



Oral Adherence Toolkit



- Tool 1. Patient Assessment Checklist
- Tool 2. Patient Education
- Tool 3. Oral Chemotherapy Ordering Standards
- Tool 4. Pharmacy Descriptions, Benefits, and Concerns
- Tool 5. Reimbursement and Patient Assistance Resources
- Tool 6. Food, Drug and Pathway Interactions and Effects
- Tool 7. Sample Treatment Calendars
- Tool 8. Factors Influencing Adherence
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- Tool 12. Developing a Process of Medication Tracking
- Tool 13. Readiness to Change Scale
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Before beginning an oral chemotherapy regimen, the patient should be assessed for the ability to obtain and administer the regimen according to the treatment plan based on some of the following merits:

Socioeconomic issues

How will the patient fill the prescription?

Does the patient have insurance?

What copays and out-of-pocket costs are associated with the patient's insurance?

Psychosocial issues

What is the patient's mental status?

Does the patient have social support?

Regulatory or administrative needs

Is the drug on formulary?

Is the drug approved by the FDA?

Health and medication beliefs and preferences

Is the patient ready to accept the necessity of treatment?

Is the patient prepared for safety and adherence concerns?

Have the patient's expectations about treatment been managed?

Lifestyle

Where does the patient live in proximity to the clinic/pharmacy?

Is the treatment regimen a good fit for the patient's lifestyle (i.e., does the patient work, drive, etc)?

Will a family member or caregiver be available to help with treatment and patient care?

Personal factors

How does the patient learn best?

Does the patient have any cognitive impairment?

Does the patient have the ability to take medications as prescribed (i.e., swallow pills or open packaging)?

Does the patient have comorbidities that could impact or affect the treatment regimen or adherence?

Does the patient use alcohol or drugs?

Treatment factors

How complex is the patient's treatment regimen?

Is there pill burden associated with the treatment regimen?

What is the treatment duration?

SOURCES:

Irwin M, Johnson LA (2015). Factors influencing oral adherence: Qualitative metasummary and triangulation with quantitative evidence. *Clin J Oncol Nurs*, 19(3 suppl):6–30.

Neuss MN, Polovich M, McNiff K, et al (2013). 2013 Updated American Society of Clinical Oncology/Oncology Nursing Society chemotherapy administration safety standards including standards for the safe administration and management of oral chemotherapy. *Oncology Nursing Forum*, 40(3):225–233.



Once a comprehensive patient assessment is completed and the treatment plan developed, patients should be provided with verbal and written or electronic information that highlights important drug and safety information. The following should be included in the educational materials:

1. Diagnosis, goal and duration of treatment
2. Drug name
3. Drug information, such as appearance and packaging
4. How the drug will be obtained
5. Potential side effects and the management of short- and long-term side effects, including reproductive and fertility risks
6. Safe storage and handling
7. Disposal of unused medication
8. Safe handling of body secretions and waste in the home
9. Dose schedule for the oral chemotherapy, as well as schedule of supplemental medications needed for the therapy
10. Food and/or drug interactions
11. Missed dose plan (i.e., what to do if the patient omits a dose)
12. Monitoring appointments (i.e., physician visits and any laboratory work needed)
13. Information on how, when, who and why to contact to report side effects and ask questions
14. The refill process, including how much time is needed to obtain refills and how to obtain them
15. A calendar with the patient's treatment cycle clearly written out, which should be given to the patient at the initial teaching session and reviewed at each follow-up session

SOURCES:

Bettencourt, E (2014). Oral chemotherapy: what your patients need to know. *Oncology Issues, the Journal of the Association of Community Cancer Centers*, 44–51.

Neuss MN, Polovich M, McNiff K, et al (2013). 2013 Updated American Society of Clinical Oncology/Oncology Nursing Society chemotherapy administration safety standards including standards for the safe administration and management of oral chemotherapy. *Oncology Nursing Forum*, 40(3):225–233.

