



COMPASS
Partnering for Mind-Body Health

COMPASS Intervention Guide



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January 2015 – The COMPASS Consortium

This document provides the clinical workflow, supporting annotations and appendices for primary care systems implementing COMPASS (Care of Mental, Physical and Substance Use Syndromes). It includes both evidence and best practices, and links to recommended tools. Based on local health care environments, care systems will need to identify necessary adaptations that still support the core model and overall goals.

Table of Contents

Section 1 – COMPASS Core Principles	2-3
Section 2 – COMPASS Workflow	4
Section 3 – Key Component Summary	5-8
Section 4 – Supporting Annotations	9-25
Annotation 1: Eligibility Determination, Patient Identification and Enrollment	9-11
Annotation 2: Registry Documentation	12-13
Annotation 3: Primary Care Team	13-15
Annotation 4: Systematic Case Review	15-18
Annotation 5: Personalized Treatment Plan	19-22
Annotation 6: Patient at Goal?	22
Annotation 7: Treatment Plan Adjustment	22-23
Annotation 8: Maintenance Planning and Relapse Planning	24-25
Section 5 – References	26-28
Appendix A – Overview of the COMPASS Consortium	29-30
Appendix B – Aims and Measures	31

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Section 1: COMPASS Core Principles

Population Health Focus

Population health has been defined as “the health outcomes of a group of individuals, including the distribution of such outcomes within the group” (*Kindig, 2003*). Medical care is only one of many factors that affect those outcomes; behavioral health and social determinants of health also bear a significant impact. Population health management is the key to health-care reform, requiring medical teams to be held accountable for all patients on their panel, not just those who access care. COMPASS ensures two population health functions: first, that all patients who need care for these comorbid conditions receive it, not only those who routinely visit a clinic; and second, that the population is regularly monitored for improvement and engaged in treatment intensification as needed to achieve goals.

Team-Based Care with Systematic Case Review

COMPASS is not the usual primary care-consultant relationship. A new team is convened, consisting of a care manager, a consulting psychiatrist, and a consulting medical physician, to support the work the primary care team is doing for these more medically complex patients. This team meets regularly to conduct **Systematic Case Review (SCR)** serving the following core functions:

- 1) Ensure individual patient treatment intensification takes place until goals for targeted conditions are met and sustained
- 2) Review the caseload to ensure all patients are engaged in COMPASS care and prioritized for interventions
- 3) Improve team functioning around the care of the patient, including the patient, SCR team members, and the patient’s regular physician/primary care team.

COMPASS requires that both the primary care team and the SCR team establish clear roles and treatment protocols. In addition, these teams must seek to partner in a truly respectful and trusting collaboration with the patient. A new sense of accountability and ownership for improved outcomes should be shared equally by all team members and the patient.

It is very important that the SCR team has regular, weekly meetings and focuses its time and attention on patients who have not yet achieved **Treat-to-Target** goals. Patients who are high-utilizers, have recent or frequent hospitalization or emergency department (ED) use, or are out of range on disease indicators should receive high priority review by these teams.

These teams consistently use data from the patient registry and quality improvement feedback from reports to impact and improve the care of both the individual patients and the population at large. These activities require routine and effective interactions between the patient’s primary care team and the consultant physicians who serve on the SCR team.

Care Management/Care Coordination

The care manager is a crucial link between these teams. He/she is part of both teams and responsible for assuring that a personalized treatment plan is developed for each patient in the program. Care managers work to assure that there is a good working relationship and communication between these teams. They also help the patient implement the plan and achieve his/her goals by having frequent contacts. Depending on local organizational context, state licensing, and patient population, this role varies. Different job titles may include care manager, care coordinator, and health coach; for purposes of this guide the term “care manager” and “care management” are chosen. Care managers may also have different credentials and therefore some differences in duties. These include registered nurses, social workers (BSW, MSW, LCSW), medical assistants, and physician assistants or nurse practitioners.

[Return to Table of Contents](#)

Treatment Intensification

COMPASS care uses treat-to-target action steps with proactive follow-up care, which require consistent and persistent treatment adjustment until individualized care goals are reached. The key output of this work is a treatment plan that includes personalized goals for PHQ-9, laboratory parameters, behavior changes and medication regimes (appropriate to diagnoses), and avoidance of unneeded hospital stays or ED visits. Documentation of this plan and all contacts in the tracking system is essential for both patient and panel management. While COMPASS has originally focused on depression, diabetes and heart disease, the treatment plan does not need to be limited to these chronic conditions.

