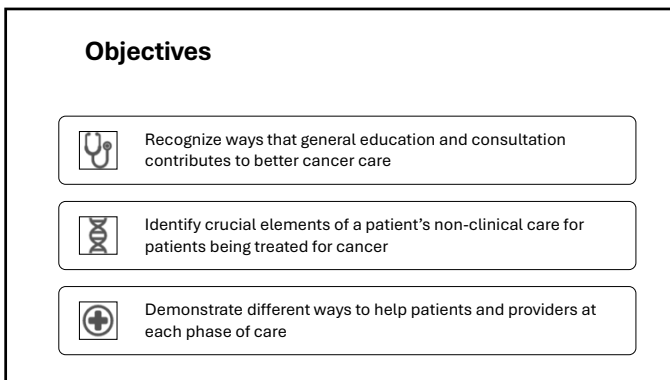




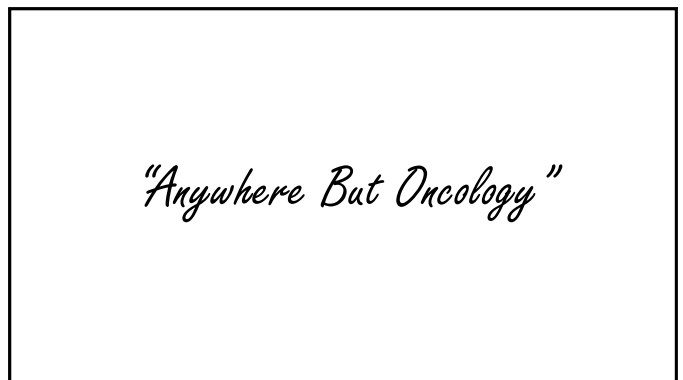
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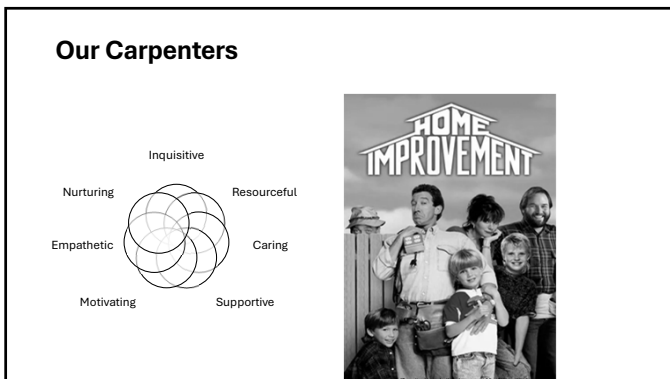
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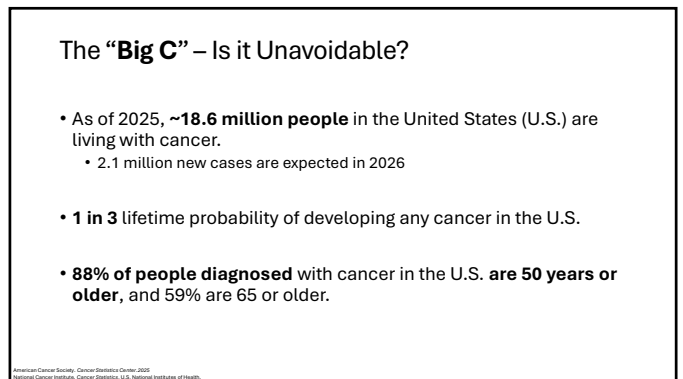
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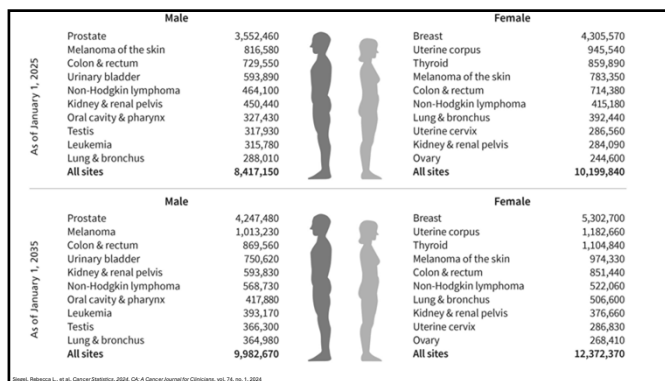
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Table 6. Probability (%) of Developing Invasive Cancer During Selected Age Intervals by Sex, US, 2018-2019, 2021

