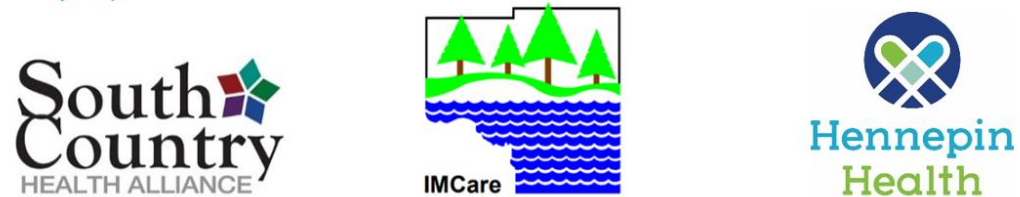


MN Health Plans Collaborative



Today's Presenters

- Brian Palmer, MD, Associate Medical Director, Health Plan Behavioral Health, HealthPartners Dr. Palmer is a practicing psychiatrist at Regions Hospital and leader of behavioral health for HealthPartners health plan. He completed his medical education at Mayo Clinic and residency at Massachusetts General Hospital / McLean Hospital before returning to the staff of Mayo Clinic where he held progressive leadership in clinical and educational programs, including as Vice Chair, Education. Before joining HealthPartners, he was Vice President, Mental Health and Addiction Services, for Allina Health. He is the author of 37 peer-reviewed papers, a dozen book chapters and an edited book.
- Sara Spilseth, MD, Associate Medical Director, HealthPartners Dr. Spilseth is a practicing internal medicine physician and leader of HealthPartners health plan's quality initiatives. She oversees the quality of care provided to the 1.8 million members including involvement in medical policy creation, utilization review, quality case review, provider monitoring, credentialing, population health quality metrics and accreditation of the health plan. In addition to her formal leadership roles, Dr. Spilseth is an influential participant in numerous committees both within HealthPartners but also in local and national organizations. She remains an active clinician, practicing as a hospitalist at Regions Hospital, a level-one trauma center and tertiary care hospital in St. Paul Minnesota. She strongly believes the true value of a care system comes not from how well we treat one individual patient but rather from the quality of care delivered to the whole population we serve.

Diabetes and Depression: 3 cases

Brian Palmer MD, Associate Medical Director,
Health Plan Behavioral Health

Sara Spilseth MD, Associate Medical Director,
Health Plan Quality



Outline

Introduction

1. Case 1

What's diabetes? What's depression?

What are the nuances of the interaction?

2. Case 2

Depression vs. Frustration

Engagement/motivation strategies

3. Case 3

Social drivers and cost issues

Introduction

Diabetes

- Type 2 global prevalence of 10.5% among adults
- Prevalence is increasing driven by increasing rates of obesity
- Genetics increases risk
- Prevalence increased among Black, Asian and Hispanic individuals

Depression

- 5% of adults suffer from depression
- 50% more common in women than men
- Despite effective treatments, more than 75% of those effected remain untreated

Introduction

Depression & Diabetes

- Managing diabetes is stressful and can lead to symptoms of depression
- Diabetes can lead to complications that worsen depression
- Depression can make it difficult to do tasks, communicate and think clearly



Case 1

34-year-old English-speaking Hmong man with Type 1 diabetes is hospitalized for severe depression and thoughts of suicide after overtaking (?overdosing) on insulin. He has advanced diabetes, with severe visual impairment, renal insufficiency, and poorly controlled hypertension. His HgbA1C is 9.

He cannot work and is on disability. The mother of his son and his son have moved out of state, and he does brighten when he talks about his son's success as captain of his hockey team, though the patient hasn't been able to see a game this year and only speaks to his son once every few months. The patient shares that he also loved hockey as a kid.

You assess depression, and he endorses depressed mood and anhedonia persisting for several months. He has few/no interests and spends the day inside, frequently crying and thinking about his regrets as a father. He does not want to die but admits at times he thinks that would be best, and in his darkest moments (like before the hospitalization) he mismanages his insulin to go low, wondering if he will die. He struggles to fall asleep and wakes frequently overnight. He was previously on citalopram which helped but he has stopped taking it.

Case 1

As you work to build a relationship and sort out how to be helpful, which question/observation would be most important?

