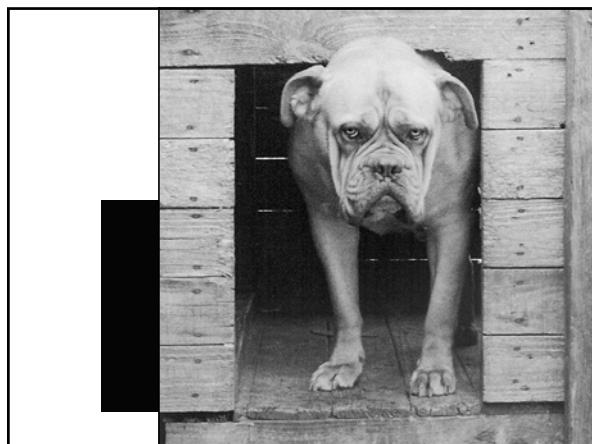




**Understanding Behavioral Change  
to Help Improve Diabetes  
Outcomes**

***Secrets of the Seven Tipping  
Points***

Donna Wahoff-Stice MS, APRN, FNP  
University of Utah  
donna.wahoff-stice@hsc.utah.edu



**Motivation in Diabetes**

- Almost no one is unmotivated to live a long and healthy life
- Problem:
  - Rewards for good diabetes care may seem not so rewarding
  - Obstacles to self-care often outweigh possible benefits, tipping patients into poor self-care
  - There are many potential tipping points

**Addressing the Tipping Points**

Point		
1. Depression		

**How Depression Influences Diabetes**

- Depression makes it harder to initiate and maintain healthy behavior changes
  - Poor self-management
  - Poor BG control<sup>1</sup>
  - Strongest predictor of increased hospitalization<sup>2</sup>
  - 3x higher incidence of CAD and retinopathy<sup>3,4</sup>
  - 2x higher risk of mortality<sup>5</sup>

1. Lustman et al., 2000; 2. Rosenthal et al., 1998; 3. Carney et al., 1994; 4. Kovacs et al., 1995; 5. Katon et al., 2005

**Addressing the Tipping Points**

Point	Patient Quotes
1. Depression	"I am tired all the time and I don't feel like doing anything." "It seems like nothing I do really matters anyway." "I used to be more sociable, but now I don't feel like being around anybody."

### Addressing the Tipping Points

Point	Patient Quotes	Assess
1. Depression	"I am tired all the time and I don't feel like doing anything." "It seems like nothing I do really matters anyway." "I used to be more sociable, but now I don't feel like being around anybody."	Use PHQ-2: "In past month, have you often felt: * depressed, down, hopeless? * little pleasure in doing things?"  Use PHQ-9: <a href="http://impact-uw.org/tools/phq9.html">http://impact-uw.org/tools/phq9.html</a>

### Tipping Point 1: Depression

- Assessment
  - Not just feeling blue
  - Symptoms of depression (e.g., low mood, sleep problems, fatigue and anhedonia) are interfering with patient's ability to function well in his life
- Focus on arranging referral, not treatment

### Addressing the Tipping Points

Point	Patient Quotes	Assess
2. "No Big Deal"		

### Addressing the Tipping Points

Point	Patient Quotes	Assess
2. "No Big Deal"	"I feel fine, so why worry?" "I'll start focusing on my diabetes just as soon as something bad happens." "What's the big deal? We are all going to die anyway."	

### Addressing the Tipping Points

Point	Patient Quotes	Assess
2. "No Big Deal"	"I feel fine, so why worry?" "I'll start focusing on my diabetes just as soon as something bad happens." "What's the big deal? We are all going to die anyway."	"What worries you about having diabetes?" "How concerned are you about possible long-term complications?" "Your last A1C was 9.2%. What does that mean to you?"

