the U.S. were employed by just the 90 largest practices. Radiation oncology, as a field, is highly concentrated, and represents one of the most consolidated specialties across the country. A growing body of literature has shown that greater levels of practice consolidation are associated with higher costs with little apparent improvement in quality. However, specific studies on the impacts of practice consolidation in radiation oncology are needed.

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### Quality Improvement in a Statewide Collaborative Radiation Oncology Quality Consortium

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**Purpose/Objective(s):** Regional collaborative quality initiatives that incent participation through direct payment and streamlined reimbursement for high-performing sites have been shown to drive improvements in surgical outcomes. Numerous quality measures have been proposed in radiation oncology, and research has identified readily measurable indicators like dose to critical structures that predict for subsequent toxicity in patients. A decade ago, we initiated a voluntary statewide collaboration for quality improvement in radiation oncology and now describe its impact on care delivery.

**Materials/Methods:** Following SQUIRE guidelines, we describe the approach and measures that the program has implemented. To evaluate impact, we describe compliance at baseline and now with active measures among participating practices.

**Results:** Since beginning data collection in 2012, radiation oncologists, physicists, data abstractors, and practice administrators from sites in one state (currently numbering 27) have convened thrice yearly. At these meetings, experts have spoken regarding trends within the field and inspired discussions regarding potential targets for quality improvement within the consortium. Blinded data on practices at various sites have also been regularly presented, and the group has iteratively developed new initiatives and consensus-based benchmarks to improve radiation oncology care delivery, patient experiences, and outcomes. An observational dataset with detailed information from over 20,000 patients has been assembled to evaluate quality. Compliance with select measures is described in the table, including use of guideline-concordant hypofractionated radiotherapy, motion management, doses to targets/ normal tissues, and consistency in delineating and naming contoured structures (a precondition for quality evaluation).

**Conclusion:** Although observational analysis cannot fully exclude secular trends, contextual data revealing slow uptake of best practices elsewhere in the US suggests that this initiative has improved the consistency, efficiency, and quality of radiation oncology care in its member practices and may be a model for other regions.

Abstract 141 – 1	Table	1:	Compliance	with	select
measures					

Measure	Year Initiated	Baseline Rate (Pre-Intervention)	Target Rate	Current Rate
Use hypofractionation in guideline-concordant breast pts	2014	36%	≥90%	98%
Motion assessment in lung pts	2014 2015	57% 71%	≥90% ≥90%	93% 94%
			(Cont	inued)

# **Abstract 141** – **Table 1: Compliance with select measures** (*Continued*)

1 1				
Measure	Year Initiated	Baseline Rate (Pre-Intervention)	Target Rate	Current Rate
90% of node negative breast patients receive a heart dose of $\leq 2$ Gy				
Lumpectomy PTV expansion drawn for breast pts	2017	47.1%	≥80%	98%
Lung GTV defined per consortium guidelines	2017	82.8%	≥90%	96%
Avoid > 10 fractions for bone mets	2019	71.3%	≥80%	96%
≥95% of PTV receives ≥100% of rx dose AND mean heart dose ≤20 Gy for lung pts	2019	44%	≥65%	85%
Single fraction for uncomplicated bone mets	2020	16%	≥20%	27%
Breast boost omission in low- risk pts	2020	43%	≥30%	64%

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#### Effectiveness of Traditional Acupuncture in Reducing the Severity of Hot Flashes Reported by Breast Cancer Patients

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**Purpose/Objective(s):** Breast cancer patients often experience hot flashes (HF) and other vasomotor symptoms that negatively impact their quality of life. Patients inclined to an integrative approach may seek alternatives to prescription drugs for managing the intensity and frequency of HF. In the literature, the benefit of acupuncture in reducing HF has been variably reported, and reasoned for having some degree of placebo effect. The goal of our randomized study is to compare the efficacy of traditional acupuncture (TA) to sham acupuncture (SA) in reducing the severity of HF in female patients with breast cancer.

**Materials/Methods:** In this IRB approved study, breast cancer patients that experienced > 10 episodes of HF/ week were randomly assigned to receive either TA or SA. The technique of SA used the validated Streit-berger placebo needles. The protocol for patient sessions in the TA and SA groups was the same, twice a week sessions for 5 weeks followed by once a week session for 4 weeks, and additional one-month follow up. All patients completed the MenQOL survey on HF at baseline, end of treatment, and at one-month follow up. In this analysis, patient reported