2020 NCODA Fall Summit

Practicing to the Top of Your License: Maximize Efficiencies Through Collaborative Agreement

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Katy Klein, DNP, FNP-C, AOCNP

Nurse Practitioner
St. Louis Cancer Care

- St. Louis Cancer Care
  - 3 Oncologists
  - 2 NPs
  - 3 main offices and 2 satellite offices
- Professional Experience
  - BSN and DNP at University of Missouri-Columbia
  - Prior experiences: Bedside RN and charge nurse at local St. Louis Hospital on an oncology floor
  - Started as an NO at St. Louis Cancer Care in March 2018

Starting the NP Program

- Setting expectations among all stake holders
- Collaboration agreement with all three physicians
- ION consultation with experienced oncology nurse practitioner
- Weekly and monthly meetings to set goals evaluate outcomes

Roles and Responsibilities

- Assessing patients prior to treatments
- General follow up visits
- Treatment education visits
- Medication management visits
- Same-day sick visits
- Survivorship counseling
- Genetic testing
- Patient Advocacy (current goal)

Barriers and Successes

- Barriers
  - New provider, new setting
  - Learning treatment plans, current practice protocols, available resources
  - Process changes for all staff members
- Successes
  - Autonomy in this role
  - 100% billing reimbursement under physician
  - Increase in total number of patients (both oncologist and NP)
  - Physician satisfaction
  - Staff satisfaction
  - Patient satisfaction

St Luke's® Cancer Institute

Expanding Pharmacist Practice in Oral Oncolytics with a Collaborative Practice Agreement

Amanda Wright, PharmD

Disclosures

- Co-investigators:
  - Stephanie Matta, PharmD, BCOP
  - Julia Kerr, PharmD
- Conflicts of Interest: None
- Project Sponsorship: None

St. Luke's Cancer Institute (SLCI)

- Provides cancer care for St. Luke's Health System (SLHS)
- Serves southern Idaho, eastern Oregon, and northern Nevada
  - 5 ambulatory oncology clinics
  - Dedicated oncology/hematology floor in St. Luke's Boise Medical Center
- Medically Integrated Pharmacy (MIP), est. 2010
  - Manage and dispense oral oncolytics to SLCI patients

MIP Workflow

- Pharmacist Responsibilities
  - Clinical review of new prescriptions
  - Medication counseling
  - Follow-up calls for new patients
  - Monthly refills
  - Review provider notes
  - Complete prior authorizations
  - Assist with transition to mail order or free drug programs