### Addressing the Tipping Points

Point	Patient Quotes	Assess
3. Inevitability		

### Addressing the Tipping Points

Point	Patient Quotes	
3. Inevitability	<p>"Diabetes is a death sentence, so why bother trying?"</p> <p>"I saw diabetes take my mom, piece by piece. That's what this disease does."</p>	

### Addressing the Tipping Points

Point	Patient Quotes	Assess
3. Inevitability	<p>"Diabetes is a death sentence, so why bother trying?"</p> <p>"I saw diabetes take my mom, piece by piece. That's what this disease does."</p>	<p>"What worries you about having diabetes?"</p> <p>"How concerned are you about possible long-term complications?"</p> <p>"Your last A1C was 9.2%. What does that mean to you?"</p>

### Addressing the Tipping Points

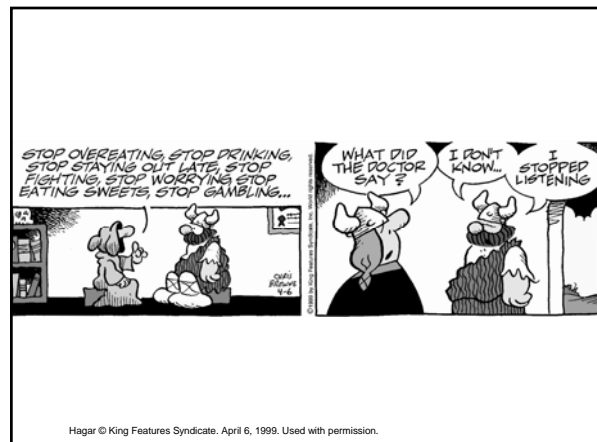
Point		
4. Treatment Skepticism		

### Addressing the Tipping Points

Point	Patient Quotes	
4. Treatment Skepticism	<p>"No matter what I do, these numbers are still too high!"</p> <p>"I've done everything, but I don't feel any different."</p> <p>"I worry about what these medications are doing to me."</p>	

### Addressing the Tipping Points

Point	Patient Quotes	Assess
4. Treatment Skepticism	<p>"No matter what I do, these numbers are still too high!"</p> <p>"I've done everything, but I don't feel any different."</p> <p>"I worry about what these medications are doing to me."</p>	<p>"How well are your medications helping to control your diabetes and better your health?"</p> <p>"How much of a positive impact does exercise seem to have on your blood sugars?"</p>



### Seven Tipping Points

1. Depression
2. "No big deal"
3. Inevitability
4. Treatment skepticism
5. Unrealistic plans for action
  - "I know, I know. I need to eat perfectly and never cheat."

### Seven Tipping Points

1. Depression
2. "No big deal"
3. Inevitability
4. Treatment skepticism
5. Unrealistic plans for action
6. Poor social support
  - "My family just doesn't understand how frustrating this disease can be."

### Seven Tipping Points

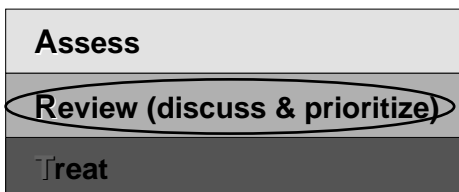
1. Depression
2. "No big deal"
3. Inevitability
4. Treatment skepticism
5. Unrealistic plans for action
6. Poor social support
7. Environmental pressures
  - Stress, competing priorities, poverty, etc.

### Tipping Points Are Additive

As tipping points accumulate, patients may:

- Perceive diabetes as more difficult/pointless
- Decide that diabetes cannot be managed or is not important enough to manage
- Slowly but surely, may become apathetic or drop out of treatment

### Addressing the Diabetes Tipping Points Is an ART!



### Tipping Points Profile Form

TIPPING POINT	LEVEL OF CONCERN			
	?	Low	Medium	High
1. Depression				
2. "No big deal"				
3. Inevitability				
4. Treatment skepticism				
5. Unrealistic plans for action				
6. Poor social support				
7. Environmental pressures				

## Tipping Points Profile Form

TIPPING POINT	LEVEL OF CONCERN			
	?	Low	Medium	High
1. Depression				X
2. "No big deal"				X
3. Inevitability				X
4. Treatment skepticism				X
5. Unrealistic plans for action				X
6. Poor social support				X
7. Environmental pressures				X

