



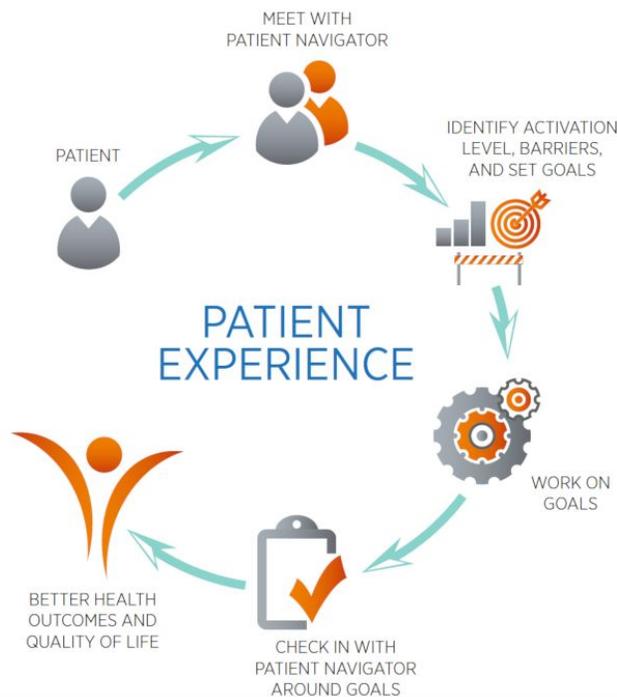
**Patient  
Navigator  
Training  
Collaborative**

## **Level 2: Advanced Care Coordination for Patient Navigators**

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## Course Description

This course focuses on the role of the patient navigator in team-based care coordination. A Level 2 patient navigator may be a nurse or social worker with a bachelor's or master's degree. Some Level 2 navigators have less education but a lot of experience as patient navigators. These navigators work with patients in healthcare or community settings after patients receive a diagnosis, through treatment or disease management, into health maintenance, and sometimes at the end of life. Level 2 navigators may focus on behavior change, adjustment to life with a chronic illness, or help clients maintain a healthy lifestyle. They address barriers to healthcare, coordinate care, tailor health information to patient needs, and motivate clients to make healthy choices.



## Table of Contents

<b>Module 1: Care Coordination and Team-Based Care</b>	<b>p.3-4</b>
→ Care Coordination Introduction & Overview .....	3
→ Active Listening.....	4
<b>Module 2: Panel Management</b>	<b>p.5</b>
→ Introduction/Overview & Risk Stratification.....	5
<b>Module 3: Patient-Centered Care Coordination</b>	<b>p. 6-7</b>
→ Introduction & Self Care Management Support.....	6
→ Patient Centered Goal Setting & Planned Care Visits.....	7
<b>Module 4: Evaluating Care Coordination</b>	<b>p. 8</b>
→ Introduction & Overview.....	8
<b>Appendix: Toolshed</b>	<b>p.9-112</b>
→ Assessment & Screening, Teamwork & Communication Tools, & Registry Tools....	9
→ More Patient Support Tools, Care Coordination Measures, & Screening Schedules.....	10
→ Screening Schedules Continued, Patient Education Material, & Individual Patient Measures.....	11
→ PDF Compilation (See Tools listed to navigate)	12-112
<b>Program Information</b>	<b>pg. 113</b>

# CARE COORDINATION AND TEAM-BASED CARE

## MODULE 1

### Learning Objectives

- Compare and contrast common terms related to care coordination.
- Identify groups of patients that benefit most from care coordination.
- Recognize conditions and situations that pose risks to certain patient populations.
- Discuss system factors that affect patient safety in the collaborative care setting.
- Build a toolkit for effective communication with patients and their family caregivers as well as the members of healthcare teams.

### Introduction

- What is care coordination?
  - Organization of patient care activities
- Who is involved?
  - Between two or more participants (including the patient) involved in a patient's care
- Why?
  - To facilitate the appropriate delivery of health care (McDonald et al., 2007).

**Purpose of care coordination:** to improve outcomes of healthcare by providing safe care, quality care, and affordable care through:

- Teamwork
- Care management
- Medication management
- Health information technology
- Patient-centered medical home

### Roles of Healthcare team through care coordination

#### Healthcare Team

#### Clinical Staff

- Physicians (MD, DO)
- Nurse Practitioner (NP)
- Physician Assistant (PA)
- Registered Nurse (RN)
- Registered Dietician (RD)
- Social Worker (LCSW)

#### Non Clinical Staff

- Patient Navigator
- Promotor/promotora
- Community Health workers (CHW)

### 9 Foundational Care Coordination Activities

1. Establish accountability or negotiate responsibility
  - Role: Team Leader

2. Communicate
  - Role: Everyone
3. Assess needs and goals
  - Role:RN, LCSW, Patient Navigator
4. Create a proactive plan of care
  - Role:RN, LCSW, Patient Navigator
5. Facilitate transitions
  - Role:RN, LCSW, Patient Navigator
6. Monitor, follow up, and respond to change
  - Role:RN, LCSW, Patient Navigator
7. Link to community resources
  - Role: Patient Navigator
8. Align resources with patient & population needs
  - Role:Patient Navigator
9. Support self-management goals
  - Role: RN, LCSW, Patient Navigator

### Patients benefiting from Care Coordination

- Vulnerable populations
  - Have certain chronic conditions
  - Multiple comorbidities
  - See many providers
  - Take many medications
  - Have depression symptoms
  - Have poor health literacy
  - Lack a home caregiver
  - Have been hospitalized in the last 6 months
  - Are physically frail
  - Could die within 1 year
- 8Ps Risk Factor Assessment tool is to assess your patient for their risk of vulnerability

### System Factors Affecting Patient Safety

- Teamwork: everyone involved in patient's care
  - Assess your team: Team Attitude Questionnaire
- Team communication
  - Make time for good communication
- Team Accountability
  - Follow up with other care providers & the patient after a referral or transfer of care
- Standardized Processes to facilitate transitions in care
  - Build good routines for patient safety by standardizing referral processes
  - SBAR Tool

# CARE COORDINATION AND TEAM-BASED CARE

## MODULE 1

### Effective Communication within Teams and with Patients

- **Active Listening:** deeply engaged in and attentive to what the speaker is saying

#### Types of Active Listening

- **Paraphrasing:** Restate the same information using different words to more concisely reflect what the speaker said

- Why do it?
  - Tests your understanding of what is heard by communicating your understanding of what the speaker said.
  - Allows the speaker to 'hear' and focus on his or her own thoughts.
  - Allows the speaker to see that you are trying to understand their message and perceptions. Encourages the speaker to continue speaking.

- Examples
  - "What I'm hearing is..."
  - "Sounds like you are saying..."
  - "I'm not sure I'm with you but..."
  - "If I'm hearing you correctly..."
  - "So, as you see it..."
  - "It sounds like what's most important to you is..."

- **Clarifying:** Invite the speaker to explain some aspect of what she or he said.

- Why do it?
  - Gives the speaker the opportunity to elaborate and clarify what was said.
  - Gives you the opportunity to identify anything that is unclear and to check the accuracy of your understanding.

- Examples
  - "I'm not sure I quite understand; or do you mean that..."
  - "Can you say more about..."
  - "You have given me a lot of information, let me see if I've got it all..."

- **Reflecting:** Relaying what was said back to the speaker to show that you understand how he/she feels about something.

- Why do it?
  - Deepens understanding of feelings and content.
  - Allows the speaker to see that you are trying to understand their message and perceptions.

- Examples
  - "I get the sense that you might be feeling afraid about what might happen if..."
  - "To me, it sounds like you are frustrated about what was said, but I am wondering if you are also feeling a little hurt by it."
  - "It seems like you felt confused and worried when that happened."
  - "So, you're saying that you were feeling more frightened than angry."

- **Summarizing:** Identify, connect, and integrate key ideas and feelings in what the speaker said.

- Why do it?
  - Helps both listener and speaker identify what is most important to the speaker.

- Examples
  - "Let me summarize what I heard so far..."
  - "So, on the one hand...but on the other hand..."
  - "I think I've heard several things that seem to be important to you, first \_\_\_\_\_, second \_\_\_\_\_, third \_\_\_\_\_."
  - "It sounds like there are two things that really matter most to you..."

- **Other Communication Techniques**

- Closed Loop Communication
- Motivational Interviewing for Patient Behavior Change
- O.A.R.S.

# PANEL MANAGEMENT

## MODULE 2

### Learning Objectives

- Define panel management and related concepts.
- Risk stratify a fictional patient panel.
- Differentiate between clinical and nonclinical registries.
- Prioritize patients accordingly to their needs and barriers to care.

### Introduction

**Patient Panel:** list of patients assigned to each care team in the practice.

- The care team is responsible for preventative care, disease management, and acute care for all the patients on its panel

**Panel Management:** working together as a primary care team and using computer tools to ensure all the patients receive timely, safe, effective, patient-centered, efficient, and equitable care.

- Requires a proactive approach to ensure that every patient assigned to a clinic is up to date on basic preventative care

**In-Reach:** an invitation to a patient who is already an active participant in care to use another service, ie., and additional screening tests, diabetes education, a cooking class.

**Outreach:** inviting a patient to come to the office because of lapses in care.

- Pertains to patients who are due or overdue on services

**Care Quality:** the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.

- 6 domains: safe, effective, patient-centered, timely, efficient, equitable

**Patient-Centered Medical Home:** model of organization of primary care that delivers the core functions of primary health care.

- 5 functions & attributes: comprehensive care, patient centered care, coordinated care, accessible services, quality & safety

### Primary Care Panels and Panel Management

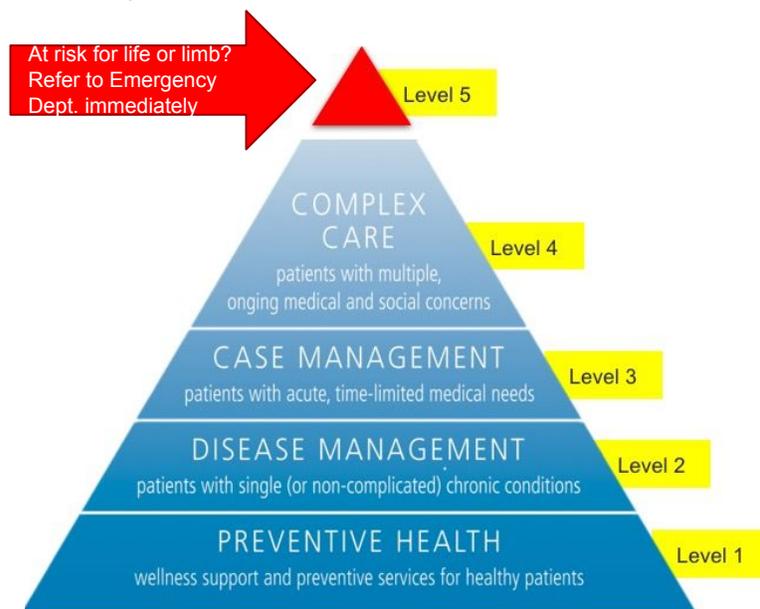
- Panel management depends on identifying certain patient needs,
- **Risk stratification:** grouping patients based on shared characteristics that impede their health

### Purpose of Risk Stratification

- To determine complexity and risk of patient to then be able to plan on addressing the patient's needs
- Helps determine which patients need immediate or extra care

### Risk Stratification Tools

- Several tools exist and vary between clinics and hospitals, and team leader as well as prioritization of needs
- Types: Computerized Stratification, manual scoring tools (by hand), and risk stratification pyramid (below)



[Source: Kaiser Permanente (n.d.). Risk Stratification Model.]

### Registry Tools

- A registry is a large spreadsheet that keeps all pertinent information about a patient regarding prominent disease
- Groups patients together for effective and efficient management
- Helpful to highlight or flag any patient info to follow up with treatment or care
- Registry info can include clinical or non-clinical info
- Resources: [Registries Made Simple -- FPM \(aafp.org\)](#)

○ Registry Tools

# PATIENT-CENTERED CARE COORDINATION

## MODULE 3

### Learning Objectives

- Recall the 9 foundational care coordination activities.
- Select the appropriate care management tasks and responsibilities for various care coordination roles.
- Distinguish between self-care and self-care management support.
- Identify patient strengths and barriers to care.
- Engage patients in goal setting to develop a patient-centered action plan within planned care visits.

### Care Coordinator Job Description

- Job Description Example
- Take note of all activities performed and discuss responsibilities and roles within care team
  - Planning tool for Care Team

### Introduction to Care Management

**Care management:** concrete activities that we do to temporarily assist patients with their health care needs

- Transitioning patients towards independence

### Care management activities

Unlicensed & Licensed Care Coordinator shared roles

- Leading patients & families towards self-care management
- Coaching patients & families
- Engaging patients & families
- Empowering patients & families
- Educating patients & families
- Managing appointments
- Managing referrals
- Medication reconciliation

Additional Licensed Care Coordinator Roles

- Managing medications (RN)
- Counseling patients & families (SW)
- Managing transitions in care (hospital discharge planner)

**Self-Care Management:** Patient is truly independent despite having chronic conditions

- Strategies
  - Show patients concrete skills to act on their problems
  - Let patients define “their” problems and on what they are willing to work first

- Provide real-life problem solving skills that focus on consequences
  - Example: “When you do this, this can happen \_\_\_\_\_. But if you do that, you could have \_\_\_\_ (e.g. more pain free days).
- Help patients become more confident. Break large goals into smaller steps to improve confidence to succeed
- Let patient do what they can do for themselves

### Self-Care Management Support

**Self-care management support:** effort of healthcare staff to train the patient to become confident in engaging in self-care management

Purpose:

- Prompts change towards health behaviors
- Teaches patients strategies for self-reliance
- Empowers patient to become partners to health care team
- Helps patients understand treatment and stick with it

Activities:

- Engaging and activating patients
- Beginning the conversation
- Healthy activities and prevention
- Helping patients understand their chronic disease
- Sticking with it when it’s tough

Steps

1. Put the patient in charge (what to discuss)
  - Communication Strategy for Patient-Centered Education and Self-Care Management
2. Assess the patient’s readiness
  - Readiness Ruler
3. Educate and Coach
  - Assessment of Patient Self-management Ability
  - Teach back approach
  - Patient worksheets: My action plan

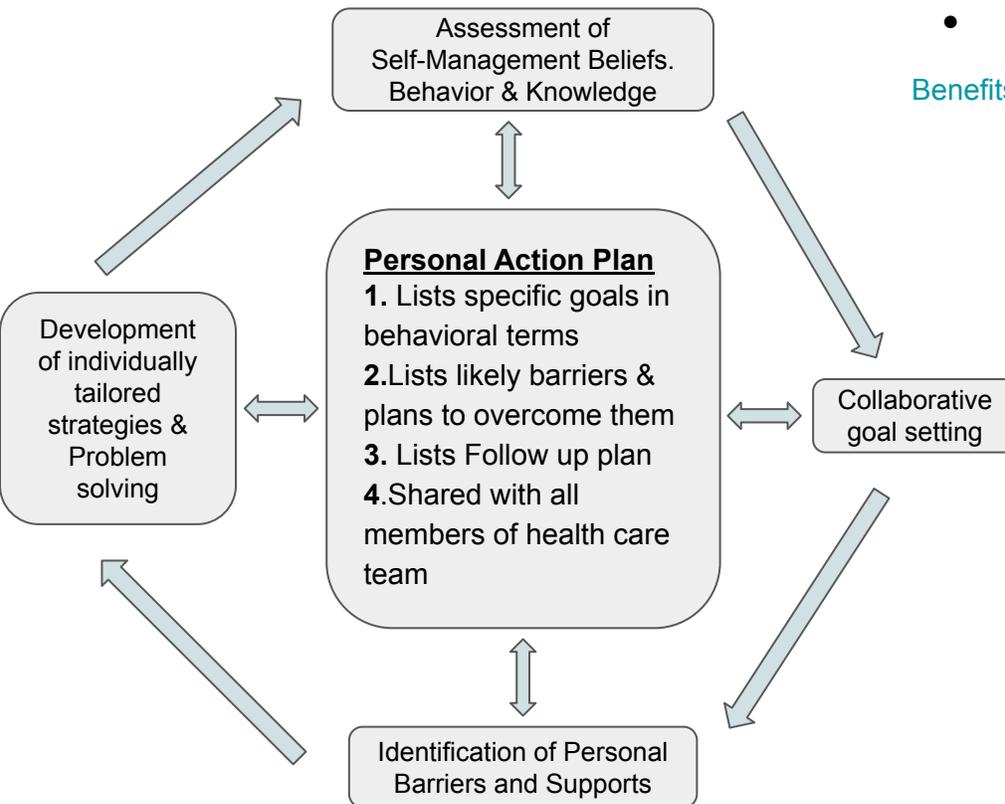
# PATIENT-CENTERED CARE COORDINATION

## MODULE 3

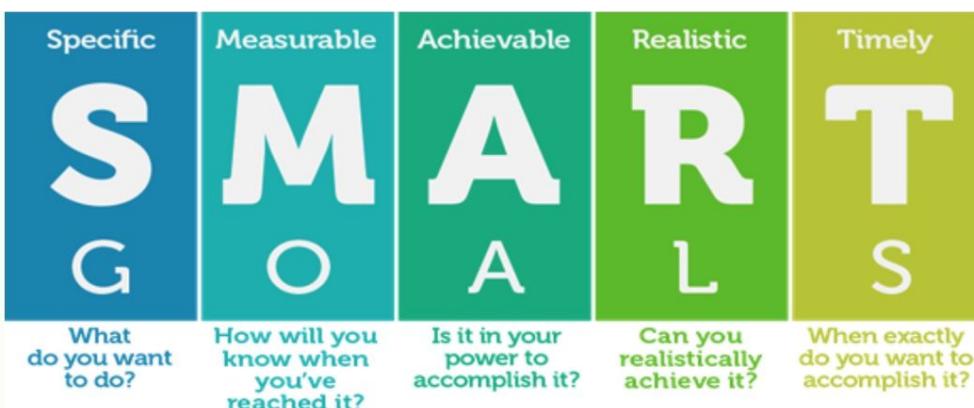


### Patient-Centered Goal Setting

- Inadequate support for self-management of patient's illness can lead to patient thinking clinicians do not explain well
- Focus efforts on getting to know the patient and understanding their goals



### SMART: mnemonic for goal setting



### Planned Care Visits

**Purpose:** set special time for a care coordinator and patient to go over what the patient understands or needs clarified before leaving the clinic

- May require more than 1 visit

#### Can assess:

- What the patient struggles with
- Develop self-care goals
- Further teach about patient's home regimen
- Less one discusses the more the patient retains info

#### Benefits:

- Better clinical control of illness
- Reduce symptoms
- Improve overall health & quality of life
- Fewer acute care visits
- Reduced costs
- Greater patient satisfaction

#### General Setup of Planned Care Visit

- Choose patient population to focus on
- Generate List of patients at particular risk within group
  - At risk:
    - Not adhering to their medication
    - Clinical evidence of poor disease control
    - Haven't received important medications or services for their condition

#### Before Visit

- Call patients and explain need for visit
- Schedule visit and instruct patient to bring all medications
- Prepare for visit: Doctor-Patient Talk
- Review medications prior to visit

#### At Visit

- Review patient's concerns & questions, clinical status & treatment, medications (eliminate or adjust)
- Discuss & resolve adherence issues
- Collaboratively develop a action plan that the patient can & will follow

#### Tools

- Self-management Support Workflow

# EVALUATING CARE COORDINATION

## MODULE 4

### Learning Objectives

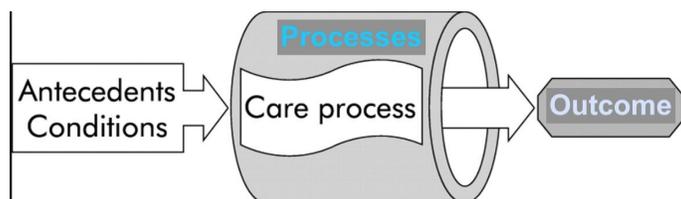
- Define how to measure successful care coordination.
- Distinguish between process and outcome measures.
- Choose appropriate individual and population health indicators to measure the effectiveness of team-based care coordination.
- Use the PDSA cycle as a tool for team performance improvement.

### Introduction

Care coordination success can be viewed as:

- Our patients improved their health?
- We reduced barriers for our patients?
- Our patients became better at self-management?
- Our team worked together more effectively and efficiently?
- Our clinic got better at providing preventative care?
- Our entire patient panel reported to be satisfied with our care management?

### How do we Know Care Coordination is Successful?



- Each patient has a unique set of conditions, symptoms, and social issues (**antecedents conditions**)
- **Process Measure**: capture whether the actions a health professional or the team (including the patient) take to improve care or self-management have been successful.
- **Outcome Measure**: measures of end-result of care
  - ◆ E.g: percentage of diabetes patients that achieved HbA1c levels below 7

### Scientifically Validated Quality Measures for Care Coordination

Predominant reports of scientifically validated care coordination quality measures:

- Care Coordination Quality Measure for Primary Care (CCQM-PC)
- AHRQ Care Coordination Measures Atlas
- NQF Care Coordination Measures
- Boston Children's Hospital CYSHCN Care Coordination Measurement Tool

### Individual Patient-Level Measures

- Encompasses both process and outcome measures

Most common patient-level outpatient care coordination measures:

- Measuring Social Determinants of Health (SDoH)
- Measuring Disease Prevention
- Measuring Self-Management, Life Style, and Behavioral Change
- Measuring Patient Perception of Care Coordination
  - Patient Satisfaction Tool
  - Health-Related Quality of Life (HRQOL) Instrument
  - General Patient Self-Efficacy Assessment

### Population Health Measures

**Population Health Management**: seeks to improve health and lower costs for a defined population through preventative, coordinated, evidence-based care.

Tools::

- Measurement Plan for Population-Level Outcomes
- MACRA Measurement Plan and examples

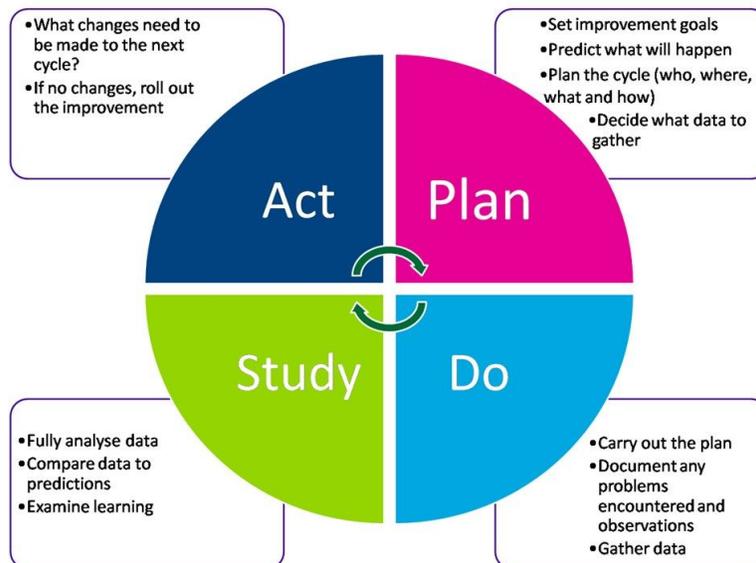
### Prevention Screening Services

U.S. Preventive Services | Prevention TaskForce  
([uspreventiveservicestaskforce.org](http://uspreventiveservicestaskforce.org))

### Improving One Small Step at a Time

Taking steps toward the right direction (forward)

#### PDSA CYCLE:



**A** **Assessment and Screening**

8 Ps Risk Factor Assessment (PDF).....12

Get Up & Go (PDF).....13

PHQ-2 and PHQ-9.....14

Generalized Anxiety Disorder (GAD-7) Scale (PDF).....15

SAHL-E (PDF).....16-17

SAHL-S (PDF).....18-19

SAHL-Key (PDF).....20

Assessment of Patient Self-Management Ability (PDF).....21-22

Transtheoretical (Stages of Change) Model (PDF).....23-24

Functional Pain Scale (PDF).....25-26

Patient Activation Measure ([PAM](#)) (copyrighted) ([Link](#))

→ <https://www.insigniahealth.com/products/pam>

**T** **Teamwork & Communication Tools**

Teamwork: Attitude Questionnaire (PDF)..... 27-29

Communication: Active Listening Handout (PDF)..... 30-31

Communication SBAR Worksheet (PDF)..... 32

Communication Strategy for Patient-Centered Education and Self-Care Management (PDF)..... 33

Planning Tool for Care Teams (PDF)..... 34-35

**R** **Registry Tools**

Registries Made Simple ([Link](#))

→ <https://www.aafp.org/fpm/2011/0500/p11.html>

How to Build a Registry from the Ground Up ([Link](#))

→ <https://www.aafp.org/fpm/1999/1100/p43.html>

How to Build an Asthma Registry (PDF)..... 36-41

Example Diabetes Registry in Excel ([Click Here to Access Excel file](#))

Example Registry for Social Determinants of Health ([Click Here to Access Excel File](#))

## More Patient Support Tools

Doctor-Patient Talk Sheet (PDF).....	42
What do you want to talk about? Goal Setting Worksheet (PDF).....	43
Diabetes Patient Worksheet ( <a href="#">Link to PDF</a> )	
→ <a href="https://docdrop.org/pdf/Diabetes-Patient-Worksheet-rt9yo.pdf/">https://docdrop.org/pdf/Diabetes-Patient-Worksheet-rt9yo.pdf/</a>	
My Action Plan Worksheet ( <a href="#">Link to PDF</a> )	
→ <a href="https://docdrop.org/pdf/All-In-One-Action-Plan-7tv8d.pdf/">https://docdrop.org/pdf/All-In-One-Action-Plan-7tv8d.pdf/</a>	
Comprehensive Action Plan (PDF).....	44-45
Self-Management Support Workflow (PDF).....	46-47
Readiness Ruler (PDF).....	48-60



## Care Coordination Measures

Measurement Plan for Population-Level Outcomes ( <a href="#">Link to PDF</a> )	
→ <a href="https://docdrop.org/pdf/Measurement-Plan-for-Population-Level-Outcomes-wrax9.pdf/">https://docdrop.org/pdf/Measurement-Plan-for-Population-Level-Outcomes-wrax9.pdf/</a>	
MACRA Measurement Plan ( <a href="#">Link to PDF</a> )	
→ <a href="https://docdrop.org/pdf/MACRA-Measurement-Plan-cbrb6.pdf/">https://docdrop.org/pdf/MACRA-Measurement-Plan-cbrb6.pdf/</a>	
Care Coordination Quality Measures for Primary Care (CCQM-PC) (PDF).....	61-75
AHRQ Care Coordination Measures Atlas ( <a href="#">Link to Download PDF</a> )	
→ <a href="https://www.ahrq.gov/ncepcr/care/coordination/atlas.html?msclkid=07db1d7dc02511ec9d686629a4b752af">https://www.ahrq.gov/ncepcr/care/coordination/atlas.html?msclkid=07db1d7dc02511ec9d686629a4b752af</a>	
NQF Care Coordination Measures ( <a href="#">Link to Download PDF</a> )	
→ <a href="https://www.qualityforum.org/Publications/2014/08/Priority_Setting_for_Healthcare_Performance_Measurement_Addressing_Performance_Measure_Gaps_in_Care_Coordination.aspx#:~:text=The%20Priority%20Setting%20for%20Healthcare%20Performance%20Measurement%3A%20Addressing,coordination%20between%20primary%20care%20settings%20and%20community-based%20services.?msclkid=12329b75c02611ec90602d4b5cdf5920">https://www.qualityforum.org/Publications/2014/08/Priority_Setting_for_Healthcare_Performance_Measurement_Addressing_Performance_Measure_Gaps_in_Care_Coordination.aspx#:~:text=The%20Priority%20Setting%20for%20Healthcare%20Performance%20Measurement%3A%20Addressing,coordination%20between%20primary%20care%20settings%20and%20community-based%20services.?msclkid=12329b75c02611ec90602d4b5cdf5920</a>	
Boston Children's Hospital CYSHCN Care Coordination Measurement Tool (PDF).....	76
Patient Satisfaction Tool (PDF).....	77-78
Health Related Quality of Life (HRQOL) Assessment (PDF).....	79
General Patient Self-Efficacy Scale (PDF).....	80



