FINANCIAL TOXICITY and CANCER TREATMENT

Fumiko Chino, MD
Duke Cancer Institute

Caveat to todays talk… mostly focused on patients WITH health insurance

DISCLOSURES:
None

"Before this, I had felt I was in charge of my life, and suddenly I was $300,000 in debt… In addition to the larger burden of being a new widow, the series of bills that arrived weekly were like crashing waves that threatened to take me out to sea"

"FINANCIAL TOXICITY"

A new name for a growing problem

A term popularized in 2013 by Dr Zafar in his seminal manuscript in the Oncologist

JNCI

Journal *of the* National Cancer Institute

Financial Toxicity of Cancer Care: It's Time to Intervene

S. Yousuf Zafar

JNCI: Journal of the National Cancer Institute, Volume 108, Issue 5, 1 May 2016, djv370, https://doi.org/10.1093/jnci/djv370
Published: 11 December 2015 **Article history**

Abstract

Evidence suggests that a considerably large proportion of cancer patients are affected by treatment-related financial harm. As medical debt grows for some with cancer, the downstream effects can be catastrophic, with a recent study suggesting a link between extreme financial distress and worse mortality. At least three factors might explain the relationship between extreme financial distress and greater risk of mortality: 1) overall poorer well-being, 2) impaired health-related quality of life, and 3) sub-par quality of care. While research has described the financial harm associated with cancer treatment, little has been done to effectively intervene on the problem. Long-term solutions must focus on policy changes to reduce unsustainable drug prices and promote innovative insurance models. In the mean time, patients continue to struggle with high out-of-pocket costs. For more immediate solutions, we should look to the

nature biotechnology

News

'Financial toxicity' looms as cancer combinations proliferate

Chris Morrison

Costs will ramp up when drugs are used in combinations. *Image: ©Brain light/Alamy*

As immune checkpoint inhibitors promise a whole raft of new combinations with other oncology agents, the American Society of Clinical Oncology (ASCO) and other thought leadership groups are becoming more vocal about the price of such therapies, both alone and in combination. In June, ASCO unveiled its Conceptual Framework to assess the value of new cancer treatment options, noting that cancer care is one of the fastest growing components of US healthcare costs, and that growth in healthcare spending "has not been accompanied by commensurate improvements in health outcomes." ASCO's framework assigns a "net health benefit" to oncology therapies that takes into account efficacy, toxicity and cost (*J. Clin. Oncol.* doi:10.1200/JCO.2015.61.6706, 22 June 2015)) Around the same time, New York's Memorial Sloan Kettering Cancer Center launched its 'DrugAbacus' (http://www.drugabacus.org/), which allows

JAMA Oncology

Invited Commentary

June 2017

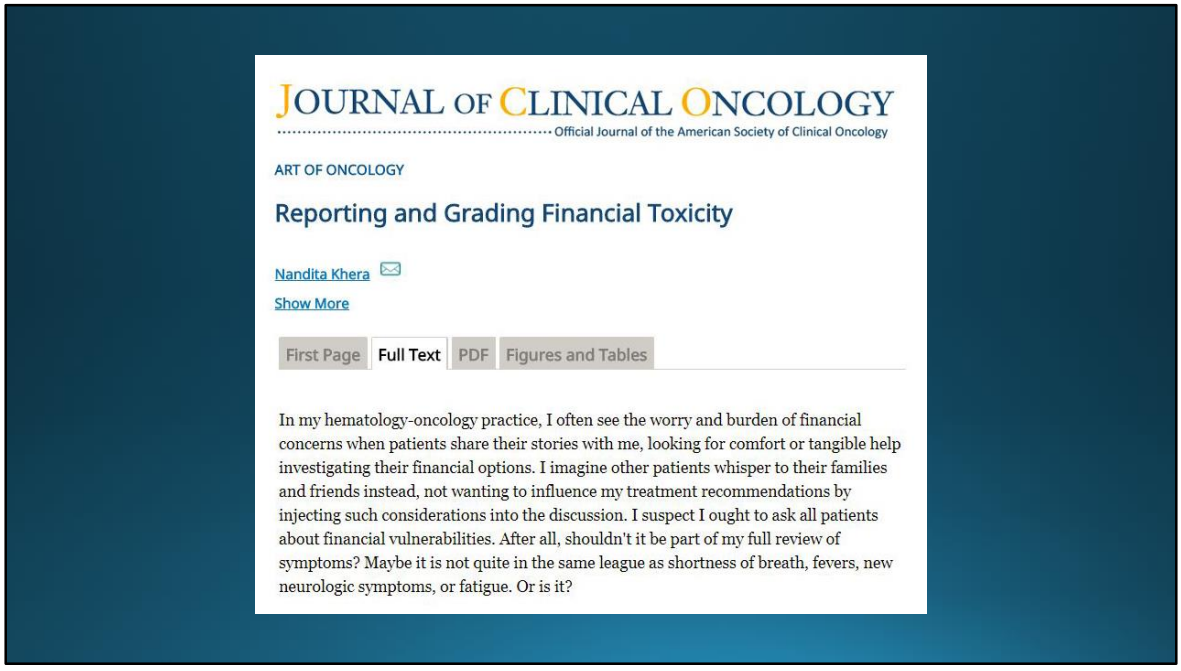
Mitigating Financial Toxicity Among US Patients With Cancer

Jonas A. de Souza, MD, MBA[1]; Rena M. Conti, PhD[2,3]

» Author Affiliations

JAMA Oncol. 2017;3(6):765-766. doi:10.1001/jamaoncol.2016.4850

Treatment for cancer is undergoing a renaissance. However, the "financial toxicity" of cancer treatment for US patients and their families is a growing concern.[1] Financial distress among patients with cancer includes high out-of-pocket (OOP) spending relative to income and assets, loss of work, and significant household debt. Financial distress is associated with growing reports of delayed initiation of treatment, limited patient adherence, and abandonment of recommended treatment, which erodes the effectiveness of cancer treatment and even hastens death.



JOURNAL OF CLINICAL ONCOLOGY

Official Journal of the American Society of Clinical Oncology

ART OF ONCOLOGY

Reporting and Grading Financial Toxicity

Nandita Khera

Show More

First Page | Full Text | PDF | Figures and Tables

In my hematology-oncology practice, I often see the worry and burden of financial concerns when patients share their stories with me, looking for comfort or tangible help investigating their financial options. I imagine other patients whisper to their families and friends instead, not wanting to influence my treatment recommendations by injecting such considerations into the discussion. I suspect I ought to ask all patients about financial vulnerabilities. After all, shouldn't it be part of my full review of symptoms? Maybe it is not quite in the same league as shortness of breath, fevers, new neurologic symptoms, or fatigue. Or is it?

The NEW ENGLAND JOURNAL of MEDICINE

Perspective

Full Disclosure — Out-of-Pocket Costs as Side Effects

Peter A. Ubel, M.D., Amy P. Abernethy, M.D., Ph.D., and S. Yousuf Zafar, M.D., M.H.S.

Article Figures/Media Metrics

5 References 80 Citing Articles

October 17, 2013
N Engl J Med 2013; 369:1484-1486
DOI: 10.1056/NEJMp1306826

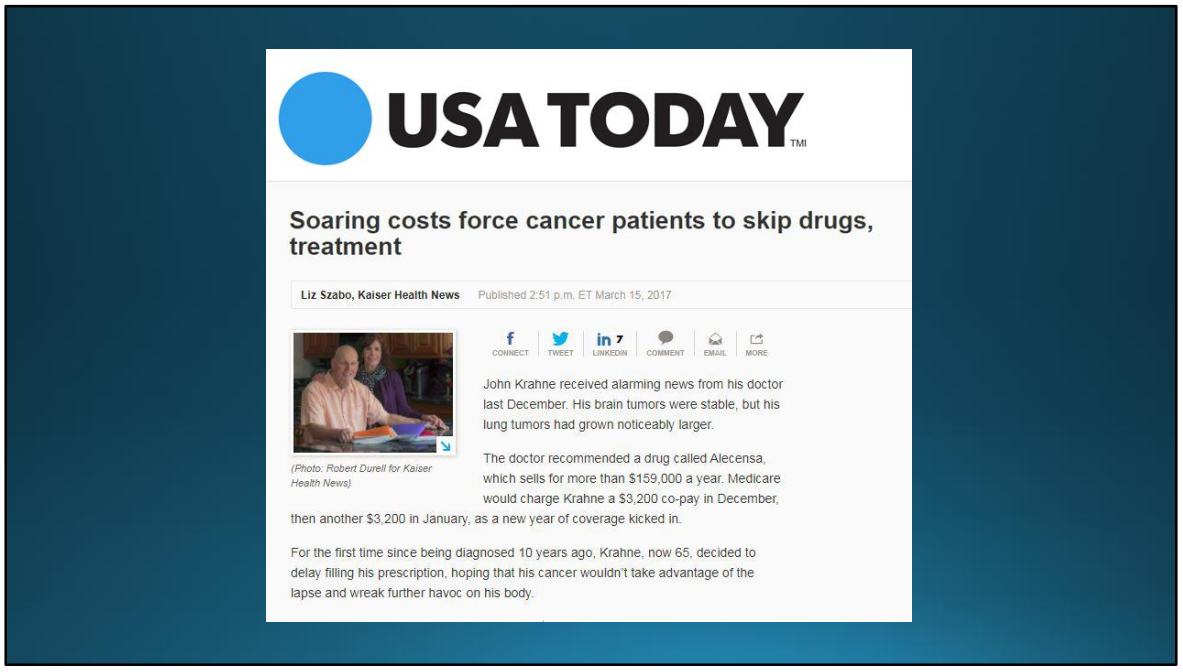
FEW PHYSICIANS WOULD prescribe treatments to their patients without first discussing important side effects. When a chemotherapy regimen prolongs survival, for example, but also causes serious side effects such as immunosuppression or hair loss, physicians are typically thorough about informing patients about those effects, allowing them to decide whether the benefits outweigh the risks. Nevertheless, many patients in the United States experience substantial harm from medical interventions whose risks have not been fully discussed. The undisclosed toxicity? High cost, which can cause considerable financial strain.

Audio Interview

Interview with Dr. Peter Ubel on a new focus on informing patients about the likely out-of-pocket costs of care. (7:30)

Download

"Because treatments can be "financially toxic," imposing out-of-pocket costs that may impair patients' well-being, we contend that physicians need to disclose the financial consequences of treatment alternatives just as they inform patients about treatments' side effects."



USA TODAY

Soaring costs force cancer patients to skip drugs, treatment

Liz Szabo, Kaiser Health News Published 2:51 p.m. ET March 15, 2017

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(Photo: Robert Durell for Kaiser Health News)

John Krahne received alarming news from his doctor last December. His brain tumors were stable, but his lung tumors had grown noticeably larger.

The doctor recommended a drug called Alecensa, which sells for more than $159,000 a year. Medicare would charge Krahne a $3,200 co-pay in December, then another $3,200 in January, as a new year of coverage kicked in.

For the first time since being diagnosed 10 years ago, Krahne, now 65, decided to delay filling his prescription, hoping that his cancer wouldn't take advantage of the lapse and wreak further havoc on his body.

This interest in financial toxicity has spilled over into the lay public with increasing reporting devoted to the costs of cancer care.

The Washington Post

The burden of cancer isn't just cancer

By Carolyn Y. Johnson April 8, 2016 Email the author

(Rachel Orr/The Washington Post)

Money is low on the list of things most people want to think about after a doctor says the scary word "cancer." And it's not just patients — physicians also want to weigh the best treatment options to rout the cancer, unburdened by financial nitty gritty. But a growing body of evidence suggests that, far from crass, ignoring cost could be harmful to patients' health.

"Money is low on the list of things most people want to think about after a doctor says the scary word "Cancer"… "A growing body of evidence suggests that, far from crass, ignoring cost could be harmful to patients' health"

Forbes

JUL 7, 2014 @ 01:27 PM 3,744

We Need to Talk About the Costs of Cancer Treatment

Elaine Schattner, CONTRIBUTOR
FULL BIO
Opinions expressed by Forbes Contributors are their own.

Recently, investigators at the University of Chicago and Northwestern University reported on a new tool, COST, for measuring patients' concerns about the financial burden of cancer treatment. The acronym stands for "COmprehensive Score for financial Toxicity."

Talking about money is not an easy thing for some doctors, including oncologists. Many hesitate to bring up the subject, either out of ignorance about pricing, time constraints, lack of concern, a simple or idealistic disdain for the topic... But the unfortunate reality is that as things stand in 2014, U.S. insurance plans vary in what treatments they cover. A cancer

Forbes particularly has focused fairly extensive coverage to the intersection of finances and cancer treatment.

DISCLOSURES:
Well…

And this is where I must confess that I do actually have an important disclosure for this session. One of the reasons why I am so passionate about this topic is because I have skin in this game.

npr

Widowed Early, A Cancer Doctor Writes About The Harm Of Medical Debt

August 10, 2017 · 11:45 AM ET
Heard on All Things Considered

ALISON KODJAK

Andrew Ladd and Fumiko Chino at their wedding in 2008, after his cancer diagnosis. Ladd died the following year, leaving behind hundreds of thousands of dollars in medical debt
Courtesy of Dr. Fumiko Chino

Ten years ago, Fumiko Chino was the art director at a television production company in Houston, engaged to be married to a young Ph.D. candidate.

In 2017, I shared my own personal story dealing with the financial toxicity of my husband's treatment for cancer on NPR. Of course that quote, "The stress and overwhelming crushing defeat of these bils" is mine. His treatment led to massive debt and, after he died, started me on the path to medical school and ultimately to the research that I do today on financial toxicity and patient reported outcomes.

Financial Toxicity

Problems a patient has related to the cost of medical care. Cancer patients are more likely to have financial toxicity than people without cancer. **-National Cancer Institute**

"Even with health insurance, the high costs of cancer care are leaving some vulnerable American families adrift in debt. [...] Out-of-pocket costs can have real effects on quality of life and quality of care." **-Chino, *JAMA Oncology*, 2018**

https://www.cancer.gov/about-cancer/managing-care/track-care-costs/financial-toxicity-pdq

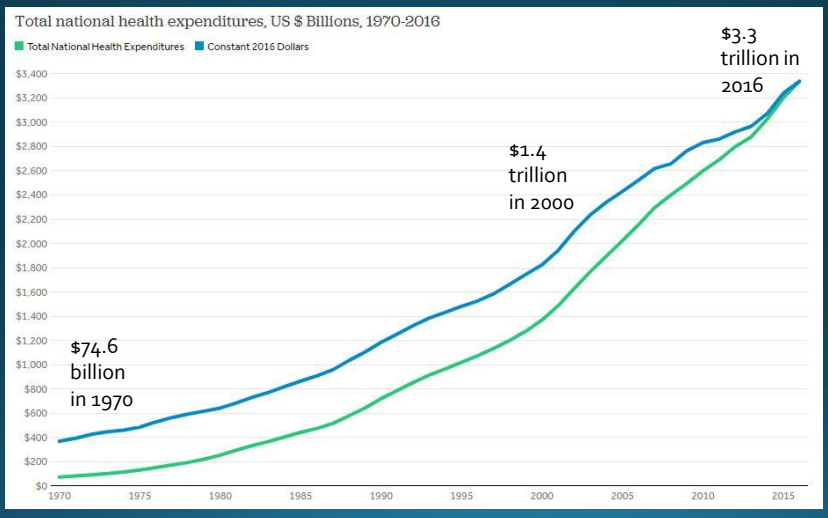
The National Cancer Institute definition

So how did we get to the point that we needed a new term to define what was happening to our patients?


Financial Toxicity
Driven by:
higher overall costs


COST$ are rising
in the US

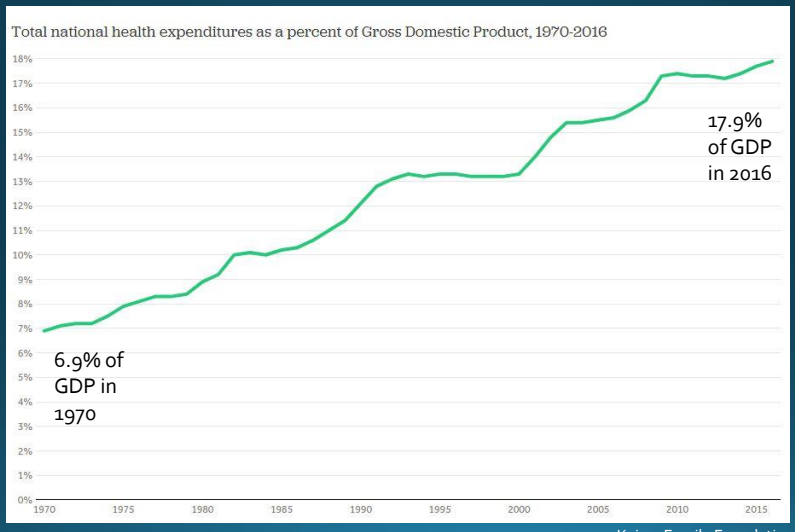
National health costs have been **increasing rapidly** since the 1970s



Kaiser Family Foundation, Chart Collection, 2017

Health spending totaled $74.6 billion in 1970. By 2000, health expenditures had reached about $1.4 trillion, and in 2016 the amount spent on health had more than doubled to $3.3 trillion.

