



Michigan Urological Surgery Improvement Collaborative (MUSIC)

Report Period (October 1, 2018 – March 26, 2019)

2018 Annual Progress Report

Executive Summary

MUSIC remains committed to making Michigan #1 in urologic care. There are 45 participating urology practices and more than 250 urologists that collectively represent 90% of the urologists in the state. MUSIC maintains prominent involvement of urologists and staff across the state, as well as seven patient advocates who are involved in all of the consortium's activities and offer the patient perspective, which is critical to the program's success. In terms of data collection, the registry now includes nearly 60,000 patients with, or at-risk for, prostate cancer, more than 13,000 patients treated with kidney stone surgery, and over 1,200 patients diagnosed with a small renal mass.

MUSIC continues to drive improvements in the quality and cost-efficiency of prostate cancer care. MUSIC's early quality improvement successes related to prostate cancer diagnosis include optimization of imaging for men with newly diagnosed cancer, and a 50% reduction in transrectal ultrasound guided prostate biopsy-related infectious hospitalizations, among others. MUSIC is expanding its work in these areas with the development of a prostate MRI quality assurance program and efforts to achieve broader adoption of office-based transperineal prostate biopsy to further reduce the rate of prostate biopsy-related infectious hospitalizations. We are continuing our work to improve radical prostatectomy outcomes via the collection and measurement of peri-operative complications and patient-reported functional outcomes, as well as tri-annual Surgical Skills Workshops and a peer-to-peer video review program. MUSIC is working to improve treatment appropriateness through the utilization of a Roadmap for the management of men with favorable-risk prostate cancer and enhancing patient-centered decision making for newly diagnosed prostate cancer patients with the implementation of a web-based decision aid, Personal Patient Profile-Prostate (P3P). MUSIC successfully achieved its recruitment target of 350 patients in its first prospective, randomized clinical trial, the Genomics in Michigan ImpactINg Observation or Radiation (G-MINOR) study, that focuses on the impact of a genomic biomarker on adjuvant treatment decisions among patients with high risk prostate cancer. MUSIC is also now the largest contributor of data to the TrueNTH Global Registry, a Movember project. Further, MUSIC continues to enhance its digital platform, askMUSIC, which now includes a suite of tools and resources to help patients and providers make the best possible treatment decisions. Recognized as a meaningful resource, askMUSIC was highlighted in Reuters November 2018 Health News.

In other work, MUSIC is striving to make Michigan #1 in kidney stone care. MUSIC ROCKS (reducing operative complications following kidney stone surgery) has collected data on more than 13,000 patients treated with Ureteroscopy (URS) and Shockwave Lithotripsy (SWL). In efforts to reduce avoidable emergency department visits after URS, we created patient education materials for the management of stent-related symptoms, as well as a Pain Optimization Pathway (POP) to provide physicians and patients guidance on pain management after surgery. MUSIC ROCKS is also initiating efforts to enhance treatment appropriateness and antibiotic stewardship for patients undergoing SWL. Furthermore, MUSIC plans to devise appropriateness guidelines for the use of ureteral stents during ureteroscopy in order to reduce emergency department visits after URS, and make Michigan the safest place in the world to undergo stone surgery. MUSIC's newest program, MUSIC KIDNEY, is focused on improving the quality of care for patients with small renal mass diagnoses. MUSIC KIDNEY conducted a

pilot in 2018 and following the approval of BCBSM funding, officially launched the program in January 2019. Twelve MUSIC practices are now participating in MUSIC KIDNEY with more sites expected to join this year. MUSIC KIDNEY's primary objectives include improving guideline adherence and documentation to optimize the management of patients with small renal masses ($\leq 7\text{cm}$) and reduce the overall burden of treatment for these patients.

Vital Performance Statistics

QI initiative	2018 Performance Rate	Target
Reduce biopsy-related infectious hospitalizations	0.76%* (0.72%)	<0.8%
Improve medical record documentation of Clinical TNM Staging (maintenance metric)	85% (91%)	>85%
Improve patterns of care in radiographic staging of men with newly diagnosed prostate cancer (maintenance metric)	Bone Scan <ul style="list-style-type: none"> Indicated = 84% Not-Indicated = 5% CT Scan <ul style="list-style-type: none"> Indicated = 68% Not Indicated = 4% 	Indicated = > 95% Not-Indicated = < 10%
NOTES: Reduce readmissions after radical prostatectomy	Readmissions = 4.9% (4.5% overall)	< 3.9%
Improve Patient Reported Outcomes following Radical Prostatectomy <ul style="list-style-type: none"> Increase MUSIC PRO patient enrollment to 70% of the collaborative prostatectomy population Increase the percent of patients with early return to good urinary function 	PRO enrollment: 71% Percent of patients with early return to good urinary function to: 3 months = 64% 6 months = 82%	PRO Enrollment \geq 70% Urinary Function: 3 months \geq 75% 6 months \geq 90%
Increase the overall rate of AS in favorable risk patients and reduce variation in utilization across practices and providers	Consideration of AS = 81% Confirmatory testing in AS Eligible Patients = 48% Verified AS = 68% Treatment within 6 Months after Confirmatory Testing = 23% Recommended Follow-Up Over 30 Months = 18% (N/A**) Transition to Secondary Treatment = 16% (N/A**)	TBD – in the process of establishing specific goals
Reduce the rate of emergency department (ED) visits within 30 days of URS; Improve the appropriateness of shockwave lithotripsy (SWL)	ED visits after URS = 8.4% Appropriateness of SWL = TBD	Decrease avoidable ED visits by 25 – 33% = 7.9% - 7.7% (7% - 6.8% post-intervention) Appropriateness of SWL = TBD