## Screening Schedules

Preventative Screening Schedule (PDF).....	81-82
Details to Prevention Screening Schedule (PDF).....	83-86



## Screening Schedules Continued

Updated Vaccine Schedules, contradictions. And more [\(Link\)](#)

→ <https://www.cdc.gov/vaccines/hcp/adults/for-practice/standards/assessment.html>

Pre-Diabetes Screen (PDF).....	87-88
Schedule for Diabetes Lab Tests and Exams (PDF).....	89
Pediatric Asthma Care Guideline (PDF).....	90-101
Lung Function Testing (PDF).....	102-103
COPD Assessment Test (PDF).....	104
SF-8 Health Survey (PDF).....	105



## Patient Education Material

Heart Failure Education Modules [\(Link\)](#)

→ <https://hfsa.org/hfsa-heart-failure-patient-education-modules>

Vaccine Need Questionnaire for Patients [\(Link\)](#)

→ <https://www.cdc.gov/vaccines/hcp/adults/downloads/patient-intake-form.pdf>

Talking to Patients and Families about Advanced Directives [\(Link\)](#)

→ <https://www.cdc.gov/aging/advancecareplanning/about.htm>



## Individual Patient Measures

Measuring Social Determinants of Health (SDoH) (PDF).....	106-107
Measuring Disease Prevention (PDF).....	108
Measuring Chronic Disease Management.....	109-110
Measuring Self-Management, Life Style, and Behavioral Change (PDF).....	111
Measuring Patient Perception of Care Coordination (PDF).....	112

PDFs found on the following pages



# The 8P Screening Tool

## Identifying Your Patient's Risk for Adverse Events After Discharge

The 8Ps (Check all that apply.)	Risk Specific Intervention	Signature of individual responsible for insuring intervention administered
<b>Problems with medications</b> (polypharmacy – i.e. ≥10 routine meds – or high risk medication including: insulin, anticoagulants, oral hypoglycemic agents, dual antiplatelet therapy, digoxin, or narcotics) <input type="checkbox"/>	<input type="checkbox"/> Medication specific education using Teach Back provided to patient and caregiver <input type="checkbox"/> Monitoring plan developed and communicated to patient and aftercare providers, where relevant (e.g. warfarin, digoxin and insulin) <input type="checkbox"/> Specific strategies for managing adverse drug events reviewed with patient/caregiver <input type="checkbox"/> Elimination of unnecessary medications <input type="checkbox"/> Simplification of medication scheduling to improve adherence <input type="checkbox"/> Follow-up phone call at 72 hours to assess adherence and complications	
<b>Psychological</b> (depression screen positive or history of depression diagnosis) <input type="checkbox"/>	<input type="checkbox"/> Assessment of need for psychiatric care if not in place <input type="checkbox"/> Communication with primary care provider, highlighting this issue if new <input type="checkbox"/> Involvement/awareness of support network insured	
<b>Principal diagnosis</b> (cancer, stroke, DM, COPD, heart failure) <input type="checkbox"/>	<input type="checkbox"/> Review of national discharge guidelines, where available <input type="checkbox"/> Disease specific education using Teach Back with patient/caregiver <input type="checkbox"/> Action plan reviewed with patient/caregivers regarding what to do and who to contact in the event of worsening or new symptoms <input type="checkbox"/> Discuss goals of care and chronic illness model discussed with patient/caregiver	
<b>Physical limitations</b> (deconditioning, frailty, malnutrition or other physical limitations that impair their ability to participate in their care) <input type="checkbox"/>	<input type="checkbox"/> Engage family/caregivers to ensure ability to assist with post-discharge care assistance <input type="checkbox"/> Assessment of home services to address limitations and care needs <input type="checkbox"/> Follow-up phone call at 72 hours to assess ability to adhere to the care plan with services and support in place.	
<b>Poor health literacy</b> (inability to do Teach Back) <input type="checkbox"/>	<input type="checkbox"/> Committed caregiver involved in planning/administration of all discharge planning and general and risk specific interventions <input type="checkbox"/> Post-hospital care plan education using Teach Back provided to patient and caregiver <input type="checkbox"/> Link to community resources for additional patient/caregiver support <input type="checkbox"/> Follow-up phone call at 72 hours to assess adherence and complications	
<b>Patient support</b> (social isolation, absence of support to assist with care, as well as insufficient or absent connection with primary care) <input type="checkbox"/>	<input type="checkbox"/> Follow-up phone call at 72 hours to assess condition, adherence and complications <input type="checkbox"/> Follow-up appointment with appropriate medical provider within 7 days after hospitalization <input type="checkbox"/> Involvement of home care providers of services with clear communications of discharge plan to those providers <input type="checkbox"/> Engage a transition coach	
<b>Prior hospitalization</b> (non-elective; in last 6 months) <input type="checkbox"/>	<input type="checkbox"/> Review reasons for re-hospitalization in context of prior hospitalization <input type="checkbox"/> Follow-up phone call at 72 hours to assess condition, adherence and complications <input type="checkbox"/> Follow-up appointment with medical provider within 7 days of hospital discharge <input type="checkbox"/> Engage a transition coach	
<b>Palliative care</b> (Would you be surprised if this patient died in the next year? Does this patient have an advanced or progressive serious illness? “No” to 1 <sup>st</sup> or “Yes” to 2 <sup>nd</sup> = positive screen) <input type="checkbox"/>	<input type="checkbox"/> Assess need for palliative care services <input type="checkbox"/> Identify goals of care and therapeutic options <input type="checkbox"/> Communicate prognosis with patient/family/caregiver <input type="checkbox"/> Assess and address concerning symptoms <input type="checkbox"/> Identify services or benefits available to patients based on advanced disease status <input type="checkbox"/> Discuss with patient/caregiver role of palliative care services and the benefits and services available to the patient	

## ASSESSMENT

# Timed Up & Go (TUG)

**Purpose:** To assess mobility

**Equipment:** A stopwatch

**Directions:** Patients wear their regular footwear and can use a walking aid, if needed. Begin by having the patient sit back in a standard arm chair and identify a line 3 meters, or 10 feet away, on the floor.

### ① Instruct the patient:

#### When I say “Go,” I want you to:

1. Stand up from the chair.
2. Walk to the line on the floor at your normal pace.
3. Turn.
4. Walk back to the chair at your normal pace.
5. Sit down again.

#### NOTE:

Always stay by the patient for safety.

### ② On the word “Go,” begin timing.

### ③ Stop timing after patient sits back down.

### ④ Record time.

#### Time in Seconds: \_\_\_\_\_

An older adult who takes  $\geq 12$  seconds to complete the TUG is at risk for falling.

CDC’s STEADI tools and resources can help you screen, assess, and intervene to reduce your patient’s fall risk. For more information, visit [www.cdc.gov/steadi](http://www.cdc.gov/steadi)

Patient \_\_\_\_\_

Date \_\_\_\_\_

Time \_\_\_\_\_  AM  PM

## OBSERVATIONS

Observe the patient’s postural stability, gait, stride length, and sway.

### Check all that apply:

- Slow tentative pace
- Loss of balance
- Short strides
- Little or no arm swing
- Steadying self on walls
- Shuffling
- En bloc turning
- Not using assistive device properly

These changes may signify neurological problems that require further evaluation.



Name \_\_\_\_\_ Birthdate \_\_\_\_\_ Doctor \_\_\_\_\_ Today's Date \_\_\_\_\_

### A Survey from Your Healthcare Provider

Part of routine screening for your health includes reviewing mood and emotional concerns.

**During the past two weeks**, have you often been bothered by of the following problems?

Feeling down, depressed, irritable or hopeless?     Yes     No

Little interest or pleasure in doing things?                       Yes     No

**If you answered “Yes” to either question above, please answer all questions below.**

	(0) Not At All	(1) Several Days	(2) More Than Half the Days	(3) Nearly Every Day
<b><u>During the past two weeks</u></b> , how often have you been bothered by of the following problems?				
Feeling down, depressed, irritable or hopeless				
Little interest or pleasure in doing things				
Trouble falling or staying asleep or sleeping too much				
Poor appetite, weight loss, or overeating				
Feeling tired or having little energy				
Feeling bad about yourself --or feeling that you are a failure, or have let yourself or your family down				
Trouble concentrating on things, like reading the newspaper or watching television				
Moving or speaking so slowly that other people could have noticed? Or the opposite – being so fidgety or restless that you were moving around a lot more than usual				
Thoughts that you would be better off dead, or of hurting yourself in some way				
<p>If you are experiencing any of the problems on this form, how difficult have these problems made it for you to do your work, take care of things at home or get along with other people?</p> <p style="text-align: center;"> <input type="checkbox"/> Not difficult at all    <input type="checkbox"/> Somewhat difficult    <input type="checkbox"/> Very difficult    <input type="checkbox"/> Extremely difficult         </p>				

For Office Use Only: Total Score

## Generalized Anxiety Disorder 7-item (GAD-7) scale

Over the last 2 weeks, how often have you been bothered by the following problems?	Not at all sure	Several days	Over half the days	Nearly every day
1. Feeling nervous, anxious, or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it's hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen	0	1	2	3
<i>Add the score for each column</i>	+	+	+	
<b>Total Score (add your column scores) =</b>				

If you checked off any problems, how difficult have these made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all \_\_\_\_\_

Somewhat difficult \_\_\_\_\_

Very difficult \_\_\_\_\_

Extremely difficult \_\_\_\_\_

Source: Spitzer RL, Kroenke K, Williams JBW, Lowe B. A brief measure for assessing generalized anxiety disorder. *Arch Intern Med.* 2006;166:1092-1097.

**The 18 items of SAHL-E, ordered according to item difficulty (keys and distracters are listed in the same random order as in the field interview)**

<b>Stem</b>	<b>Key or Distracter</b>		
1. kidney	__urine	__fever	__don't know
2. occupation	__work	__education	__don't know
3. medication	__instrument	__treatment	__don't know
4. nutrition	__healthy	__soda	__don't know
5. miscarriage	__loss	__marriage	__don't know
6. infection	__plant	__virus	__don't know
7. alcoholism	__addiction	__recreation	__don't know
8. pregnancy	__birth	__childhood	__don't know
9. seizure	__dizzy	__calm	__don't know
10. dose	__sleep	__amount	__don't know
11. hormones	__growth	__harmony	__don't know
12. abnormal	__different	__similar	__don't know
13. directed	__instruction	__decision	__don't know
14. nerves	__bored	__anxiety	__don't know
15. constipation	__blocked	__loose	__don't know
16. diagnosis	__evaluation	__recovery	__don't know
17. hemorrhoids	__veins	__heart	__don't know
18. syphilis	__contraception	__condom	__don't know

## Instruction for Administering SAHL-E

### SHORT ASSESSMENT OF HEALTH LITERACY-ENGLISH (SAHL-E)

#### Interviewer's Instruction

The *Short Assessment of Health Literacy-English*, or SAHL-E, contains 18 test items designed to assess an English-speaking adult's ability to read and understand common medical terms. The test could help health professionals estimate the adult's health literacy level. Administration of the test could be facilitated by using laminated 4"×5" flash cards, with each card containing a medical term printed in boldface on the top and the two association words—i.e., the key and the distracter—at the bottom.

#### Directions to the Interviewer:

1. Before the test, the interviewer should say to the examinee:  
***"I'm going to show you cards with 3 words on them. First, I'd like you to read the top word out loud. Next, I'll read the two words underneath and I'd like you to tell me which of the two words is more similar to or has a closer association with the top word. If you don't know, please say 'I don't know'. Don't guess."***
2. Show the examinee the first card.
3. The interviewer should say to the examinee:  
***"Now, please, read the top word out loud."***
4. The interviewer should have a clipboard with a score sheet to record the examinee's answers. The clipboard should be held such that the examinee cannot see or be distracted by the scoring procedure.
5. The interviewer will then read the key and distracter (the two words at the bottom of the card) and then say:  
***"Which of the two words is most similar to the top word? If you don't know the answer, please say 'I don't know'."***
6. The interviewer may repeat the instructions so that the examinee feels comfortable with the procedure.
7. Continue the test with the rest of the cards.
8. A correct answer for each test item is determined by both correct pronunciation and accurate association. Each correct answer gets one point. Once the test is completed, the interviewer should tally the total points to generate the SAHL-E score.
9. A score between 0 and 14 suggests the examinee has low health literacy.

**The 18 items of SAHL-S, ordered according to item difficulty (keys and distracters are listed in the same random order as in the field interview)**

<b>Stem</b>	<b>Key or Distracter</b>		
1. empleo	__trabajo	__educación	__no se
2. convulsiones	__mareado	__tranquilo	__no se
3. infección	__mata	__virus	__no se
4. medicamento	__instrumento	__tratamiento	__no se
5. alcoholismo	__adicción	__recreo	__no se
6. riñón	__orina	__fiebre	__no se
7. dosis	__dormir	__cantidad	__no se
8. aborto espontáneo	__pérdida	__matrimonio	__no se
9. estreñimiento	__bloqueado	__suelto	__no se
10. embarazo	__parto	__niñez	__no se
11. nervios	__aburrido	__ansiedad	__no se
12. nutrición	__saludable	__gaseosa	__no se
13. indicado	__instrucción	__decisión	__no se
14. hormonas	__crecimiento	__harmonía	__no se
15. abnormal	__diferente	__similar	__no se
16. diagnóstico	__evaluación	__recuperación	__no se
17. hemorroides	__venas	__corazón	__no se
18. sífilis	__anticonceptivo	__condón	__no se

## Instruction for Administering SAHL-S

### SHORT ASSESSMENT OF HEALTH LITERACY-SPANISH (SAHL-S)

#### Interviewer's Instruction

The *Short Assessment of Health Literacy-Spanish*, or SAHL-S, contains 18 test items designed to assess a Spanish-speaking adult's ability to read and understand common medical terms. The test could help health professionals estimate the adult's health literacy level. Administration of the test could be facilitated by using laminated 4"×5" flash cards, with each card containing a medical term printed in boldface on the top and the two association words—i.e., the key and the distracter—at the bottom.

#### Directions to the Interviewer:

1. Before the test, the interviewer should say to the examinee:  
*"Le voy a mostrar tarjetas con 3 palabras en ellas. Primero, me gustaría que usted lea la palabra arriba en voz alta. Entonces, yo leeré las dos palabras debajo a usted y me gustaría que usted me dijera cuál de las dos palabras es más similar a la palabra arriba. Si usted no sabe la respuesta, por favor diga, 'no se'. No adivine."*
2. Show the examinee the first card.
3. The interviewer should say to the examinee:  
*"Ahora, por favor, lea la palabra arriba en voz alta."*
4. The interviewer should have a clipboard with a score sheet to record the examinee's answers. The clipboard should be held such that the examinee cannot see or be distracted by the scoring procedure.
5. The interviewer will then read the key and distracter (the two words at the bottom of the card) and then say:  
*"Cuál de las dos palabras es más similar a la palabra arriba? Si usted no sabe la respuesta, por favor diga, 'no se'."*
6. The interviewer may repeat the instructions so that the examinee feels comfortable with the procedure.
7. Continue the test with the rest of the cards.
8. A correct answer for each test item is determined by both correct pronunciation and accurate association. Each correct answer gets one point. Once the test is completed, the interviewer should tally the total points to generate the SAHL-S score.
9. A score between 0 and 14 suggests the examinee has inadequate health literacy.

## SAHL-E keys

Correct answers are bolded and highlighted in yellow

1. kidney	__ <b>urine</b>	__ fever	__ don't know
2. occupation	__ <b>work</b>	__ education	__ don't know
3. medication	__ instrument	__ <b>treatment</b>	__ don't know
4. nutrition	__ <b>healthy</b>	__ soda	__ don't know
5. miscarriage	__ <b>loss</b>	__ marriage	__ don't know
6. infection	__ plant	__ <b>virus</b>	__ don't know
7. alcoholism	__ <b>addiction</b>	__ recreation	__ don't know
8. pregnancy	__ <b>birth</b>	__ childhood	__ don't know
9. seizure	__ <b>dizzy</b>	__ calm	__ don't know
10. dose	__ sleep	__ <b>amount</b>	__ don't know
11. hormones	__ <b>growth</b>	__ harmony	__ don't know
12. abnormal	__ <b>different</b>	__ similar	__ don't know
13. directed	__ <b>instruction</b>	__ decision	__ don't know
14. nerves	__ bored	__ <b>anxiety</b>	__ don't know
15. constipation	__ <b>blocked</b>	__ loose	__ don't know
16. diagnosis	__ <b>evaluation</b>	__ recovery	__ don't know
17. hemorrhoids	__ <b>veins</b>	__ heart	__ don't know
18. syphilis	__ contraception	__ <b>condom</b>	__ don't know



# Assessing Self-management Ability

The following questions may help you assess your patient's ability to self-manage his or her own health. If possible, ask the questions when a family member or caregiver is present. If any answers concern you, consider following up with other assessments, such as the Mini-Mental State Examination if you're concerned about cognitive status; the PHQ9 if you're concerned about depression; or the DNT5 (a shortened version of the Diabetes Numeracy Test) if you're concerned about the medication management abilities of a patient who has diabetes.

## HOME ENVIRONMENT

- Do you live alone or with others? If with others, who?
- Does the place where you live have a kitchen?
- Are you able to prepare food for yourself?
- Are all utilities turned on (water, electricity, gas)?
- Do you know your neighbors?
- Can you walk safely in your neighborhood?
- Do you have a telephone? If yes, are you able to use it?

## EXERCISE

Do you exercise? If yes, what do you do, for how many minutes, and how often?

## TRANSPORTATION

- Are you able to drive? If yes, do you have a valid driver's license?
- Is there a vehicle you can drive?
- If needed, is there someone who can take you to appointments or the drug and grocery store?
- If needed, is a bus/subway stop nearby?

## ACTIVITIES OF DAILY LIVING

Are you able to perform daily activities, such as dressing, eating, bathing, and toileting, by yourself? If no, does someone else help you?

## HEALTH LITERACY

- What level of education did you complete?
- Do you sometimes have trouble with reading or math?

## LANGUAGE, CULTURE, HEALTH BELIEFS, AND SPIRITUALITY

What are your reading, writing, and speaking abilities in your primary and secondary languages?

- Do you need an interpreter during medical appointments?
- Are you involved in a faith community? If yes, what faith, and does the community offer resources such as health screenings or support groups?
- Are there religious beliefs, customs, or restrictions that we should know about as we provide your medical care?
- Do you have any food or medication preferences or prohibitions?

## SOCIAL SUPPORT AND RESPONSIBILITIES

- Is there someone who:
  - Will listen when you need to talk?
  - Will help you figure out a problem?
  - Will assist you with daily chores when you're sick?
  - Will go out and have fun with you?
- Are you the caretaker for someone else who has a health problem? If yes, what does the caretaking entail?

## SUBSTANCE USE

- Do you use tobacco? If yes, what kind, how long, and how much?
- Do you drink alcohol? If yes, how often and how much?
- Do you use drugs (such as marijuana, LSD, heroin, speed, meth, narcotics)? If yes, how often?

## MENTAL HEALTH/MEMORY

- This past month, have you:
  - Often felt down, depressed, or hopeless?
  - Often felt little pleasure or interest in doing things?
- Do you have memory problems? If yes, could you describe?
- Are you able to keep track of appointments on a calendar? If no, is there someone else you can rely on to keep track of your appointments and remind you?

### FINANCES

Do you manage your own finances? If no, does someone else do it for you?

Do you sometimes skip medical appointments or not fill prescriptions because of the cost?

### YOUR MEDICAL CONDITION (FOR PATIENTS WHO HAVE A CHRONIC CONDITION)

What is your understanding of your condition?

### MEDICATIONS

Are you usually able to take prescription medicines as directed? If no, why?

- Do you sometimes not understand how to take them?
- Are some prescriptions too expensive?
- Does your insurance not cover prescriptions?
- Do you have trouble swallowing large tablets?
- Other reason:

Do you manage your own medications? If no, is there someone you can rely on to do this for you?

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### ADDITIONAL RESOURCES

The following *American Family Physician* articles have other assessment tools that may help:

Clark MS, Jansen KL, Cloy A. Treatment of childhood and adolescent depression. *Am Fam Physician*. <http://www.aafp.org/afp/2012/0901/p442.html>. Accessed November 1, 2012.

Elsawy B, Higgins KE. The geriatric assessment. *Am Fam Physician*. 2011;83(1):48-56. <http://www.aafp.org/afp/2011/0101/p48.html>. Accessed November 1, 2012.

Norris D, Clark MS. Evaluation and treatment of the suicidal patient. *Am Fam Physician*. 2012;85(6):602-605. <http://www.aafp.org/afp/2012/0315/p602.html>. Accessed November 1, 2012.

Saguil A, Phelps K. The spiritual assessment. *Am Fam Physician*. 2012;86(6):546-550. <http://www.aafp.org/afp/2012/0915/p546.html>. Accessed November 1, 2012.

Simmons BB, Hartmann B, DeJoseph D. Evaluation of suspected dementia. *Am Fam Physician*. 2011;84(8):895-902. <http://www.aafp.org/afp/2011/1015/p895.html>. Accessed November 1, 2012.

Walling AD, Dickson GM. Hearing loss in older adults. *Am Fam Physician*. 2012;85(12):1150-1156. <http://www.aafp.org/afp/2012/0615/p1150.html>. Accessed November 1, 2012.

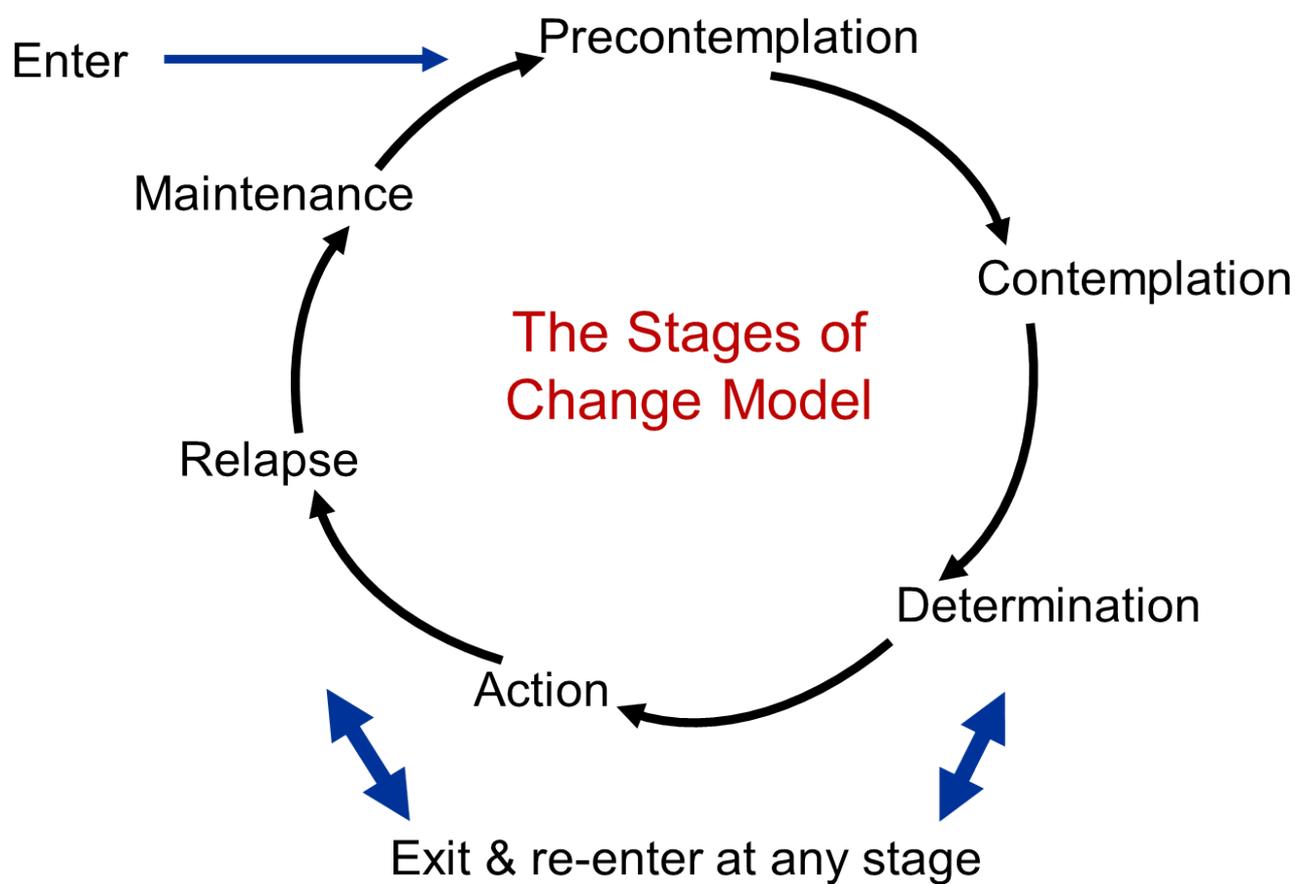


## The Transtheoretical Model (Stages of Change)

The Transtheoretical Model (also called the Stages of Change Model), developed by Prochaska and DiClemente in the late 1970s, evolved through studies examining the experiences of smokers who quit on their own with those requiring further treatment to understand why some people were capable of quitting on their own. It was determined that people quit smoking if they were ready to do so. Thus, the Transtheoretical Model (TTM) focuses on the decision-making of the individual and is a model of intentional change. The TTM operates on the assumption that people do not change behaviors quickly and decisively. Rather, change in behavior, especially habitual behavior, occurs continuously through a cyclical process. The TTM is not a theory but a model; different behavioral theories and constructs can be applied to various stages of the model where they may be most effective.

The TTM posits that individuals move through six stages of change: precontemplation, contemplation, preparation, action, maintenance, and termination. Termination was not part of the original model and is less often used in application of stages of change for health-related behaviors. For each stage of change, different intervention strategies are most effective at moving the person to the next stage of change and subsequently through the model to maintenance, the ideal stage of behavior.

1. Precontemplation - In this stage, people do not intend to take action in the foreseeable future (defined as within the next 6 months). People are often unaware that their behavior is problematic or produces negative consequences. People in this stage often underestimate the pros of changing behavior and place too much emphasis on the cons of changing behavior.
2. Contemplation - In this stage, people are intending to start the healthy behavior in the foreseeable future (defined as within the next 6 months). People recognize that their behavior may be problematic, and a more thoughtful and practical consideration of the pros and cons of changing the behavior takes place, with equal emphasis placed on both. Even with this recognition, people may still feel ambivalent toward changing their behavior.
3. Preparation (Determination) - In this stage, people are ready to take action within the next 30 days. People start to take small steps toward the behavior change, and they believe changing their behavior can lead to a healthier life.
4. Action - In this stage, people have recently changed their behavior (defined as within the last 6 months) and intend to keep moving forward with that behavior change. People may exhibit this by modifying their problem behavior or acquiring new healthy behaviors.
5. Maintenance - In this stage, people have sustained their behavior change for a while (defined as more than 6 months) and intend to maintain the behavior change going forward. People in this stage work to prevent relapse to earlier stages.
6. Termination - In this stage, people have no desire to return to their unhealthy behaviors and are sure they will not relapse. Since this is rarely reached, and people tend to stay in the maintenance stage, this stage is often not considered in health promotion programs.



To progress through the stages of change, people apply cognitive, affective, and evaluative processes. Ten processes of change have been identified with some processes being more relevant to a specific stage of change than other processes. These processes result in strategies that help people make and maintain change.