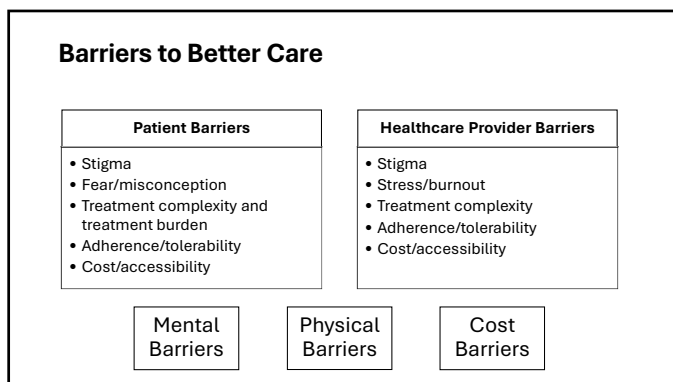
| Site | Sex | Birth to 49 | 50 to 64 | 65 to 84 | 85 and older | Birth to death |
|-----------------------|--------|----------------|----------------|----------------|------------------|----------------|
| All sites* | Male | 3.4 (1 in 29) | 11.3 (1 in 9) | 31.3 (1 in 3) | 18.7 (1 in 5) | 39.9 (1 in 3) |
| | Female | 3.0 (1 in 33) | 10.6 (1 in 9) | 34.2 (1 in 3) | 14.1 (1 in 7) | 39.0 (1 in 3) |
| Breast | Female | 2.1 (1 in 47) | 4.0 (1 in 25) | 22.0 (1 in 5) | 2.6 (1 in 38) | 12.1 (1 in 8) |
| Colon & rectum | Male | 0.4 (1 in 255) | 0.4 (1 in 255) | 0.9 (1 in 117) | 0.9 (1 in 117) | 0.4 (1 in 255) |
| | Female | 0.4 (1 in 255) | 0.9 (1 in 117) | 2.1 (1 in 47) | 1.6 (1 in 62) | 3.8 (1 in 26) |
| Kidney & renal pelvis | Male | 0.3 (1 in 390) | 0.7 (1 in 146) | 1.5 (1 in 68) | 0.5 (1 in 183) | 2.2 (1 in 45) |
| | Female | 0.2 (1 in 599) | 0.3 (1 in 289) | 0.8 (1 in 129) | 0.3 (1 in 313) | 1.3 (1 in 75) |
| Leukemia | Male | 0.3 (1 in 381) | 0.3 (1 in 297) | 1.2 (1 in 83) | 0.8 (1 in 122) | 1.8 (1 in 55) |
| | Female | 0.2 (1 in 483) | 0.2 (1 in 454) | 0.7 (1 in 138) | 0.5 (1 in 201) | 1.3 (1 in 77) |
| Lung & bronchus | Male | 0.1 (1 in 991) | 1.1 (1 in 99) | 4.8 (1 in 21) | 2.5 (1 in 40) | 5.8 (1 in 17) |
| | Female | 0.1 (1 in 991) | 1.1 (1 in 99) | 2.9 (1 in 34) | 1.8 (1 in 56) | 3.6 (1 in 28) |
| Melanoma of the skin | Male | 0.4 (1 in 258) | 0.8 (1 in 128) | 2.3 (1 in 43) | 1.4 (1 in 72) | 3.5 (1 in 29) |
| | Female | 0.6 (1 in 162) | 0.7 (1 in 152) | 1.1 (1 in 89) | 0.6 (1 in 181) | 2.5 (1 in 40) |
| Non-Hodgkin lymphoma | Male | 0.2 (1 in 407) | 0.5 (1 in 204) | 1.6 (1 in 64) | 0.9 (1 in 105) | 2.3 (1 in 44) |
| | Female | 0.2 (1 in 407) | 0.5 (1 in 204) | 1.6 (1 in 64) | 0.9 (1 in 105) | 2.3 (1 in 44) |
| Prostate | Male | 0.2 (1 in 468) | 3.8 (1 in 26) | 10.6 (1 in 9) | 2.2 (1 in 45) | 12.8 (1 in 8) |
| Thyroid | Male | 0.2 (1 in 500) | 0.2 (1 in 500) | 0.3 (1 in 342) | 0.1 (1 in 1,434) | 0.6 (1 in 160) |
| | Female | 0.8 (1 in 126) | 0.5 (1 in 207) | 0.5 (1 in 220) | 0.1 (1 in 1,136) | 1.7 (1 in 59) |
| Uterine cervix | Female | 0.3 (1 in 340) | 0.2 (1 in 564) | 0.2 (1 in 580) | 0.1 (1 in 1,691) | 0.6 (1 in 156) |
| Uterine corpus | Female | 0.3 (1 in 295) | 1.1 (1 in 91) | 1.7 (1 in 57) | 0.4 (1 in 245) | 3.1 (1 in 32) |