*Post-intervention rate

**Too early to assess

Recent Successes (a list of MUSIC's major accomplishments in the last 6 months)

- Recruited a newly formed, three-physician urology practice, Sparrow Medical Group – Urology, into MUSIC for a current total of 45 participating practices
- Advanced efforts in the statewide adoption of office-based transperineal prostate biopsy
 - Trained MUSIC urologists on the office-based transperineal biopsy technique, which can serve as an alternative to transrectal ultrasound guided biopsy. The goal of this work is to further decrease the risk of infection after prostate biopsy and lessen the use of antibiotics.
 - Developed a MUSIC template to guide needle placement for transperineal prostate biopsy and optimize the cancer detection rate.
 - BCBSM approval of a modifier-22 for all BCBSM PPO patients undergoing transperineal prostate biopsy to help offset added costs related to the procedure
- As a component of the prostate MRI quality assurance program, organized and attended multidisciplinary review of fusion biopsy data at 7 MUSIC practices. These meetings include urologists and radiologists as they examine MRI images, fusion system data, and pathology reports for selected cases with discordant pathology and radiology results to identify sources of error and opportunities for improvement.
- On behalf of MUSIC, Dr. Dan Spratt presented data from MUSIC illustrating the value of prostate MRI as a confirmatory test for active surveillance to the NCCN guideline committee in June 2018. As a result, the guidelines now include prostate MRI in the algorithm for prostate cancer patients considering active surveillance and MUSIC is hopeful that the changes will influence payer coverage decisions.
- Continued efforts to enhance patient-centered decision making among men with newly diagnosed prostate cancer with implementation of the Personal Patient Profile-Prostate (P3P) decision aid. Eight MUSIC practices (two since the last report) including 27 MUSIC urologists are now offering P3P to their patients with several more practices expected to adopt the tool this year.
- As part of the Notable Outcomes and Trackable Events after Surgery (NOTES) initiative, and specifically our efforts to reduce readmissions after radical prostatectomy, we are making progress on our practice-level approach to quality improvement. At the higher volume, higher readmission practices, we are evaluating the radical prostatectomy process from the time a patient decides to have surgery through 30 days' post-discharge with the goal of identifying specific opportunities for improvement that will decrease a patient's likelihood of being readmitted after surgery. We have completed the in depth process analysis at one higher volume practice and will be spending the next 6 – 12 months acting on the identified opportunities for improvement. We are also initiating the practice-level analysis at a second higher volume MUSIC practice with a plan to conduct the process evaluation over the course of the next several months. All lessons learned from the practice-level process analyses will be shared with the larger collaborative.
- Following the official approval from BCBSM of the Michigan Pain-control Optimization Pathway (MPOP) for Radical Prostatectomy, MUSIC has led the launch of MPOP in more than 10 additional MUSIC practices with a goal of expanding to the rest of the state throughout 2019.
- VIDEO Review
 - Conducted two additional Radical Prostatectomy Robotic Skills Workshops in October 2018 and February 2019 with involvement from more than 20 surgeons and many more clinical observers at each session.
 - Continued to develop and refine a video library that will be made publically available by