TOOL 3

Oral Chemotherapy Ordering Standards

A standardized process of verification is recommended with all chemotherapy orders. Include the following in oral chemotherapy prescriptions:

- ☐ Patient name and second identifier
- ☐ Date of order
- ☐ Name of drug (complete generic name)
- ☐ Allergies
- ☐ Method of dose calculation
- ☐ Dosage
- ☐ Route of administration
- ☐ Schedule and frequency of administration
- ☐ Treatment duration and time limitation
- ☐ Dispensing quantity
- ☐ Duration of therapy and number of days of treatment, if medication is not to be taken continuously
- ☐ Number of refills, including if there are no further refills
- ☐ Time limitation to ensure appropriate evaluation at predetermined intervals

SOURCES:

Neuss MN, Polovich M, McNiff K, et al (2013). 2013 Updated American Society of Clinical Oncology/Oncology Nursing Society chemotherapy administration safety standards including standards for the safe administration and management of oral chemotherapy. *Oncology Nursing Forum*, 40(3):225–233.

Polovich M, Olsen M, LeFebvre KB (2014). *Chemotherapy and Biotherapy Guidelines and Recommendations for Practice*. Pittsburgh, PA: Oncology Nursing Society.

Filling prescriptions for oral cancer therapies can be challenging, as pharmacies must have designated areas to store and compound drugs and separate tools to count and dispense the drugs. In addition, insurance companies may require the use of other pharmacies, including mail-order pharmacies, which often provide a 30-day supply of the drugs at a lower cost but delay delivery. Some centers have begun on-site dispensing as a solution to this issue.

An overview of different types of pharmacies is provided below.

Dispensing Site	Benefits	Concerns
Community retail pharmacy	<ul style="list-style-type: none"> Often located near patient's residence May be better positioned to monitor for drug–drug interactions if all prescriptions are filled at this pharmacy chain 	<ul style="list-style-type: none"> Community pharmacist may not have adequate experience to provide counseling for specialized medications May not stock less frequently used or high-cost medications, thus resulting in delay in starting cycle Billing concerns – may not bill correctly when medication is covered under Medicare Part B Limited resources for patients without insurance or with high copays
Specialty pharmacy	<ul style="list-style-type: none"> Has highly experienced and knowledgeable oncology pharmacy staff Provides additional patient education by phone or mail Delivers medication to patient at no additional cost Able to custom pack multi-strength doses to avoid multiple copays Works closely with insurance plans and Medicare Access to patient assistance programs 	<ul style="list-style-type: none"> May not be local – patient may have concerns about working with pharmacy by phone Education and instructions received may differ from information received from provider, creating patient confusion Non-chemotherapy prescriptions may be filled at other locations, creating confusion with drug–drug or food–drug interactions
Mail-order pharmacy	<ul style="list-style-type: none"> Usually decreased patient copay when medication is ordered in 90-day amounts May have nurse case managers on staff to assist patients on medications for “catastrophic diseases” 	<ul style="list-style-type: none"> Unlikely that patient will speak directly with an oncology pharmacist Nurse case manager may not be an oncology nurse Most require minimum 90-day supply
Practice or physician dispensing pharmacy	<ul style="list-style-type: none"> Conveniently located inside oncology office Has physician or nurse available for questions Has all personnel available so that double check of prescription can be performed for safety Has patient medical record readily available for questions 	<ul style="list-style-type: none"> Varying levels of physician supervision may be required, depending on regulations Drug safety rules mandated by HFAP, Joint Commission, OSHA and public health rules require additional documentation and record keeping
Hospital Pharmacy	<ul style="list-style-type: none"> May give patient access to an oncology pharmacist Allows close communication with practice physician or nurse Generally follows double check of prescription if given patient data May be connected to practice through electronic ordering system Dispenses investigational drugs 	<ul style="list-style-type: none"> Travel burden – hospital pharmacy may not be located on same campus as office May not have access to patient assistance program information May limit to 30-day supply

HFAP: Healthcare Facilities Accreditation Program [American Osteopathic Association]; OSHA: Occupational Safety and Health Administration.

Based on information from

Reff, MJ (2014). Physician dispensing adding value to patients and the practice. *Oncology Issues, the Journal of the Association of Community Cancer Centers*, 38–43. Retrieved from <http://docz.io/doc/118637/38-www.accc-cancer.org---may%E2%80%93june-2014---oi>

Weingart SN, Brown E, Bach PB, et al (2008). NCCN Task Force Report: Oral Chemotherapy. *Journal of the National Comprehensive Cancer Network*, 6(suppl. 3):S-8-10.