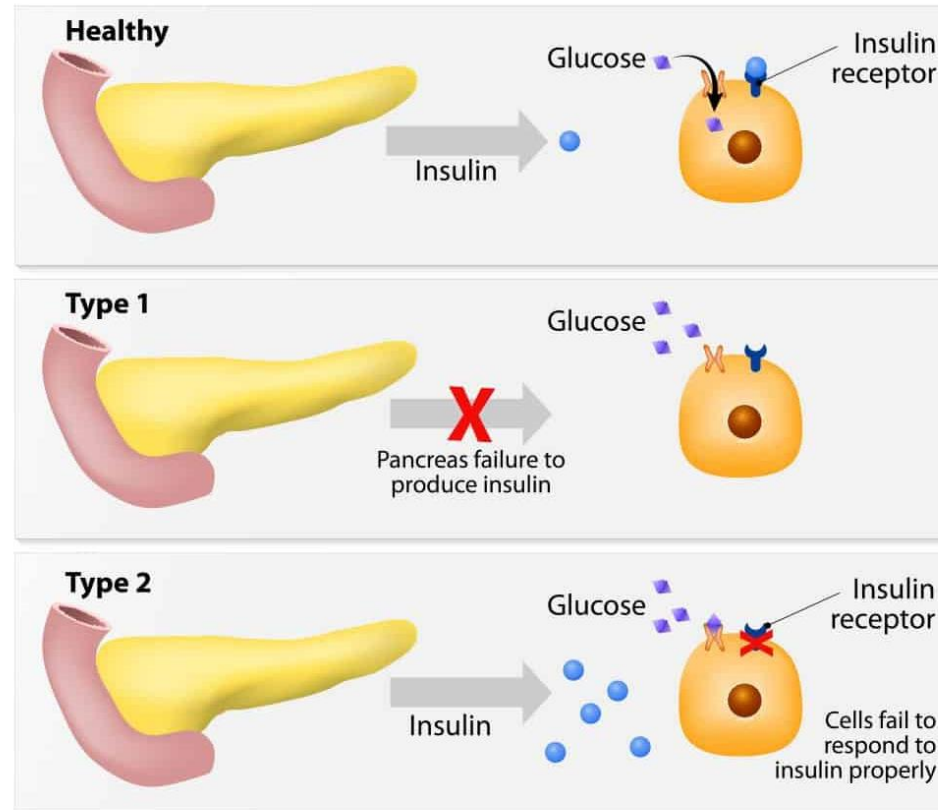
- A. Have you considered that if your diabetes was better managed and your HgbA1C was lower, your depression would be better?
- B. Depression can lower libido, and diabetes can impact sexual functioning. Amid everything else, how are you feeling sexually?
- C. How does Hmong culture understand suicide?
- D. It seems like being there for your son is important to you. Have you thought about how your death would impact him?



What is Diabetes?

Type 1

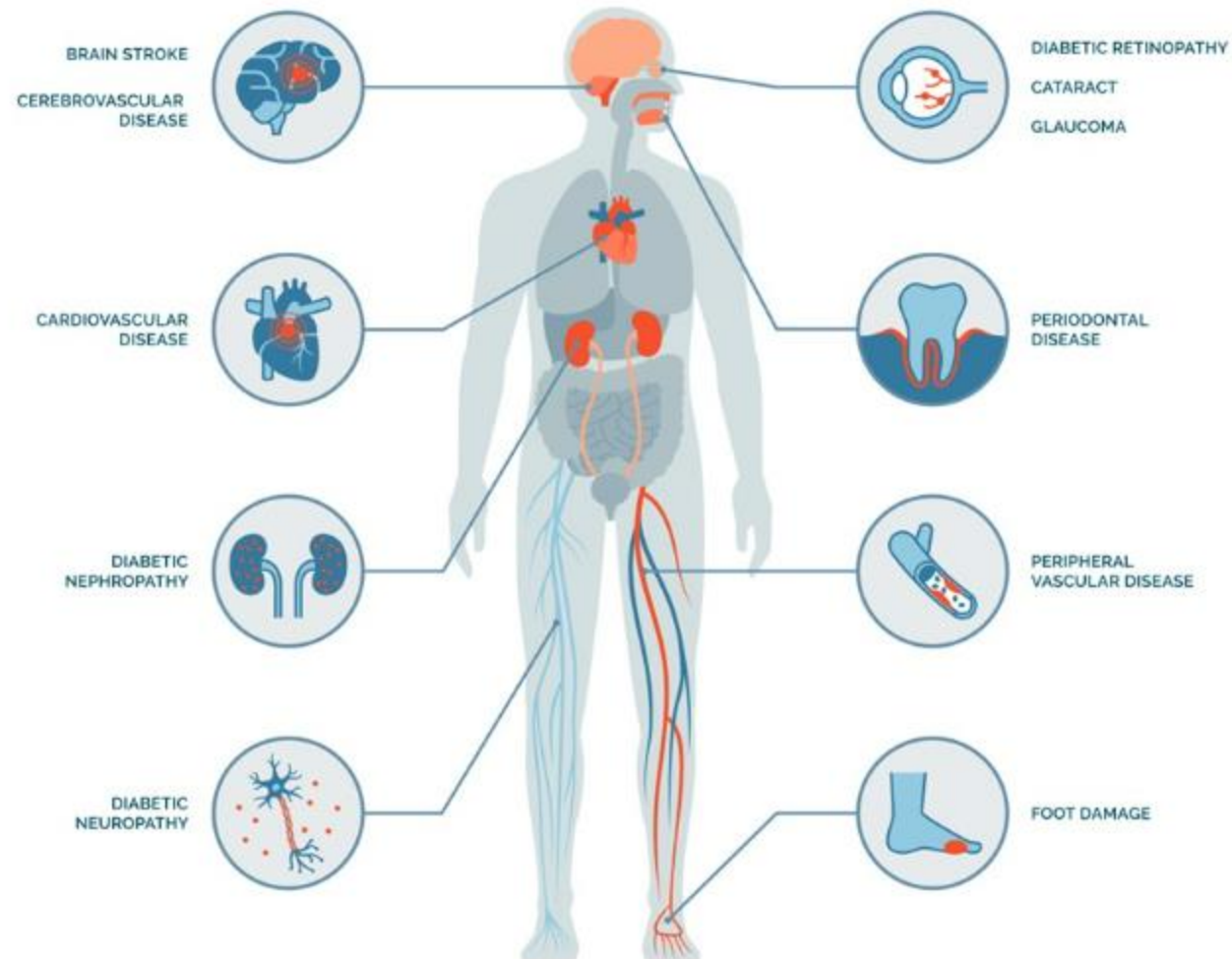
- Autoimmune disease
- 5-10% of diabetes
- Typically presents in childhood/young adulthood
- Must be treated with insulin
- DKA common
- Lifelong illness