American Cancer Society, Cancer Statistics Center, 2022

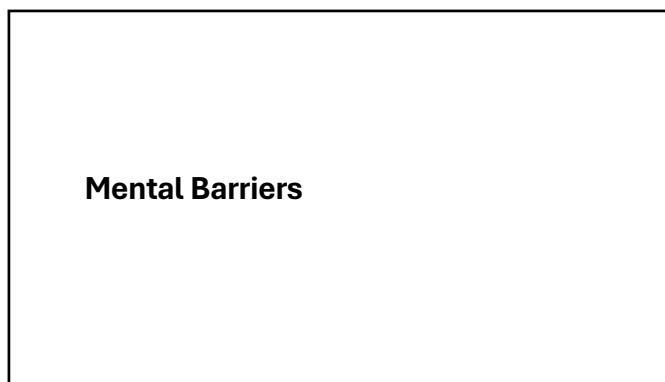
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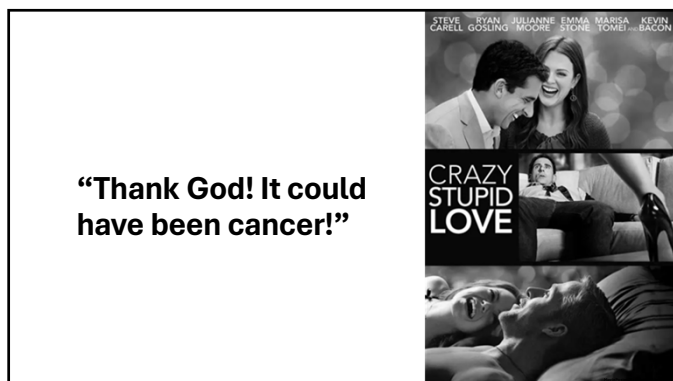
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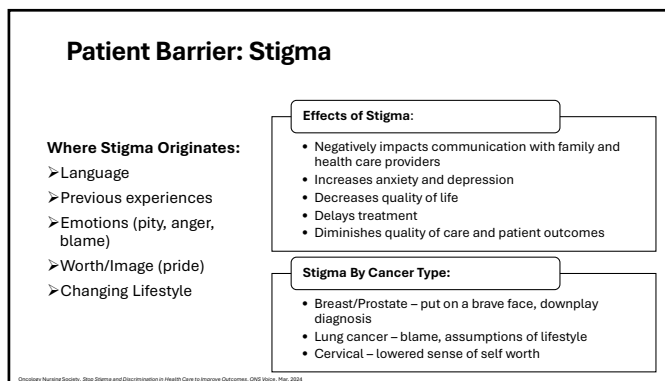
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11



12

Reducing Stigma

Avoid "blame" statements

- "If only you had..."
- "You should have..."