TOOL 5

Reimbursement and Patient Assistance Resources

Medication cost can be a barrier to adherence. Prior to starting an oral chemotherapy regimen, determine the cost to the patient. Most manufacturers offer financial assistance or reimbursement programs. To locate these programs online, do an internet search of the drug manufacturer with the words “financial assistance” or “patient assistance” to learn about that company’s program. In addition, many foundations, including those listed here, provide patient assistance.

CancerCare® Co-Payment Assistance Foundation	http://cancercarecopay.org
Cancer Supportive Care Programs National and International Listing of Pharmaceutical Programs	http://www.cancersupportivecare.com/drug_assistance.html
Good Days from Chronic Disease Fund	https://patientsandpros.cdfund.org
HealthWell Foundation	www.healthwellfoundation.org
The Leukemia & Lymphoma Society's® Co-Pay Assistance Program	www.lls.org/copay
National Cancer Institute support and resources	www.cancer.gov/cancertopics/support
National Organization of Rare Disorders	www.rarediseases.org
NeedyMeds	www.needymeds.com
Partnership for Prescription Assistance	www.pparx.org
Patient Access Network Foundation	www.panfoundation.org
Patient Advocate Foundation	www.patientadvocate.org
Patient Advocate Foundation's Co-Pay Relief program	www.copays.org
PSI®—Patient Services Inc.	www.patientservicesinc.org 1-800-366-7741

TOOL 6

Food, Drug and Pathway Interactions and Effects

It is important to review your patient's regimen prior to the start of treatment. Understanding specific administration concerns, food and drug interactions and treatment side effects will help you guide patients and manage expectations. Consult the drug manufacturer's product information, as well as print and online drug resources for guidance on the administration of each drug. Below are general interactions that are important to know and share with your patient depending on the treatment regimen, followed by websites that provide drug information for both patients and healthcare professionals.

Food-Drug Interactions

- It is generally recommended that oral agents be taken whole (i.e., do not crush or chew), though several drugs may be dispersed in water or juice until dissolved completely.
- Foods and activities that may impact absorption of chemotherapy can include:
 - » High-fat meals
 - » Lack of adequate fluid intake
 - » Smoking
 - » Alcohol
 - » Caffeine
 - » Grapefruit juice
 - » Calcium or dairy products
 - » Seville oranges
 - » Tyramine-rich foods (e.g., wine, yogurt, bananas, aged cheeses)
- Providers should consider whether the administration schedule can help to minimize adverse effects of the drug. For example, recommending that agents causing drowsiness or nausea are taken at night.

Drug-Drug Interactions

- The potential for drug interactions increases as the number of medications a patient takes increases.
- Oral chemotherapy agents often have a narrow therapeutic index, and all patients on oral chemotherapy agents should be screened for potential drug-drug or drug-herbal interactions.
- The most common interactions with oral drugs involve pharmacokinetic interactions, where one drug affects the absorption, distribution, metabolism or elimination of the other drug.
- Most of the drug interactions that nurses will see in clinical practice involve the cytochrome P450 (CYP450) enzyme system.

Pathway Interactions

- Research has identified about 50 different enzymes that metabolize drugs, though most medications are metabolized by six specific enzymes that may cause serious drug interactions: CYP3A4, CYP2D6, CYP1A2, CYP2C9, CYP2C19 and CYP2E1.
- A drug may be a substrate, inducer or inhibitor of the CYP450 system. The information about whether a drug is a substrate, an inducer or an inhibitor is very important for the nurse to know. In particular, because oral chemotherapy drugs that are substrates of the CYP450 system may have their effectiveness or tolerability affected, nurses should assess whether an oral chemotherapy drug is a substrate prior to sending the patient home with a prescription. The nurse can then provide information for the patient instructing him or her to avoid particular drugs that induce or inhibit the oral chemotherapy drug.
 - » Substrates are drugs that are metabolized by the CYP450 system. Inducers and inhibitors of the CYP450 system affect the metabolism of substrates.
 - » Inducers are drugs that increase the metabolism of CYP450 substrates. Most often, this results in decreased levels of the drug and potentially decreased effectiveness.
 - » Inhibitors are drugs that decrease the metabolism of CYP450 substrates. Most often, this results in increased levels of the drug and potentially increased adverse effects and toxicities.