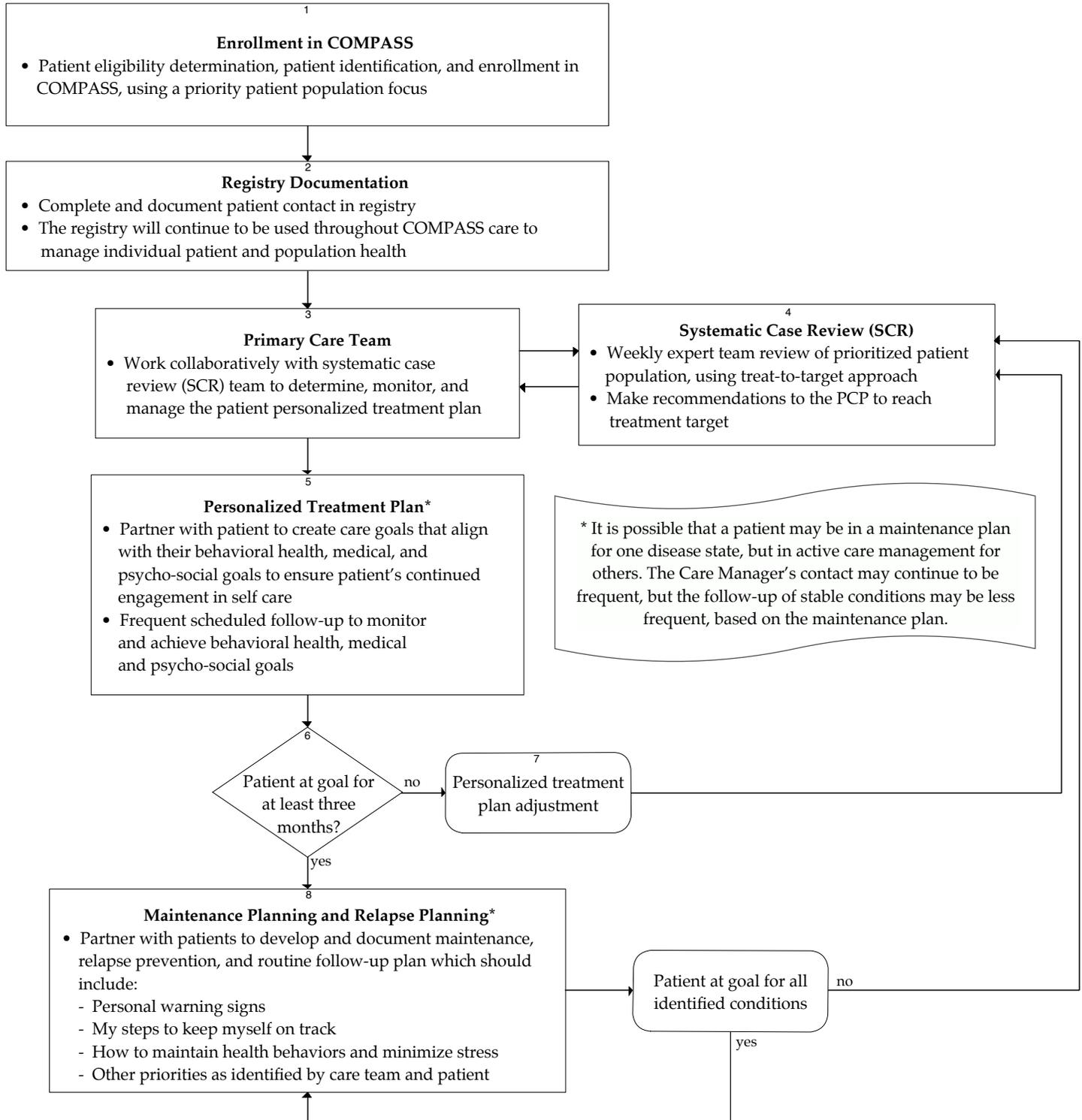
Patient Engagement in Care

A key finding in COMPASS is that complex patients with these co-morbid conditions need extra effort by the care team to meaningfully engage the patient in their own care. It is worthwhile to note that this target population has not achieved optimal outcomes through the usual care processes for managing their chronic conditions. There are many possible reasons this might occur: time pressures in primary care, clinical inertia, and social as well as medical complexity. Further, during implementation many care managers reported that they found patients to not only be disengaged in health care, but mistrustful of the health care system. The presence of depression can also affect an individual's ability to be hopeful of improvement. Therefore, developing skills and methods to meaningfully engage patients in their own care is critically important.