1. Consciousness Raising - Increasing awareness about the healthy behavior.
2. Dramatic Relief - Emotional arousal about the health behavior, whether positive or negative arousal.
3. Self-Reevaluation - Self reappraisal to realize the healthy behavior is part of who they want to be.
4. Environmental Reevaluation - Social reappraisal to realize how their unhealthy behavior affects others.
5. Social Liberation - Environmental opportunities that exist to show society is supportive of the healthy behavior.
6. Self-Liberation - Commitment to change behavior based on the belief that achievement of the healthy behavior is possible.
7. Helping Relationships - Finding supportive relationships that encourage the desired change.
8. Counter-Conditioning - Substituting healthy behaviors and thoughts for unhealthy behaviors and thoughts.
9. Reinforcement Management - Rewarding the positive behavior and reducing the rewards that come from negative behavior.
10. Stimulus Control - Re-engineering the environment to have reminders and cues that support and encourage the healthy behavior and remove those that encourage the unhealthy behavior.

## Limitations of the Transtheoretical Model

There are several limitations of TTM, which should be considered when using this theory in public health. Limitations of the model include the following:

- The theory ignores the social context in which change occurs, such as SES and income.
- The lines between the stages can be arbitrary with no set criteria of how to determine a person's stage of change. The questionnaires that have been developed to assign a person to a stage of change are not always standardized or validated.
- There is no clear sense for how much time is needed for each stage, or how long a person can remain in a stage.
- The model assumes that individuals make coherent and logical plans in their decision-making process when this is not always true.

The Transtheoretical Model provides suggested strategies for public health interventions to address people at various stages of the decision-making process. This can result in interventions that are tailored (i.e., a message or program component has been specifically created for a target population's level of knowledge and motivation) and effective. The TTM encourages an assessment of an individual's current stage of change and accounts for relapse in people's decision-making process.

## Pain Assessment Tool Guidelines for use: Functional Pain Scale

### **Functional Pain Scale (FPS)**

(0)	(2)	(4)	(6)	(8)	(10)
<b>No Pain</b>	<b>Tolerable activities not prevented</b>	<b>Tolerable prevents some active activities</b>	<b>Intolerable prevents many active, (not passive) activities</b>	<b>Intolerable prevents all active and many passive activities</b>	<b>Intolerable incapacitated, unable to do anything or speak due to pain</b>

Active activities : usual activities or those requiring effort (turning, walking, etc)

Passive activities: talking on phone, watching TV, reading

**Description:** The Functional Pain Scale (FPS) was developed to assess pain in older adults. It incorporates both subjective and objective components to assess pain, based on the pain's perceived tolerability and interference with functioning.

**Populations for use:** The FPS is best used for older adults who are unable to self report pain level. The FPS may be superior to other approaches if visual or mild-moderate cognitive impairments are present.

#### **Instructions for use:**

The patient is initially asked if they are experiencing any pain.

- If no, score "0"
- If pain is so extreme they can not engage in a conversation about it, score "10."

Next, ask the patient to rate their pain as either "tolerable" or "intolerable" (intolerable is  $\geq 5$ ).

Next, ask if the pain interferes with any activity? If so determine level of interference with:

- Active activities : usual activities or those requiring effort (turning, walking, etc) and
- Passive activities: those requiring little movement, like talking on phone, watching TV, reading

**Scoring instructions:** see attached decision diagram

0= no pain

2=tolerable pain: able to perform activities of daily living

4= able to tolerate *some* activities: pain prevents some "active" activities, such as walking, ADLs, etc

5=intolerable: able to perform some, but not all "active" (usual) activities

6=intolerable: Interferes with most "active" but not passive activities, such as reading, watching TV

8=intolerable: Interferes with all "active" and most passive activities such speaking about pain

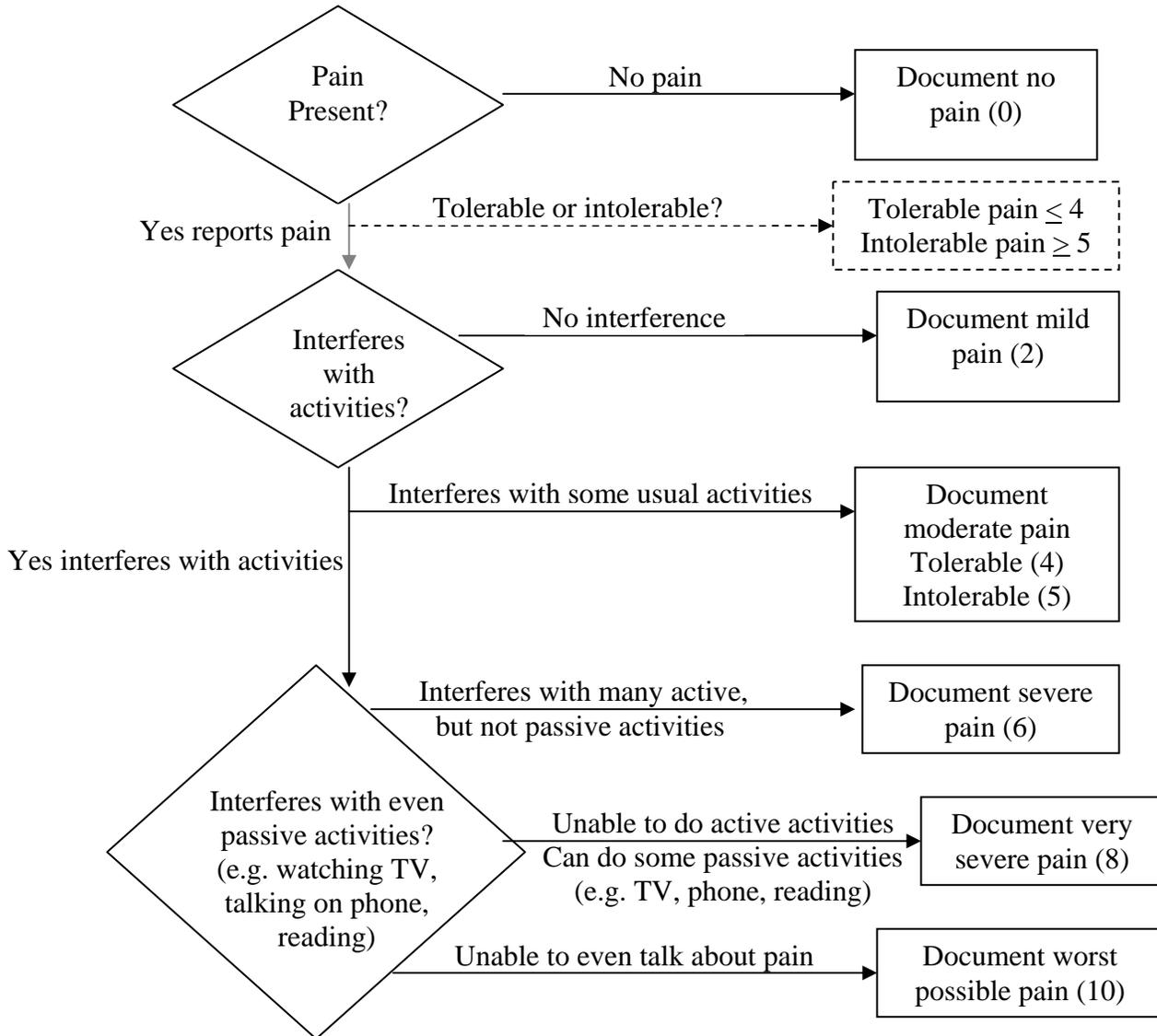
10=intolerable: patient is unable to do anything or even speak due to their pain

#### **Reliability and Validity:**

The FPS has been tested and shown to be a reliable pain assessment tool in the geriatric population.

Gloth, FM III, Scheve, AA, Stober, CV, Chow, S, Prosser, J. (2001). The Functional Pain Scale: reliability, validity and responsiveness in an elderly population. *Journal of the American Medical Directors Association*, 2 (3):110-114.

# Assess Pain Using an Functional Pain Scale





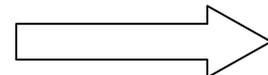
## TeamSTEPPS™ Teamwork Attitudes Questionnaire

The purpose of this survey is to measure your impressions of various components of teamwork as it relates to patient care and safety.

**Instructions:** Please respond to the questions below by placing a check mark (✓) in the box that corresponds to your level of agreement from *Strongly Disagree* to *Strongly Agree*. Please select only one response for each question.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>Team Structure</b>						
1.	It is important to ask patients and their families for feedback regarding patient care.					
2.	Patients are a critical component of the care team.					
3.	This facility's administration influences the success of direct care teams.					
4.	A team's mission is of greater value than the goals of individual team members.					
5.	Effective team members can anticipate the needs of other team members.					
6.	High-performing teams in health care share common characteristics with high-performing teams in other industries.					
<b>Leadership</b>						
7.	It is important for leaders to share information with team members.					
8.	Leaders should create informal opportunities for team members to share information.					
9.	Effective leaders view honest mistakes as meaningful learning opportunities.					
10.	It is a leader's responsibility to model appropriate team behavior.					
11.	It is important for leaders to take time to discuss with their team members plans for each patient.					
12.	Team leaders should ensure that team members help each other out when necessary.					

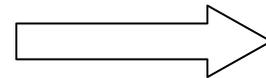
**PLEASE CONTINUE TO THE NEXT PAGE**





		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>Situation Monitoring</b>						
13.	Individuals can be taught how to scan the environment for important situational cues.					
14.	Monitoring patients provides an important contribution to effective team performance.					
15.	Even individuals who are not part of the direct care team should be encouraged to scan for and report changes in patient status.					
16.	It is important to monitor the emotional and physical status of other team members.					
17.	It is appropriate for one team member to offer assistance to another who may be too tired or stressed to perform a task.					
18.	Team members who monitor their emotional and physical status on the job are more effective.					
<b>Mutual Support</b>						
19.	To be effective, team members should understand the work of their fellow team members.					
20.	Asking for assistance from a team member is a sign that an individual does not know how to do his/her job effectively.					
21.	Providing assistance to team members is a sign that an individual does not have enough work to do.					
22.	Offering to help a fellow team member with his/her individual work tasks is an effective tool for improving team performance.					
23.	It is appropriate to continue to assert a patient safety concern until you are certain that it has been heard.					
24.	Personal conflicts between team members do not affect patient safety.					

PLEASE CONTINUE TO THE NEXT PAGE



		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>Communication</b>						
25.	Teams that do not communicate effectively significantly increase their risk of committing errors.					
26.	Poor communication is the most common cause of reported errors.					
27.	Adverse events may be reduced by maintaining an information exchange with patients and their families.					
28.	I prefer to work with team members who ask questions about information I provide.					
29.	It is important to have a standardized method for sharing information when handing off patients.					
30.	It is nearly impossible to train individuals how to be better communicators.					

Please provide any additional comments in the space below.

**Thank you for your participation!**

## Active Listening

Active Listening means being deeply engaged in and attentive to what the speaker is saying. It requires far more listening than talking. Your goal as an active listener is to truly understand the speaker’s perspective (regardless of whether you agree) and to communicate that understanding back to the speaker so that he or she can confirm the accuracy of your understanding.

What It's Called	How To Do It	Why Do It	Examples of Active Listening Responses
Paraphrasing	Restate the same information, using different words to more concisely reflect what the speaker said.	<p>Tests your understanding of what is heard by communicating your understanding of what the speaker said.</p> <p>Allows the speaker to 'hear' and focus on his or her own thoughts.</p> <p>Allows the speaker to see that you are trying to understand his/her message and perceptions. Encourages the speaker to continue speaking.</p>	<p>What I’m hearing is...”</p> <p>“Sounds like you are saying...”</p> <p>“I’m not sure I’m with you but... If I’m hearing you correctly.... So, as you see it... It sounds like what’s most important to you is . . .</p>
Clarifying	Invite the speaker to explain some aspect of what she or he said.	<p>Gives the speaker the opportunity to elaborate and clarify what was said.</p> <p>Gives you the opportunity to identify anything that is unclear and to check the accuracy of your understanding</p>	<p>I am not sure I quite understand; or do you mean that...?</p> <p>Can you say more about . . . ?</p> <p>You have given me a lot of information, let me see if I’ve got it all...”</p>
Reflecting	Relaying what was said back to the speaker to show that you understand how eh/she feels about something.	<p>Deepens understanding of feelings and content.</p> <p>Allows the speaker to see that you are trying to understand his/her message and perceptions.</p>	<p>“I get the sense that you might be feeling afraid about what might happen if . . . “</p> <p>To me, it sounds like you are frustrated about what was said, but I am wondering if you are also feeling a little hurt by it.”</p> <p>It seems like you felt confused and worried when that happened.”</p> <p>“So, you’re saying that you were feeling more frightened than angry.”</p>
Summarizing	Identify, connect, and integrate key ideas and feelings in what the speaker said.	Helps both listener and speaker identify what is most important to the speaker.	<p>Let me summarize what I heard so far. . . .</p> <p>So, on one the hand... but on the other hand . . .</p> <p>I think I’ve heard several things that seem to be important to you, first____, second, second____, third_____.”</p> <p>“It sounds like there are two things really matter most to you . . . “</p>

## Examples of Roadblocks to Good Listening

Fixing	Evaluating	Diverting	Interrupting
Ordering Suggesting Advising Diagnosing	Judging Threatening Praising Condemning Taking sides Giving opinions	Reassuring Changing the subject Focusing on your own agenda Minimizing	Interjecting comments Not allowing speaker's own pace Tuning out Creating/responding to distractions Cross-examining

## Tips for Active Listening

Do's	Don'ts
<p>Listen More than you talk</p> <p>Let the speaker finish before you respond.</p> <p>Asks open-ended questions</p> <p>Remain attentive to what's being said</p> <p>Be aware of your own biases</p> <p>Manage your own emotions</p> <p>Be attentive to ideas and problem-solving opportunities</p> <p>Give verbal and nonverbal messages that you are listening</p> <p>Listen for both feelings and content</p>	<p>Dominate the conversation</p> <p>Interrupt</p> <p>Finish the speaker's sentences</p> <p>Jump to conclusions</p> <p>Respond with blaming or accusatory language</p> <p>Become argumentative</p> <p>Demonstrate impatience or multitask</p> <p>Mentally compose your responses about what to say next</p> <p>Listen with biases or shut out new ideas</p>

## A Cheat-Sheet for "Feeling" Words

Concerned	Unimportant	Stymied	Attacked
Desperate	Resentful	Hurt	Considered
Confused	Misunderstood	Astonished	Intruded upon
Angry	On the spot	Overwhelmed	Intimidated
Frustrated	Unimportant	Surprised	Ignored
Discouraged	Hopeless	Scared	Comforted
Annoyed	Encouraged	Terrified	Sad
Belittled	Confident	Upset	Anxious
Patronized	Envious	Uncertain	Disturbed
Put-Down	Dissatisfied	Important	Rejected
Understood	Worried	Guilty	In a bind
Turned off	Affectionate	Blamed	Delighted
Pleased	Resigned	Content	Infuriated
Uncomfortable	Tired	Shamed	Ripped-off
Resentful	Enthusiastic	Defensive	Betrayed
Misunderstood	Puzzled	Discounted	Concerned
On the spot	Threatened	Embarrassed	Joyful



WORKSHEET

# SBAR Communication Technique

## PATIENT INFORMATION

State the **SITUATION**:

Give **BACKGROUND** information:

Give your **ASSESSMENT**:

Provide a **RECOMMENDATION**:

## Communication Strategy for Patient-Centered Education and Self-Care Management

The following questions can facilitate patient-centered education and self-management. These questions can be used to explore patient knowledge, ideas, feelings, preferences, needs and values. We do not suggest that all of these questions be used in every encounter. Applying just one of these questions may open the door to more effective dialogue and a more collaborative and productive interaction.

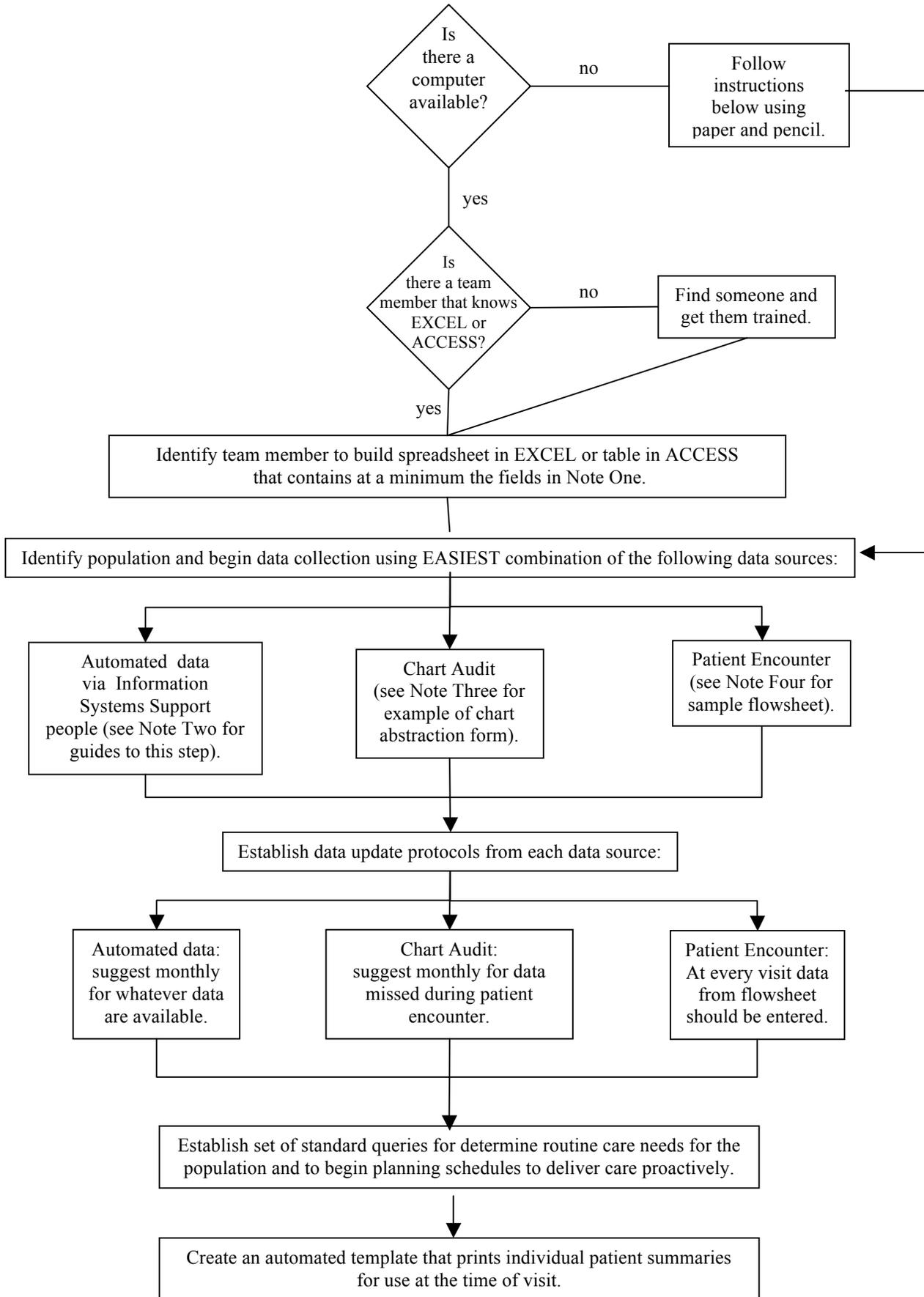
- *What ideas do you have about what is contributing to your problem?*
- *What ideas do you have about treatment or things you can do to manage your condition?*
- *How important do you think it is to do [X treatment or self-management task] to manage or treat your condition?*
- *What is most important for you to accomplish during your visit today?*
- *What would you like to know about your condition?*
- *What concerns you the most about your condition?*
- *What specifically would you like to work on to manage your condition?*
- *What would help you to manage your condition?*
- *How confident are you that you could do [X treatment or self-management task]?*
- *What might get in the way or keep you from being successful?*

## Planning Tool for Care Teams

<b>Care Coordination Role →</b>  <i>P = Primary Responsibility</i> <i>D = Delegated Responsibility</i>  <b>Care Coordination Activity ↓</b>	Non-Clinical Staff			Clinical Staff			
	Front-Desk Staff/ Receptionist	Patient Navigator	Office Manager	Medical Assistant (MA)	Registered Nurse (RN)	Licensed Mental Health Professional (LCSW, psychologist)	Primary Care Provider (MD/NP/PA)
Risk stratify patient population							
Outreach and/or in-reach to identify patients with care needs							
Contact patients & schedule planned care visits							
Review patient charts and lab values							
Perform medication reconciliations							
Assess patients' readiness to make changes							
Develop SMART goals with patients							
Identify & address patients' barriers to care or goal accomplishment							
Engage in clinical education with patients/families							
Counsel patient on family issues and coping skills							
Schedule referrals to community services							
Manage clinical referrals							
Conduct a follow-up calls							
Evaluate patients' understanding through teach-back							



# Constructing an Asthma Registry

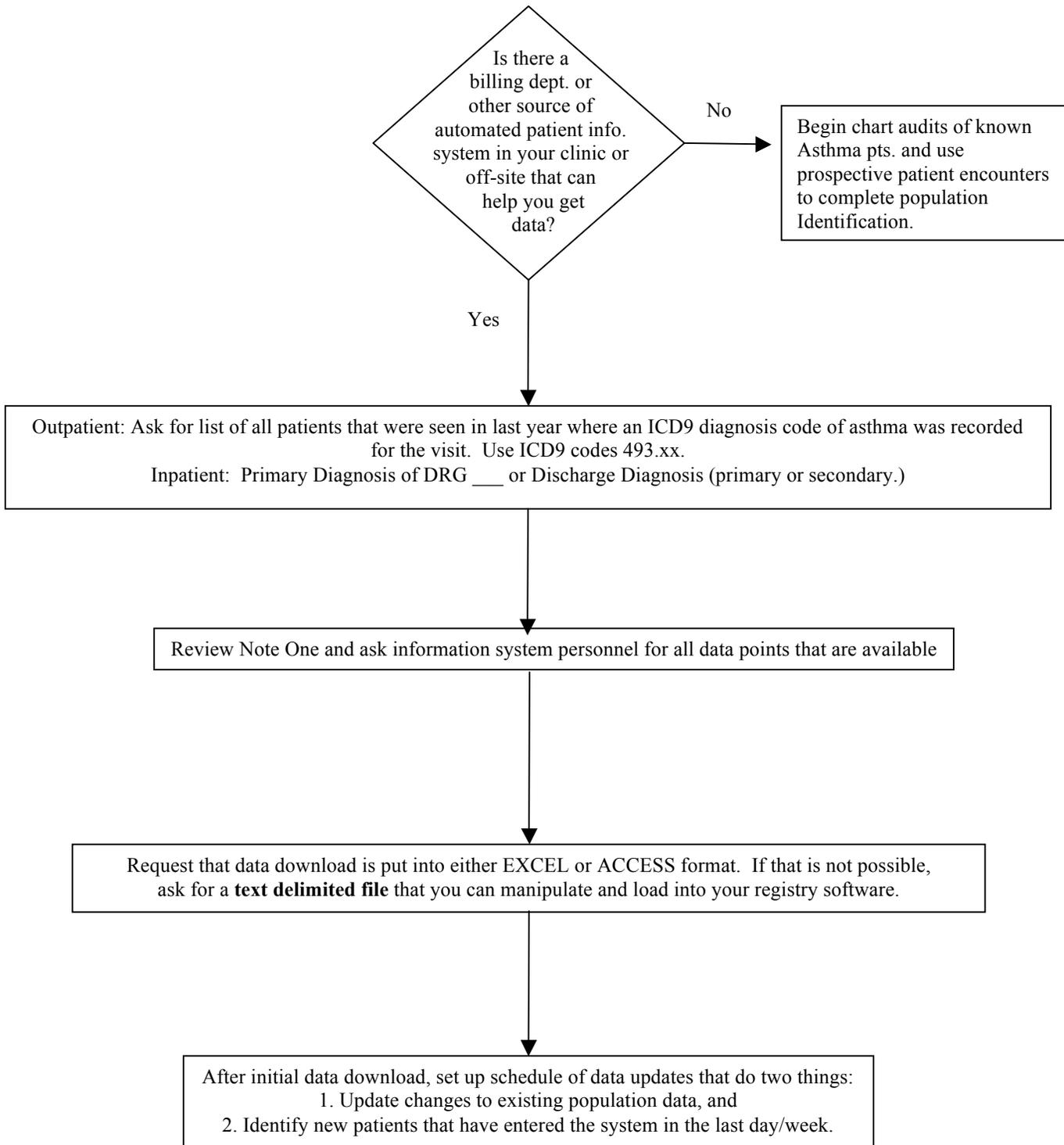


### ***Note One: Fields to include in the Asthma Registry***

(Your registry construction should strive to capture those data as you continually improve it. The list below suggests some items for data capture. Try to collect only information that will affect clinical decision-making and management.)

- Patient identification number
- Patient name (full name with middle initial)
- Address (complete enough for mailing purposes)
- Phone (home and work)
- Gender
- Birth date
- Severity score
- Date of severity score
- Controller medication
- Controller medication date
- Reliever medication
- Reliever medication date
- Other relevant medications
- Comorbidities: allergic rhinitis, sinusitis, GERD
- Written care plan: Y/N
- Date of written care plan
- Date of last peak flow
- Result of last peak flow
- Date of last spirometry
- Result of last spirometry (FEV1)
- Allergy testing: Y/N
- Date of allergy testing
- Result of allergy testing
- Symptom-free days
- Date of symptom-free days
- Missed school or work days
- Date of missed school or work days
- Satisfaction with care
- Date of satisfaction measure
- Exposure to environmental tobacco
- Allergy and trigger management
- ER visits
- Hospital days
- Urgent-care days
- Same day visits
- Immunization status
- Smoking status
- Evidence of any ongoing patient education (e.g., classes, instructional materials, etc.)

*Note Two: Getting Automated Data for the Registry*



## Asthma Data Fact Sheet

The approach to asthma management in your clinic will depend on available resources and the characteristics of your community. Regardless of your approach, an important component will be to identify your population of asthmatic patients so that you can select the neediest subset to consider targeting with some type of asthma management intervention. You will find here several suggestions for determining health service use for all of your asthmatic patients, which will help identify those most in need of additional attention.

If your clinic uses an automated data system (i.e. for billing purposes), generate a search of all visits with an ICD-9 code for asthma (493 and any of its sub-codes) for all pediatric patients ( $\leq 18$ ) over the preceding 12 months. When organized by visit frequency, this search will help you understand the clinic use of your pediatric population with asthma. This list should include the following data elements and information (ideally in an Excel file):

- ***all visits to the clinic for asthma*** (493.00 - 493.99) during a specified period (usually 12 months)
- ***patient name*** (last name, first name)
- ***patient date of birth*** (anyone  $\leq 18$ )
- ***date of visit*** (within specified time period)
- ***primary care provider***, if available

Use automated data systems at your local hospital and emergency departments (ED) to identify patients having the most difficulty controlling their asthma exacerbations, as evidenced by ED /urgent care visits and hospital admissions. Supply a complete list of your clinic providers (or other clinic identifier) for the hospitals to run against their system, collecting the following data elements for all asthma visits for all of your practice's patients:

- ***discharge diagnosis*** (both ED and inpatient) of 493.xx (493 and any of its sub-codes)
- ***type of visit*** (inpatient, emergency department, clinic, urgent care)
- ***date of visit*** (during the specified 12 month period)
- ***patient name*** (last name, first name)
- ***patient date of birth*** (anyone  $\leq 18$ )
- ***primary care provider***
- ***insurance plan*** and ***charges*** are useful, but not essential

This hospital data is most useful when combined with your own clinic visit data (if this information is available via automated systems). The data will compare individual children's clinic and hospital utilization during the same time period. For example, how many times has a particular patient been to the ED, hospitalized, and to the clinic to see his or her primary care pediatrician? This additional data will enable you to identify your practice's asthma patients who may be over utilizing the ED or hospital, but under utilizing their primary care clinic. This process should be repeated quarterly in order to track any changes in utilization. Attached is an example of the combined data.