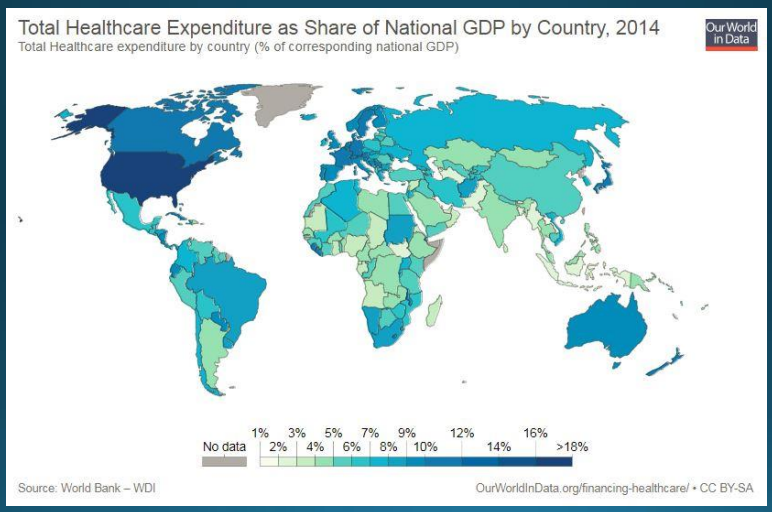
Health spending is **outpacing economic growth**



Kaiser Family Foundation, Chart Collections, 2017

In 1970 the U.S. devoted 6.9% of its gross domestic product to total health spending (both through public and private funds). By 2015 the amount spent on health had increased to 17.9% of GDP.

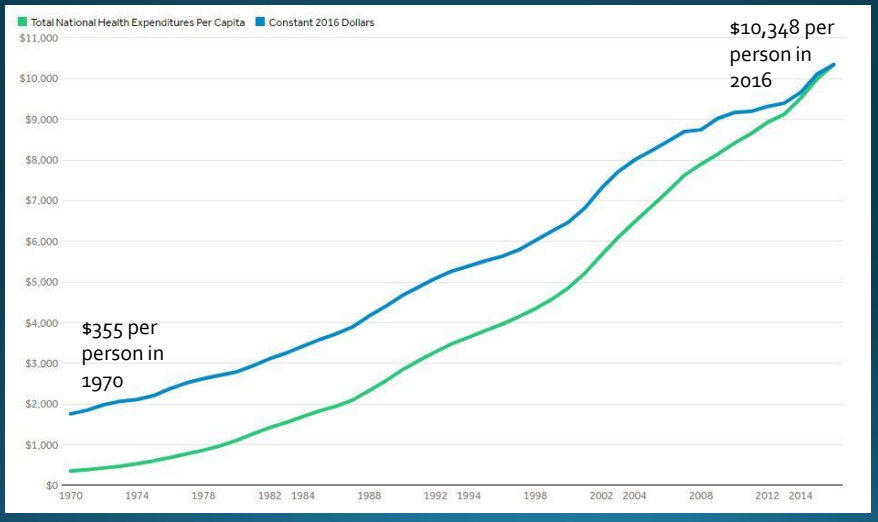
US health care spending is higher than any other nation



https://ourworldindata.org/financing-healthcare

US spending compared to the world as share of GDP

Per capita health spending has increased nearly **29-fold**



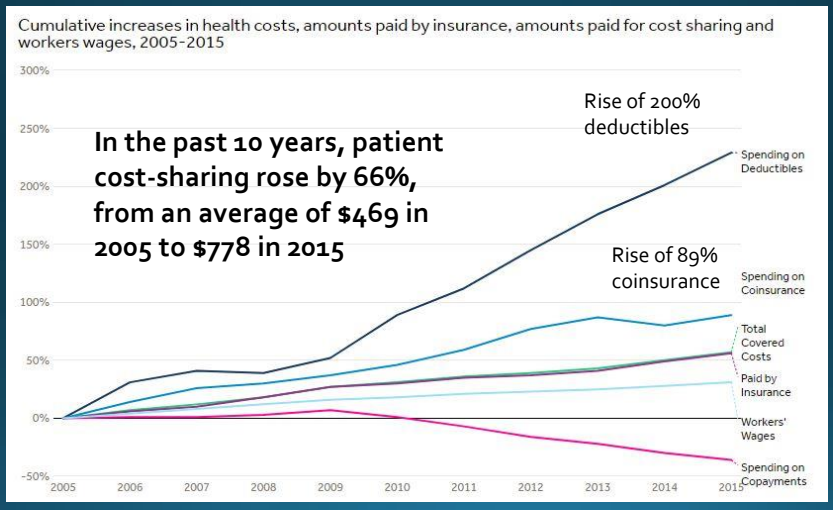
Kaiser Family Foundation, Chart Collection, 2017

On a per capita basis, total national health spending has increased nearly 29-fold over the last four decades, from $355 per person in 1970 to $10,348 in 2016. In constant 2016 Dollars, the increase was almost 6-fold from $1,762 In 1970 to $10,348 in 2016.


Financial Toxicity
Driven by:
higher overall costs
increased cost sharing


COST$ are rising
in the US
for patients

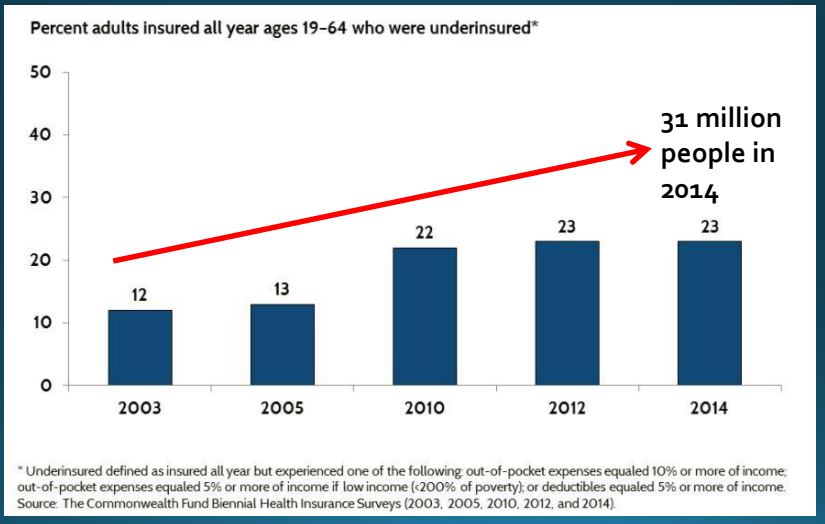
Increases in **cost-sharing payments** have far outpaced wage growth



Kaiser Family Foundation, Brief, 2017

From 2005 to 2015, the average payments by enrollees towards deductibles rose over 200%, and the average payments towards coinsurance rose 89%. Overall, patient cost-sharing rose by 66%, from an average of $469 in 2005 to $778 in 2015.

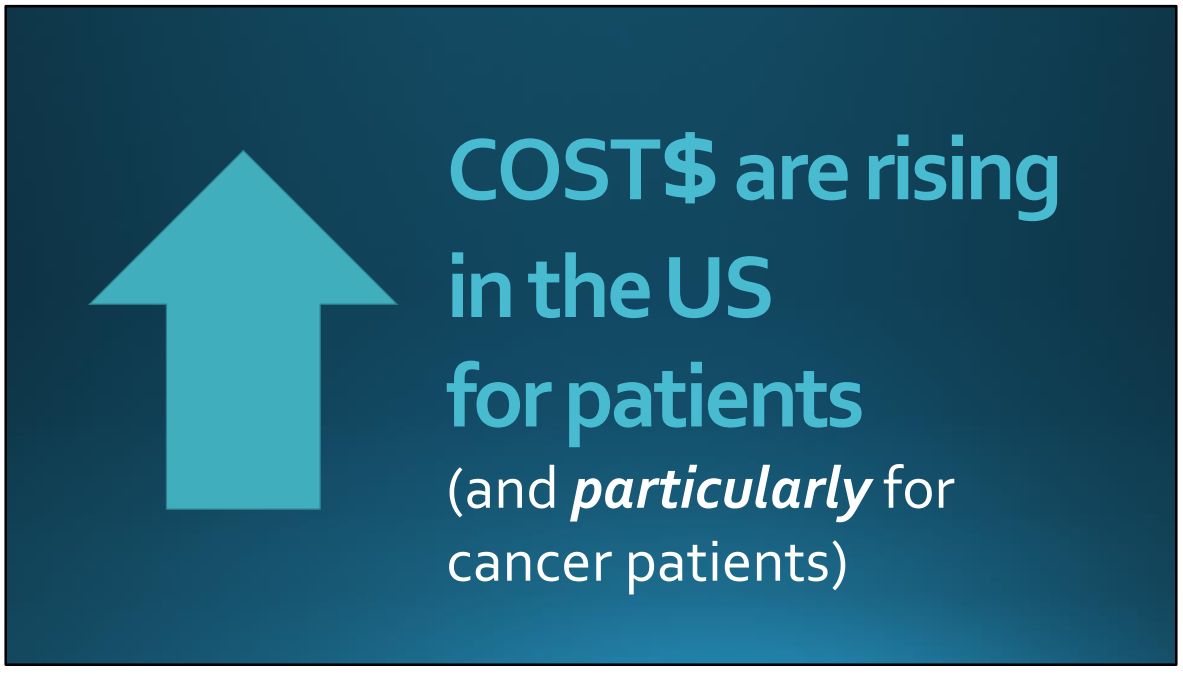
31 Million Americans are **underinsured**

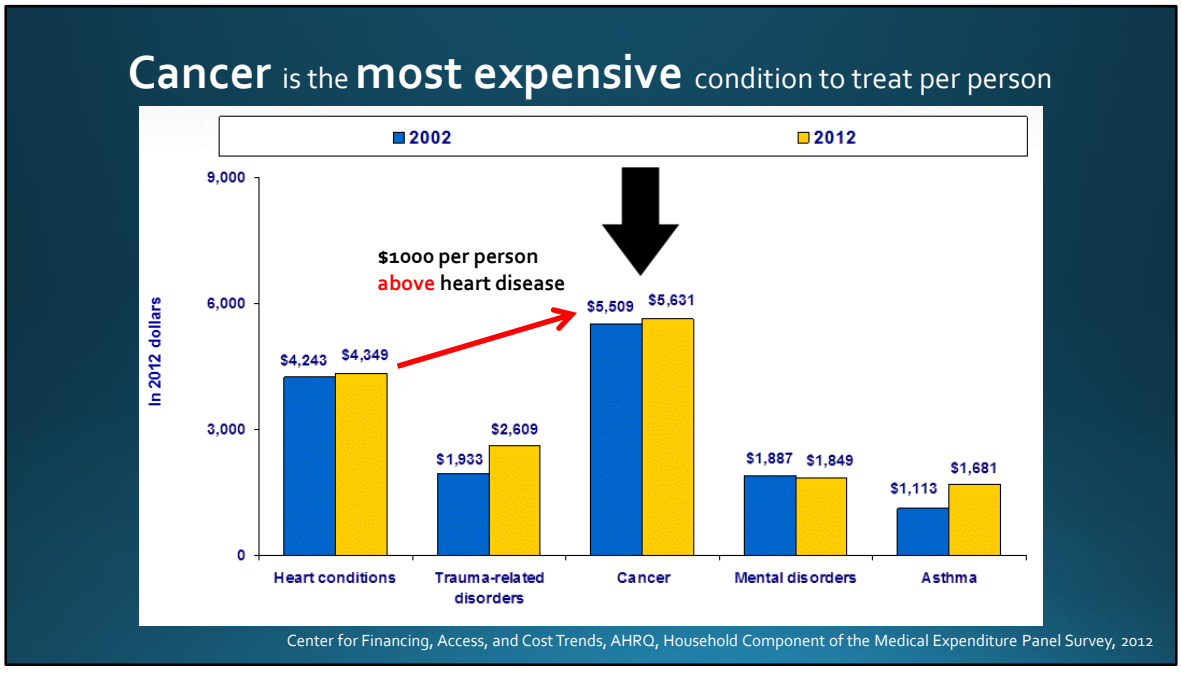


Kaiser Family Foundation, Brief, 2017

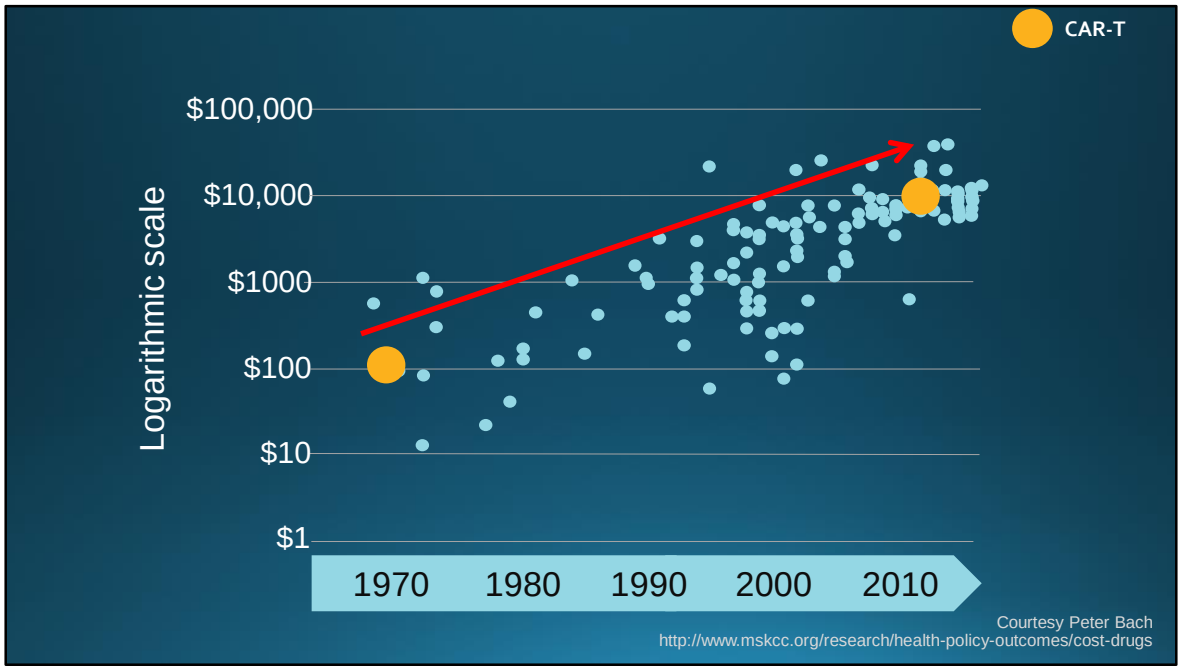
As of 2014, 23 percent of U.S. adults ages 19 to 64, an estimated 31 million people, were underinsured. This is almost double the number of underinsured adults in 2003 when the measure was first introduced in the survey.

Underinsured: out-of-pocket costs, excluding premiums, over the prior 12 months are equal to 10 percent or more of household income; or out-of-pocket costs are equal to 5 percent or more of household income if income is under 200 percent of the federal poverty level ($22,980 for an individual and $47,100 for a family of four); or deductible is 5 percent or more of household income.