Project Rationale

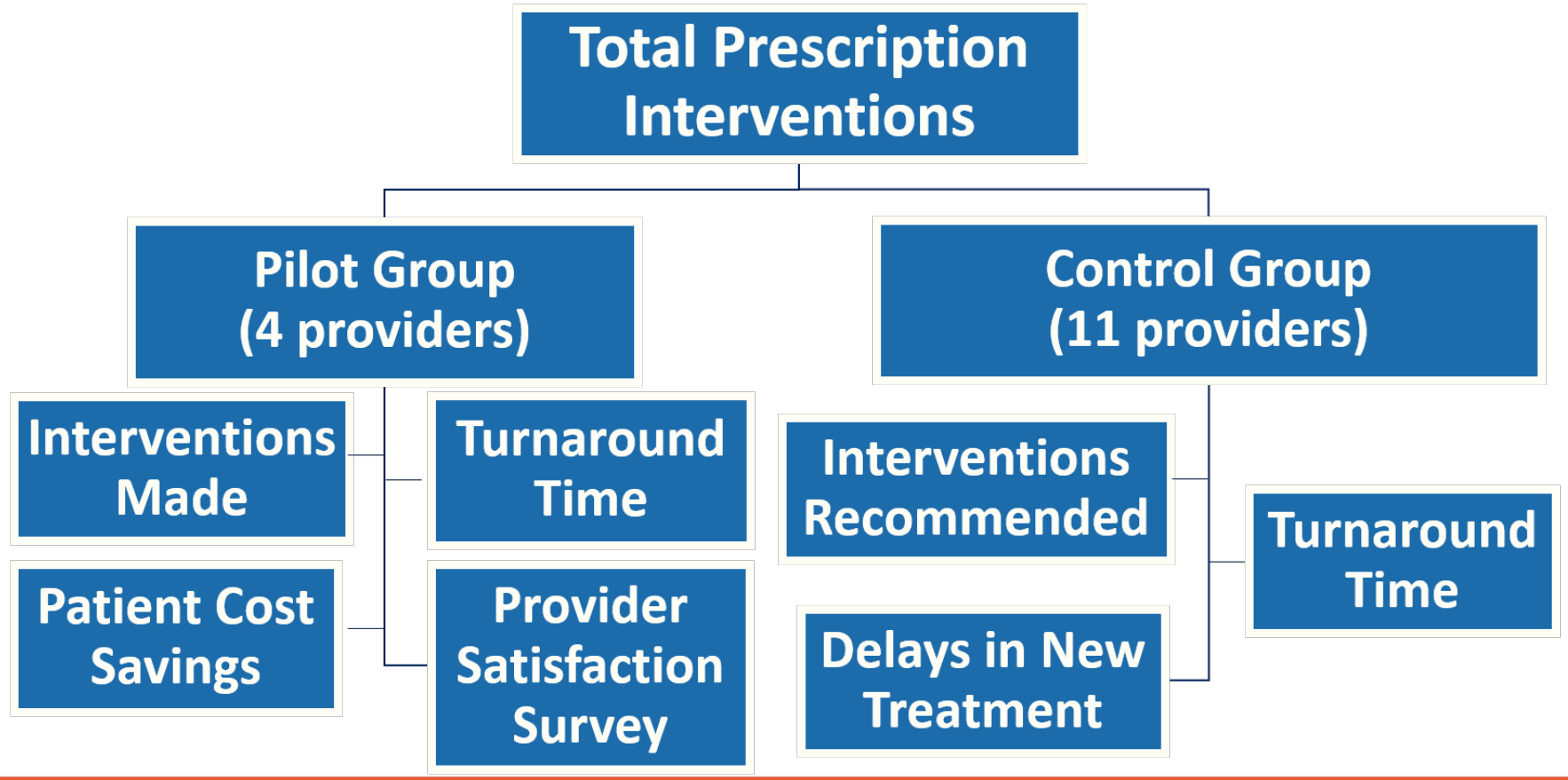
- Motivation for Oral Oncolytic CPA
  - Providers sought out pharmacist assistance with entry of oral oncolytic prescriptions
  - Successful Anti-Emetic CPA in place at SLCI sites
  - Opportunity identified to improve workflow and reduce delays in processing or oral oncolytic prescriptions

Oral Oncolytic CPA

Clinical activities to be completed by the oncology pharmacists per the Oral Oncolytic CPA

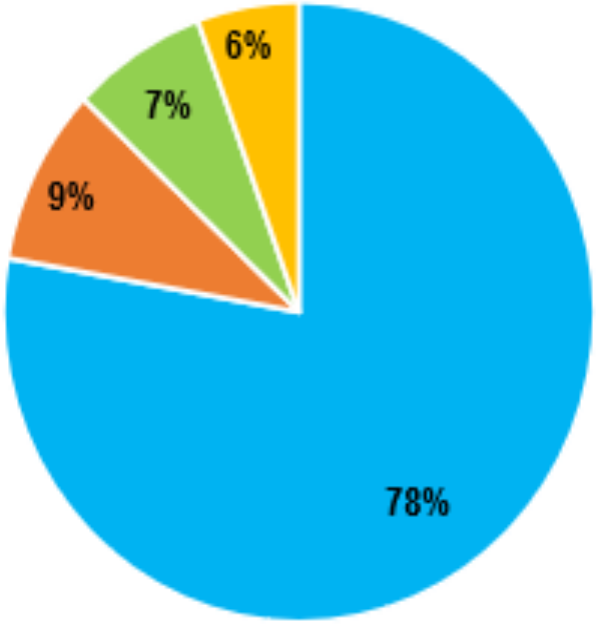
1. Dose adjustments based on renal and/or hepatic function
2. Dose rounding to nearest tablet size
3. Renewal of prescription refills based on provider notes
4. Dose adjustments for toxicities based on guidelines, clinical judgement and provider notes
5. Dose adjustments based on specific indications
6. Ordering of laboratory tests and/or exams per guidelines

