



Minimally Disruptive Medicine

a respectful approach to chronic care delivery

Nilay Shah

KER UNIT

Center for the Science of Health Care Delivery

Division of Health Care Policy and Research

Mayo Clinic

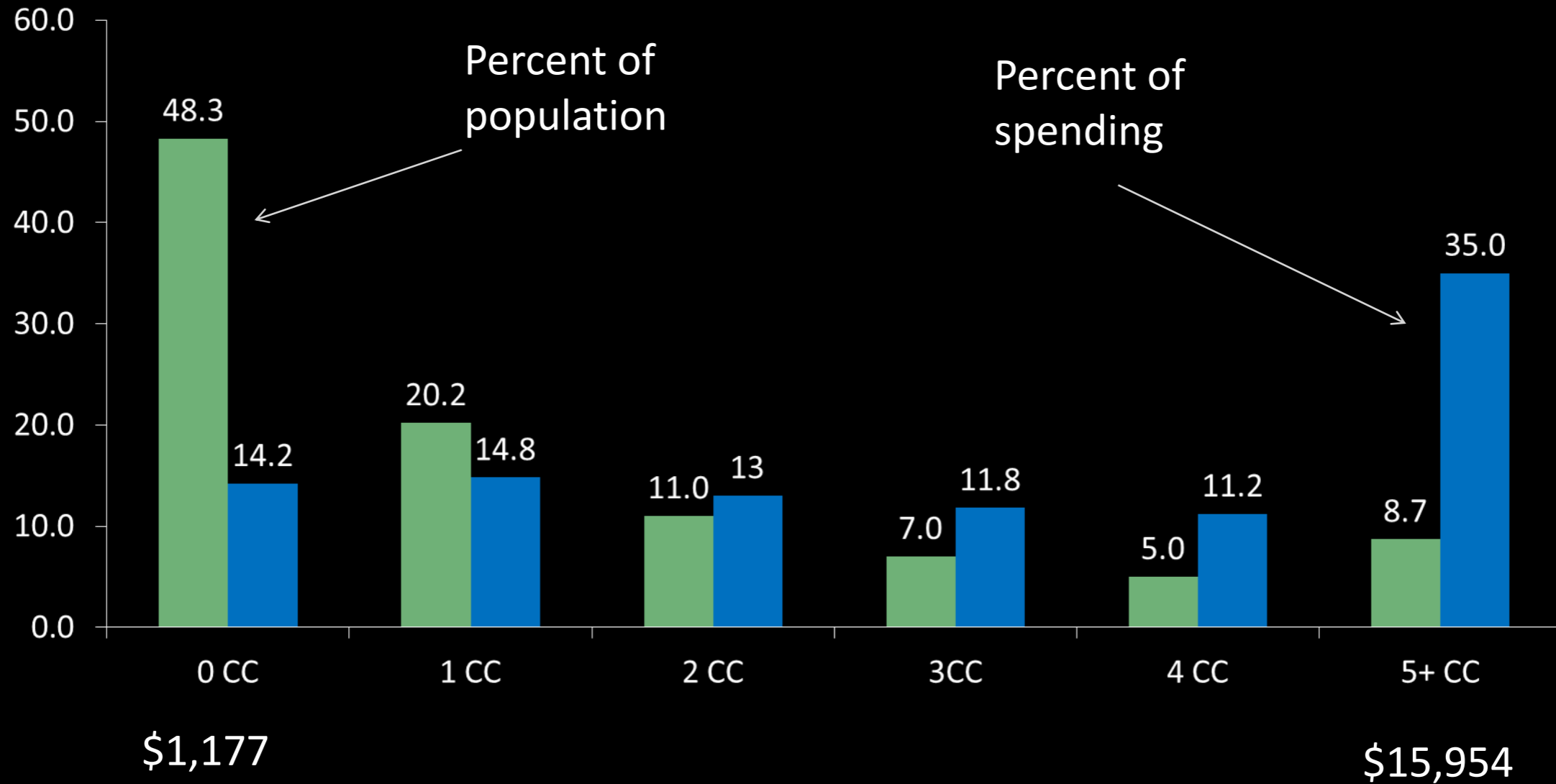
Disclosure Statement

No financial relationships or interests related to the content of this presentation.

Learning Objectives

1. To describe the prevalence of multiple chronic conditions among patients with diabetes
2. To describe the concept of minimally disruptive medicine
3. Approaches to operationalize minimally disruptive medicine in practice

Multiple Chronic Conditions, US 2012



Strategic Framework on Multiple Chronic Conditions

Goal 1: Foster Health Systems Change

Evidence supported models for care coordination, payment reform and incentives, effective use of HIT, purposeful evaluation of models

Goal 2: Empower individuals

Facilitate self-management, home and community based services, tools for medication management

