PQI IN ACTION







LIPOSOMAL DAUNORUBICIN-CYTARABINE (VYXEOS) MANAGEMENT



INTRODUCTION

In an effort to promote higher quality patient care, 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 concise 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 education techniques for the patient and their medically integrated teams.

The PQI in Action incorporates opinions and experiences from oncology experts within the medically integrated teams at leading cancer care organizations. These professionals have successfully implemented pharmacy as part of the medically integrated team as well as the use of Positive Quality Interventions throughout these teams to improve the clinical outcomes of patients. Utilization of consistent clinical information like that contained within NCODA's PQI standardizes knowledge exchange and improves clinical communication within an organization.

Illinois Cancer Specialists (ICS) is a community-based practice in the Chicago area. ICS has five provider office locations and infusion centers, 20 medical oncologists, one radiation oncologist and three Medically Integrated Dispensing sites. They provide chemotherapy, radiation therapy, tomotherapy, partial breast irradiation, hormone therapy and clinical research trials. They are a member of the US Oncology Network.

The University of Chicago Medical Center (UChicago Medicine) is a teaching hospital located in Chicago. It is nationally ranked in nine adult specialties including cancer. It is a general medical and surgical facility. UChicago Medicine has a team of 40 providers who specialize in acute and chronic leukemias as well as myelodysplastic syndromes and myeloproliferative neoplasms.

New York Oncology Hematology (NYOH) is a physician-owned practice in New York's capital region. NYOH has six locations including two main centers in Albany and Clifton Park. They have close to 50 providers, including physicians and advanced practice providers. They provide central pharmacy admixture services from two locations and have a Medically Integrated Dispensing program. They also provide the regions only autologous stem cell transplant program. They are affiliated with the US Oncology Network.

THE PARTICIPANTS

Illinois Cancer Specialists Chicago, IL



Chara Reid, PharmD *Director of Pharmacy*



Angela Schildgen, RN *Nursing Manager*



Nora Hansen, CPhTPatient Benefit Representative

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Gwen Sislowski Senior Admixture Technician

DEFINING MEDICALLY INTEGRATED PHARMACY AND THE POSITIVE QUALITY INTERVENTION

edically Integrated Pharmacies (MIP) 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. 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.

Empowered with innovative tools like the PQI, the medically integrated teams have improved the quality of care delivered at their institutions through adoption of NCODA resources.



An NYOH pharmacy technician mixes IV therapies.

These leading oncology organizations value the PQI which provides concise, clinical guidance information to raise the standard of care across all the professional disciplines. In general, PQIs afford attention to any critical aspect of drug therapy that may be easily overlooked ("if you see 'x', remember to do 'y'"). In a world where new and novel treatments arise almost daily, healthcare professionals need an easy-to-use reference to enact the key clinical principles for each therapy. The PQI serves that need.

AML AND VYXEOS POSITIVE QUALITY INTERVENTION

cute myeloid leukemia (AML) is a heterogeneous hematologic malignancy characterized by the clonal expansion of myeloid blasts in the peripheral blood, bone marrow, and/or other tissues. It is the most common form of acute leukemia among adults and accounts for the largest number of annual deaths from leukemias in the United States. An estimated 21,450 people will be diagnosed with AML in 2019, and 10,920 patients will die of the disease.¹ According to the SEER Cancer Statistics Review, the median age at diagnosis is 67 years; 2 other registries report 71 years, 3 with 54% of patients diagnosed at 65 years or older (and approximately a third diagnosed at ≥75 years of age).² Thus, as the population ages, the incidence of AML, along with myelodysplastic syndromes (MDS), seems to be rising.

Vyxeos is a combination of daunorubicin and cytarabine in a fixed molar ratio of 1:5 (44mg daunorubicin and 100mg cytarabine) encapsulated together in liposomes.³ It is approved for the treatment of adults with newly-diagnosed therapy-related acute myeloid leukemia (t-AML) or AML with myelodysplasia-related changes (AML-MRC).³ Combination chemotherapy regimens with or without hematopoietic stem cell transplantation (HSCT) have been the most common therapy for patients with AML.⁴ Patients who are able to tolerate

intensive therapy typically receive induction chemotherapy, conventional chemotherapy with cytarabine plus daunorubicin, the "7+3" regimen. Older patients (age \geq 60) have lower expected complete remission (CR) rates and 2-year overall survival (OS) with this regimen. And the area as with t-AML and AML with preceding hematologic disorders have lower expected CR rates as well. Daunorubicin-cytarabine liposome significantly prolonged OS and event-free survival (EFS) relative to the 7+3 regimen and was associated with significantly higher rates of CR compared with 7+3. It also had an acceptable tolerability profile in older patients with newly diagnosed high-risk secondary AML.