Upon first contact with the patient, the care team begins to establish a therapeutic partnership with the patient. By eliciting a patient's own expertise about themselves while sharing its medical expertise, the care team works to move the patient down a path to greater self-management.

[Return to Table of Contents](#)

Section 2: COMPASS Workflow



Section 3: Key Component Summary

The following are the required key components of the COMPASS intervention model.

1. Enrollment in COMPASS (See Annotations 1, 2)

Eligibility Criteria for COMPASS Care:

- Adult patients
- AND sub-optimally managed depression (PHQ-9 > 9)*
- AND treatable, sub-optimally managed diabetes or cardiovascular disease

*At physicians' discretion, based on patient underreporting and the patient population, those with PHQ-9 < 10 may be enrolled. It is recognized that the PHQ-9 is a screening tool and therefore has limitations. Further assessment is recommended.

Optional: Criteria above AND substance misuse based on AUDIT ≥ 7 for females or ≥ 8 for males and/or DAST-10 ≥ 2 (If this focus has been chosen by the practice)

Priority Populations

The following are recommended as **priority populations**:

- Adult patients with Medicare or Medicaid insurance
- A diagnosis of diabetes with one of the following: HgbA1c $\geq 8.0\%$ **OR** SBP ≥ 145 mmHg **OR** LDL ≥ 100 mg/dL
- Existing cardiovascular disease (e.g., history of ischemic heart disease diagnosis, coronary procedure, CHF or stroke) with one of the following: SBP ≥ 145 **OR** LDL ≥ 100 mg/dL (patients with essential hypertension or hyperlipidemia without end organ damage are not included in this definition)
- Patients 65 years and older with uncontrolled hypertension (SBP > 160)
- Recent hospitalization or ED visit related to diabetes or cardiovascular disease

Optional: Individual care systems may decide to define their priority population differently.

Identification of Potentially Eligible Patients

- Establish connections with area EDs and hospitals to find opportunities to enroll and link patients.
- Establish processes to identify patients with upcoming encounters, who might be eligible.
- Establish processes to proactively identify patients from claims data, the medical record, or other registries for outreach, who might be eligible.
- Establish process to confirm with primary care team that identified patients are appropriate to be contacted about enrollment.

[Return to Table of Contents](#)

Enrollment and Intake

- Establish a process for “warm hand-offs” in the clinic between the primary care team and the care manager.
- Establish processes to reach out to patients to invite them to enroll, following PCP visit, or outreach call.
- Establish a process for the care manager to complete the intake visit.

2. Treatment Plan Development/Population Management (See Annotations 3, 4, 5)

The following teams and individuals need to be identified for each enrolled patient:

- Primary care team (treating primary physician and others based on patient care needs, for example: nurse, medical assistant, etc.)
- Care manager
- Consulting psychiatrist
- Consulting medical physician
- Other providers and caregivers as identified by the practice (e.g., CDE, pharmacists)

Robust, interactive, communication channels between the primary care (PC) team and the SCR team must be determined. This can be achieved by ensuring the following:

- The SCR is a weekly meeting between the care manager, consulting psychiatrist and consulting medical physician to review the patient caseload. New patients and those patients not progressing to meet treatment goals are reviewed and recommendations about treatment intensification are made for the PC team.
- The SCR team’s recommendations will be reviewed by the PC team, and orders placed, as needed.
- If the PC team disagrees with the SCR team’s recommendations, a process is needed to record this and communicate to the SCR team.
- The care manager is key, but should not be the only link between the PC team and the SCR team.
- Primary care teams must have a process to decide upon individual patient goals for PHQ-9, HgbA1c, LDL, and blood pressure.
- Treatment intensification protocols* need to be agreed upon by the practice.
- Identification of hospital and ED use in the past and prospectively in a timely way requires systematic attention and support by the care manager, including identifying those patients requiring special attention and/or action to reduce unneeded use.
- The care manager is responsible for needed information being available in the registry.
- Ensure that all who provide care to the patient are updated on treatment plan and changes.