Pilot Project Timeline 11/8/18 - 1/31/19

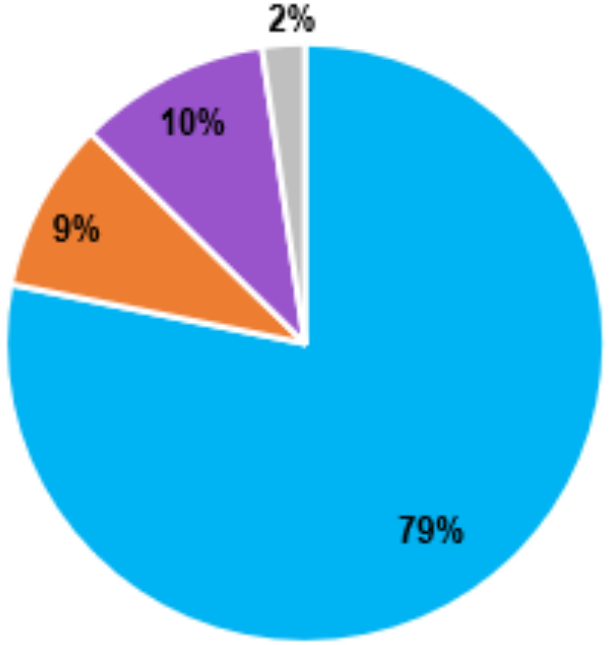


Pilot Results – Interventions

Pilot Group (n = 54)



Control Group (n = 87)



Rx Refill Renewal
Toxicity
New Order
Appropriate Indication
Dose Rounding
Dose Titration

Pilot Results – Prescription Turnaround Time

Pilot Group (n = 54)	Control Group (n = 87)
Total Turnaround Time: 365 minutes	Total Turnaround Time: 399,999 minutes
Turnaround Time Range: 5-15 minutes (Average 7 minutes)	Turnaround Time Range: 10 – 20,565 minutes (Average 3,311 minutes) Outliers: 30,075, 41,549, & 50,245 minutes
Mean Turnaround Time* ($p < 0.0001$)	**Excluding outliers*

Pilot Results – Pilot Group Satisfaction Survey

1. I was satisfied with the interventions made by the pharmacists as part of the Oral Oncolytic CPA.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-	-	-	1	3

2. I feel that the Oral Oncolytic CPA had a positive impact on my time.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-	-	-	1	3

3. I would recommend the Oral Oncolytic CPA be implemented at all SLCI sites.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-	-	-	1	3

Pilot Results – Cost Savings

Dose rounding to nearest tablet size resulted in cost savings for patients on two prescriptions.

- Capecitabine 500 mg tablet = $39.12/tablet (*SWP)
- Temozolomide 100 mg capsule = $252.57/capsule (*SWP)
- Temozolomide 140 mg capsule = $353.61/capsule (*SWP)

Capecitabine	Temozolomide
Capecitabine 500 mg Sig: 1500 mg BID, 14 on/7 off (#84)	Temozolomide **100 mg** Sig: 300 mg daily, 5 on/23 off (#15)
Changed to: Capecitabine 500 mg Sig: 1000 mg QAM, 1500 mg QPM, 14 on/7 off (#70)	Changed to: Temozolomide **140 mg** Sig: 280 mg daily, 5 on/23 off (#10)
Cost Savings per Cycle: $547.68	**Cost Savings per Cycle: $252.45**
Yearly Cost Savings: $9,858.24	**Yearly Cost Savings: $3,281.85**