**Note Three: Example of Chart Abstraction Form for Collecting Registry Data**

**DEMOGRAPHICS**

Today's Date:

Patient ID:

Patient Name:

Address:

City:

State:

Zip:

Phone:

H:

W:

Birth Date:

Gender:

**PAST MEDICAL HISTORY**

Comorbidities:

Allergic rhinitis

COPD

GERD

sinusitis

**PHYSICAL EXAM VITALS**

Smoking Status: Yes

No

Environmental Tobacco: Yes

No

**MEDICATIONS**

Date initiated:

Date last fill:

Dose:

Controller:

Reliever:

Other:

Other

**MONITORING**

Last Peak Flow: Date:

Value:

Last Spirometry: Date:

Value:

**ASTHMA DIAGNOSIS AND MONITORING**

Last Severity Score: Date:

Result:

Satisfaction: Date:

Result:

Missed school or work days: Date:

Result:

Allergy testing: Date:

Result:

Symptom-Free Days: Date:

Result:

**SELF-MANAGEMENT SUPPORT AND PATIENT EDUCATION**

Trigger management?:

Classes:

Provider Visits:

Other:

Asthma Care Plan:

Date:



Date:

## Doctor-Patient Talk Form

---

Things to ask my doctor:

---

Current symptoms:

---

The medications I am currently taking:

---

Instructions from my doctor:

---

Follow-up appointment

Date:

Time:

Location:

---

If I have a problem or a question, I should call:

**Blood glucose monitoring**



**Taking medications to help control blood sugar**



**Taking insulin**



**Physical Activity**



**Diet**



**Losing weight**



**Depression**



**Daily foot care**



**Smoking**



# Action Plan

1. **Goals:** *Something you WANT to do:*

---

---

---

---

2. **Describe**

**How:** \_\_\_\_\_

**Where:** \_\_\_\_\_

**What:** \_\_\_\_\_ **Frequency:** \_\_\_\_\_

**When:** \_\_\_\_\_

3. **Barriers:** \_\_\_\_\_

4. **Plans to overcome barriers:** \_\_\_\_\_

5. **Conviction** \_\_\_\_ **& Confidence** \_\_\_\_ **ratings**  
(0 - 10)

6. **Follow-Up:** \_\_\_\_\_

## Action Plan (*Example*)

- 1. Goals:** *Something you WANT to do:*  
Begin exercising
- 2. Describe:**  
**How:** Walking  
**Where:** Around the block  
**What:** 2 times      **Frequency:** 4 x/wk  
**When:** after dinner
- 3. Barriers:** have to clean up; bad weather
- 4. Plans to overcome barriers:**  
ask kids to help; get rain gear
- 5. Conviction 8 & Confidence 7 ratings  
(0 - 10)**
- 6. Follow-Up:** next visit – 2 months

## Self-Management Support Workflow

Use a Planned Care visit to focus on aspects of care that typically are not delivered during a provider visit. The objective is to specifically work on patient self-management goals.

If patients will not come in for an extra planned care visit, change the strategy to “opportunistic care”. This means, possibly adding on a planned care visit right after the patient has seen the provider.

Rarely, can all steps be done by only one staff member. Include team members and plan referrals so that the patient gets “wrap-around” care on all of his or her self-care management learning needs. Here is an example, how to assess, plan, implement, and follow-up on patient self-care management needs.

<b>Self-Management Support Workflow</b>	Patient Navigator 1	Patient Navigator 2	Clinical Nurse	Dietician/ Nutritionist	Primary Care Provider	Community Organization	Specialty Medical Care Provider	Other
Inform patient of own his/her own role in managing health.					done during PCP visit on 4.1.18			
Ask patient which topics are most important to him/her.	Quit Smoking, Eat Healthier							
Assess patient’s readiness to make changes.	Importance: 8 Confidence: 5 Readiness: 9							
Develop SMART goals together with patient and create an action plan.	done on 4.1.18							
Educate and coach patient.			Planned care visit on 4.6.18	Planned care visit on 4.6.18				
Link patient with other resources.						referred to Colorado Quitline		
Proactively follow up and evaluate progress.	Planned care visit after next provider appointment 6.28.18							



# Importance Ruler

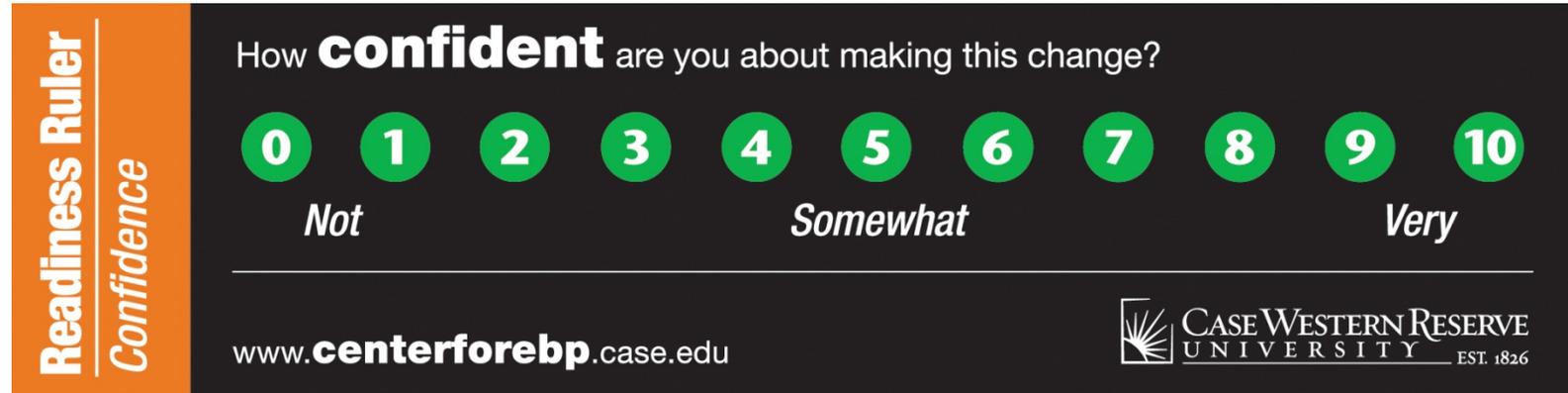


On a scale of 0 – 10, how important is it for you to (quit smoking)?

1. Why are you at a \_\_\_\_\_ and not a zero?
2. What would it take for you to be at a \_\_\_\_\_ (one number higher)?

(Miller and Rollnick, 2013)

# Confidence Ruler



On a scale of 0 – 10, how confident are you that you can (take your medications regularly)?

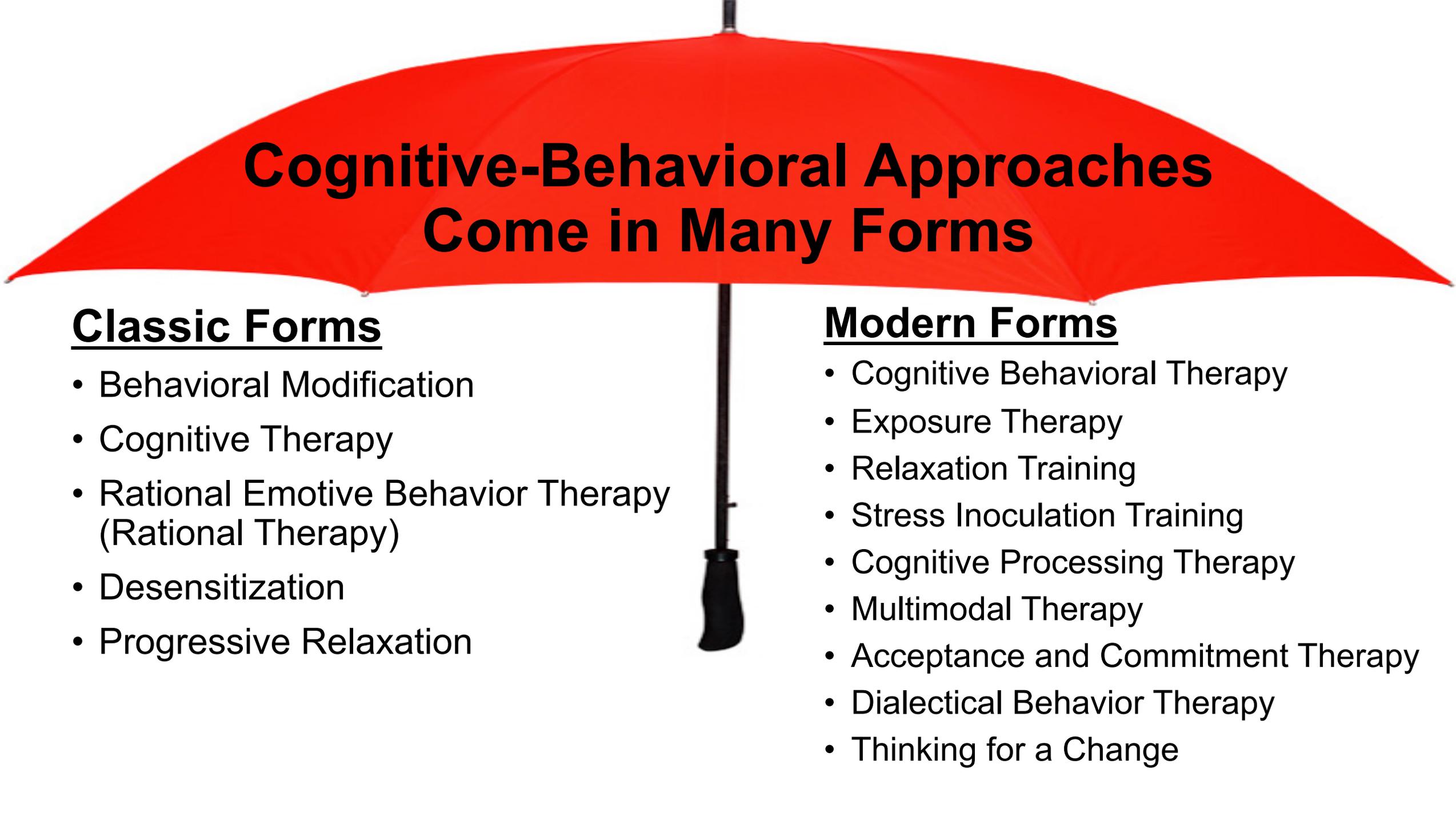
1. Why are you at a \_\_\_\_\_ and not a zero?
2. What would it take for you to be at a \_\_\_\_\_ (one number higher)?

(Miller and Rollnick, 2013)

# Signs of Readiness for Change

- Diminished language in favor of non-change and dwelling on the problems (focus on solutions)
- Increased frequency and intensity of language in favor of change
- Talk about “when” and “how” of the change
- Questions about the change
- Envisioning
- Taking small steps

# **What are Cognitive Behavioral Approaches (CBT)?**



# Cognitive-Behavioral Approaches Come in Many Forms

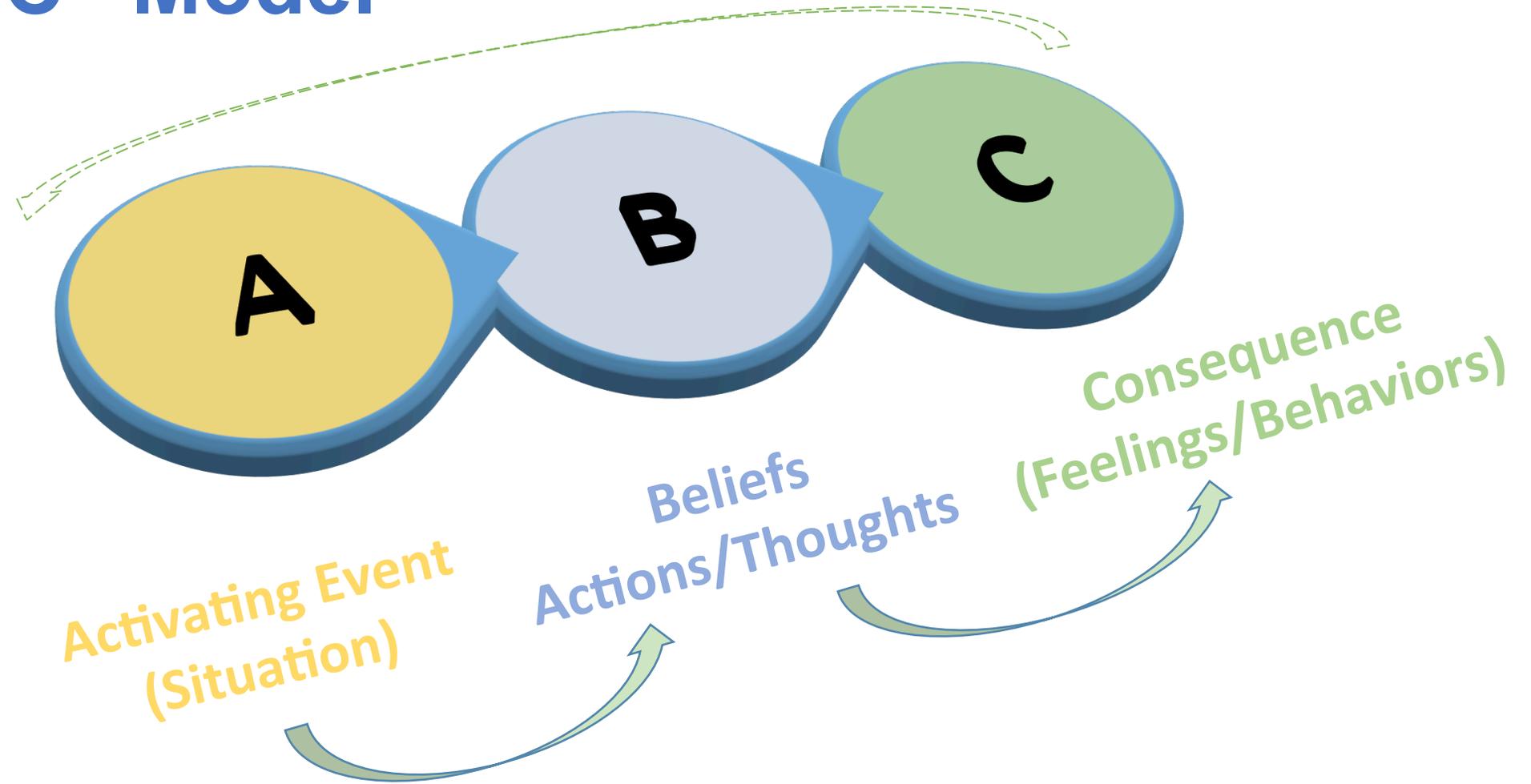
## Classic Forms

- Behavioral Modification
- Cognitive Therapy
- Rational Emotive Behavior Therapy (Rational Therapy)
- Desensitization
- Progressive Relaxation

## Modern Forms

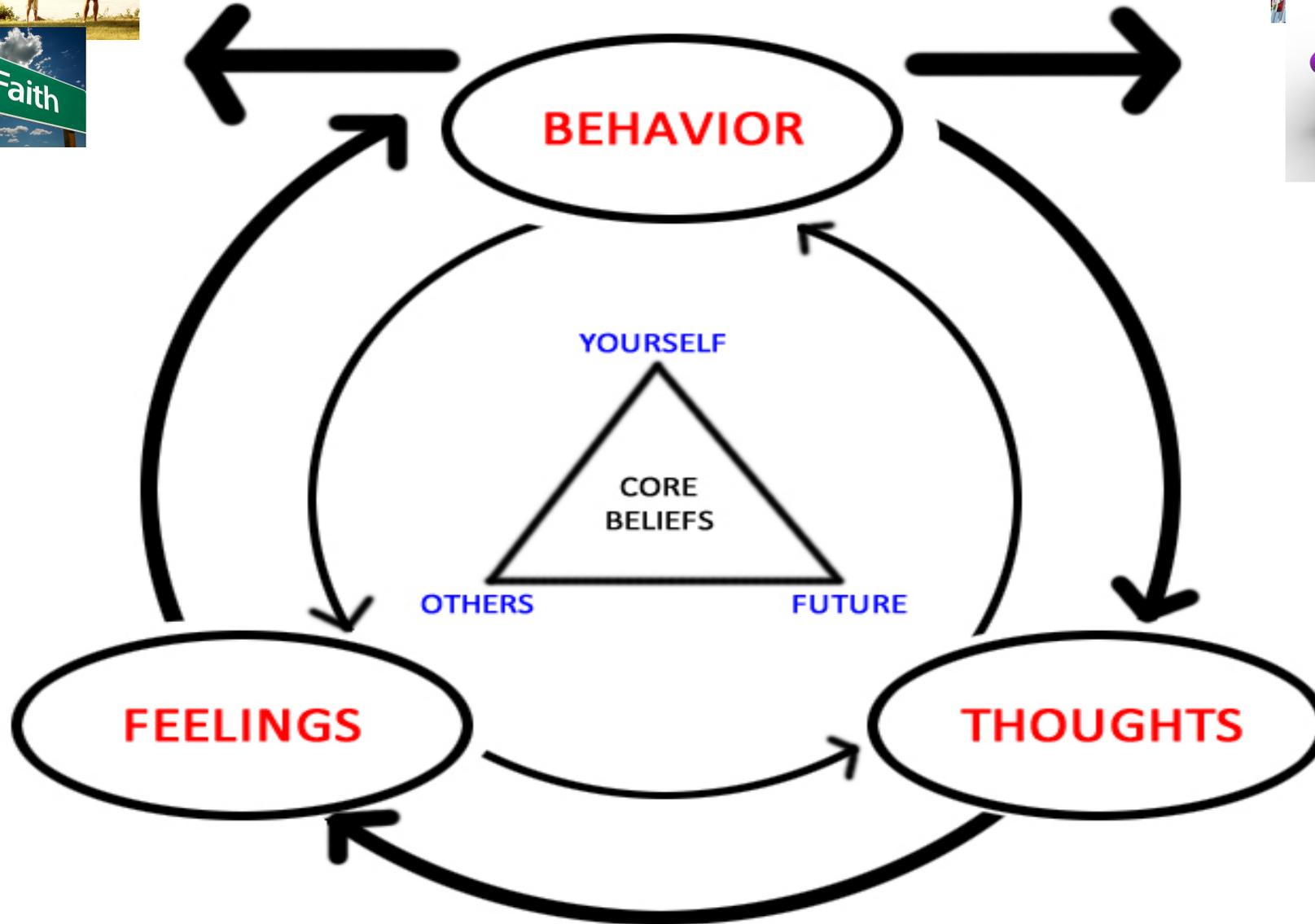
- Cognitive Behavioral Therapy
- Exposure Therapy
- Relaxation Training
- Stress Inoculation Training
- Cognitive Processing Therapy
- Multimodal Therapy
- Acceptance and Commitment Therapy
- Dialectical Behavior Therapy
- Thinking for a Change

# The “ABC” Model



(Ellis, 1957)

# The CBT Model



# CBT Treatment Evidence

Coping, Social Phobia, Anxiety, Purging, Relapse Prevention, Anger, Motivation, Suicidality, Binging, Positive Symptoms, Negative Symptoms, Self-harm, Depression, Substance Use Disorders, Schizophrenia, Fear, Sleep Difficulties, PTSD, Delusions, Substance Abuse, Panic, Isolation, Aggression, Pain, Empowerment, Major Depression, Obsession, Compulsion, Dysphoria, Mania, Hallucinations, Anhedonia, Social Functioning, Medication Adherence, Bipolar, Eating Disorders, Hopelessness, Marriage Adjustment

# **But I'm Not a Therapist:** **Why Use Cognitive Behavioral Approaches?**

# Does CBT Fit Your Job Description?

- Does your position involve interacting with people?
- Do you hold regular conversations with people about distressing situations in their life?
- Are you sometimes frustrated that people continue to engage in self-destructive behaviors?
- Are you involved in helping people to learn to cope with their emotions and make life changes?
- Are there times when the interventions you've always used help people change don't work?
- Do you find yourself wishing you had other effective tools/interventions to help create lasting change?

# **CBT Can Enhance Services for People with Mental Illness**

# How can CBT Enhance Services for People with Mental Illness?

- Ineffective services:
  - Teach skills to people who aren't ready to change
  - Offer recommendations to people who lack skills to follow through
- Ineffective services expect:
  - The “Non-ready” to be “Ready”
  - The “Ready” to be “Skilled”
  - The “Recently Skilled” to “Maintain”
  - Or worse...the “Non-ready” to “Get skilled and maintain immediately”

***SOC + MI + CBT effectively impact all aspects of the change process and can help us be more effective supports.***

# CBT Research – Targets for SMI

<b>Sx Resistant to Meds (SMI)</b>	<b>Other Targets</b>	
<ul style="list-style-type: none"> <li>• Anhedonia</li> <li>• Anxiety</li> <li>• Delusions</li> <li>• Depression</li> <li>• Hallucinations</li> <li>• Mania and Hypomania</li> <li>• Negative Symptoms</li> <li>• Sleep Difficulties</li> <li>• Suicidality and Hopelessness</li> </ul>	<ul style="list-style-type: none"> <li>• Adherence to Meds</li> <li>• Positive Symptoms</li> <li>• Empowerment</li> <li>• Interpersonal Prob.</li> <li>• Isolation</li> <li>• Motivational Prob.</li> <li>• Procrastination</li> <li>• Relapse Prevention</li> <li>• Social Skills Deficits</li> <li>• Self-Worth</li> <li>• Substance Abuse</li> </ul>	<ul style="list-style-type: none"> <li>• Eating Disorders</li> <li>• Binging/Purging</li> <li>• Social Phobia</li> <li>• Coping Skills</li> <li>• Anger/Aggression</li> <li>• PTSD</li> <li>• Obsession/Compulsion</li> <li>• Bipolar</li> <li>• Panic/Fear/Worry</li> <li>• Pain</li> <li>• Marriage Adjustment</li> </ul>

(Wright, et al, 2009)

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# Care Coordination Quality Measure for Primary Care (CCQM-PC)

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# Your Care Coordination Experience

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## Survey Instructions

Answer each question by marking the box to the left of your answer. You are sometimes told to skip over some questions in this survey. When this happens, you will see an arrow with a note that tells you what question to answer next, like this:

- <sup>1</sup>  Yes  
<sup>2</sup>  No → **If No, go to #1**

## Introduction

This survey asks questions about your experience with care coordination. Care coordination refers to health care that is provided in a planned way that meets the needs and preferences of the patient. When care is coordinated well, the patient and his or her doctors, nurses, other health care providers, family, and other caregivers all know who is responsible for different parts of the patient's care, and they communicate with each other so that everyone has the information they need.

Your answers to this survey will help us learn more about people's experiences with care coordination.

## Definitions

Below are several definitions of terms that are used throughout the survey. Some of these definitions are relevant to specific sections of the survey and are also included at the beginning of that section.

Your primary care provider: The doctor or other provider who cares for most of your usual health care needs and who you normally see when you need care for a new illness or injury, to maintain or control a health issue, or to prevent health problems so you can stay healthy.

Other primary care professionals in this office: doctors, nurse practitioners, physician assistants, nurses, and others who work in the same office or group as your primary care provider and also help people get better, maintain their health, and prevent problems to stay healthy.

Primary care office: A group of primary care professionals and the staff who work with them in an office. The primary care professionals and other staff in the office all work for the same organization or business that shares a common goal of caring for the health needs of patients and keeping patients healthy. A primary care office is designed to be the first place patients go to get their health needs met.

Other health care professionals: Specific or specialized care from doctors, nurse practitioners, physician assistants, nurses, and others who work outside of your primary care practice.

Health care team: this includes your primary care provider, other primary care professionals, and other health care professionals who care for you. It also includes people who are not primary care professionals; for example, the people in your life such as yourself, family members, or friends that help you get the care you need to feel better or stay healthy.

Care plan: Sometimes, in order to coordinate care, the patient and/or family creates a care plan, together with one or more health care providers. It can be created for people with any health condition. The care plan covers the patient's needs and goals for health care and identifies any gaps in care coordination. The plan may set goals for the patient and the patient's providers. Ideally, it anticipates routine needs and tracks current progress toward a patient's goals. This plan is often called a care plan or a plan of action.

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## Seeking care in the last 12 months

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1. In the last 12 months, how many times did you visit your primary care provider's office to get care for yourself from your primary care provider or other primary care professionals?

- <sup>1</sup>  None  
<sup>2</sup>  1  
<sup>3</sup>  2  
<sup>4</sup>  3  
<sup>5</sup>  4  
<sup>6</sup>  5 to 9  
<sup>7</sup>  10 or more times

2. In the last 12 months, apart from scheduling appointments, how many times did you contact your primary care provider or other primary care professionals in this office about your health—for example, by email or phone call?

- <sup>1</sup>  None  
<sup>2</sup>  1  
<sup>3</sup>  2  
<sup>4</sup>  3  
<sup>5</sup>  4  
<sup>6</sup>  5 to 9  
<sup>7</sup>  10 or more times

3. In the last 12 months, including your primary care provider, how many different primary care professionals at your primary care provider's office have you seen for a health reason?

- <sup>1</sup>  1  
<sup>2</sup>  2  
<sup>3</sup>  3 or more  
<sup>4</sup>  I did not get care from this primary care provider's office in the last 12 months.

4. In the last 12 months, how many health care professionals outside of your primary care provider's office have you seen for a health reason?

- <sup>1</sup>  None  
<sup>2</sup>  1  
<sup>3</sup>  2  
<sup>4</sup>  3 or more

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## Knowing Who Does What

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**Care coordination:** this refers to health care that is provided in a planned way that meets the needs and preferences of the patient. When care is coordinated well, the patient and his or her doctors, nurses, other health care providers, family, and other caregivers all know who is responsible for different parts of the patient's care, and they communicate with each other so that everyone has the information they need.

**Health care team:** this includes your primary care provider, other primary care professionals, and other health care professionals who care for you. It also includes people who are not primary care professionals—for example, the people in your life such as yourself, family members, or friends that help you get the care you need to feel better or stay healthy.

5. In the last 12 months, how often did you know what aspects of your care you were responsible for?

- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always

6. In the last 12 months, if you had health problems, how often did your primary care provider or other primary care professionals in this office talk with you about what to do if your condition got worse or came back?

- 1  Never
- 2  Sometimes
- 3  Usually
- 4  Always
- 5  I did not have a health problem in the last 12 months.

7. In the last 12 months, if you saw more than one health care professional for your health care needs, how often did you know which one to get in touch with when you needed medical care?

- 1  Never
- 2  Sometimes
- 3  Usually
- 4  Always
- 5  I did not see more than one health care professional for my health care needs in the last 12 months.

---

### Communicating with your health care providers

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8. In the last 12 months, if you called your primary care provider's office with a medical question during regular office hours, how often did you get an answer that same day?

- 1  Never
- 2  Sometimes
- 3  Usually
- 4  Always
- 5  I did not call my primary care provider's office with a medical question during regular office hours in the last 12 months.

9. In the last 12 months, if you called your primary care provider's office **after regular office hours**, how often did you get the help or advice you needed?

- 1  Never
- 2  Sometimes
- 3  Usually
- 4  Always
- 5  I did not call my primary care provider's office after regular office hours in the last 12 months.

10. In the last 12 months, if you emailed your primary care provider's office with a question, how often did you get an answer as soon as you needed it?

- 1  Never
- 2  Sometimes
- 3  Usually
- 4  Always
- 5  I did not email my primary care provider's office with a question in the last 12 months.

11. In the last 12 months, how often did the primary care professionals in your primary care provider's office make it easy for you to discuss your care in your preferred language?

- 1  Never
- 2  Sometimes
- 3  Usually
- 4  Always

**12.** In the last 12 months, if you needed to talk to your primary care provider or another primary care professional in this office, how often did you get to talk to the primary care professional who knows you best?

- <sup>1</sup>  Never
- <sup>2</sup>  Sometimes
- <sup>3</sup>  Usually
- <sup>4</sup>  Always
- <sup>5</sup>  I did not need to talk to my primary care provider or another primary care professional in this office in the last 12 months.