Type 2

- Variable degrees of insulin resistance
- Most common type of diabetes
- Most common in adults
- Numerous treatment options including oral available
- DKA less common
- Weight loss curative in some

Complications of Diabetes



What is Depression?

A major depressive **episode** involves at least 2 weeks of depressed mood or anhedonia with changes in (5 of 9 required for diagnosis):

Sleep (increase or decrease),

Interest in activities

Guilt

Energy

Concentration

Appetite (inc or dec)

Psychomotor changes (slowing usually)

Suicidal thoughts

... Libido (*a somewhat unique and important overlap with DM*)

Can be mild to severe, impacts functioning, “persistent” if > 2 years, can recur.

NOT the same as grief, demoralization, a bad day, or an acute reaction to a stressor.

What is Depression?

But in medical illness, many of those symptoms are common!

Key signs that may help differentiate

- Lack of affective reactivity (doesn't perk up)
- Brooding or tearfulness
- Pessimism or negative self-appraisal
- Social withdrawal

And we always assess is it unipolar or bipolar depression (i.e., is there a history of mania).

More common in women than men overall

How can they interact?

1. The co-occur

3X higher depression Type 1 DM, 2X higher in Type 2 DM

2. They can worsen each other

Poor glycemic control can worsen depression

Think complications, stress, losses, etc.

Depression can worsen glycemic control

Think self-care, motivation, isolation, decreased activity

3. Treatment of each improves the other

Case 1

As you work to build a relationship and sort out how to be helpful, which question/observation would be most important?

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- B. Depression can lower libido, and diabetes can impact sexual functioning. Amid everything else, how are you feeling sexually?
- C. How does Hmong culture understand suicide?
- D. It seems like being there for your son is important to you. Have you thought about how your death would impact him?



Case 1, post-script

You ask about libido and sexual function. The patient bursts into tears and shares that he is terrified to date because he cannot have an erection and is deeply ashamed by this fact. This worsens his isolation and hopelessness. He agrees he felt better on an antidepressant but noted that the citalopram he was on previously worsened what little sexual functioning he had.

You refer him to his PCP to inquire about options for an antidepressant that doesn't worsen sexual function, for treatment of erectile dysfunction to optimize his diabetes care. He mentions that it seems like if the depression got better it would be easier to manage his DM, and if the DM were more stable, his depression wouldn't be so triggered by the highs and lows. You gently agree.

Perhaps most importantly, you ask him more about his interests, and hockey comes up again. He mentions he previously volunteered with the Minnesota Wild and believes he could again if he called his former coordinator. You inquire more about his positive experience of being around hockey, and he brightens considerably and talks again about his son.

Case 2

A 56-year-old white woman is seen in Dr. Palmer's clinic. She has Type 2 DM partially controlled on lantus 30u at night. She is prescribed pre-meal and sliding scale insulin but frequently misses doses. Hgb A1C 9.2. She checks her glucoses 3-4 times per week. Depression partially controlled on bupropion (PHQ-9 is 11, question 9 is 0).

She lives with a supportive same-sex partner of 20 years and works in sales for a local health insurance company. They like to travel, and she tells you she hates navigating travel with meds, needles, syringes, testing in restaurants, disposal of sharps in overseas restaurant bathrooms, all of it. She denies depressed mood and clearly has strong interests, no SI, no sleep changes, mild guilt about how she impacts her partner, but overall she tells you she feels demoralized. They don't have kids and were expecting to retire early and travel more, but she fears she is becoming a burden to her partner.

Case 2

How do you as a case manager respond to this member's demoralization and intermittent treatment adherence?