The Liposomal Daunorubicin-Cytarabine (Vyxeos) Management PQI offers clinical information to promote optimal care for patients with AML initiating therapy. The PQI helps to identify patients who are eligible to receive therapy such as those with t-AML or AML-MRC. Additionally, the PQI highlights key clinical considerations in pre-medications, clinical monitoring, dosing and administration and patient-centered activities. From an operational perspective, the PQI also highlights the preparation instructions for Vyxeos and resources for patient education.

THE MEDICALLY INTEGRATED TEAM: A WINNING APPROACH FOR PATIENTS

ealthcare has not always been approached as the "team sport" we currently know and love. 7 The healthcare landscape has changed dramatically in the last 20 years and the clinician operating in isolation is now seen as undesirable.⁶ Incorporating multiple perspectives in healthcare offers the benefit of diverse knowledge and experience, and a high-functioning team is an essential tool for building a more patient-centered, coordinated, and effective healthcare delivery system.6 Teams are defined as two or more people who interact dynamically, interdependently, and adaptively to achieve a common, valued goal.7 The oncology team plays a vital role in providing high quality patient care with positive outcomes. Pharmacy plays an important part of the team in all of our participating practices. When a patient begins a new treatment or a new regimen becomes available, NYOH Medical Oncologist Dr. Mihir Raval believes in getting the entire team on board. He comments that having "pharmacy help create the regimen and help to ensure all appropriate pre-medications are entered is essential." UChicago Medicine Physician Assistant Lauran DeCeault values pharmacy as part of her team and says, "I've always had really positive interactions with the pharmacy. I do not think our patients would get such high-quality care if it were not for the pharmacy or pharmacists who round with us. This is just such a benefit." She adds "I just love our pharmacist. She is so knowledgeable, rounds with our team, goes over the MAR, is able to provide really helpful feedback during rounds about drug interactions, pricing and availability. She has a serious passion for oncology and that is really helpful. As our team is relatively new, she has just been a huge asset to the team, and we are all so thankful she rounds with us."

All three participants have multidisciplinary teams that include physicians, advanced practice providers, nursing, pharmacy, and others. ICS Director of Pharmacy Chara Reid, PharmD is new to her role and the first Director of Pharmacy for her practice. She comes with a strong background in oncology pharmacy services and is looking forward to watching their team develop and grow. She says, "the great thing is that I come with a new set of eyes to help integrate pharmacy services for the team. This is already a really cohesive team so I am excited to see how I can help. The team is so open to any new pharmacy initiatives that I bring to the table. Thankfully with my NCODA background, I will be able to help

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take the program even further than they have already come." ICS Patient Benefit Representative and pharmacy technician Nora Hansen, CPhT believes "having a Medically Integrated Team including pharmacy makes patient safety a priority and allows for a bigger picture of the patient's care." NYOH nurse Jill Mahan-McDonald, RN, OCN says pharmacy is a "wonderful resource." ICS Nursing Manager Angela Schildgen, RN echoes this and says, "pharmacy plays an integral part in the infusion." She relies on pharmacy as a resource "when we have questions about how something should be reconstituted, questions about infusions in general, like 'Does this need a filter? Should this go on one designated line or with other drugs?' We need to know if it is compatible with certain things."

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THE LIPOSOMAL DAUNORUBICIN-CYTARABINE (VYXEOS) MANAGEMENT PQI: EMPOWERING THE TEAM

he Liposomal Daunorubicin-Cytarabine (Vyxeos) Management PQI is clinical resource for the medically integrated team to use in selection, preparation, administration, and patient management of Vyxeos. Hansen is no stranger to NCODA initiatives and resources as she was the recipient of the 2019 Living the Mission Award. The NCODA Living the Mission Award recognizes members who exemplify the mission and values of NCODA (https://www.ncoda.org/awards/). She says the Vyxeos PQI provides "uniformity" for the practice. She explains that the PQI saves time on extra research and it allows "our clinicians to have everything at their fingertips and ensures that they are doing things the same every time." NYOH Director of Pharmacy and Admixture Services Nancy Egerton, PharmD, BCOP has experienced the value the PQI has provided on the oral side in their Medically Integrated Dispensing (MID) model. She shares that the "PQIs are excellent educational tools to help the pharmacists provide appropriate patient education and to educate the pharmacists." She adds that "with all these new drugs it is very hard to keep up." When a new PQI is published for the new drug she says "this is great. It is right there, everything you need to know" She looks forward to seeing NCODA get "more entrenched in IV therapy and other chemotherapy drugs and immunotherapies" and sees additional opportunities to use the PQIs in their infusion pharmacy to help educate the staff. She sees particular value on the infusion side of the practice for nursing "because the nurses are certainly right out with the patients educating them in the treatment chairs and answering questions."