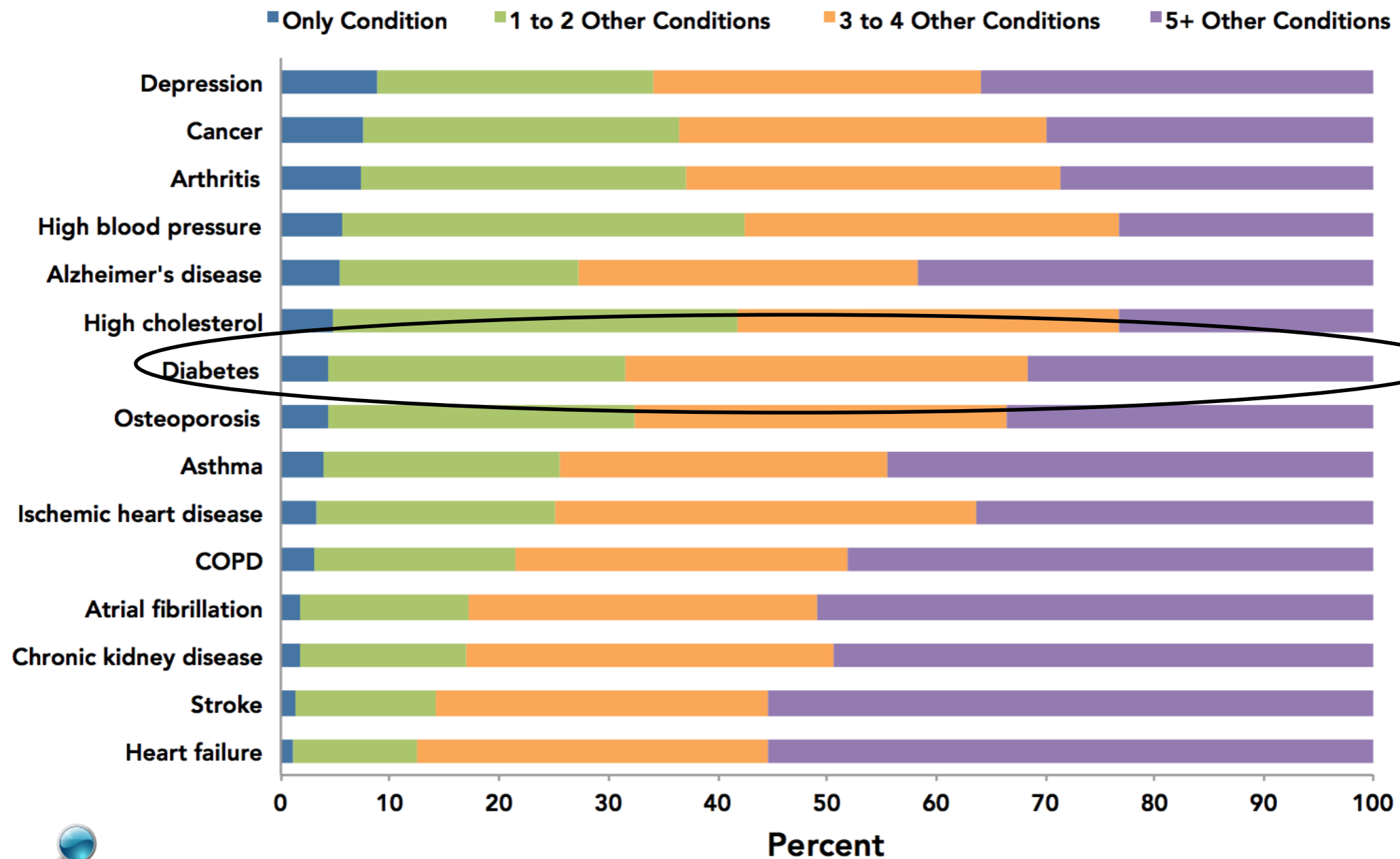
Goal 3: Equip clinicians

Identify best practices and tools, training, practice guidelines

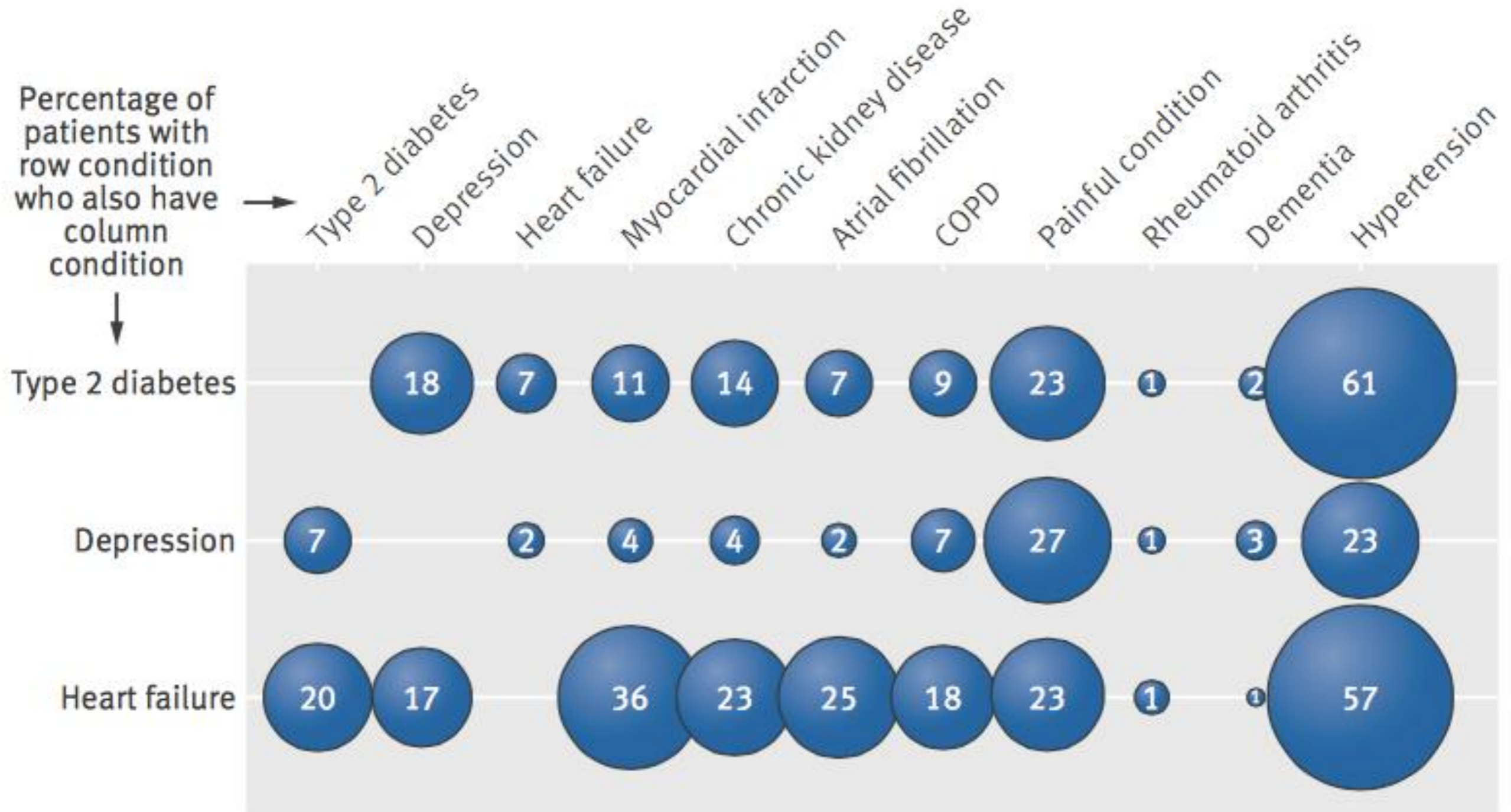
Goal 4: Enhance research

External validity of trials, patient-centered health research, address disparities

Diabetes and Multiple Chronic Conditions

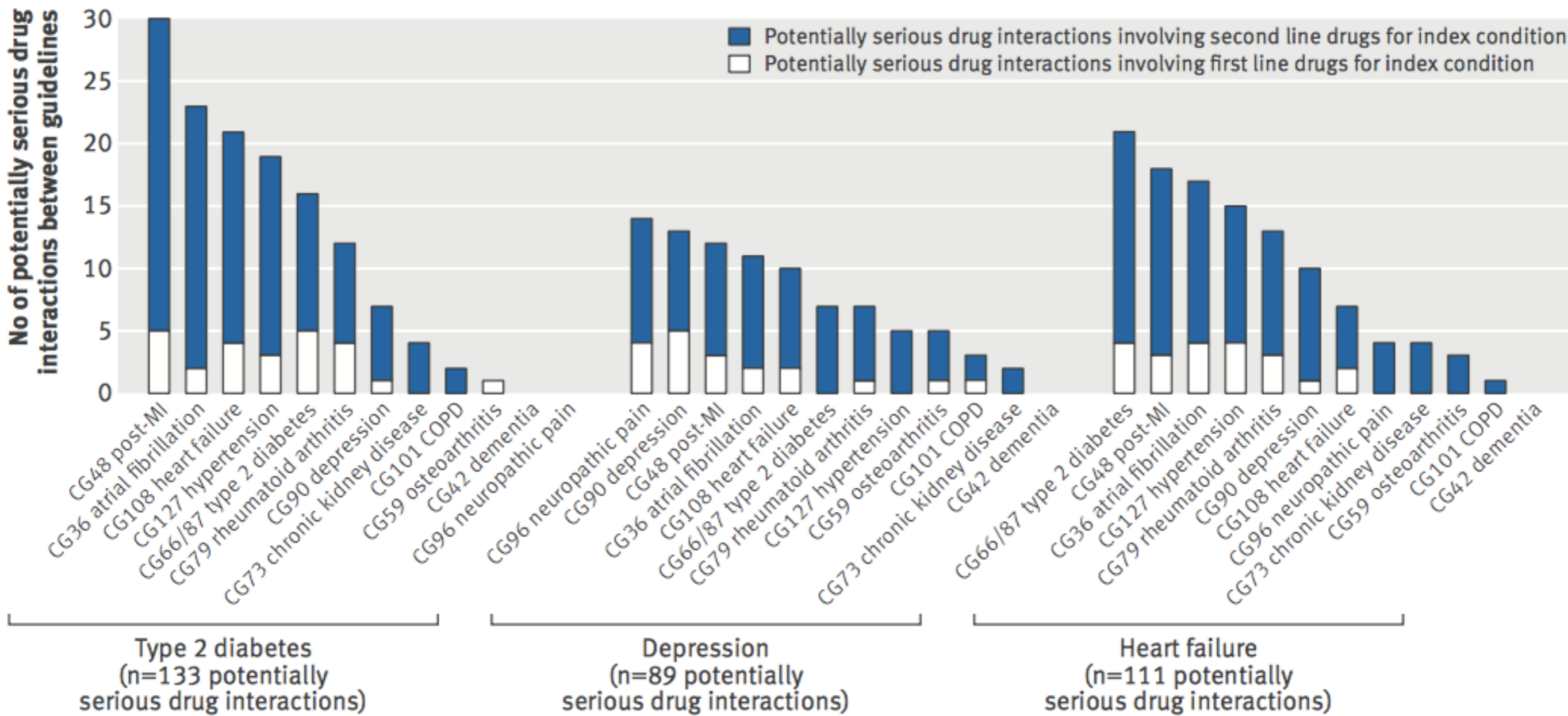


Comorbidities are common

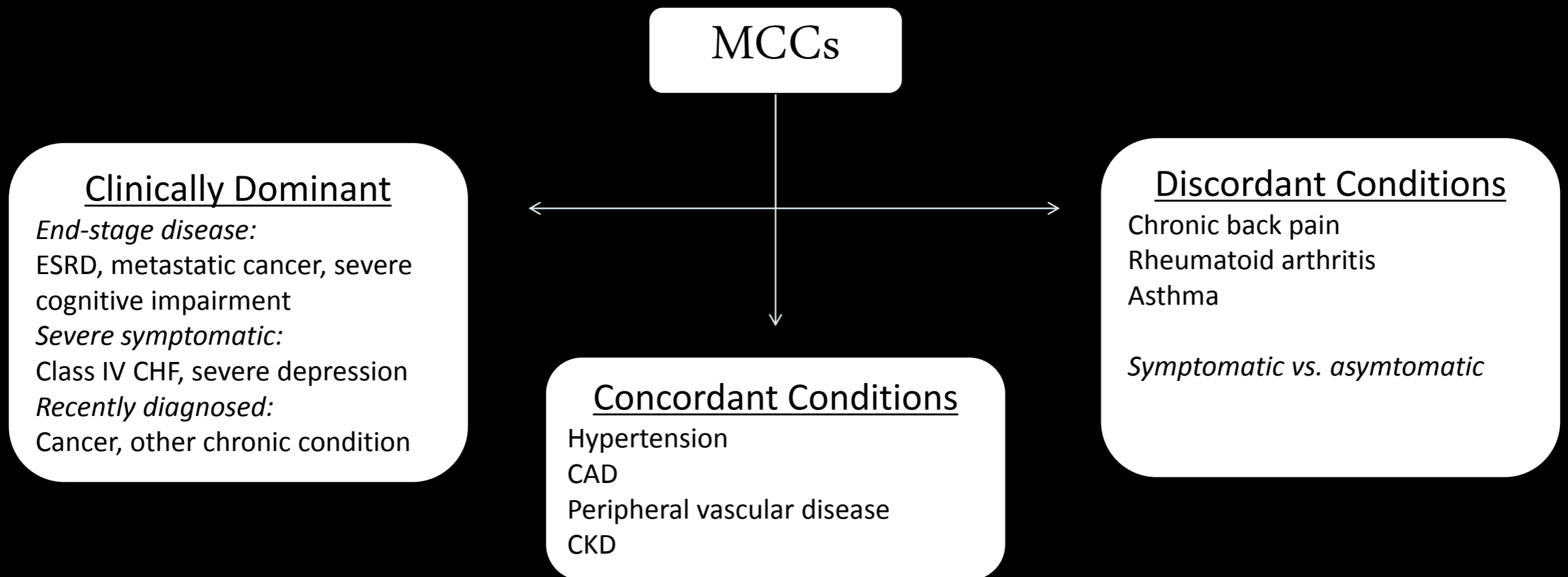


Drug-disease interactions rare, but chronic kidney disease

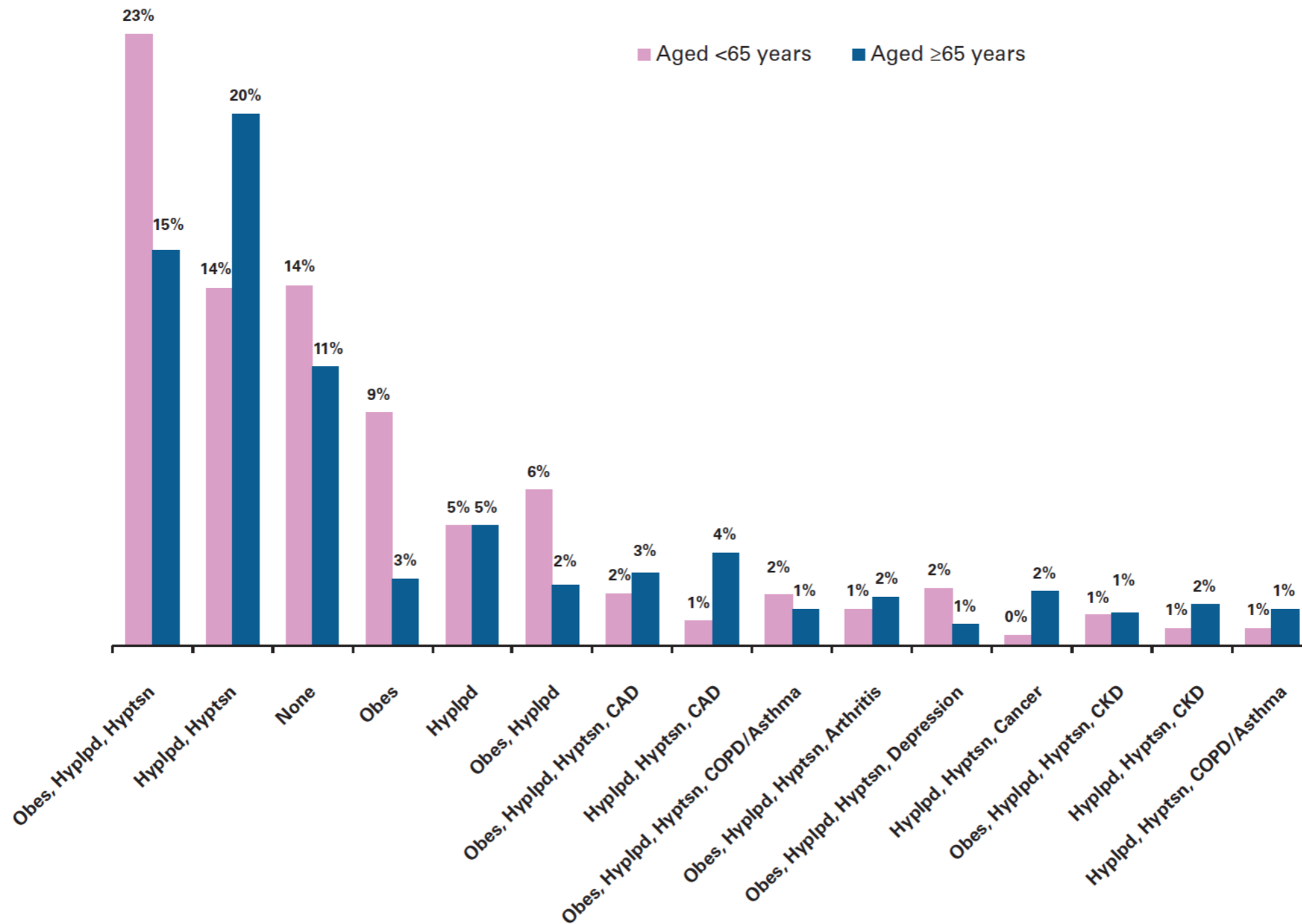
Drug-drug interactions are common, and some serious