Validate emotions

Encourage patients to express their concerns and speak openly

Bring companions to office visits

Clarify misconceptions (ex. contagious, longevity, lifestyle)

Highlight that this is a *medical condition*, not a personal failing


Social support groups

OncoLink Nursing Faculty. Stop Stigma and Discrimination in Health Care to Improve Outcomes. ONC News, Mar 2024

13

Patient Barrier: Fear

- Fears
- Pain
- Death
- Previous Experiences
- Bankruptcy
- Loneliness
- Leaving behind loved ones
- Reoccurrence



14

Alleviating Fear for Patients and Families

- Social work referrals
- Support/advocacy groups (online or in person)
- Repetition: key information at each visit/stage of care
- Patient involvement: active involvement in treatment plan and discussions
- Encouraging physical and social activity
- **Patient education**
- **Set realistic expectations**

15

Appeasing Fear Through Patient Education

Through Medical Facts:

- Cancer treatment has come a long way → targeted approach
- Educate on disease state, diagnosis, and prognosis
- Survival Statistics
- Medication data sheets
- Clinical trials/approval data
- Goals of therapy

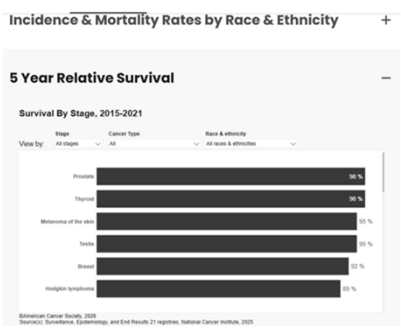
Through Genuine Care:

- Health Literacy – speak simply
- Eye contact and respect
- Providing additional resources
- Repetition
- Motivate to be active in treatment
- Instill hope with a plan
- **LISTEN TO YOUR PATIENTS!**

The "more better" approach
Better understanding = better buy-in = better outcomes

16

The 5-Year Survival Rates for all cancers combined has increased from **49%** for those diagnosed between 1975 and 1977 to **70%** for those diagnosed between 2015 and 2021



| Cancer Type | Survival Rate |
|----------------------|---------------|
| Prostate | 94% |
| Thyroid | 98% |
| Melanoma of the skin | 92% |
| Testis | 91% |
| Breast | 85% |
| Hodgkin lymphoma | 82% |

American Cancer Society, 2023
Source: Surveillance, Epidemiology, and End Results 21 registries, National Cancer Institute, 2023

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Transparency in Setting Expectations

- **Impact and Quality of Life**
 - Training for a marathon vs walking a couple miles a day
 - Working in the yard all day vs taking breaks
 - Matching work or school responsibilities to current capabilities
 - Working vs watching grandchildren
 - TIMELINES
- **Encourage Physical and Mental Activity**
 - Improves quality of life, overall well-being, and outcomes
 - Reduces fatigue
 - Strengthens immune system
 - Promotes better sleep
 - Reduces treatment side effects
 - Improves mental health and reduce stress
 - Provides empowerment
- **Encourage patients to FIND THE WINS**

American Cancer Society. Physical Activity After You Have Cancer. 2022

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Provider Stigma, Stress, and Burnout


Causes:

- Becoming numb to the diagnosis, shock factor, and tolerability of treatment
- Superhero complex
- Outcomes are generally worse
- Rapid progression/ Complex treatment
- High patient load
- LOTS of follow-up and complications

Resolutions:

- Maintain perspective
 - More readily available lab work
 - More intimate knowledge of patient through frequent visits
- Seek help when needed
 - Therapy
 - Resilience training
 - Workflow optimization
- Work as a team
 - Trust others/delegate
 - Use effective hand-offs
 - Maintain working relationships
- Personalize Goals of Therapy to each patient

19




Knowledge Check

Al Borland, co-host of the hit show *Tool Time*, just finished filming the latest episode. His oncologist tells him to call your pharmacy. He was recently diagnosed with colon cancer and asks about the new oral oncolytic prescribed for him. We tell Mr. Borland that the medication needs a prior authorization.

What can the pharmacist do to help Al?

- Tell Al that we will call him within 72 hours of receiving a paid claim
- Offer to address any questions that Al might have regarding his new medication or recent diagnosis
- Put him on hold and tell all your co-workers that you are talking to a celebrity!!!
- Relay that he should direct all non-insurance related questions to his oncologist

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Physical Barriers

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Treatment Adherence: ADEs

Managing adverse effects

- Severity/impact on quality of life
- Lifestyle modifications (diet and exercise)

Prophylactic care

- Used to prevent the occurrence of suspected and likely adverse event
- ex. dexamethasone solution with everolimus to prevent mouth sores
- ex. diclofenac gel to prevent hand-foot syndrome with capecitabine

Just In-case Meds

- ondansetron and loperamide = better to have and not need, than need and not have
- ex. abemaciclib:loperamide (high incidence)
- ex. abemaciclib:ondansetron (low emetic potential)

