Measuring the impact of a Physician-led collaborative on the quality of prostate cancer care: 7 years of making MUSIC
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INTRODUCTION AND OBJECTIVE: Beginning in 2012, the Michigan Urological Surgery Improvement Collaborative (MUSIC) endeavored to build on the success of the Collaborative Quality Initiatives program of Blue Cross Blue Shield of Michigan and improve the quality of urologic care for patients in Michigan with an initial focus on prostate cancer (PCA). We sought to evaluate the effectiveness MUSIC’s prostate-related QI initiatives.

METHODS: MUSIC is comprised of > 250 urologists representing 90% of the urologists in Michigan. Prospective data collection began in 2012 with more than 65,000 patients with, or at risk for, PCA in the registry to date. From 2012 - 2018 efforts to improve PCA care included reducing prostate biopsy-related infectious hospitalizations, optimizing the utilization of radiographic staging for men with newly diagnosed PCAs, enhancing treatment appropriateness for favorable risk PCA patients, and establishing the MUSIC patient reported outcomes (PRO) program, an electronic infrastructure for measuring and improving functional outcomes after radical prostatectomy (RP).

RESULTS: From 2012 - 2018, the overall rate of prostate biopsy-related infectious hospitalizations decreased from 1.2% pre-intervention to 0.7% post-intervention (p<0.001) representing the avoidance of 280 hospitalizations. The use of radiographic staging (i.e., CT scan and/or bone scan) for non-indicated patients (i.e., PSA ≤ 20 or Gleason < 8 or Clinical T stage < cT3) decreased from 16.4% to 5.9% (p<0.001) resulting in approximately 1750 patients avoiding inappropriate imaging. For favorable-risk PCA patients, verified active surveillance increased from 42.2% to 67.3% (p<0.001), equivalent to 1600 patients avoiding initial definitive treatment where its benefits are less apparent. The proportion of RP patients enrolled in PRO from 2014-2018 increased from 22.0% to 70.0% (p<0.001). (Refer to figure 1 below)

CONCLUSIONS: By collecting credible data, sharing best practices and implementing system-level changes and modifications in clinical behavior, MUSIC is enhancing the quality, value, and outcomes of care for PCA patients in Michigan.

Source of Funding: Blue Cross Blue Shield of Michigan