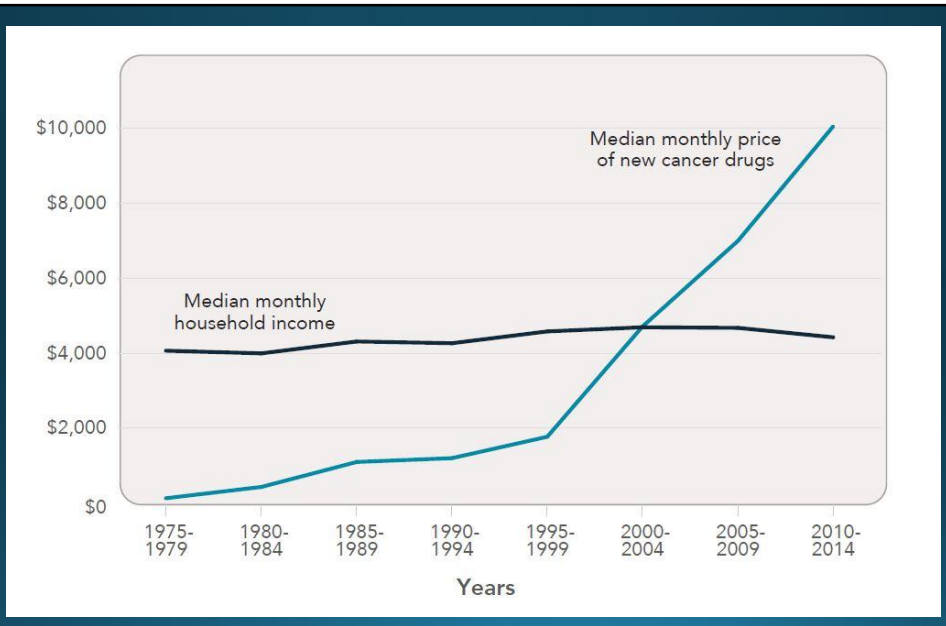

COST$ are rising
in the US
for patients
(and *particularly* for
cancer patients)



Average expenditures per person with expenses for the top five most costly conditions, 2002 and 2012. Cancer costs more than one thousand dollars per person above heart disease

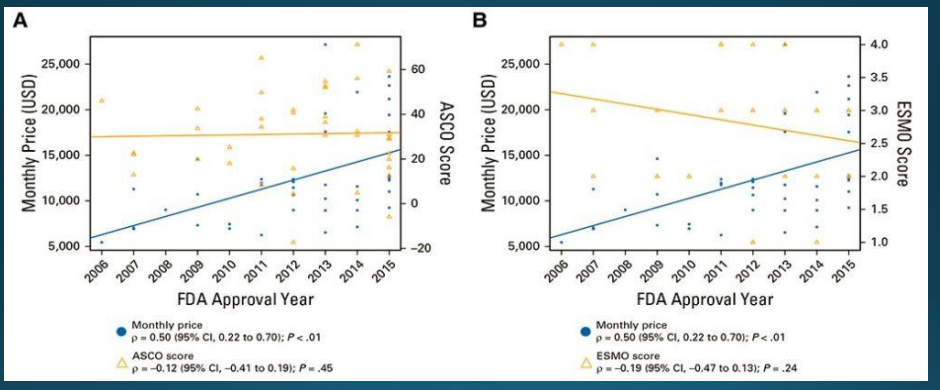


Each dot represents average cost for a month of chemo for various drugs, x axis is years and y-axis is log scale cost in US dollars. In 70's drugs cost $100-1000. Today, drugs cost >$10,000 per month, these rising costs have been driven by the proliferation of biologics and immunotherapy. Chimeric antigen receptor T-cell therapy (CAR-T) estimated to cost >$1 million for treatment course



Prasad, Nat Rev Clin Oncol, 2017

Anticancer drug **costs are rising**

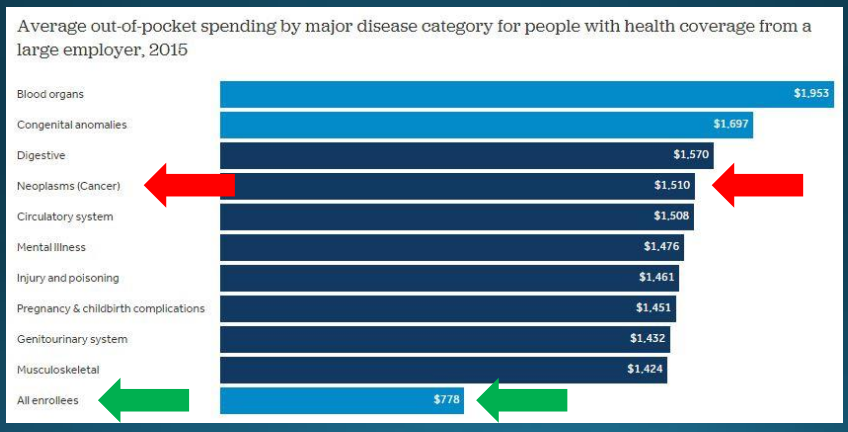


but **clinical benefit is stagnant** (or decreasing)

Saluja, JOP, 2018

Over the past decade, costs of novel oncology drugs have increased, while clinical benefits of these medications have not experienced a proportional positive change. The predicted mean incremental anticancer drug cost increased from $30,447 in 2006 to $161,141 in 2015 (greater than five-fold increase).

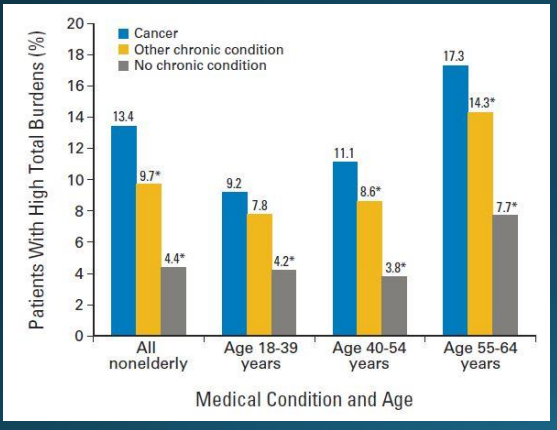
Out-of-pocket costs for **cancer patients x2** that of the average enrollee

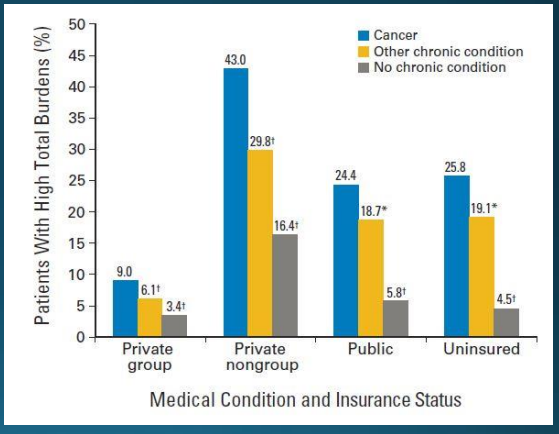


Kaiser Family Foundation, Brief, 2017

The average out-of-pocket expenditure for cancer was $1,510 which nearly twice that of average enrollee spending $778.

Cancer patients more likely than others to have **high total burden…**

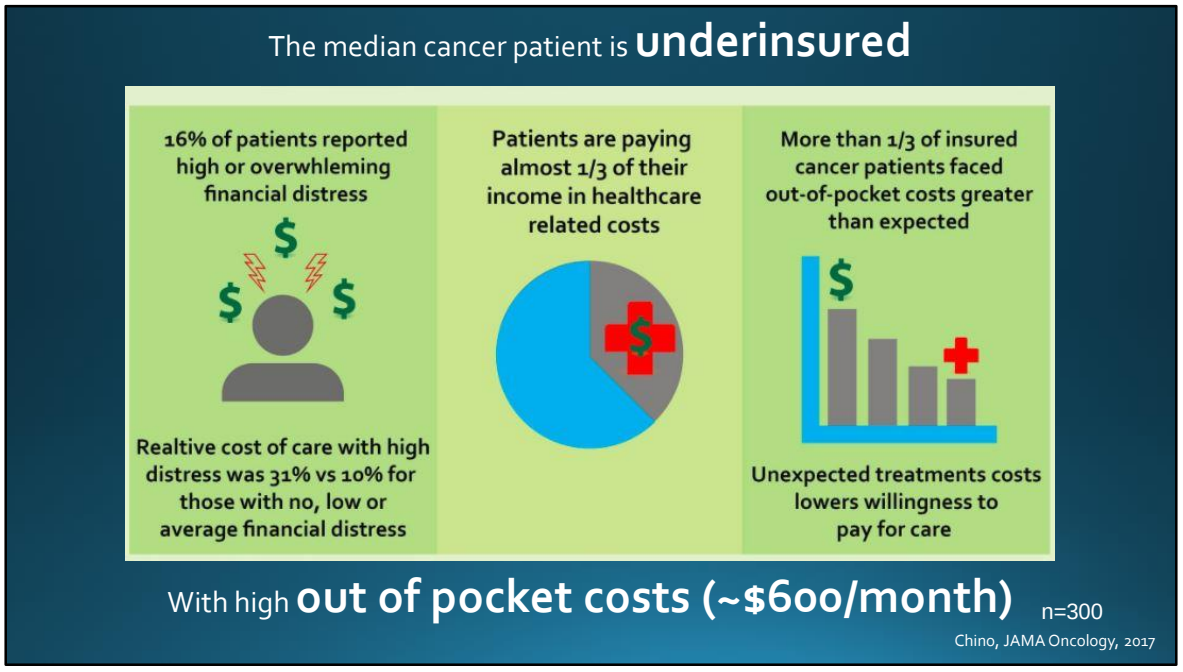




Regardless of **age** or **insurance type**

Bernard, JCO, 2011

"High burden" is defined as 20% or more of your income on OOP



Median relative cost of care was 11%, median OOP costs $592/month

So costs are rising. This is likely no surprise to providers in this room.
There are several other drivers for financial toxicity other than rising costs and increased cost sharing.

Patients have more options for treatment than ever and an unfortunate aspect of the current litigious health care environment is that as providers we are more likely to give treatment. On one end of the spectrum we are more likely to scan and diagnose cancers that would never harm a patient in their lifetime. On the other end of the spectrum we are more likely to treat disease at the end of life.

Over diagnosis + Over treatment

DCIS (Stage O Breast Cancer)
Low Risk Prostate Cancer
Thyroid Cancer
Cancers in the Elderly

Cancers are diagnosed and treated even if they may not ultimately affect mortality

Aggressive Treatment at the End of Life

71-76% of patients <65 across different cancers received aggressive care within the last 30 days of life, including 30-35% of patients who died in the hospital

40% of patients >65 had ICU admission, 39% had chemo in the last 180 days of life

Chen, ASCO Late breaking abstract, 2016
Bekelman, JAMA, 2016

Patients with Cancer are Living LONGER

Not all cost increases are due to negative factors:

- Our improvements in health care delivery has led to longer, more fruitful lives even in the setting of incurable cancer
- Metastatic or incurable cancer has increasingly become like a chronic disease for some patients, necessitating lifelong treatment


Financial Toxicity
Driven by:
higher overall costs
increased cost sharing
more treatment
clinical and technical advances

Advances in TECHNOLOGY

"Technological advances over the last several decades have been monumental and have served the industry very well. However, the cost of some of the technical advances is what is partially responsible for the overall increase in health care costs. In fact, new medical tech is responsible for 40-50% in annual cost increases."

- Forbes

Expensive
Imaging Studies

PET/CT (including PSMA scans for prostate cancer)
MRI (used increasingly for prostate and breast cancer)
CT (standard use for follow up cancer studies)
MBI (Molecular Breast Imaging)

The use of CT and MRI scans grew more than 15 percent annually between 2000 and 2004 (all comers, not just cancer patients). Some studies ordered without clear evidence that they improve staging or surveillance.

Expensive
Surgical & Radiation Techniques

ROBOTS Robotic assisted Surgery
IMRT/SBRT Intensity Modulated/ Stereotactic Body Radiation Therapy
SRS Stereotactic Radiosurgery
PROTONS Particle Therapy

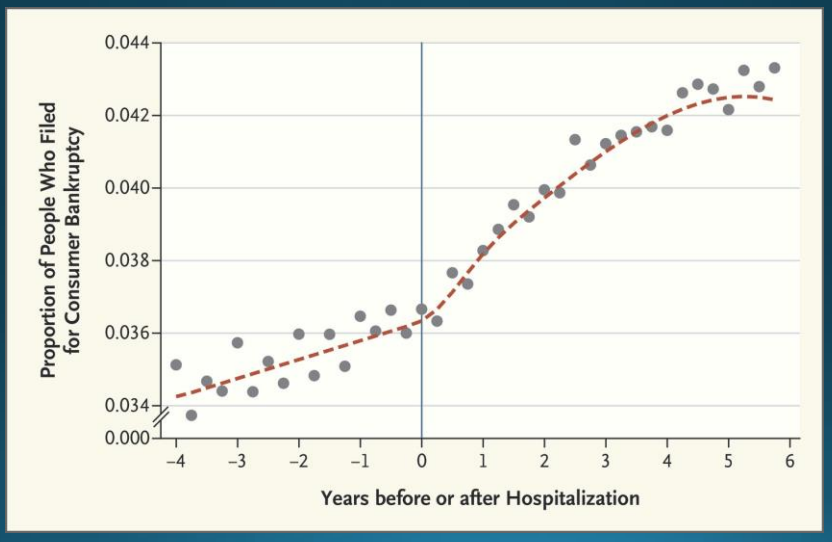
Studies results are mixed with advanced technologies cost effective at QALY $100,000-$200,000 (or more)

Robotic ($3-6k more for surgery than traditional laparoscopic), IMRT 60k, SBRT 50k, SRS 50k, Protons 100k
Sometimes used without clear evidence of benefit/improved oncological outcomes


Financial Toxicity
Driven by:
✓ higher overall costs
✓ increased cost sharing
✓ more treatment
✓ clinical and technical advances


Where
does this
leave our
patients

The Effect of **Hospitalization** on the Likelihood of Filing for **Bankruptcy**



Dobkin, NEJM, 2018

In 2005 and 2009 there were two high-profile articles that claim that medical events cause approximately 60% of all bankruptcies in the United States. Although the quality of this data has been called into question, what we are confident of is that medical bills contribute to an increased rate of bankruptcy. Recently published NEJM piece, risk of bankruptcy increased by about 20% in the years following a hospitalization. This data uses all hospitalized patients.

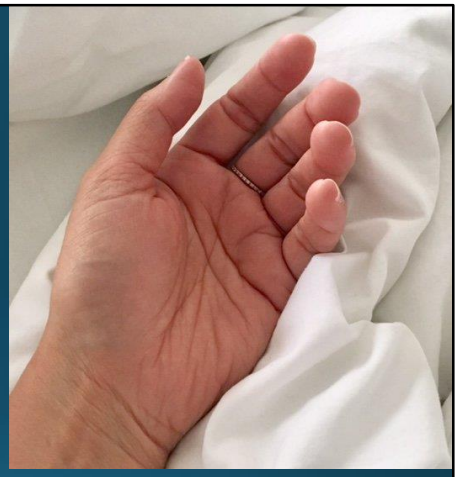
Research specifically focused on cancer patients however has found that the risk is actually ten-fold higher.

Specifically focused on cancer patients however research as found that the risk is actually higher. And it's not just financial well being, it's also cancer outcomes…

7,570
matched patients

79%
greater mortality risk

HR 1.79 (1.64-1.96)



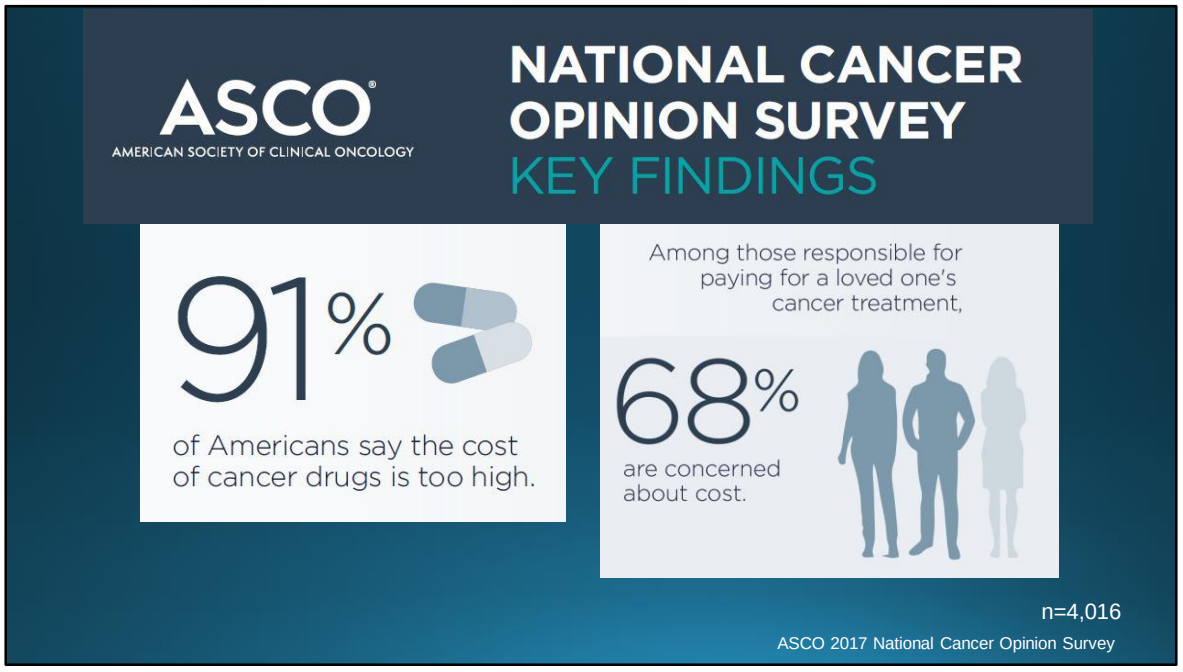
n=231,596
(4,728 of which
declared bankruptcy)

Ramsey, JCO, 2016

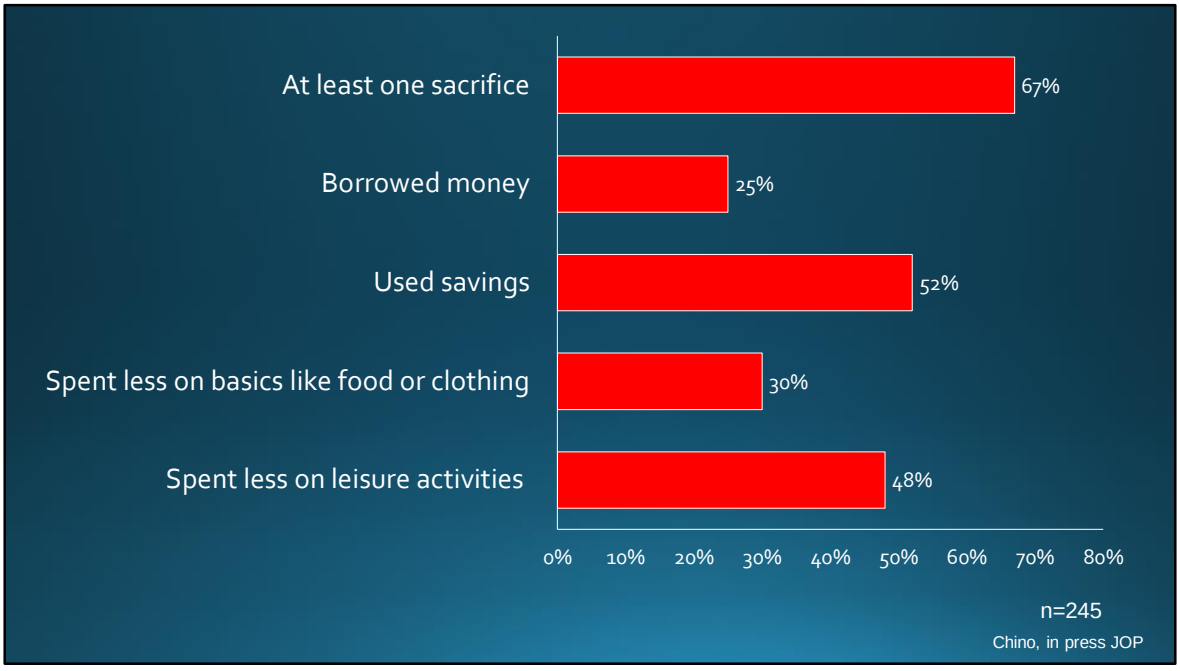
It's not just financial well being, it's also cancer outcomes. One study found that there was a greater risk of dying for cancer patients

How can we explain the relationship between financial distress and greater risk of mortality

First, we know cancer care impacts financial and personal well-being short of declaring personal bankruptcy



The vast majority of Americans think that the cost of cancer drugs is too high and, for those actually paying for treatment, most of worried about the costs of care.