## Where Do I Start? The Review Step

- Tackle one tipping point at a time
  - Even a single tipping point resolved may be enough to tip the mind-set, producing huge change
- All tipping points are not created equal; start at the top of the tipping points list and work down
- "Higher" tipping points are not more important than "lower" tipping points, but "lower" tipping points may not be resolvable until "higher" tipping points are addressed
- Discuss and review with patient

## Mrs. Crandall's Story

- Age 45, dental hygienist, type 2 diabetes for 10 years
- Single mother, four children; lives with sister and her family of six
- Angry and frustrated about having diabetes; often just ignores it
- On maximum doses of 3 oral meds; not sure they are working
- A1C is 9.3%, which worries her
- Stopped taking insulin last year due to fears about weight gain



Polonsky WH. Unpublished case study.

## Mrs. Crandall's Story

### BEHAVIORAL ISSUES

- May not be taking medications regularly and has quit insulin
- Has apparently not made any positive dietary changes
- Does not exercise (states she has no time available)
- No SMBG (this has not been recommended)



Polonsky WH. Unpublished case study.

## Mrs. Crandall's Story

- P: Given what you've already told me, I wonder if you've been feeling down, depressed or hopeless over the past month or so?
- C: Sometimes, but not too often. I still manage to get up and go every single day, but sometimes it is just like I'm going through the motions.
- P: Sure, and there is diabetes on top of it. What worries you about having diabetes?
- C: Everything. But I worry most about my kidneys. My mom ended up on dialysis; that was awful. I'm pretty sure this will happen to me as well; I doubt I can do anything about it. It is just going to happen. I just hope I die before that.



Polonsky WH. Unpublished case study.

## Mrs. Crandall's Story

- P: What about all of the things your doctor has suggested? Your medications, for example. Do you think that those are helping to control your blood sugars and to improve your health?
- C: Are you kidding? Have you seen my blood sugars? Nothing I do seems to be working at all. It is so discouraging; I don't know why I even bother.
- P: Do you have any sense of what might help you?
- C: I know I'm supposed to eat "healthy," whatever that means. But my sister and I just don't have time to make all sorts of special foods, especially with all of these kids to feed.



Polonsky WH. Unpublished case study.

## Mrs. Crandall's Story

P: Handling diabetes can be easier when you get people in your life who are rooting for you. Do you have anyone like that?

C: I work hard to keep it together for everyone in my family; they all have enough stress. Diabetes is my problem, not theirs.

P: And speaking of stress, what are the other big stresses in your life these days that make diabetes care tough?

C: The biggest would be Crystal, my oldest. She is 17 now. I try to keep her on the straight and narrow, but she told me this morning that she might be pregnant. Pregnant! I just can't take this.



Polonsky WH. Unpublished case study.

## What to Address First?

Given Mrs. Crandall's tipping point profile, what would you guess is her most critical tipping point?

1. "No big deal"
2. Poor social support
3. Inevitability
4. Unrealistic action plans

## Mrs. Crandall's Tipping Points

TIPPING POINT	LEVEL OF CONCERN			
	?	Low	Medium	High
1. Depression				
2. "No big deal"				
3. Inevitability				
4. Treatment skepticism				
5. Unrealistic plans for action				
6. Poor social support				
7. Environmental pressures				

## Mrs. Crandall's Tipping Points

TIPPING POINT	LEVEL OF CONCERN			
	?	Low	Medium	High
1. Depression				
2. "No big deal"				
3. Inevitability				
4. Treatment skepticism				
5. Unrealistic plans for action				
6. Poor social support				
7. Environmental pressures				X

## What to Address First?

Given Mrs. Crandall's tipping point profile, what would you guess is her most critical tipping point?