* Lipid management guidelines significantly changed during the implementation of the COMPASS model (*Stone, 2014*).

[Return to Table of Contents](#)

3. Outcome-Oriented Care Management (See Annotations 6, 7)

Care Manager Role Includes:

- Identifying and engaging patients in COMPASS
- Active follow-up of patients not at treatment goals and to partnering with the patient to set and achieve goals
- Monitoring and reducing unneeded hospital and ED use is essential
- Activating patients and building patients' self efficacy skills by using motivational interviewing, behavioral activation, problem solving, and other techniques
- Completing needed registry information for ongoing patient care for each active problem, as well as for quality improvement data and study completion
- Ensuring the patient has information needed to contact their care manager with questions, concerns or other needs (such as hospital or ED use)
- Actively coordinating/engaging with other professionals, consultants, agencies, and clinics that are part of the patient's care team or community
- Developing a process to reach out to patients who have not returned for care as expected
- Prioritizing which patients are discussed at the SCR and presenting the pertinent facts to the SCR team

Consulting Physician Roles Include:

- Attending weekly SCR team meetings
- Making treatment intensification recommendations based on evidence-based guidelines as agreed upon by the practice and/or organization
- Making recommendations to the PCP team to reach treatment targets

SCR Team Roles Include:

- Participating in regular, weekly meetings (preferably in person, but can be done virtually)
- Reviewing population caseload via the organization's population management tool
- Reviewing prioritized patients' data via electronic health record and/or registry
- Intensifying treatment to goals
- Assessing risk of ED/hospital use
- Frequently communicating with primary care providers on the patient's treatment plan and the SCR recommendations
- Documenting SCR consultation per patient
- Utilizing outcome data and quality improvement reports to improve the care of both the individual patients and the total population

Primary Care Team Role Includes:

- Coordinating and communicating with the SCR Team regarding SCR recommendations
- Communicating with the care manager to act on urgent patient concerns (suicide risk, dangerous SBP measurement, other medical emergencies)

- Arranging with commonly used hospitals to notify the practice and care manager when they admit and discharge the patient
- Possible ad hoc consulting with the SCR team
- Creating a process to ensure regular review of all COMPASS patients for delivery of optimal care
- Creating a back-up plan for when the care manager is not available

4. Maintenance Planning and Relapse Planning

A maintenance plan helps support patients in their effort to maintain healthy behaviors, identify early signs associated with poor disease control, and prevent relapse. Teams will want to ensure the following:

- A detailed and condition-specific plan for ongoing maintenance and monitoring devised with each patient as treatment targets are met for at least three months, including warning signs that may indicate need for prompt interventions to prevent unneeded hospital or ED use
- A process for regular contact for 6-12 months after all treatment goals are met
- Practices to determine criteria for transitioning a patient from the case manager caseload back to the primary care team

[Return to Table of Contents](#)

Section 4: Supporting Annotations

Annotation 1:

Eligibility Determination, Patient Identification, and Enrollment in COMPASS

Eligibility Criteria:

- Adult patients
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(Patients with essential hypertension or hyperlipidemia without end organ damage are not included in this definition.)

- Patients 65 years and older with uncontrolled hypertension (SBP > 160)
- Recent hospitalization or ED visit related to diabetes or cardiovascular disease

Optional: Individual care systems may decide to define their priority population differently.

Ineligibility Criteria

Patients are ineligible for COMPASS if they have a life-limiting illness or are under the age of 18.

Although it is not required, local care systems may determine other ineligibilities based on local needs, for example: excluding patients with bipolar disease, schizophrenia, and language barriers. If a care system decides to include patients with severe psychiatric illness, ensure there is appropriate psychiatric backup and support.

Patient Identification and Engagement

Proactive patient identification and rapid enrollment is critical for the success of COMPASS.

Patients who meet COMPASS criteria are, by definition, typically less engaged with primary care. Therefore, organizations will likely need to put considerable effort into determining how best to identify and engage potential patients.