Typologies of Multiple Chronic Conditions



Clusters of Chronic conditions



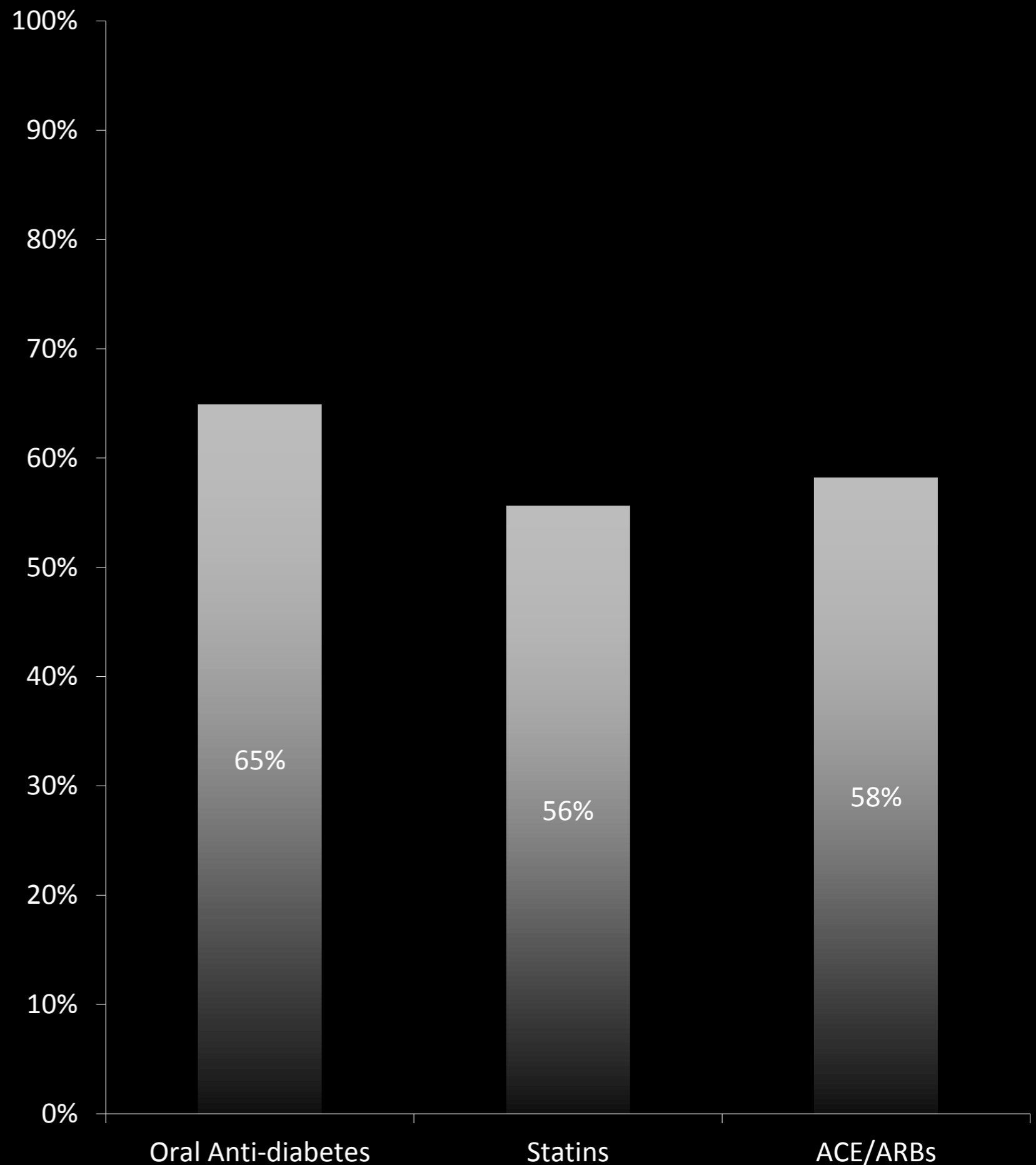
Adherence to Medications

1.8 million enrollees in Medicare Part D

Evaluated adherence to oral anti-diabetes agents, statins, and ACE/ARBs (conditional on at least 1 fill)

Adherence defined as PDC > 80%

Source: Yang 2009, *Clin Ther*



Coercion thru threats of dire outcomes from poor control of the disorder are doubly unethical: it does not work and high anxiety patients withdraw from care when threatened.

Haynes et al. JAMA 2002

Poor fidelity to treatments is the patient's fault
Intentional noncompliance

Communication
Education
Shared decision making

3 2 1

Numbers don't add up

Deadline is now

take work home

perform!

insurance

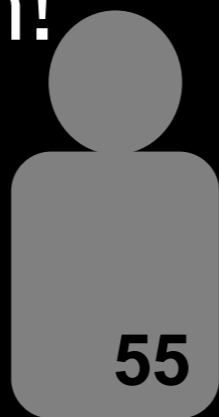
mortgage

debt

Wasted!

Daughter back at home

2 beautiful girls



55

Get a ride

Dietitian

Take off work

108 kg

Obese

High cholesterol

Avoid salt, fats, carbs

LDL high

Metformin

A1c 8.2%

Diabetes

Glipizide

Check sugars

Hypertension

HCTZ

Dizzy

Take pills

Beta-blocker

Depression

Can't sleep

Exercise

Bad back

Neuropathy

Pain

Check his feet

Podiatrist

Collaborate to co-create a program that fits better

FIT

Intensify treatment

A survey of 627 US primary care clinicians

50% of my patients get too much care

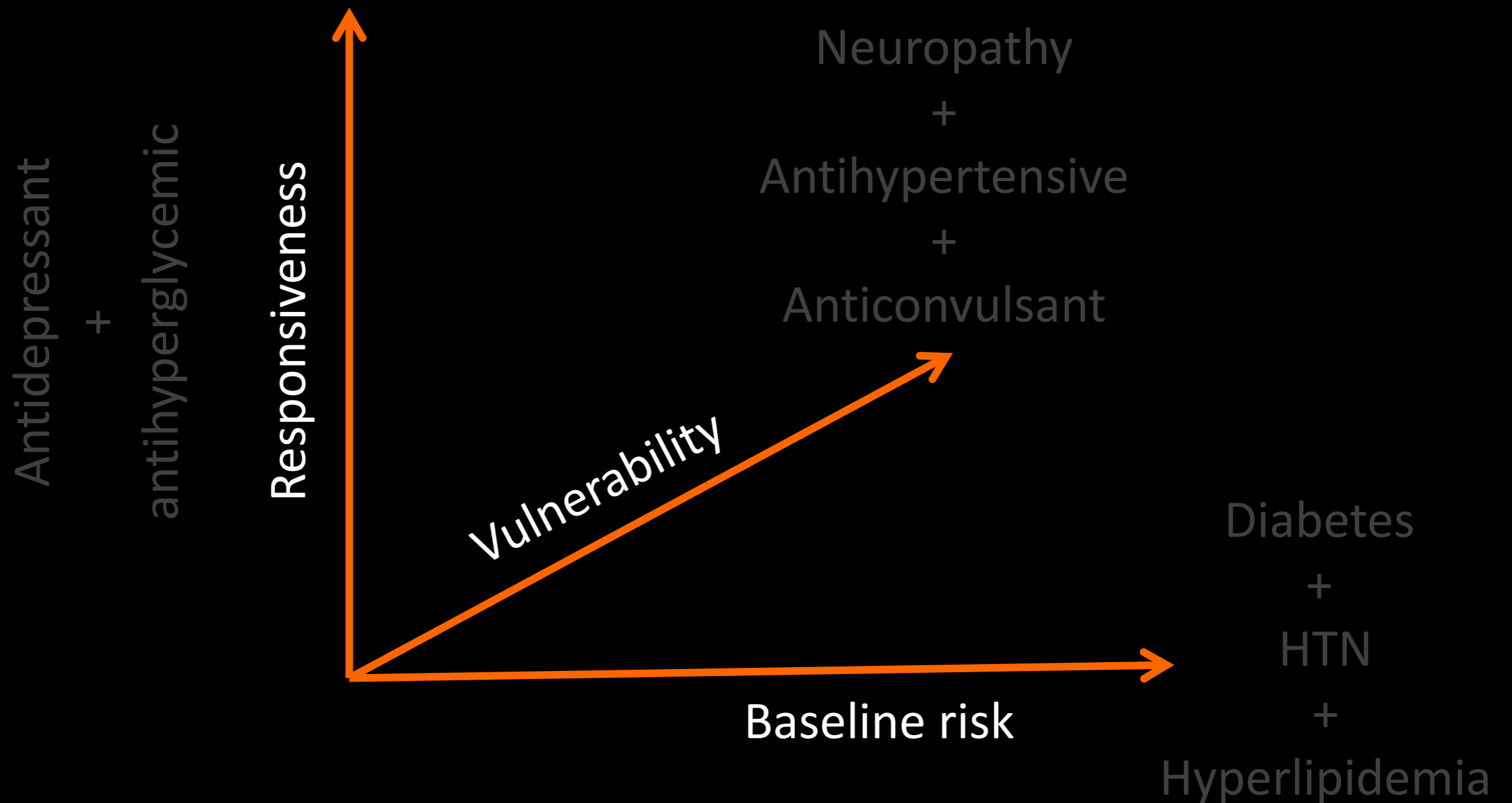
50% of primary care docs are too aggressive

