

OPTIMIZING CANCER CARE: UPDATES FOR 2020

Benyam Muluneh, PharmD, BCOP, CPP
bmuluneh@unc.edu

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DISCLOSURES

None

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OBJECTIVES

- Identify key practice-related barriers to optimal patient outcomes in oncology
- Differentiate patient-level and system-level challenges to delivering cancer care
- Describe best practices to enhance patient engagement, medication access, and treatment adherence

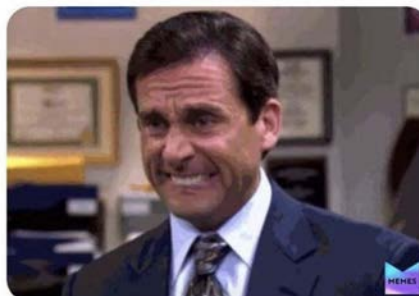
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2020

Time traveler: What year is it?

Me: 2020

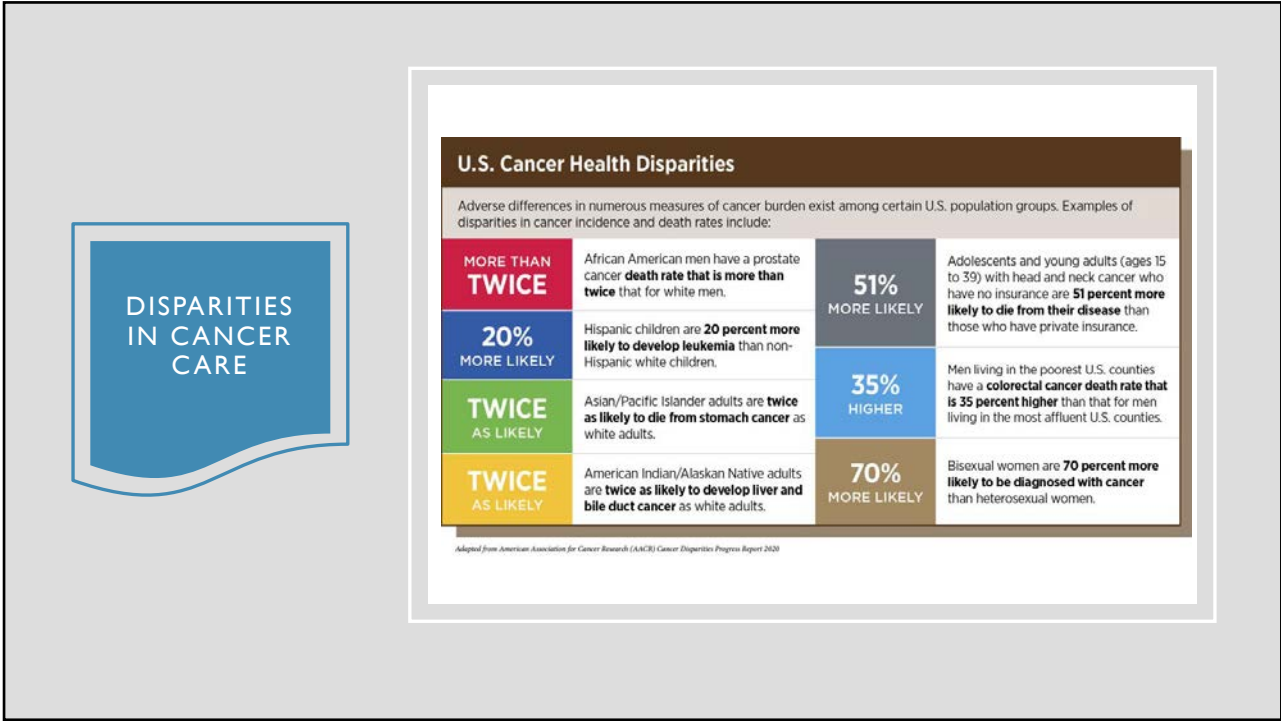
Time traveler:



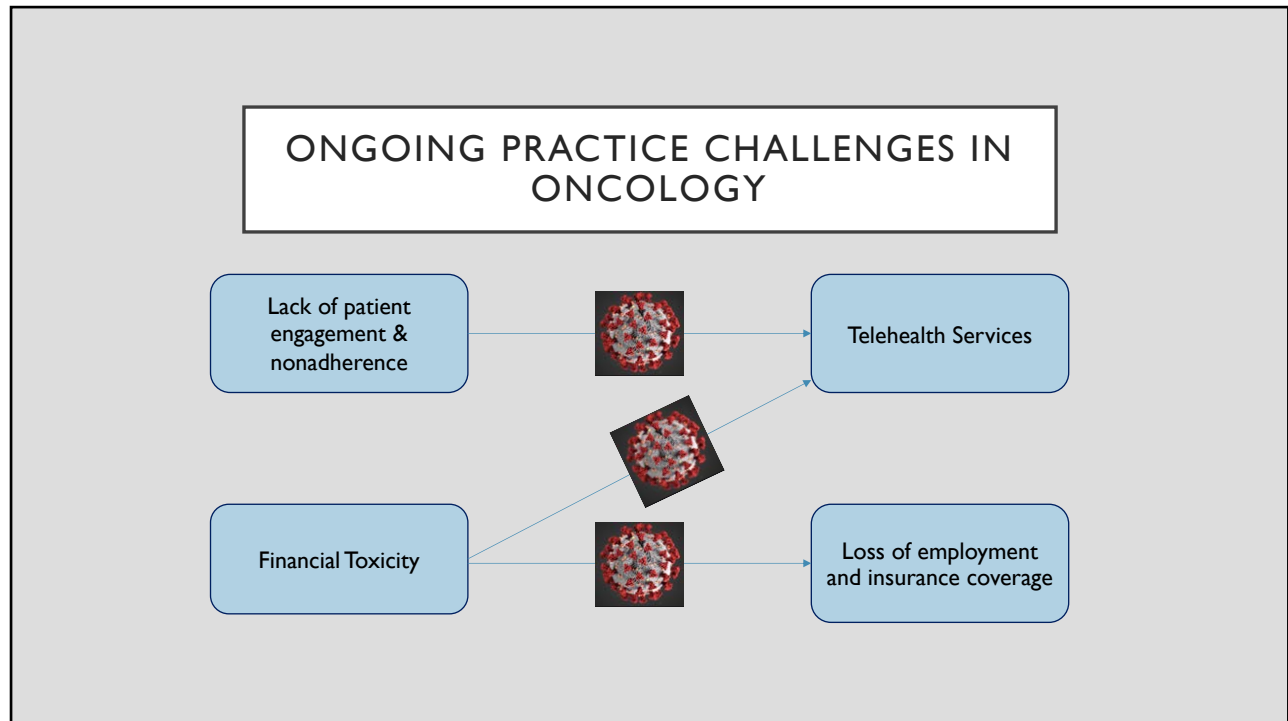
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ADHERENCE: NOT SO STRAIGHTFORWARD

“Adherence is the single most important modifiable factor that compromises treatment outcome.”

-World Health Organization, 2003

Landmark Study: Evidence for Action, World Health Organization, 2003

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PROS AND CONS OF SELF-ADMINISTERED THERAPY

Benefits

- ☐ Convenient
- ☐ Patient Empowerment
- ☐ ?Decreased toxicity
- ☐ ?Increased efficacy

Concerns

- ☐ **Adherence**
- ☐ Cost
- ☐ Storage/handling
- ☐ Therapy monitoring

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ADHERENCE TO THERAPY

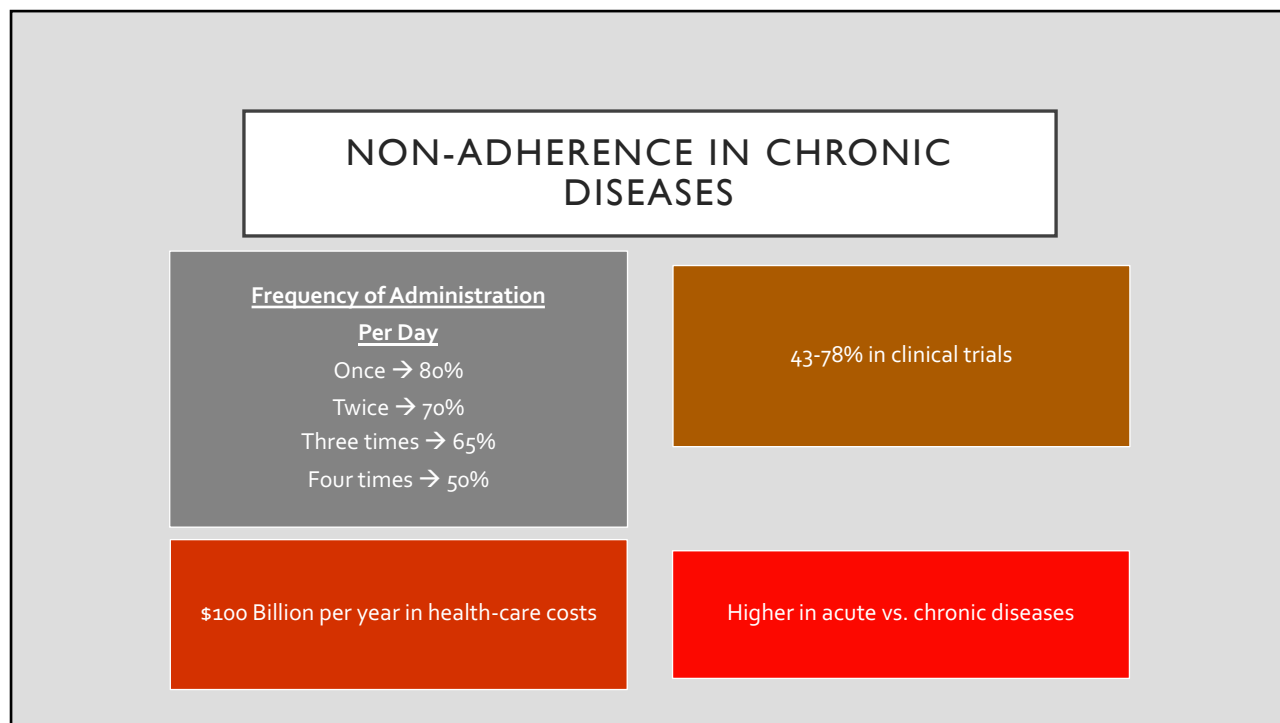
Definition: Extent to which a patient's behavior coincides with medical advice