[Return to Table of Contents](#)

Patient Identification Strategies

- Administer a PHQ-9 at all office visits for diabetes and CHD, because depression is often under diagnosed in patients with diabetes and CHD.
- Review clinic/practice appointment schedules on an ongoing basis to identify patients who may be eligible.
- Consider cultural sensitivities regarding mental health and other chronic illnesses.
- Remind the primary care teams to solicit referrals.
- Review other local clinician's appointment schedules that may serve eligible patients (pharmacy medication management, nutritionist, social worker, etc.).
- Review hospital admission and discharge reports. Work with primary care team to identify priority patients to call and schedule hospital follow-up appointments. (Many hospitals are engaged in projects to decrease avoidable readmissions. Link to these efforts locally.)
- Review ED discharge records to identify priority patients to call and schedule for follow-up appointments.
- Review any existing care management lists/registries.
- Gather patient lists from existing disease management programs run by insurers (Medicare Advantage programs, etc).
- Do a claims review for all patients on antidepressant medications, statins, etc.
- Review hospitalization reports for the last 18 months, with the targeted conditions as discharge diagnoses.
- Use laboratory databases to seek patients with out of range tests.
- Ask primary care teams and other office staff about high-needs patients.

Patient Engagement Strategies in Enrollment

Patients who are identified as eligible for COMPASS should be provided information about the program, emphasizing that this is the standard way of providing care at the practice. A warm hand off from the primary care team to the care manager is a highly effective trigger to start COMPASS care. The care manager then introduces the program, initiates patient engagement and discusses participation in team-based care. The care manager completes the initial contact form, reviews the PCP's current care plan and determines next steps with the patient. If the care manager is not available, information about COMPASS should be given by a care team member (or other proxy) with written material to take home. Specific follow-up steps should be determined before leaving the clinic (phone call, e-visit, etc).

Identified patients who have not been recently seen by their primary care team may need an initial evaluation/re-evaluation by the PCP, including screening for relevant comorbidities. COMPASS patients may need to be briefly reviewed by the primary care team prior to contacting them to capture relevant information that the team may have that would impact the likelihood of engaging the patient at this time. This is a prioritization step, not primarily an eligibility step, though ineligibility criteria should be reviewed. (For example, the patient may have been diagnosed with a life-limiting illness by another caregiver, a patient's spouse may have very recently died, or a patient may be spending winter in another state.)

Patients may be prioritized for initial engagement based on local assessment. This may include such factors as recent or frequent hospitalization, frequent ED visits, frequent clinic visits with little progress toward goals, frequently missed appointments or other adherence concerns, patient's motivation to change, or PCP's concern about immediate health risk.

[Return to Table of Contents](#)

Other engagement strategies include:

- Enlisting members of the primary care team to call patients, inviting them to a visit with care manager.
- Sending a letter from the primary care team explaining COMPASS and introducing the care manager as a member of the team. The care manager could then complete a follow-up phone call within a week.
- Calling patients who have evidence of at least one of the three parameters of poor medical control and evidence of depression to explain the COMPASS program and schedule an appointment for the patient.

Supporting Documents

- *Team Role Descriptions*
- *List of Usual Codes for Relevant Conditions*
- *Patient Brochure*
- *Sample Recruitment Letter*
- *Patient Outreach Flyer*
- *Patient Engagement Letter*
- *Initial Intake Form*
- *Care Manager Talking Points to Engage Primary Care Teams and PCP's*
- *Talking Points: Physician Buy-In*
- *Office Workflow Examples*
- *PIC Comorbidity Brief Assessment Tool*
- *Patient Encouragement Letter (30-Days)*
- *2013 ACC/AHA Guideline on the Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adults*
- *ICSI Adult Depression in Primary Care guideline*
- *ICSI Hypertension Diagnosis and Treatment guideline endorsement*
- *Patient Health Questionnaire (PHQ-9)*
- *Implementation Strategies*

[Return to Table of Contents](#)

Annotation 2: Registry Documentation

To manage the patient population, a registry tool is required. There are many examples of registries and decision support tools that will help the care team meet the health needs of patients. It is very helpful to have an electronic health information tracking system modified to use specific data fields to proactively track populations.

A registry is intended to facilitate the following:

1. Direct care of patients on an individual basis
2. Population management of patient panels by care managers and other site clinicians and leaders
3. Provide outcomes data at the level of partners, medical groups, clinics, clinicians, and care managers
4. Provide quality improvement data that assess implementation and fidelity to the model
5. Evaluation of care in meeting outcomes

Once a patient has been identified and engaged in COMPASS, care managers must note their enrollment in a registry (or electronic health record). A computerized registry of care-monitoring information including dates of visits and initial and most recent PHQ-9, HbA1c, SBP, and LDL values is used to closely track and monitor processes, severity, follow-up needs and care plan adjustments. The care manager will document patient progress and use this tracking system throughout the course of COMPASS care. Registries should include alerts to care managers regarding patients who have not been contacted in a reasonable time period as well as patients who have not reached control of disease parameters.