1. "No big deal"
2. Poor social support
3. Inevitability
4. Unrealistic action plans

## Mrs. Crandall's Tipping Points

TIPPING POINT	LEVEL OF CONCERN			
	?	Low	Medium	High
1. Depression			X	
2. "No big deal"		X		
3. Inevitability				X
4. Treatment skepticism				X
5. Unrealistic plans for action			X	
6. Poor social support			X	
7. Environmental pressures				X

## Helping Patients Succeed with Diabetes Is an ART!

**Assess**

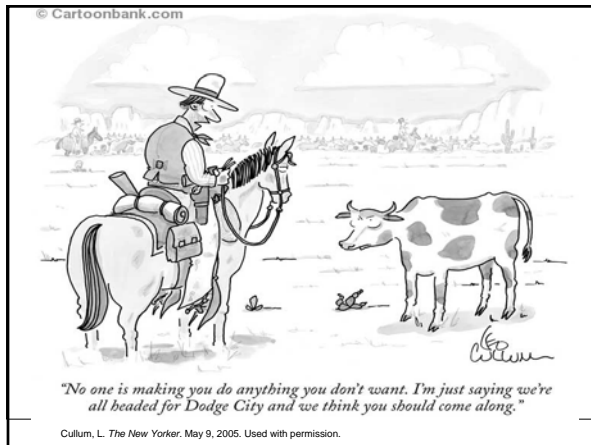
**Review/prioritize treatment targets**

**Treat**

Polonsky WH. Unpublished data.

## What Doesn't Work

- Urging more willpower
  - “If you would just try harder...”
- Threatening bad outcomes
  - “You’ll go blind if you don’t do what I tell you to do.”
- The gift of advice
  - “Maybe if you joined a nice fitness center...”



## Addressing the Tipping Points

Point	Assess
-------	--------

1. Depression

- Use the PHQ-2  
“In past month, have you often felt:  
\* depressed, down, hopeless?  
\* little pleasure/interest in doing things?”
- Also, use PHQ-9

## Addressing the Tipping Points

Point	Assess	Intervene
-------	--------	-----------

1. Depression

- Use the PHQ-2  
“In past month, have you often felt:  
\* depressed, down, hopeless?  
\* little pleasure/interest in doing things?”
- Also, use PHQ-9

- Refer for treatment:  
“You may be suffering from depression; this is not a sign of a weak mind or anything shameful. It likely won’t get better all by itself.”  
“I want to get you the help you need to feel better and do better.”

## Addressing Depression in Diabetes

- The critical intervention: A successful referral for evaluation and treatment
- Effective treatments
  - Antidepressant medications
  - Cognitive behavioral therapy
  - Regular exercise
  - See <http://impact-uw.org>
- PROSPECT: Comprehensive depression treatment *halved* mortality risk over four years

Bogner et al., 2007

## Addressing the Tipping Points

Point	Assess
2. "No Big Deal"	<p>"What worries you about having diabetes?"</p> <p>"How concerned are you about possible long-term complications?"</p> <p>"Your last A1C was 9.2%. What does that mean to you?"</p>

## Addressing the Tipping Points

Point	Assess	Intervene
2. "No Big Deal"	<p>"What worries you about having diabetes?"</p> <p>"How concerned are you about possible long-term complications?"</p> <p>"Your last A1C was 9.2%. What does that mean to you?"</p>	<ul style="list-style-type: none"> <li>• Use metabolic data to make diabetes more real</li> </ul> <p>"I know you'd like to live a long, healthy life, and I am concerned you may not be in as safe a place with your diabetes as you could be."</p>

## Overcoming "No Big Deal"

HCP: What worries you about diabetes?

R: Not much. I feel okay, so I figure—no problem! I understand that diabetes will get me in the long run, but that's the way life goes.

HCP: You've taken the time to be here, so I know you are interested in living a long, healthy life. At the same time, you're not sure that putting more effort into diabetes care will be worth the effort. True?

R: Well, yeah.



## Overcoming "No Big Deal"

HCP: May I share some info with you?

R: Sure.