Consequences of Non-adherence

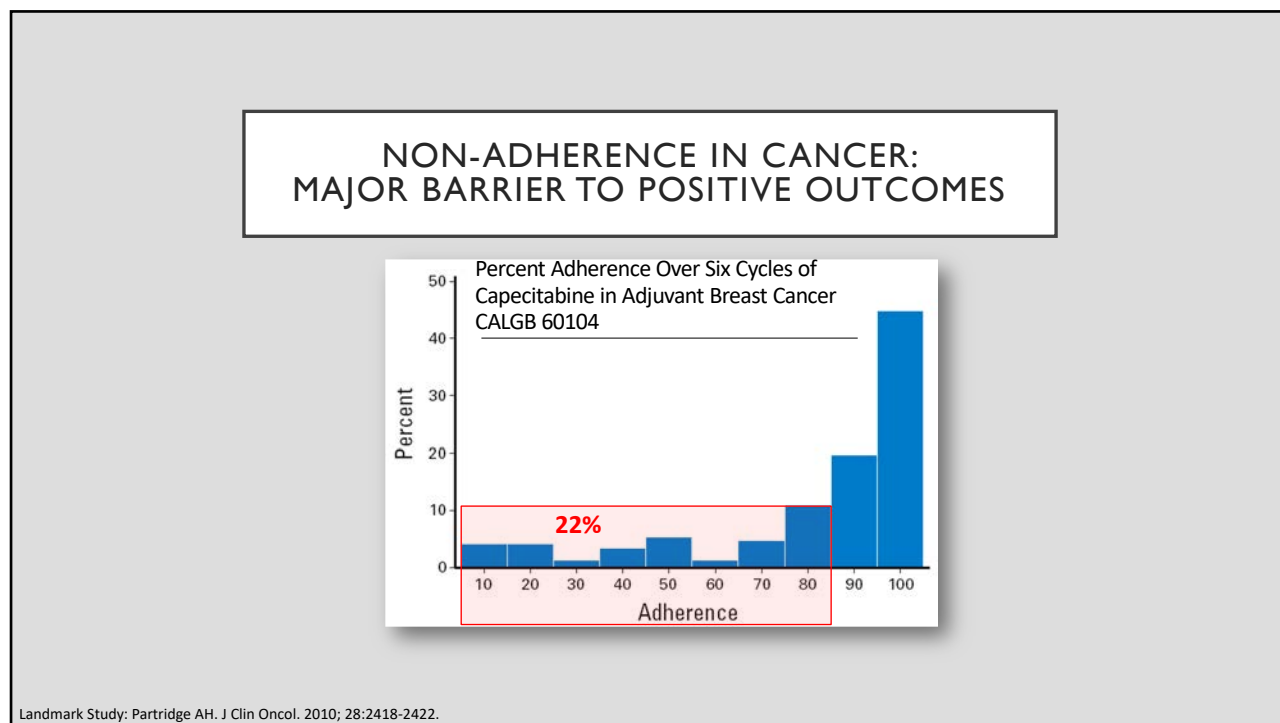
Poor outcomes	Increased Toxicity	Increased health care costs
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Landmark Study: Partridge et al. J Clin Oncol. 2009; 124-128.

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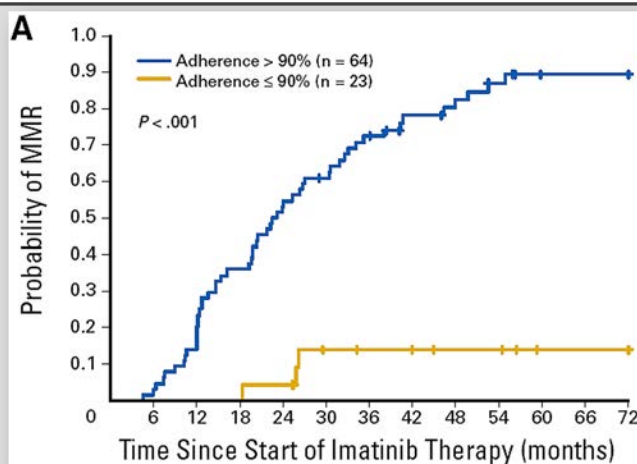


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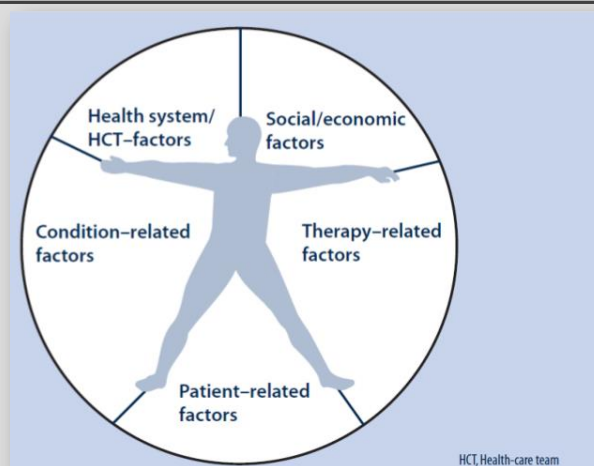
CONSEQUENCES



Landmark Study: Marin et al. J Clin Oncol. 2010. 28:2381-2388.


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DIMENSIONS OF ADHERENCE



Landmark Study: Evidence for Action, World Health Organization, 2003

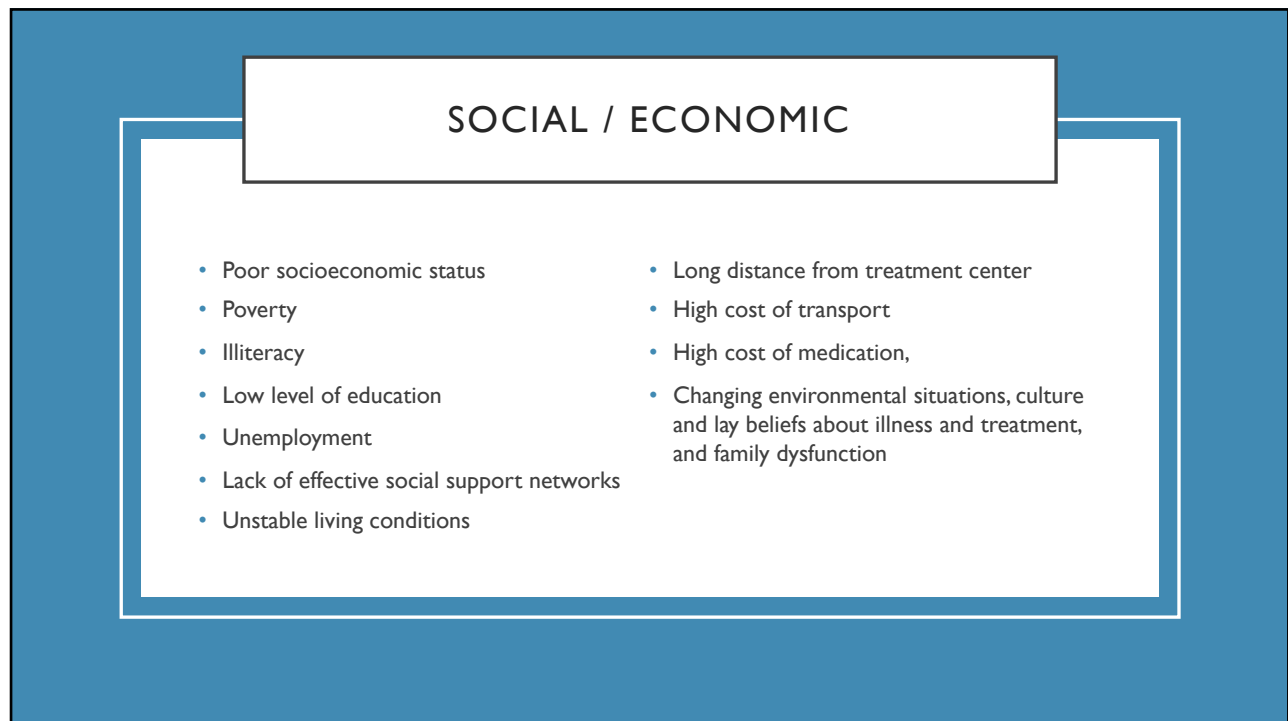
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HEALTH SYSTEM

- Poorly developed health services
- Poor medication distribution systems
- Lack of knowledge and training of health care providers
- Lack of incentives on feedback and performance