**13.** In the last 12 months, how often did your primary care provider or other primary care professionals in this office explain things in a way that was easy to understand?

- <sup>1</sup>  Never
- <sup>2</sup>  Sometimes
- <sup>3</sup>  Usually
- <sup>4</sup>  Always

**14.** In the last 12 months, how often did your primary care provider or other primary care professionals in this office listen carefully to you?

- <sup>1</sup>  Never
- <sup>2</sup>  Sometimes
- <sup>3</sup>  Usually
- <sup>4</sup>  Always

**15.** In the last 12 months, how often did your primary care provider or other primary care professionals in this office encourage you to ask all the questions you had?

- <sup>1</sup>  Never
- <sup>2</sup>  Sometimes
- <sup>3</sup>  Usually
- <sup>4</sup>  Always

**16.** In the last 12 months, how often did your primary care provider or other primary care professional in this office ask you if you understood all of the information he or she gave you?

- <sup>1</sup>  Never
- <sup>2</sup>  Sometimes
- <sup>3</sup>  Usually
- <sup>4</sup>  Always

**17.** In the last 12 months, how often have you felt comfortable asking questions of your primary care provider or other primary care professionals you saw in this office?

- <sup>1</sup>  Never
- <sup>2</sup>  Sometimes
- <sup>3</sup>  Usually
- <sup>4</sup>  Always

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### Sharing health information

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**Care plan:** Sometimes, in order to coordinate care, the patient and/or family creates a care plan, together with one or more health care providers. It can be created for people with any health condition. The care plan covers the patient's needs and goals for health care and identifies any gaps in care coordination. The plan may set goals for the patient and the patient's providers. Ideally, it anticipates routine needs and tracks current progress toward a patient's goals. This plan is often called a **care plan** or a **plan of action**.

**18.** In the last 12 months, how often did your primary care provider or other primary care professionals in this office know about your past health problems or past treatments?

- <sup>1</sup>  Never
- <sup>2</sup>  Sometimes
- <sup>3</sup>  Usually
- <sup>4</sup>  Always

**19.** In the last 12 months, if you saw a health care professional outside of your primary care provider's office, how often did your primary care provider know about any tests or results from these visits?

- <sup>1</sup>  Never
- <sup>2</sup>  Sometimes
- <sup>3</sup>  Usually
- <sup>4</sup>  Always
- <sup>5</sup>  I did not see a health care professional outside of my primary care provider's office in the last 12 months.

**20.** In the last 12 months, how often has it seemed like your primary care provider's office keeps health information about you complete and up-to-date?

- <sup>1</sup>  Never
- <sup>2</sup>  Sometimes
- <sup>3</sup>  Usually
- <sup>4</sup>  Always

**21.** In the last 12 months, if you asked someone at your primary care provider's office for your medical records, how often did you get them as soon as you needed?

- <sup>1</sup>  Never
- <sup>2</sup>  Sometimes
- <sup>3</sup>  Usually
- <sup>4</sup>  Always
- <sup>5</sup>  I did not ask my primary care provider's office for my medical records in the last 12 months.

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**Develop and execute a plan of  
action for your care:  
*Assessing your needs and goals***

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**22.** In the last 12 months, if you had a health insurance plan, how often did your primary care provider or other primary care professionals in this office talk with you about what is and is not covered by your insurance plan?

- <sup>1</sup>  Never
- <sup>2</sup>  Sometimes
- <sup>3</sup>  Usually
- <sup>4</sup>  Always
- <sup>5</sup>  I did not have health insurance in the last 12 months.

**23.** In the last 12 months, how often did your primary care provider or other primary care professionals in this office talk to you about any support you might need to take care of your health?

- <sup>1</sup>  Never
- <sup>2</sup>  Sometimes
- <sup>3</sup>  Usually
- <sup>4</sup>  Always

**24.** In the last 12 months, how often did your primary care provider or other primary care professionals at this office ask about your goals for taking care of your health?

- <sup>1</sup>  Never
- <sup>2</sup>  Sometimes
- <sup>3</sup>  Usually
- <sup>4</sup>  Always

25. In the last 12 months, how often has your primary care provider or other primary care professional at this office helped you in setting goals for taking care of your health?

- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always

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**Develop and execute a plan of action for your care:  
Collaboration on the design of care**

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26. In the last 12 months, how often did your primary care provider or other primary care professionals at this office consider your preferences for where you wanted to receive your care?

- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always

27. Choices for your treatment or health care can include choices about tests and screenings, preventive health care (e.g., flu shot), medicine, surgery, or other treatment.

In the last 12 months, how often did your primary care provider or other primary care professionals in this office tell you there was more than one choice for your health care or treatment?

- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always

28. In the last 12 months, if you talked about different options for your health care or treatment with your primary care provider or other primary care professionals in this office, how often did they talk with you about the reasons for choosing an option?

- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always  
<sup>5</sup>  I did not talk to my primary care provider or other primary care professionals in this office about different options for my health care or treatment.

29. In the last 12 months, if you talked about different options for your health care or treatment with your primary care provider or other primary care professionals in this office, how often did they talk about the reasons for **not** choosing an option?

- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always  
<sup>5</sup>  I did not talk to my primary care provider or other primary care professional in this office about different options for my health care or treatment.

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**Develop and execute a plan of action for your care:**  
***Creating a health care plan of action***

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**Care plan:** Sometimes, in order to coordinate care, the patient and/or family creates a care plan, together with one or more health care providers. It can be created for people with any health condition. The care plan covers the patient's needs and goals for health care and identifies any gaps in care coordination. The plan may set goals for the patient and the patient's providers. Ideally, it anticipates routine needs and tracks current progress toward a patient's goals. This plan is often called a **care plan** or a **plan of action**.

**30.** In the last 12 months, how often did your primary care provider or other primary care professionals in this office help you create a plan of action that you use every day to help you take care of your health?

- <sup>1</sup>  Never
- <sup>2</sup>  Sometimes
- <sup>3</sup>  Usually
- <sup>4</sup>  Always

**31.** In the last 12 months, if you and a primary care professional in this office had a plan of action to take care of your health, how often did the plan **include different ways to communicate with your primary care practice?**

- <sup>1</sup>  Never
- <sup>2</sup>  Sometimes
- <sup>3</sup>  Usually
- <sup>4</sup>  Always
- <sup>5</sup>  I did not have a health care plan of action with primary care professionals in this office in the last 12 months.

**32.** In the last 12 months, if you and a primary care professional in this office had a plan of action to take care of your health, how often did the plan **include specific outcomes that would tell you when you met your goals?** Outcomes can include functional goals, such as being able to walk a flight of stairs without losing your breath, or target rates—for example, a blood pressure reading below 120/80 mmHg?

- <sup>1</sup>  Never
- <sup>2</sup>  Sometimes
- <sup>3</sup>  Usually
- <sup>4</sup>  Always
- <sup>5</sup>  I did not have a health care plan of action with primary care professionals in this office in the last 12 months.

**33.** In the last 12 months, if you and a primary care professional in this office had a plan of action to take care of your health, how often did the **plan include what to do if there is a problem or a change in your health?**

- <sup>1</sup>  Never
- <sup>2</sup>  Sometimes
- <sup>3</sup>  Usually
- <sup>4</sup>  Always
- <sup>5</sup>  I did not have a health care plan of action with primary care professionals in this office in the last 12 months.

34. During stressful times, some people find it harder to take care of their health. In the last 12 months, how often did your primary care provider or other primary care professionals in this office help you to plan ahead so that you could take care of your health even during difficult or stressful times?

- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always

---

**Develop and execute a plan of action for your care:**  
***Following up, identifying problems, and making adjustments***

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35. In the last 12 months, if you had a health problem, how often did your primary care provider or other primary care professional in this office follow up on a health problem you had, either at the next visit or by phone?

- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always  
<sup>5</sup>  I did not have a health problem in the last 12 months.

36. In the last 12 months, how often did your primary care provider or other primary care professionals in this office ask you how your health or treatment affected your daily life?

- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always

37. In the last 12 months, if you had treatment, how often did your primary care provider or other primary care professionals in this office follow up with you to find out what was working well with your treatment?

- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always  
<sup>5</sup>  I did not have treatment in the last 12 months.

38. In the last 12 months, how often did your primary care provider or other primary care professionals in this office discuss with you whether you were getting the health care you needed?

- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always

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**Connecting you to other sources of care**

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39. In the last 12 months, if you needed a referral from your primary care provider to see another health care professional, how often did you get one as soon as you needed it?

- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always  
<sup>5</sup>  I did not need a referral to another health care professional in the last 12 months.

**40.** In the last 12 months, if you needed to visit another health care professional outside of your primary care provider's office, how often did someone in your primary care provider's office help you make the appointment?

<sup>1</sup>  Never

<sup>2</sup>  Sometimes

<sup>3</sup>  Usually

<sup>4</sup>  Always

<sup>5</sup>  I did not need to visit a health care professional outside of my primary care provider's office in the last 12 months.

<sup>6</sup>  When I needed to visit a health care professional outside of my primary care provider's office in the last 12 months, I did not seek help from anyone in my primary care provider's office.

**41.** In the last 12 months, how often did your primary care provider or other primary care professionals in this office give you information about available community-based services to support your health such as support groups, classes, counselors, community recreation programs, or faith-based activities?

<sup>1</sup>  Never

<sup>2</sup>  Sometimes

<sup>3</sup>  Usually

<sup>4</sup>  Always

**42.** In the last 12 months, if your primary care provider or another primary care professional in this office told you about resources available in the community that could help you take care of yourself or your family, how often did someone in your primary care provider's office follow up with you about your use of these resources?

<sup>1</sup>  Never

<sup>2</sup>  Sometimes

<sup>3</sup>  Usually

<sup>4</sup>  Always

<sup>5</sup>  Community-based services were not recommended to me in the last 12 months.

**43.** In the last 12 months, if you had health problems, how often did your primary care provider or other primary care professionals in this office help you connect with other people with similar health problems?

<sup>1</sup>  Never

<sup>2</sup>  Sometimes

<sup>3</sup>  Usually

<sup>4</sup>  Always

<sup>5</sup>  I did not have health problems in the last 12 months.

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## Helping you take care of yourself

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44. In the last 12 months, if you had an illness or injury, how often did your primary care provider or other primary care professionals in this office ask whether you had enough services to help you take care of this illness or injury at home?
- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always  
<sup>5</sup>  I did not have an illness or injury in the last 12 months.
45. In the last 12 months, if you needed help at home to manage your health, how often did someone in your primary care provider's office arrange services for you at home to help manage your health condition?
- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always  
<sup>5</sup>  I did not need help at home to manage my health in the last 12 months.
46. In the last 12 months, how often did you feel like the activities that primary care professionals in this office recommended for your care took into account the responsibilities you have at work or home?
- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always

47. In the last 12 months, how often did a primary care professional in this office give you health information such as booklets or videos about what you can do for your health?
- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always

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## About You

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48. In general, how would you rate your overall **physical** health?
- <sup>1</sup>  Excellent  
<sup>2</sup>  Very good  
<sup>3</sup>  Good  
<sup>4</sup>  Fair  
<sup>5</sup>  Poor
49. In general, how would you rate your overall **mental or emotional** health?
- <sup>1</sup>  Excellent  
<sup>2</sup>  Very good  
<sup>3</sup>  Good  
<sup>4</sup>  Fair  
<sup>5</sup>  Poor
50. In the last 12 months, did you get health care 3 or more times for the same condition or problem?
- <sup>1</sup>  Yes  
<sup>2</sup>  No → **If No, go to #52**
51. Is this a condition or problem that has lasted for at least 3 months? Do not include pregnancy or menopause.
- <sup>1</sup>  Yes  
<sup>2</sup>  No

52. Do you now need or take medicine prescribed by a doctor? Do **not** include birth control.

<sup>1</sup>  Yes

<sup>2</sup>  No → **If No, go to #54**

53. Is this medicine to treat a condition that has lasted for at least 3 months? Do **not** include pregnancy or menopause.

<sup>1</sup>  Yes

<sup>2</sup>  No

54. In the last 12 months, did you have to stay in the hospital for at least one night?

<sup>1</sup>  Yes

<sup>2</sup>  No

55. In the last 12 months, were you admitted to or discharged from a nursing home or rehabilitation facility?

<sup>1</sup>  Yes

<sup>2</sup>  No

56. In the last 12 months, did you have health insurance?

<sup>1</sup>  Yes

<sup>2</sup>  No

57. What is your age?

<sup>1</sup>  18 to 24 years

<sup>2</sup>  25 to 34

<sup>3</sup>  35 to 44

<sup>4</sup>  45 to 54

<sup>5</sup>  55 to 64

<sup>6</sup>  65 to 74

<sup>7</sup>  75 or older

58. Are you male or female?

<sup>1</sup>  Male

<sup>2</sup>  Female

59. What is the highest grade or level of school that you have completed?

<sup>1</sup>  8th grade or less

<sup>2</sup>  Some high school, but did not graduate

<sup>3</sup>  High school graduate or GED

<sup>4</sup>  Some college or 2-year degree

<sup>5</sup>  4-year college graduate

<sup>6</sup>  More than 4-year college degree

60. Are you Hispanic, Latino/a, or Spanish origin?

<sup>1</sup>  Yes, Hispanic, Latino/a, or Spanish origin

<sup>2</sup>  No, not of Hispanic, Latino/a, or Spanish origin

61. What is your race? *Mark one or more.*

<sup>1</sup>  White

<sup>2</sup>  Black or African American

<sup>3</sup>  American Indian or Alaska Native

<sup>4</sup>  Asian Indian

<sup>5</sup>  Chinese

<sup>6</sup>  Filipino

<sup>7</sup>  Japanese

<sup>8</sup>  Korean

<sup>9</sup>  Vietnamese

<sup>10</sup>  Other Asian

<sup>11</sup>  Native Hawaiian

<sup>12</sup>  Guamanian or Chamorro

<sup>13</sup>  Samoan

<sup>14</sup>  Other Pacific Islander

62. What is your preferred language?

<sup>1</sup>  English

<sup>2</sup>  Other

*Please specify:*

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**63.** How well do you speak English?

- <sup>1</sup>  Very well
- <sup>2</sup>  Well
- <sup>3</sup>  Not well
- <sup>4</sup>  Not at all

**64.** Did someone help you complete this survey?

- <sup>1</sup>  Yes → **If Yes, go to #65**
- <sup>2</sup>  No → **If No, go to #66**

**65.** How did that person help you? Mark one or more.

- <sup>1</sup>  Read the questions to me
- <sup>2</sup>  Wrote down the answers I gave
- <sup>3</sup>  Answered the questions for me
- <sup>4</sup>  Translated the questions into my language
- <sup>5</sup>  Helped in some other way

**66.** Have you ever received professional treatment for any of the following conditions? Professional treatment refers to any treatment supervised by a health professional.

	<b>YES, I have received professional treatment for this condition</b>	<b>NO, I have NOT received professional treatment for this condition</b>
Arthritis?	<input type="checkbox"/>	<input type="checkbox"/>
Chronic back/neck pain?	<input type="checkbox"/>	<input type="checkbox"/>
Any other chronic pain?	<input type="checkbox"/>	<input type="checkbox"/>
High blood pressure or hypertension?	<input type="checkbox"/>	<input type="checkbox"/>
Congestive heart failure?	<input type="checkbox"/>	<input type="checkbox"/>
Coronary artery disease?	<input type="checkbox"/>	<input type="checkbox"/>
High blood cholesterol or hyperlipidemia?	<input type="checkbox"/>	<input type="checkbox"/>
Asthma?	<input type="checkbox"/>	<input type="checkbox"/>
Chronic Obstructive Pulmonary Disease (COPD)?	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes?	<input type="checkbox"/>	<input type="checkbox"/>
Osteoporosis?	<input type="checkbox"/>	<input type="checkbox"/>
Skin cancer?	<input type="checkbox"/>	<input type="checkbox"/>
Any other kind of cancer?	<input type="checkbox"/>	<input type="checkbox"/>
Anxiety disorder?	<input type="checkbox"/>	<input type="checkbox"/>
Depression?	<input type="checkbox"/>	<input type="checkbox"/>
Any other emotional problem?	<input type="checkbox"/>	<input type="checkbox"/>
Substance problems (drugs or alcohol)?	<input type="checkbox"/>	<input type="checkbox"/>
Stroke	<input type="checkbox"/>	<input type="checkbox"/>
Chronic Kidney Disease	<input type="checkbox"/>	<input type="checkbox"/>
Hepatitis	<input type="checkbox"/>	<input type="checkbox"/>

**Thank You**  
**Please return the completed survey in the**  
**postage-paid envelope.**

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<http://www.ahrq.gov/carecoordination>

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[www.ahrq.gov](http://www.ahrq.gov)

# Care Coordination Measurement Tool<sup>®</sup>

CCMT 2017 Version 1.1

	Patient Level	Care Coordination Needs	Activity	Outcomes Occurred	Outcomes Prevented	Time Spent	Staff	Clinical Competence
1								
2								

<b><u>Patient Level</u></b>	<b><u>Activity to Fulfill Needs</u></b>	<b><u>Outcomes Occurred</u></b>	<b><u>Outcomes Prevented</u></b>	<b><u>Time Spent</u></b>
<p>1a. Child/Youth with Special Health Care Needs –with complicating family/social issues</p> <p>1b. Child/Youth without Special Health Care Needs- with complicating family/social issues</p> <p>1c. Child/Youth with Special Health Care Needs- without complicating family/social issues</p> <p>1d. Child/Youth without Special Health Care Needs- without complicating family/social issues</p> <p>1e. Interpreter needed</p> <p>1f. Interpreter not needed</p> <p><b><u>Care Coordination Needs</u></b></p> <p>2a. Clinical or Medical Management related to [THIS] clinic (including education about medical or behavioral condition)</p> <p>2b. Mental/Behavioral/Developmental Health</p> <p>2c. Referral and Appointment Management</p> <p>2d. Educational</p> <p>2e. Social Services (housing, food, transportation)</p> <p>2f. Financial/Insurance</p> <p>2g. Advocacy/Legal/Judicial</p> <p>2h. Connection to Community/Non-Medical Resources</p> <p>2i. Prior Authorization</p>	<p>3a. Pre-visit review</p> <p>3b. Patient education/anticipatory guidance</p> <p>3c. Communication with family [via telephone/email]</p> <p>3d. Communication with an internal clinic team member [via telephone/email/in-person]</p> <p>3e. Communication with an external health care provider, hospital, or care team member [via telephone/email]</p> <p>3f. Telehealth encounter</p> <p>3g. Update of clinical chart [electronic medical record system]</p> <p>3h. Communication with a community agency/educational facility/school [via telephone/email]</p> <p>3i. Reviewed labs, diagnostic tests, notes, IEP</p> <p>3j. Form processing (school, camp, etc.)</p> <p>3k. Research of clinical/medical question</p> <p>3l. Research of non-medical question/service/etc.</p> <p>3m. Development/modification of care plan</p> <p>3n. Referral management or appointment scheduling</p> <p>3o. Prescription/Supplies order placement</p> <p>3p. Secured prior authorization for patient</p> <p>3q. Connection to family navigator/family support group</p>	<p>4a. Medication-related discrepancies reconciled</p> <p>4b. Medication treatment adherence</p> <p>4c. Non-medication-related discrepancies reconciled, adherence to care plan</p> <p>4d. Ability for family to better manage at home care and treatment due to education/guidance provided virtually</p> <p>4e. Modification of medical care plan (testing, medication, etc.)</p> <p>4f. Modification of care plan [non-medication component] to reduce unnecessary family burden/stress; increase adherence to care plan</p> <p>4g. Scheduled necessary clinic visit [for THIS clinic]</p> <p>4h. Specialty referral</p> <p>4i. Necessary ER referral</p> <p>4j. Referral to community agency</p> <p>4k. Prior Authorization completed</p> <p>4l. Prescription/medical supplies ordered</p>	<p>5a. Abrupt discontinuation of medication by family/caregiver due to prior authorization requirement</p> <p>5b. Non-adherence to treatment plan due to misunderstanding between care team and family</p> <p>5c. Medication error</p> <p>5d. Presence of adverse medication side effects unnoticed by family/clinic team</p> <p>5e. ER Visit</p> <p>5f. Unnecessary clinic visit [for THIS clinic]</p> <p>5g. Unnecessary specialist visit</p> <p>5h. Missed clinic visit</p> <p>5i. MD/NP call to the family</p> <p>5j. Unnecessary lab/test [prevented duplicative testing]</p> <p>5k. I don't know</p>	<p>6a. less than 5 minutes</p> <p>6b. 5-9 minutes</p> <p>6c. 10-19 minutes</p> <p>6d. 20-29 minutes</p> <p>6e. 30-39 minutes</p> <p>6f. 40-49 minutes</p> <p>6g. 50+ minutes (please note actual time): _____</p> <p><b><u>Staff</u></b></p> <p>7a. RN</p> <p>7b. NP</p> <p>7c. PA</p> <p>7d. MA</p> <p>7e. Administrative</p> <p>7f. Care Coordinator</p> <p>7g. Social Worker</p> <p>7h. Physician</p> <p><b><u>Clinical Competence (CC)</u></b></p> <p>8a. CC required</p> <p>8b. CC not required</p>

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**Patient Satisfaction Survey** adapted from Stratis Health and available at <https://www.stratishealth.org/documents/HITToolkitcoordination/5-CCC-Program-Satisfaction-Surveys.pdf>

1. **Review the *sample survey provided below*.** Use it to initiate an assessment of patients' perceptions of their providers, or construct your own based on your identified needs.
  - a. The sample survey is designed to be distributed at a registration desk in a provider office or clinic and either placed in a locked collection box at the registration desk (for collection by a representative) or mailed back to the health care facility. If there are multiple offices/clinics in the CCC program, code each office's forms with a non-distinguishable code. (For example, if the name of the clinic is Green Street Clinic, do not code it "GSC;" but if it is the *third* clinic out of twelve clinics when listed alphabetically and the survey is to be administered during the *first* quarter of 2014, the code might be 031Q14.) As a CCC program gains experience with these surveys, it may be feasible for each individual provider to distribute their own coded survey to their patients.
  - b. The sample survey includes ten questions, including at least one question from each of the seven Patient/Caregiver Experience quality performance standards that ACOs must meet for share savings.
    - i. The questions have easy Yes, No, and Not Sure choices for easy.
    - ii. The sample questions relate to the current office visit. For other surveys, you might ask questions about how well the office/clinic communicates by phone, such as when a patient calls with a question, to provide reminders, or when lab test results are available.
2. **Consider rotating questions** in the survey every three to six months. Reword questions from the current CAHPS Survey. Additional surveys, guidance and helpful resources are available at: <https://cahps.ahrq.gov/surveys-guidance/index.html>
3. **Evaluate responses** to determine what steps may need to be taken to improve scores, and hence, improve the likelihood for good scores on the CAHPS Survey required by CMS. For example, if you find that patients are responding "No" to "Did you get today's appointment scheduled as soon as you needed?" they may likely respond negatively to the similar question on the CAHPS Survey. If you find that two out of the twelve clinics consistently have low scores on this question, consider reviewing procedures at the clinics with positive responses and suggest ways to improve appointment booking at the two clinics having low scores.
4. **Evaluate response rate.** Consider the following to improve response rate:
  - a. Provide self-addressed, stamped envelope.
  - b. Mail the survey to patients at the end of each day, including a return envelope.
  - c. Provide a URL for a web portal where the survey can be conducted online.
  - d. Use a check out process which includes asking the patient/caregiver to complete the survey.
  - e. Instruct the receptionist to say goodbye to the patient and inquire if the survey was completed.

## Patient Satisfaction Survey (Example)

We want to know what you think!

Dear Patient or Caregiver,

1. Please complete this short survey as part of our continuous quality improvement efforts. Your responses will be confidential.
2. Drop your completed survey into the collection box at the registration area as you leave, or mail it back to the address provided below.
3. If you need help completing the form or have questions, please ask the front desk staff.

1. Did you get today's appointment scheduled as soon as you needed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not sure
2. Did your provider listen carefully to you today?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not sure
3. Did your provider spend enough time with you today?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not sure
4. Did your provider ask you about changing any of your prescription medications?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not sure
5. If your provider gave you written instructions or other information today, is it easy to understand?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not applicable
6. Did your provider or nurse talk to you today about the exercise or physical activity you receive?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not sure
7. In general, would you rate your overall emotional health very good?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not sure
8. In the past year, have you seen a provider three or more times for the same condition or problem?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not sure
9. On a scale of 1 to 5 with 5 being the best, would you rate your provider a 5?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not sure
10. If your provider referred you to a specialist, such as a surgeon or a doctor to care for your heart, will you make an appointment right away?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not sure

Thank you! Your input is very important to us.  
Please drop this in the collection box at <location> or mail to:

<Name>  
<Address> <City, State, Zip code>

**Health Related Quality of Life (HRQOL)**  
**Centers for Disease Control and Prevention, 2000-2018**

Physical health is a vital component of well-being. This HRQOL measure is adapted from the “Healthy Days Measure” used by the U.S. Centers for Disease Control and Prevention (CDC).

**Scoring:** Items are assigned a value between 5 and 1, and then summed, with higher scores indicating better health. Items 2, 3, and 4 are reverse coded.

**Source:** Centers for Disease Control and Prevention (CDC). (2000). *Measuring Healthy Days: Population Assessment of Health-Related Quality of Life*. Retrieved from:

<http://www.cdc.gov/hrqol/pdfs/mhd.pdf>

1. Would you say that, in general, your health is:

- Excellent..... 5
- Very good..... 4
- Good..... 3
- Fair..... 2
- Poor..... 1

2. During the past 30 days, how many days was your physical health, which includes physical illness and injury, not good?

- 0..... 6
- 1 week or less..... 5
- About 2 weeks..... 4
- About 3 weeks..... 3
- Almost every day..... 2
- Every day..... 1

3. During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, school/work, or recreation?

- 0..... 6
- 1 week or less..... 5
- About 2 weeks..... 4
- About 3 weeks..... 3
- Almost every day..... 2
- Every day..... 1

4. During the past 30 days, for about how many days did PAIN make it hard for you to do your usual activities, such as self-care, school/work, or recreation?

- 0..... 6
- 1 week or less..... 5
- About 2 weeks..... 4
- About 3 weeks..... 3
- Almost every day..... 2
- Every day..... 1

5. During the past 30 days, for about how many days have you felt VERY HEALTHY AND FULL OF ENERGY?

- 0..... 6
- 1 week or less..... 5
- About 2 weeks..... 4
- About 3 weeks..... 3
- Almost every day..... 2
- Every day..... 1

PATIENT NAME \_\_\_\_\_ TODAY'S DATE \_\_\_\_\_ TOTAL SCORE \_\_\_\_\_

PATIENT'S DOB \_\_\_\_\_ NAME/CREDENTIALS OF STAFF MEMBER \_\_\_\_\_

## GENERAL SELF-EFFICACY SCALE (ADULTS)

**Directions:** Please select the appropriate response for each item below.

#	Item	1 Not at all	2 Hardly true	3 Moderately true	4 Exactly true
1.	I can always manage to solve difficult problems if I try hard enough.				
2.	If someone opposes me, I can find the means and ways to get what I want.				
3.	It is easy for me to stick to my aims and accomplish my goals.				
4.	I am confident that I could deal efficiently with unexpected events.				
5.	Thanks to my resourcefulness, I know how to handle unforeseen situations.				
6.	I can solve most problems if I invest the necessary effort.				
7.	I can remain calm when facing difficulties because I can rely on my coping abilities.				
8.	When I am confronted with a problem, I can usually find several solutions.				
9.	If I am in trouble, I can usually think of a solution.				
10.	I can usually handle whatever comes my way.				

Replicates the General Self-Efficacy Scale (Schwarzer, R., & Jerusalem, M 1995).