60% of specialists are too aggressive

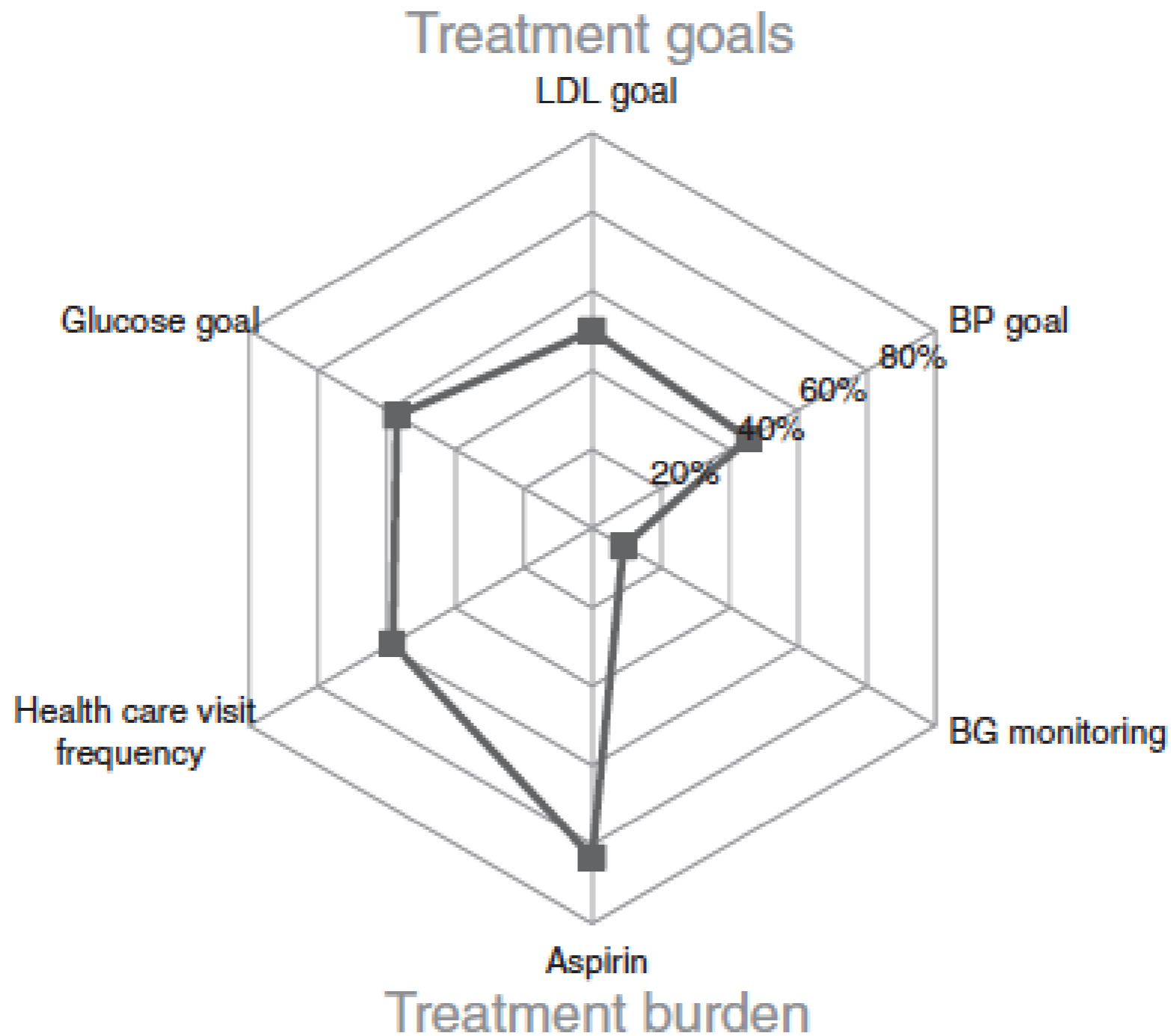
35% practice much more aggressively than what they would like

Evidence-based guidelines are disease-specific

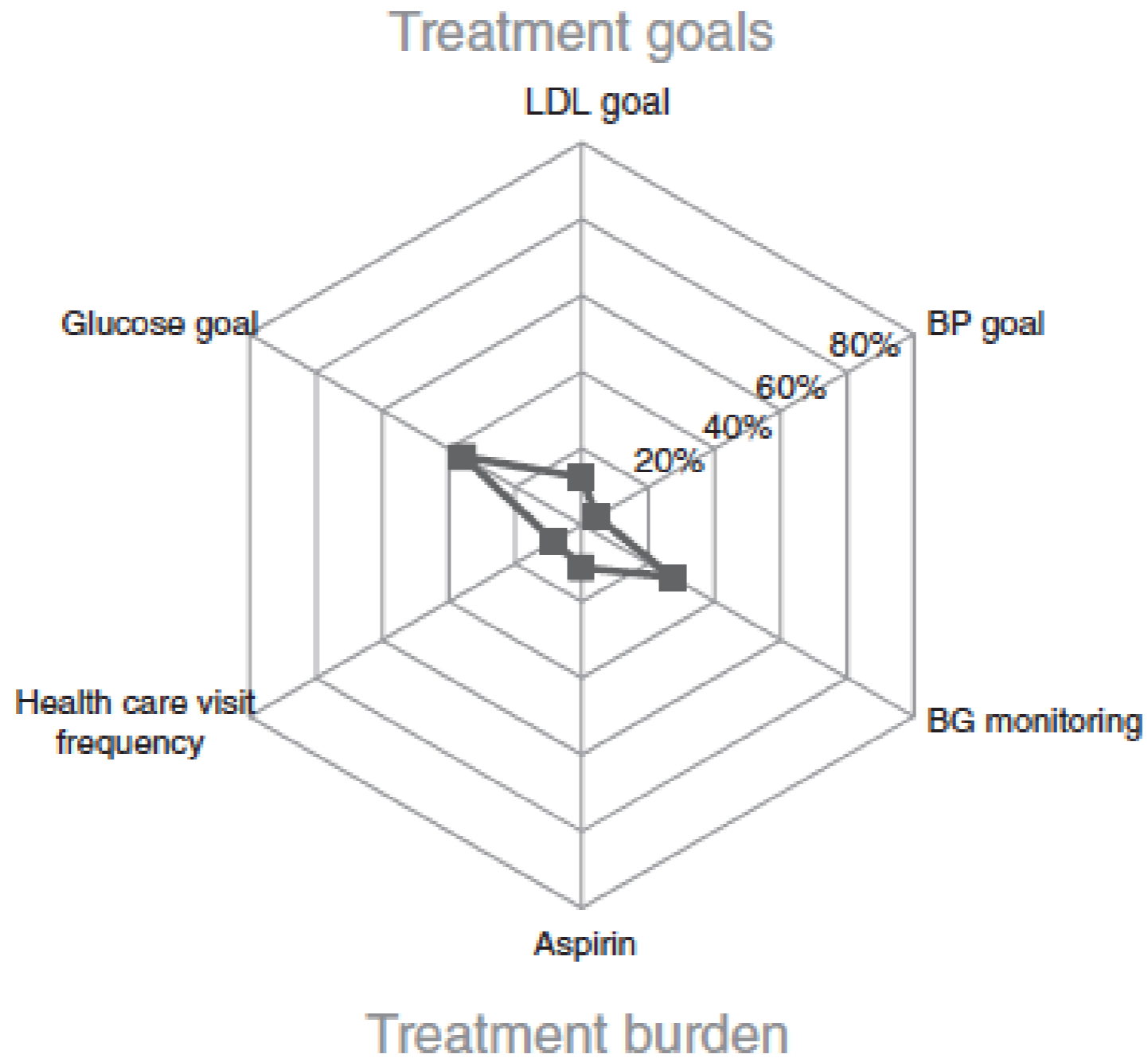
Do the other conditions and their management impact...



