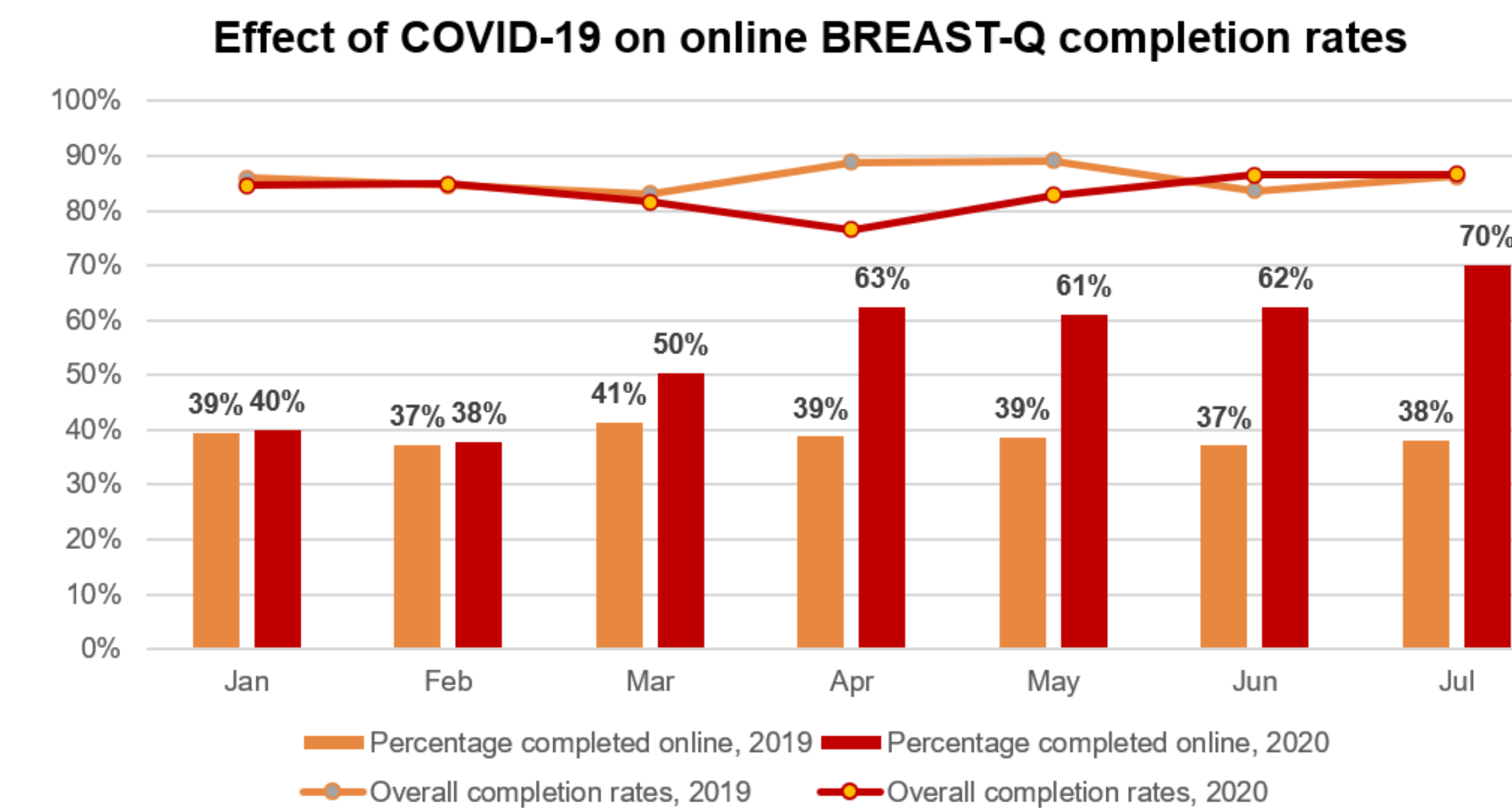