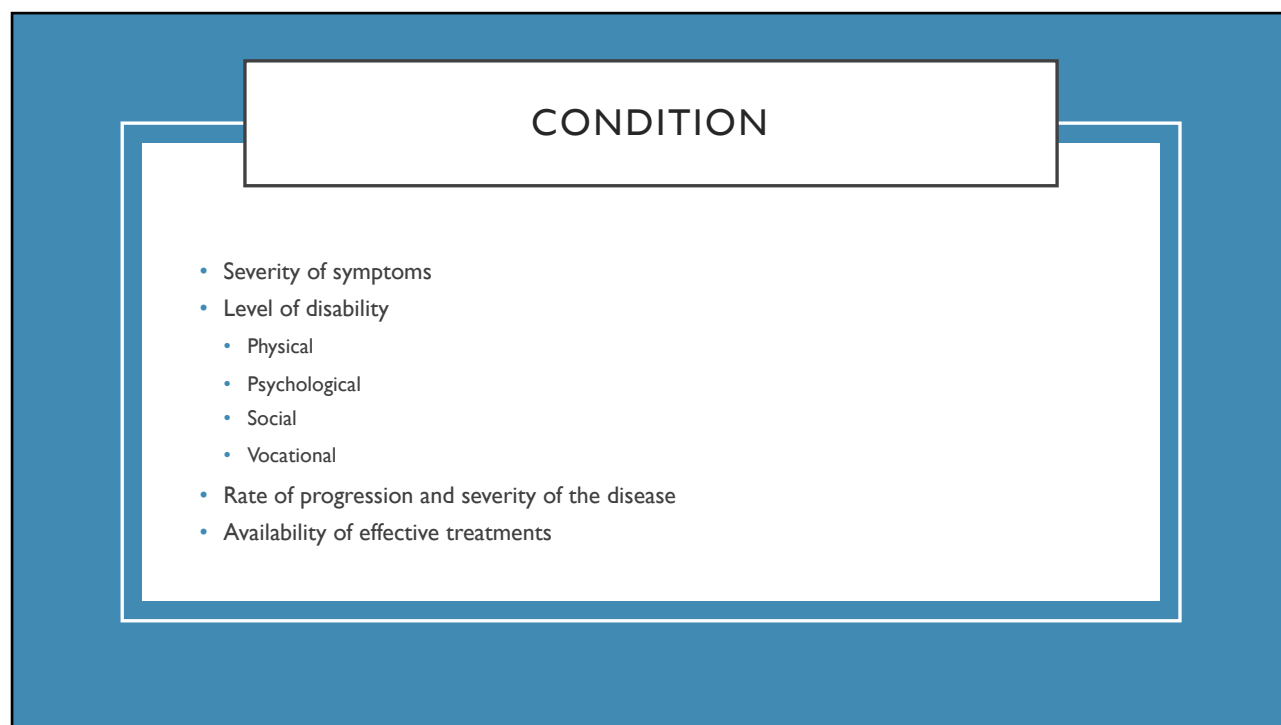
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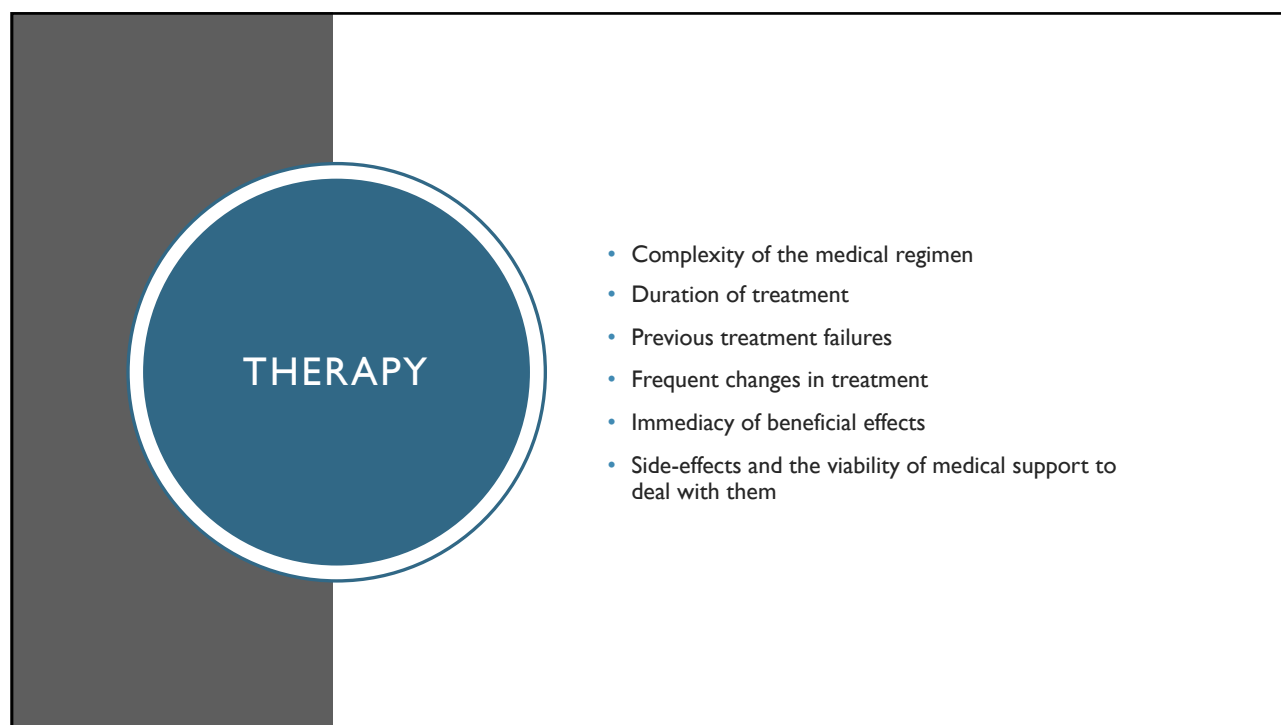
SOCIAL / ECONOMIC

- Poor socioeconomic status
- Poverty
- Illiteracy
- Low level of education
- Unemployment
- Lack of effective social support networks
- Unstable living conditions
- Long distance from treatment center
- High cost of transport
- High cost of medication,
- Changing environmental situations, culture and lay beliefs about illness and treatment, and family dysfunction