RESOURCES FOR DRUG-SPECIFIC INFORMATION:

U.S. Food and Drug Administration <http://www.fda.gov/Drugs/ResourcesForYou/Consumers/ucm450624.htm>
Provider Resources <http://www.fda.gov/Drugs/ResourcesForYou/HealthProfessionals/default.htm>
Medication Guides for Patients <http://www.fda.gov/Drugs/DrugSafety/ucm085729.htm>
MedlinePlus <https://www.nlm.nih.gov/medlineplus/medlineplus.html>

National Institutes of Health – DailyMed <https://dailymed.nlm.nih.gov/dailymed/index.cfm>
Lexi-Comp, Inc. www.lexi.com
UpToDate® information resource www.uptodate.com

SOURCES:

Harmsen S, Meijerman I, Beijnen JH, Schellens JH (2007). The role of nuclear receptors in pharmacokinetic drug-drug interactions in oncology. *Cancer Treatment Reviews*, 33(4), 369–380.

Lohr LK (2009). Drug interactions with newer oral chemotherapy agents. *US Pharmacist*, 34(Oncology suppl. 7), 4–8.

Panesar, K (2011). Typical drug interactions in oncology. *US Pharm*, 2011;36(1) (Oncology suppl):7–9.

Segal EM, Flood MR, Mancini RS, et al (2014). Oral chemotherapy food and drug interactions: a comprehensive review of the literature. *Journal of Oncology Practice*, 10(4): e255–e268.

Steinberg M (2006). Drug interactions with antineoplastic medications. In M Barton-Burke & GM Wilkes (Eds.), *Cancer Therapies* (pp. 289–310). Sudbury, MA: Jones and Bartlett Publishers.

Wilkes GM, Barton-Burke M (2016). *Oncology nursing drug handbook*. Burlington, MA: Jones & Bartlett Learning.

Written information on treatment regimens is vital for patients to have a thorough understanding of their therapies, and providing a patient with a folder or binder that is specific to his or her therapy will often help the patient to keep organized. These sample patient calendars are examples of tools that can be created to serve as part of patient education and treatment adherence.

SAMPLE CALENDAR 1: Trametinib + Dabrafenib for Metastatic Melanoma

Sunday Date _____	Monday Date _____	Tuesday Date _____	Wednesday Date _____	Thursday Date _____	Friday Date _____	Saturday Date _____
Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM
Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM
Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM
Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM	Trametinib AM Dabrafenib AM Dabrafenib PM

SOURCES:

GlaxoSmithKline. (2014). Mekinist® [Package insert]. Research Triangle Park, NC.

GlaxoSmithKline. (2014). Tafinlar® [Package insert]. Research Triangle Park, NC.

National Comprehensive Cancer Network. (2016). NCCN Clinical Practice Guidelines in Oncology. *Melanoma*. Version 2.2016. www.NCCN.org.

SAMPLE CALENDAR 2: Ixazomib + Lenalidomide + Dexamethasone for Multiple Myeloma after ≥ 1 prior therapy

Sunday Date _____	Monday Date _____	Tuesday Date _____	Wednesday Date _____	Thursday Date _____	Friday Date _____	Saturday Date _____
		Ixazomib Lenalidomide Dexamethasone	Lenalidomide	Lenalidomide	Lenalidomide	Lenalidomide
Lenalidomide	Lenalidomide	Ixazomib Lenalidomide Dexamethasone	Lenalidomide	Lenalidomide	Lenalidomide	Lenalidomide
Lenalidomide	Lenalidomide	Ixazomib Lenalidomide Dexamethasone	Lenalidomide	Lenalidomide	Lenalidomide	Lenalidomide
Lenalidomide	Lenalidomide	Dexamethasone	Rest	Rest	Rest	Rest
Rest	Rest	Begin next cycle as instructed				

SOURCES:

Celgene Corporation. (2015). Revlimid® [package insert]. Summit, NJ.