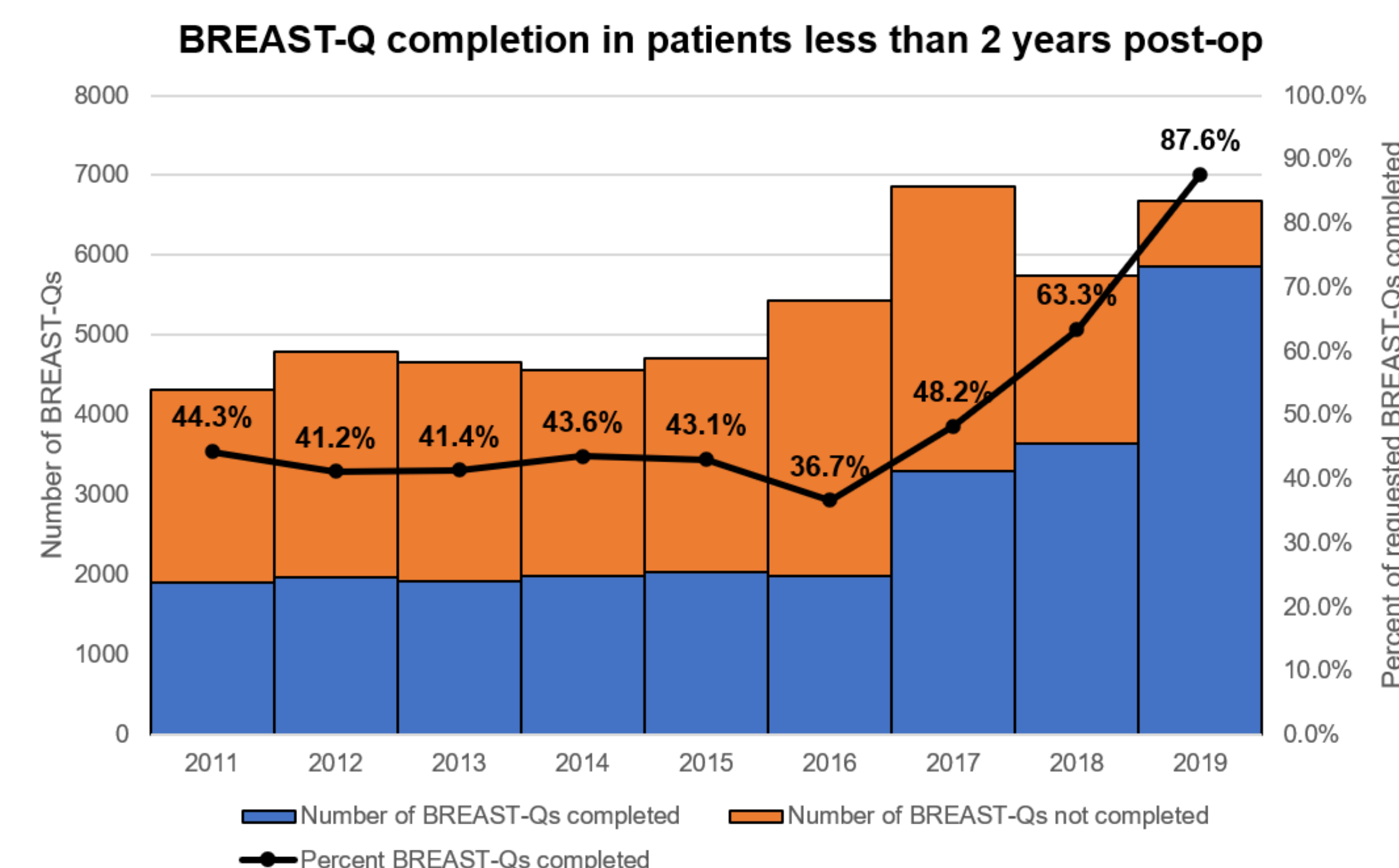