*SWP: Suggested Wholesale Price

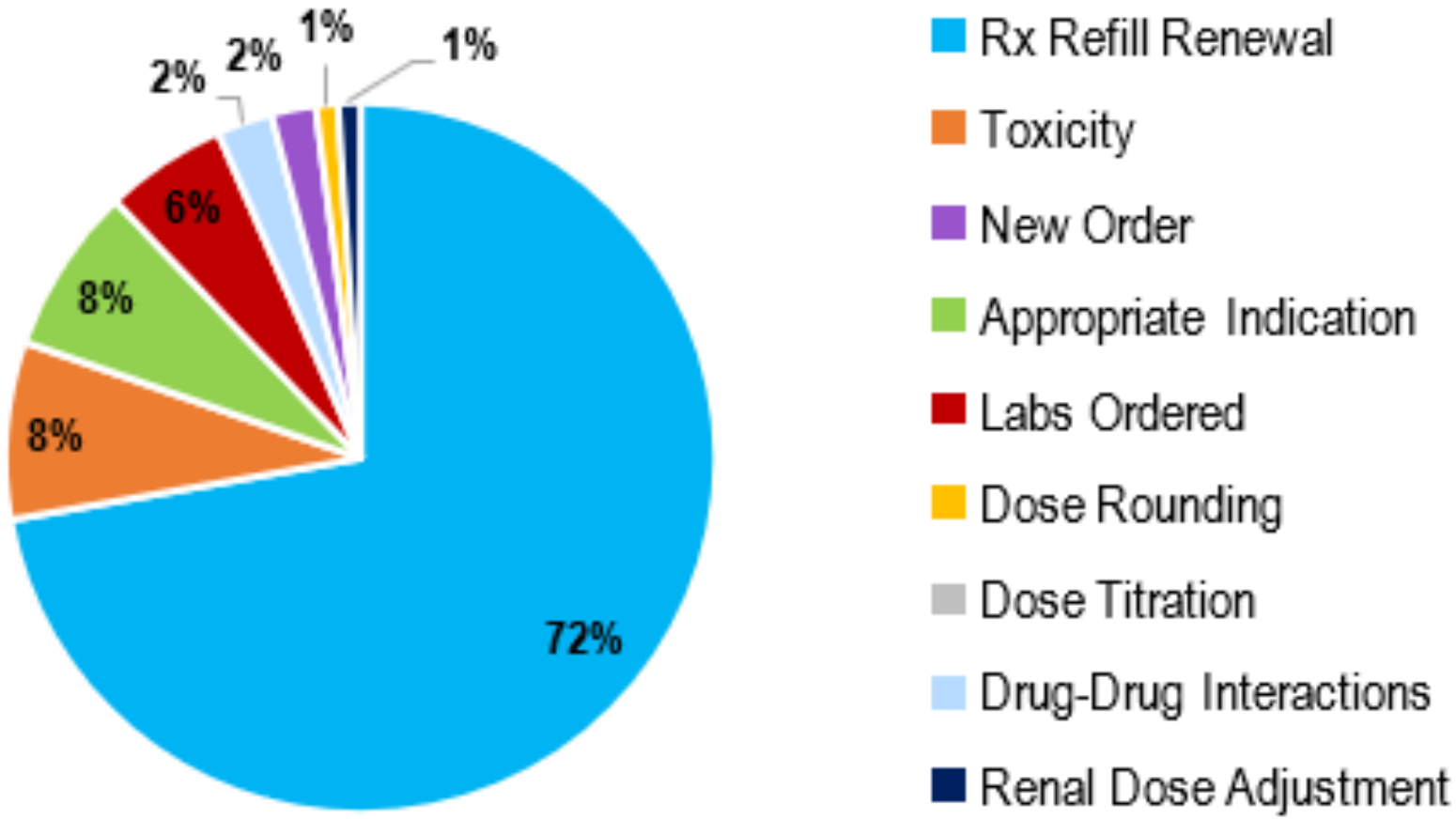
Pilot Results

- Potential Limitations
  - All possible data for both groups may not be represented
    - Delays in pharmacist education
    - Forgotten notification to the data collector
- Conclusions
  - Turnaround time was found to be significantly shorter on prescriptions in the pilot group
  - Provider satisfaction increased
  - Patient costs were reduced due to dose rounding

Post Pilot Steps

- Preliminary pilot results presented at the Oncology P&T meeting
  - Oral Oncolytic CPA approved unanimously
- Education of all SLCI providers on the CPA
- Continue data collection for evaluation of Post-CPA implementation impact
  - Education of pharmacists on data collection & lab order entry
  - Data collection for an additional 3 months: 2/1/19 – 4/30/19

Post-CPA Results – Interventions



Post-CPA Results – Turnaround Time

Pilot Results- Control Group (n = 87)	Post-CPA Implementation (n = 197)
Total Turnaround Time: 399,999 minutes	Total Turnaround Time: 1,190 minutes
Turnaround Time Range: 10 - 20,565 minutes (Average 3,311 minutes) Outliers (minutes): 30,075, 41,549, & 50,245	Turnaround Time Range: 5 -15 minutes (Average 6 minutes)
Mean Turnaround Time* ($p < 0.0001$)	**Excluding outliers*

Post-CPA Results

- Turnaround time continued to be significantly shorter on prescriptions that had interventions per the CPA
- Providers were satisfied with pharmacist interventions
- Pharmacist practice has expanded in oral oncolytics with the CPA
- Opportunities for further expansion of the CPA are being explored