## Adult Preventive Health Care Schedule: Recommendations from the USPSTF (as of April 5, 2016)

To be used in conjunction with USPSTF recommendation statements for additional details (see accompanying tables and references)

**Only grade A/B recommendations are shown**

Age 18 20 21 24 25 35 40 45 49 50 55 65 70 74 75 79 80

### USPSTF screening recommendations

Alcohol misuse <sup>1</sup>	(B)																
Depression <sup>2</sup>	(B)																
Hypertension <sup>3</sup>	(A)																
Obesity <sup>4</sup>	(B)																
Tobacco use and cessation <sup>5</sup>	(A)																
HIV infection <sup>6</sup>	(A)														(A) if at increased risk		
Hepatitis B virus infection <sup>7</sup>	(B) if at increased risk																
Syphilis <sup>8</sup>	(A) if at increased risk																
BRCA gene screening <sup>9</sup>	(B) if appropriate family history																
Chlamydia and gonorrhea <sup>10</sup>	(B) if sexually active								(B) if at increased risk								
Intimate partner violence <sup>11</sup>	(B) childbearing-aged women																
Cervical cancer <sup>12</sup>	(A) Pap smear every 3 years, or every 5 years with human papillomavirus cotesting starting at age 30																
Lipid disorder <sup>13</sup>	(B) if increased CHD risk				(A)												
	(B) if increased CHD risk								(A) if increased CHD risk								
Abnormal glucose/diabetes <sup>14</sup>	(B) if overweight or obese																
Hepatitis C virus infection <sup>15</sup>	(B) if at high risk										(B) birth years 1945-1965			(B) if at high risk			
Colorectal cancer <sup>16</sup>	(A)																
Breast cancer <sup>17</sup>	(B) biennial screening																
Lung cancer <sup>18</sup>	(B) if 30 pack-years and current or former smoker (quit in past 15 years)																
Osteoporosis <sup>19</sup>	(B) if ≥ 9.3% 10-year fracture risk										(B)						
Abdominal aortic aneurysm <sup>20</sup>	(B) if an "ever smoker"																

### USPSTF preventive medications recommendations

Primary prevention breast cancer <sup>21</sup>	(B) if at increased risk and only after shared decision making																
Folic acid supplementation <sup>22</sup>	(A) if capable of conceiving																
Aspirin for cardiovascular risk <sup>23</sup>	(A) if benefit of aspirin > risk										(A) if benefit of aspirin > risk						
	(B) if community dwelling and increased fall risk																

### USPSTF counseling recommendations

Sexually transmitted infection prevention <sup>25</sup>	(B) if at increased risk																
Diet/activity for CVD prevention <sup>26</sup>	(B) if overweight or obese and with additional CVD risk																
Skin cancer prevention <sup>27</sup>	(B) if fair skinned																

Legend	With specific risk factor		Recommendation grades	
	Normal risk	With specific risk factor	A	B
Recommendation for men and women			Recommended (likely significant benefit)	Recommended (likely significant benefit)
Recommendation for women only			Recommended (likely significant benefit)	Recommended (likely significant benefit)

Recommendation for men only  
Recommendation for women only



- B Recommended (likely moderate benefit)
- C Do not use routinely (benefit is likely small)
- D Recommended against (likely harm or no benefit)
- I Insufficient evidence to recommend for or against

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*CHD = coronary heart disease; CVD = cardiovascular disease; HIV = human immunodeficiency virus; USPSTF = U.S. Preventive Services Task Force.*

*Visual adaptation from recommendation statements by Swenson PF, Lindberg C, Carrilo C, and Clutter J.*

## Adult Preventive Health Care Schedule: Recommendations from the USPSTF

### **Grade A/B Recommendations (with Associated Grade C/D/I Recommendations):**

#### **Alcohol misuse screening<sup>1</sup>**

- (B) Screen adults and provide brief behavioral interventions for risky alcohol use

#### **Depression screening<sup>2</sup>**

- (B) Screen adults with systems for evaluation and management

#### **Hypertension screening<sup>3</sup>**

- (A) Screen adults; exclude white coat hypertension before starting therapy

#### **Obesity screening<sup>4</sup>**

- (B) Screen adults and offer or refer patients with body mass index  $\geq 30$  kg per m<sup>2</sup> to intensive behavioral interventions

#### **Tobacco use screening<sup>5</sup>**

- (A) Screen adults and provide behavioral and U.S. Food and Drug Administration–approved intervention therapy for cessation  
(I) IETRFOA electronic nicotine delivery systems for tobacco cessation

#### **Human immunodeficiency virus screening<sup>6</sup>**

- (A) Screen individuals 15 to 65 years of age  
(A) Screen older and younger persons who are at increased risk

#### **Hepatitis B virus infection screening<sup>7</sup>**

- (B) Screen adolescents and adults at high risk

#### **Syphilis screening<sup>8</sup> (UIP)**

- (A) Screen individuals at increased risk  
(D) Recommend against routine screening if normal risk

#### **BRCA screening<sup>9</sup>**

- (B) Screen women with appropriate family history  
(D) Recommend against screening patients without appropriate family history

#### **Chlamydia and gonorrhea screening<sup>10</sup>**

- (B) Screen sexually active women 24 years and younger, and women at increased risk who are 25 years and older  
(I) IETRFOA screening sexually active males

#### **Intimate partner violence screening<sup>11</sup>**

- (B) Screen women of childbearing age and refer to appropriate services  
(I) IETRFOA screening all vulnerable and elderly patients for abuse or neglect

#### **Cervical cancer screening<sup>12</sup> (UIP)**

- (A) Screen women 21 to 65 years of age
- Papanicolaou smear every three years
  - Women 30 to 65 years of age may increase screening interval to five years with cytology and human papillomavirus cotesting
- (D) Recommend against screening in women
- Age 20 years and younger

- Older than 65 years if adequately screened previously and no increased risk of cervical cancer
- With hysterectomy (including cervix) without history of cervical intraepithelial neoplasia grade 2 or 3 or cervical cancer
- Younger than 30 years with human papillomavirus testing alone or in combination with cytology

#### **Lipid disorder screening<sup>13</sup> (UIP)**

- (A) Screen men 35 years and older  
(A) Screen women 45 years and older at increased risk of CHD  
(B) Screen men 20 to 35 years of age and women 20 to 45 years of age at increased CHD risk  
(C) No recommendations for or against screening men 20 to 35 years of age and women 20 to 45 years of age without increased CHD risk

#### **Abnormal glucose and diabetes mellitus type 2 screening<sup>14</sup>**

- (B) Screen overweight or obese adults 40 to 70 years of age and refer patients with abnormal glucose levels for intensive counseling for healthy diet and exercise

#### **Hepatitis C virus infection screening<sup>15</sup>**

- (B) Offer one-time screening of patients born between 1945 and 1965  
(B) Screen high-risk patients

#### **Colorectal cancer screening<sup>16</sup> (UIP)**

- (A) Screen patients 50 to 75 years of age with fecal occult blood testing, sigmoidoscopy, or colonoscopy  
(C) Recommend against routine screening of patients 76 to 85 years of age  
(D) Recommend against screening patients 86 years and older  
(I) IETRFOA for screening with computed tomography colonography or fecal DNA

#### **Breast cancer screening<sup>17</sup>**

- (B) Biennial screening mammography in women 50 to 74 years of age  
(C) Screening is an individualized decision for women 40 to 49 years of age  
(I) IETRFOA
- Mammography after 75 years of age
  - Screening with digital breast tomosynthesis
  - Adjunctive screening in women with dense breast tissue and negative screening mammogram

#### **Lung cancer screening<sup>18</sup>**

- (B) Screen annually with low-dose computed tomography for individuals 55 to 80 years of age with a 30 pack-year history who currently smoke or quit within the past 15 years; consider overall health in decision to screen

#### **Osteoporosis screening<sup>19</sup> (UIP)**

- (B) Screen women 65 years and older  
(B) Screen women if fracture risk equal to that of a 65-year-old white woman without other risk factors (9.3% in 10 years by U.S. FRAX [Fracture Risk Assessment] tool)  
(I) IETRFOA screening men

### **Grade D Recommendations:**

### **Abdominal aortic aneurysm screening<sup>20</sup>**

- (B) Screen men 65 to 75 years of age who ever smoked (100 or greater lifetime cigarettes) with one-time abdominal aortic aneurysm ultrasonography
- (C) Recommend selective screening of never-smoking men 65 to 75 years of age
- (I) IETRFOA women 65 to 75 years of age who ever smoked
- (D) Recommend against routine screening in never-smoking women 65 to 75 years of age

### **Primary prevention of breast cancer<sup>21</sup>**

- (B) Recommend shared decision making for medications (such as tamoxifen and raloxifene) that reduce risk of breast cancer in women at increased risk
- (D) Recommend against routine use if no increased risk

### **Folic acid supplementation<sup>22</sup> (UIP)**

- (A) 0.4 to 0.8 mg daily for women capable of conception

### **Aspirin for cardiovascular risk reduction<sup>23</sup> (UIP)**

- (A) Recommend aspirin use in men 45 to 79 years of age for reduction in myocardial infarction if benefit outweighs risk
- (A) Recommend aspirin use in women 55 to 79 years of age for reduction in ischemic stroke if benefit outweighs risk
- (I) IETRFOA aspirin for primary prevention of cardiovascular risk reduction in individuals 80 years and older
- (D) Recommend against use of aspirin for CVD primary prevention in men younger than 45 years and women younger than 55 years

### **Fall prevention in older adults<sup>24</sup> (UIP)**

- (B) Recommend exercise or physical therapy and vitamin D supplementation for fall prevention in community-dwelling individuals 65 years and older at increased risk of falls
- (C) Recommend against automatic comprehensive screening for fall risk in community-dwelling older adults

### **Counseling to prevent sexually transmitted infection<sup>25</sup>**

- (B) Recommend counseling to prevent sexually transmitted infection for adolescents and adults at increased risk

### **Counseling to promote healthy diet and physical activity<sup>26</sup>**

- (B) Recommend that overweight or obese patients with other CVD risk factor(s) be offered or referred for intensive behavioral counseling

### **Counseling for skin cancer prevention<sup>27</sup>**

- (B) Recommend counseling fair-skinned patients 10 to 24 years of age about minimizing ultraviolet light exposure
- (I) IETRFOA counseling individuals older than 24 years about reducing risk of skin cancer

### **Grade C Recommendations:**

Physical activity and healthy diet counseling to reduce cardiovascular risk<sup>28</sup> (UIP)

Aspirin or nonsteroidal anti-inflammatory drugs for prevention of colorectal cancer<sup>29</sup> (UIP)

Bacteriuria (asymptomatic) screening in men and nonpregnant women<sup>30</sup>

Beta carotene or vitamin E supplementation for CVD or cancer risk reduction<sup>31</sup>

Carotid artery stenosis screening<sup>32</sup>

CHD screening with resting or exercise electrocardiography in low-risk patients<sup>33</sup>

Chronic obstructive pulmonary disease screening with spirometry<sup>34</sup>

Combined estrogen-progesterone for prevention of chronic conditions or estrogen for the same in patients with hysterectomy<sup>35</sup> (UIP)

Genital herpes screening<sup>36</sup> (UIP)

Ovarian cancer screening<sup>37</sup> (UIP)

Pancreatic cancer screening<sup>38</sup>

Prostate cancer screening with prostate-specific antigen<sup>39</sup> (UIP)

Testicular cancer screening<sup>40</sup>

Vitamin D screening in community-dwelling nonpregnant adults<sup>41</sup>

Vitamin D ( $\leq 400$  IU) and calcium ( $\leq 1,000$  mg) supplementation daily for primary prevention of fracture in noninstitutionalized postmenopausal women<sup>42</sup>

### **Grade I Recommendations:**

Bladder cancer screening<sup>43</sup>

CHD screening with nontraditional risk factors<sup>44</sup> (UIP)

CHD screening with resting or exercise electrocardiography in intermediate- to high-risk patients<sup>33</sup>

Chronic kidney disease screening<sup>45</sup>

Cognitive impairment screening in older adults<sup>46</sup>

Combined vitamin D and calcium supplementation in men or premenopausal women<sup>42</sup>

Hearing loss screening in older adults<sup>47</sup>

Illicit drug use screening<sup>48</sup>

Impaired visual acuity screening in older adults<sup>49</sup>

Multivitamin, single nutrient or paired nutrients for CVD or cancer risk reduction (beta carotene and vitamin E, as above)<sup>31</sup>

Oral cancer screening<sup>50</sup>

Peripheral artery disease and CVD risk screening with ankle-brachial index<sup>51</sup>

Primary open-angle glaucoma screening<sup>52</sup>

Skin cancer screening (whole body) in primary care<sup>53</sup> (UIP)

Suicide risk screening<sup>54</sup>

Thyroid dysfunction screening<sup>55</sup>

Vitamin D ( $> 400$  IU) and calcium ( $> 1,000$  mg) supplementation daily for primary prevention of fracture in noninstitutionalized postmenopausal women<sup>42</sup>

CHD = coronary heart disease; CVD = cardiovascular disease; IETRFOA = insufficient evidence to recommend for or against; UIP = update in progress; USPSTF = U.S. Preventive Services Task Force.

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# CDC Prediabetes Screening Test



## COULD YOU HAVE PREDIABETES?

Prediabetes means your blood glucose (sugar) is higher than normal, but not yet diabetes. Diabetes is a serious disease that can cause heart attack, stroke, blindness, kidney failure, or loss of feet or legs. Type 2 diabetes can be delayed or prevented in people with prediabetes through effective lifestyle programs. Take the first step. Find out your risk for prediabetes.

### TAKE THE TEST—KNOW YOUR SCORE!

Answer these seven simple questions. For each “Yes” answer, add the number of points listed. All “No” answers are 0 points.

Yes	No
1	0
1	0
1	0
5	0
5	0
5	0
9	0

Are you a woman who has had a baby weighing more than 9 pounds at birth?

Do you have a sister or brother with diabetes?

Do you have a parent with diabetes?

Find your height on the chart. Do you weigh as much as or more than the weight listed for your height?

Are you younger than 65 years of age and get little or no exercise in a typical day?

Are you between 45 and 64 years of age?

Are you 65 years of age or older?

**Add your score and check the back of this page to see what it means.**

### AT-RISK WEIGHT CHART

Height	Weight <small>Pounds</small>	Height	Weight <small>Pounds</small>
4'10"	129	5'7"	172
4'11"	133	5'8"	177
5'0"	138	5'9"	182
5'1"	143	5'10"	188
5'2"	147	5'11"	193
5'3"	152	6'0"	199
5'4"	157	6'1"	204
5'5"	162	6'2"	210
5'6"	167	6'3"	216
		6'4"	221



## IF YOUR SCORE IS 3 TO 8 POINTS

This means your risk is probably low for having prediabetes now. Keep your risk low. If you're overweight, lose weight. Be active most days, and don't use tobacco. Eat low-fat meals with fruits, vegetables, and whole-grain foods. If you have high cholesterol or high blood pressure, talk to your health care provider about your risk for type 2 diabetes.

## IF YOUR SCORE IS 9 OR MORE POINTS

This means your risk is high for having prediabetes now. Please make an appointment with your health care provider soon.

## HOW CAN I GET TESTED FOR PREDIABETES?

**Individual or group health insurance:** See your health care provider. If you don't have a provider, ask your insurance company about providers who take your insurance. Deductibles and copays may apply.

**Medicaid:** See your health care provider. If you don't have a provider, contact a state Medicaid office or contact your local health department.

**Medicare:** See your health care provider. Medicare will pay the cost of testing if the provider has a reason for testing. If you don't have a provider, contact your local health department.

**No insurance:** Contact your local health department for more information about where you could be tested or call your local health clinic.



## Guidelines for Routine Chronic Care Measures

Measure	Frequency	Goal
<b>HbA1c</b>	Every 3 months if not at goal	HbA1c < 7%
	Every 6 months if at goal	Frail patients: HbA1c < 8%
<b>Blood Pressure</b>	Every 3 months if not at goal	Systolic < 140 Diastolic < 80
	Every 6 months if at goal	(BP <130/80)
<b>LDL</b>	Every 3 months if not at goal	Diabetics and/or CHD: LDL < 100
	Every year if at goal	All other: LDL < 130
<b>Smoking</b>	Every year	“No”

# Asthma Care Quick Reference

## DIAGNOSING AND MANAGING ASTHMA

### Guidelines from the National Asthma Education and Prevention Program

#### EXPERT PANEL REPORT 3

The goal of this asthma care quick reference guide is to help clinicians provide quality care to people who have asthma.

Quality asthma care involves not only initial diagnosis and treatment to achieve asthma control, but also long-term, regular follow-up care to maintain control.

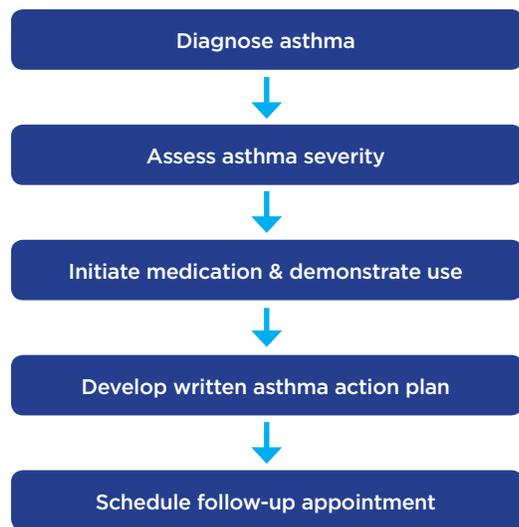
Asthma control focuses on two domains: (1) **reducing impairment**—the frequency and intensity of symptoms and functional limitations currently or recently experienced by a patient; and (2) **reducing risk**—the likelihood of future asthma attacks, progressive decline in lung function (or, for children, reduced lung growth), or medication side effects.

Achieving and maintaining asthma control requires providing appropriate medication, addressing environmental factors that cause worsening symptoms, helping patients learn self-management skills, and monitoring over the long term to assess control and adjust therapy accordingly.

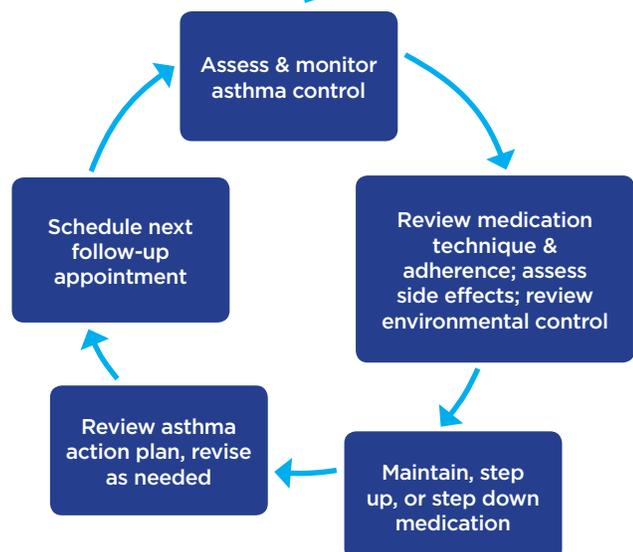
The diagram (right) illustrates the steps involved in providing quality asthma care.

This guide summarizes recommendations developed by the National Asthma Education and Prevention Program's expert panel after conducting a systematic review of the scientific literature on asthma care. See [www.nhlbi.nih.gov/guidelines/asthma](http://www.nhlbi.nih.gov/guidelines/asthma) for the full report and references. Medications and dosages were updated in September 2011 for the purposes of this quick reference guide to reflect currently available asthma medications.

### INITIAL VISIT



### FOLLOW-UP VISITS



## KEY CLINICAL ACTIVITIES FOR QUALITY ASTHMA CARE

(See complete table in *Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma* [EPR-3])

Clinical Issue	Key Clinical Activities and Action Steps
<p>➔ <b>ASTHMA DIAGNOSIS</b></p>	
<p><b>Establish asthma diagnosis.</b></p> <ul style="list-style-type: none"> <li>▪ Determine that symptoms of recurrent airway obstruction are present, based on history and exam.           <ul style="list-style-type: none"> <li>• History of cough, recurrent wheezing, recurrent difficulty breathing, recurrent chest tightness</li> <li>• Symptoms occur or worsen at night or with exercise, viral infection, exposure to allergens and irritants, changes in weather, hard laughing or crying, stress, or other factors</li> </ul> </li> <li>▪ In all patients <math>\geq 5</math> years of age, use spirometry to determine that airway obstruction is at least partially reversible.</li> <li>▪ Consider other causes of obstruction.</li> </ul>	
<p>➔ <b>LONG-TERM ASTHMA MANAGEMENT</b></p>	
<p><b>GOAL:</b> <b>Asthma Control</b></p>	<p><b>Reduce Impairment</b></p> <ul style="list-style-type: none"> <li>▪ Prevent chronic symptoms.</li> <li>▪ Require infrequent use of short-acting beta<sub>2</sub>-agonist (SABA).</li> <li>▪ Maintain (near) normal lung function and normal activity levels.</li> </ul> <p><b>Reduce Risk</b></p> <ul style="list-style-type: none"> <li>▪ Prevent exacerbations.</li> <li>▪ Minimize need for emergency care, hospitalization.</li> <li>▪ Prevent loss of lung function (or, for children, prevent reduced lung growth).</li> <li>▪ Minimize adverse effects of therapy.</li> </ul>
<p><b>Assessment and Monitoring</b></p>	<p><b>INITIAL VISIT: Assess asthma severity to initiate treatment</b> (see page 5).</p> <p><b>FOLLOW-UP VISITS: Assess asthma control to determine if therapy should be adjusted</b> (see page 6).</p> <ul style="list-style-type: none"> <li>▪ Assess at each visit: asthma control, proper medication technique, written asthma action plan, patient adherence, patient concerns.</li> <li>▪ Obtain lung function measures by spirometry at least every 1–2 years; more frequently for asthma that is not well controlled.</li> <li>▪ Determine if therapy should be adjusted: Maintain treatment; step up, if needed; step down, if possible.</li> </ul> <p><b>Schedule follow-up care.</b></p> <ul style="list-style-type: none"> <li>▪ Asthma is highly variable over time. See patients:           <ul style="list-style-type: none"> <li>• Every 2–6 weeks while gaining control</li> <li>• Every 1–6 months to monitor control</li> <li>• Every 3 months if step down in therapy is anticipated</li> </ul> </li> </ul>
<p><b>Use of Medications</b></p>	<p><b>Select medication and delivery devices that meet patient's needs and circumstances.</b></p> <ul style="list-style-type: none"> <li>▪ Use stepwise approach to identify appropriate treatment options (see page 7).</li> <li>▪ Inhaled corticosteroids (ICSs) are the most effective long-term control therapy.</li> <li>▪ When choosing treatment, consider domain of relevance to the patient (risk, impairment, or both), patient's history of response to the medication, and willingness and ability to use the medication.</li> </ul> <p><b>Review medications, technique, and adherence at each follow-up visit.</b></p>

## KEY CLINICAL ACTIVITIES FOR QUALITY ASTHMA CARE (continued)

Clinical Issue	Key Clinical Activities and Action Steps
<b>Patient Education for Self-Management</b>	<p><b>Teach patients how to manage their asthma.</b></p> <ul style="list-style-type: none"> <li>▪ Teach and reinforce at each visit:           <ul style="list-style-type: none"> <li>• Self-monitoring to assess level of asthma control and recognize signs of worsening asthma (either symptom or peak flow monitoring)</li> <li>• Taking medication correctly (inhaler technique, use of devices, understanding difference between long-term control and quick-relief medications)               <ul style="list-style-type: none"> <li>- <b>Long-term control medications</b> (such as inhaled corticosteroids, which reduce inflammation) prevent symptoms. Should be taken daily; will not give quick relief.</li> <li>- <b>Quick-relief medications</b> (short-acting beta<sub>2</sub>-agonists or SABAs) relax airway muscles to provide fast relief of symptoms. Will not provide long-term asthma control. If used &gt;2 days/week (except as needed for exercise-induced asthma), the patient may need to start or increase long-term control medications.</li> </ul> </li> <li>• Avoiding environmental factors that worsen asthma</li> </ul> </li> </ul> <p><b>Develop a written asthma action plan</b> in partnership with patient/family (sample plan available at <a href="http://www.nhlbi.nih.gov/health/public/lung/asthma/asthma_actplan.pdf">www.nhlbi.nih.gov/health/public/lung/asthma/asthma_actplan.pdf</a>).</p> <ul style="list-style-type: none"> <li>▪ Agree on treatment goals.</li> <li>▪ Teach patients how to use the asthma action plan to:           <ul style="list-style-type: none"> <li>• Take daily actions to control asthma</li> <li>• Adjust medications in response to worsening asthma</li> <li>• Seek medical care as appropriate</li> </ul> </li> <li>▪ Encourage adherence to the asthma action plan.           <ul style="list-style-type: none"> <li>• Choose treatment that achieves outcomes and addresses preferences important to the patient/family.</li> <li>• Review at each visit any success in achieving control, any concerns about treatment, any difficulties following the plan, and any possible actions to improve adherence.</li> <li>• Provide encouragement and praise, which builds patient confidence. Encourage family involvement to provide support.</li> </ul> </li> </ul> <p><b>Integrate education into all points of care involving interactions with patients.</b></p> <ul style="list-style-type: none"> <li>▪ Include members of all health care disciplines (e.g., physicians, pharmacists, nurses, respiratory therapists, and asthma educators) in providing and reinforcing education at all points of care.</li> </ul>
<b>Control of Environmental Factors and Comorbid Conditions</b>	<p><b>Recommend ways to control exposures to allergens, irritants, and pollutants that make asthma worse.</b></p> <ul style="list-style-type: none"> <li>▪ Determine exposures, history of symptoms after exposures, and sensitivities. (In patients with persistent asthma, use skin or in vitro testing to assess sensitivity to perennial indoor allergens to which the patient is exposed.)           <ul style="list-style-type: none"> <li>• Recommend multifaceted approaches to control exposures to which the patient is sensitive; single steps alone are generally ineffective.</li> <li>• Advise all asthma patients and all pregnant women to avoid exposure to tobacco smoke.</li> <li>• Consider allergen immunotherapy by trained personnel for patients with persistent asthma when there is a clear connection between symptoms and exposure to an allergen to which the patient is sensitive.</li> </ul> </li> </ul> <p><b>Treat comorbid conditions.</b></p> <ul style="list-style-type: none"> <li>▪ Consider allergic bronchopulmonary aspergillosis, gastroesophageal reflux, obesity, obstructive sleep apnea, rhinitis and sinusitis, and stress or depression. Treatment of these conditions may improve asthma control.</li> <li>▪ Consider inactivated flu vaccine for all patients &gt;6 months of age.</li> </ul>

## ASTHMA CARE FOR SPECIAL CIRCUMSTANCES

Clinical Issue	Key Clinical Activities and Action Steps
<b>Exercise-Induced Bronchospasm</b>	<p><b>Prevent EIB.*</b></p> <ul style="list-style-type: none"> <li>Physical activity should be encouraged. For most patients, EIB should not limit participation in any activity they choose.</li> <li>Teach patients to take treatment before exercise. SABAs* will prevent EIB in most patients; LTRAs,* cromolyn, or LABAs* also are protective. Frequent or chronic use of LABA to prevent EIB is discouraged, as it may disguise poorly controlled persistent asthma.</li> <li>Consider long-term control medication. EIB often is a marker of inadequate asthma control and responds well to regular anti-inflammatory therapy.</li> <li>Encourage a warm-up period or mask or scarf over the mouth for cold-induced EIB.</li> </ul>
<b>Pregnancy</b>	<p><b>Maintain asthma control through pregnancy.</b></p> <ul style="list-style-type: none"> <li>Check asthma control at all prenatal visits. Asthma can worsen or improve during pregnancy; adjust medications as needed.</li> <li>Treating asthma with medications is safer for the mother and fetus than having poorly controlled asthma. Maintaining lung function is important to ensure oxygen supply to the fetus.</li> <li>ICSs* are the preferred long-term control medication.</li> <li>Remind patients to avoid exposure to tobacco smoke.</li> </ul>

## MANAGING EXACERBATIONS

Clinical Issue	Key Clinical Activities and Action Steps
<b>Home Care</b>	<p><b>Develop a written asthma action plan</b> (see Patient Education for Self-Management, page 3).</p> <p><b>Teach patients how to:</b></p> <ul style="list-style-type: none"> <li>Recognize early signs, symptoms, and PEF* measures that indicate worsening asthma.</li> <li>Adjust medications (increase SABA* and, in some cases, add oral systemic corticosteroids) and remove or withdraw from environmental factors contributing to the exacerbation.</li> <li>Monitor response.</li> <li>Seek medical care if there is serious deterioration or lack of response to treatment. Give specific instructions on who and when to call.</li> </ul>
<b>Urgent or Emergency Care</b>	<p><b>Assess severity by lung function measures (for ages <math>\geq 5</math> years), physical examination, and signs and symptoms.</b></p> <p><b>Treat to relieve hypoxemia and airflow obstruction; reduce airway inflammation.</b></p> <ul style="list-style-type: none"> <li>Use supplemental oxygen as appropriate to correct hypoxemia.</li> <li>Treat with repetitive or continuous SABA,* with the addition of inhaled ipratropium bromide in severe exacerbations.</li> <li>Give oral systemic corticosteroids in moderate or severe exacerbations or for patients who fail to respond promptly and completely to SABA.</li> <li>Consider adjunctive treatments, such as intravenous magnesium sulfate or heliox, in severe exacerbations unresponsive to treatment.</li> </ul> <p><b>Monitor response with repeat assessment of lung function measures, physical examination, and signs and symptoms, and, in emergency department, pulse oximetry.</b></p> <p><b>Discharge with medication and patient education:</b></p> <ul style="list-style-type: none"> <li>Medications: SABA, oral systemic corticosteroids; consider starting ICS*</li> <li>Referral to follow-up care</li> <li>Asthma discharge plan</li> <li>Review of inhaler technique and, whenever possible, environmental control measures</li> </ul>

\*Abbreviations: EIB, exercise-induced bronchospasm; ICS, inhaled corticosteroid; LABA, long-acting beta<sub>2</sub>-agonist; LTRA, leukotriene receptor antagonist; PEF, peak expiratory flow; SABA, short-acting beta<sub>2</sub>-agonist.