June 2019

- Conducted a strategic retreat to discuss the immediate and long term goals of the Skills Workshops and video review program, as we continue efforts to improve radical prostatectomy outcomes.
- **MUSIC ROCKS**
 - Operationalized the stent leaflet and Pain Optimization Pathway (POP) for ureteroscopy to MUSIC practices via the implementation and dissemination site visits. The goal of these resources and pathway are to reduce post-operative symptoms, and ultimately modifiable ED visits, after ureteroscopy.
 - Developed a ROCKS practice-level dashboard (in addition to the pre-existing urologist-level report) to inform MUSIC practices of their status in decreasing the proportion of their local, modifiable ED visits.
 - Created a dedicated ROCKS ED visit Focus working group of 5 broadly representative practices, to better understand on a monthly basis measures that can be adopted to reduce avoidable ED visits after URS.
- **MUSIC KIDNEY**
 - Enrolled four new practices (total of 12) into MUSIC KIDNEY
 - Disseminated RENL placards to MUSIC urologists to improve documentation of the RENL score in patients' medical records
- **askMUSIC**
 - Enhanced askMUSIC (ask.musicurology.com) by including a suite of prostate-cancer and kidney stone-related resources for both providers and patients.
 - askMUSIC was highlighted in Reuters November 2018 Health News: [askMUSIC Reuters highlight](#). It was also featured in the March edition of the BCBSM Value Partnerships newsletter: [askMUSIC Value Partnerships Update](#)
- Continued engagement in several Movember Foundation initiatives, including GAP3 (Active Surveillance Database) and the TrueNTH Global Registry which is an international effort to compare and reduce variation in prostate cancer outcomes. MUSIC is currently the largest contributor of Active Surveillance patients in the United States and overall for the TrueNTH Global Registry.
- Acceptance of 20 MUSIC abstracts (11 prostate, 7 ROCKS, and 2 KIDNEY) to the American Urological Association (AUA) 2019 Annual Meeting with 44 MUSIC urologists serving as authors/co-authors.
- Five scientific manuscripts accepted for publication (a complete list of MUSIC publications can be found here: <http://musicurology.com/publications/>)
- **QCDR**
 - Successfully submitted the 2018 MIPS data to CMS on behalf of 12 MUSIC practices including 27 urologists
 - Approved as a 2019 MIPS QCDR for the quality and improvement activities components of the MIPS Quality Payment Program
- **BCBSM Value-Based Reimbursement (VBR):**
 - As a collaborative, MUSIC met or surpassed the targets for both of the 2018 population-based performance metrics and thus all MUSIC urologists that are enrolled in PGIP and actively participating in the collaborative are receiving the MUSIC component of the VBR beginning March 1, 2019
 - Received approval for the 2020 VBR population-based performance metrics

Future Directions/Plans

1. Prostate biopsy

While our past efforts and successes have centered around transrectal ultrasound-guided (TRUS) prostate biopsy, we are now shifting our focus to transperineal prostate biopsy, an alternative approach that demonstrates a nearly 0% risk of infection (MUSIC's TRUS prostate-biopsy related infectious hospitalization rate is 0.72%) with less use of antibiotics. We developed a comprehensive plan to help MUSIC urologists adopt an office-based transperineal biopsy technique. As BCBSM recently approved a modifier-22 for BCBSM PPO patients to help offset the expenses associated with implementing the new approach, MUSIC intends to continue with the training of many interested MUSIC urologists.

2. Prostate MRI and Fusion Biopsy

In considering MUSIC's work around prostate MRI, practice-level MRI and Fusion Biopsies Scorecards are disseminated to provide quality data to practices ordering MRI and/or performing fusion biopsies. We have also organized and attended multidisciplinary review of fusion biopsy data at 7 different MUSIC sites. At these meetings, local urologists and radiologists examine MRI images, fusion system data, and pathology reports for selected cases with discordant pathology and radiology results to identify sources of error and opportunities for improvement. We plan to facilitate multidisciplinary reviews at an additional 5 sites in 2019. We will also begin collecting MRI data on patients with negative prostate biopsies in 2019. These data will allow us to calculate the negative predictive value (NPV) of prostate MRI across the state. Improvements in the NPV of prostate MRI could ultimately lead to a reduction in unnecessary biopsies thereby reducing cost and morbidity for urologic patients. Further, as we heard of concerns regarding payer approval of prostate MRI as a confirmatory test, information was presented to the NCCN guideline committee in June 2018 and as a result, the guidelines were updated to include prostate MRI as part of the algorithm for patients considering active surveillance. MUSIC is hopeful that this modification to the guidelines will encourage payers to cover the test for active surveillance eligible patients.

3. Post-operative course following RP

In our efforts to improve radical prostatectomy outcomes, one of the key objectives of MUSIC's Notable Outcomes and Trackable Events after Surgery (MUSIC NOTES) is reducing readmissions within 30 days following surgery. We are actively engaging with the four high volume radical prostatectomy practices with higher rates of readmissions to better understand local processes and key drivers for readmissions at a particular site. We are hopeful that this targeted approach will allow us to better understand the nuances and challenges at each site, so that we can improve local processes, while disseminating the information and lessons learned statewide. We already completed the radical prostatectomy process analysis at one higher volume practice and identified a number of opportunities for process improvement. In related work, MUSIC supported the implementation of the BCBSM Michigan Pain-control Optimization Pathway (MPOP) that aims to safely limit, if appropriate, the number of opioid tablets a patient receives following radical prostatectomy. MUSIC has already helped to implement MPOP at more than 10 practices and will continue to assist with statewide implementation.