Importance of a CPA in Clinical Practice

- Improve pharmacy workflow
- Increase provider time for other patient care responsibilities
- Expand pharmacist practice in area of expertise

Steps to Implement a CPA

- Develop rapport with interdisciplinary team
- Identify areas where pharmacy can assist providers with oral oncolytics
- Discuss with the provider team to determine best approach
- Create and present the CPA to administrative team
- Evaluate CPA to share impact in clinic workflow
- Request feedback from interdisciplinary team

Publication

Further information regarding the Oral Oncolytic CPA can be found in the following article

Wright AL, Matta SF, Kerr JR. Expansion of pharmacist practice in oral oncolytic therapy with a collaborative practice agreement [published online ahead of print, 2020 Feb 19]. *J Oncol Pharm Pract*. 2020;1078155220905004. doi:10.1177/1078155220905004

St. Lawrence Health System

MTM (Medication Therapy Management) and CPA's (Collaborative Practice Agreement's) in Action; Patient Cases

Ryan Titus PharmD, BCOP, BCPS

Clinical Assistant Professor; Clarkson University

Ambulatory Oncology Pharmacist; St. Lawrence Health System (SLHS)

NYS Collaborative Drug Therapy Management (CDTM) Certified

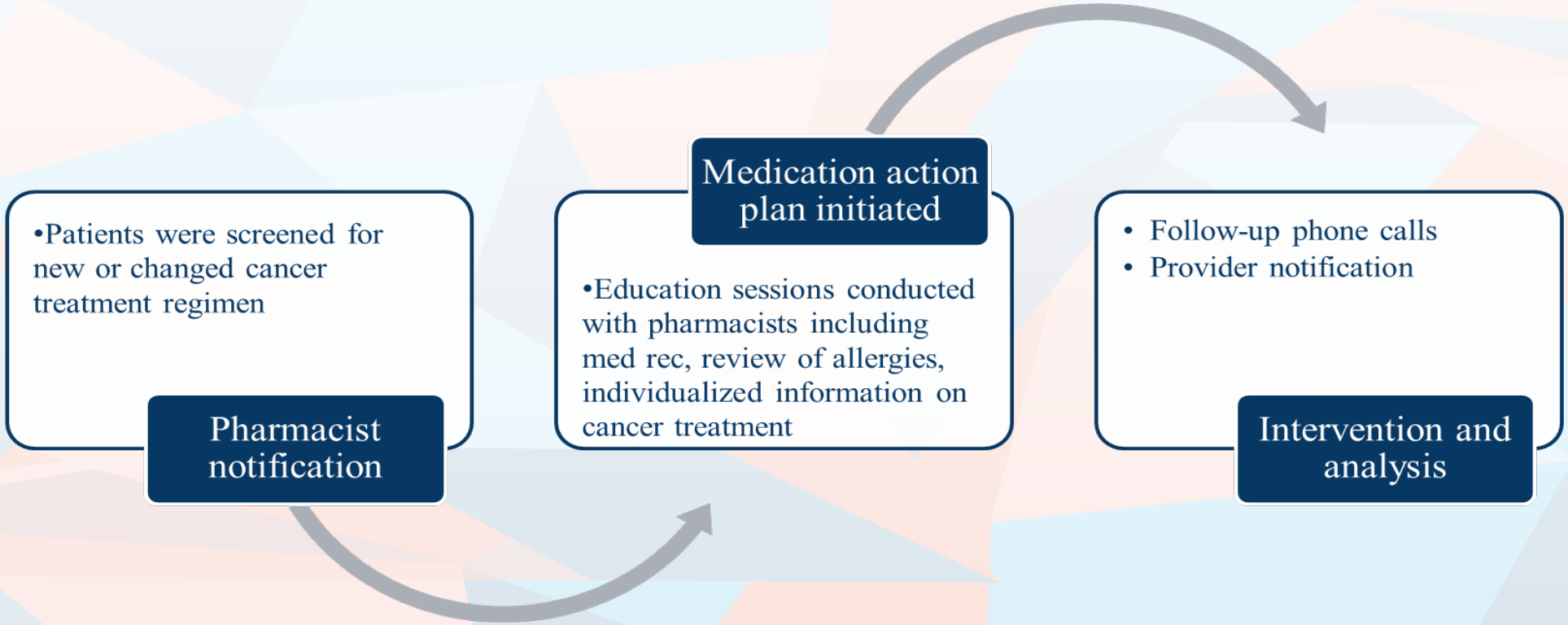
St. Lawrence Health System (SLHS)