Negative coping mechanisms

How can we explain the relationship between financial distress and greater risk of mortality

Distinct from well being, financial toxicity affects quality of life

High financial burden:

Quality of life for patients with active cancer and survivors

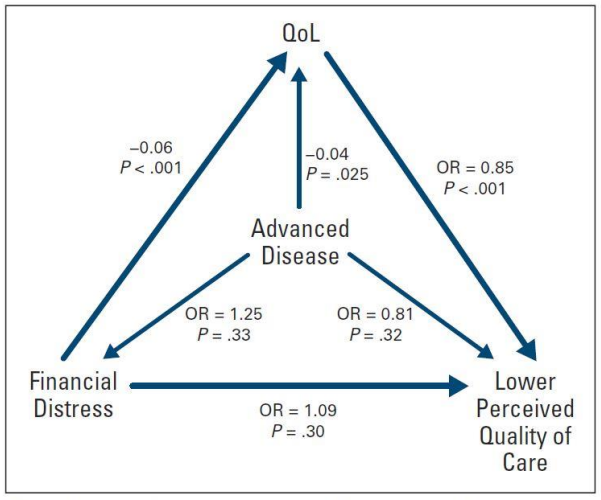
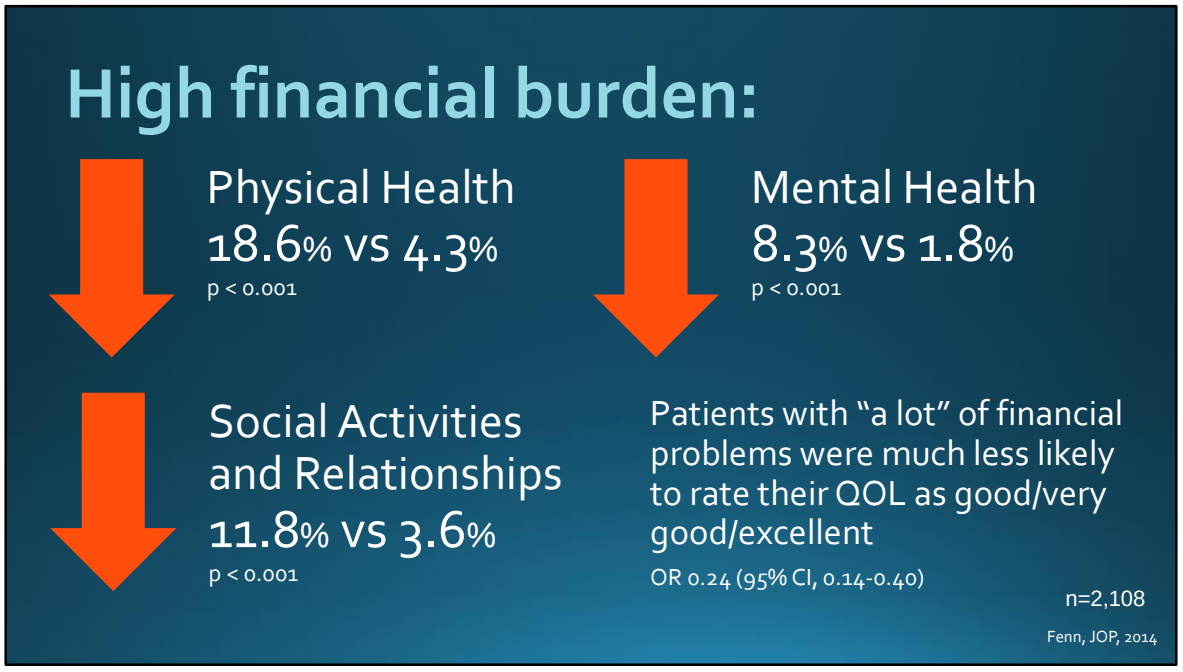


Figure 1. Simplified representation of the path model focusing on primary outcomes only. OR, odds ratio; QoL, quality of life.

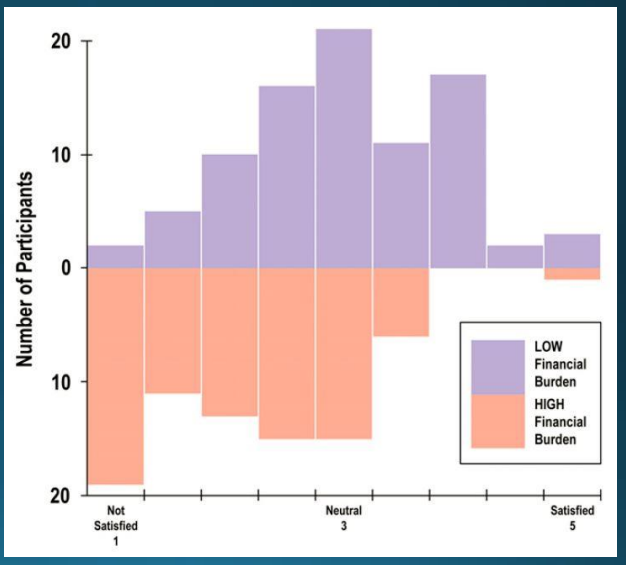
n=1000 Zafar et al, JOP 2014



2010 National Health Interview Survey (NHIS) 2,108 patients; Patients who reported "a lot" of financial problems as a result of cancer care costs were more likely to rate their physical health, mental health, and satisfaction with social activities and relationships as poor compared to those with no financial hardship. On MVA, the degree to which cancer caused financial problems was the strongest independent predictor of quality of life. Patients who reported that cancer caused "a lot" of financial problems were four times less likely to rate their quality of life as "excellent," "very good," or "good" (odds ratio = 0.24; 95% CI, 0.14 to 0.40; P < .001).

High financial burden:

Decreased Satisfaction with the Cancer Care



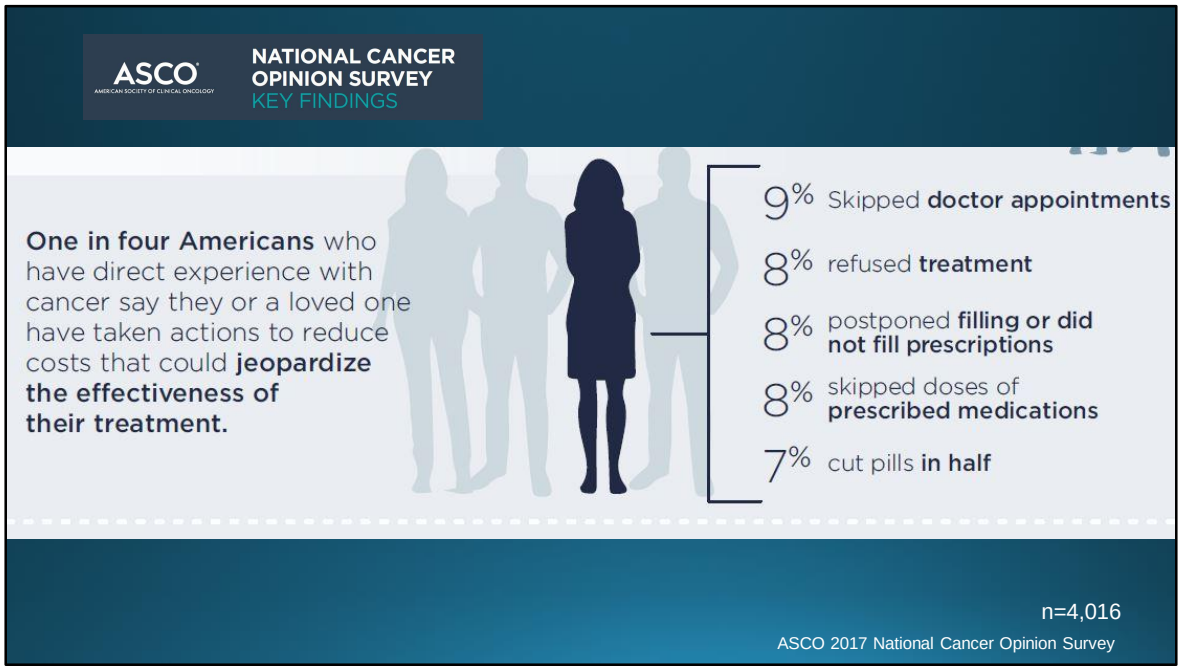
n=174 Chino, Oncologist 2014

In adjusted analysis, high financial burden was negatively associated with the "general satisfaction with health care" subscale score (coefficient: --.29; lower to upper bound: -0.57 to -0.01; p=0.04) and the "satisfaction with technical quality of care" subscale score (coefficient: -0.26; lower to upper bound: -0.48 to -0.03; p=0.03)

How can we explain the relationship between financial distress and greater risk of mortality

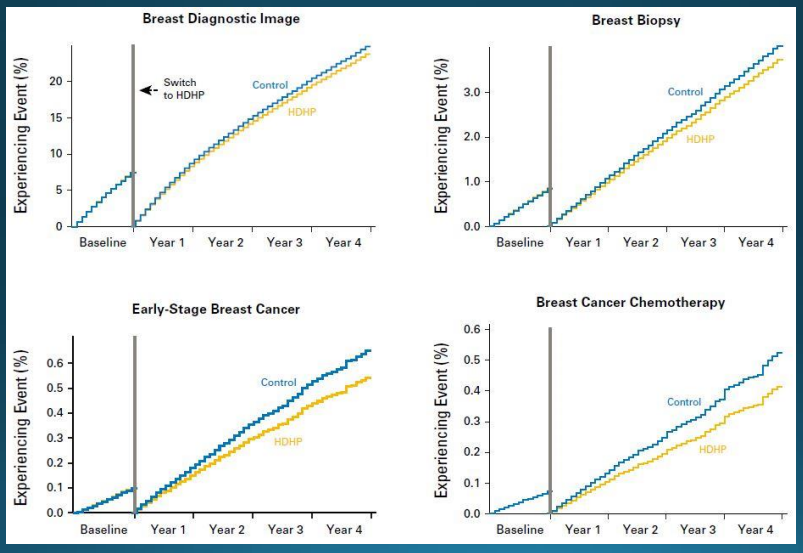
non adherence has the important impacts into the quality of care, as high costs lead to compromised care

Again, high costs lead to compromised care



Negative coping mechanisms

Breast Cancer: Delays to care due to high deductible plans



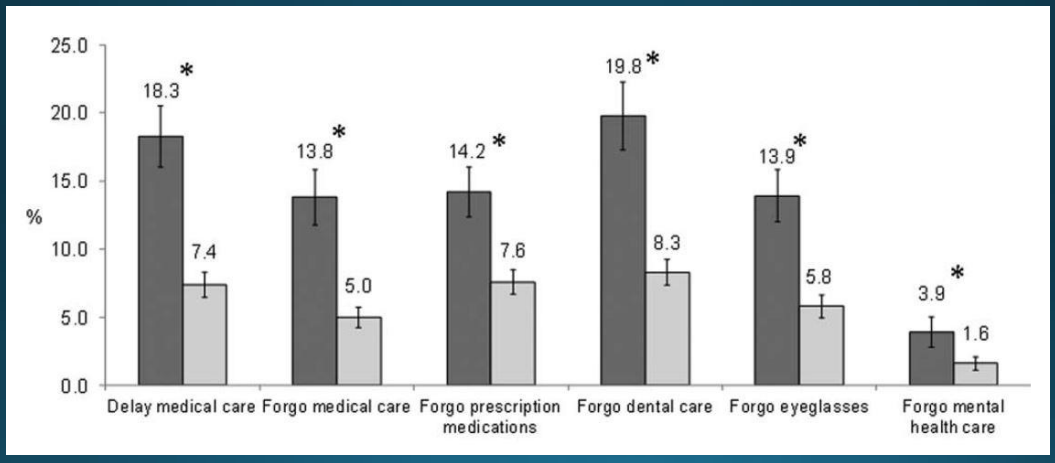
n=273,499

Wharam, JCO, 2018

Almost 300k women enrolled in 1 year in a low-deductible ($0 to $500) plan followed by up to 4 years in a high deductible health plan (at least $1,000 deductible) after an employer-mandated switch. Comparison group = 2.4 million contemporaneously matched women whose employers offered only low-deductible plans

OOP increased 39-50% and the HDHP women experienced delays in receipt of diagnostic imaging (aHR 0.95; 95% CI, 0.94 to 0.96), biopsy (aHR, 0.92; 95% CI, 0.89 to 0.95), early-stage breast cancer diagnosis (aHR, 0.83; 0.78 to 0.90), and chemotherapy initiation (aHR, 0.79; 95% CI, 0.72 to 0.86) compared with the control group. During follow-up, the high-deductible group compared with the control group experienced relative delays of 1.2, 2.1, 5.8, and 7.4 months in reaching comparable rates of diagnostic mammography, breast biopsy, early-stage breast cancer diagnosis, and chemotherapy initiation, respectively.

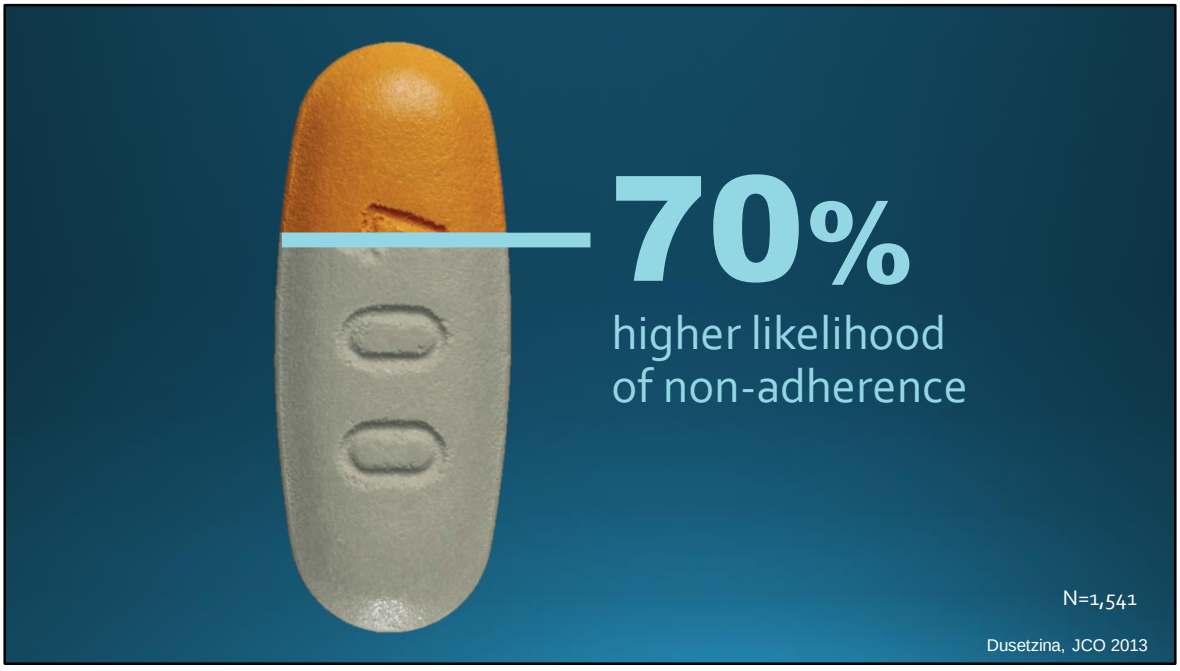
Cancer Survivors: Forgoing or delaying care due to cost