- A. It's okay to feel burdened by this, and I'm sure your partner understands and doesn't mind.
- B. You really do need to take your meds – for both your diabetes and depression. Both diseases can progress and worsen the other one, so even if it's hard I hope you'll keep taking them.
- C. Tell me more about how sometimes you feel like you want to take meds and stay on track with your diet and other times it's hard to do so.
- D. Did you know that they have some diabetes treatments that don't require injections?



Treatment of Diabetes

Lifestyle Modifications

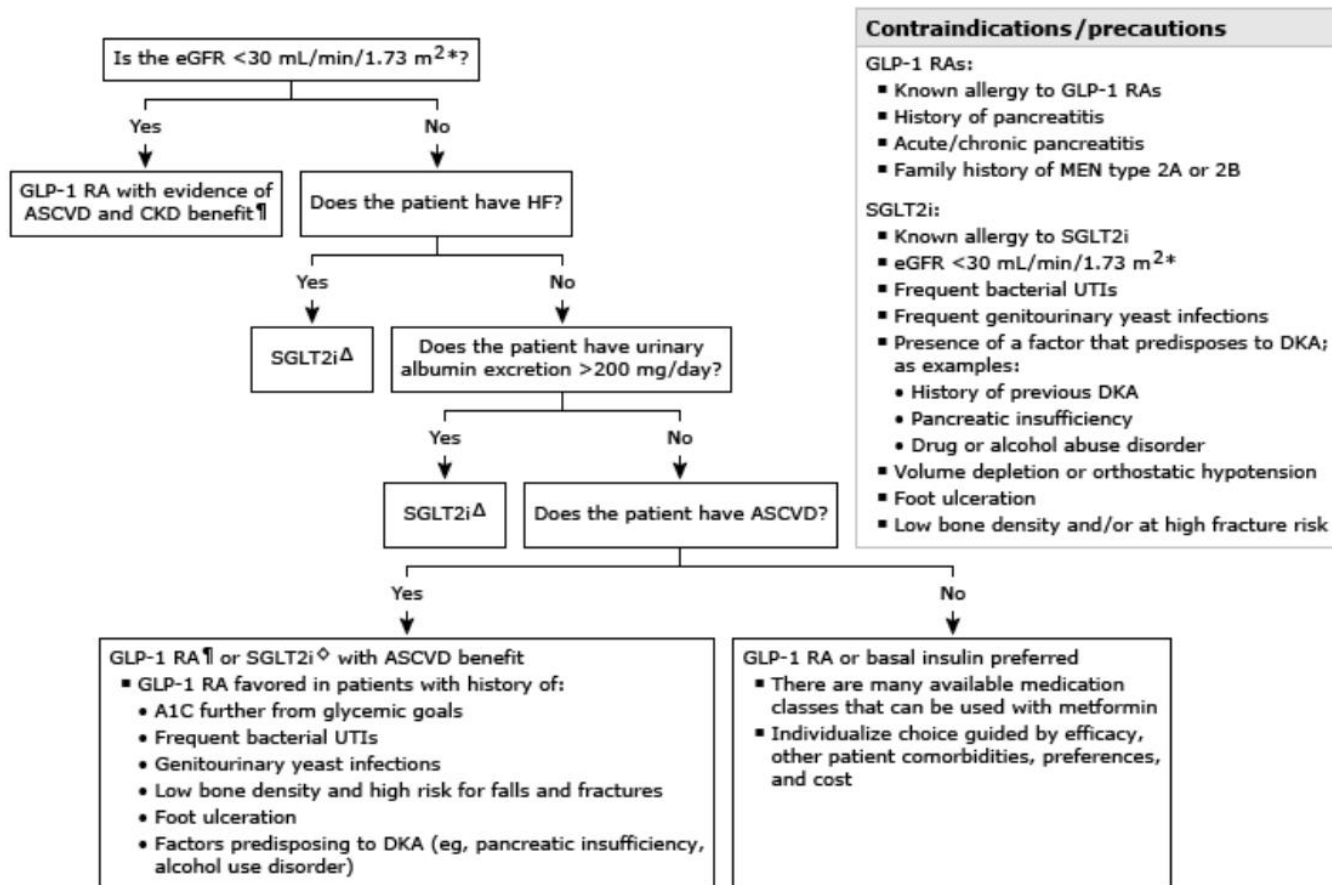
- Diet
- Exercise
- Smoking Cessation
- Blood pressure control
- Lower cholesterol

Monitoring

- Blood glucose
 - Fasting
 - Pre-prandial
- A1C
- Eye examination
- Foot examination
- Protein in urine
- Blood pressure
- Cholesterol