HCP: First, the bad news. You may not be doing as well as you think you are, *even if you feel okay*. This could mean bad things for your health—and soon. Second, the good news. With some effort, odds are pretty good you could live a long, healthy life with diabetes. What do you think of that?



## Overcoming "No Big Deal"

R: Yeah, but how do I do that? I don't want to eat just birdseed.

HCP: The first step is to find out about the A1C test—that 3-month average blood sugar test. Does that sound familiar?

R: I think my doc told me that my A1C was 8.8%—whatever that means.

HCP: The A1C test is the coolest test we have. And it is the only good way to know how well you are managing your diabetes.



## Overcoming "No Big Deal"

HCP: Even if you feel okay, if your A1C is high, then bad things are happening. But if you get your A1C into a safe range—typically that means <7.0%—you make it more likely that you can live a long, healthy life. Your last number, 8.8%, tells us you are right to worry. You are not in a safe place at all.

R: Okay, I see what you mean, but what can I do?



## Addressing the Tipping Points

Point	Assess
3. Inevitability	<p>“What worries you about having diabetes?”</p> <p>“How concerned are you about possible long-term complications?”</p> <p>“Your last A1C was 9.2%. What does that mean to you?”</p>

## Addressing the Tipping Points

Point	Assess	Intervene
3. Inevitability	<p>“What worries you about having diabetes?”</p> <p>“How concerned are you about possible long-term complications?”</p> <p>“Your last A1C was 9.2%. What does that mean to you?”</p>	<ul style="list-style-type: none"> <li>Identify/challenge <u>inaccurate beliefs</u></li> </ul> <p>“Diabetes is not a death sentence, especially not now in the twenty-first century. With good care, odds are good you can live a long, healthy life with diabetes.”</p>

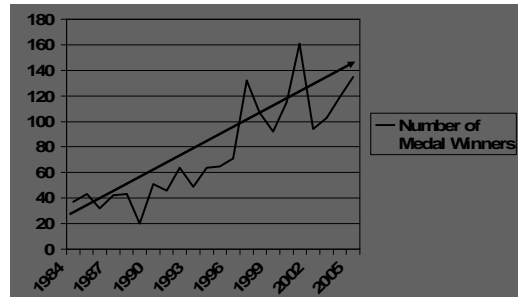
## FACTS AND FICTIONS

Q. Diabetes is the leading cause of adult blindness, amputation and kidney failure.  
True or false?

A. False. To a large extent, it is *poorly controlled* diabetes that is the leading cause of adult blindness, amputation and kidney failure.

Well-controlled diabetes is the leading cause of ... nothing.

## Joslin 50-Year Medalists 1984 – 2005



Joslin Diabetes Center. Data on file.

## But What about Complications?

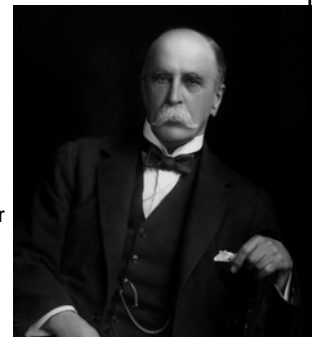
- 326 winners of the Joslin 50-Year Medal were surveyed
- The percentage without complications was:
  - No retinopathy 52.1%
  - No neuropathy 49.7%
  - No MV complications at all 46.6%

Keenan et al., 2007

## Diabetes and Your Health

“To live a long and healthy life, develop a chronic disease and take care of it.”

—Sir William Osler



## Addressing the Tipping Points

Point	Assess
4. Treatment Skepticism	<p>"How well are your medications helping to control your diabetes and better your health?"</p> <p>"How much of a positive impact does exercise seem to have on your blood sugars?"</p>

## Addressing the Tipping Points

Point	Assess	Intervene
4. Treatment Skepticism	<p>"How well are your medications helping to control your diabetes and better your health?"</p> <p>"How much of a positive impact does exercise seem to have on your blood sugars?"</p>	<ul style="list-style-type: none"> <li>• Help demonstrate regimen efficacy in a tangible fashion</li> </ul> <p>"By focusing on the right outcomes and structuring our efforts carefully, you will see how your own actions can help you succeed with diabetes."</p>

## THE TRUTH ABOUT DIABETES

You can tell how well you are doing with your diabetes by:

- how well you eat. True/false?
- how much medication you take. True/false?
- how you feel. True or false?