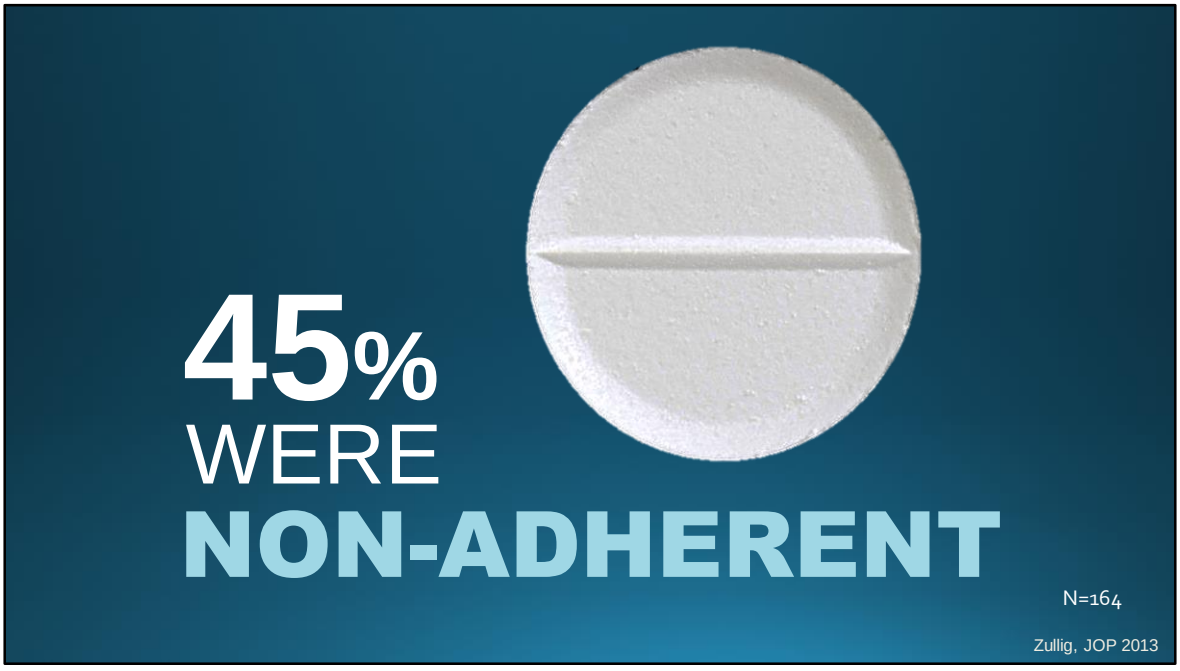
N=1,276

Kent, Cancer, 2013

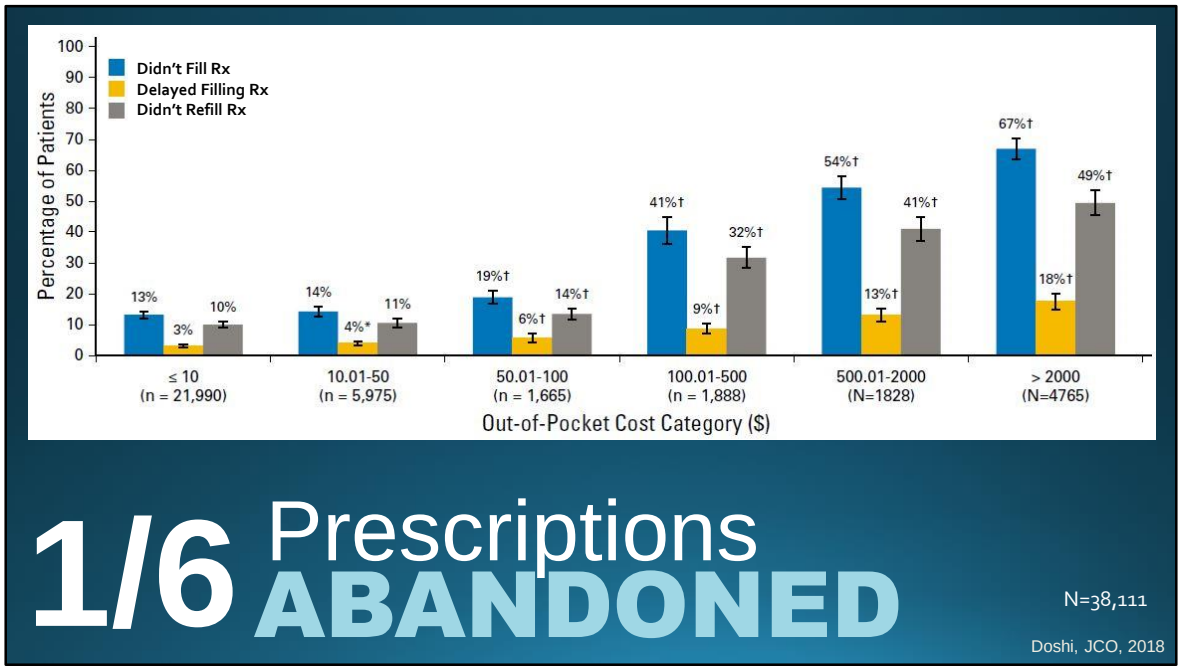
% survivors reporting forgoing or delaying care because of cost who also reported that cancer caused them financial problems is shown, adjusted for other covariates (age at last cancer diagnosis; sex; marital status; race/ethnicity; education; whether insurance paid for cancer treatment; residential region; recurrence or multiple cancer history; years since last cancer diagnosis; history of surgery, chemotherapy, or radiation; and number of comorbidities). Only survivors who reported not receiving cancer care within the previous 12 months (n=1276) were included. This also highlights that the financial toxicity of cancer care actually eclipses the treatment period.



A portion of patients simply cannot afford their medications. Imatinib study 6 months of starting for CML, higher co-pays ($53 month) decreased adherence



Healthwell patients had compromised care due to costs: 4% took medications prescribed for another person, 22% took less medication than prescribed, 25% filled a partial prescription, and 27% did not fill a prescription

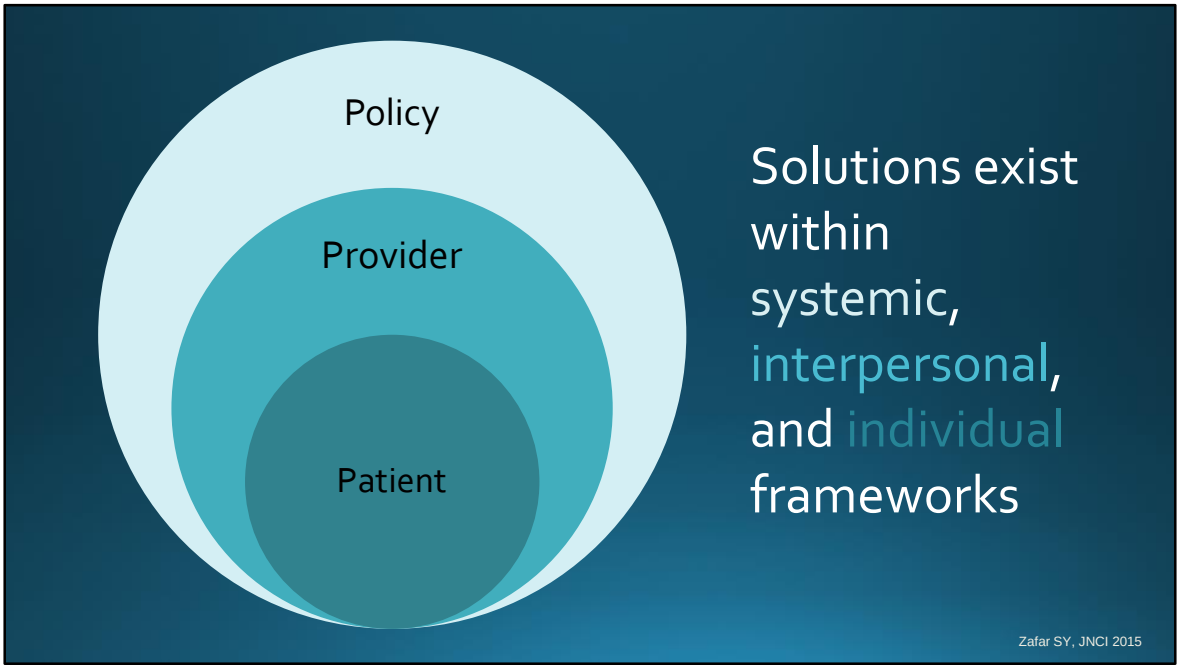


risk-adjusted rates of claim reversal (not filling Rx at all) ranged from 13% to 67%, increasing with higher OOP costs. The abandonment rate was 18% overall, risk-adjusted rates were higher in greater OOP cost categories.

Summarizing factors and impact, extreme financial distress decreasing well being, quality of life, quality of care and likely other unknown factors. All of which leads to a greater risk of mortality.

Each is evidence based financial toxicity


Skipping Dental Care
Financial distress
Buying less food
Working longer hours
Missing scans
Cutting out vacations
Missed appointments
INTERVENE
Using other people's medications
Borrowing from friends or family
Selling property
Non-adherence
Replaced prescriptions with over the counter medications
Delaying care

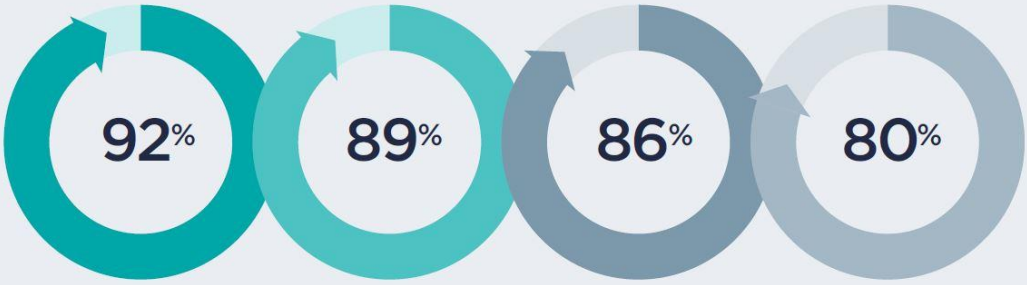


HOW DO WE INTERVENE: Look at systemic, interpersonal, and individual points of intervention

ASCO
AMERICAN SOCIETY OF CLINICAL ONCOLOGY

NATIONAL CANCER OPINION SURVEY
KEY FINDINGS

Overwhelmingly, Americans want the federal government to take action to lower prescription drug costs:



92% believe Medicare should be allowed to directly negotiate prescription drug prices with drug makers.

89% believe the FDA should speed up approvals of generic cancer treatments.

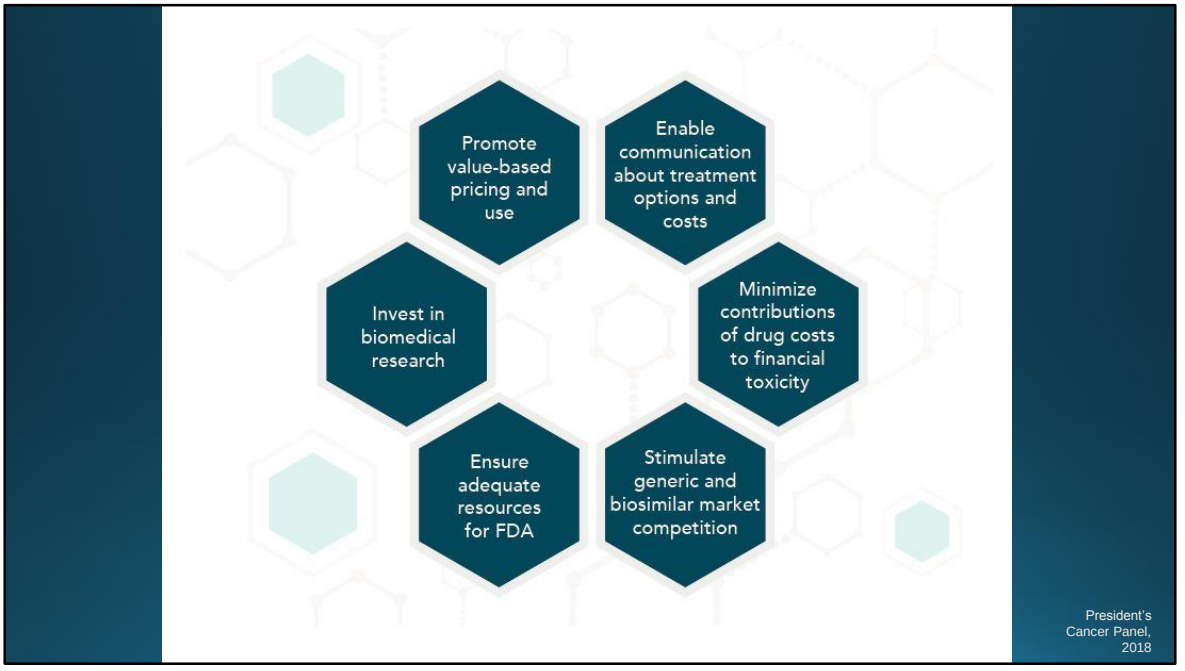
86% believe the U.S. government should regulate the price of cancer drugs to lower their cost.

80% believe it should be legal for U.S. residents to buy cancer drugs from other countries.

n=4,016

ASCO 2017 National Cancer Opinion Survey

The **President's Cancer Panel** advises the U.S. President on high-priority issues in cancer. The Panel was formed in 1971 and meets several times annually with key stakeholders and forms recommendations. In March 2018 they concluded that "addressing the dramatic rise of cancer drug prices must be made a national priority."



1. Promote value-based pricing and use of cancer drugs.

2. Enable meaningful communication about treatment options, including cost information, to support patients' decision making.

3. Minimize the contributions of drug costs to financial toxicity for cancer patients and their families.

4. Stimulate and maintain competition in the generic and biosimilar cancer drug markets.

5. Ensure that FDA has appropriate resources to assess cancer drug safety and efficacy efficiently.

6. Invest in biomedical research to create a strong foundation for developing innovative, high-value cancer drugs.

National Health Care Initiatives:

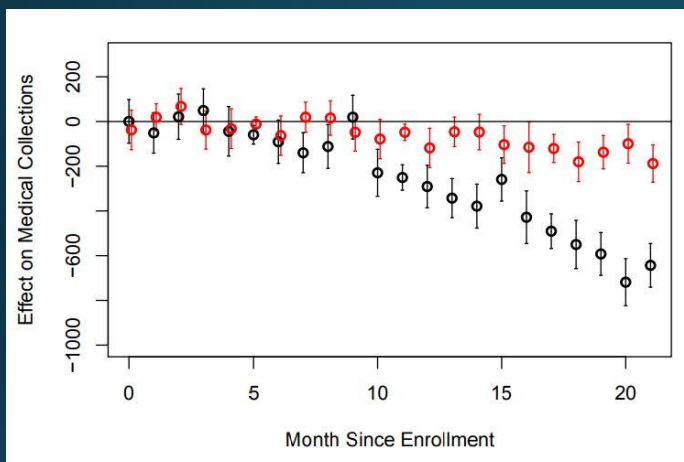
- The Affordable Care Act
- Choosing Wisely
- ASCO Value Framework

After the ACA: Everyone benefited in terms of **lower uninsurance rates,** however the **differential decrease favored** those who are the highest risk of **cancer disparities** (namely black patients and those living in high poverty areas)

n=197,290

Chino, IJROBP, 2018

SEER analysis, new diagnosed cancer patients treated with radiation



(b) Medical Collections

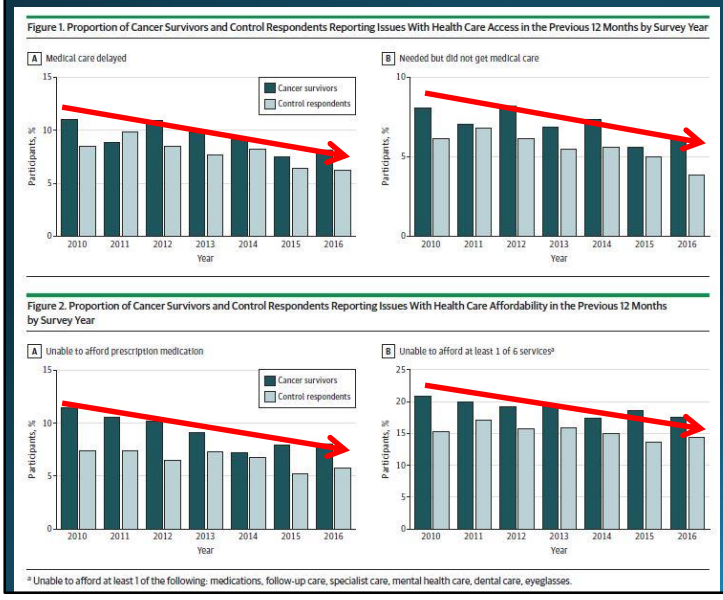
Medicaid expansion enrollees had lower rates of medical collections.

Patients with **chronic illnesses** benefited more than those **without chronic illnesses**

Miller, NBER Working Paper, 2018

SEER analysis, new diagnosed cancer patients treated with radiation

Health care access for cancer survivors **improved** under the ACA



Decreases in:

- Delayed Medical Care
- Foregone Medical Care
- Inability to Afford Medications
- Inability to afford 1 of 6 services (meds, follow-up, specialist care, mental health, dental or eyeglasses)

n=15,182

Nipp, JAMAOnc, 2018

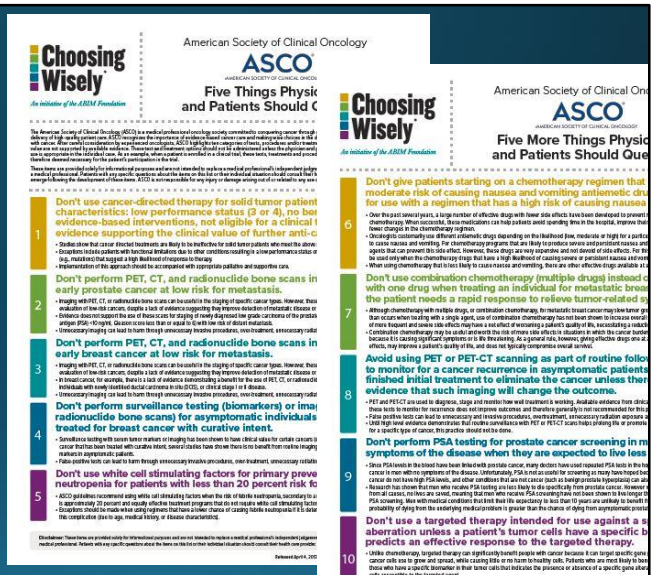
National Health Interview Survey (2010-2016) to conduct a population-based study of 30 364, grouped participants as adult cancer survivors (n = 15 182) and those with no reported history of cancer (control n = 15 182), matched on age. proportion of survivors reporting access and affordability concerns trended down throughout the years following the implementation of the Affordable Care Act. ASCO “Choosing Wisely” also implemented during this time.