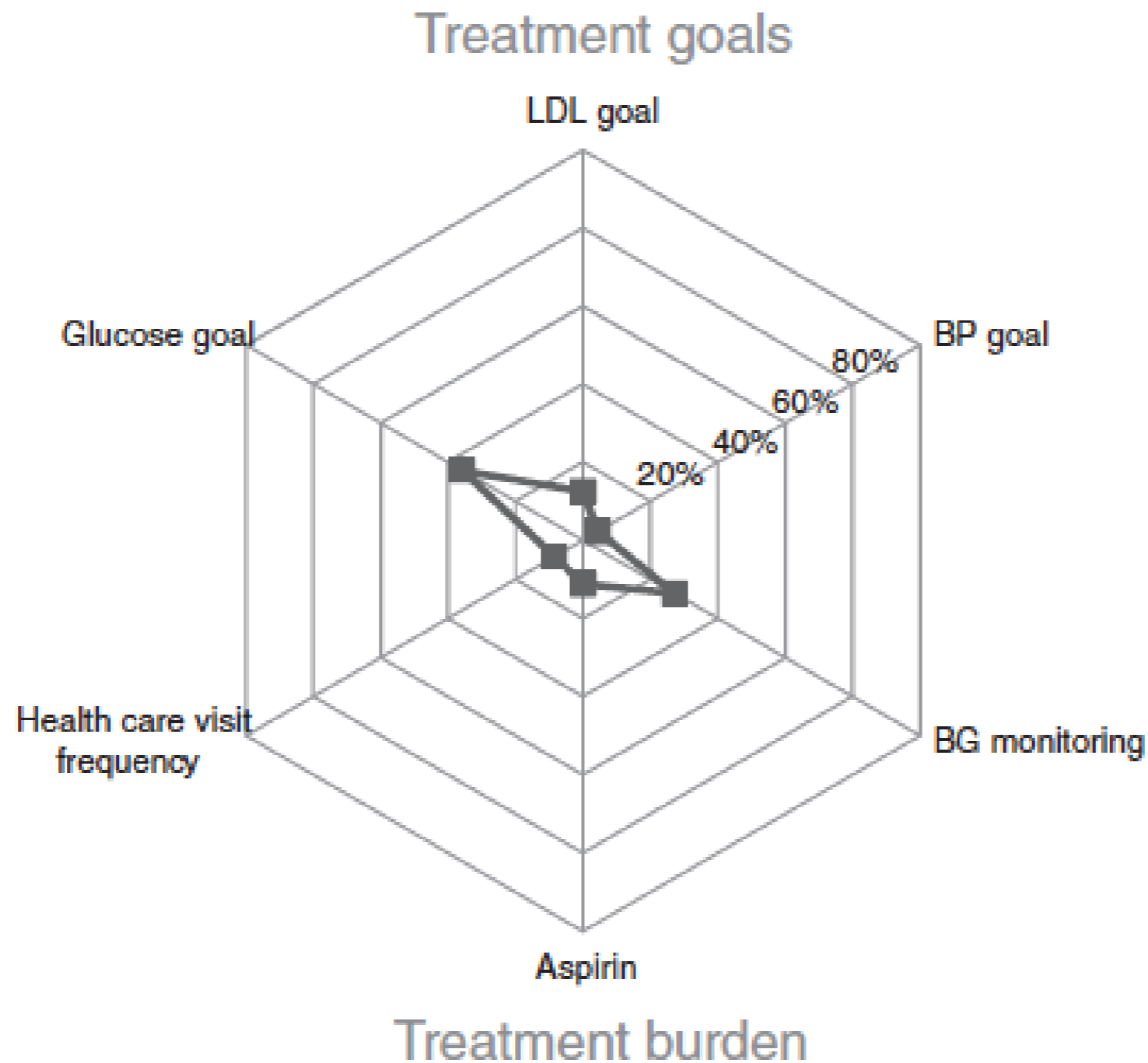
Comorbidities



Socio-personal context



Patient preferences



Evidence-based guidelines
Quality measures + Specialist care
are disease-specific and context blind

Increasingly complex regimens
Treatments | Monitoring

Poor care coordination
Shift to self-management

Increasing treatment burden

Minimally disruptive healthcare

Health care delivery designed to reduce the burden of treatment on patients while pursuing patient goals

Disease-specific guidelines, specialists, and quality targets

Multiple treatments | Monitoring tests

Limited care prioritization

Poor care coordination

Life

Burden of treatment

Workload

access

use

Outcomes

Capacity

self-care

Burden of illness

Scarcity

The work of being a chronic patient



Sense-making work



Organizing work and enrolling others



Doing the work



Reflection, monitoring, appraisal



The work of being a chronic patient

People with more chronic conditions attend more visits, get more tests, and more medicines

Shippee D, In press

2 hours/day spent on health-related activities

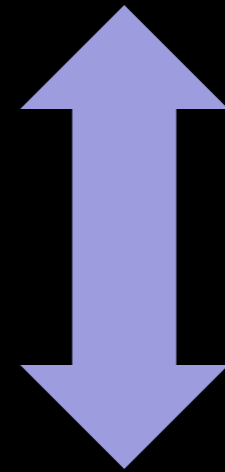
Jowsey and Yem. BMC Public Health 2012

Of 83 workload discussions in 46 primary care visits (24 min):
70% left unaddressed

Bohlen et al. Diabetes Care 2011

Resilience
Literacy
Bandwidth
Mental
Physical
Financial
Social
Environmental

Workload



Capacity

NONCOMPLIANCE



**Imbalance
workload
+
capacity**



Exploring imbalance

1. Is there imbalance of workload-to-capacity?
Has the clinical disrupted life, or *vice versa*
2. Was this acute or chronic imbalance?
3. Was this caused by increased workload?
From life work? From patient work?
4. Was this caused by reduced capacity?
Which: personal, functional, socio-economical?

Workload-to-capacity imbalance?

Acute or chronic imbalance?

By increased workload or reduced capacity?



Resources for easing workload

Problem-focused strategies

Routinizing self-care

Planning for the future

Preserving independence

Enlisting support

Using technology

Proactive with providers

Emotion-focused coping

Maintaining positive attitude

Focusing on life priorities

Questioning the notion of burden

Adaptation of self-care

Social comparison with others

Receiving support from others

Informational

Emotional/companionship

Positive aspects of health care

Systemic aspects

Individual provider

How to manage?

Assess **burden** of treatment and illness

Align **workload** with patient goals:

Problem focused strategies (identify what is wanted and what is not)

- Goal elicitation

- Shared decision making

- Medication therapy management (deprescribing)

Systemic alignment

- Efficiency of visits

- Care delivery locations

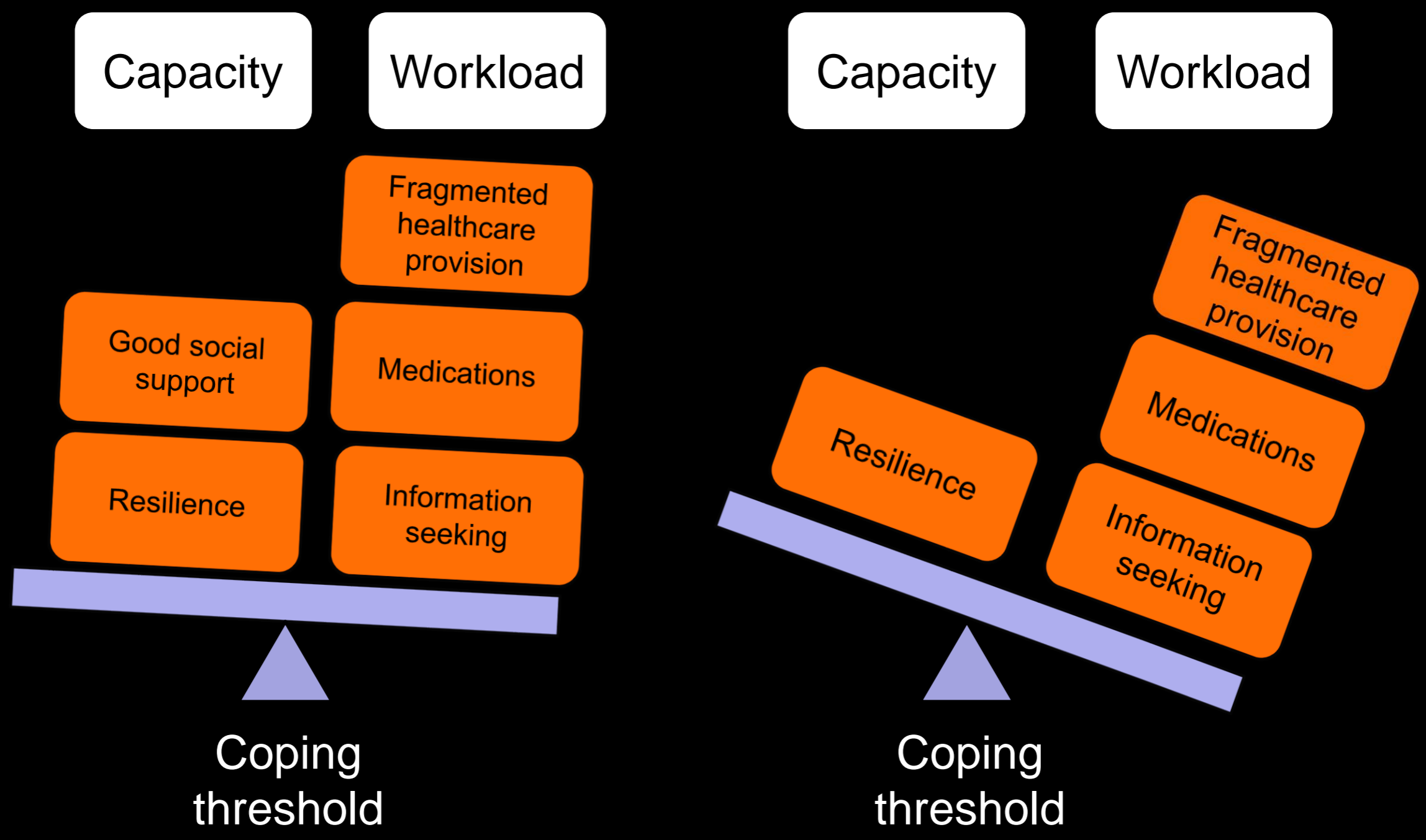
- Transportation

- Financial

Increase **capacity** for patients and families

- Capacity coaching

- Leverage community and personal resources



Managing Workload

MDM – the management process

Patient-focused

A. Encounter actions:

Shared decision making

Medication therapy management

Capacity coaching

B. Referral actions:

Self management training

Palliative care

Mental health

Physical and occupational therapy

Financial and resource security services

Community and governmental resources

Keep in Mind

Sexual Issues

Sleep

Cost

Weight Change

Stopping Approach

What You Should Know

Will this medicine work for me?

- The antidepressants presented in this decision aid all work the same for treating depression.
- Most people with depression can find one that can make them feel better.
- 6 out of 10 people will feel better with the first antidepressant they try and the rest will have to try other antidepressants before they find the one that is right for them.

How long before I feel better?