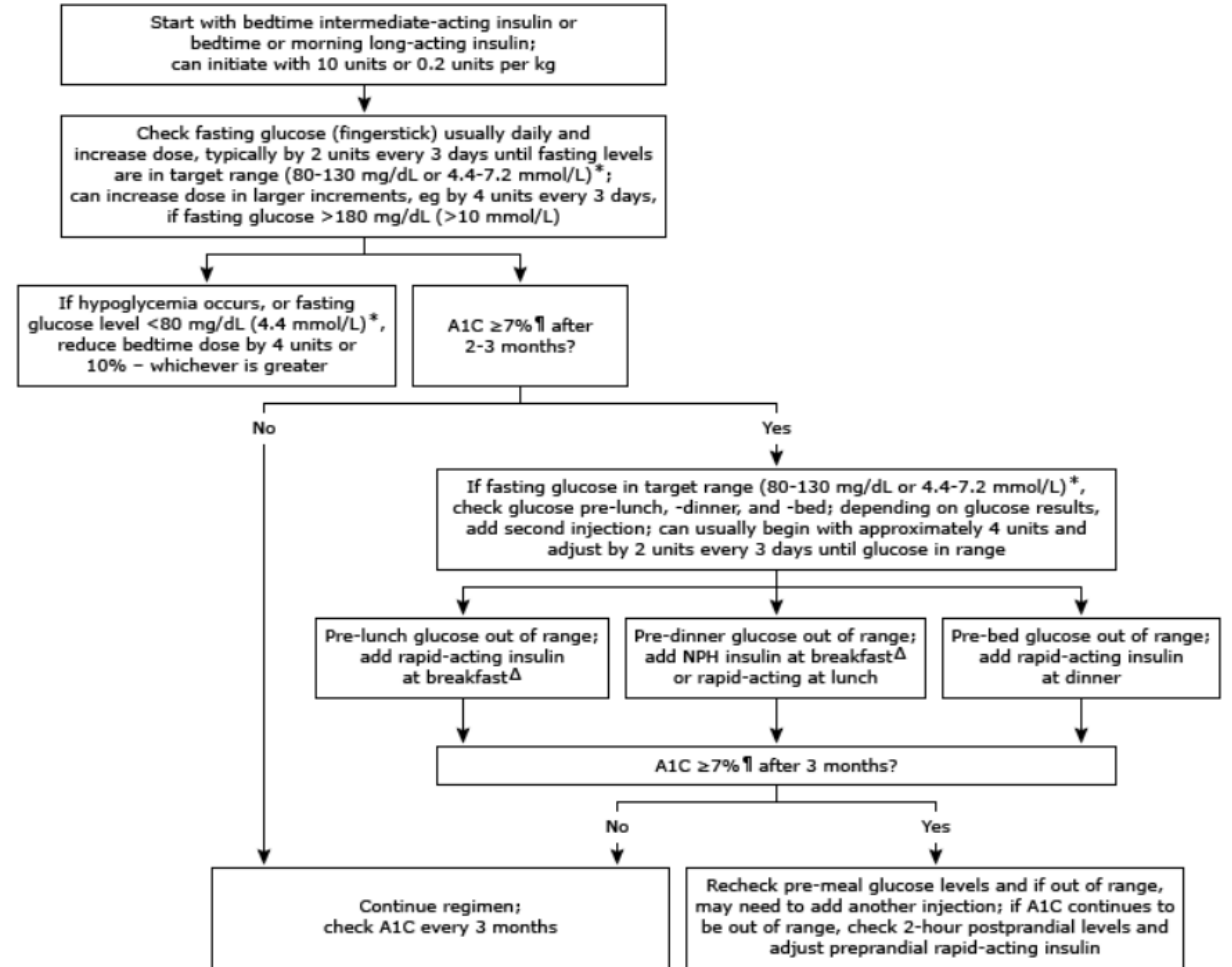
Treatment of Diabetes – Oral Therapy

- Its complicated!



Treatment of Diabetes

- Its even more complicated!



Remember this...

“Drugs don’t work in patients who don’t take them.”