Choosing Wisely®

An initiative of the ABIM Foundation

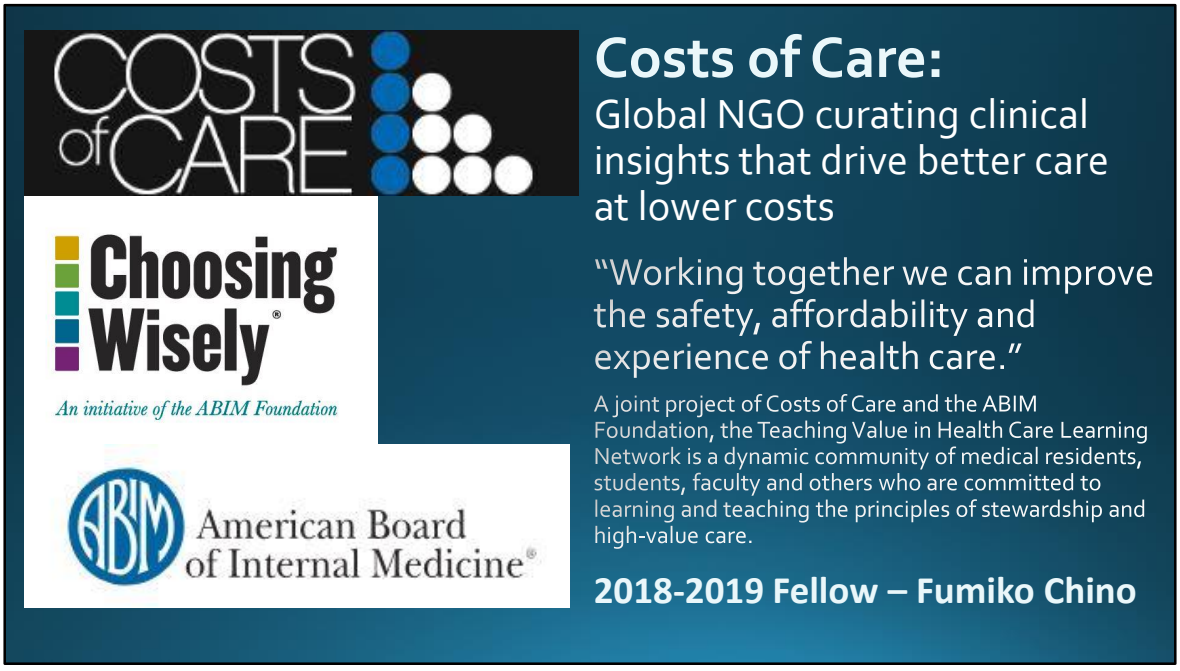
Released 2012, updated 2013

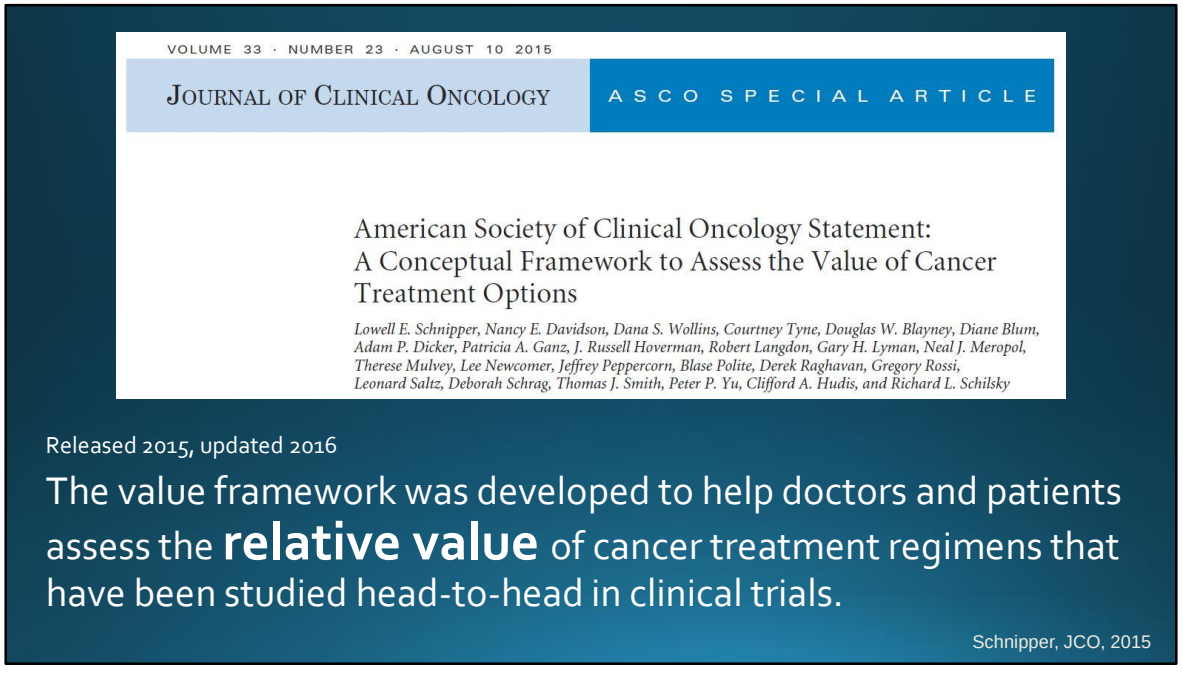
10 Cancer Tests and Treatments Routinely Performed **Despite Lack of Evidence**



http://www.choosingwisely.org/societies/american-society-of-clinical-oncology/

Viewed as opportunities to improve the quality and value of cancer care.

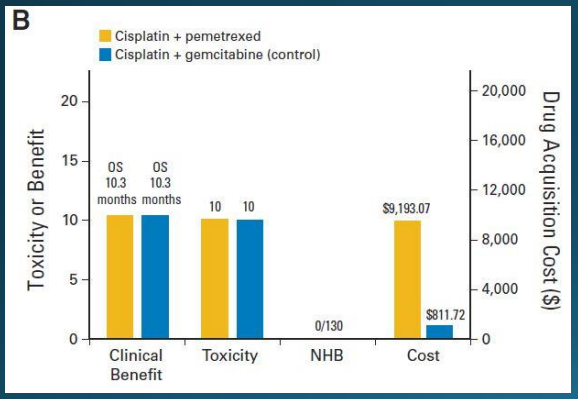

COSTS of CARE
Choosing Wisely
An initiative of the ABIM Foundation
ABIM American Board of Internal Medicine
Costs of Care:
Global NGO curating clinical insights that drive better care at lower costs
"Working together we can improve the safety, affordability and experience of health care."
A joint project of Costs of Care and the ABIM Foundation, the Teaching Value in Health Care Learning Network is a dynamic community of medical residents, students, faculty and others who are committed to learning and teaching the principles of stewardship and high-value care.
2018-2019 Fellow – Fumiko Chino



Task Force on the Cost of Cancer Care was formed in 2007. Its mission includes educating oncologists about the importance of discussing costs associated with recommended treatments, empowering patients to ask questions pertaining to the anticipated costs of their treatment options, identifying the drivers of the rising costs of cancer care, and ultimately developing policy positions that will help Americans move toward more equal access to the highest-quality care at the lowest cost.

Action Brief, 2014:

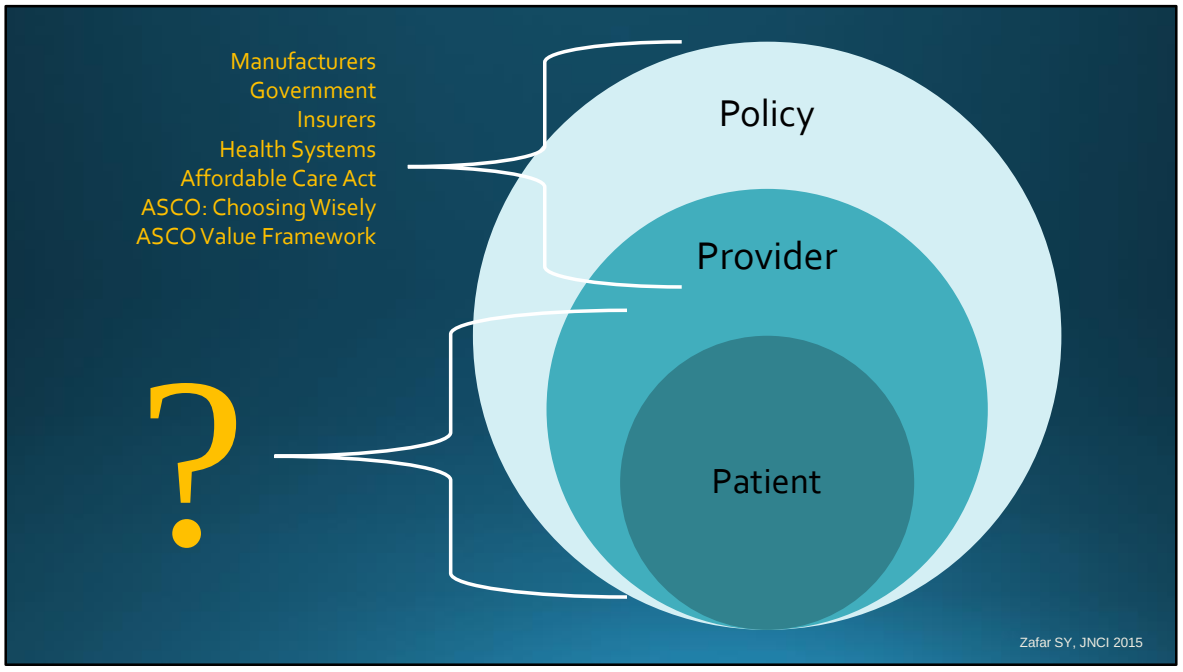
"**Price is what you pay.** Value is what you get." –Warren Buffet



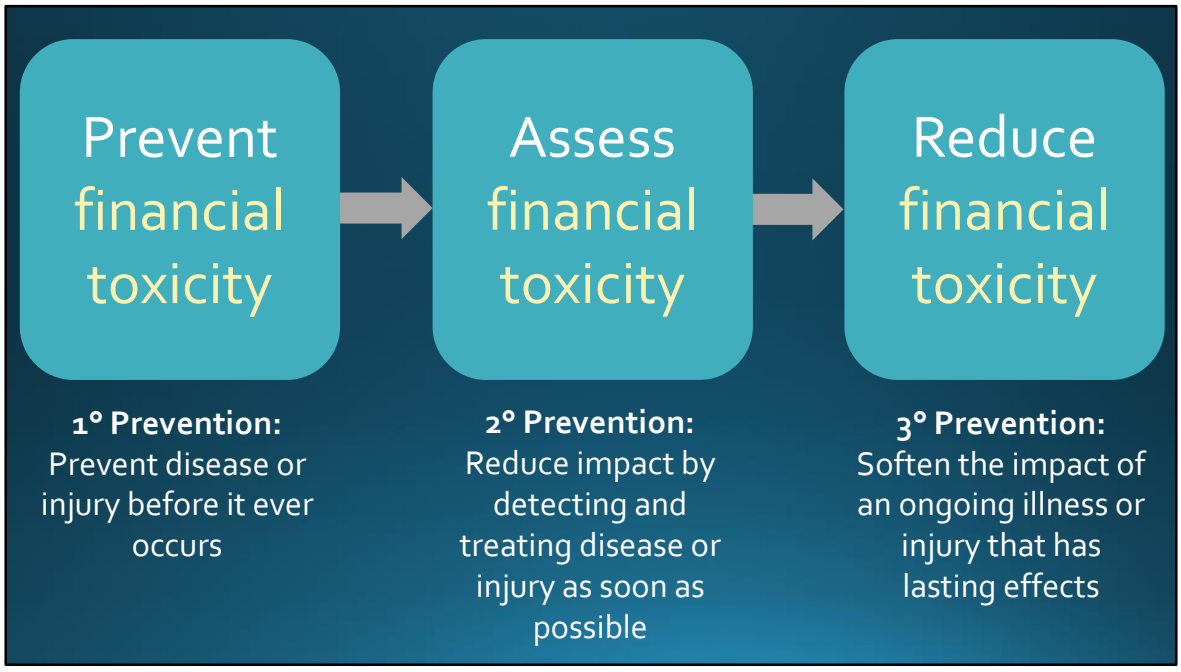
The framework is intended to be used as a discussion guide between doctors and patients and not as a substitute for physician knowledge or judgment.

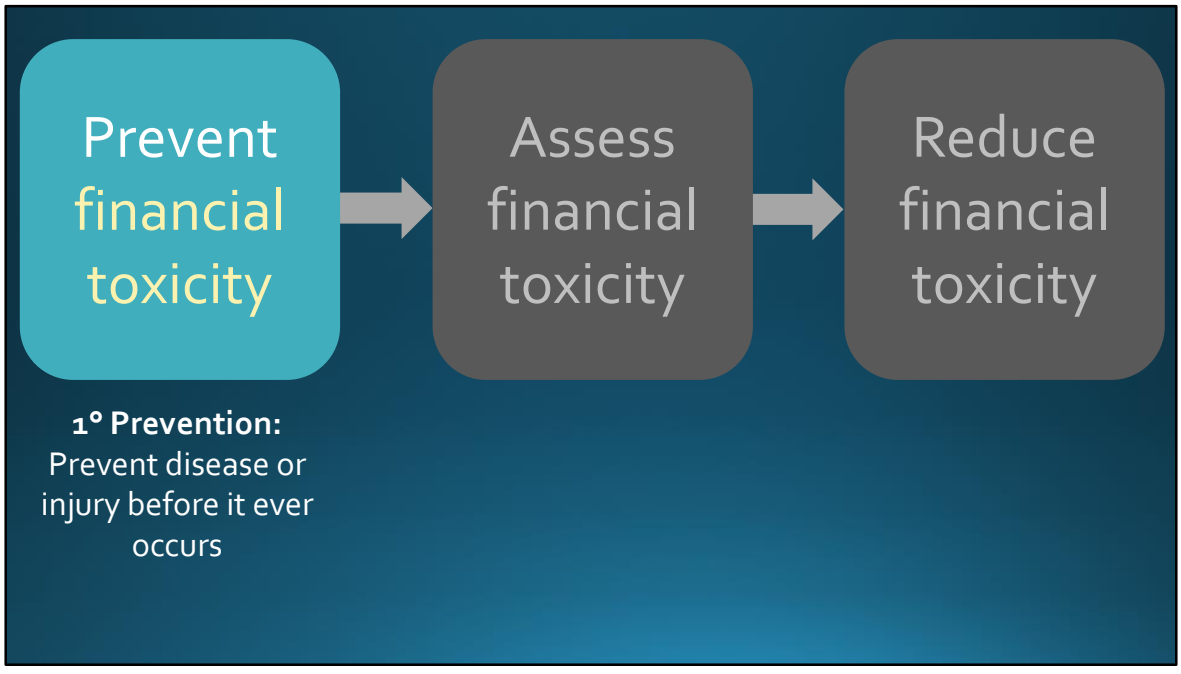
Schnipper, JCO, 2015

Clinical benefit and toxicity (and bonus points for palliation of symptoms and/or treatment-free interval, in the advanced disease framework) are combined to generate a net health benefit (NHB) score, which is then juxtaposed against the direct cost of the treatment, to provide an overall summary assessment. Ex: first-line treatment of metastatic non–small-cell lung cancer.



This is all well and good but what can we do to help our patients who may be suffering from financial toxicity? Most of the people in this room, including myself, are NOT deeply involved in policy recommendations or implementation at the macro level of health care delivery. For the last part of this talk I'd like to focus on concrete steps that we can do at the provider/patient level to affect real change on the micro level.