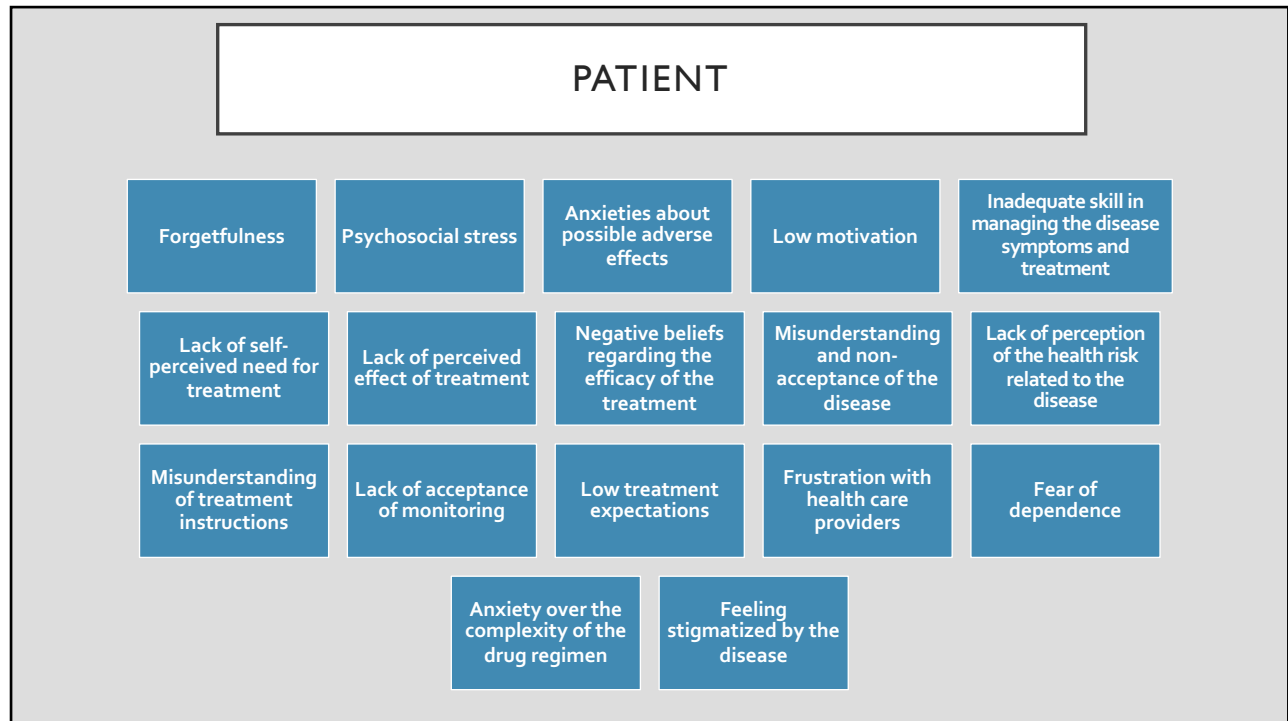
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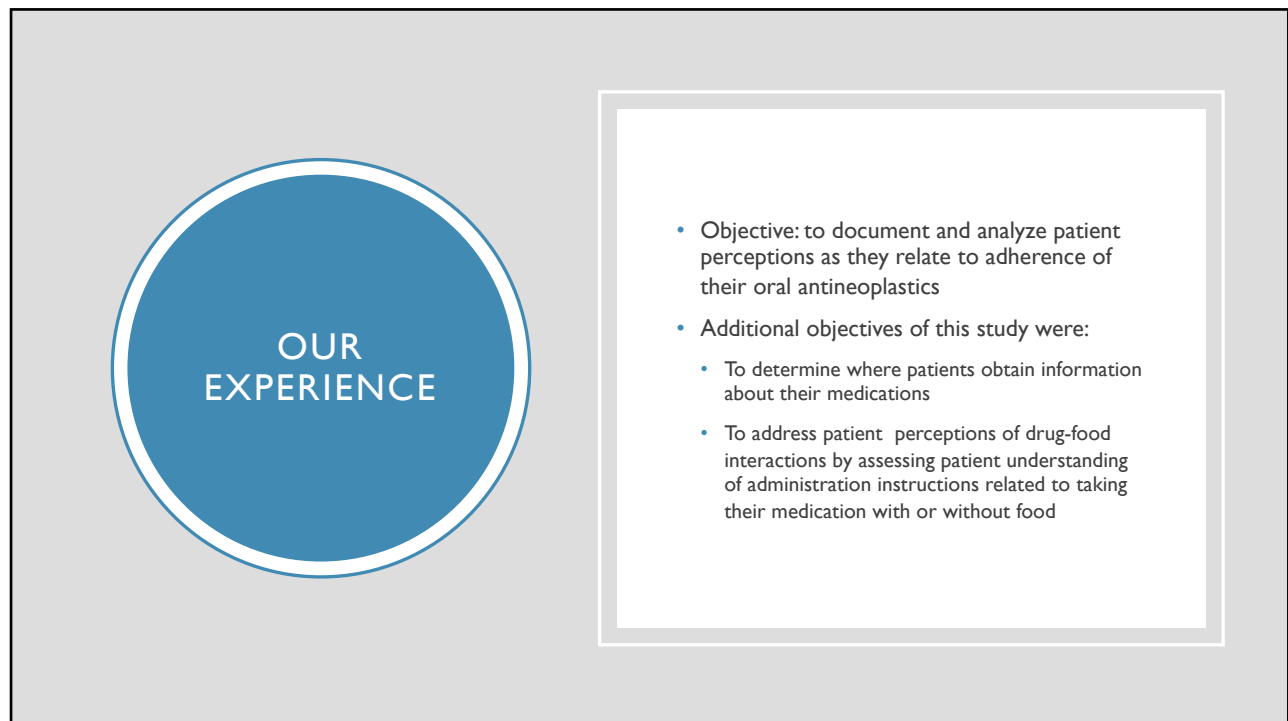
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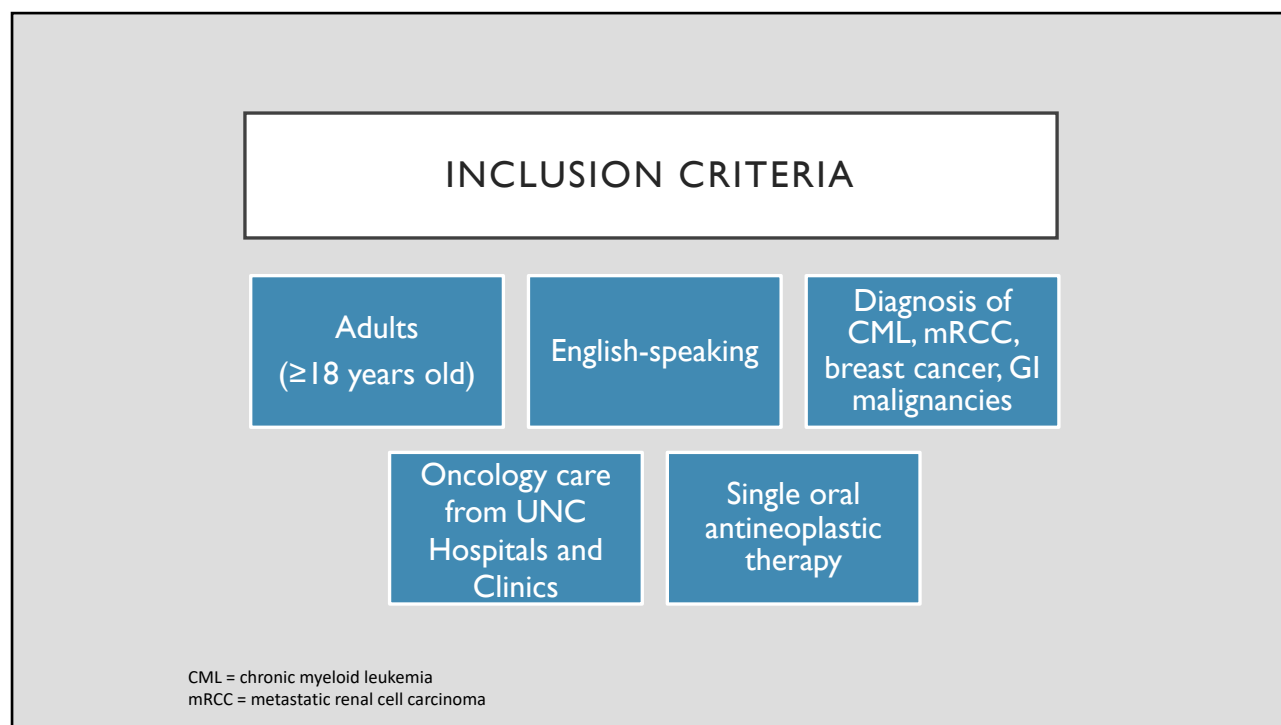
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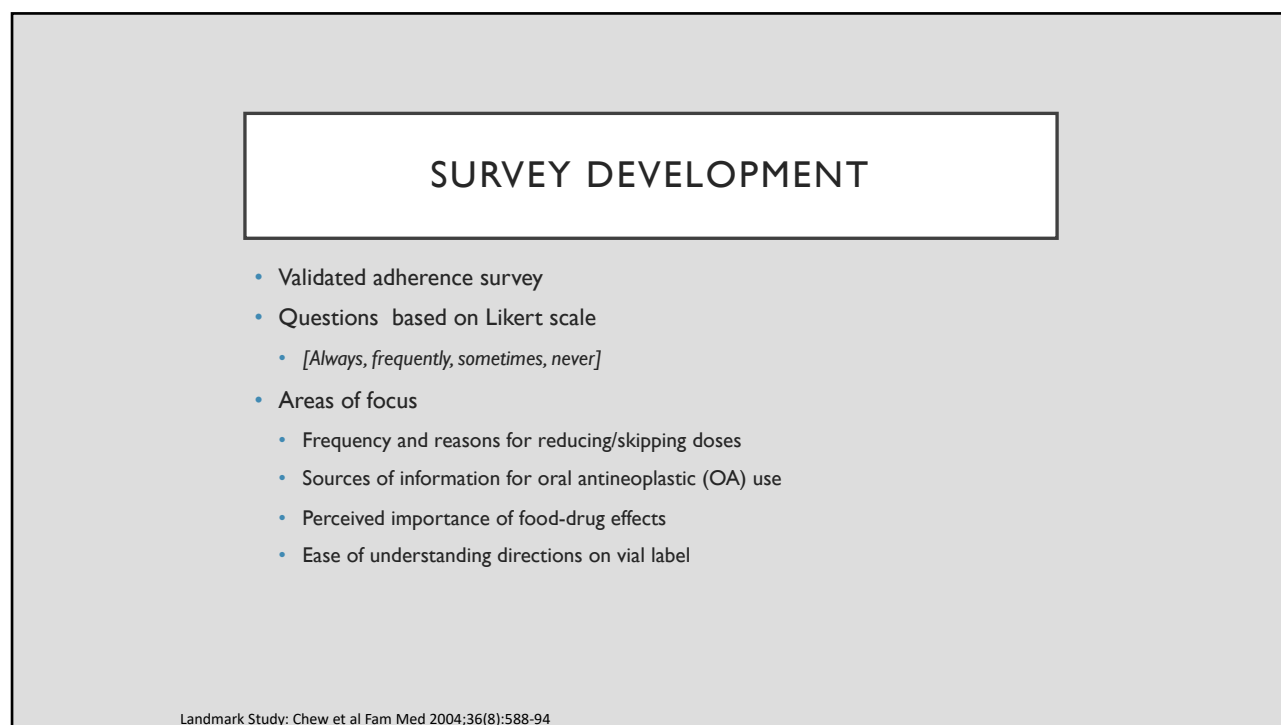
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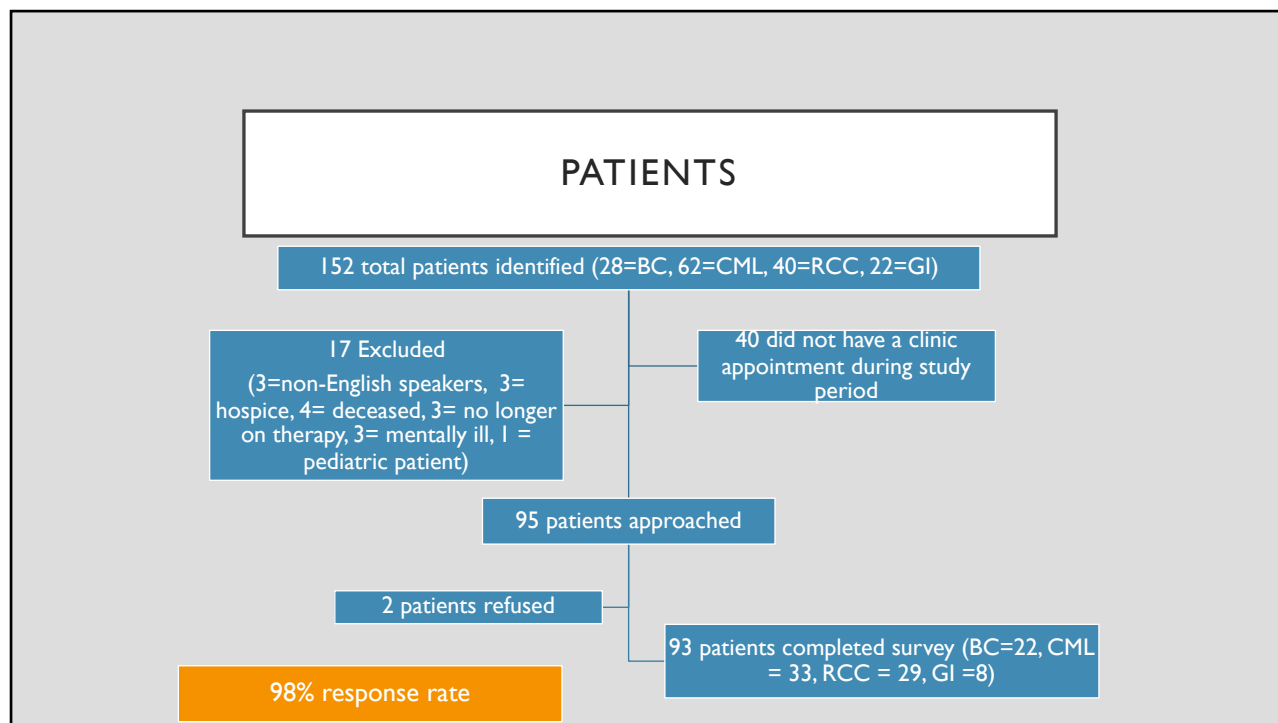
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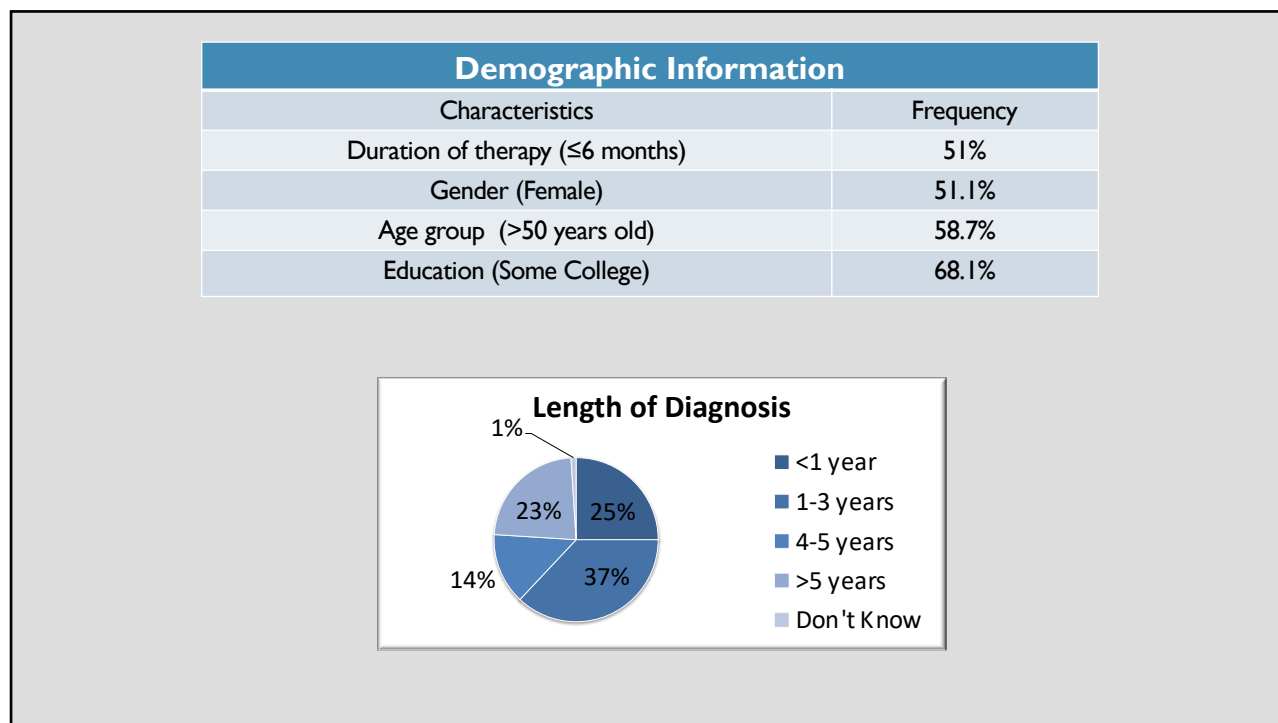
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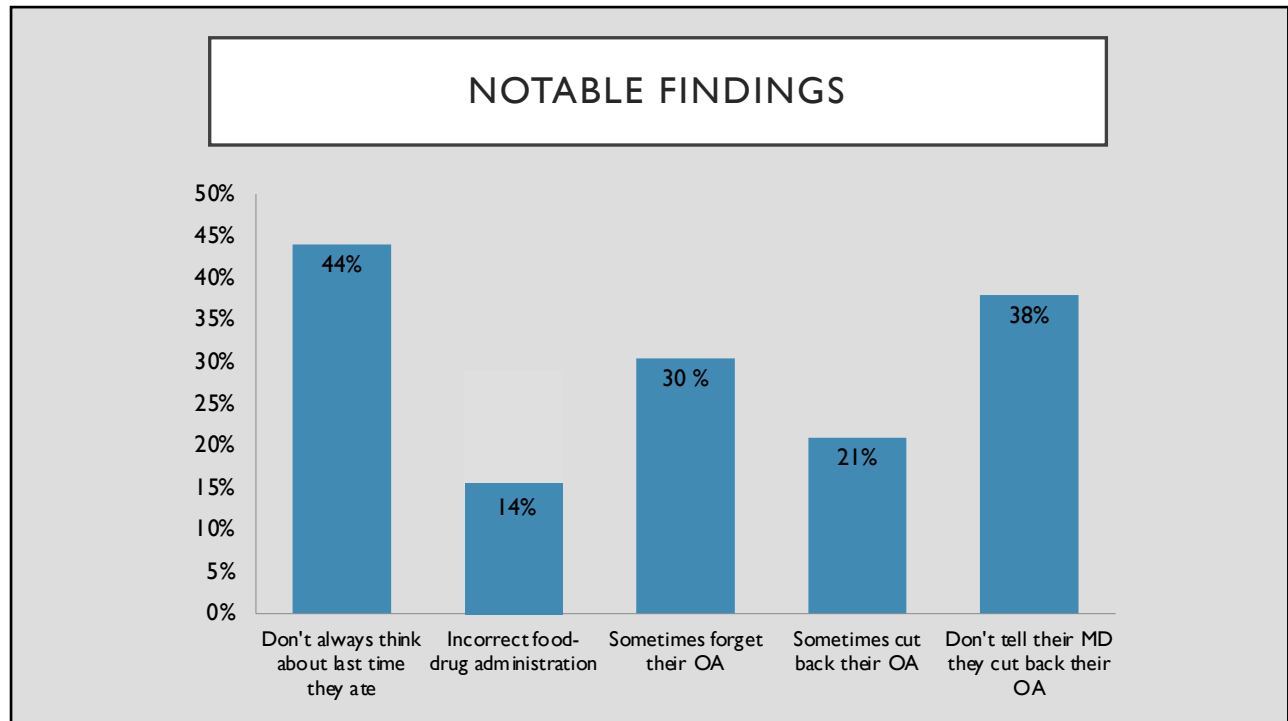
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UNC'S ADHERENCE STUDY: BARRIERS TO APPROPRIATE USE OF ORAL CHEMOTHERAPY

