NCODA’s
POSITIVE
QUALITY
INTERVENTION
IN ACTION

PUTTING GILTERITINIB (XOSPATA®) FOR
RELAPSED/REFRACTORY ACUTE MYELOID
LEUKEMIA (AML) INTO ACTION
INTRODUCTION

In an effort to promote higher-quality patient care, the National Community Oncology Dispensing Association, Inc (NCODA) created the NCODA Positive Quality Intervention (PQI) as a peer-reviewed clinical guidance document for healthcare providers. By providing Quality Standards and effective practices around a specific aspect of cancer care, PQIs equip the entire multidisciplinary care team with a sophisticated yet simple-to-use resource for managing patients receiving oral or IV oncolytics. The PQI fosters better care for patients through appropriate patient identification/selection, increased speed to therapy, reduced cost and hospitalization and by improving adherence techniques for the patient and their medically integrated teams.

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Practice panelist’s comments reflect their experiences and opinions and should not be used as a substitute for medical judgement.
Medically Integrated Dispensing (MID) are a type of service model in which patients receive oral and IV therapies at the site of care with their doctor and are managed by one staff; state-of-the-art pharmacy services are built within the oncologist’s office that help to deliver timely and ongoing care as part of a single, multidisciplinary team. Complexity of cancer treatment has recently increased with a growing number of both oral and IV therapies which are delivered across an often-confusing, payer-driven healthcare system. University of Minnesota Health (UM) medical oncologist Armin Rashidi, MD, PhD, stated, “Today we need a clearly defined group of experts to take care of the oral therapy needs,” referring to the organization’s medically integrated pharmacy team that was established to do just that. Various treatment settings including community, institutional, and academic centers have made successful efforts to transition to this integrated service model to maintain continuous care of the patient and achieve the best possible clinical outcomes.

University of Minnesota Health Oncology Nurse Care Coordinator, Judi Butler, MSN, RN, OCN, shared that the clinical outcomes can vary depending on the manner in which the patient receives their oral medications. For both the initial dispensing and the refills, she stated, “The biggest roadblock to the coordination of care within the medically integrated model is insurance-mandated pharmacy care.” As prescriptions are sent to mail-order pharmacies, the care can become disjointed and visibility into that patient case can become clouded. UM Oncology Clinic Pharmacy Liaison Dominique Cloutier, CPhT, added, “We have all the resources from writing the prescription to dispensing to managing the patient all in-house.” Further, she shared that if their pharmacy does not have access to a particular drug then the prescribing habits may steer to the prescriber to an option that allows on-site dispensing. Prescribers know through experience with their medically integrated dispensing model that the patient is more closely cared for and positive outcomes are more readily achieved within this model.
Pharmacy Manager at Rocky Mountain Cancer Centers (RMCC), Derek Burns, PharmD, BCPS, DPLA, shared that, “Patient outcomes will be far greater when you have an integrated model.” Organizations like NCODA, ION, McKesson, and Cardinal are compiling data that demonstrates the improved outcomes for patients who receive consistent care directly from the doctor’s office. Small, single-provider practices can also achieve improved patient outcomes by utilizing uniform clinical information like that which is contained in the Positive Quality Intervention. “The challenge is getting payers and manufacturers to understand that model. It’s about telling our story. The old model does not work and it is a constant challenge to patients, payers, and manufacturers,” said Burns.

For these reasons and more, Rocky Mountain Cancer Centers made the decision to establish their Medically Integrated Dispensary (MID) in 2014 and have since seen both challenges and benefits within that new service model. RMCC Lead Pharmacy Technician Jessica Rush, CPhT, explained “I believe we offer incredible service at Rocky Mountain Cancer Centers Pharmacy, including various forms of tools like the PQI that can help patients benefit from their treatment. Working in a medically integrated pharmacy has a distinct advantage to obtain pertinent patient information and expedite prescriptions.” Much like at the University of Minnesota, the medically integrated team at RMCC shares that the most significant issue impacting patient care is delays with insurance, prior authorizations, and drug-delivery. RMCC nurse clinician, Erick Blakely, RN, stated, “Prior authorizations become confusing when the pharmacy team initiates the case but the insurance company replies back to the other practice location(s) for the prescriber. I often end up addressing these denials but the insurance doesn’t include the reasoning behind their decision; the process is inefficient and impacts the patient.”