Prevent financial toxicity
Assess financial toxicity
Reduce financial toxicity
1° Prevention: Prevent disease or injury before it ever occurs
2° Prevention: Reduce impact by detecting and treating disease or injury as soon as possible
3° Prevention: Soften the impact of an ongoing illness or injury that has lasting effects


Prevent financial toxicity
Assess financial toxicity
Reduce financial toxicity
1° Prevention:
Prevent disease or injury before it ever occurs

Prevent Financial Toxicity from Forming

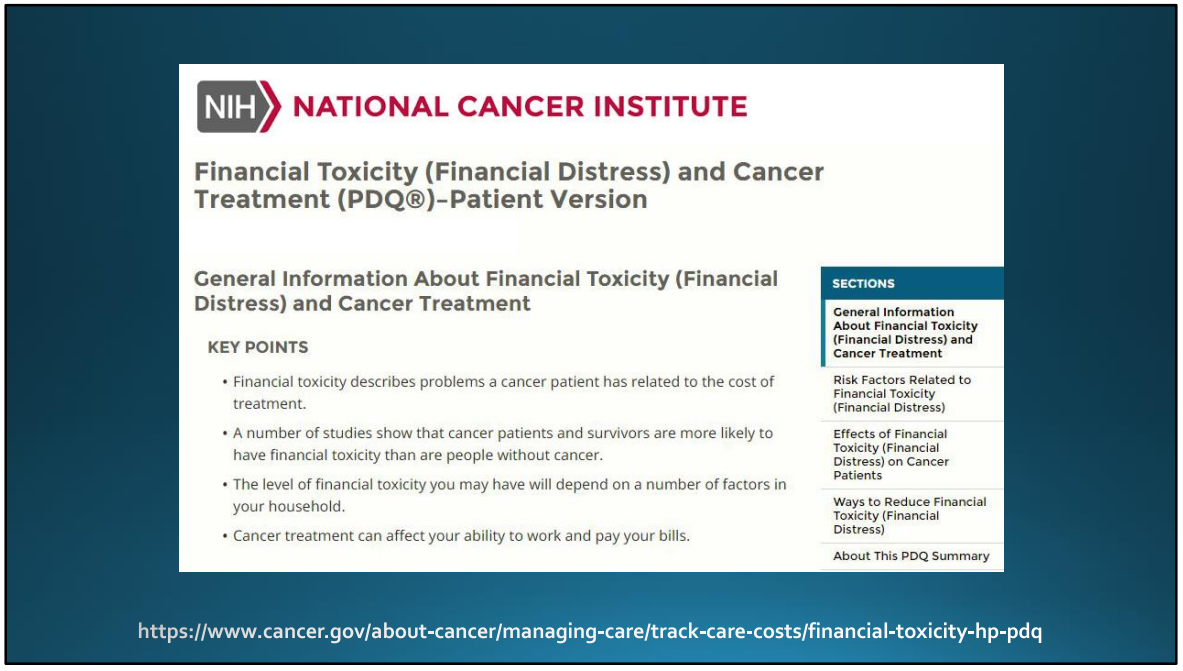
Patient Level:

- Education
- Optimize Insurance (Financial Navigators)
- Improve Access (maintain work, health insurance)

Provider Level:

- Education
- Value Based Care (ASCO Value Framework)
- Cost aware prescribing patterns

oncologists should focus on the value of care delivered



https://www.cancer.gov/about-cancer/managing-care/track-care-costs/financial-toxicity-hp-pdq

Trained Oncology Financial Navigators

- Four hospitals received training from NaVectis to either current employees (social workers, financial care counsellors etc) or a newly hired employee
- Program open to ANY cancer patient, not just those referred due to financial concerns
- Costs of implementing the program were ultimately covered by increased revenue
- Hospitals were able to avoid unreimbursed expenditures and save on charity care by an average of **$2.1 million per year**

Yezefski, AJMC, 2018

Categories of Cost Savings :

- Free medication
- Co-pay assistance (patient assistance foundations or pharmaceutical industry programs)
- Premium assistance
- Insurance enrollment (education on insurance options and referral to insurance brokers)
- Marketplace maximization: optimization of ACA Marketplace to obtain highest level of coverage with the lowest OOP costs
- Community assistance (including transportation and medical equipment)

Yezefski, AJMC, 2018

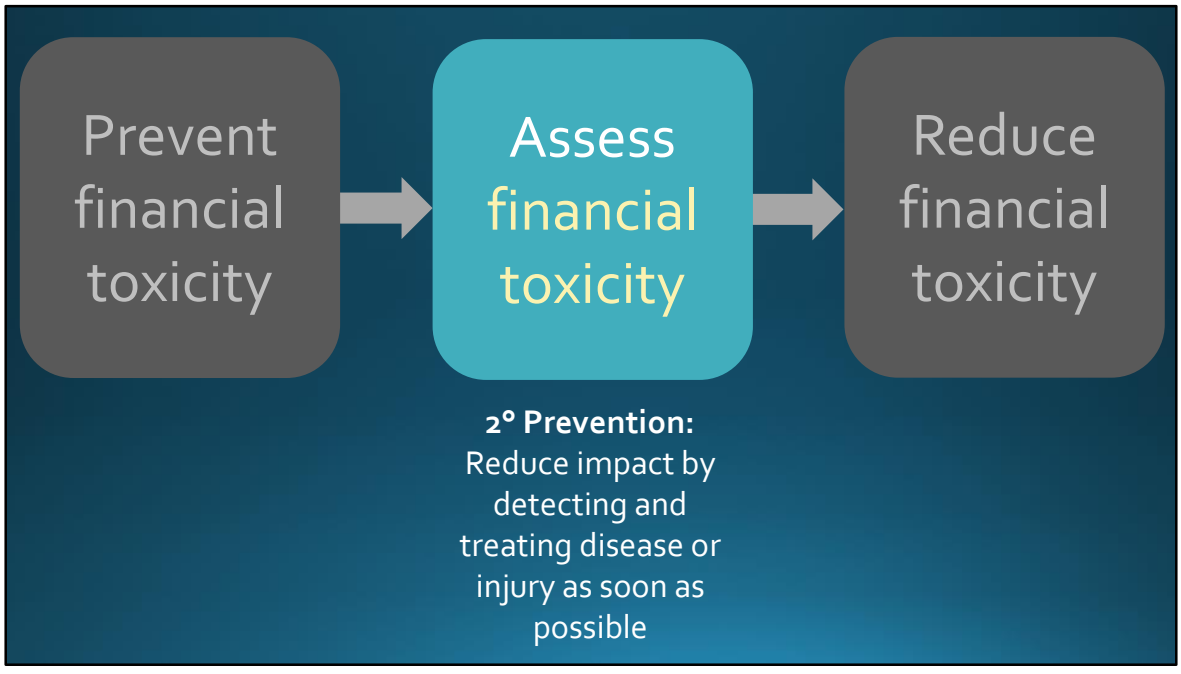
	Free Medication	Premium Assistance[a]	Co-Pay Assistance	Insurance Enrollment[a]	Marketplace Maximizing	Community Assistance
Hospital 1						
2016	$32,613		$4449	$7215 ($4960-$9470)	$2500	$348
Hospital 2						
2014	$28,629	$42,037 ($28,405-$55,670)	$3339	$4285	$2500	$1828
2015	$31,101	$20,334 ($13,556-$27,112)	$4505	$4081	$2500	$1176
2016	$144,816	$23,796 ($15,863-$31,726)	$4571	$3883	$2500	$608
Hospital 3						
2015	$12,167	$73,322 ($48,881-$97,762)	$2818	$5000	$5231	$850
2016	$12,852	$29,427 ($19,618-$39,236)	$2307	$4835	$7503	
Hospital 4						
2012	$24,308	$39,627 ($26,418-$52,836)	$1417	$5000		
2013	$26,228	$33,822 ($22,548-$45,096)	$359	$5000		
2014	$65,038	$29,513 ($19,675-$39,350)	$451	$12,252 ($8345-$16,159)		
2015	$42,621	$43,629 ($29,086-$58,172)	$503	$15,335 ($10,555-$20,115)		
2016	$40,838	$75,258 ($50,172-$100,344)	$812	$20,559 ($14,215-$26,904)		
Average	$33,265	$35,294 ($23,529-$47,058)	$3076	$12,256 ($8687-$15,825)	$2914	$880
Total	$9,879,779	$14,117,157 ($9,411,438-$18,822,876)	$2,541,105	$11,214,225 ($7,948,370-$14,480,079)	$259,357	$926,657

[a]When patient savings were not directly reported, they were estimated as 150% of hospital insurance payments, with a probable range from 100% to 200%.

Yezefski, AJMC, 2018

Mean Patient Benefits and Savings, Per Patient

By instituting financial navigation programs, hospitals were able to provide cancer care that previously would have been unaffordable to many patients. Hospitals that used trained financial navigators were able to provide significant financial assistance for their patients with cancer including decreased OOP expenditures.


Prevent financial toxicity
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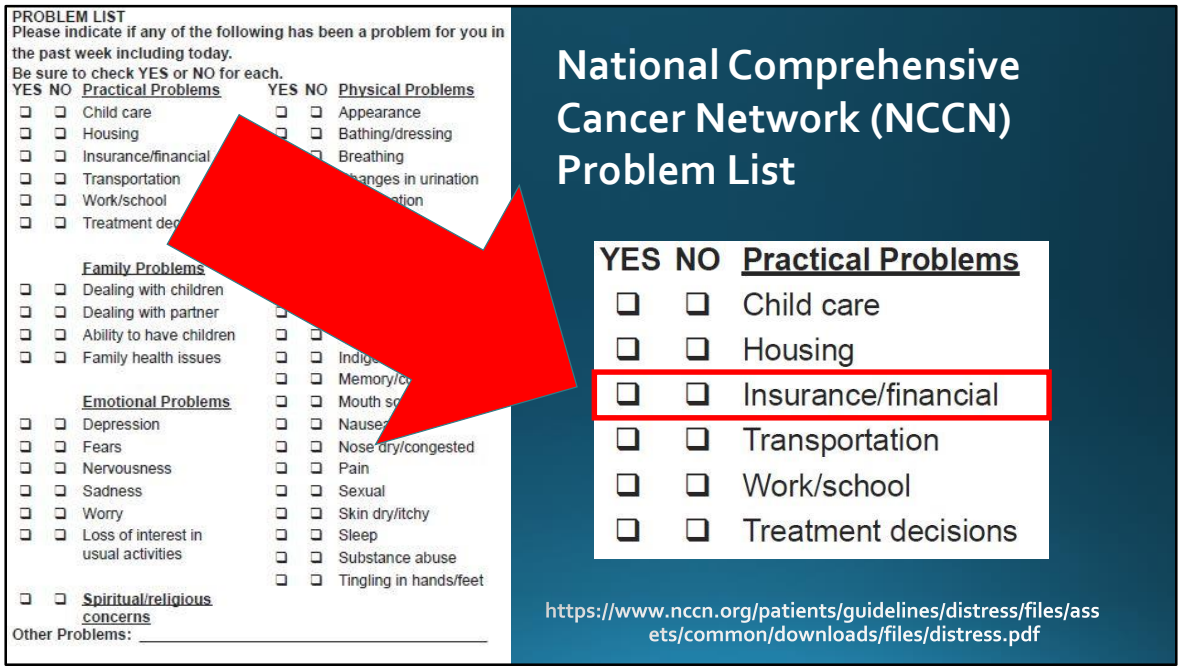
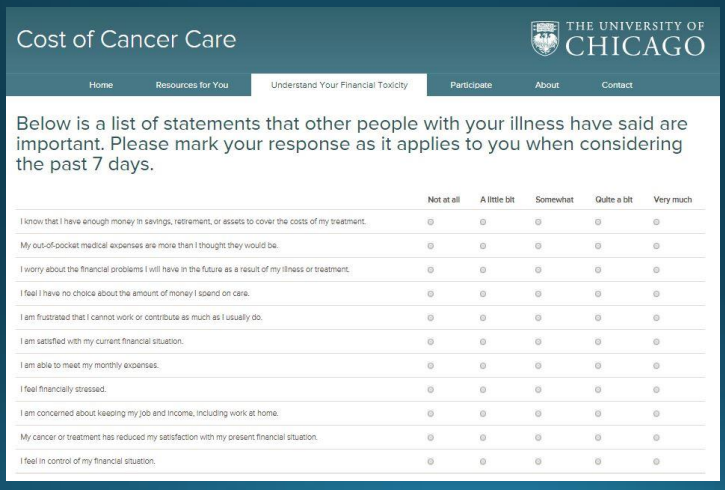
Reduce financial toxicity
2° Prevention:
Reduce impact by detecting and treating disease or injury as soon as possible



The NCCN Problem List is completed with the thermometer with help categorize the distress patients may be feeling. 39 questions about various symptoms or concerns.
A single question under “Practical problems” assesses via yes/no whether patients have insurance/financial problems.

The COmprehensive Score for Financial Toxicity (COST)



https://costofcancercare.uchicago.edu/

Validated assessment to score financial toxicity in cancer patients, developed by the University of Chicago Team

The COmprehensive Score for Financial Toxicity (COST)

- Scored from 0 to 44 (score of 0 represents the highest financial toxicity)
- Divided into 4 grades based on the impact of financial toxicity on patient's quality of life:
  - Grade 0: no impact on quality of life
  - Grade 1: mild impact
  - Grade 2: moderate impact
  - Grade 3: high impact
- Additional subdivisions by gender, education level and insurance type

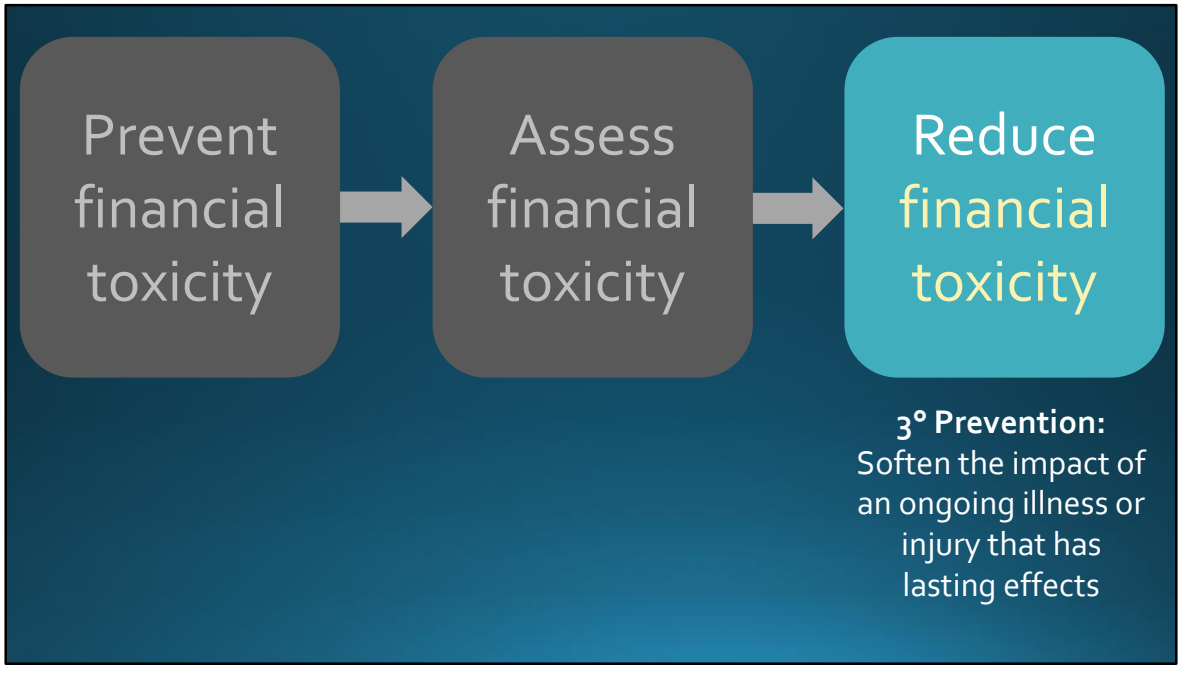
de Souza, Cancer, 2017

COST: A FACIT Measure of Financial Toxicity

I know that I have enough money in savings, retirement, or assets to cover the costs of my treatment
My out-of-pocket medical expenses are more than I thought they would be
I worry about the financial problems I will have in the future as a result of my illness or treatment
I feel I have no choice about the amount of money I spend on care
I am frustrated that I cannot work or contribute as much as I usually do
I am satisfied with my current financial situation
I am able to meet my monthly expenses
I feel financially stressed
I am concerned about keeping my job and income, including work at home
My cancer or treatment has reduced my satisfaction with my present financial situation
I feel in control of my financial situation