**INITIAL VISIT: CLASSIFYING ASTHMA SEVERITY AND INITIATING THERAPY**  
*(in patients who are not currently taking long-term control medications)*

Level of severity (Columns 2-5) is determined by events listed in Column 1 for both impairment (frequency and intensity of symptoms and functional limitations) and risk (of exacerbations). Assess impairment by patient's or caregiver's recall of events during the previous 2-4 weeks; assess risk over the last year. Recommendations for initiating therapy based on level of severity are presented in the last row.

Components of Severity	Intermittent					Persistent						
	Mild		Moderate		Severe		Mild		Moderate		Severe	
	Ages 0-4 years	Ages 5-11 years	Ages ≥12 years	Ages 0-4 years	Ages 5-11 years	Ages ≥12 years	Ages 0-4 years	Ages 5-11 years	Ages ≥12 years	Ages 0-4 years	Ages 5-11 years	Ages ≥12 years
Symptoms	≤2 days/week		≤2x/month	1-2x/month	>2 days/week but not daily	3-4x/month	3-4x/month	>1x/week but not nightly	Daily	>1x/week	Throughout the day	Often 7x/week
Nighttime awakenings	0		≤2x/month	1-2x/month	3-4x/month	3-4x/month	>1x/week but not nightly	Daily	>1x/week	Several times per day	Extremely limited	
SABA* use for symptom control (not to prevent EIB*)	≤2 days/week		≤2 days/week	>2 days/week but not daily	>2 days/week but not daily and not more than once on any day	>80%	>80%	>80%	60-80%	60-80%	<60%	<60%
Interference with normal activity	None		Minor limitation	Minor limitation	Some limitation	Some limitation	Some limitation	Some limitation	Some limitation	Some limitation	Some limitation	Some limitation
Lung function	Normal FEV <sub>1</sub> between exacerbations		Normal FEV <sub>1</sub> between exacerbations	Normal FEV <sub>1</sub> between exacerbations	Normal FEV <sub>1</sub> between exacerbations	>80%	>80%	>80%	60-80%	60-80%	<60%	<60%
→ FEV <sub>1</sub> * (% predicted)	Not applicable		>80%	>80%	>80%	>80%	>80%	>80%	60-80%	60-80%	Not applicable	<60%
→ FEV <sub>1</sub> /FVC*	>85%		>85%	Normal†	Normal†	>80%	>80%	Normal†	75-80%	75-80%	Reduced 5%†	<75%
Asthma exacerbations requiring oral systemic corticosteroids‡	0-1/year		0-1/year	≥2 exacerb. in 6 months, or wheezing year lasting >1 day AND risk factors for persistent asthma	≥2 exacerb. in 6 months, or wheezing year lasting >1 day AND risk factors for persistent asthma	Generally, more frequent and intense events indicate greater severity.	Generally, more frequent and intense events indicate greater severity.	Generally, more frequent and intense events indicate greater severity.	Generally, more frequent and intense events indicate greater severity.	Generally, more frequent and intense events indicate greater severity.	Generally, more frequent and intense events indicate greater severity.	Reduced >5%†
Risk	Consider severity and interval since last asthma exacerbation. Frequency and severity may fluctuate over time for patients in any severity category. Relative annual risk of exacerbations may be related to FEV <sub>1</sub> .*											
Recommended Step for Initiating Therapy	Step 1		Step 1	Step 2	Step 2	Step 3	Step 3	Step 3	Step 3	Step 3	Step 3	Step 3
(See "Stepwise Approach for Managing Asthma Long Term," page 7)	Step 1		Step 1	Step 2	Step 2	Step 3	Step 3	Step 3	Step 3	Step 3	Step 3	Step 3
The stepwise approach is meant to help, not replace, the clinical decisionmaking needed to meet individual patient needs.	Consider short course of oral systemic corticosteroids.											
	In 2-6 weeks, depending on severity, assess level of asthma control achieved and adjust therapy as needed. For children 0-4 years old, if no clear benefit is observed in 4-6 weeks, consider adjusting therapy or alternate diagnoses.											

\* **Abbreviations:** EIB, exercise-induced bronchospasm; FEV<sub>1</sub>, forced expiratory volume in 1 second; FVC, forced vital capacity; SABA, short-acting beta<sub>2</sub>-agonist.  
 † Normal FEV<sub>1</sub>/FVC by age: 8-19 years, 85%; 20-39 years, 80%; 40-59 years, 75%; 60-80 years, 70%.  
 ‡ Data are insufficient to link frequencies of exacerbations with different levels of asthma severity. Generally, more frequent and intense exacerbations (e.g., requiring urgent care, hospital or intensive care admission, and/or oral corticosteroids) indicate greater underlying disease severity. For treatment purposes, patients with ≥2 exacerbations may be considered to have persistent asthma, even in the absence of impairment levels consistent with persistent asthma.

**FOLLOW-UP VISITS: ASSESSING ASTHMA CONTROL AND ADJUSTING THERAPY**

Level of control (Columns 2-4) is based on the most severe component of impairment (symptoms and functional limitations) or risk (exacerbations). Assess impairment by patient's or caregiver's recall of events listed in Column 1 during the previous 2-4 weeks and by spirometry and/or peak flow measures. Symptom assessment for longer periods should reflect a global assessment, such as inquiring whether the patient's asthma is better or worse since the last visit. Assess risk by recall of exacerbations during the previous year and since the last visit. Recommendations for adjusting therapy based on level of control are presented in the last row.

Components of Control	Well Controlled			Not Well Controlled			Very Poorly Controlled		
	Ages 0-4 years	Ages 5-11 years	Ages ≥12 years	Ages 0-4 years	Ages 5-11 years	Ages ≥12 years	Ages 0-4 years	Ages 5-11 years	Ages ≥12 years
Symptoms	≤2 days/week	≤2 days/week but not more than once on each day	≤2 days/week	>2 days/week	>2 days/week or multiple times on ≤2 days/week	>2 days/week	>2 days/week	Throughout the day	Throughout the day
Nighttime awakenings	≤1x/month	≤2x/month	≤2x/month	>1x/month	≥2x/month	1-3x/week	>1x/week	≥2x/week	≥4x/week
Interference with normal activity	None	None	None	Some limitation	Some limitation	Some limitation	Extremely limited	Extremely limited	Extremely limited
SABA* use for symptom control (not to prevent EIB*)	≤2 days/week	≤2 days/week	≤2 days/week	>2 days/week	>2 days/week	>2 days/week	Several times per day	Several times per day	Several times per day
Lung function	>80%	>80%	>80%	Not applicable	60-80%	60-80%	Not applicable	<60%	<60%
↑ FEV <sub>1</sub> * (% predicted) or peak flow (% personal/best) ↓ FEV <sub>1</sub> /FVC*	>80%	>80%	Not applicable	Not applicable	75-80%	Not applicable	Not applicable	<75%	Not applicable
Validated questionnaires†	Not applicable	Not applicable	0 ≤0.75‡ ≥20	Not applicable	Not applicable	1-2 ≥1.5 16-19	Not applicable	Not applicable	3-4 Not applicable ≤15
↓ ATAQ* ↓ ACQ* ↓ ACT*	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Asthma exacerbations requiring oral systemic corticosteroids§	0-1/year	0-1/year	0-1/year	2-3/year	≥2/year	≥2/year	>3/year	≥2/year	≥2/year
Reduction in lung growth/Progressive loss of lung function	Evaluation requires long-term follow-up care.	Evaluation requires long-term follow-up care.	Evaluation requires long-term follow-up care.	Not applicable	Evaluation requires long-term follow-up care.	Evaluation requires long-term follow-up care.	Not applicable	Evaluation requires long-term follow-up care.	Evaluation requires long-term follow-up care.
Treatment-related adverse effects	Medication side effects can vary in intensity from none to very troublesome and worrisome. The level of intensity does not correlate to specific levels of control but should be considered in the overall assessment of risk.								
<b>Recommended Action for Treatment</b>	Maintain current step. Regular follow-up every 1-6 months. Consider step down if well controlled for at least 3 months.			Step up 1 step	Step up at least 1 step	Step up 1 step	Step up 1 step	Step up 1-2 steps. Reevaluate in 2 weeks to achieve control.	Consider short course of oral systemic corticosteroids.
						For children 0-4 years, if no clear benefit observed in 4-6 weeks, consider adjusting therapy or alternative diagnoses.			Reevaluate in 2 weeks to achieve control.
									Before step up in treatment: Review adherence to medication, inhaler technique, and environmental control. If alternative treatment was used, discontinue and use preferred treatment for that step. For side effects, consider alternative treatment options.

\* **Abbreviations:** ACQ, Asthma Control Questionnaire; ACT, Asthma Control Test™; ATAQ, Asthma Therapy Assessment Questionnaire; EIB, exercise-induced bronchospasm; FVC, forced vital capacity; FEV<sub>1</sub>, forced expiratory volume in 1 second; SABA, short-acting beta<sub>2</sub>-agonist.  
 † Minimal important difference: 1.0 for the ATAQ; 0.5 for the ACQ; not determined for the ACT.  
 ‡ ACO values of 0.76-1.4 are indeterminate regarding well-controlled asthma.  
 § Data are insufficient to link frequencies of exacerbations with different levels of asthma control. Generally, more frequent and intense exacerbations (e.g., requiring urgent care, hospital or intensive care admission, and/or oral corticosteroids) indicate poorer asthma control.

## STEPWISE APPROACH FOR MANAGING ASTHMA LONG TERM

The stepwise approach tailors the selection of medication to the level of asthma severity (see page 5) or asthma control (see page 6). The stepwise approach is meant to help, not replace, the clinical decisionmaking needed to meet individual patient needs.

		STEP UP IF NEEDED (first, check medication adherence, inhaler technique, environmental control, and comorbidities)					
ASSESS CONTROL:		STEP DOWN IF POSSIBLE (and asthma is well controlled for at least 3 months)					
		STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6
<b>At each step:</b> Patient education, environmental control, and management of comorbidities							
0-4 years of age		<b>Intermittent Asthma</b>	<b>Persistent Asthma: Daily Medication</b> Consult with asthma specialist if step 3 care or higher is required. Consider consultation at step 2.				
	Preferred Treatment <sup>†</sup>	SABA* as needed	low-dose ICS*	medium-dose ICS*	medium-dose ICS* + either LABA* or montelukast	high-dose ICS* + either LABA* or montelukast	high-dose ICS* + either LABA* or montelukast + oral corticosteroids
	Alternative Treatment <sup>†‡</sup>		cromolyn or montelukast				
	Quick-Relief Medication	<ul style="list-style-type: none"> <li>▪ SABA* as needed for symptoms; intensity of treatment depends on severity of symptoms.</li> <li>▪ With viral respiratory symptoms: SABA every 4-6 hours up to 24 hours (longer with physician consult). Consider short course of oral systemic corticosteroids if asthma exacerbation is severe or patient has history of severe exacerbations.</li> <li>▪ Caution: Frequent use of SABA may indicate the need to step up treatment.</li> </ul>					
<i>If clear benefit is not observed in 4-6 weeks, and medication technique and adherence are satisfactory, consider adjusting therapy or alternate diagnoses.</i>							
5-11 years of age		<b>Intermittent Asthma</b>	<b>Persistent Asthma: Daily Medication</b> Consult with asthma specialist if step 4 care or higher is required. Consider consultation at step 3.				
	Preferred Treatment <sup>†</sup>	SABA* as needed	low-dose ICS*	low-dose ICS* + either LABA,* LTRA,* or theophylline <sup>(b)</sup>	medium-dose ICS* + LABA*	high-dose ICS* + LABA*	high-dose ICS* + LABA* + oral corticosteroids
	Alternative Treatment <sup>†‡</sup>		cromolyn, LTRA,* or theophylline <sup>§</sup>	OR medium-dose ICS	medium-dose ICS* + either LTRA* or theophylline <sup>§</sup>	high-dose ICS* + either LTRA* or theophylline <sup>§</sup>	high-dose ICS* + either LTRA* or theophylline <sup>§</sup> + oral corticosteroids
	Quick-Relief Medication	<ul style="list-style-type: none"> <li>▪ SABA* as needed for symptoms. The intensity of treatment depends on severity of symptoms: up to 3 treatments every 20 minutes as needed. Short course of oral systemic corticosteroids may be needed.</li> <li>▪ Caution: Increasing use of SABA or use &gt;2 days/week for symptom relief (not to prevent EIB*) generally indicates inadequate control and the need to step up treatment.</li> </ul>					
Consider subcutaneous allergen immunotherapy for patients who have persistent, allergic asthma.**							
≥12 years of age		<b>Intermittent Asthma</b>	<b>Persistent Asthma: Daily Medication</b> Consult with asthma specialist if step 4 care or higher is required. Consider consultation at step 3.				
	Preferred Treatment <sup>†</sup>	SABA* as needed	low-dose ICS*	low-dose ICS* + LABA* OR medium-dose ICS*	medium-dose ICS* + LABA*	high-dose ICS* + LABA* AND consider omalizumab for patients who have allergies <sup>††</sup>	high-dose ICS* + LABA* + oral corticosteroid <sup>§§</sup> AND consider omalizumab for patients who have allergies <sup>††</sup>
	Alternative Treatment <sup>†‡</sup>		cromolyn, LTRA,* or theophylline <sup>§</sup>	low-dose ICS* + either LTRA,* theophylline, <sup>§</sup> or zileuton <sup>‡‡</sup>	medium-dose ICS* + either LTRA,* theophylline, <sup>§</sup> or zileuton <sup>‡‡</sup>		
	Quick-Relief Medication	<ul style="list-style-type: none"> <li>▪ SABA* as needed for symptoms. The intensity of treatment depends on severity of symptoms: up to 3 treatments every 20 minutes as needed. Short course of oral systemic corticosteroids may be needed.</li> <li>▪ Caution: Use of SABA &gt;2 days/week for symptom relief (not to prevent EIB*) generally indicates inadequate control and the need to step up treatment.</li> </ul>					
Consider subcutaneous allergen immunotherapy for patients who have persistent, allergic asthma.**							

\* **Abbreviations:** EIB, exercise-induced bronchospasm; ICS, inhaled corticosteroid; LABA, inhaled long-acting beta<sub>2</sub>-agonist; LTRA, leukotriene receptor antagonist; SABA, inhaled short-acting beta<sub>2</sub>-agonist.

† Treatment options are listed in alphabetical order, if more than one.

‡ If alternative treatment is used and response is inadequate, discontinue and use preferred treatment before stepping up.

§ Theophylline is a less desirable alternative because of the need to monitor serum concentration levels.

\*\* Based on evidence for dust mites, animal dander, and pollen; evidence is weak or lacking for molds and cockroaches. Evidence is strongest for immunotherapy with single allergens. The role of allergy in asthma is greater in children than in adults.

†† Clinicians who administer immunotherapy or omalizumab should be prepared to treat anaphylaxis that may occur.

‡‡ Zileuton is less desirable because of limited studies as adjunctive therapy and the need to monitor liver function.

§§ Before oral corticosteroids are introduced, a trial of high-dose ICS + LABA + either LTRA, theophylline, or zileuton, may be considered, although this approach has not been studied in clinical trials.

**ESTIMATED COMPARATIVE DAILY DOSAGES: INHALED CORTICOSTEROIDS FOR LONG-TERM ASTHMA CONTROL**

Daily Dose	0-4 years of age			5-11 years of age			≥12 years of age		
	Low	Medium*	High*	Low	Medium*	High*	Low	Medium*	High*
<b>Beclomethasone MDI†</b>									
40 mcg/puff	N/A	N/A	N/A	80-160 mcg	>160-320 mcg	>320 mcg	80-240 mcg	>240-480 mcg	>480 mcg
80 mcg/puff				1-2 puffs 2x/day	3-4 puffs 2x/day		1-3 puffs 2x/day	4-6 puffs 2x/day	
				1 puff 2x/day	2 puffs 2x/day	≥3 puffs 2x/day	1 puff am, 2 puffs pm	2-3 puffs 2x/day	≥4 puffs 2x/day
<b>Budesonide DPI†</b>									
90 mcg/inhalation	N/A	N/A	N/A	180-360 mcg	>360-720 mcg	>720 mcg	180-540 mcg	>540-1,080 mcg	>1,080 mcg
180 mcg/inhalation				1-2 inhs† 2x/day	3-4 inhs† 2x/day		1-3 inhs† 2x/day		
					2 inhs† 2x/day	≥3 inhs† 2x/day	1 inh† am, 2 inhs† pm	2-3 inhs† 2x/day	≥4 inhs† 2x/day
<b>Budesonide Nebules</b>									
0.25 mg	0.25-0.5 mg	>0.5-1.0 mg	>1.0 mg	0.5 mg	1.0 mg	2.0 mg	N/A	N/A	N/A
0.5 mg	1-2 nebs†/day			1 neb† 2x/day					
1.0 mg	1 neb†/day	2 nebs†/day	3 nebs†/day	1 neb†/day	1 neb† 2x/day				
		1 neb†/day	2 nebs†/day		1 neb†/day	1 neb† 2x/day			
<b>Ciclesonide MDI†</b>									
80 mcg/puff	N/A	N/A	N/A	80-160 mcg	>160-320 mcg	>320 mcg	160-320 mcg	>320-640 mcg	>640 mcg
160 mcg/puff				1-2 puffs/day	1 puff am, 2 puffs pm-2 puffs 2x/day	≥3 puffs 2x/day	1-2 puffs 2x/day	3-4 puffs 2x/day	
				1 puff/day	1 puff 2x/day	≥2 puffs 2x/day		2 puffs 2x/day	≥3 puffs 2x/day
<b>Flunisolide MDI†</b>									
80 mcg/puff	N/A	N/A	N/A	160 mcg	320-480 mcg	≥480 mcg	320 mcg	>320-640 mcg	>640 mcg
				1 puff 2x/day	2-3 puffs 2x/day	≥4 puffs 2x/day	2 puffs 2x/day	3-4 puffs 2x/day	≥5 puffs 2x/day

\* It is preferable to use a higher mcg/puff or mcg/inhalation formulation to achieve as low a number of puffs or inhalations as possible.

† Abbreviations: DPI, dry powder inhaler (requires deep, fast inhalation); inh, inhalation; MDI, metered dose inhaler (releases a puff of medication); neb, nebu-

**ESTIMATED COMPARATIVE DAILY DOSAGES:  
INHALED CORTICOSTEROIDS FOR LONG-TERM ASTHMA CONTROL (continued)**

Daily Dose	0-4 years of age			5-11 years of age			≥12 years of age		
	Low	Medium*	High*	Low	Medium*	High*	Low	Medium*	High*
<b>MEDICATION</b>									
<b>Fluticasone MDI†</b>									
44 mcg/puff	176 mcg	>176-352 mcg	>352 mcg	88-176 mcg	>176-352 mcg	>352 mcg	88-264 mcg	>264-440 mcg	>440 mcg
110 mcg/puff	2 puffs 2x/day	3-4 puffs 2x/day	≥2 puffs 2x/day	1-2 puffs 2x/day	3-4 puffs 2x/day	≥2 puffs 2x/day	1-3 puffs 2x/day	2 puffs 2x/day	3 puffs 2x/day
220 mcg/puff		1 puff 2x/day			1 puff 2x/day	≥2 puffs 2x/day		1 puffs 2x/day	≥2 puffs 2x/day
<b>Fluticasone DPI†</b>									
50 mcg/inhalation	N/A	N/A	N/A	100-200 mcg	>200-400 mcg	>400 mcg	100-300 mcg	>300-500 mcg	>500 mcg
100 mcg/inhalation				1-2 inh† 2x/day	3-4 inh† 2x/day	>2 inh† 2x/day	1-3 inh† 2x/day	2 inh† 2x/day	≥3 inh† 2x/day
250 mcg/inhalation				1 inh† 2x/day	2 inh† 2x/day	>2 inh† 2x/day		1 inh† 2x/day	≥2 inh† 2x/day
<b>Mometasone DPI†</b>									
110 mcg/inhalation	N/A	N/A	N/A	110 mcg	220-440 mcg	>440 mcg	110-220 mcg	>220-440 mcg	>440 mcg
220 mcg/inhalation				1 inh†/day	1-2 inh† 2x/day	≥3 inh† 2x/day	1-2 inh† pm	3-4 inh† pm or 2 inh† 2x/day	≥3 inh† 2x/day
					1-2 inh†/day	≥3 inh† divided in 2 doses	1 inh† pm	1 inh† 2x/day or 2 inh† pm	≥3 inh† divided in 2 doses

\* It is preferable to use a higher mcg/puff or mcg/inhalation formulation to achieve as low a number of puffs or inhalations as possible.

† Abbreviations: DPI, dry powder inhaler (requires deep, fast inhalation); inh, inhalation; MDI, metered dose inhaler (releases a puff of medication); neb, nebulizer.

**Therapeutic Issues Pertaining to Inhaled Corticosteroids (ICSs) for Long-Term Asthma Control**

- **The most important determinant of appropriate dosing is the clinician's judgment of the patient's response to therapy.** The clinician must monitor the patient's response on several clinical parameters (e.g., symptoms; activity level; measures of lung function) and adjust the dose accordingly. Once asthma control is achieved and sustained at least 3 months, the dose should be carefully titrated down to the minimum dose necessary to maintain control.

  - Some doses may be outside package labeling, especially in the high-dose range. Budesonide nebulizer suspension is the only inhaled corticosteroid (ICS) with FDA-approved labeling for children <4 years of age.
  - Metered-dose inhaler (MDI) dosages are expressed as the actuator dose (amount leaving the actuator and delivered to the patient), which is the labeling required in the United States. This is different from the dosage expressed as the valve dose (amount of drug leaving the valve, not all of which is available to the patient), which is used in many European countries and in some scientific literature. Dry powder inhaler (DPI) doses are expressed as the amount of drug in the inhaler following activation.
  - For children <4 years of age: The safety and efficacy of ICSs in children <1 year of age has not been established. Children <4 years of age generally require delivery of ICS (budesonide and fluticasone MDI) through a face mask that fits snugly over nose and mouth to avoid nebulizing in the eyes. Face should be washed after treatment to prevent local corticosteroid side effects. For budesonide, the dose may be given 1-3 times daily. Budesonide suspension is compatible with albuterol, ipratropium, and levalbuterol nebulizer solutions in the same nebulizer. Use only jet nebulizers, as ultrasonic nebulizers are ineffective for suspensions. For fluticasone MDI, the dose should be divided 2 times daily; the low dose for children <4 years of age is higher than for children 5-11 years of age because of lower dose delivered with face mask and data on efficacy in young children.

## USUAL DOSAGES FOR OTHER LONG-TERM CONTROL MEDICATIONS\*

Medication	0–4 years of age	5–11 years of age	≥12 years of age
<b>Combined Medication (inhaled corticosteroid + long-acting beta<sub>2</sub>-agonist)</b>			
<b>Fluticasone/Salmeterol</b> — DPI† 100 mcg/50 mcg, 250 mcg/50 mcg, or 500 mcg/50 mcg MDI† 45 mcg/21 mcg, 115 mcg/21 mcg, or 230 mcg/21 mcg	N/A†	1 inhalation 2x/day; dose depends on level of severity or control	1 inhalation 2x/day; dose depends on level of severity or control
<b>Budesonide/Formoterol</b> — MDI† 80 mcg/4.5 mcg or 160 mcg/4.5 mcg	N/A†	2 puffs 2x/day; dose depends on level of severity or control	2 puffs 2x/day; dose depends on level of severity or control
<b>Mometasone/Formoterol</b> — MDI† 100 mcg/5 mcg	N/A†	N/A†	2 inhalations 2x/day; dose depends on severity of asthma
<b>Leukotriene Modifiers</b>			
<b>Leukotriene Receptor Antagonists (LTRAs)</b>			
<b>Montelukast</b> — 4 mg or 5 mg chewable tablet, 4 mg granule packets, 10 mg tablet	4 mg every night at bedtime (1–5 years of age)	5 mg every night at bedtime (6–14 years of age)	10 mg every night at bedtime
<b>Zafirlukast</b> — 10 mg or 20 mg tablet <i>Take at least 1 hour before or 2 hours after a meal. Monitor liver function.</i>	N/A†	10 mg 2x/day (7–11 years of age)	40 mg daily (20 mg tablet 2x/day)
<b>5-Lipoxygenase Inhibitor</b> <b>Zileuton</b> — 600 mg tablet <i>Monitor liver function.</i>	N/A†	N/A†	2,400 mg daily (give 1 tablet 4x/day)
<b>Immunomodulators</b>			
<b>Omalizumab (Anti IgE†)</b> — Subcutaneous injection, 150 mg/1.2 mL following reconstitution with 1.4 mL sterile water for injection <i>Monitor patients after injections; be prepared to treat anaphylaxis that may occur.</i>	N/A†	N/A†	150–375 mg subcutaneous every 2–4 weeks, depending on body weight and pretreatment serum IgE level
<b>Cromolyn</b>			
<b>Cromolyn</b> — Nebulizer: 20 mg/ampule	1 ampule 4x/day, N/A† <2 years of age	1 ampule 4x/day	1 ampule 4x/day
<b>Methylxanthines</b>			
<b>Theophylline</b> — Liquids, sustained-release tablets, and capsules <i>Monitor serum concentration levels.</i>	Starting dose 10 mg/kg/day; usual maximum: ▪ <1 year of age: 0.2 (age in weeks) + 5 = mg/kg/day ▪ ≥1 year of age: 16 mg/kg/day	Starting dose 10 mg/kg/day; usual maximum: 16 mg/kg/day	Starting dose 10 mg/kg/day up to 300 mg maximum; usual maximum: 800 mg/day
<b>Inhaled Long-Acting Beta<sub>2</sub>-Agonists (LABAs)</b> — used in conjunction with ICS† for long-term control; LABA is NOT to be used as monotherapy			
<b>Salmeterol</b> — DPI† 50 mcg/blister	N/A†	1 blister every 12 hours	1 blister every 12 hours
<b>Formoterol</b> — DPI† 12 mcg/single-use capsule	N/A†	1 capsule every 12 hours	1 capsule every 12 hours
<b>Oral Systemic Corticosteroids</b>			
<b>Methylprednisolone</b> — 2, 4, 8, 16, 32 mg tablets	▪ 0.25–2 mg/kg daily in single dose in a.m. or every other day as needed for control ▪ Short course “burst”: 1–2 mg/kg/day, max 60 mg/d for 3–10 days	▪ 0.25–2 mg/kg daily in single dose in a.m. or every other day as needed for control ▪ Short course “burst”: 1–2 mg/kg/day, max 60 mg/d for 3–10 days	▪ 7.5–60 mg daily in single dose in a.m. or every other day as needed for control ▪ Short course “burst”: to achieve control, 40–60 mg/day as single or 2 divided doses for 3–10 days
<b>Prednisolone</b> — 5 mg tablets; 5 mg/5 cc, 15 mg/5 cc			
<b>Prednisone</b> — 1, 2.5, 5, 10, 20, 50 mg tablets; 5 mg/cc, 5 mg/5 cc			

\* Dosages are provided for those products that have been approved by the U.S. Food and Drug Administration or have sufficient clinical trial safety and efficacy data in the appropriate age ranges to support their use.