WHEN WE CAN DIRECTLY DISPENSE I’M NOT STRESSED OR WORRYING IF MY PATIENT WILL RECEIVE THEIR DRUG ON TIME.

Even within one organization the demands of the payer can lead to delays in care. When insurance is not applicable, some patients may utilize free drug services from the manufacturer. In the past this was also a confusing scenario for both the nurse and the patient. “Nowadays, I can call the pharmacy team and they are able to provide a direct contact to the appropriate dispensing pharmacy for the free-drug program,” said Blakely. Indeed, the pharmacy team has been designated as the experts for oral oncolytics within the organization. Over time through case-by-case examples the MID has become a trusted source for critical information related to oral anticancer medications for the organization as a whole. RMCC Associate Chair of the US Oncology Hematology Research Program, John M. Burke, MD, stated, “The pharmacy team does a high quality job and it speeds up the time for the patients to receive their drug.” When the internal pharmacy is unable to dispense the medication, the mail-order prescriptions may not arrive in a timely fashion. Dr. Burke said, “In some instances, patients will come in for their IV portion of their regimen but have not yet received the oral portion, which delays treatment.” Comparatively, Dr. Burke stated, “When we can directly dispense I’m not stressed or worrying if my patient will receive their drug on time.”
A consistent and streamlined workflow for processing, delivering, and managing patients on oral therapies is an imperative piece in today’s oncology care puzzle. Both the University of Minnesota and Rocky Mountain Cancer Centers have established procedures which place the pharmacist at the center of all oral orders for their respective patients. As such, the pharmacist is best positioned for disseminating sophisticated drug therapy recommendations to the entire medically integrated team; the NCODA Positive Quality Intervention tools help them to consistently accomplish and deliver exceptional care as a standard. At both UM and RMCC, the clinical pharmacist reviews every prescription during Drug Utilization Review (DUR), assessing appropriate diagnosis, line of therapy, pathway check, labs, patient status, and drug interactions. By reviewing the clinical information as part of the initial assessment, these teams ensure appropriate therapy and accurate correspondence is submitted to the insurance as a prior authorization request. Therein, the cancer center quickly places the impetus on the insurance company to expedite and approve coverage of the drug and prevent potential delays.

At the University of Minnesota Health Masonic Cancer Clinic, the oral chemotherapy monitoring team (clinical pharmacists and pharmacy residents) reviews all orders before they are triaged to the mail-order pharmacy, when applicable. Patient education is primarily the responsibility of the clinical pharmacist within the doctor’s office where they can meet with the patient face to face. According to clinical pharmacist Jeff Engle, PharmD, “We prefer that patient education is done upfront while in the clinic where we can immediately begin to understand the patient’s needs and strengthen our relationship with them.” The pharmacist ensures patients are equipped with the information and products they need to succeed with their oral therapy. By utilizing the NCODA Oral Chemotherapy Education (OCE) Sheets, Engle and the oral team references a consistent resource tool and standardizes the delivery of patient-facing information.

Complimentary public access to OCE sheets available here: www.oralchemoedsheets.com
After the clinical pharmacist reviews and releases the prescription for further processing, the oncology liaison team at UM, which largely consists of pharmacy technicians and financial navigators, takes swift action to take care of the patient. Working through prior authorizations, financial assistance, and other logistical pieces, these liaisons move toward their goal of initiating an outbound introductory call to all patients within two hours of receipt of the prescriptions. By keeping the patient well informed of the current status of their life-sustaining drug and the next steps for receiving it, these medically integrated teams deliver unmatched customer service.

Other professionals quickly noticed the improved care that was resulting from the standardized process for oral orders. UM physician Armin Rashidi, MD, shared that the efficient timing of care is an essential component to cancer care today. “The oral team keeps me updated throughout the process, reviews clinical criteria and offers recommendations that are helpful.” Nurse care coordinator Judi Butler, MSN, RN, OCN, agreed saying, “It is really nice to have the oral team looking at those prescriptions and the more pharmacists we can get, the better it will be for everybody.”