- Confusion or misunderstanding about the timing of drug with food
- Forgetfulness in oral antineoplastic administration
- Reducing/stopping drug without informing MD
- Difficulty understanding directions on the drug vial label

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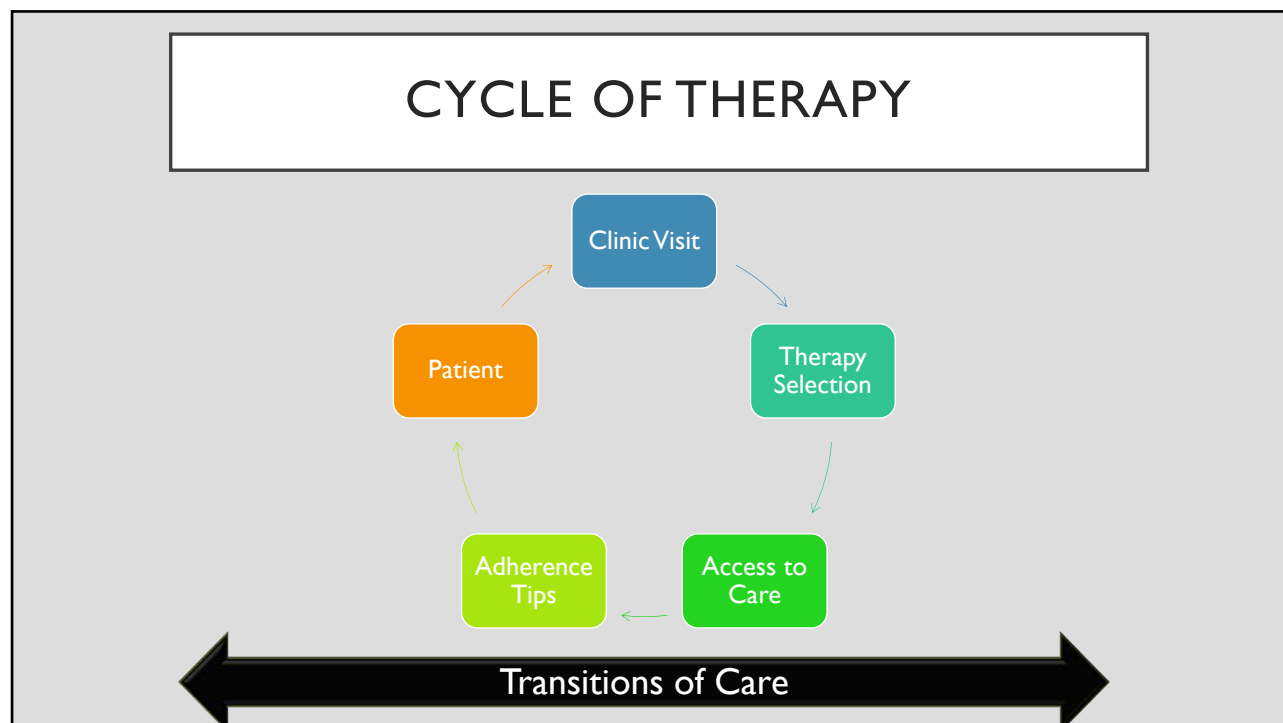
STRATEGIES FOR MANAGEMENT

Comprehensive care



A cartoon showing a doctor sitting at a desk with a stethoscope, talking to a patient. The doctor's speech bubble says: "IT'S QUITE SERIOUS TAKE THIS MEDICINE WHEN IT'S AVAILABLE.. WHENEVER YOU CAN AFFORD IT". The cartoon is signed "© Medipedia" in the bottom right corner.

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ASSESSING ADHERENCE - MORISKY MEDICATION ADHERENCE SCALE

DO YOU TAKE YOUR MEDICATIONS THE RIGHT WAY?

Do you ever forget to take your prescription drugs?
Yes ☐ No ☐

Are you careless at times about taking your drugs?
Yes ☐ No ☐

Do you sometimes stop taking your drugs when you feel better?
Yes ☐ No ☐

Do you sometimes stop taking your drugs if they make you feel worse?
Yes ☐ No ☐

Uchmanowicz, Front Pharmacol. 2019; 10:168. Adapted from Morisky et al.