- SLHS – Center for Cancer Care
  - Located on main hospital campus in Upstate NY
  - 6 - Infusion beds
  - 2 - Medical Oncologist
  - 1 - Midlevel Provider (PA/NP)
  - 1 - Board Certified Oncology Pharmacist (BCOP)

Roadmap to Initiation of Drug Therapy Management Programs (DTMP) at SLHS

- 2017; Directors of finance and revenue approved ambulatory pharmacist (PMEP (Pharmacist Medication Education Program) and CDTM (Collaborative Drug Therapy Management)
- 2017; PMEP policy and procedure; approved by PT committee.
- July 2017; Director's of Oncology Services and Pharmacy approved PMEP consultation initiation within outpatient Center for Cancer Care
- March 2018; Physician Practice Manager and Primary Care Site Manager approved PMEP consultation initiation at outpatient medical campus.
- 2018; CDTM P&P submitted, Governance and Credentialing P & P, and smoking cessation CPA submitted to Medical Executive Committee (MEC); Approved on 2/7/19
- February 2018; Comprehensive CDTM Proposal resubmitted. Oncology supportive Care CPA also submitted for MEC for review. Approved on 2/7/19

SLHS – Center for Cancer Care



Patient Case 1

- MM is a 59 yo female
- Past Medical history:
  - HTN, arrhythmia, GERD, CKD
- Home medications:
  - Amiodarone, carvedilol, docusate, fentanyl patch, morphine, pantoprazole
- Labs
  - WBC: 5.3, Plts: 255, Neutrophils: 3, Hbg:10, Bili: 0.3, Scr: 2.85, Crcl (C&G): 18.4
- Diagnosis:
  - Cervical cancer
- Treatment History:
  - Laparotomy followed by external beam radiation

Patient Case 1

- Referral for DTMP consult:
  - Carboplatin and pemetrexed
- Drug monograph:
  - CrCL less than 45 mL/min: Dosage recommendations are not available; do not administer pemetrexed
- Contacted prescriber and switched to carboplatin and paclitaxel

http://clinicalpharmacology-ip.com/Forms/Monograph/monograph.aspx?cpnum=2781&sec=monindi&t=0

Patient Case 1 - DTMP Consult Summary

- Drug interaction (Level 2 – Major)
  - Amiodarone and ondansetron
    - Changed ondansetron to palonosetron
- Drug – disease interaction (CKD)
  - Pemetrexed changed to paclitaxel
- Supportive care medications prescribed
  - Metoclopramide
  - Lidocaine/prilocaine cream
- Face to face patient DTMP educational consult
  - 80 minutes spent with patient

Patient Case 2

- ED is a 72 male
- Past Medical history:
  - MI (2004), HTN, dyslipidemia, CAD, BPH, GERD, CHF (EF = 30 %), COPD
- Diagnosis:
  - MDS → AML
- Home medications
  - Carvedilol, nitroglycerin, ramipril, rosuvastatin, spironolactone, ASA
  - Albuterol, ferrous sulfate, montelukast, pantoprazole, finasteride, tiotropium, cetirizine
- Labs
  - WBC: 1.0, Plts: 38, Neutrophils: 0.19, Hbg: 7.4, Bili: 0.5, Scr: 1.08, Crcl (C&G): 71.7
- Treatment History:
  - Vidaza 75mg/m2 Days 1-5, 8 & 9 every 28 days

Patient Case 2

- Referral for DTMP consult:
  - Venetoclax/Low dose cytarabine
- Patient presented for DTMP teach with previously processed venetoclax prescription via 3rd party specialty pharmacy stating the following;
  - Day 1 - 100 mg, Day 2 - 200 mg, Day 3 - 400 mg, Day 4 - 500 mg, Day 5 - 600 mg.
  - #18 Tablets
    - **Prescribed for first 5 days only for each 28 day cycle by provider**