At Rocky Mountain Cancer Centers, nurse clinician Erick Blakely, RN, also appreciates the continuity of care within the Medically Integrated Team and shared that he isn’t the only one who benefits from this coordinated care effort: “Patients feel like they are better taken care of when all services come from one source.” Through the Electronic Medical Record (EMR), he is able to receive timely updates from the MID regarding the approval, shipping, and start dates of the oral therapies which helps all disciplines to be aware of the most current components affecting the patient. Blakely added, “We all work as a really fluid team.” Indeed, the MID model allows for open communication across the entire patient care team. With preferred local delivery by courier, Medically Integrated Teams at both practices often provide drug to patient on the same day or within two days of it being prescribed. On average, the time to delivery is about three days for prescriptions filled at the MID versus about eight days for those prescriptions that must be filled by a mail-order pharmacy.

**BY UTILIZING THE NCODA ORAL CHEMOTHERAPY EDUCATION (OCE) SHEETS, THE CARE TEAM REFERENCES A CONSISTENT RESOURCE TOOL AND STANDARDIZES THE DELIVERY OF PATIENT-FACING INFORMATION.**

BEYOND THE FIRST FILL: PATIENT FOLLOW-UP

After a patient receives the initial prescription for a new oral therapy from the medically integrated pharmacy, both UM and RMCC have robust, multidisciplinary follow-up processes to help maximize the outcome. A one-week follow-up and assessment call is initiated by the pharmacist at both practices. Refill calls occur at least seven days before the next treatment cycle starts; many medications require more frequent phone calls beyond the standard protocol in order to effectively manage the side effects.

Medication refills are coordinated and sent out as dictated by certain lab values, toxicity, tolerance, medication reconciliation, scans, and other data obtained through medically integrated team interaction with key criteria available on demand in the EMR. Seeing each team member’s notes within the EMR, they are able to work in concert together to proactively intervene when appropriate. Because dose holds and dose modifications occur so frequently with these anti-cancer medications, the timing of required refills can be best accomplished through communication within the medically integrated team. In this way, the pharmacy can avoid dispensing expensive and unnecessary medications. When the prescription must be filled via a third party, visibility into the dynamic and ever-changing patient status becomes challenging. A coordinated care effort ensures the most critical aspects are not overlooked or mismanaged; by filling in any potential gaps across the team and working together in real-time, the patient who can receive all of his or her care from one source is well-positioned for a successful outcome from oral therapy.

The Cost Avoidance and Waste Tracker Tool, an NCODA resource, helps pharmacy teams to document such inefficiencies and is available here: www.NCODA.org/cawt

One manner in which the Medically Integrated Team can better care for the patient is through routine monitoring of
necessary lab tests and adverse effects (AE). As these clinical aspects are identified by Jeff Engle, PharmD, MS, for example, he can collaborate with the nurse or the prescriber for further coordination of care. Judi Butler RN, BSN, OCN, stated, “The dispensing pharmacy works closely with the oral chemotherapy monitoring team, the prescriber, and the nurse care coordinator to adjust the schedule as needed and intervene sooner along the critical path. We are notified of any delays in real time and have a firm grasp on the patient case and its trajectory.” The Medically Integrated Team at UM tracks all patients and makes every effort to support them regardless of where the medication is dispensed. Both UM and RMCC identified that significant pitfalls exist with the patients who must use a payer-mandated mail-order pharmacy, leaving providers, pharmacists, technicians, nurses, and practices as a whole yearning for a better model or new system for the sake of their patients.

Without much indication as to any significant overhauls on the current payer-driven system and model, practices have been forced to find more efficient methods for caring for patients prescribed oral therapies. The Medically Integrated Teams sought resources that could raise the bar to not only increase the patient’s speed to therapy, but to deliver advanced patient care services. The NCODA Positive Quality Intervention is a clinical guidance tool in which both UM and RMCC have found great value for providers, patients, and the whole Medically Integrated Team.
Each oral oncolytic imparts unique challenges in patient compliance, adherence, and toxicity management. Keeping up with the nuances of the many new medications being researched and approved can be overwhelming for any care team. The NCODA Positive Quality Intervention resource tool (www.NCODA.org/pqi) was created to provide concise and timely guidance information for health care professionals to effectively address those unique challenges within a specific drug or side effect. In just a few minutes of reading a PQI, any clinician can quickly understand the key components needed to safely identify, counsel, dispense, and effectively manage a patient on a new medication.