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Schildgen discusses the need for a resource on medications that the nurses may not administer on a routine day to day basis. "I think it is a good resource, we are always looking for a resource, because we don't have patients who get this every day. I generally have to bring up the package insert and maybe even check NCCN guidelines to make sure that everything is how it is supposed to be" when administering.

The first section of the Vyxeos PQI is the background. It provides a general overview and gives information on the drug. Egerton appreciates this section and comments, "the background, I think, is really great because it is right there, that is exactly what you need to know." She adds that when someone does not have time to read the entire package insert this section "highlights what you need to know." She says there are even usually some items "for us pharmacy geek people, things that are interesting or cool, like (regarding Vyxeos) the liposomes favor uptake into leukemia cells, well that is cool."

THE PQI PROCESS: PROVIDING A STEP-BY-STEP GUIDE FOR THE TEAM

he PQI Process section of the Vyxeos PQI contains a wealth of information for the medically integrated team. It provides information on patient eligibility, pre-medications, preparation, dosing, administration, adverse events, and copper overload risk. DeCeault explains the first step in determining "if a patient is a candidate for Vyxeos is asking the basic question 'is the patient fit or unfit?' Then we use it in basically any kind of previously untreated adult with AML with t-AML or AML-MRC between 60 and 75 years old, so older adults who are relatively fit, who have not been previously treated, who would be a candidate for 7 + 3 but we decide to use Vyxeos instead." Dr. Raval echoes her patient selection criteria and says the population of patients who receive treatment with Vyxeos are a "unique population." Many have AML that is "treatment related with previous anthracycline exposure and a history of MDS progressed to AML." His patients receive Vyxeos for induction in the hospital and then receive their consolidation treatment as an outpatient. He elaborates, "if a patient has no limiting factors, we will use Vyxeos for induction." The patient also has the "potential for a second induction if the disease does not go down to less than 5% in a bone marrow biopsy. We do a second induction with a modified dose in the hospital and then consolidation in 5-7 weeks outpatient." He comments that his practice has been "successfully able to do consolidation as an outpatient."

Part of the Vyxeos PQI patient eligibility check includes verifying a patient's anthracycline eligibility by calculating the previous lifetime dose and evaluating a baseline echocardiogram for signs of cardiac dysfunction. All practice participants include cardiac fitness into their patient evaluation for therapy. DeCeault says this is standard at UChicago Medicine, "we check an echo before, we go over their history of if they have had any anthracyclines in the past." Schlidgen states at ICS the nurses also make sure that the patient has had cardiac function checked prior to starting Vyxeos. Of note, at ICS, Hansen feels that the PQI is also a benefit to nursing staff because typically "different specialties look at different things." She explains it can serve as a guide for reminding staff of labs and other tests that need to be verified and that when there is not a pharmacist immediately present at all times it can be critical for guiding the team. Dr. Raval shares that after the team checks cardiac function, a central line is placed, and treatment is started.

Mahan-McDonald comments on the importance of "good venous access" with this drug and using a central line. Daunorubicin (and therefore Vyxeos) is a vesicant and has been associated with severe local tissue necrosis with extravasation.³

The PQI Process covers pre-medications and states to follow institutional practice for moderate emetic risk IV chemotherapy. Egerton comments that this PQI gives guidance as to "where you actually start as far as the pre-meds. It gives guidance to the pharmacy people in the consideration of the premeds, the emetic risk, etc, then the mixing process." NYOH has centralized admixture services so as Egerton explains, "We mix and prepare all of our chemotherapy and immunotherapy at our two main centers on a daily basis and then courier the drugs to other locations." In this model the clinic follows a decoupling policy, where the patient has labs and a physician visit on one day and has their treatment on an alternate day. NYOH pharmacist Jessica Klingamen, PharmD explains that as part of their practice process, the physician inputs the regimen, and the pharmacist goes over the proper doses and proper pre-medications, and the treatment is pre-scheduled 72 hours ahead of time. DeCeault finds this section of the PQI useful and comments the PQI "tells us the overall possible advantage of Vyxeos versus 7 + 3. It is also helpful to let us know what we need to look at before administration. It's helpful for pre-medications, I would say knowing there is a moderate emetic risk."