Frequent follow-up

- Catching problems early
- Initial education, 5-day follow-up, refill questionnaires, 6-month reassessments

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Time Commitment and Complexity

| Patients | Pharmacists/Health Care Providers |
|---|--|
| <ul style="list-style-type: none"> • Time-Consuming <ul style="list-style-type: none"> ◦ Frequent bloodwork/office visits ◦ Oral vs. IV vs. Radiation ◦ Contacting the pharmacy or provider office ◦ Hours of operation • Treatment complexity • Comorbidities • Pill burden • Cascading iatrogenesis • Language barriers • Insurance approvals | <ul style="list-style-type: none"> • Time consuming <ul style="list-style-type: none"> ◦ Frequency of visits ◦ Advise to schedule blood work before office visit or same day if it is an option • Treatment Complexity <ul style="list-style-type: none"> ◦ Navigating drug interactions ◦ Scheduling/aligning treatment cycles ◦ Digging through provider notes ◦ Contacting providers and patients • Language barriers • Insurance approvals |


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Knowledge Check

Al Borland has been on his new cancer medication, capecitabine, for two months. Upon routine questioning during the refill process, he says, "I am too darned busy for these frequent office visits and bloodwork. Every time you call, I miss the call because I'm filming! When I call back, you leave me on hold. And the doctor said I can't take omeprazole because of an interaction! I HAVE HEARTBURN!!!!" He confides that he started taking the omeprazole again even though he knows he shouldn't.

What barriers to better care need to be addressed for Al?

- Schedule navigation, drug interactions, and communication issues
- Al's poor attitude and the need to address you with respect
- The staff's apparent heavy workload that cause care delays




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- The staff's apparent heavy workload that cause care delays



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What Can Pharmacists Do?



Documentation

- Drug interactions
- Conversations/ open ended questions
- Issues/concerns
- Patient preferences



Be resourceful

- Language lines
- MyChart/text messages
- Telehealth
- Combined visits
- Interprofessional relationships

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Operational Barriers

- Reporting errors, near-misses, and adverse events can feel time consuming and burdensome
- Consistent and reliable reporting can lead to impactful changes
 - Saves time in the long run
 - Updates clinical safety information
 - Leads to positive policy, workflow, and patient safety changes
- Typical Example:**
 - Look-Alike, Sound-Alike (LASA)
 - Tall Man Lettering

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Policy and Workflow Changes

My Own Experience:

- Changes in prescribing practices**
 - Abemaciclib +/- free loperamide
 - New everolimus orders built with dexamethasone solution
 - Alpelisib (different strengths = different indications = different brand names)
- Changes in testing**
 - Dihydropyrimidine Dehydrogenase (DPD) testing before capecitabine
 - Baseline EKG monitoring before ribociclib
- Changes in communication**
 - Including pharmacists on physician outreach
 - Subject on Prior Authorization e-mails
- Changes in workflow**
 - Medicaid and thioguanine

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Commonly Missed Interactions

Darolutamide for prostate cancer with rosuvastatin

Increases rosuvastatin AUC 5 fold (max 5 mg rosuvastatin)

Enzalutamide for prostate cancer with apixaban/rivaroxaban

Decreases blood thinner by 25-50%

Dasatinib for CML and acid reducers (PPI and H2RA)

Omeprazole decreases dasatinib by 89-95%

Venetoclax and carvedilol


Increases serum concentration of venetoclax (decrease dose by 50%)

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Cost and Accessibility Barriers

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“Financial Toxicity”



“Financial toxicity” is a term used to describe how out-of-pocket costs can cause financial problems for a patient.

- Cancer survivors usually report **higher out-of-pocket spending** than people who have not had cancer.
- Some cancer survivors report spending **more than 20% of their annual income** on medical care.