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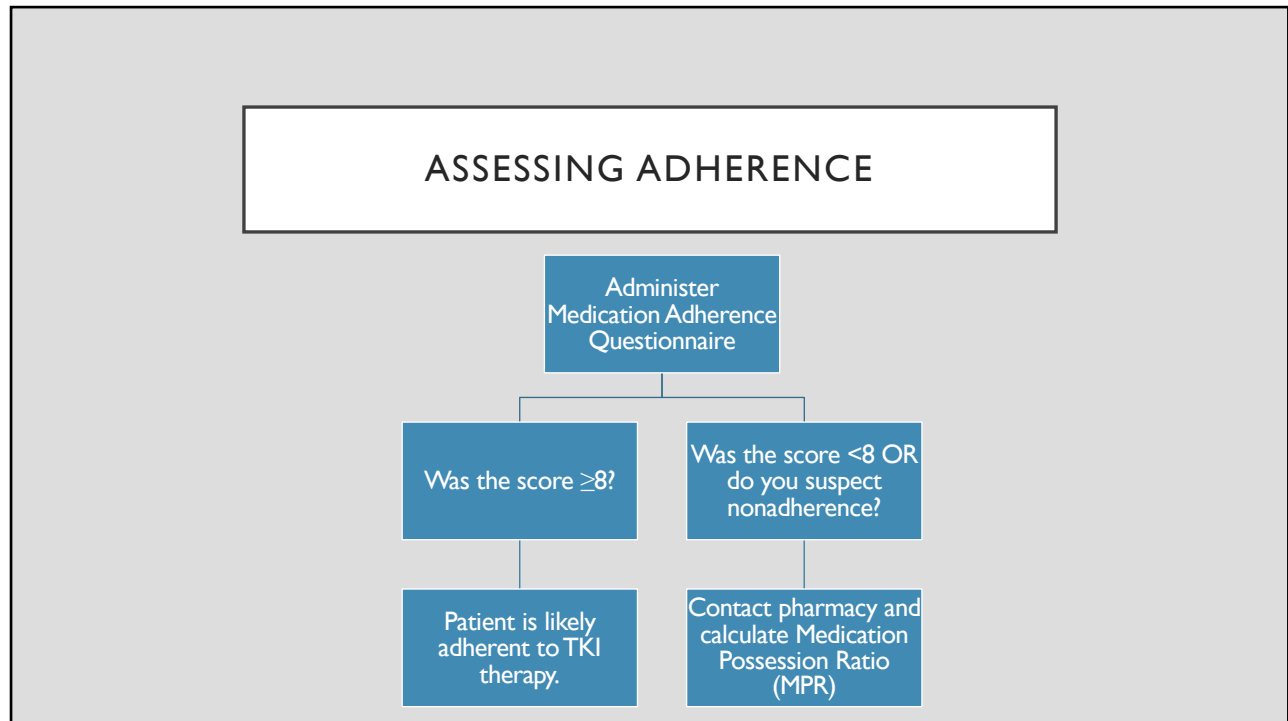
ASSESSING ADHERENCE – CML DATA

Medication Adherence Questionnaire		
Did you forget to take your medication(s) this morning?	Yes (0)	No (1)
Have you run out of medication since your last visit?	Yes (0)	No (1)
Do you ever take your medication(s) later than your usual time?	Yes (0)	No (1)
If you feel worse when taking your medication(s), do you stop taking it?	Yes (0)	No (1)
Do you think that you take too many medications?	Yes (0)	No (1)
Do you ever forget to take your medication(s)?	Yes (0)	No (1)
Do you know the name(s) of your medication(s)?	Yes (1)	No (0)
Do ever miss doses of your medication(s)?	Yes (0)	No (1)
Does a change in your daily routine modify the way you take your medication(s)?	Yes (0)	No (1)
Do you sometimes skip doses of your medication(s) when you feel better?	Yes (0)	No (1)

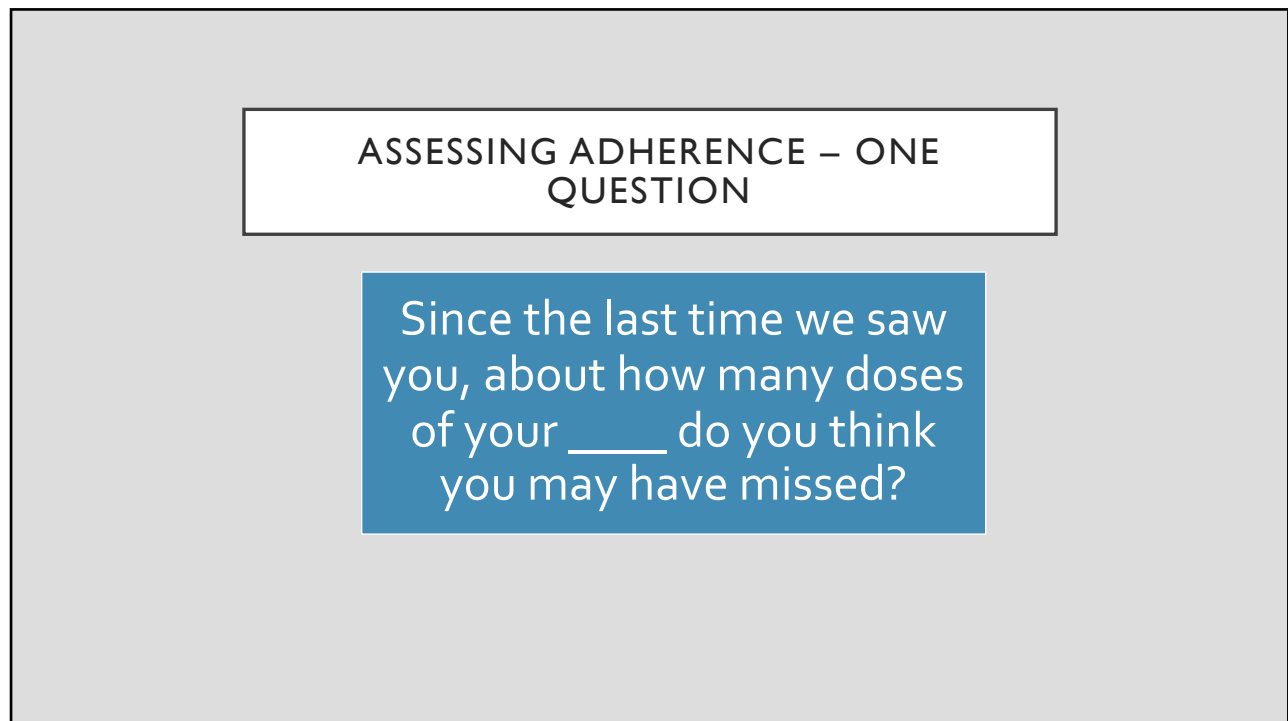
Daouphars M, Ouvry M, Lenain P et al. *Pharmacotherapy*. 2013;33:152-6.

Score **Interpretation**
 ≥8 Suggests adherence
 <8 Suggests non-adherence

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MEDICATION POSSESSION RATIO (MPR)

- Obtain records of at least 2 consecutive medication refills.
- Enter data (fill dates, days supply) into the Excel spreadsheet.

The screenshot shows an Excel spreadsheet with the following data:

Patient Name	Drug	Date(s) of Medication Pick-Up/Delivery	Days Supply	Days In Between Fills	Days with No Medication	Medication Possession Ratio
John Smith	Imatinib	6/13/2013	30			
		7/15/2013	30	32	2	0.9375

- In the above example, the MPR is 0.9375, or 93.75%.

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HELPFUL HINTS

Barriers	Solutions
Forgetfulness	Alarm Clock
	Family Members
Side Effects	Close Follow-up
	Early Management
Questions	Empowerment
Cost	Medication Assistance
Complex Regimen	Written Care Plan*

*Example: www.medactionplan.com, 2020

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PATIENT CALENDARS

January-February 2017						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	30 (Cycle 7, Day 1) Ponatinib 15 mg Doxorubicin IV Dexamethasone 1.5 tabs in the morning and 1.5 tabs in the afternoon Mercaptopurine 1 tab	31 Ponatinib 15 mg Dexamethasone 1.5 tabs in the morning and 1.5 tabs in the afternoon Mercaptopurine 2 tabs	1 Ponatinib 15 mg Dexamethasone 1.5 tabs in the morning and 1.5 tabs in the afternoon Mercaptopurine 1 tab	2 Ponatinib 15 mg Dexamethasone 1.5 tabs in the morning and 1.5 tabs in the afternoon Mercaptopurine 2 tabs	3 Ponatinib 15 mg Dexamethasone 1.5 tabs in the morning and 1.5 tabs in the afternoon Mercaptopurine 1 tab	4 Ponatinib 15 mg Mercaptopurine 2 tabs
5 Ponatinib 15 mg Mercaptopurine 2 tabs	6 Ponatinib 15 mg Mercaptopurine 1 tab	7 Ponatinib 15 mg Mercaptopurine 2 tabs	8 Ponatinib 15 mg Mercaptopurine 1 tab	9 Ponatinib 15 mg Mercaptopurine 2 tabs	10 Ponatinib 15 mg Mercaptopurine 1 tab	11 Ponatinib 15 mg Mercaptopurine 2 tabs
12 Ponatinib 15 mg Mercaptopurine 2 tabs	13 Ponatinib 15 mg	14 Ponatinib 15 mg	15 Ponatinib 15 mg	16 Ponatinib 15 mg	17 Ponatinib 15 mg	18 Ponatinib 15 mg
19 Ponatinib 15 mg	20 (Cycle 8, Day 1) Ponatinib 15 mg Doxorubicin IV Dexamethasone 1.5 tabs in the morning and 1.5 tabs in the afternoon	Take mercaptopurine at least 1 hour after evening meals. Avoid milk and citrus products				