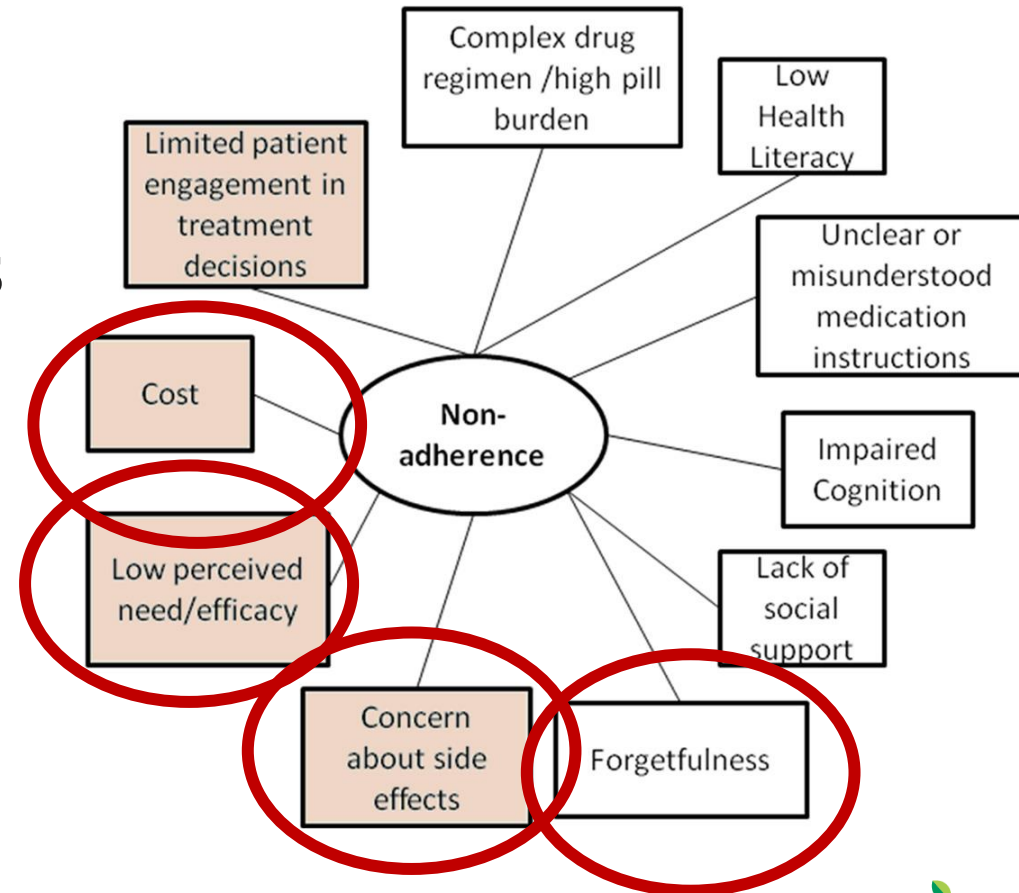
- C. Everett Koop

Medication Adherence Statistics

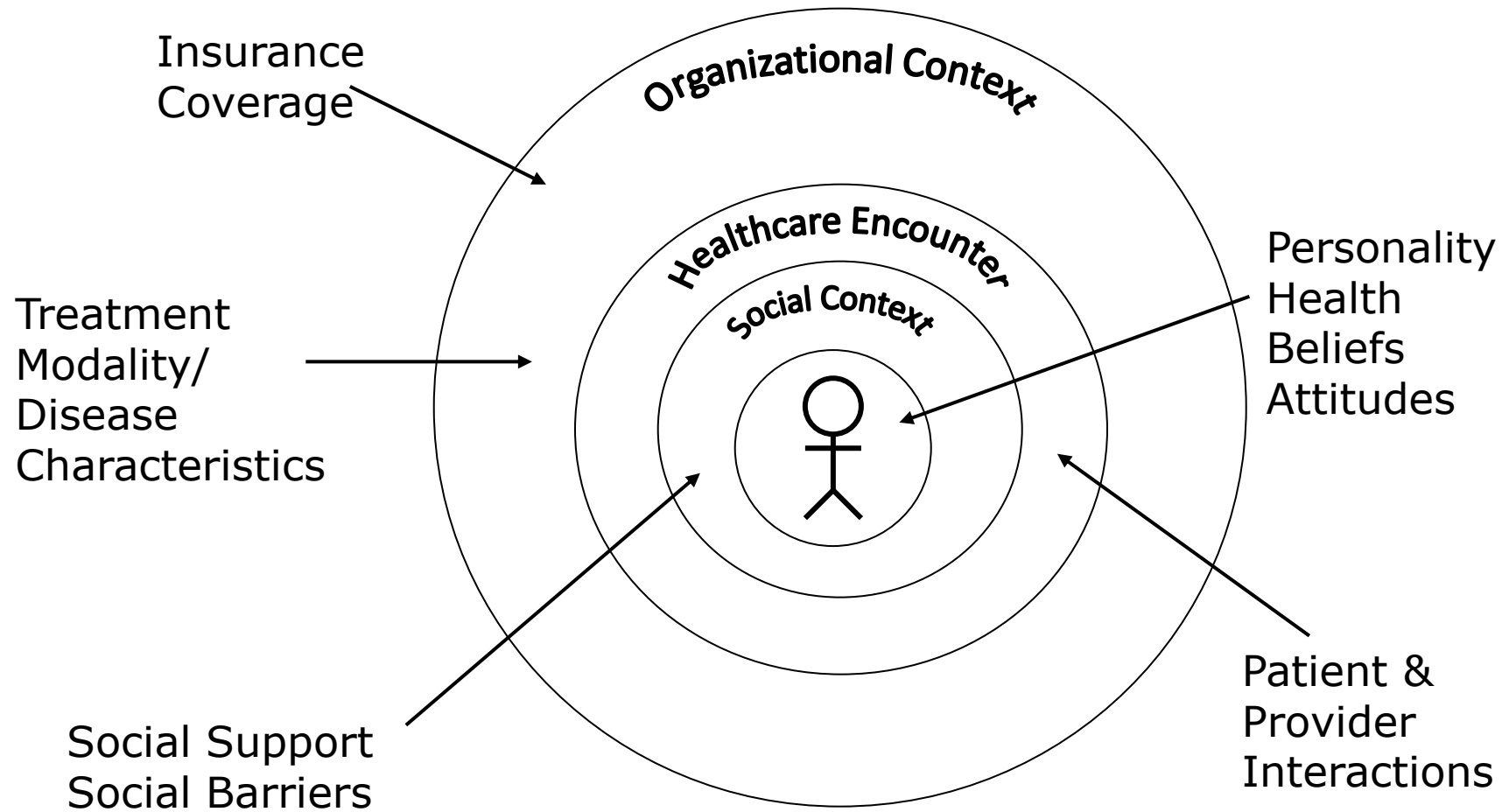
- Approximately 20 to 30 % of prescriptions are never picked up from the pharmacy
- 50 % of medications for chronic diseases are not taken as prescribed
- An estimated 10 % of hospitalizations in older adults may be caused by medication non-adherence
- Up to \$300 billion of avoidable health care costs have been attributed to non-adherence in the US annually