Download at http://www.facit.org/facitorg/questionnaires

FACIT: Validated questionnaires that measure health-related quality of life for people with chronic illnesses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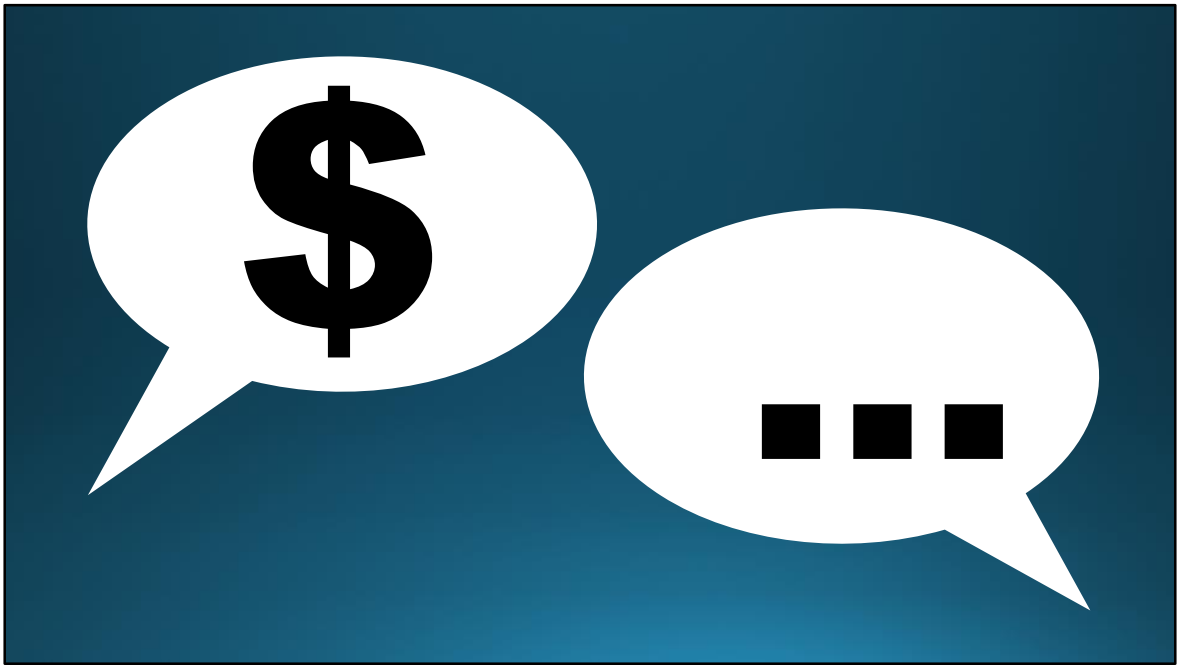
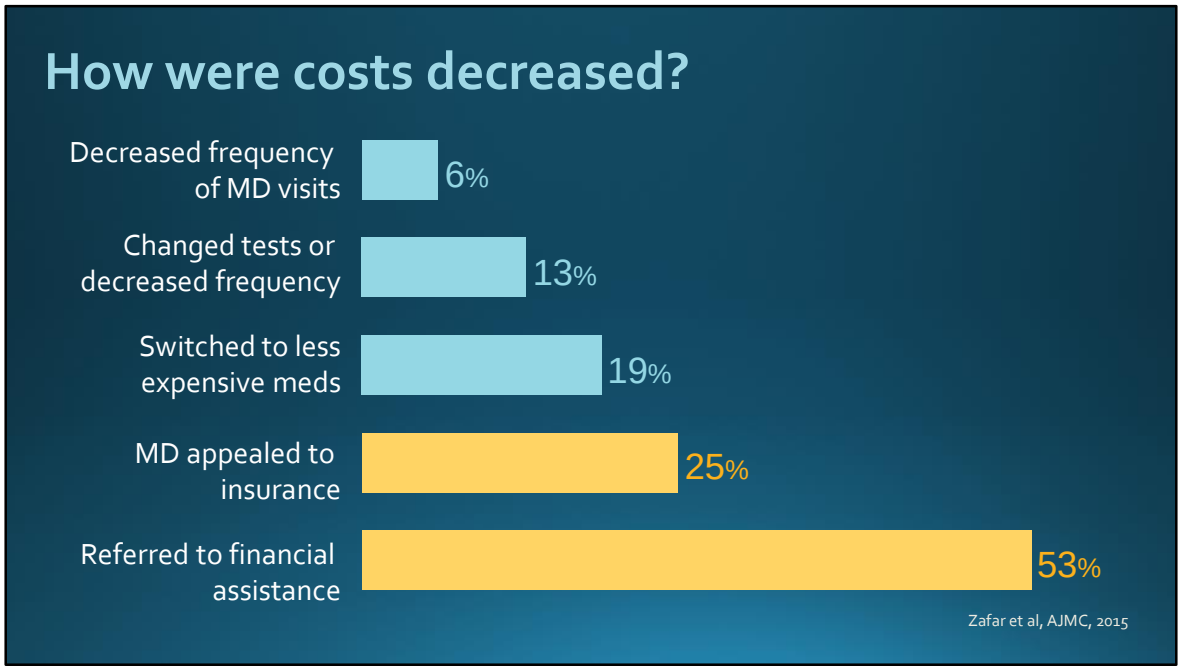
3° Prevention:
Soften the impact of an ongoing illness or injury that has lasting effects



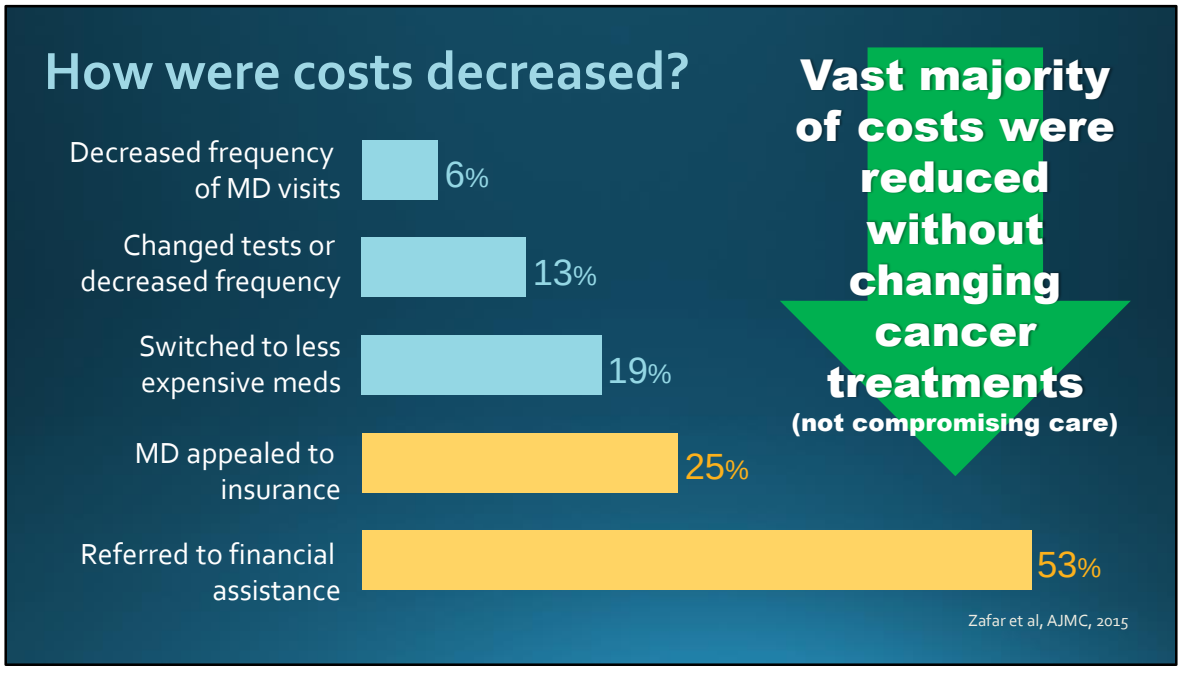
Simply asking patients if they have difficulty paying for their medical care is an important means for oncologists to ally themselves with patients. Talking about money is never easy. But when doctors are reluctant to talk about medical costs, a patient's health can be undermined.

Patient and provider attitude that costs can't be changed/lowered….not true… Open and honest communication. Promoting cost discussions. Most patients want to discuss costs but few do. Challenges: very little transparency can make cost discussions difficult

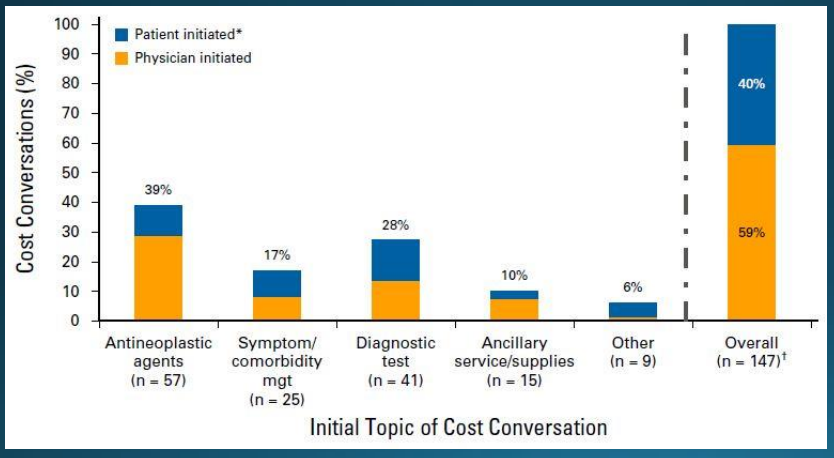

$
$
$
$
Over
50%
of those who discussed their costs reduced them
Zafar et al, AJMC, 2015



Costs reduced without changing cancer treatments (not compromising care)


How were costs decreased?
Decreased frequency of MD visits
6%
Changed tests or decreased frequency
13%
Switched to less expensive meds
19%
MD appealed to insurance
25%
Referred to financial assistance
53%
Vast majority of costs were reduced without changing cancer treatments
(not compromising care)
Zafar et al, AJMC, 2015

Cost conversations during cancer follow up visits



- 22% had cost conversations
- **33 second median duration**
- MDs initiated most conversations

n=677
Hunter, JOP, 2017

1 in 5 had cost discussions, most of which lasted less than 1 minute

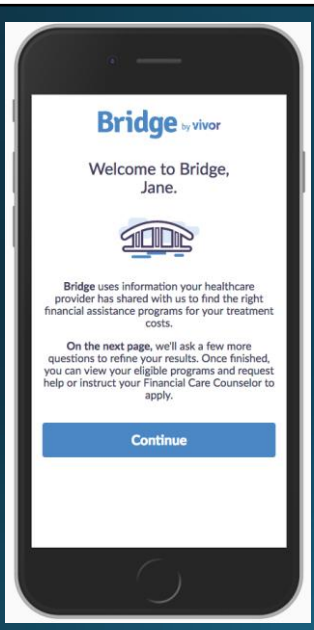
Cost-reduction Strategies

Changing care plan:	Not changing care plan:
• Switch to lower-cost alternative • Switch to generic • Change dosage/frequency or withhold	• Change logistics • Copay assistance/coupons • Free samples • Change insurance, disability enrollment

Hunter, JOP, 2017

Duke developed web-based application
94% of patients agreed/strongly agreed that Pathlight improved knowledge of financial aspects of cancer. 71% agreed/strongly agreed that the tool was helpful with financial concerns. Patients using Pathlight experienced a greater absolute decrease in median COST scores (3.5 vs 2.0 decrease).

Video education tools



Reducing Financial Toxicity for Cancer Patients with a

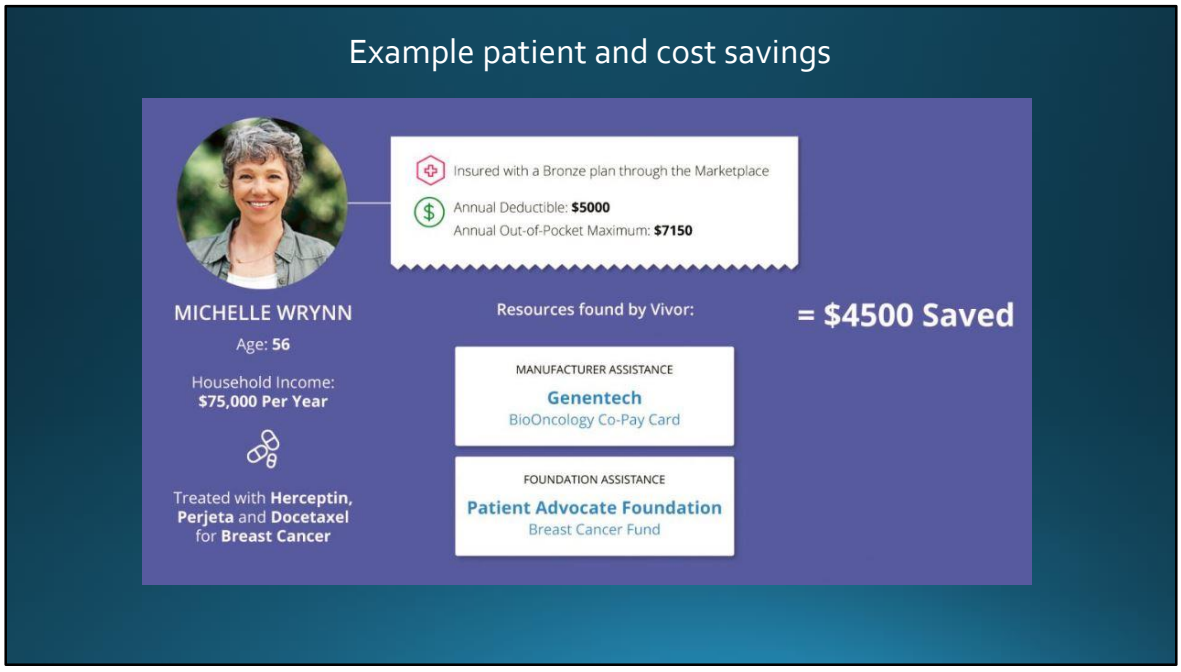
Mobile App

Bridge by vivor

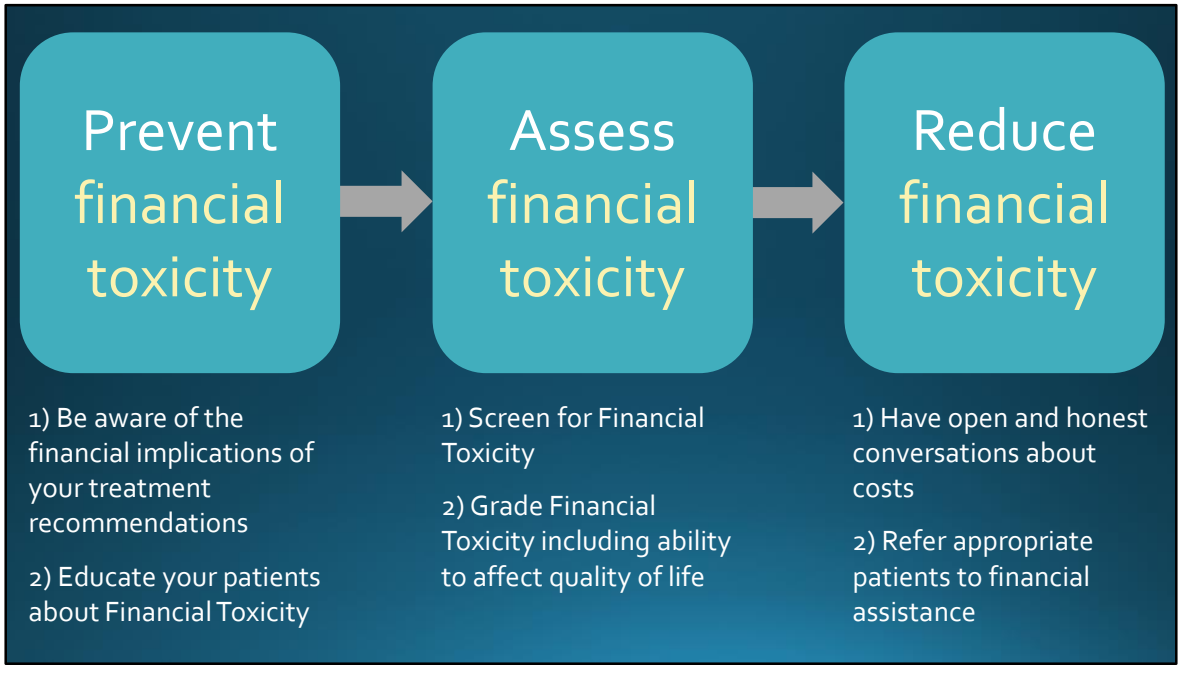
Bridge is a comprehensive mobile app that connects patients to financial assistance that can reduce their out-of-pocket costs for expensive cancer medications.

https://www.mag.mobile.duke.edu/blog/2018/3/12/reducing-financial-toxicity-for-cancer-patients-with-a-mobile-app

Vivor is a tech company from NYC, originally developed as a tool for financial care councilors to identify financial assistance, still in use at ~25 institutions ($450-1000 a month 0-200 to up to 1000 patients a year); Focused tool, need smart phone (interact through browser)



This is an example of cost savings taken from the Vivor site. [I receive no funding, grants, honoraria or other compensation from Vivor]


Prevent financial toxicity
Assess financial toxicity
Reduce financial toxicity
1) Be aware of the financial implications of your treatment recommendations
2) Educate your patients about Financial Toxicity
1) Screen for Financial Toxicity
2) Grade Financial Toxicity including ability to affect quality of life
1) Have open and honest conversations about costs
2) Refer appropriate patients to financial assistance

Prevent
Access
Reduce

We all have the responsibility to prevent, access and reduce financial toxicity. Starting may be a simple as asking your patients if they are having difficulties affording their care

Thank you

- S. Yousuf Zafar
- Duke Cancer Institute
- Iowa Oncology Society


Questions?
fumiko.chino@duke.edu

Facilitate copay assistance or charity care + switch to lower-cost alternative

Pt: Those drugs are expensive, aren't they?

Dr: It depends on your copay plans and all that.

…

Dr: Okay, once I write prescriptions for you, you're going to pick up the prescription for the pill. You're going to take it to the pharmacy and see what the copay. If it's a little large you're not going to take the pills. You're going to go back to the social worker and arrange for the company assistance to get access, so you can access it with reasonable amount of money, and if you don't want to pay any copay we're going to go with the injectables. You just comeback here instead of taking pills, and go on Taxotere, or maybe we'll give you Gemzar. There's plenty of options. There's just plenty of things.

(1:05)

Hunter, JOP, 2017

Changing logistics of intervention

Dr: We did the last scan in September; maybe do something in December or January, I don't know. Do you have to pay a new deductible in January?

Pt: I think we making, they changing some insurance -

Dr: So, it might be better to do another scan right before your deductible.

Pt: Right.

Dr: So, like end of December we do another scan…

(0:24)

Hunter, JOP, 2017

Change dose or frequency of intervention

Dr: Now what are we doing for your overall general pain, aches and pains?

Pt: We decided last time I was here that we were going to go with 40 mg of OxyContin.

Dr: How many at a time, one or two?

Pt: One. We were going to do it three times a day instead of two, but that's not going to work for me.

Dr: What's going to work for you?

Pt: I have to spend $200 on pain medication, that's how much those pills cost me.

Dr: For three a day?

Pt: Yep, $198 for 120 of them. So, I'd rather just go back to the 80s.

Dr: Alright, so I'll write for the 80s every 12.

Pt: Yeah.

(0:44)

Hunter, JOP, 2017