National Comprehensive Cancer Network. (2016). NCCN Clinical Practice Guidelines in Oncology. *Multiple Myeloma*. Version 3.2016. www.NCCN.org.

Takeda Pharmaceutical Company Limited. (2015). Ninlaro® [package insert]. Cambridge, MA.

SAMPLE CALENDAR 3: Lapatinib + Capecitabine for Invasive Breast Cancer

Sunday Date _____	Monday Date _____	Tuesday Date _____	Wednesday Date _____	Thursday Date _____	Friday Date _____	Saturday Date _____
	Capecitabine AM Capecitabine PM Lapatinib at bedtime	Capecitabine AM Capecitabine PM Lapatinib at bedtime	Capecitabine AM Capecitabine PM Lapatinib at bedtime	Capecitabine AM Capecitabine PM Lapatinib at bedtime	Capecitabine AM Capecitabine PM Lapatinib at bedtime	Capecitabine AM Capecitabine PM Lapatinib at bedtime
Capecitabine AM Capecitabine PM Lapatinib at bedtime	Capecitabine AM Capecitabine PM Lapatinib at bedtime	Capecitabine AM Capecitabine PM Lapatinib at bedtime	Capecitabine AM Capecitabine PM Lapatinib at bedtime	Capecitabine AM Capecitabine PM Lapatinib at bedtime	Capecitabine AM Capecitabine PM Lapatinib at bedtime	Capecitabine AM Capecitabine PM Lapatinib at bedtime
Capecitabine AM Capecitabine PM Lapatinib at bedtime	Lapatinib at bedtime	Lapatinib at bedtime	Lapatinib at bedtime	Lapatinib at bedtime	Lapatinib at bedtime	Lapatinib at bedtime
Lapatinib at bedtime	Begin next cycle as instructed.					

SOURCE:

Genentech USA, Inc. (2015). Xeloda® [package insert]. San Francisco, CA.

GlaxoSmithKline. (2014). Tykerb® [package insert]. Research Triangle Park, NC.

National Comprehensive Cancer Network. (2016). NCCN Clinical Practice Guidelines in Oncology. *Breast Cancer*. Version 1.2016. www.NCCN.org

TOOL 8

Factors Influencing Adherence



Dimension	Barriers
Personal and Patient Factors	<ul style="list-style-type: none">• Emotional and mental status• Physical status and comorbid conditions• Social supports• Feelings about disease, self-efficacy and outcome expectation• Socioeconomic status
Treatment-Related Factors	<ul style="list-style-type: none">• Goal of therapy• Complexity of treatment regimen• Immediacy and evidence of benefit• Short- and long-term side effects• Cost of medication and copay
Healthcare System	<ul style="list-style-type: none">• Relationship with providers• Communication with providers• Education of patient and caregivers• Satisfaction with care• Insurance coverage• Access to convenient and efficient clinic

NOTE: Based on information from
Irwin M, Johnson LA (2013). Factors influencing oral adherence: Qualitative metasummary and triangulation with quantitative evidence. *Clin J Oncol Nurs*, 19(3 suppl):6–30.

Ruddy K, Mayer E, Partridge A (2009). Patient adherence and persistence with oral anticancer treatment. *CA Cancer J Clin*, 59(1):56–66.

Weingart SN, Brown E, Bach PB, et al (2008). NCCN Task Force Report: Oral Chemotherapy. *Journal of the National Comprehensive Cancer Network*, 6(suppl. 3):S-8-10.

World Health Organization (2003). Adherence to long-term therapies, Evidence for action. Geneva, Switzerland: World Health Organization. Retrieved from http://www.who.int/chp/knowledge/publications/adherence_report/en/.

Methods Used to Encourage Patient Adherence

A variety of tools and techniques have been shown to help improve adherence to oral anticancer therapy.