PATIENT ELIGIBILITY

- Confirmation of therapy-related AML (t-AML) or AML with myelodysplasia-related changes (AML-MRC)
- Anthracycline eligibility:
 - Calculate patient's previous lifetime anthracycline dose. If approaching or over recommended lifetime maximum, consider alternative therapy. Vyxeos is not recommended for patients who have reached maximum lifetime anthracycline dose.
 - Evaluate baseline echocardiogram for signs of cardiac dysfunction. If patient exhibits significant cardiac dysfunction at baseline, discuss risks/benefits of continuing this therapy vs choosing alternative.

 Re-evaluate echocardiogram prior to consolidation with Vyxeos and as clinically necessary.
- Consolidation with Vyxeos is only preferred if given in induction

DOSING, PREPARATION AND ADMINISTRATION: PHAR-MACY AND NURSING ADDING VALUE TO THE TEAM

ollowing the pre-medications, the PQI then covers dosing and preparation. Klingamen discusses Vyxeos and states "the dosing is different on this one." She lists managing medications with complicated dosing as one benefit of having a pharmacist as part of the medically integrated team. This formulation contains two drugs in one solution and it is helpful to have a pharmacist help calculate the dosing. The PQI contains clinical dosing information to help the team including dose adjustments, the first and second induction doses, and consolidation dosing. At ICS, Schildgen shares that following any dose changes from the physician, nursing and pharmacy are notified and "we will recalculate and make sure we have the proper dose." All participants have pharmacy technicians who prepare the chemotherapy. Pharmacy technicians are an integral member of the practice and perform vital functions to support the patient care efforts of the medically integrated team.8 Their duties are continuously growing an expanding. These duties are decided by state law but may include: accurately preparing and distributing patient medications; performing calculations; preparing sterile medicines including chemotherapy; collecting accurate patient information; processing third party billing claims and assisting with prior authorization completion; working directly with patients to obtain medication histories and reconciliation; assisting in the management of investigational drug studies; using technology to help maintain accurate patient records, medication inventory, and orders, and ensuring compliance with regulatory requirements.8

As an additional resource for pharmacy technicians, NCODA also offers technicians the chance to join OPTA, the Oncology Pharmacy Technician Association. OPTA's focus is to cultivate a community where oncology pharmacy technicians will learn, share, interact and empower one another. OPTA aims to equip the technician professional discipline with the resources necessary to raise the standards and optimize the care of individual's affected by cancer. (www.ncoda.org/ oncology-pharmacy-technician-association-opta/) NYOH pharmacy technician Gwen Sislowski, CPhT, has been in the practice's IV pharmacy for 16 years, and shares more on the mixing of Vyxeos. She comments that it is a slow, careful process and that a technician must be careful during the mixing to not shake or agitate the product. When complete, she comments that the final product is a "pretty color," that may be described as an "eggplant" shade. According to the PQI



and PI, Vyxeos is compatible with normal saline (NS) or dextrose 5% in water (D5W) and the resulting product will be a "deep purple, opaque, homogeneous dispersion with no visible particles." Many other team members also commented on the color of the product. Dr. Raval shares he has had patients tell him the product looks like "Gatorade or Vitamin Water", so he now educates them beforehand that it will be "bright, dark purple hanging in the bag."

The PQI covers administration of Vyxeos following the preparation and dosing. It reiterates the need for a central line due to risk for tissue necrosis and states to consult the PI for specifics around filtration. It also states that Vyxeos may be administered as an outpatient if the patient is clinically stable. As discussed earlier, both ICS and NYOH are administering the consolidation treatments on an outpatient basis. Hansen shares that one benefit of being able to administer on an outpatient basis is that "it puts the patient at ease" and they are often more comfortable being able to stay in their own homes. DeCeault shares that the "ease of use of the medication" may be one reason it has been successfully administered in the outpatient setting. At NYOH, Egerton shares that, "for us, we have the capacity within the practice to take care of AML patients." Regarding Vyxeos she adds, "once you get past that initial cycle, we can certainly take care of the patients on an outpatient basis."