† **Abbreviations:** DPI, dry powder inhaler; IgE, immunoglobulin E; MDI, metered-dose inhaler; N/A, not available (not approved, no data available, or safety and efficacy not established for this age group).

**The most important determinant of appropriate dosing is the clinician’s judgment of the patient’s response to therapy.** The clinician must monitor the patient’s response on several clinical parameters (e.g., symptoms; activity level; measures of lung function) and adjust the dose accordingly. Once asthma control is achieved and sustained at least 3 months, the dose should be carefully titrated down to the minimum dose necessary to maintain control.

## RESPONDING TO PATIENT QUESTIONS ABOUT INHALED CORTICOSTEROIDS

Questions and varying beliefs about inhaled corticosteroids (ICSs) are common and may affect adherence to treatment. Following are some key points to share with patients and families.

- ICSs are the most effective medications for long-term control of persistent asthma. Because ICSs are inhaled, they go right to the lungs to reduce chronic airway inflammation. In general, ICSs should be taken every day to prevent asthma symptoms and attacks.
- The potential risks of ICSs are well balanced by their benefits. To reduce the risk of side effects, patients should work with their doctor to use the lowest dose that maintains asthma control, and be sure to take the medication correctly.
  - Mouth irritation and thrush (yeast infection), which may be associated with ICSs at higher doses, can be avoided by rinsing the mouth and spitting after ICS use and, if appropriate for the inhaler device, by using a valved holding chamber or spacer.
- ICS use may slow a child's growth rate slightly. This effect on linear growth is not predictable and is generally small (about 1 cm), appears to occur in the first several months of treatment, and is not progressive. The clinical significance of this potential effect has yet to be determined. Growth rates are highly variable in children, and poorly controlled asthma can slow a child's growth.
- ICSs are generally safe for pregnant women. Controlling asthma is important for pregnant women to be sure the fetus receives enough oxygen.
- ICSs are not addictive.
- ICSs are not the same as anabolic steroids that some athletes use illegally to increase sports performance.

## RESPONDING TO PATIENT QUESTIONS ABOUT LONG-ACTING BETA<sub>2</sub>-AGONISTS

Keep the following key points in mind when educating patients and families about long-acting beta<sub>2</sub>-agonists (LABAs).

- The addition of LABA (salmeterol or formoterol) to the treatment of patients who require more than low-dose inhaled corticosteroid (ICS) alone to control asthma improves lung function, decreases symptoms, and reduces exacerbations and use of short-acting beta<sub>2</sub>-agonists (SABA) for quick relief in most patients to a greater extent than doubling the dose of ICS.
- A large clinical trial found that slightly more deaths occurred in patients taking salmeterol in a single inhaler every day in addition to usual asthma therapy\* (13 out of about 13,000) compared with patients taking a placebo in addition to usual asthma therapy (3 out of about 13,000). Trials for formoterol in a single inhaler every day in addition to usual therapy\* found more severe asthma exacerbations in patients taking formoterol, especially at higher doses, compared with those taking a placebo added to usual therapy. Therefore, the Food and Drug Administration placed a Black Box warning on all drugs containing a LABA.
- The established benefits of LABAs added to ICS for the great majority of patients who require more than low-dose ICS alone to control asthma should be weighed against the risk of severe exacerbations, although uncommon, associated with daily use of LABAs.
- LABAs should not be used as monotherapy for long-term control. Even though symptoms may improve significantly, it is important to keep taking ICS while taking LABA.
- Daily use should generally not exceed 100 mcg salmeterol or 24 mcg formoterol.
- It is not currently recommended that LABAs be used to treat acute symptoms or exacerbations.

\* Usual therapy included a wide range of regimens, from those in which no other daily therapy was taken to those in which varying doses of other daily medications were taken.

## EDUCATIONAL RESOURCES

### National Heart, Lung, and Blood Institute

- Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma (EPR-3)  
[www.nhlbi.nih.gov/guidelines/asthma](http://www.nhlbi.nih.gov/guidelines/asthma)
- Physician Asthma Care Education (PACE): [www.nhlbi.nih.gov/health/prof/lung/asthma/pace/](http://www.nhlbi.nih.gov/health/prof/lung/asthma/pace/)
- National Asthma Control Initiative (NACI): <http://naci.nhlbi.nih.gov>

### Allergy & Asthma Network Mothers of Asthmatics

800-878-4403  
[www.aanma.org](http://www.aanma.org)

### American Academy of Allergy, Asthma, and Immunology

414-272-6071  
[www.aaaai.org](http://www.aaaai.org)

### American Academy of Pediatrics

847-434-4000  
[www.aap.org](http://www.aap.org)

### American Association of Respiratory Care

972-243-2272  
[www.aarc.org](http://www.aarc.org)

### American College of Chest Physicians

847-498-1400  
[www.chestnet.org](http://www.chestnet.org)

### American College of Allergy, Asthma & Immunology

847-427-1200  
[www.acaai.org](http://www.acaai.org)

### American Lung Association

800-LUNG-USA (800-586-4872)  
[www.lungusa.org](http://www.lungusa.org)

### American School Health Association

800-445-2742  
[www.ashaweb.org](http://www.ashaweb.org)

### Asthma and Allergy Foundation of America

800-7-ASTHMA (800-727-8462)  
<http://aafa.org>

### Centers for Disease Control and Prevention

800-CDC-INFO (800-232-4636)  
[www.cdc.gov/asthma](http://www.cdc.gov/asthma)

### Environmental Protection Agency/ Asthma Community Network

[www.asthmacommunitynetwork.org](http://www.asthmacommunitynetwork.org)  
800-490-9198 (to order EPA publications)  
[www.epa.gov/asthma/publications.html](http://www.epa.gov/asthma/publications.html)

### National Association of School Nurses

240-821-1130  
[www.nasn.org](http://www.nasn.org)

*For more information contact:*

### NHLBI Information Center

P.O. Box 30105  
Bethesda, MD 20824-0105  
Phone: 301-592-8573  
Fax: 301-592-8563  
Web site: [www.nhlbi.nih.gov](http://www.nhlbi.nih.gov)



U.S. Department of Health and Human Services  
National Institutes of Health



National Heart  
Lung and Blood Institute  
People Science Health

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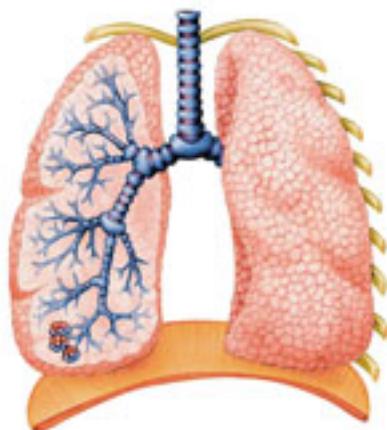
# THE WORKER HEALTH PROTECTION PROGRAM

- Home
- About WHPP
- WHPP Screening
- WHPP DOE Sites
- Worker Health Info
- WHPP News
- Success Stories
- Related Links

## Understanding Your Breathing Test Results

There are many ways that a doctor can tell if your lungs are working properly. First, the doctor can do a physical exam using a stethoscope. The doctor will listen to hear if any of the “breath sounds” are abnormal. For example, wheezing, a high-pitched sound produced by airflow through narrowed airways, is an example of an abnormal sound. The doctor can also take a picture of your lungs using a chest x-ray or CAT scan to look for abnormalities in the structure of the lungs, such as an infection like pneumonia. However, these two tests can still miss important problems. For this reason, a breathing test, called **spirometry**, is often done to further evaluate the health of the lungs.

Spirometry can tell you how much air is going into the lungs and how rapidly air is inhaled and exhaled in the lungs (airflow).



One of the benefits of spirometry testing (also referred to as “pulmonary function testing”) is that it can detect abnormalities in lung function even when no signs or symptoms of disease are evident. An example of this would be a cigarette smoker without shortness of breath who shows a mild decrease in airflow. In this case, the spirometry test detects disease at an early stage (before the onset of symptoms), so treatment (and smoking cessation, in this case) can be initiated earlier. Spirometry can also be used to help establish a medical diagnosis when signs or symptoms of disease are evident. An example of this would be a person who has developed wheezing. If decreased airflow is detected along with wheezing, this can be an indicator of asthma. Spirometry can also be used to assess the effectiveness of medical treatment. If a medication is given to open narrowed airways, it should be monitored by spirometry to ensure that the normal airflow is restored.

Spirometry is performed by deeply inhaling and forcefully exhaling into a spirometer (the device that records the various measurements of lung function). There are two measurements that are crucial in the interpretation of spirometry results. The first is called the **forced vital capacity (FVC)**. This is a measurement of lung size (in liters) and represents the volume of air in the lungs that can be exhaled following a deep inhalation. The second is the **forced expiratory volume-one second (FEV1)**. This is a measure of how much air can be exhaled in one second following a deep inhalation. You will also see another number on the spirometry test results --- the **FEV1/ FVC ratio**. This number represents the percent of the lung size (FVC) that can be exhaled in one second. For example, if the FEV1 is 4 and the FVC is 5, then the FEV1/ FVC ratio would be 4/5 or 80%. This means the individual can breath out 80% of the inhaled air in the lungs in one second.

The three key spirometry measurements (the FVC, FEV1 and FEV1/FVC ratio) for a given individual are compared to reference values. The reference value is based on healthy individuals with normal lung function and it tells the doctor the values that would be expected for someone of the same sex, age and height. To find the reference value on your spirometry report, look for the column marked “reference” or “predicted” value.

Interpretations of spirometry results require comparison between an individual’s measured value and the reference value. If the FVC and the FEV1 are within **80%** of the reference value, the results are considered normal. The normal value for the FEV1/FVC ratio is **70%** (and 65% in persons older than age 65). When compared to the reference value, a lower measured value corresponds to a more severe lung abnormality. (See table below.)

SPIROMETRY TEST	NORMAL	ABNORMAL

FVC and FEV1	Equal to or greater than 80%	Mild Moderate Severe	70-79% 60-69% less than 60%
FEV1/FVC	Equal to or greater than 70%	Mild Moderate Severe	60-69% 50-59% less than 50%

Restrictive lung diseases can cause the FVC to be abnormal. This means that the lung is restricted from filling to its normal capacity of air. Asbestosis (scarring of the lung due to asbestos exposure) is an example of a restrictive lung disease. Abnormalities of the FEV1 and FEV1/FVC are the result of a decrease in the airflow through the lung, which may be caused by obstructive lung diseases. Examples of obstructive diseases are emphysema and asthma. It is also possible to have situations where both restrictive and obstructive diseases are present.

WHPP includes spirometry as part of the free medical examination. Many participants have learned of, or have confirmed problems with their breathing after participating in the program. In summary, spirometry can be used for several purposes --- the early detection of lung disease, establishing a medical diagnosis or monitoring the effectiveness of medical therapy. A physician can also use the results to determine whether additional lung tests are needed to diagnose conditions detected by spirometry abnormalities.

Your name:

Today's date:

## How is your COPD? Take the COPD Assessment Test™ (CAT)

This questionnaire will help you and your healthcare professional measure the impact COPD (Chronic Obstructive Pulmonary Disease) is having on your wellbeing and daily life. Your answers, and test score, can be used by you and your healthcare professional to help improve the management of your COPD and get the greatest benefit from treatment.

For each item below, place a mark (X) in the box that best describes you currently. Be sure to only select one response for each question.

**Example:** I am very happy  0  1  2  3  4  5 I am very sad

				SCORE
<b>I never cough</b>	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	<b>I cough all the time</b>		
<b>I have no phlegm (mucus) in my chest at all</b>	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	<b>My chest is completely full of phlegm (mucus)</b>		
<b>My chest does not feel tight at all</b>	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	<b>My chest feels very tight</b>		
<b>When I walk up a hill or one flight of stairs I am not breathless</b>	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	<b>When I walk up a hill or one flight of stairs I am very breathless</b>		
<b>I am not limited doing any activities at home</b>	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	<b>I am very limited doing activities at home</b>		
<b>I am confident leaving my home despite my lung condition</b>	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	<b>I am not at all confident leaving my home because of my lung condition</b>		
<b>I sleep soundly</b>	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	<b>I don't sleep soundly because of my lung condition</b>		
<b>I have lots of energy</b>	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	<b>I have no energy at all</b>		
				<b>TOTAL SCORE</b>

Date \_\_\_\_\_ Name \_\_\_\_\_

## SF-8™ Health Survey

This survey asks for your views about your health. This information will help you keep track of how you feel and how well you are able to do your usual activities.

Answer every question by selecting the answer as indicated. If you are unsure about how to answer a question, please give the best answer you can.

For each of the following questions, please mark an [x] in the one box that best describes your answer.

1. Overall, how would you rate your health during the **past 4 weeks**?

Excellent    Very Good    Good    Fair    Poor    Very Poor

2. During the **past 4 weeks**, how much did physical health problems limit your usual physical activities (such as transfers or going places)?

Not at all    Very little    Somewhat    Quite a lot    Could not do physical activities

3. During the **past 4 weeks**, how much difficulty did you have doing your daily work, both at home and away from home, because of your physical health?

Not at all    Very little    Somewhat    Quite a lot    Could not do daily work

4. How much bodily pain have you had during the **past 4 weeks**?

None    Very mild    Mild    Moderate    Severe    Very severe

5. During the **past 4 weeks**, how much energy did you have?

Very much    Quite a lot    Some    A little    None

6. During the **past 4 weeks**, how much did your physical health or emotional problems limit your usual social activities with family or friends?

Not at all    Very little    Somewhat    Quite a lot    Could not do social activities

7. During the **past 4 weeks**, how much have you been bothered by **emotional problems** (such as feeling anxious, depressed or irritable)?

Not at all    Slightly    Moderately    Quite a lot    Extremely

8. During the **past 4 weeks**, how much did personal or emotional problems keep you from doing your usual work, school or other daily activities?

Not at all    Very little    Somewhat    Quite a lot    Could not do daily activities

*Thank you for completing these questions.*

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	Quality of care
Medical bills	Playgrounds	Higher education		Stress	
Support	Walkability				
	Zip code / geography				

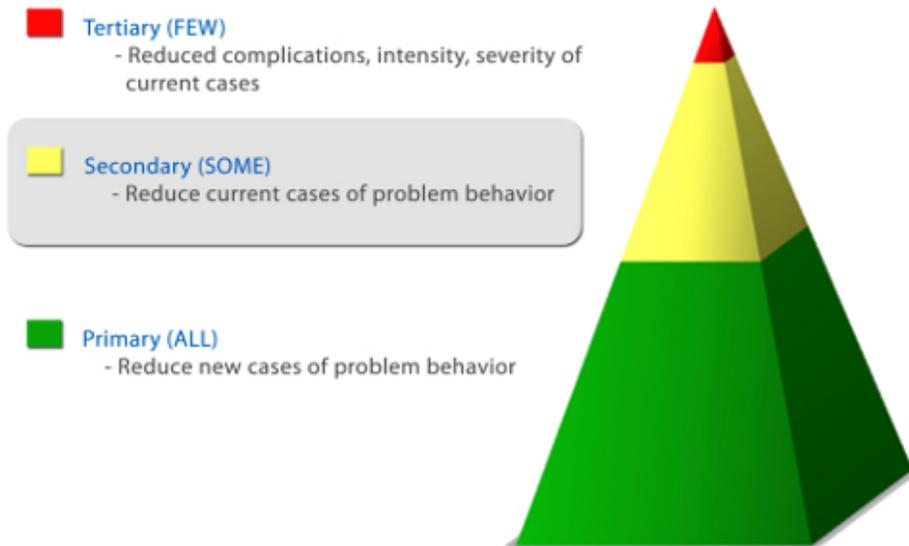
**Health Outcomes**  
Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

[Source: Kaiser Family Foundation (KFF). (2018). Beyond health care: The role of social determinants in promoting health and health equity. Retrieved from <https://www.kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/>]

<b>Reduce barriers related to... (measure before and after care coordination)</b>
• Patient activation
• Health literacy
• Patient activation
• Insurance coverage
• Transportation
• Language, culture, health beliefs, and spirituality
• Social isolation
• Homelessness
• Food security

- Access to safe places to exercise

[Source: OSEP Technical Assistance Center on Positive Behavioral Interventions and Supports (2017). Positive Behavioral Interventions & Supports [Website]. Retrieved from www.pbis.org.]

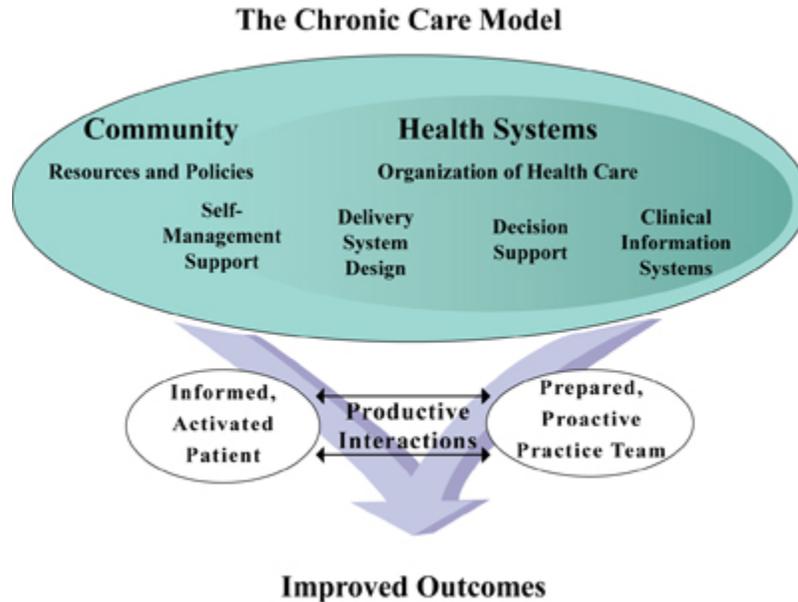


### Increase the percentage of clinic patients who receive the recommended....

- Vaccines
- Alcohol misuse screening
- Tobacco use screening
- Prediabetes screening
- Lipid disorder screen
- Hepatitis C screening
- Colon cancer screening (colonoscopy)
- Breast cancer screening (mammogram)
- Depression screening
- Hypertension screening
- Obesity screening (BMI)
- HIV screening
- STD screening (HPV, syphilis, chlamydia, gonorrhea, HIV)
- Cervical cancer screening (Pap test)
- Prostate cancer screening (digital, PSA)
- Testicular cancer screening
- Intimate partner violence
- Lung cancer screening (for current and former smokers)
- Osteoporosis screening
- Genetic testing (e.g., BRCA)

For particulars look at **Preventive Screening Schedule** and **Details to Prevention Screening Schedule**

# Chronic Disease Management



Developed by The MacColl Institute  
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[Source: Group Health Research Institute. (2018). The chronic care model. Retrieved from [http://www.improvingchroniccare.org/index.php?p=the\\_chronic\\_caremodel&s=2](http://www.improvingchroniccare.org/index.php?p=the_chronic_caremodel&s=2)]

## Increase the percentage of clinic patients who meet recommendations for...

### Diabetes Management:

- Blood pressures
- HbA1c
- LDL and lipids
- Eye exam
- Microalbumin
- Foot exam

For particulars look at the schedule for Diabetes Lab Tests and Exams and Diabetes Patient Worksheet

### Pediatric Asthma Management:

- Spirometry lung function test (FEV1/FVC)
- Symptom management
- Avoided ED visits for asthma exacerbation requiring oral systemic steroids

For particulars look at current Pediatric Asthma Care Guideline

### COPD Management:

- Spirometry (FEV1/FVC)
- Symptom management
- Avoided ED visits for exacerbations
- COPD assessment test (CAT)

For further resources look at COPD Assessment Test (CAT) and Lung Function Testing

### **Schizoaffective/Bipolar/Depressive Disorder Management:**

- Compliance with medication regimen
- Keeping appointments
- Agreeable to psychiatric consultation
- Reduced suicidal ideation
- Health related quality of life

For further resources look on PHQ 2-9

### **Arthritis and Pain Disorder Management:**

- Pain rating
- Health related quality of life
- Symptom acceptability
- Agreeable to medication assisted opioid dependency treatment

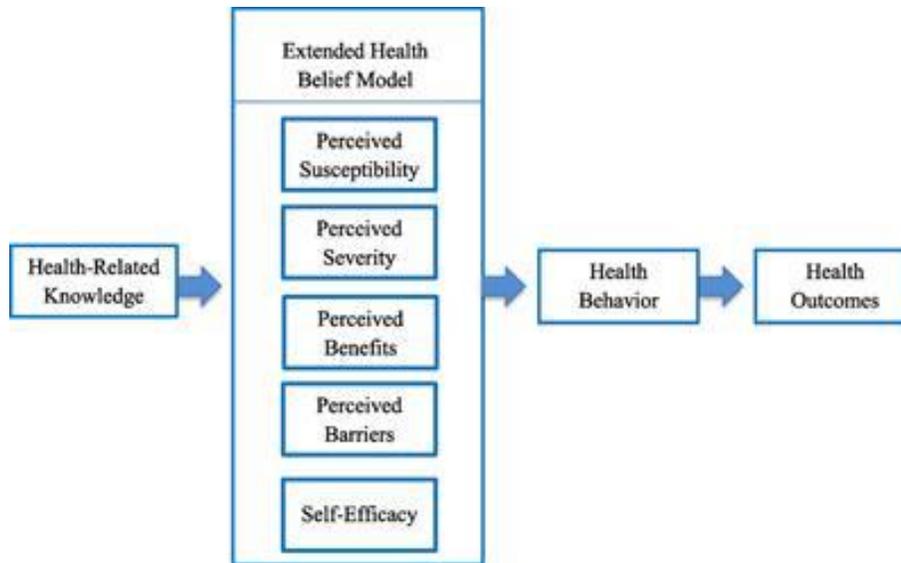
For further resources look on Osteoarthritis Care Quality Indicators, SF-8 Health Survey, Functional Pain Scale

### **Heart Failure (CHF) Management:**

- Left ventricular systolic (LVS) function
- Smoking cessation
- Taking ACE-I (or ARB if intolerant)
- Taking B-blocker (or ARB if intolerant)
- Taking anticoagulant with chronic or recurrent atrial fibrillation
- Daily weights
- Seasonal influenza vaccination
- Pneumococcal vaccination
- Avoided CHF-related hospital re-admissions
- Mortality/Survival

For further resources look on Signs of Heart Failure

## Life-Style, Self-Management, and Behavior Change



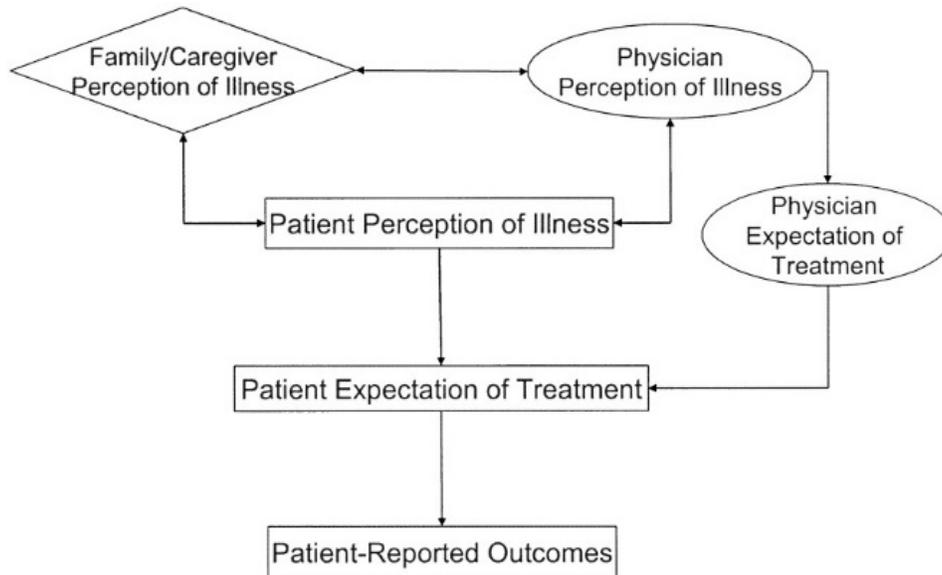
[Source: Wilson, A. R., Mulvahill, M. J., & Tiwari, T. (2017). The impact of maternal self-efficacy and oral health beliefs on early childhood caries in Latino children. *Frontiers in Public Health*, (5), 228.

### **Demonstrated increase in patient effort or regular routines related to... (measure before and after care coordination)**

- Exercise
- Breast self-exam
- Testicular self-exam
- Healthy eating
- Alcohol moderation
- Smoking cessation

For particulars look on the [Readiness Ruler](#), [Self-Management Ability Assessment](#), [Transtheoretical/Stages of Change Model](#)

## Patient Perception



[Source: Marschall-Kehrel, D., Roberts, R. G., & Brubaker, L. (2006). Patient-reported outcomes in overactive bladder: The influence of perception of condition and expectation for treatment benefit. *Urology*, 68(2), 29-37.]

### Percentage of clinic patients who increase scores for...

- Perceived health
- Health related quality of care
- Satisfaction with care
- Confidence with self-care management

For particulars look on the [Patient Satisfaction Tool](#), [Health Related Quality of Life Assessment](#), [Self-Efficacy Scale](#), and [SF-8 Health Survey](#)

# Program Information

## About Us

The Patient Navigator Training Collaborative (PNTC) is designed to help you prepare for the growing profession of patient navigation. The program offers a full curriculum with face-to-face courses, online courses, self-paced eLearning courses, and webinars. Our program team includes patient navigators and navigator supervisors, educators, medical experts, social workers, psychologists and evaluators. We work continuously to improve courses so they are of high quality and relevant to situations that navigators face every day.

Program partners include Denver Health and Hospital Authority; the Center for Public Health Practice and the Rocky Mountain Public Health Training Center; University of Colorado School of Public Health; the Denver Prevention Training Center, Trailhead Institute and Red Rocks Community College.

This curriculum was developed by Nora Flucke, PhD, RN, with contributions from Patricia Valverde, PhD, MPH, Beverly Wasserman, RN, and other curriculum development experts on the PNTC team.

## Program Funding

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## Contact Us

View upcoming courses, sign up for our listserv, and more at [patientnavigatortraining.org](http://patientnavigatortraining.org). Questions? Email [admin@patientnavigatortraining.org](mailto:admin@patientnavigatortraining.org).

## Use of Training Materials

The blend of our instructor experience and active learning approach is unique. We ask that you do not distribute or share these materials without our permission. Much of the learning takes place during the exercises led by instructors.

**Materials are not intended for use by those not participating in the course. In addition, you do not have permission to use these materials to train on the curriculum within this manual.**