Reminder Tools

- Calendar or daily medication checklist
 - Pill diaries
 - Patient and family education
 - Establishing routine, which includes drug administration
 - Home psychological support
 - Pillboxes with multiple compartments (as packaging form and storage needs permit)
 - Electronic reminders
 - » Alarms on clocks, timers and cell phones
 - » Smartphone applications
 - » Glowing or electronic pillboxes
 - » Text message reminder
 - » Automated voice recording (phone call) reminder
 - Medication-dispensing machines
-



SOURCES:

Burhenn PS, Smuddle J (2015). Using Tools and Technology to promote education and adherence to oral agents for cancer. *Clin J Oncol Nurs*, 19(3 suppl):53–59.

Ruddy K, Mayer E, Partridge, A (2009). Patient adherence and persistence with oral anticancer treatment. *CA: A Cancer Journal for Clinicians*, 59:56–66.

TOOL 10

Traditional Counseling Versus Motivational Interviewing

Traditional Counseling	Motivational Interviewing
<ul style="list-style-type: none">• HCP is the healthcare expert• Assumes patient lacks knowledge• Tells patient what to do• Hopes patient follows instructions	<ul style="list-style-type: none">• HCP develops partnership with patient• Exchanges information to facilitate an informed decision• Patient has the right to decide own care
<ul style="list-style-type: none">• HCP provides definitive information• Directives are presumed to be non-negotiable	<ul style="list-style-type: none">• HCP provides information to patient for the purpose of developing discrepancy between present behavior and goal
<ul style="list-style-type: none">• HCP dictates healthcare behavior	<ul style="list-style-type: none">• HCP and patient negotiate behavior and reach agreement
<ul style="list-style-type: none">• Goal is to motivate the patient	<ul style="list-style-type: none">• Goal is to access motivation and elicit patient's commitment to change behavior
<ul style="list-style-type: none">• HCP persuades patient to change behavior	<ul style="list-style-type: none">• HCP understands and accepts patient's action
<ul style="list-style-type: none">• HCP expects respect from patient	<ul style="list-style-type: none">• HCP must earn respect from patient

HCP: healthcare provider.

SOURCES:

Levensky ER, Forcehimes A, O'Donohue WT, Beitz K (2007). Motivational interviewing: an evidence-based approach to counseling helps patients follow treatment recommendations. *Am J Nurs*, 107(10):58–59.

Miller WR, Rollnick S (2012). Meeting in the middle: motivational interviewing and self-determination theory. *Int J Behav Nutr Phys Act*, 9:25.

Possidente CJ, Bucci KK, McClain WJ (2005). Motivational interviewing: a tool to improve medication adherence? *Am J Health Syst Pharm*, 62(12):1311–1314.



Maintain a current list of patient medications and supplements, both prescription and over-the-counter, through a process of medication reconciliation. Medication reconciliation involves comparing medication orders against the medications a patient has been taking in an effort to avoid medication errors such as omissions, duplications, dosing errors or drug interactions. It should be done across the continuum of care, at every clinical encounter or transition of care in which new medications are ordered or existing orders are rewritten.

The 5-step process includes

1. Develop a list of current medications
2. Develop a list of medications to be prescribed
3. Compare the medications on the two lists
4. Make clinical decisions based on the comparison
5. Communicate the new list to appropriate caregivers and to the patient and pharmacy

SOURCES:

Agency for Healthcare Research and Quality (2014). AHRQ PSNet patient safety primer: Medication reconciliation. Retrieved from <http://psnet.ahrq.gov/primer.aspx?primerID=1>

Neuss MN, Polovich M, McNiff K, et al (2013). 2013 Updated American Society of Clinical Oncology/Oncology Nursing Society chemotherapy administration safety standards including standards for the safe administration and management of oral chemotherapy. *Oncology Nursing Forum*, 40(3):225–233.

The Joint Commission (2006). Using medication reconciliation to prevent errors. *Sentinel Event Alert*. Issue 35. January 25, 2006. Retrieved from http://www.jointcommission.org/assets/1/18/SEA_35.pdf.

When a team of healthcare professionals cares for a patient through their cancer treatment, responsibility for medication tracking can be confusing. The interprofessional team should establish a process to ensure medication reconciliation is completed consistently and concerns are acted upon promptly. Consider discussing the following questions as a team.

- Who is responsible for obtaining the medication history?
- What medications are included?
- Is a standardized form used?
- Who adds this form or information to the chart?
- Who identifies variances?
- What is the time frame to act upon variances?
- When medications are changed, how is it documented?
- How are medication changes communicated between specialties?
- Who communicates changes to patients and caregivers?
- How is the process monitored?