NCODA PQI: Venetoclax Risk Stratification, Dosing, and Dispensing Procedure

Venetoclax Ramp-Up Schedule

CLL/SLL[§]		AML		
Week 1	20 mg daily	Day 1	100 mg	[§] The CLL/SLL Starting Pack provides the first 4 weeks of VENCLEXTA according to the ramp-up schedule. The 400 mg dose is achieved using 4 x 100 mg tablets supplied in bottles.
Week 2	50 mg daily	Day 2	200 mg	*400mg when used in combination with azacitidine or decitabine; 600mg when used in combination with low dose cytarabine
Week 3	100 mg daily	Day 3	400 mg	
Week 4	200 mg daily	Day 4 and beyond	400 mg or 600 mg*	
Week 5 and beyond	400 mg daily			

Patient Case 2 - DTMP Consult Summary

- Drug interaction (Level 2 – Major)
  - Venetoclax and carvedilol
    - Obtained authorization to switch → metoprolol
- Incorrect titration and frequency of venetoclax
  - Obtained new prescriptions with correct dosing protocol
- Supportive care medications prescribed
  - Allopurinol
  - Ondansetron
  - Loperamide
  - Lidocaine-prilocaine cream
- Face to face patient DTMP educational consult
  - 60 minutes spent with patient

Oral Chemotherapy Education

ACCC Association of Community Cancer Centers | HOPA Hematology/Oncology Pharmacy Association | NCODA National Community Oncology Dispensing Association, Inc. PASSION FOR PATIENTS | ONS Oncology Nursing Society

VENETOCLAX

Name of your medication

Generic name — venetoclax (veh-NEH-toh-klax)
Brand name — Venclexta™ (ven-KLEK-stuh)

Approved uses

Venetoclax is used to treat chronic lymphocytic leukemia or small lymphocytic lymphoma. It is also used in select patients with newly-diagnosed acute myeloid leukemia, in combination with azacitadine, decitabine, or low-dose cytarabine.

Dose and schedule

Taking venetoclax as instructed is important to allow your treatment to be as effective as possible, so here are some key points to remember.

- ☐ Your dose may vary, but the usual dose of venetoclax is 400 or 600 milligrams (mg) to be taken by mouth at a scheduled time once a day.
- ☐ When you start venetoclax, your care provider will give you instructions about how to safely and correctly increase your dose to reach the recommended dose of 400 mg or 600 mg daily.
- ☐ Venetoclax should be taken with food, at the same time each day.
- ☐ Venetoclax should be taken whole and not crushed, cut, or dissolved. If you are unable to swallow venetoclax, talk to your care provider or pharmacist for possible options.
- ☐ If you miss a dose of venetoclax:
  - **Do not** take the missed dose if it has been more than 8 hours since you should have taken it. Simply take the next dose at the regularly scheduled time.
  - **Do not** take two doses at one time.
  - Be sure to write down if you miss a dose and let your care provider know about any missed doses.

ACCC Association of Community Cancer Centers | HOPA Hematology/Oncology Pharmacy Association | NCODA National Community Oncology Dispensing Association, Inc. PASSION FOR PATIENTS | ONS Oncology Nursing Society

VENETOCLAX

Side Effects of Venetoclax

Below are common side effects that have been known to happen in about one third or more of patients taking venetoclax are listed on the left side of this table. You **MAY NOT** experience these side effects. Options to help manage any side effects that do occur are included on the right side of this table. These should be discussed with your care provider. If you experience any side effect you cannot manage or that is not listed here, contact your care provider.

Possible Side Effect	Management
Decreased white blood cells (WBCs) and increased risk for infection	Your WBCs should be monitored by a simple blood test. When your WBCs are low, you are at greater risk of having an infection. Take the following precautions to protect yourself from infection: • Wash your hands often, especially before eating and after using the bathroom. • Avoid crowds and people with fevers, flu, or other infection. • Bathe regularly to keep good personal hygiene. Contact your care provider if you experience any signs or symptoms of an infection, including the following: • Fever (temperature more than 100.4°F or 38°C) • Chills • Sore throat • Burning with urination • Unusual tiredness • A sore that becomes red, is draining, or does not heal Check with your care provider before taking any medicine for a fever or chills.

SLHS Barriers and Successes

- Barriers
  - Administration and Provider buy-in
    - Fear of the unknown
  - Payment options
    - Direct bill
    - Part D (MTM)
    - Incident to Physician Order
    - Facility Charge
  - Consumer buy-in
    - Novel service
- Successes
  - Maximize patient satisfaction
    - Improved outcomes/safety
  - Physician satisfaction
    - Delegate tasks to inter-professional team
  - Staff satisfaction
    - Be efficient!
    - Practice at the top of one's license