**A. ALL are false. The best way to tell is by keeping a close eye on your clinical markers: blood glucose (A1C and SMBG), blood pressure and cholesterol.**

## Example: Sam's Exercise Experiment

Daily walk (30 minutes)

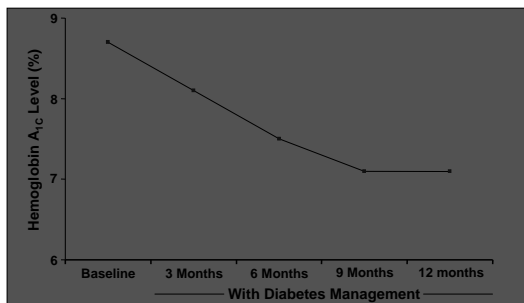
For 1 week, measure BG right before and after my walk

Day	Pre-Exercise	Post-Exercise	BG Change
1	140 mg/dL	111 mg/dL	-29 mg/dL
2	185 mg/dL	102 mg/dL	-83 mg/dL
3	122 mg/dL	90 mg/dL	-32 mg/dL
4	176 mg/dL	153 mg/dL	-23 mg/dL
5	150 mg/dL	145 mg/dL	-5 mg/dL
6	205 mg/dL	134 mg/dL	-71 mg/dL
7	132 mg/dL	94 mg/dL	-38 mg/dL

Average BG change: -40 mg/dL

Polonsky WH. Unpublished case study.

## Example: Mary's Diabetes Management over 1 Year



## Mr. Braddock's Story

- Age 56, single, well educated
- Morbidly obese, type 2 diabetes for 9 years
- A1C typically <6.5%, but last was 7.9%; major weight gain
- Not familiar with A1C test
- Has stopped exercise; dietary habits have "gone to hell"
- No longer checks BGs due to "consistently high readings"
- Takes medications and sees his physician regularly



Polonsky WH. Unpublished case study.

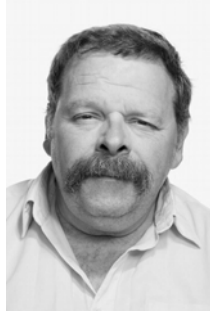
## Mr. Braddock's Story

P: Before we talk about the specifics of your health, can you tell me some about your life and how you've been feeling?

B: Oh, I get by. But this hasn't been an easy year for me. My girlfriend and I split up a few months ago, and that was right after I lost my job. That sucked.

P: Ever get down and depressed?

B: You bet. I've had ups and downs with depression all year. It is so hard sometimes just to get going.



Polonsky WH. Unpublished case study.

## Mr. Braddock's Story

P: And then you've got diabetes to deal with as well. What worries you about having diabetes?

B: Right now I think my health is pretty good. In a few years, when I have more time, I'll get serious about diabetes. But for now, I'm feeling okay, so there's no need to worry.

P: I'm sure you've heard about diabetes complications. How concerned are you about those?

B: I guess it could happen, but who can really say? Besides, I have enough things to worry about already.



Polonsky WH. Unpublished case study.

## Mr. Braddock's Story

P: I know you take your medications regularly, and you have made other healthy lifestyle changes in the past. How well do you think those efforts can help control your blood sugars and improve your health?

B: Oh, I'm sure they work just fine.

P: And when you decide it's time to put more effort into your diabetes, what exactly would you do?

B: I'll need to get back to walking regularly, checking blood sugars and cutting down on late-night snacks. I know what to do; I just don't have the energy right now.



Polonsky WH. Unpublished case study.

## Mr. Braddock's Story

P: Sometimes it helps when you have other people in your life who are supporting your efforts. Do you have anyone like that in your life?