National Cancer Institute. Financial Burden of Cancer Care. Cancer Trends Progress Report, Apr. 2015

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Cost and Accessibility

- Can delay or prevent care
 - Prior Authorizations
 - Insurance Lockouts
 - Limited Distribution
 - Copay Assistance/Grant Approval/ Free Drug Approval
- Additive Ancillary Medications:
 - Pain medications
 - Nausea medications
 - Bowel regimens
 - Steroids
 - Topical creams
- Most expensive: leukemia and brain cancer
- New Year = New Deductibles

National Cancer Institute. Financial Burden of Cancer Care. Cancer Trends Progress Report, Apr. 2015


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Cost and Accessibility

- Average Patient → \$110-120k/year
- Average *Out of Pocket* → \$5-15K with insurance
- Costs include:
 - Surgery
 - Radiation
 - Chemotherapy
 - Hospitalization
 - Diagnostics/imaging
 - Prescriptions

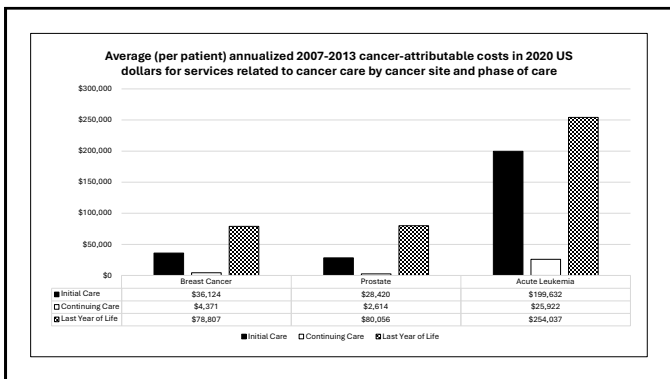
A complete course of therapy is Often \$200-300K

The Average Cost to Build a Standard 1,800 Sq Ft 3-bedroom, 2-bathroom home in Connecticut is \$250 – 360K




1. National Cancer Institute. Financial Burden of Cancer Care. Cancer Trends Progress Report, Apr. 2015
2. American Cancer Society. Cancer Action Network. Medical Expenses for Cancer Care.
3. “Cost per Square Foot by State.”

34




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Cost and Accessibility



Insurance lockouts

Contracted with specific pharmacies based on insurance plans
Commercial Insurance only




Limited Distribution Drugs

Specialty medications which are available only through limited, specific pharmacies

Common with newly approved medications (cost/handling/administration concerns)

Helps control costs and streamline supply chains and targeted access to drugs



Solution:

Keep patients informed and provide pharmacy information and next steps

Maintain follow-up when possible

©2016 Avastics. Understanding Limited Distribution Networks. 11 Nov. 2016.

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Circumventing Cost and Accessibility

• SETTING EXPECTATIONS

- Timelines!

• Effective Handoffs

- Workflow processes
- Informing patients

• Prior Authorizations

- Use proper, clear documentation and link accurate and updated diagnosis codes

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Circumventing Cost and Accessibility

340b Programs

- Section 340b of the *Public Health Service Act* requires pharmaceutical manufacturers participating in Medicaid to sell outpatient drugs at discounted prices to health care organizations which care of many uninsured/low-income patients and pass those savings along to the consumer

Grants

- Used in combination with insurance to cover the cost of the copay
- These can be pursued by the patients themselves OR on their behalf
- Examples include National Breast Cancer Foundation, Leukemia and Lymphoma Society, American Cancer Society, CancerCare, PAN Foundation

Free Drug Programs

- Offered by drug manufacturers to assist with the cost of patient's living at or below 150% poverty line
- Comes direct from the manufacturer, no insurance involved
- Tends to be last step

Together4Cancer: 10 Organizations Offering Cancer Support Grants
American Hospital Association: Fair Share 608 Drug Pricing Program, 23 Nov. 2025

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Circumventing Cost and Accessibility

Copay cards

- Manufacturer specific
- Brand name meds only
- Used with insurance

Discount Cards

- Used in place of insurance
- Best for older/generic medications
- Unreliable, found online

Medicare Caps

- 2026 PART D: Annual out of pocket cost \$2,100 (upfront) → Once met, patient will pay \$0 out-of-pocket for covered drugs for the remainder of the year

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Medicare Recap

- **Medicare Part A: Hospital Insurance**
 - Drugs administered during stay at inpatient hospital or skilled nursing facility

- **Medicare Part B: Medical Insurance**
 - Specific Criteria (oral anti-cancer, immunosuppressants, vaccines, physician administered)