Most Common Reasons for Non-Adherence

- Forgetfulness
- Concern about side effects
- High drug costs
- Perceived lack of efficacy or low need



How Can We Predict Adherence?



Motivational Interviewing

Facilitate patient sharing his/her story

Active and reflective listening, positive affirmations

Explore importance and build confidence (e.g. engage in “change talk”)

Importance and confidence rulers



Make a change plan **WITH** the patient

Motivational Interviewing

Role play

Understand the Patient's Story

How do they understand their disease?

How do they understand their treatment?

Decisional balance:

	Good	Bad
"Doing" treatment		
Not "doing" treatment		

Depression in the picture?

How does your approach to your medication change when your depression is worse or better?

Address Specific Barriers

- What might be specific barriers to adherence?
- A few patients will need true exposure treatment (refer to behavioral health) for phobias (needles, taking pills)
- Help patients set reminders if they are forgetful

Making Taking Medication a Habit

- Help with organizing medications (i.e. pillbox)
- Encourage patient to store all medications together and out of reach of children (i.e. bathroom or kitchen cabinet)
- Attach the timing of taking the medication to an existing habit
 - With breakfast
 - When brushing teeth (AM and PM)
 - Before bedtime



Making Taking Medication a Habit

- Have a contingency plan if away from home
 - Single-compartment pill carriers
 - Carry medicine in purse or bag
 - Keep in car temporarily (most medications are temperature sensitive)
- Engage social supports (i.e. family, friends) to help organize medicines and remind patient
- Skilled nursing (weekly med set-up), med dispenser . . .

Case 2

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- C. Tell me more about how sometimes you feel like you want to take meds and stay on track with your diet and other times it's hard to do so.
- D. Did you know that they have some diabetes treatments that don't require injections?



Case 3

A 47 year-old African American woman sees you for case management. She had Type 2 diabetes that is controlled with oral medications (HgbA1C is 7.2) and depression treated with fluoxetine (most recent PHQ-9 is 7).

“I’m so glad to be getting back to normal!” she tells you. In scanning her record, you see that she was reasonably well-controlled (as she is now) in early 2019 but that by November of 2020 her diabetes was poorly controlled (HgbA1C 9.2), and her depression was significantly worse (PHQ-9 was 17).

Case 3

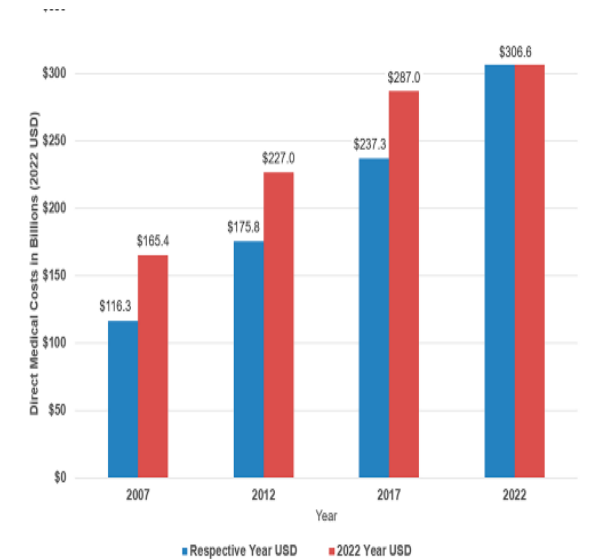
Which of the following would best explain her worsening and subsequent improvement?

1. She had a change in PCP during that time and had to build trust with a new provider.
2. She lost her job during the COVID-19 lockdown and became food insecure, a feature that improved when she received subsequent stimulus checks and eventual re-employment.
3. She had a depressive episode that required hospitalization in 2020 and hospital food was hard for her to manage with her diabetes.
4. She experienced natural worsening of her diabetes in 2020 with corresponding worsening of her depression, and it took time to determine a more effective regimen for both.