B: Not since my girlfriend and I split up. And besides, I am a big boy. I should be able to do this on my own. I don't need anyone else hassling me right now.

P: It sounds like you have enough on your plate. Are there other stresses in your life that makes diabetes care difficult?

B: Life is complicated. I'd rather not go into that right now.



Polonsky WH. Unpublished case study.

## Q1: What to Address First?

What would you guess are Mr. Braddock's TWO most critical tipping points?

1. Depression, "no big deal"
2. Depression, treatment skepticism
3. Unrealistic action plans, inevitability
4. Unrealistic action plans, environmental pressures

To answer this question, complete Mr. Braddock's Tipping Points Form

## Mr. Braddock's Tipping Points

TIPPING POINT	LEVEL OF CONCERN			
	?	Low	Medium	High
1. Depression			X	
2. "No big deal"			X	
3. Inevitability		X		
4. Treatment skepticism		X		
5. Unrealistic plans for action		X		
6. Poor social support			X	
7. Environmental pressures	X			

## Mr. Braddock's Tipping Points

TIPPING POINT	LEVEL OF CONCERN			
	?			
1. Depression				
2. "No big deal"				
3. Inevitability				
4. Treatment skepticism				
5. Unrealistic plans for action				
6. Poor social support			X	
7. Environmental pressures	X			

Reports "ups and downs" with depression  
Writes "I need more time, I'm not ready for this"

"I guess it could happen, but who can really say"

Notes that "better self-care will be necessary eventually"

"I know what to do..."

Commitment gone; little support from family/friends

## Q1: What to Address First?

What would you guess are Mr. Braddock's TWO most critical tipping points?

1. Depression, "no big deal"
2. Depression, treatment skepticism
3. Unrealistic action plans, inevitability
4. Unrealistic action plans, environmental pressures

## Q2. "No Big Deal": How to Intervene?

You discover the key tipping point for Mr. Braddock is the belief that diabetes is "no big deal," so what should you do?

1. Invite him to return for tx when he feels more motivated
2. Encourage him to attend a diabetes support group, so he can meet people with serious long-term complications
3. Discuss his latest A1C result, helping him to see what this result means and how it can affect his future health
4. Tell him that being in denial is just foolish

Polonsky WH. Unpublished case study.

## Take-Home Messages

- Everyone would prefer a long, healthy life
- Our patients are not unmotivated to manage diabetes effectively
- The problem is diabetes self-care is tough
- Our patients face many obstacles to good self-care
- These obstacles are considered to be tipping points—opportunities to help "tip" our patients toward better self-management

## Addressing the Tipping Points

Point	Assess	Intervene
1. Depression	Use PHQ-2	Refer for treatment
2. "No Big Deal"	"What worries you about DM?"	Use metabolic data to make DM real
3. Inevitability	"What worries you about DM?"	Identify/challenge inaccurate beliefs
4. Treatment Skepticism	"How well are your medications helping to control your DM?"	Demonstrate regimen efficacy in a tangible fashion

## Addressing the Tipping Points

Point	Assess	Intervene
5. Unrealistic Action Plans	"What does taking good care of your DM mean to you?"	Concrete, achievable and personally meaningful actions
6. Poor Social Support	"Ever feel you're all alone with DM?"	Clarify type of support needed; urge patients to request it
7. Environmental Pressures	"What is it about daily life that makes DM care difficult?"	Support environmental changes to support self-care efforts

## What about...?

- Time constraints
- Group approaches
- Other types of patients

## Conclusions

- A new way of thinking about our patients with diabetes
- New tools for understanding and addressing their obstacles to better self-care
- As we help our patients feel more hopeful and energized, we help ourselves as well



## The Diabetes Tipping Points Program

- [www.diabetesbehaviorchange.com](http://www.diabetesbehaviorchange.com)
- View the training video
- Download training materials:
  - Slide presentation
  - Tipping points profile forms
  - Case studies
  - Training manual