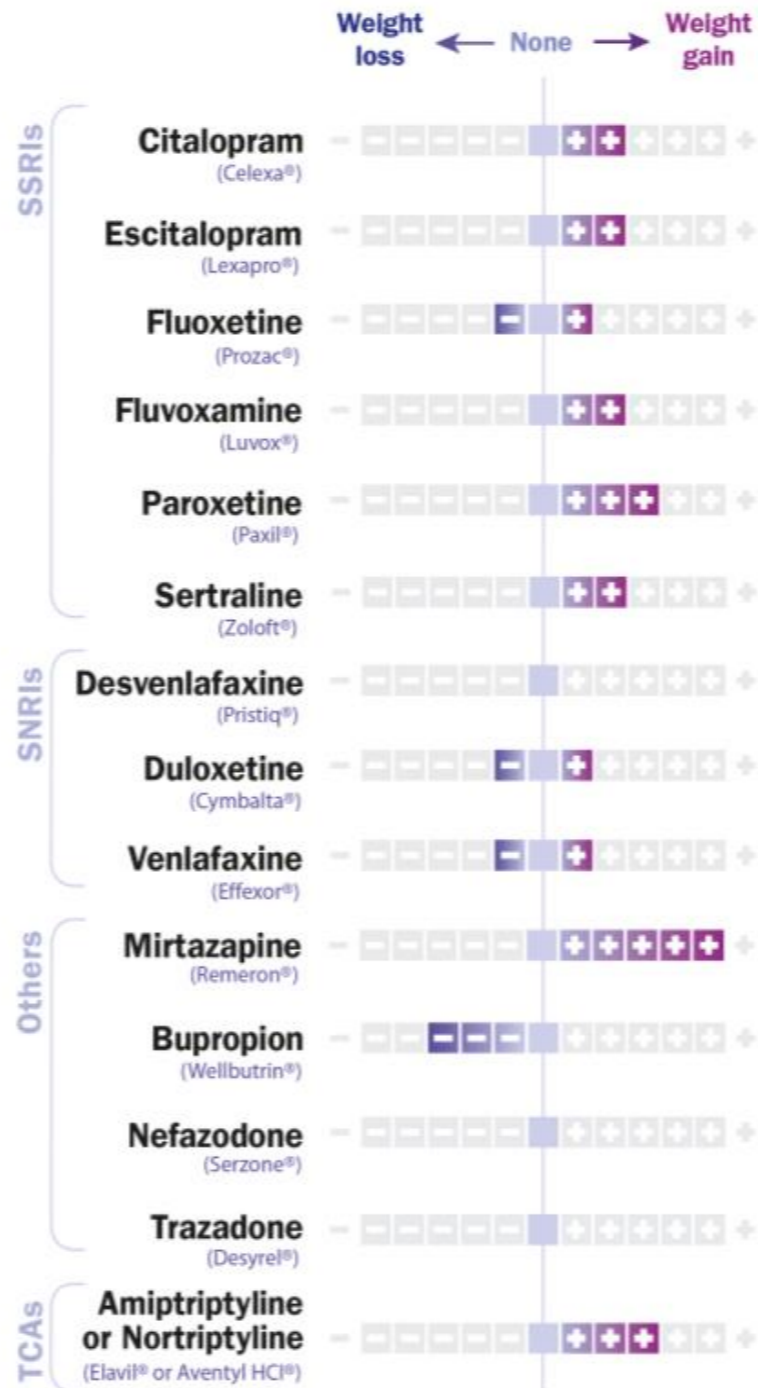
- Most people need to take an antidepressant regularly for at least 6 weeks to begin to get the full effect.

Understanding side effects

- Most people taking antidepressants have at least one side effect.
- Many side effects go away after a few weeks, but some only go away after you stop the medicine.

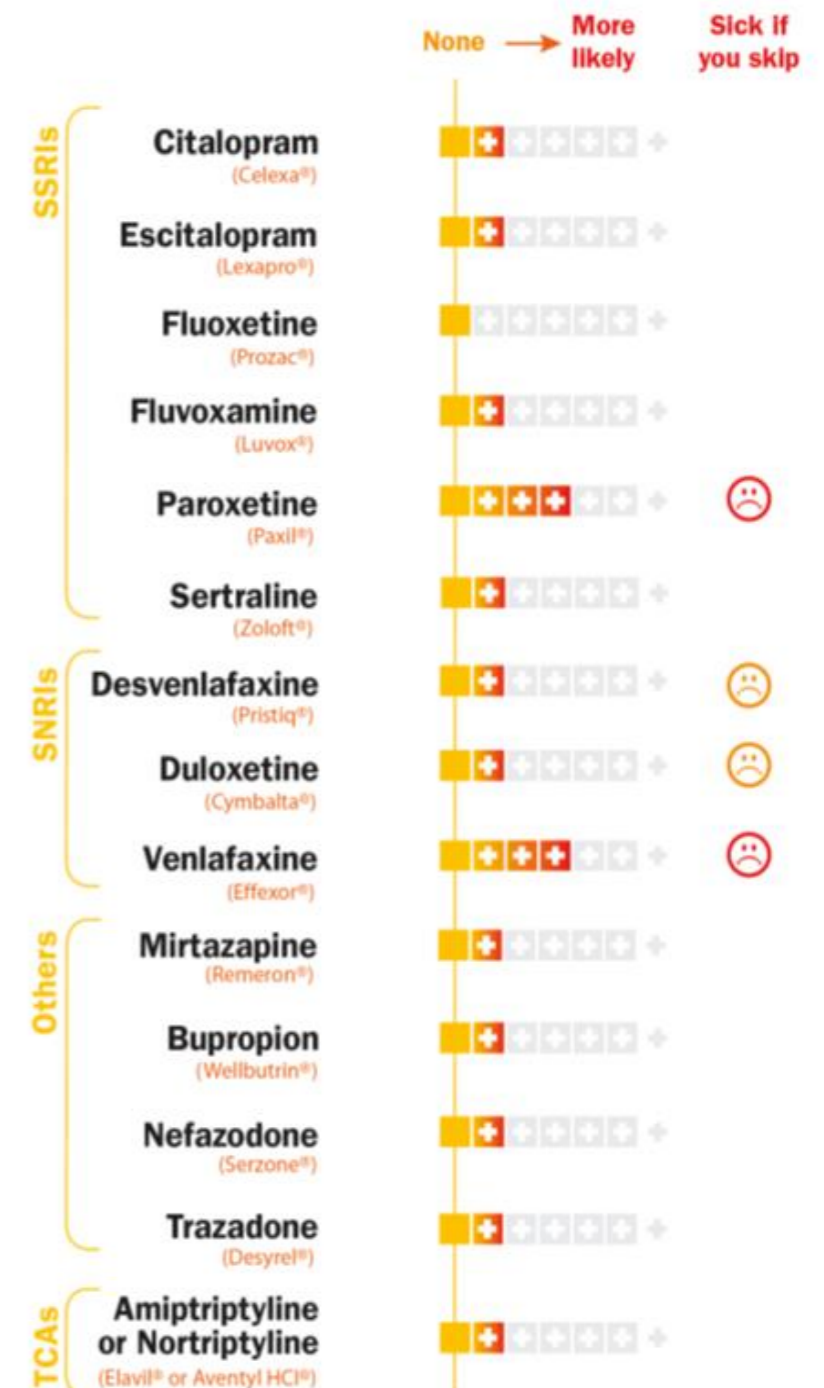
Weight Change

Weight change is most likely to occur over a long period of time and depends on your actual weight.



Stopping Approach

Quitting your medicine all at once can make you feel sick, as if you had the flu (e.g. headache, dizziness, light-headedness, nausea or anxiety).

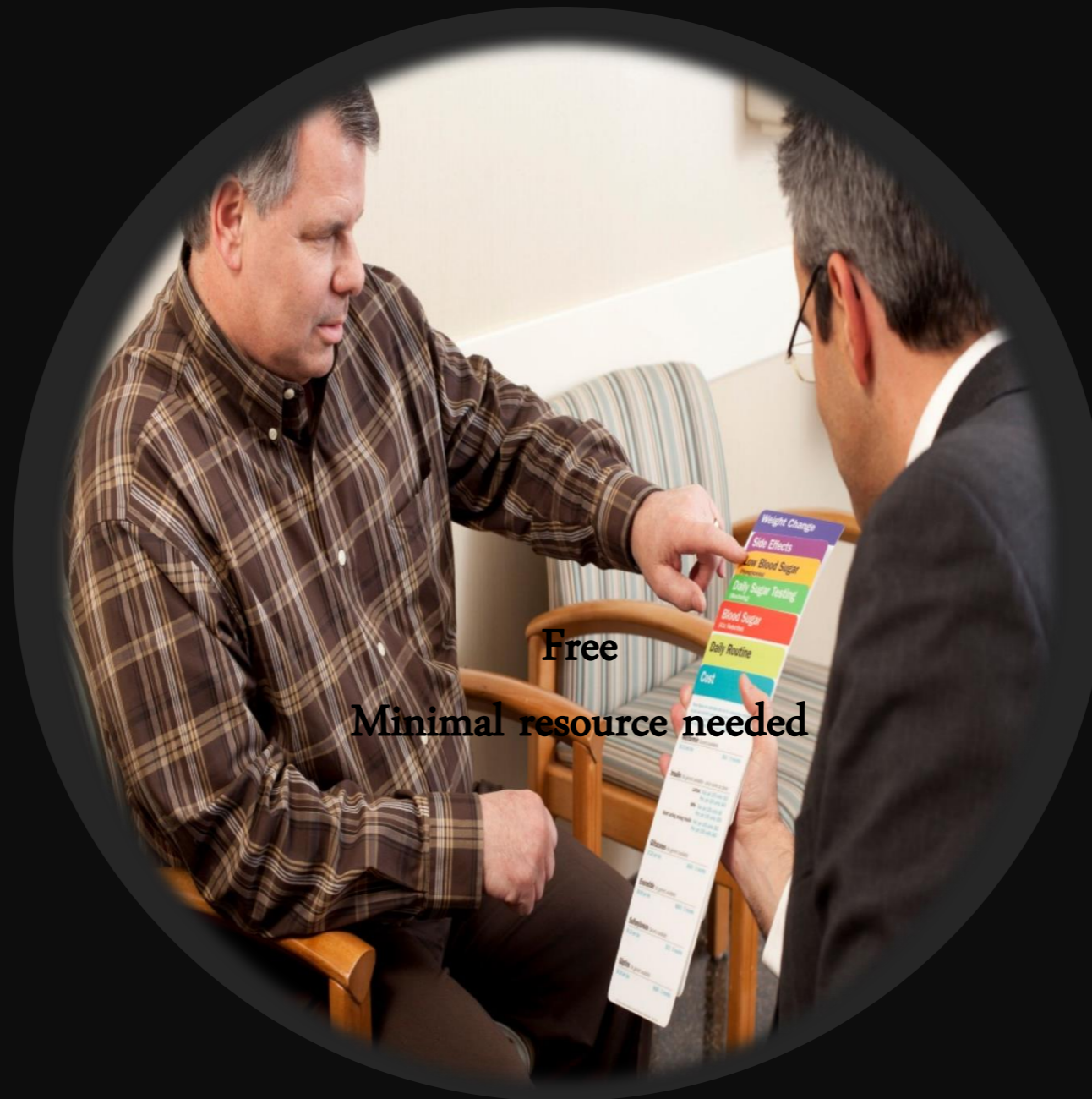


Comfortable

Knowledgeable

Satisfied

(feel better)