ADVERSE EVENTS AND PATIENT CENTERED ACTIVITIES



NYOH Physician Dr. Mihir Raval, MD counsels a patient and his caregiver.

ollowing administration information, the Vyxeos PQI Process covers adverse events. The Patient-Centered Activities also review adverse events as part of patient monitoring and patient education. Dr. Raval says he first lets patients know that "compared to 7 + 3, [Vyxeos] is not a continuous infusion." He lets the patient know that they normally will not experience side effects during the infusion. He comments that Vyxeos is "more tolerable than 7 + 3 but [the patient has] lower counts for longer." He explains that "systemic side effects are better" but because Vyxeos "sits in the bone marrow, there is a longer time to hematologic recovery, a greater rate of neutropenic fever, and a greater need for transfusion." Both Dr. Raval and DeCeault inform patients that they are unlikely to lose their hair on this treatment and DeCeault comments that patients see this as a benefit. De-Ceault also educates patients on potential severe cytopenias and bleeding risk. She says, "while it is a bit easier to use than 7 + 3 it doesn't mean we can go without close monitoring." She also lets patients know "they may feel nauseated, they may have some GI discomfort." She does tell patients that is a "pretty short, 90-minute infusion." Mahan-McDonald states that their nursing team also educates patients on the PQI points such as "blood counts will go down and plan on transfusions, look for mouth sores, watch for nausea, and try to stay out of crowds" due to the risk for infection. DeCeault lets patients know up front that they may need "pretty intensive IV antibiotics and they may need antifungals." Mahan-McDonald shares that her practice will monitor cardiac function in these patients as follow up.

Egerton comments that the information in the PQI is especially helpful "if it is a brand-new drug and people are not that familiar with it yet. We do have multiple technicians and multiple pharmacists, so it is useful in that regard." She adds it can save time from pulling out the PI when needing to know what side effects someone needs to look for and says, "I think these are really great tools for physicians too." She comments that she has shown them to various physicians, and they normally comment "these are great because again, they don't have time to read a package insert. They know the study, they know what they need, if this is the right drug for the right patient based on their knowledge base, and they entrust the pharmacy staff with the admixture specifics so this information is very concise and handy for them to review" when needed. Klingamen agrees and says the PQI is "very useful" and contains "a lot of the things we look for when we look at clinic patients." Schlidgen explains that at ICS, their Advanced Practice Providers now complete the initial patient chemo teach and then nurses follow up to answer further questions and remind patients of points that are important.

One additional item addressed in the Vyxeos PQI is copper overload risk. When reconstituted, Vyxeos contains 5mg/ml of copper gluconate, of which 14% is elemental copper.³ De-Ceault says "we look at this drug, it can cause copper build-up so we look to make sure the patient doesn't have any Wilson's disease." Dr. Raval has not seen this issue as a huge clinical concern but if he sees persistent anemia may check the patient for the problem.

PQI SUPPLEMENTAL INFORMATION: BILLING INFORMATION

ollowing the patient centered activities, the Vyxeos PQI supplemental information section gives information on billing including J-code and billing units. Egerton explains that the billing process is electronic. "When the treatments are done, notification is being given by the nurse and there is a charge capture report that automatically comes out of our EMR. That is all downloaded by our business office and they submit the claim based on j-Code, units, etc. for the drug that was given." She shares that when Vyxeos first came on the market there were questions about the billing because of the two drugs in one, but they were able to reach out to the manufacturer for recommendations and since the drug was loaded in their system and given the first time they have had no issues.

Cancer is one of the most expensive diseases to treat in the United States and 1 in 3 American families are faced with healthcare bills they cannot afford. All practice participants have staff dedicated to the billing and financial assistance for patients. Hansen is now a patient billing representative in her practice. In addition to her experience in mixing IV chemotherapy and dispensing oral oncolytics, she also assists with gaining authorizations for injectables and securing funding when required through the manufacturer and through foundations. She shared that she has worked with the Vyxeos manufacturer in the past and received help with answering financial assistance questions for a patient "right away."

THE MEDICALLY INTEGRATED TEAM AND THE PQI: A WINNING RESOURCE FOR PATIENTS

he medically integrated team provides value to patients. Sislowski shares that her outpatient team is "very beneficial" to patient care. She says NYOH is a "close community. Everybody is right here. All of the information is right here. Everybody works well with one another." Hansen values the PQI as part of this team "so people don't have to reinvent the wheel and know where they are starting." DeCeault echoes that sentiment and adds, "as a provider I think it is a good foundation." As a Director, Reid relies on the PQI as a clinical resource for her team and shares, "I think the Vyxeos PQI did a fantastic job walking a clinician through where Vyxeos fits into the treatment paradigm. It was thorough on how to infuse the medication and what to expect in terms of potential adverse events. I like that the PQI is a short and quick overview of the medication. It is something that I can read in under five minutes. I know that the pharmacy and nursing team can quickly digest this information and provide quality care for the patient by using

"EVERYBODY IS RIGHT HERE. ALL OF THE INFORMATION IS RIGHT HERE. EVERYBODY WORKS WELL WITH ONE ANOTHER."