2018-present: BREAST-Q as a vital sign
Routine BREAST-Q administration prior to every clinical encounter

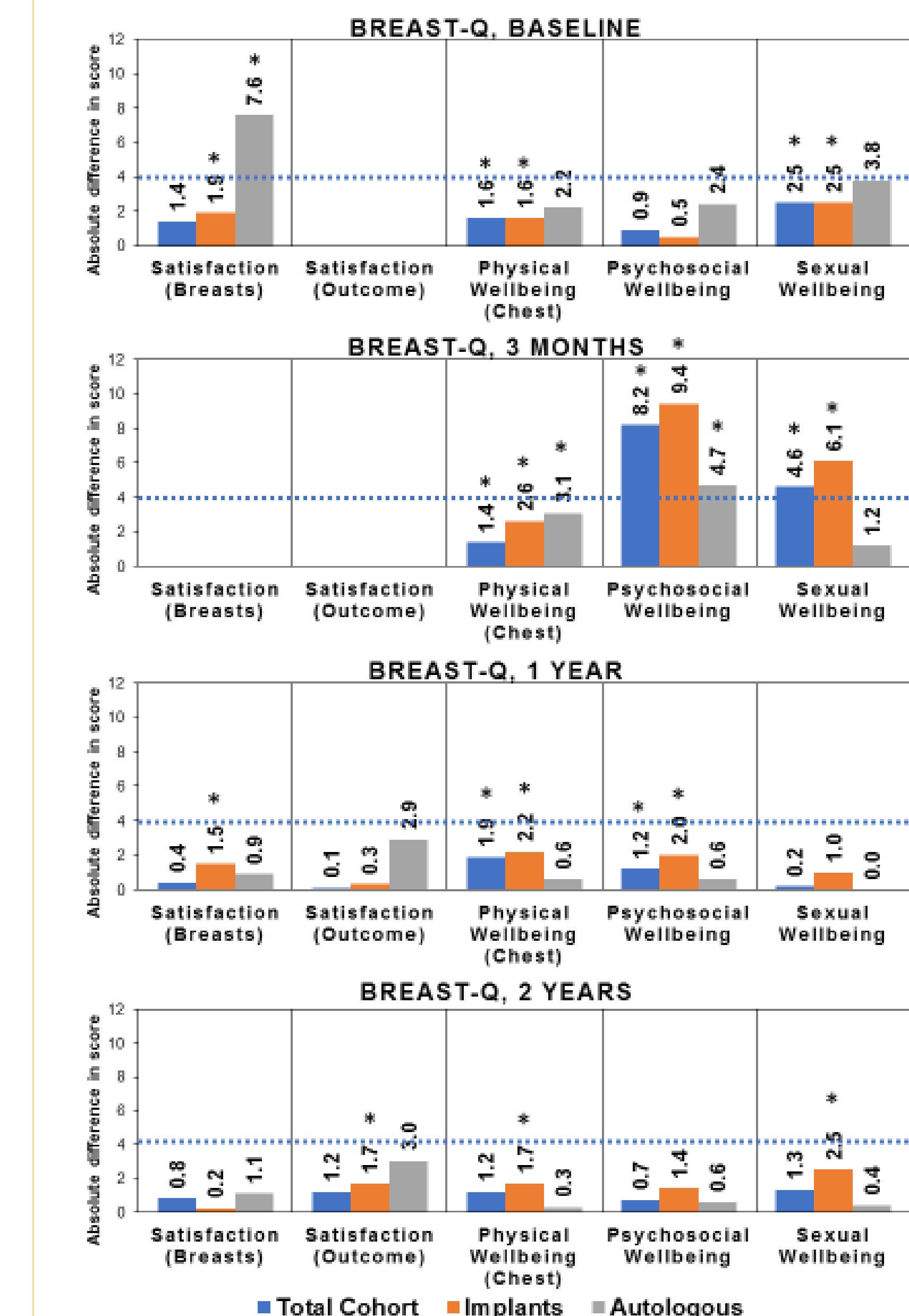
- MSK Engage:** Automated BREAST-Q administration and integration with EMR
- BREAST-Q Champions:** Clinical staff members responsible for monitoring BREAST-Q completion and troubleshooting clinic-specific administration issues
- Tableau:** Digital dashboard for monitoring BREAST-Q completion

Results

- 109,435 requested BREAST-Qs → 41,981 BREAST-Qs completed
- Responders were younger, more likely to be white, and more likely to have private insurance than non-responders.



Absolute differences in BREAST-Q scores, MSK vs. MROC



- MSK:** n=3268, 2932 implant, 336 autologous
- MROC:** n=2814, 1958 implant, 856 autologous
- No meaningful differences in cohort characteristics, including age, race, diabetes, smoking status, chemotherapy, and radiation.

Conclusions

- Sustained, longitudinal implementation of BREAST-Q for clinical practice is possible.
- REACT adds to the clinical applicability of BREAST-Q by providing context to a numerical score → target patients with concerning scores for intervention
- REACT validated for breast reconstruction patients in North America