As an example, the Care Management Tracking System (CMTS) is a sophisticated disease management registry developed by the AIMS Center. The CMTS facilitates collaborative care by tracking a population of patients and facilitating their care. It does this by alerting clinicians when a patient hasn't been seen for a long time or when the patient hasn't adequately improved. The CMTS also facilitates measurement-based treatment-to-target (treatments are actively changed until the clinical goals are achieved) and accountable care (providers are accountable and reimbursed for quality of care and clinical outcomes, not just the volume of care provided) (*Aims Center, 2014*).

To assess COMPASS implementation and fidelity to the model, data from the registry should be pulled regularly and processed using the Aims and Measures listed in Appendix B. The feedback from these reports should be used to improve both the care of individual patients and also the health of the population.

Supporting Documents

- [*AIMS Care Management Tracking System \(Registry\)*](#)
- [*Registry: What's My Role?*](#)
- [*COMPASS Registry Technical Specifications*](#)
- [*COMPASS Registry Requirements*](#)
- [*COMPASS Registry Tools and Templates for Care Management*](#)
- [*COMPASS CMTS Screenshots*](#)

[*Return to Table of Contents*](#)

Annotation 3: Primary Care Team

The primary care team has overall responsibility for COMPASS patients' care. This team has in-depth knowledge of not only the medical history of the patient, but knows the patients personal circumstances, their values and beliefs, and other information important for directing their overall care. The primary care team is centered on the patient's primary physician, nurse practitioner, or other clinician. The remainder of the team composition is based on the local practice, and availability of specialized resources. Primary care team members may include but are not limited to: primary care provider (PCP), team nurse, specialty care provider, chronic care coordinator, diabetes care manager, cardiac care manager and others.

While team composition may vary by practice and by patient, it is important that the team be specifically defined for each patient, such that the care manager is able to coordinate efforts to avoid duplication and assure the patient that all caregivers are working together, effectively.

Individualized Patient Treatment Goal Setting

Overall goals for COMPASS include:

- Achieve depression improvement measured by a decrease in PHQ-9 by 5 points or PHQ-9 of less than 10
- Improve diabetes and hypertension control rates:
 - HgbA1c \geq 8%
 - SBP \geq 145 mmHg
 - LDL \geq 100 mg/dL
- Decrease unneeded hospitalization and ED visits

* These goals should be consistent with overall COMPASS targets as well as patient specific goals.

The disease-specific treatment goals for patients are based on substantial medical evidence, and require some customization based on overall health. For example, the recommended target for HbA1c may be seven for many patients with diabetes but a level of eight may be more appropriate in the frail elderly. When beginning treatment, care managers should set goals based on current status, but maintenance and relapse prevention should be considered early on as well. Patients should be encouraged to recognize triggers and self-manage their diseases.

The primary care team is responsible for determining the individualized patient's goals. These goals form the basis for the patient's treatment plan. This can be accomplished in a number of settings, and access to the patient's full medical record is of key importance. This may require gathering information from sources outside of the primary care clinic. Other information may be useful, including recommendations from the SCR team and information from the case manager's first discussion with the patient. Minimally, the PCP and care manager should work together to set the disease-specific target goals and ensure the SCR team is aware of and agrees with the treatment goals. Optimally, this activity should be scheduled soon after the patient is enrolled in COMPASS.

The treatment goals will be entered into the registry by the care manager and used for the ongoing work with the patient by all who provide care to the patient and are part of his/her designated care team. Local systems will determine effective ways for this information to be communicated.

[*Return to Table of Contents*](#)

Implementing Recommendations from the SCR Team

Most often, it is the responsibility of the care manager to communicate the recommendations of the SCR team to the primary care team. However, specific cases or teams may require physician-to-physician communication.

The PCP should review all recommendations prior to implementation. While the SCR team has considerable expertise in managing the target diseases, the PCP needs to consider the recommendations in the entire context of each patient's individual situation and needs. If the PCP chooses not to endorse and implement the SCR team's recommendations, the reason should be noted in the registry. The PCP should also communicate with the SCR team via the care manager as to the prudent course of treatment. Direct communication between the PCP and SRC Team should always be encouraged to ensure that all are providing the best care recommendations.

