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Positive Quality Intervention: Proactive Symptom Management in Myelofibrosis

Description: The purpose of this PQI is to highlight implementation of telehealth symptom and risk survey completion by pharmacists or other healthcare providers for myelofibrosis (MF) patients.

Background: Patients diagnosed with MF may have a symptom burden that compromises patient quality of life. Myelofibrosis is one of the classical Philadelphia chromosome negative myeloproliferative neoplasms (MPNs). The only curative treatment option is allogeneic hematopoietic stem cell transplantation, which is associated with significant risks and can only be administered to a minority of patients based on disease risk category and age. Other treatment options have been historically focused on alleviation of the symptoms that are present for each individual patient but do not alter the course of the disease itself.[1-2] Multiple studies have led to the development and validation of a patient MPN-related symptom burden questionnaire that can be used for serial assessments of response to therapy. The Myeloproliferative Neoplasm Symptom Assessment Form total symptom score (MPN-SAF TSS) was calculated as the mean score for 10 items from two previously validated scoring systems with questions to assess symptoms of fatigue, concentration, early satiety, inactivity, night sweats, itching, bone pain, abdominal discomfort, weight loss, and fevers. Scoring is from 0 (symptom absent) to 10 (worst imaginable) for each symptom assessed. The final score is the summation of all of the 10 symptom scores on a 0 to 100 scale.[2] In addition to symptom assessment utilizing the MPN-SAF TSS, a risk scoring system, the Dynamic International Prognostic Scoring System (DIPSS-Plus) has been developed to be a dynamic risk assessment tool that can be used at diagnosis and anytime during the course of therapy to attempt to predict survival.[3] The DIPSS-Plus risk score is a prognostic tool evaluating age, blood counts, peripheral blood blast percentage, karyotype, transfusion dependency, and presence of constitutional symptoms to tabulate a combined score to assign low, intermediate-1, intermediate-2, and high-risk categories to MPN patients.[3] Guidelines recommend evaluation of patients' symptom burden and prognostic risk scores prior to initiation of therapy and at a regular intervals during the course of therapy, typically every 3 to 6 months during clinical encounters. Symptom response requires a greater than or equal to 50% reduction in the MPN-SAF TSS sustained for at least 12 weeks.[4] Providers utilize both the MPN-SAF TSS and DIPSS-Plus as tools upon diagnosis and throughout therapy to guide treatment, to assess when changes in therapy are needed, and occasionally to assess the optimal timing of allogeneic hematopoietic stem cell transplantation. However, the traditional approach to obtaining these assessments, during clinic visits, may be burdensome for many patients and providers given limited time and other resources as well as patient needs for these visits. A recent analysis has additionally demonstrated that risk prognostication is often done incorrectly so there may be a need to identify mechanisms to perform these assessments in a correct, standardized, and uniform manner.[5] Performing the MPN-SAF TSS and DIPSS-Plus assessments prior to clinic appointments offers enhanced efficiency of clinic time and allows MF providers to create therapy plans prior to patients' clinic appointments. A pharmacist-driven telehealth consult program at Atrium Health was developed to increase adherence to internal care pathways/national guideline recommendations and lead to care optimization for MF patients. This consult service represents an opportunity for the outpatient and specialty pharmacy services to be incorporated into the care pathways for MF patients by developing a new element of standard of care which demonstrates a shift towards a pharmacy practice-based model. By implementing this service, pharmacists have had an active and leading role in virtual care which has become more relevant as a result of the COVID-19 pandemic.[6]

PQI Process:

- Upon diagnosis or clinical review of a MF patient, patient should be flagged for symptom and risk assessments to be completed at baseline and a predefined interval with corresponding visits
- A pharmacy consult should be established for long-term patient follow-up and assessment completion
    - MPN-SAF TSS symptom and DIPSS-Plus risk assessments for MF can be completed in person or via telephone prior to their appointments (in-person or virtual) and then uploaded via the electronic medical record for the provider to review prior to the upcoming appointment
- Example of workflow:[7]

- Provider to identify patients and initiate a consult through a consult order
    - The consult triggers an order to be sent to the pharmacy queue or triggers an email to pharmacy team
    - The patient is notified of enrollment by the provider prior to pharmacist contact
- A system should be developed to track the patients in two manners
    - The number of times patient has been contacted to complete the assessments
    - The date of the previous assessments to make sure the patient is contacted at the correct interval
- Once consulted, pharmacist should complete both MPN-SAF TSS and DIPSS-Plus risk score assessments
    - MPN-SAF TSS questions are completed with patient consent via telephone (3 attempts made)
        - If patient was not reached, notify provider to complete the assessments during appointment
    - DIPSS-Plus risk assessment can be completed using the most recent laboratory and karyotype information
- Completed assessments via the pharmacy consult service are scanned into the EMR prior next appointment
- Provider is notified via the EMR of the importation and assessment location of the assessment
- Patients are contacted at 3-month, 6-month, or 12-month intervals corresponding with their planned follow-up schedule with the physician based on disease stability to adhere to guideline recommendations

Patient-Centered Activities:

- Inform patient that the telehealth consult for the MPN-SAF TSS and DIPSS-Plus assessments, patients are provided an opportunity to streamline their discussion with their provider at upcoming appointment
- Provide Oral Chemotherapy Education (OCE) Sheet as applicable for prescribed MF medication
- Patient medication adherence can be assessed with completion of the MPN-SAF TSS assessment

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