Cost of Diabetes

- Total annual cost 2022 \$412.9 billion
 - \$306.6 billion in direct medical costs
 - \$106.3 billion in indirect costs
- Diabetics have 2.6x higher medical expenditures than non diabetics
- Women spend more on average than men
- Black diabetics pay the most in direct expenditures
- Inflation reduction act capped cost of some insulin to \$35/month
 - Medicare only



Food Insecurity and Diabetes

Increases the Risk of Developing

- Food insecurity is not just lack of food
- Research show those with food insecurity are 2-3x more likely to have diabetes



Increases risk of Complications

- Leads to higher A1Cs, diabetes-related complications, hospitalizations and poorer mental health
- Skipping meals may lead to spikes in blood sugar and dangerous hypoglycemic episodes

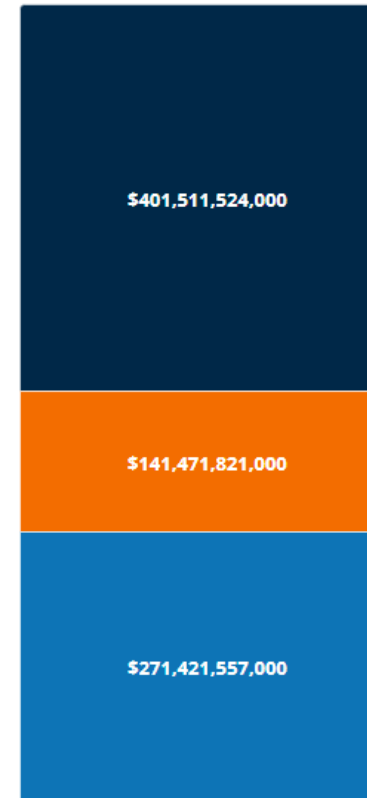
Food insecurity and depression

The pandemic showed how elastic depression and anxiety can be.

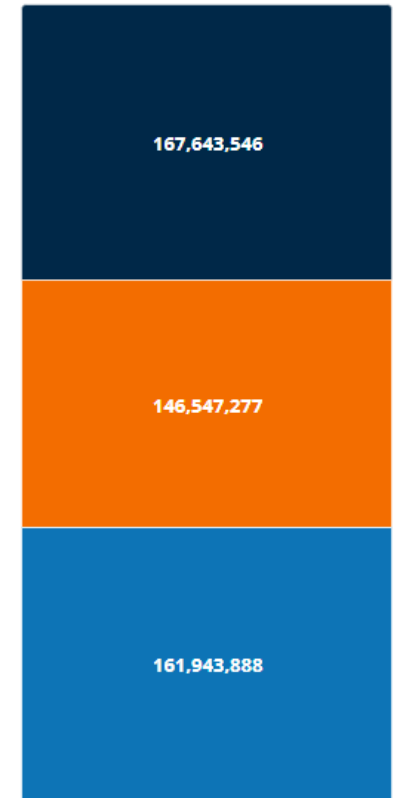
"Rates of anxiety and depression peaked in late 2020 at 39% and 32%, respectively. Food insecurity and disrupted medical care were associated with more than twice the odds of anxiety and depression"

Coley RL, Carey N, Baum CF, Hawkins SS. COVID-19-Related Stressors and Mental Health Disorders Among US Adults. Public Health Rep. 2022 Nov-Dec;137(6):1217-1226.

Amount of payments



Number of payments



● Round 3 payments (American Rescue Plan Act)
● Round 1 payments (CARES Act)

● Round 2 payments (Consolidated Appropriations Act, 2021)

Healthy Food Resources – Access is key

- **Market Bucks:** hungersolutions.org
 - Triple your SNAP/EBT at participating farmers markets
- **The Food Group:** thefoodgroupmn.org
 - Twin Cities Mobile Market- grocery store on a bus. Shop for fresh fruit, veggies, meat, dairy, grains and more using EBT/SNAP and Market Bucks
 - Fare For All- pop up sites in Metro and Greater MN area offering fresh produce and frozen meat for up to 40% off retail

What you can buy with SNAP at the farmers market:



Fruits and Vegetables



Meat, Fish, Eggs,
and Dairy*



Honey and
Maple Products*



Jams, Jellies, Pickles,
and Sauces*



Baked Goods*



Seeds and Plants
that Produce Food*

* Not eligible for Produce Market Bucks.

Case 3

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4. She experienced natural worsening of her diabetes in 2020 with corresponding worsening of her depression, and it took time to determine a more effective regimen for both.



Questions and Open Discussion

Upcoming webinar – NAMI Presents: Understanding and Overcoming the Unique Barriers to Care for People with Depression and Diabetes

Tuesday, July 16th 12:00

Presented by Molly Peterson, MPH, MCHES, Director of Adult Mental Health Programs for NAMI Minnesota

- [Register-Diabetes and Depression Nami Webinar 7-16-2024](#)

Thank You!

Evaluation – link at sign-off

Certificate of Participation –upon completion of Evaluation

Recording -Performance Improvement Project (PIP):
Improving Care for People with Co-Occurring Diabetes
and Depression