4. Patient Reported Outcomes and VIDEO

MUSIC's Patient Reported Outcomes (PRO) program continues to grow with more than 6,000 patients enrolled. We remain focused on our goals of enrolling at least 70% of radical prostatectomies into

MUSIC PRO and also achieving best in world early social continence (0 – 1 pads/day) after radical prostatectomy with a goal of 75% of patients achieving this outcome at 3 months and 90% at six months. We continue to engage practices and urologists that are not actively enrolling patients into PRO in the hope that they will initiate participation. In terms of our efforts to improve social continence, we incorporated a one-month post-op PRO questionnaire (in addition to 3, 6, 12, and 24-month post-op questionnaires) to assess the degree of incontinence and identify the higher risk patients that could benefit from early physical therapy. We also disseminated a patient-facing brochure intended to help patients manage urinary leakage and incontinence after surgery via the implementation and dissemination site visits. Our additional QI strategies for improving social continence include the ongoing conduct of surgical skills workshops and the development of a virtual video library to showcase blinded de-identified videos of cases performed by surgeons with optimal patient outcomes.

5. Treatment appropriateness

In other prostate-related efforts, MUSIC continues its work to improve treatment appropriateness for men with newly diagnosed prostate cancer. We continue to evaluate management of men with favorable-risk prostate cancer and practice-level performance on six measures. While MUSIC continues to advocate for urologists to adhere to the concepts and guidelines put forth in the MUSIC Roadmap, we also recognize the important role that patient-centered decision making plays in a patient's treatment decision. In partnership with the Movember Foundation, we implemented a web-based decision aid, Personal Patient Profile-Prostate (P3P), to assist in shared decision making for patients with localized prostate cancer. While MUSIC continues its collaborative efforts to improve treatment appropriateness and enhance patient centered decision making, practices may also soon have the opportunity to participate in the MUSIC Prostate Cancer Surveillance Study (MPrSS). MPrSS is an interdisciplinary program designed to improve population health by better aligning treatment patterns with clinical need among men with favorable-risk prostate cancer. If approved, MUSIC practices will be able to voluntarily participate in the various projects.

6. Other Prostate-Related Work

MUSIC continues to monitor the study cohort from our randomized clinical trial, the Genomics in Michigan Impacting Observation or Radiation (G-MINOR). The goal of the study is to determine the impact of a genomic biomarker on adjuvant treatment decisions in patients at high-risk for cancer recurrence after radical prostatectomy with the primary Endpoint being whether the patients receive any adjuvant therapy (radiation and/or hormone therapy). The data should be mature enough to review and draw some preliminary conclusions on the efficacy of the biomarker test in late 2019. MUSIC continues to engage in several Movember Foundation initiatives, including GAP3 (Active Surveillance Database) and the TrueNTH Global Registry which is an international effort to compare and reduce variation in prostate cancer outcomes. MUSIC will continue to contribute to both of the aforementioned registries and consider the opportunity for utilizing the global data for potential quality improvement projects.

7. ROCKS

In our efforts to reduce operative complications following kidney stone surgery, we disseminated the MUSIC Pain Optimization Pathway (POP) for reducing post-operative pain and symptoms after ureteroscopy. We discussed the relevant resources and recommendations with MUSIC practices and talked about how to best integrate them into their local processes. We created a ROCKS working group that will convene monthly and specifically discuss local efforts to reduce modifiable ED visits with a goal



of identifying lessons learned that can be shared with the rest of the collaborative. As stents are associated with an increased risk of ED visits, we also disseminated a stent utilization brochure that provides patients education on what to expect and how to manage a stent and plan to convene a stent utilization panel in the coming months that will inform consensus stenting recommendations. While the aforementioned efforts relate to ureteroscopy, we are also assessing treatment appropriateness and antibiotic stewardship for patients undergoing shockwave lithotripsy with a goal for providing specific guidelines and recommendations for our collaborative members.

8. KIDNEY

MUSIC KIDNEY which aims to improve the quality of care for patients with small renal mass diagnoses, now consists of twelve MUSIC practices. Early work has focused on improving the quality of medical record documentation, and specifically that of documenting the complexity of the renal mass - the MUSIC developed RENL score - to minimize the amount of information that must be interpreted by the data abstractor. MUSIC KIDNEY recognizes the opportunity to improve American Urological Association (AUA) guideline adherence for the management of patients with small renal mass diagnoses as there is variability among practices. As the number of cases in the registry grows, we plan to take a deeper look at the opportunity for avoiding intervention, and specifically surgery, for benign renal masses with a goal of reducing the overall burden of treatment for patients with renal masses < 7 cm. Further, we are considering the opportunity of evaluating persistent opioid use following surgery for renal mass patients.