Free

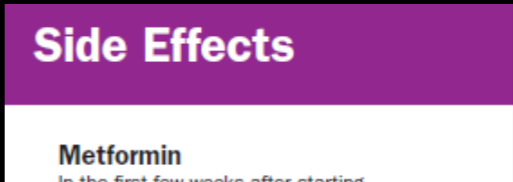
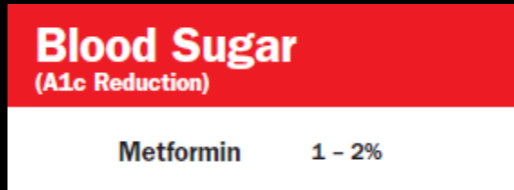
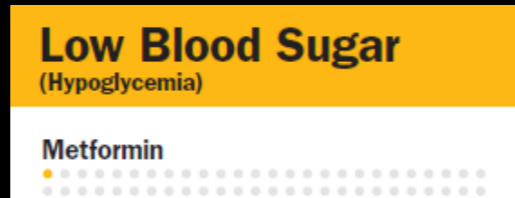
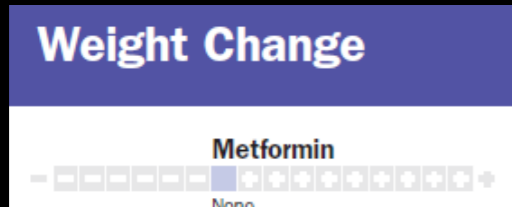
Minimal resource needed

Comfortable

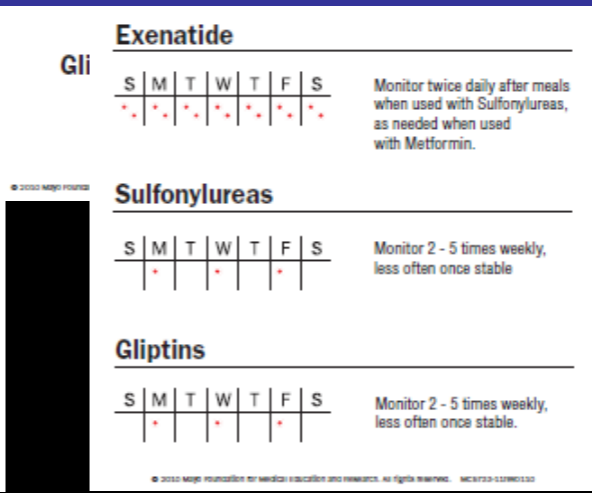
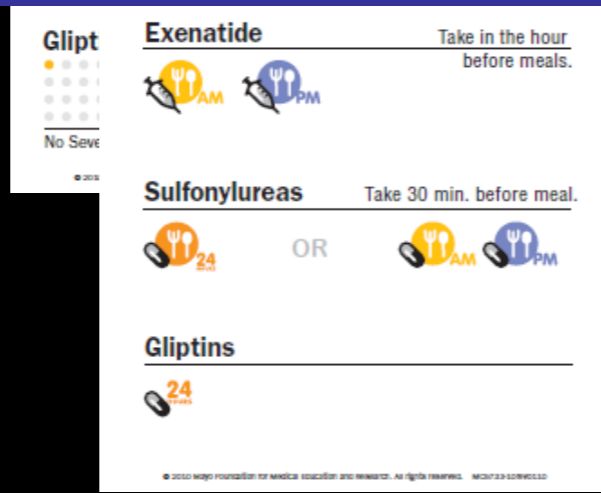
Satisfied

Use tool/like it

Engaged in decision
making process



More helpful
Improved knowledge
Increased patient involvement
No difference in adherence (perfect adherence in control gr)
No significant impact on HbA1c levels



Glitazones (No generic available)	\$7.20 per day	\$650 / 3 months
Exenatide (No generic available)	\$9.00 per day	\$800 / 3 months
Sulfonylureas (Generic available)	\$0.10 per day	\$10 / 3 months
Gliptins (No generic available)	\$6.20 per day	\$560 / 3 months

Statin Choice

MAYO CLINIC

Back

Current Risk

Select Risk Calculator

ACC/AHA ASCVD Framingham Reynolds

Do you have a history of events such as prior heart attack or stroke, acute coronary syndromes, history of angioplasty or stents, etc?

No

These figures are used to calculate my risk of having a heart attack in the next 10 years:

Age

Gender M F

Population Group

Smoker Yes No

Diabetes Yes No

Treated SBP Yes No

Systolic Blood Pressure mmHg

HDL Cholesterol mg/dL

Total Cholesterol mg/dL

Select Current Intervention

Statins No Std Dose High Dose

Aspirin No Low Dose

Statin/Aspirin Choice Decision Aid

Convention Issues Notes Document

Benefits vs Downsides according to my personal health information
Using ACC/AHA ASCVD Risk Calculator

3. View Issues

Current Risk of having a heart attack

Risk for 100 people like you who **do not** medicate for heart problems

100 people represented by 10 rows of 10 circles. 10 circles are yellow (at risk), 90 are green (no risk).

Future Risk of having a heart attack

Risk for 100 people like you who do take **standard dose statins**

Over 10 years

6 people will have a heart attack

92 people will have no heart attack

2 people will be saved from a heart attack by taking medicine



Statin/Aspirin Choice Decision Aid

Back

Share

Current Risk

Intervention

Issues

Notes

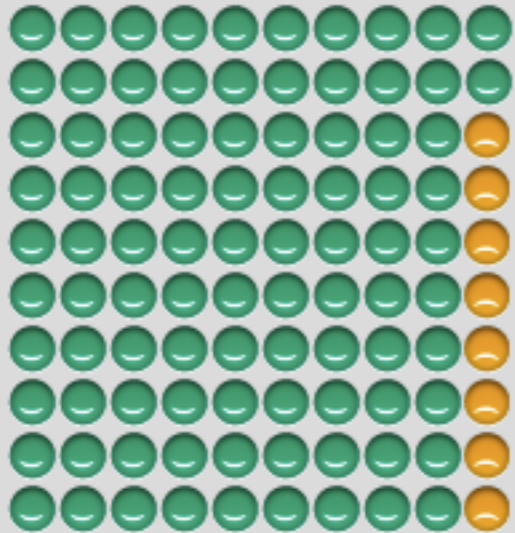
Document

Benefits vs Downsides according to my personal health information

Using ACC/AHA ASCVD Risk Calculator

Current Risk of having a heart attack

Risk for 100 people like you who **do not** medicate for heart problems



Over 10 years
8 people will have a heart attack
92 people will have no heart attack

Cost

Standard dose statins
about \$4/month

Daily Routine

Standard dose statins
One pill once a day

Other Benefits

Standard dose statins
The use of statins reduces your stroke risk by about one fifth.

Side Effects

Standard dose statins

Common side effects
nausea, diarrhea, constipation
(most patients can tolerate);

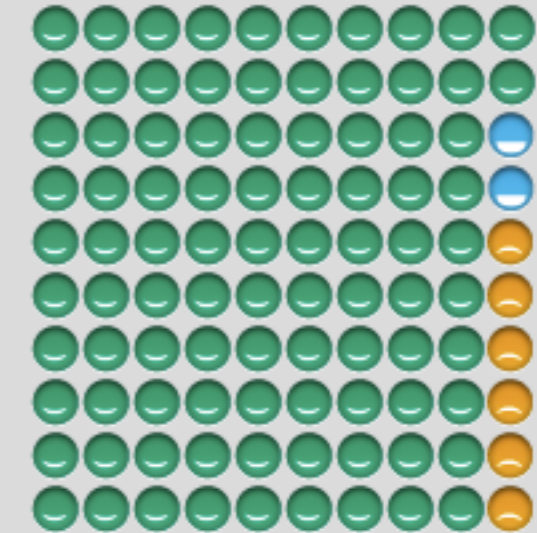
Muscle aching/stiffness
5 in 100 patients
(some need to stop statins because of this);

Liver blood test goes up
(no pain, no permanent liver damage):
2 in 100 patients
(some need to stop statins because of this);

Muscle and kidney damage
1 in 20,000 patients
(requires patients to stop statins).

Future Risk of having a heart attack

Risk for 100 people like you who do take **standard dose statins**



Over 10 years
6 people will have a heart attack
92 people will have no heart attack
2 people will be saved from a heart attack by taking medicine

MDM – the management process

System-focused

A. Reduce waste for the patient / caregiver

In accessing + using healthcare/other services

In enacting self-care

B. Team-based care

Train primary care team in MDM

C. Policy review

Guidelines/quality measures to enable MDM



Provide care and services that FIT

Lean consumption

Medication therapy management

Relational coordination

“Choosing Wisely”

Integrated behavioral health

Care transitions

Community navigators

Capacity coaching

Resource registries

Increasing Capacity

REFERRAL TO EVIDENCE-BASED COMMUNITY PROGRAMS FOR IMPROVED HEALTH

PRESCRIPTION PAD

Freeborn County community resources prescription pad

PATIENT NAME _____ PATIENT PHONE _____
 PATIENT EMAIL _____ TODAY'S DATE _____

- CHRONIC DISEASE SELF-MANAGEMENT PROGRAM (LIVING WELL WITH CHRONIC CONDITIONS)**
DESCRIPTION: SIX-WEEK PROGRAM, WITH TWO-HOUR WEEKLY SESSIONS AT MAYO CLINIC HEALTH REACH CAMPUS
COST: FREE
PROGRAM COMPONENTS: FOR ANYONE OVER THE AGE OF 18, APPROPRIATE EXERCISE AND MEDICATION, COMMUNICATING EFFECTIVELY WITH FAMILY, FRIENDS, HEALTH PROFESSIONALS, DECISION MAKING, ETC. TREATMENTS, DEALING WITH FRUSTRATION, FATIGUE, PAIN AND ISOLATION.
CONTACT : SENIOR RESOURCES, NANCY HALVORSEN, NANCYH@SROFC.ORG, 507-377-7433

- DIABETES PREVENTION PROGRAM (PARTNERSHIP WITH MCHS AND Y-USA)**
DESCRIPTION: 12-month group-based program consists of 16 one-hour weekly sessions monthly sessions at the Albert Lea Family Y.
COST: Call for Information
PROGRAM COMPONENTS: A trained lifestyle coach will introduce topics in a supportive environment and encourage participants as they explore how healthy eating, physical behavior changes can benefit their health. The 12-month group-based program consists of one hour, weekly sessions, followed by monthly sessions led by a trained lifestyle coach with a small group of people with similar goals. Discuss topics such as healthy eating, increasing activity, reducing stress, problem solving, and much more. Stay motivated to maintain progress towards program goals with monthly maintenance sessions.
CONTACT INFO: Albert Lea Family Y, Dennis Dieser, dennis@ymcaal.org, 507-373-8