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ELECTRONIC ADHERENCE MONITORING PROGRAMS

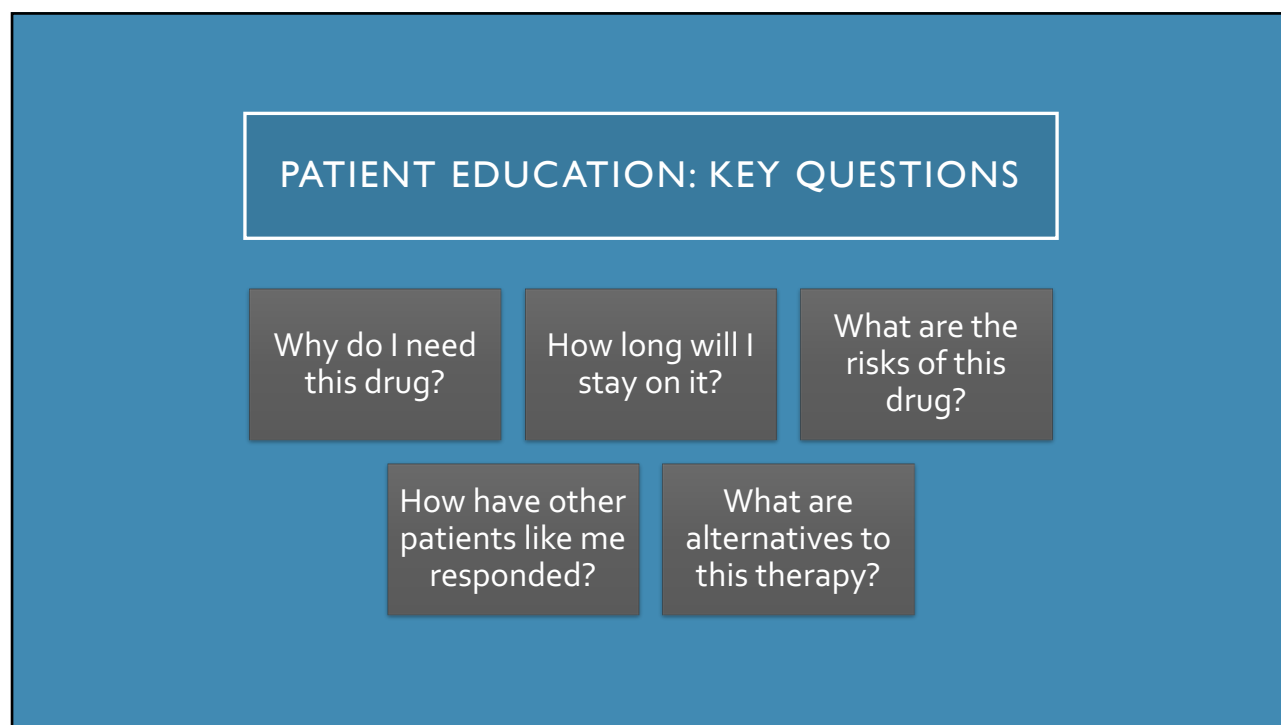
	Engagement	Functionality	Aesthetics	Information	Subjective quality	MARS ^b total score
Advanced apps						
Medisafe	0.94	0.90	0.93	0.83	1.00	0.92
MedicineList+ ^c	0.74	0.90	0.87	0.93	0.78	0.84
CareZone	0.78	0.90	0.93	0.84	0.70	0.83
My Pillbox	0.76	0.83	0.77	0.68	0.53	0.71
Dosecast	0.56	0.90	0.80	0.80	0.55	0.70
MyMeds	0.52	0.75	0.87	0.55	0.48	0.63
Basic apps						
My heart, my life	0.60	1.00	0.83	0.82	0.58	0.77
MyMedManager	0.50	0.83	0.70	0.63	0.33	0.60
Pill Reminder (Aplicativos Legais) ^d	0.36	0.80	0.60	0.33	0.25	0.47
MediWare ^e	0.00	0.00	0.00	0.00	0.00	0.00

Santo et al. JMIR Mhealth Uhealth. 2016 Dec 2;4(4):e132.

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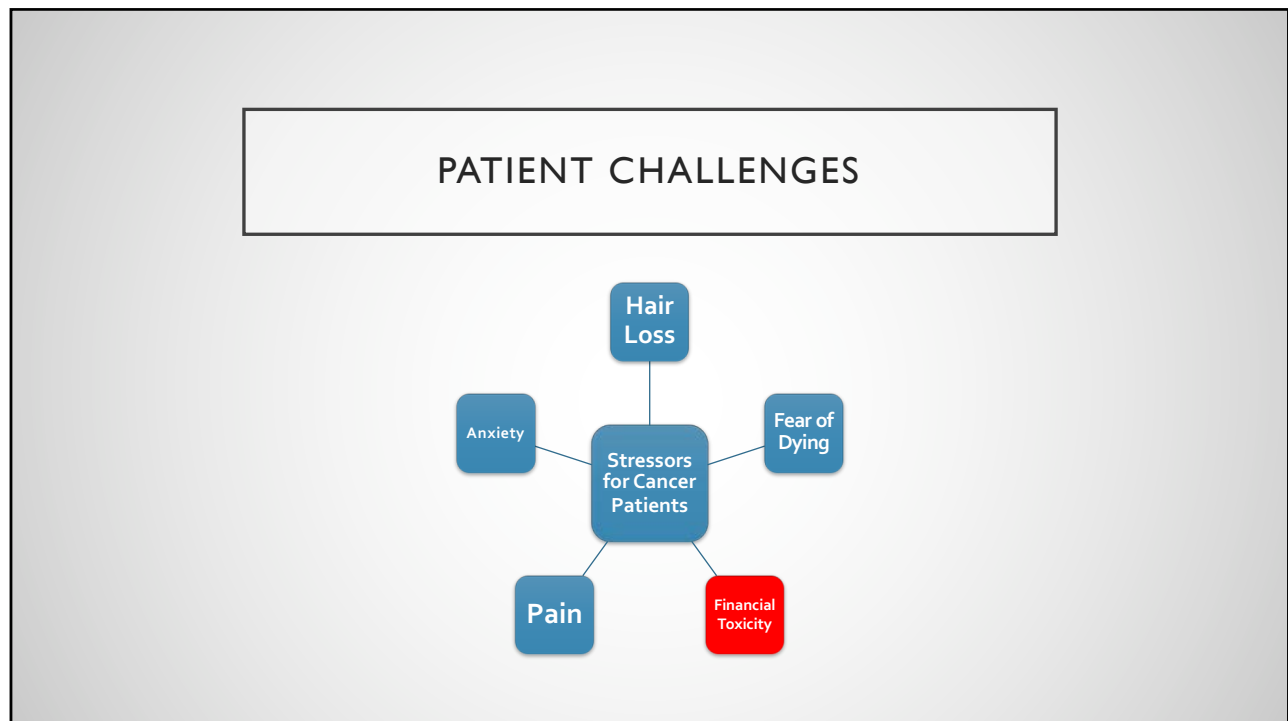
PATIENT EDUCATION

- Written care plan
- Adverse effects
 - Management and tracking systems
- Food-drug administration education techniques



Morning	Evening
7 am - Lapatinib (Tykerb) 	8 pm - Dinner
8 am - Breakfast	8:30 pm - Capecitabine (Xeloda) 
8:30 am - Capecitabine (Xeloda) 	

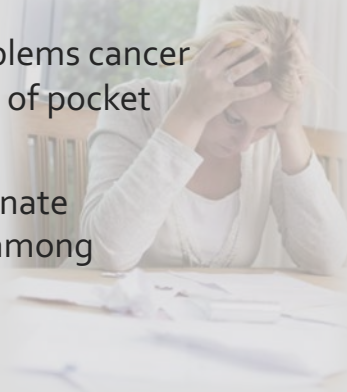
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WHAT IS FINANCIAL TOXICITY?

- Financial toxicity describes problems cancer patients have related to the out of pocket cost of treatment
- Health insurance does not eliminate financial distress or disparities among cancer patients.








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WHAT IS THE RESULT OF FINANCIAL TOXICITY?

- Cancer treatment can affect your ability to work and pay bills
- May be forced to spend retirement savings
- Cut back on food and clothing
- Miss appointments
- Delay care
- Take fewer medications
- May face personal bankruptcy

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WHY AREN'T WE TALKING ABOUT COSTS OF CARE?

-  Want the best care
-  Not my doctor's job
-  My doctor can't help
-  Talked to someone else
-  Embarrassed

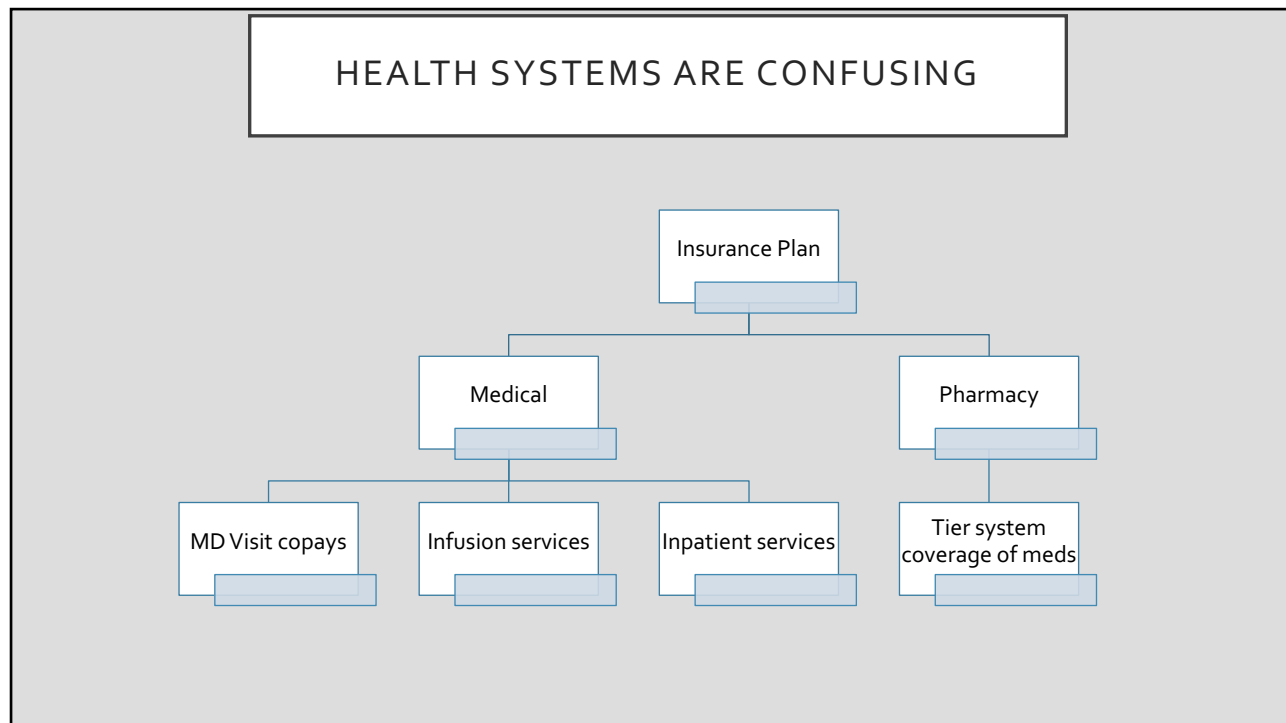
Zafar et al ASCO, 2013

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WHY IS FINANCIAL TOXICITY IMPORTANT?