Gwen Sislowski

these PQI guides. When I have questions about treatment or supportive care, I always first search to see if there is a PQI that has addressed my question."

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Chara Reid, PharmD



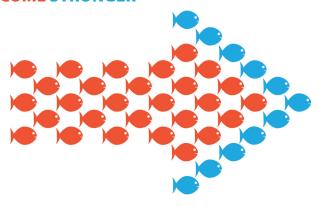
CONCLUSION: PQI PRINCIPLES BUILD THE BRIDGE TO FUTURE SUCCESS

QI principles promote quality care and create an environment in which the patient feels safe with regular check-ins on their health status. Surrounded by one team of expert professionals with each individual cohesively contributing to the overall journey, these AML patients are in a position to maintain health and quality of life throughout the treatment process. That is a comforting feeling for everyone involved. Individuals within cancer treatment organizations are the builders who provide the bridge to success with Vyxeos therapy. Employers, payers, providers, pharmacists, and patients are continuing to recognize the value of this delivery model for every stakeholder. NCODA exists to advance the value of practices for oncology physicians through the provision of innovative and effective resources like the Positive Quality Intervention (PQI). These tools reduce physician burden and instill confidence in healthcare professionals to achieve optimal outcomes for their patients. But the work is far from over.

All organizations, and more importantly, individuals, should challenge themselves to simply do more. The updated adage

is true: it takes a team to care for a cancer patient. NCODA has provided a foundation, but only the individuals within an empowered MID team can take the necessary steps to successfully build the bridge to optimal patient care. Once these tools are properly operationalized, professionals can enable patients to climb up and over the waters and find success on the other side. We are all in this together; let us move forward confidently.

WORKING TOGETHER, WE BECOME STRONGER

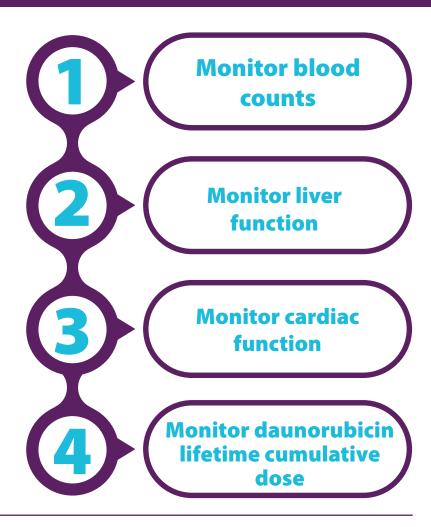


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VYXEOS PQI PATIENT MONITORING:





Helpful Online Resources

- www.ncoda.org
- www.ncoda.org/pqi
- www.ncoda.org/pqi-in-action
- www.ncoda.org/liposomal-daunorubicin-cytarabine-management

ON THE COVER (from left):

- New York Oncology and Hematology in Albany, New York.
- Illinois Cancer Specialists in Chicago, Illinois.
- University of Chicago Medical Center in Chicago, Illinois.

NCODA'S POSITIVE QUALITY INTERVENTION IN ACTION >>>>>

Practice panelist's comments reflect their experiences and opinions and should not be used as a substitute for medical judgement.

Important notice: National Community Oncology Dispensing Association, Inc. (NCODA), has developed this Positive Quality Intervention in Action platform. This platform represents a brief summary of medication uses and therapy options derived from information provided by the drug manufacturer and other resources. This platform is intended as an educational aid and does not provide individual medical advice and does not substitute for the advice of a qualified healthcare professional. This platform does not cover all existing information related to the possible uses, directions, doses, precautions, warning, interactions, adverse effects, or risks associated with the medication discussed in the platform and is not intended as a substitute for the advice of a qualified healthcare professional. The materials contained in this platform are for informational purposes only and do not constitute or imply endorsement, recommendation, or favoring of this medication by NCODA, which assumes no liability for and does not ensure the accuracy of the information presented. NCODA does not make any representations with respect to the medications whatsoever, and any and all decisions, with respect to such medications, are at the sole risk of the individual consuming the medication. All decisions related to taking this medication should be made with the guidance and under the direction of a qualified healthcare professional.