Local practices that use standing orders and other protocols that allow nurses to make medication and other treatment changes, without consulting the PCP, should be considered in developing the specifics of this process. The goal is to increase effective time use by all members of the teams.

Supporting Documents

- *Care Management Phases and Follow-Up Guide*
- *Admissions, Readmissions and Transitions*
- *Preventing a Relapse of Depression*
- *Team Roles and Operations Worksheet*
- *Physician Champion Summary*

[Return to Table of Contents](#)

Annotation 4: Systematic Case Review

Systematic Case Review (SCR) is the weekly evaluation of all new patients and patients who have not reached their goals. The SCR team is made up of a consulting medical physician, consulting psychiatrist, care manager and other ancillary medical staff as appropriate. The weekly SCR team meetings are organized around these core functions:

- 1) Ensuring individual patient treatment intensification takes place until goals for targeted conditions are met and sustained
- 2) Reviewing the caseload to ensure all patient are engaged in COMPASS care and prioritized for interventions
- 3) Improving team functioning around the care of the patient, including the patient, SCR team members, and the patient's regular physician/primary care team.

The meetings offer a time to review aspects of behavioral intervention, management of depression, diabetes or coronary heart disease, relationship strategies and avoidance of hospital and ED use. The SCR team works collaboratively with the primary care team to determine, monitor and manage individualized patient treatment goals.

Do not underestimate the challenge of "role and cultural changes" facing each member of the team. For example, primary care physicians may not be used to receiving recommendations from a colleague regarding medical management of one of their patients, when delivered by a care manager. Allowing each care manager the opportunity to "role play" this scenario and receive coaching feedback regarding how to effectively partner with a busy clinician may be beneficial. Partnering effectively includes identifying the PCP's preference for the most effective and efficient way to communicate with him/her regarding the patient (e.g., voicemail, email, EMR notes, in person).

[Return to Table of Contents](#)

Tracking of Patient Outcomes

The following patient outcomes should be actively tracked as a standard part of systematic case reviews:

- PHQ-9 score
- Hospitalizations/ED encounters
- Clinic-derived blood pressure, and home blood pressure
- HgbA1c and date when last test was done
- Statin adherence monitoring
- Patient's stated goals and level of activation
- Patient's adherence with prescribed medications, diet, exercise and self-monitoring regimens

Lipid management guidelines significantly changed during the implementation of the COMPASS model. The field is in transition on the effective use of statins. LDL is an eligibility criteria; however, monitoring of laboratory values is no longer relevant. The focus is now on medication adherence.

SCR Team Functions: Care Manager and Physician Consultants

The weekly SCR team meetings with the consulting psychiatric and medical physicians are a substantial change from usual practices. It is expected that the care manager and the physician consultants have open discussions about the process of the SCR sessions, particularly to agree about expectations about all party's roles during the sessions.

Care Manager Preparation for SCR Team Meetings

The care manager is responsible for prioritizing which patients are discussed at in the SCR and presenting the pertinent information to the SCR team. Many teams are using Situation Background Assessment Recommendations (SBAR) as a format for this.

Prior to the weekly SCR team meeting, it is essential that care managers review the previous SCR recommendations in order to assess implementation of the recommendations, including patient progress. The care manager should also update the registry and/or EHR for key disease control measures, medication doses (optional), and hospitalization and/or ED use in order to make these sessions as productive as possible. The care manager needs to be able to articulate patient progress or lack thereof in each of the diabetes, depression, and CVD outcomes.

Consulting Physician Responsibilities for SCR Team Meetings

The consulting physicians are responsible for attending weekly SCR team meetings. They focus their treatment intensification recommendations based on their specialized body of knowledge (i.e., medical or psychiatric).

The care managers present patient cases to the consultants at the SCR team meeting. The consultants then probe to learn what the individual patient's situation is prior to making customized recommendations based on evidence-based guidelines as agreed upon by the practice and/or organization.

Consulting physicians make recommendations to the PCP team to reach treatment targets via the care manager, and may communicate directly with other physicians as needed. The PCPs do all the actual prescribing.