- **Medicare Part C (Advantage): Supplemental**

- Covers a broad range of prescription drugs and vaccines dependent on plan

- **Medicare Part D: Prescription Drug Coverage**

- Primary Medicare prescription drug coverage

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Medicare Part D Caveats

- Medicare is Federally funded program
- Max out-of-pocket for individuals in 2026 is \$2,100
 - Front loaded
- Offers Medication Prescription Payment Plan (M3P)
 - Provides a \$0 copay at the pharmacy while charging the patient a monthly payment directly to the Medicare Plan through the end of the year
- Ineligible to be used with manufacturer co-pay cards
 - Anti-kickback statute
 - Prevents inflation costs

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Circumventing Cost and Accessibility

Avoiding Insurance All Together (uninsured/high-deductible plans)

TrumpRX

- Government-run online platform for discounted prices on BRAND NAME medications
- Coupons for specific pharmacies or manufacturer direct to patients
- Program is Medicare eligible
- New → Only two options for cancer now and still expensive
 - midostaurin \$26,823 → \$5,817
 - capmatinib \$11,666 → \$2,669

Mark Cuban Cost Plus Drugs


- Uses URAC-accredited facilities
- GENERICS
- Cost breakdown
- Can filter by disease state or search for medication name
- More options → around 30 different medications for common cancers including breast cancer, leukemia, and prostate cancer
- Examples:
 - abiraterone \$12,192 → \$91.25
 - Imatinib \$9,657 → \$34.50

U.S. Department of Health and Human Services, "TrumpRX"
Cost Plus Drugs, Manufacturer User Fee Data Collection

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Knowledge Check

During one of their late-night talks, the **retired** Wilson W. Wilson Jr, a.k.a. Wilson, confides in his long-time neighbor, Tim, that he has recently been diagnosed with prostate cancer. Tim is scared for Wilson and begins immediately trying to fix his friend, spewing facts and ideas about how he can help. Always insightful and philosophical, Wilson interrupts Tim, reassuring him that he is not afraid because he has spoken extensively with his care team and trusts that he is in good hands. His only concern is the exorbitant cost of his medication even though covered by Medicare.




All of the following are options to help Wilson with affordability EXCEPT?

- Medicare Payment Plan (M3P)
- A grant through the PAN Foundation
- Applying for Free Drug Program
- Manufacturer Copay Card
- Mark Cuban Cost Plus Drug

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Helpful Resources

- **DailyMED – National Institute of Health**
 - Free
 - Excellent for injectable medications
 - Pictures of packages/how supplied
 - Detailed description drug appearance and size
- **Drug Disposal Locator – NABP**
 - Free
 - "Safe.pharmacy"
 - Uses address or zip code to find closest locations
 - Provides name, distance, address and phone number of location
- **NatMed Pro**
 - Subscription required
 - Great for natural products and herbal supplements
 - Can search commercial products, drugs, or ingredients

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Key Takeaways

- Manage expectations (of both the patient AND our own!)
- Maintain perspective
- Creating environments in which patients feel involved and confident in their care can lead to significantly better outcomes and quality of life
- Take the extra time to listen
- Be resourceful. Think outside the box

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"Right Fit, Tight Seal"



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Acknowledgment

I would like to sincerely thank Jeannette Wick for nominating me for this wonderful opportunity and for her contributions and insight into the development of this presentation.

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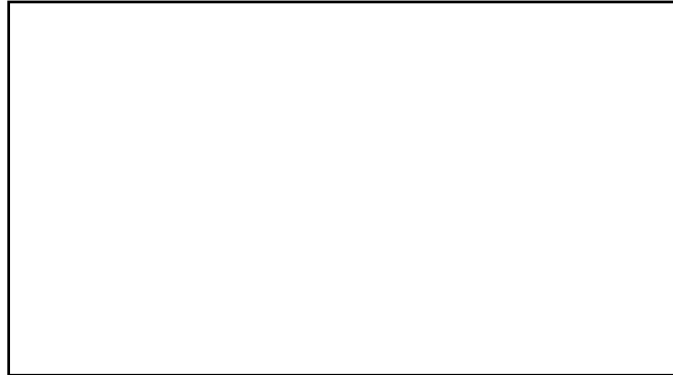
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5. CDC. ["Obesity in Men and Women"](#). [https://www.cdc.gov/od/oc/ohrt/obesity.htm](#)
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