- TAI JI QUAN (TAI CHI) – MOVING FOR BETTER BALANCE**
DESCRIPTION: Classes are held twice a week for 12 weeks at Mayo Clinic Health System campus
COST: FREE
PROGRAM COMPONENTS: Tai Ji Quan is an evidence-based fall prevention and balance program for older adults. Using a series of slow, flowing forms, seniors will practice movements showing balance, flexibility, strength, and mobility. Tai Ji Quan can be done seated, standing or in a chair. It coordinates breathing with motion for a complete routine.
CONTACT INFO: SENIOR RESOURCES, CAROL SOMA, CAROLSOMA@GMAIL.COM, 507-377-7433

- BONE BUILDERS (BUILDING STRONG BONES FOR A LIFETIME)**
Description: Classes held at various times and locations throughout Freeborn County
Cost: FREE
Program Components: a fitness program for people 60 and older that focuses on balance training and has an educational component that includes such topics as fall prevention and nutrition. They are intended to help seniors make changes that will truly help them stay healthy, while also ensuring that the program itself does not increase stress or cause injury. The program starts off very gently and builds gradually as your strength increases
Contact Info: Senior Resources, Carrie Paulson, carriep@srofc.org, 507-377-7433

- TOBACCO CESSATION**
Description: Support In person or over the phone
Cost: FREE
Program Components: Right here in Freeborn County at Mayo Clinic Health System we have a Certified Tobacco Treatment Specialist. Certified Tobacco Treatment Specialists, or CTTs, are professionals who are trained to provide treatment for individuals seeking to stop using tobacco. The CTTs help tobacco dependent individuals eliminate or substantially reduce their tobacco use by assisting them in developing the motivation, confidence, knowledge and skills necessary to achieve cessation and maintain abstinence.
Contact Info: Mayo Clinic Health System, Rebecca Arneson, arneson.rebecca@mayo.edu, 507-377-5960

- POWERFUL TOOLS FOR CAREGIVERS**
Description: Six weekly classes
Cost: FREE
Program Components: Caregivers develop a wealth of self-care tools to: reduce personal stress; change negative self-talk; communicate their needs to family members and healthcare or service providers; communicate more effectively in challenging situations; recognize the messages in their emotions, deal with difficult feelings; and make tough caregiving decisions.
Contact Info: Senior Resources, Nancy Halvorsen, nancyh@srofc.org 507-377-7433

- Breastfeeding Class**
Description: This one-session class, designed for both the pregnant mother and her support person, provides important information and support for successful breastfeeding, taught by a certified lactation specialist. Recommended between 30-38 weeks of pregnancy.
Cost: FREE
Contact Info: Freeborn County Public Health, Cheryl Lonning, cheryl.lonning@co.freeborn.mn.us 507-377-5100

LOCAL OPTIONS FOR PHYSICAL ACTIVITY: MAYO CLINIC HEALTH SYSTEM'S HEALTH REACH CAMPUS, ALBERT LEA FAMILY Y, BLAZING STAR TRAIL, HELMER MYRE STATE PARK, BLUE ZONES WALKWAY, MALLS, BROOKSIDE SCHOOL
IF YOU ARE OVER 55 AND HAVE TRANSPORTATION NEEDS PLEASE CONTACT SENIOR RESOURCES AT 507-377-7433

INDEPENDENT PHYSICAL ACTIVITY (ON YOUR OWN OR WITH PROGRAM OF YOUR CHOICE)

TYPE OF PHYSICAL ACTIVITY	AEROBIC – DEFINE THIS	STRENGTH DEFINE THIS
NUMBER OF DAYS PER WEEK:		
MINUTES PER DAY:		
TOTAL MINUTES PER WEEK:		

CLINIC: _____
 THIS IS A HIPAA-COVERED ENTITY ____YES ____NO ____DON'T KNOW
 I WOULD LIKE TO RECEIVE AN OUTCOMES REPORT ____YES ____NO SEND TO: _____
 THE DATE RANGE FOR THIS REFERRAL IS _____ TO _____
 PROVIDER SIGNATURE _____
 I CONSENT TO THE ABOVE PROGRAMS CONTACTING ME WITH INFORMATION ABOUT THESE PROGRAMS.
 PATIENT SIGNATURE _____

“What can I do for you today?”

PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

NAME: _____

DATE: _____

Over the *last 2 weeks*, how often have you been bothered by any of the following problems?
(use "✓" to indicate your answer)

	<i>Not at all</i>	<i>Several days</i>	<i>More than half the days</i>	<i>Nearly every day</i>
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3

ORIGIN ME: from re- 'again' + s...

resound /ri'zaund/
booming, or echoing
much talked of. > [as a ...]

DERIVATIVES **resounding**

ORIGIN ME: from RE-
resoner or L. *resonare* 'so ...'

resource /ri'sɔ:s, ri'zɔ:s/
or supply of materials or
adopted in adverse circ
sonal attributes and cari
verse circumstances.
resources.

DERIVATIVES **resource**

ORIGIN C17: from
as n.) of OFr

interval measure
instrument. 8 the degree
phic or television image
adj. formal or archaic
or dispel some
a solution to
to heal or
n. > (of a
of harmonic
a subject or
elements or
separate into
something seen at
when seen more
equipment) separ-
adjacent objects).
in a graph or
city) into com-
n. 1 firm de-
a legislative
solved

“You mean the doctor could ask me how I am coping with my disease? Wow, that would change the world.”

Prototypes





**WHAT MAKES
YOU
FAMOUS?**

Areas in your Life



Results



Are these areas of your life a source of satisfaction, burden, or both?

	Satisfaction	Burden
My Family and Friends	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
My Work	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
My House & Neighborhood	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
My Finances	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Free time, Relaxation, Fun	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Faith or Personal Meaning	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Being Active	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
My Rest and Comfort	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
My Emotional Life	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
My Senses and Memory	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Eating Well	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

What are the things that your doctors or clinic have asked you to do to care for your health?

For example:

Come in for appointments

Take aspirin

Do you feel that they are a help, a burden, or both?

	A help	A burden
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

“What stands out to you?”

What we heard...

“Would you believe that 4 out of 5 days of the week, I have to be a patient?”

“Let’s get as much synced as possible so you only have to come in once every 3 months.”

“I’ve been told to have # of milligrams per day, and I am so careful, but it’s taken over my life a bit.”

“Don’t use table salt to salt your food, and don’t eat more than 2 canned/prepackaged foods per day, and you’ll be fine.”

Burden: Insulin 4X/Day

Solution: Insulin 2X/Day

“Given everything you have going on, do you feel like going for this test would be too much?”

“I really don’t have anything that is giving me joy
right now.”

“We’re going to find something together.”

Conclusions



Acknowledge

Address

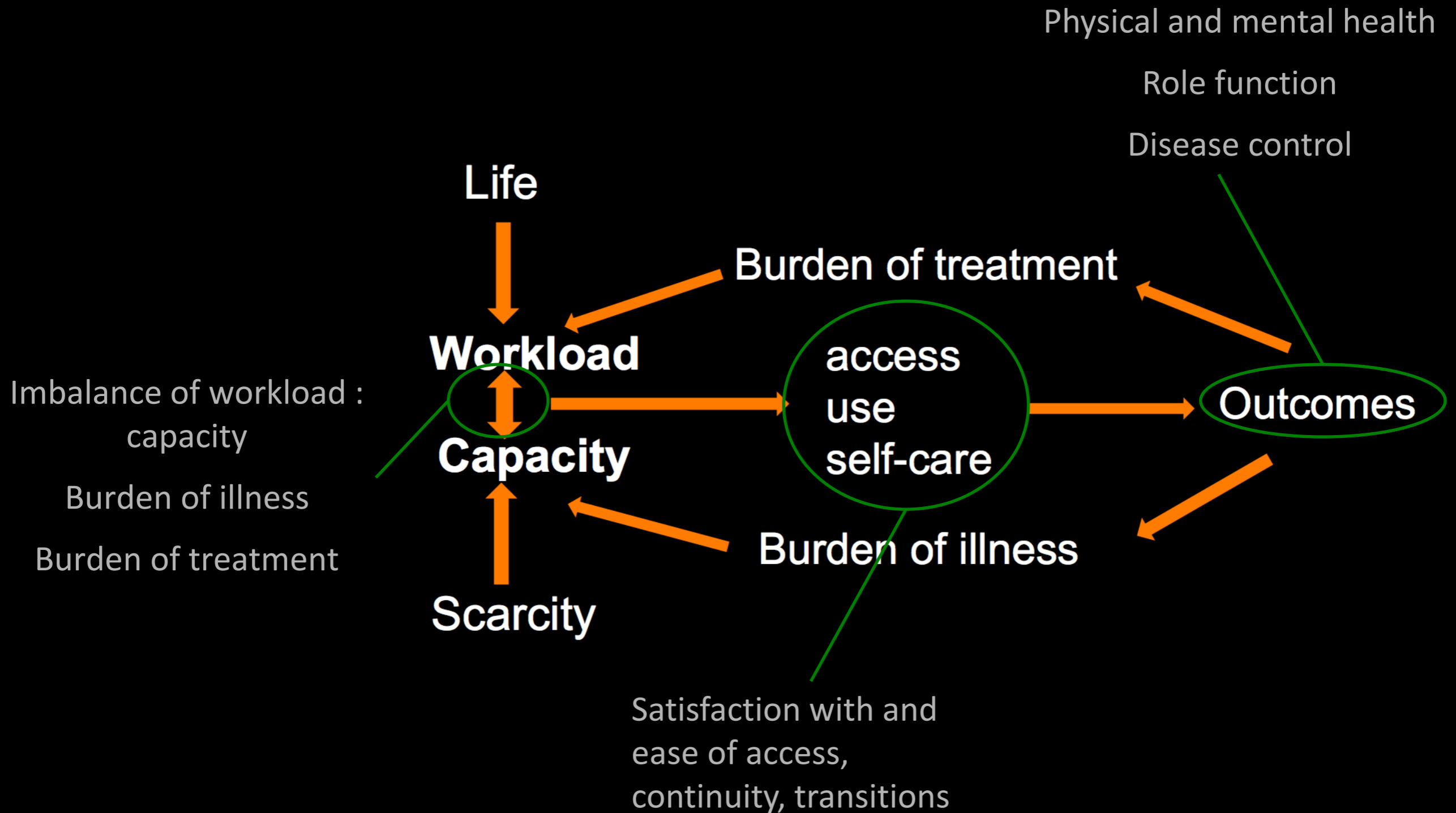
Adapt

Partner

Minimally disruptive healthcare

Health care delivery designed to reduce the burden of treatment on patients while pursuing patient goals

Measuring quality in MDM



Ability to adapt and self-manage

To fully play the role they play

FIT



shah.nilay@mayo.edu



<http://shareddecisions.mayoclinic.org>
<http://minimallydisruptivemedicine.org>