One way in which sophisticated delivery of care takes place at these two leading oncology organizations is via the PQI on gilteritinib (brand name Xospata®), an oral therapy option for Relapsed/Refractory Acute Myeloid Leukemia (AML) patients that exhibit a FLT3 mutation. Both organizations revealed that they recognize the inherent value that the gilteritinib PQI provides in bringing more awareness to this valuable option for patients that previously had extremely limited alternative therapy options.

University of Minnesota Health oncologist Armin Rashidi, MD, PhD, described how AML differs from many other cancer disease types: “AML patients are in an urgent situation. With no time to wait for treatment, quick turnarounds on drug procurement are required; the MID model is best equipped to handle that demand.” Indeed, according to Dr. Rashidi, “timeframes help determine the course.” Identifying patients by FLT3 molecular testing, who would be candidates for this therapy is a primary purpose of the document, “Gilteritinib (XOSPATA®) for Relapsed/Refractory Acute Myeloid Leukemia (AML) PQI”. Gilteritinib is also indicated and appropriate for fit patients too. NCCN Guidelines highly recommends (Category 1) XOSPATA for both Fit and Unfit R/R FLT3 AML patient with prior TKI use. According to Dr. Rashidi, “Gilteritinib is often the first choice for more frail patients or those who haven’t recovered well from induction therapy. This is an exciting option to have something that is outpatient. I think it is a
good choice.” Medical oncologist John M. Burke, MD, shared a similar perspective on the type of patient that will potentially benefit from the Gilteritinib treatment option: “Patients don’t always want more chemo.” In fact, he shared the experience of one patient who faced this new path head-on. Following induction and consolidation therapy, Dr. Burke recommended additional treatment but the patient was unwilling to undergo the rigorous and demanding course of more chemotherapy. Inevitably, that patient relapsed. Yet today, instead of resorting to best supportive care, there is a new targeted oral therapy outpatient option for that patient. As it is seen, gilteritinib grants patients an option that did not exist before. For them, this treatment option can make the difference between hope and despair.

Both physicians have started utilizing this new option for patients. Proper monitoring of key lab values is one component that the gilteritinib PQI covers in detail. Dr. Rashidi completes a baseline EKG, CBC/CMP, specifically keeping an eye on uric acid, creatinine, and INR. In addition, he might initiate therapy with daily monitoring, including weight and fluids, to address risks for Tumor Lysis Syndrome (TLS) and differentiation syndrome. Dr. Burke was an investigator on the extended clinical trial for gilteritinib and gained useful clinical experience with several patients before the drug was FDA approved. During the extended clinical trial, his team completed weekly EKG tests but did not see any significant issues. Today, he’ll employ an initial EKG, another at two weeks, and then as needed thereafter. UM Nurse Care Coordinator Judi Butler, RN, BSN, OCN, also finds this guidance information to be useful and especially appreciates the dose modification information that is easy to find and follow.

As gilteritinib creates its place as a standard course of therapy for AML patients with a FLT3 mutation, Dr. Burke shares a helpful perspective on this paradigm shift, “Historically, next generation sequencing was not routinely done in AML. Today, doctors should be aware of the need to be looking for FLT3, IDHI and IDH2 mutations and identify the most efficacious treatments.” It is also important for clinicians to be aware that the status of FLT3 mutation can change throughout treatment. Poor Outcomes are associated with a FLT3 mutation status in AML, confirming status of FLT3 mutations status at relapse or progression, can inform a targeted treatment strategy. NCCN Guidelines recommend testing all AML patients for FLT3 mutations at each relapse or progression. Therefore, at diagnosis and at progression it is imperative to retest for this FLT3. Gilteritinib is a tyrosine kinase inhibitor that has demonstrated activity in patients who have mutations in the internal tandem duplication (ITD) and/or tyrosine kinase domain (TKD) of FLT3 (found in 30% of AML population). In the final analysis of the ADMIRAL study, Overall Survival (OS) was reported as 9.3 months for patients receiving gilteritinib versus 5.6 months for those receiving salvage chemotherapy (Hazard Ratio = 0.64 (95% CI 0.49, 0.83), P=0.0004). The rate of complete response (CR/CRh) was reported at 22.6%. The median time to first response was 2 months and transfusion-independence was observed in 34.5% of patients, representing a potential improvement in quality of life.²³⁴ This data led the National Comprehensive Cancer Network (NCCN) to designate gilteritinib as a category 1 treatment in the target treatment of AML with FLT3-ITD and FLT3-TKD mutations.⁵
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Implementation of the PQI into the workflow at these two organizations varies much like it does across the country. The clinical principles presented within the NCODA PQI are the critical factors needed to educate professionals and improve patient outcomes. This clinical guidance information can originate from any professional, but it should always be communicated across the wider team in an effort to exchange consistent strategies and effective practices. NCODA is accepting qualified authors who are eager to highlight a critical aspect of patient care by writing and sharing their clinical experience in a new PQI.