SOURCES:

Barnsteiner JH. Patient safety and quality: an evidence-based handbook for nurses. Rockville (MD): Agency for Healthcare Research and Quality (US); 2008 Apr. Chapter 38. Medication reconciliation.

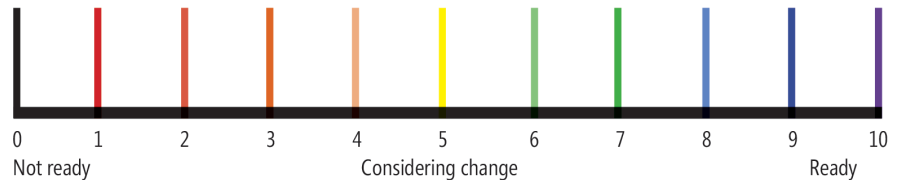
Lee KP, Hartridge C, Corbett K, Vittinghoff E, Auerbach AD (2014). "Whose job is it, really?" Physicians', nurses', and pharmacists' perspectives on completing inpatient medication reconciliation. *Journal of Hospital Medicine*, doi: 10.1002/jhm.2289. [Epub ahead of print]

TOOL 13

Readiness to Change Scale

A treatment regimen that is not a good lifestyle fit may result in poor adherence to therapy, and changing one's lifestyle can be challenging. Begin by assessing the individual's readiness to change.

Readiness Ruler



Instructions for Use

1. Ask patient to rate how ready he or she is for change by drawing an arrow to or circling a number in the appropriate area on the scale.
2. A score >5 indicates patient is ready to work toward changing behavior.
3. Discuss the patient's ranking on the scale with the following questions:
 - a. How important is this change to you?
 - b. How confident are you that you can make this change?
 - c. Why did you choose a ____, not a 10?
 - d. What would have to happen to make it a ____?
[next highest number from the one stated in question "c"]

SOURCES:

Rollnick S, Butler CC, Stott NC (1997). Helping smokers make decisions: the enhancement of brief intervention for general medical practice. *Patient Educ Couns*, 31:191–203.

Zimmermann GL, Olsen CG, Bosworth MF (2000). A 'stages of change' approach to helping patients change behavior. *Am Fam Physician*, 61(5):1409–1416.

PATIENT AND PROVIDER RESOURCE LIST

Abramson Cancer Center of the University of Pennsylvania, OncoLink	www.oncolink.org
American Cancer Society	www.cancer.org
American Society of Health-System Pharmacists	www.ashp.org
Association of Cancer Online Resources	www.acor.org
Association of Community Cancer Centers	www.accc-cancer.org
Association of Community Cancer Centers	http://accc-cancer.org/oncology_issues/articles/ND14/ND14-Oral-Chemotherapy-What-Your-Patients-Need-to-Know.pdf
Association of Community Cancer Centers	https://accc-cancer.org/surveys/pdf/Trends-in-Cancer-Programs-2015.pdf
Cancer Care. Understanding and Managing Chemotherapy Side Effects	http://media.cancercare.org/publications/original/24-ccc_chemo_side_effects.pdf?1406834684
Cancer.Net, American Society of Clinical Oncology Patient Information	www.cancer.net
ChemoCare	www.chemocare.com
Epocrates	www.epocrates.com
Leukemia and Lymphoma Society	www.lls.org
Lexi-Comp, Inc.	www.lexi.com
MedlinePlus	https://www.nlm.nih.gov/medlineplus/
Micromedex	www.micromedex.com
MyMedSchedule.com	https://secure.medactionplan.com/mymedschedule/index.htm
National Cancer Institute	www.cancer.gov
National Coalition for Cancer Survivorship	www.canceradvocacy.org
National Comprehensive Cancer Network	www.nccn.org
Patient Compliance	www.patientcompliance.net
Patients Equal Access Coalition	http://peac.myeloma.org/oral-chemo-access-map
Stand Up to Cancer	www.standuptocancer.org
UpToDate® information resource	www.uptodate.com
U.S. Food and Drug Administration	www.fda.gov



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