- Cancer treatment is expensive
- Cost sharing is increasing (Claxton, 2016)
- Many patients do not want to discuss cost-related concerns
- Financially toxicity may worsen outcomes and ultimately could increase cost
- Discussing costs decreased expenses (Zafar et al, 2013)

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INSURANCE LANGUAGE CAN BE CONFUSING

- **Copayments:** Amount you pay for each healthcare service
- **Deductible:** Amount you pay for your medical care before your insurance plan begins
- **Coinsurance:** Percentage of costs you pay for a service that your health insurance covers after you have paid your deductible
- **Drug formulary:** a list of prescription drugs covered by your plan
- **Specialty Tier:** the highest "tier" for coverage of specialized (expensive) medications

The image contains a collection of medical and financial icons. At the top is a stethoscope. Below it are a syringe, a pill bottle, a bandage, and a dollar bill. To the left is a calculator showing '320'. In the center is a smartphone with a 'Health insurance' app. To the left of the phone is a prescription pad with 'Rx' and a list of items. At the bottom is a first aid kit with a red cross.

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THE COST OF CANCER




The cost of treatment paid by patients is estimated to be **\$5,000 to \$8,000 per year** on average, although costs vary widely based on type of cancer and type of insurance. (Zafar 2013, Chino 2017)

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THE COST OF CANCER

However, there are additional costs beyond medical treatment:

- missing work**
- getting **transportation** to treatment
- even paying for **parking**.



These costs are estimated to be more than **\$4,000 per year** for the average cancer patient. (Guy, 2014)

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HOW MANY PEOPLE ARE AFFECTED BY THIS?

- Financial toxicity is a broad idea- how common it is depends on how you measure it. Here are a few ways researchers have tried to measure this:



Nearly Half of cancer patients lost income, or said it was harder to get by. (Zafar, 2015)

1 in 3 reported using **all or most of their savings**. (Cagle, 2016)

1 in 4 went into debt. (Meisenberg, 2015)

1 in 5 skipped payment on bills or utilities. (Meisenberg, 2015)

1 in 50 filed for bankruptcy. (Ramsey, 2013)

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REDUCING FINANCIAL BURDEN: CARES

Call

Call your insurance representative to discuss treatment plan and associated cost

Ask
about

Ask about financial assistance programs you may be eligible for

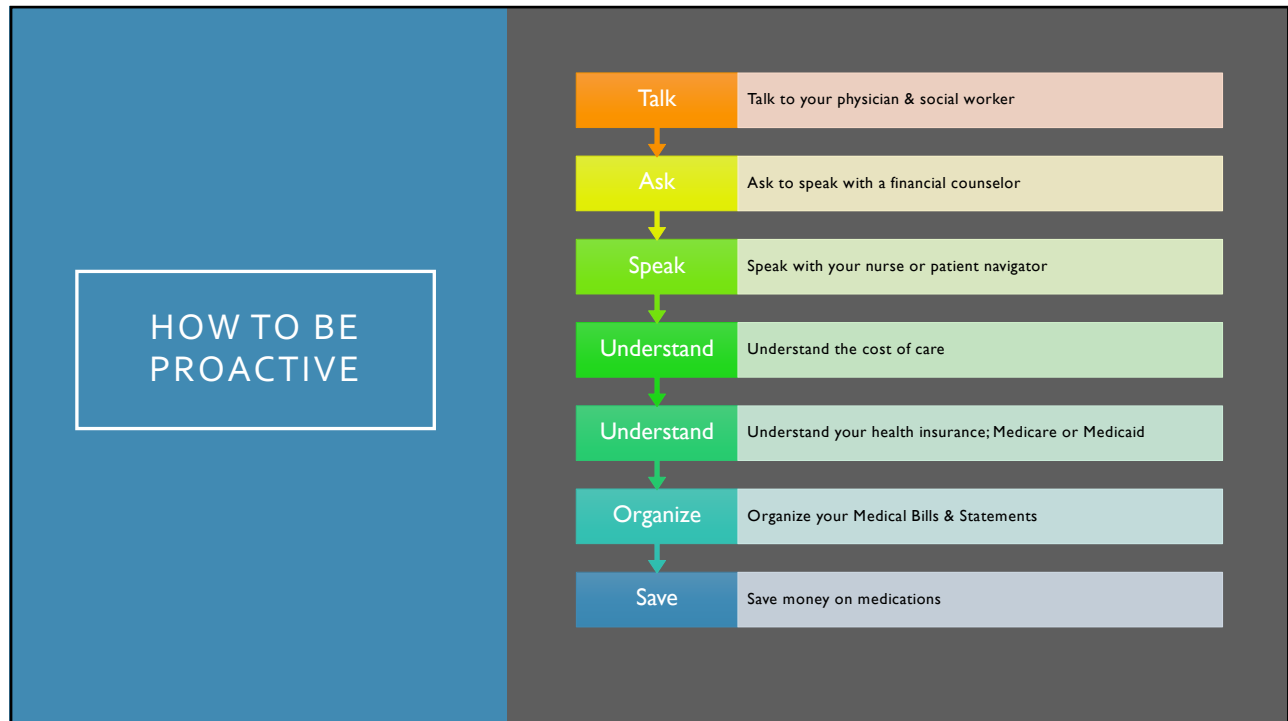
Request

Request to meet with a financial navigator/financial counselor

Speak

Speak with your cancer care team that should include a pharmacist about cost

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HIGH VALUE INTERVENTIONS

Choosing Wisely aims to promote conversations that enable patients to choose care that is:

- Supported by evidence
- Not duplicative
- Free from harm
- Truly necessary

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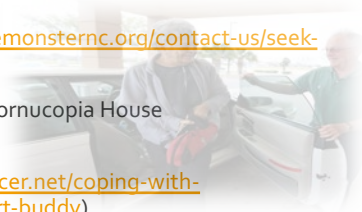
IMPORTANT RESOURCES

- Patient Access Network Foundation www.panfoundation.org
- Leukemia Lymphoma Society www.lls.org
- NeedyMeds www.needymeds.org
- Rx Assist www.rxassist.org
- RxHope www.rxhope.com
- 1 of US 1ofus.org
- Social Security Compassionate Allowance www.socialsecurity.gov/compassionateallowances/

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EXAMPLES FOR UNIQUE RESOURCES

- Food, utilities, gas → Stop the Monster <http://stompthemonsternc.org/contact-us/seek-assistance>
- Counseling, gas cards, peer to peer support, meals → Cornucopia House www.cancersupport4u.org
- Peer support Buddies (Adults & Young Adults) www.cancer.net/coping-with-cancer/finding-support-and-information/finding-support-buddy
- Transportation, home care, childcare → CancerCare www.cancercare.org



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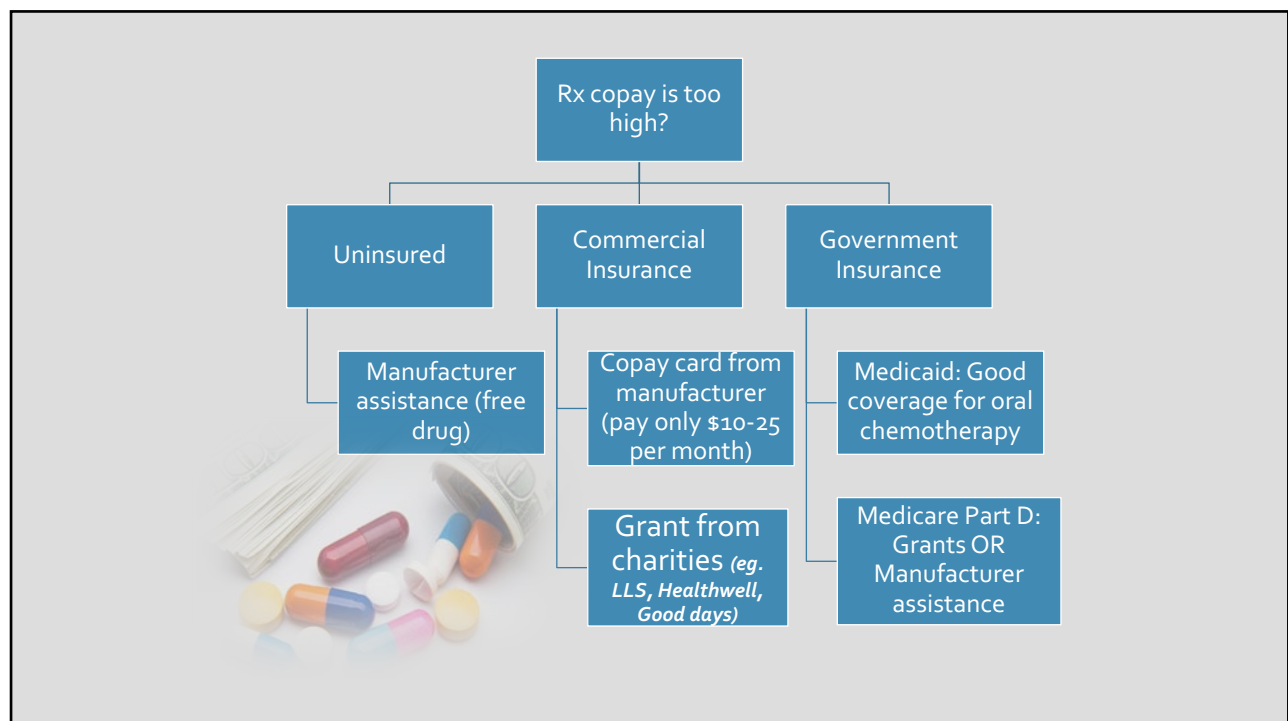
TALK TO YOUR PHARMACIST

Involving your pharmacist is very important

There are creative ways to cut costs for medications including coupons, grants, and payment plans

In addition, your pharmacist can review how you should take your medicines and what to expect as side effects

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MORE TIPS TO MANAGE COST



Follow your treatment and medication schedule



Ask for help with travel costs



Look for online tools to help with money and budget



Get emotional support



Look for ways to ease the tasks of daily living

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