Apply to author or review a PQI by emailing: Contact@NCODA.org

TODAY, DOCTORS SHOULD BE AWARE OF THE NEED TO BE LOOKING FOR FLT3, IDH1 AND IDH2 MUTATIONS AND IDENTIFY THE MOST EFFICACIOUS TREATMENTS.

OVERCOMING EDUCATIONAL GAPS WITH THE PQI

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Nurses at both the University of Minnesota Health and Rocky Mountain Cancer Centers described how the gilteritinib PQI provides useful information at their fingertips. Judi Butler, RN, BSN, OCN, stated, “This PQI likely has more readily-available information compared to the other resources we’ve used like VIA Oncology. Although those education materials are helpful, they don’t have everything I want or need for the oral drugs.” Furthermore, Butler could see the advanced practice providers (APP) utilizing the PQI resource as well with actionable information like the dose modification guidance. Erick Blakely, RN, shared that the US Oncology resources that they have for drug information are comprehensive, but the PQI database is easier, faster, with better peer-reviewed information, “The PQI and OCE Sheets are resources that nursing supervisors find valuable.” Dr. John M. Burke agreed, “Having the critical information page, short and sweet and to the point about what you need to know is always helpful.”

Indeed, the PQI equips the entire healthcare team with a useful medium for communication of clinical information that benefits patients. In today’s care model with multiple layers and professional disciplines, the PQI can help deliver a robust and consistent method for maximizing outcomes for gilteritinib patients. As a pharmacy technician who does not provide clinical recommendations, Dominique Cloutier, CPhT, shared that for her, having some information about drugs is still very valuable.

With this knowledge she is better prepared for more meaningful conversations with the patient and can deliver higher quality care: “I wish I would have known about these PQIs a long time ago.”
Both leading oncology organizations see the value in providing consistent drug education from the pharmacy team across the entire medically integrated team. Multiple benefits exist in that model, stated Derek Burns, PharmD, BCPS, DPLA, “When it comes to oral oncology drugs, I would prefer the pharmacy team be the owner of educating the practice sites. If that information is reaching our providers internally from our pharmacy team, it will strengthen that relationship.” Further implementation could arise in the form of a bi-weekly email to providers with links to the new PQI information, “That stimulates dialogue and interaction coming directly from the pharmacy team”

Clinic sites and providers are pressed for time and the idea of coming in early or staying late for an educational in-service is not always feasible. As the pharmaceutical industry continues to partner around how to best communicate critical information to the providers and the practice, the PQI offers a solution. Burns stated, “I believe there is true value in a document like the PQI. In the past, it may have been cumbersome to look through multiple resources provided. Now, we have concise, peer-reviewed resources to utilize.” As it is seen, Burns grasps a clear vision of ways to improve the current drug dispensing, educating, and managing model. He shared, “Having something in a digital format like this is key. Ten years ago, few patients had an email; now everybody has a smart phone and information should be right at our fingertips.”

Indeed, both the Positive Quality Intervention and the Oral Chemotherapy Education Sheets are NCODA resources that are available to the public, complimentary, at one easily-accessible website address with full digital download capacity. These tools provide consistent and valuable information for healthcare professionals and patients alike.

Complimentary Access to all PQIs available at: ncoda.org/pqi
Complimentary Access to all OCE sheets available at: oralchemoedsheets.com

REFERENCES
1. XOSPATA® (gilteritinib) [package insert]
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