[*Return to Table of Contents*](#)

SCR Team Meeting Priorities

The priorities for SCR team meetings should be on:

1. Newly enrolled patients.
2. Patients who are not reaching goal and may require intensification or change of treatment
3. Patients with recent hospitalization/ED visit
4. Patients who have not or are not engaged in their care
5. Patients whose primary care teams are not responding to the SCR team's recommendations (this may require physician-to-physician communication to resolve)
6. Reviewing the full patient panel, as well as quality improvement reports and create action plan to address

Best practices of the SCR team meeting could include:

- Initially meeting face-to-face so the teams can establish relationships and roles that build trust and communication channels. Subsequently, this can be done by telephone or via the web, however, there continue to be many advantages to meeting in-person.
- The care manager should have access by phone, e-mail or face-to-face with consultants and the primary care team.
- Access to other members of the behavioral health team, such as psychologists, social workers, depression care coordinators, etc. who may be able to provide suggestions on helping patients with non-adherence or other behavioral issues.
- Access to ancillary members of the medical team such as diabetes educators, nutritionists, pharmacists and others who may provide guidance for patients' medical care.
- A communication style that facilitates effective and efficient reviews that produce important and valued recommendations for the primary care team.
- If there are numerous SCR teams throughout the health system, care managers may benefit from hearing about each other's cases.
- Documentation of the recommended treatment/medication changes should be made in the registry during or after the SCR by the care manager.

Systematic Case Review Outline

Each SCR team will determine a structured outline for each patient discussed during the systematic case reviews that meets their preferences and local needs. The following questions are recommended:

- What are the current outcomes versus targets in the treatment plan?
 - PHQ-9
 - HgbA1c
 - SBP
 - LDL
 - Self-care

[Return to Table of Contents](#)

- Has the patient recently been hospitalized or visited the ED?
- Is the patient active in self-care?
 - Taking medicines (name, dose, frequency)
 - Medication adherence evaluation
 - ASA use (if not contraindicated)
 - Weight monitoring (heart failure)
 - Blood pressure monitoring
 - Glucose monitoring
 - Physical activity
 - Nutrition
 - Social and environmental factors
 - Pleasant activities, especially for depressed patients
- Have treat-to-target goals been reached?
 - If no, adjust or intensify treatment, referral to complement collaborative care management, medication changes, etc. See also SCR Overview.
 - If yes, treat-to-target goals have been reached and no adjustment is planned, document.

Treatment Plan, Next Steps

During weekly systematic case reviews, the physician consultants recommend initial choices or changes in medications and treatments tailored to patient history and clinical response. Following the meeting, these steps take place:

1. The care manager (or consulting physician) brings the SCR team's recommendations to the primary care team by whichever mechanism is identified within the system.
2. The primary care team acknowledges and accepts the recommendations, or provides rationale for refusal.
3. Appropriate follow-up appointments, which could include labs, eye exams, nutrition consults, etc., are scheduled.
4. Medication and treatment changes are documented in the registry.
5. The care manager contacts the patient with the treatment plan to help implement it.

In addition to the data tracking tools, a Systematic Review Action List can be used to ensure that all patients receive interventions discussed by the team and that plans discussed are easier for the care manager to remember.

The primary care team and the SCR team collaborate in caring for the patient. To support the patient's successful self-management, partnership amongst the health care teams is a necessity.

Supporting Documents

- [*Care Manager Role Description*](#)
- [*Consulting Psychiatrist Role Description*](#)
- [*Consulting Medical Physician Role Description*](#)

[*Return to Table of Contents*](#)

- *TEAMcare Clinical Checklist*
- *TEAMcare Action List*
- *Systematic Case Review Effectiveness Checklist*
- *Systematic Case Review Workflow Example*
- *Systematic Case Review Overview*
- *SBAR Examples*
- *Healthy Days Measure*
- *TEAMcare Treat-to-Target Guide*
- *Systematic Case Review Guide Example*

[Return to Table of Contents](#)

Annotation 5: Personalized Treatment Plan

Upon first contact with the patient, the care team begins to establish a relationship. The relationship is pivotal in planning and implementing the personalized treatment plan. Care managers will take a lead role in this.

Communication with Patient

Ongoing contacts between the patient and care manager should always include:

- Partnership in reviewing the treatment plan to ensure patient’s continued engagement in self-care
- Review of clinical targets through re-administration of the PHQ-9 and review of current lab readings (HgbA1c, SBP, LDL)
- Review of hospitalization or ED use
- Motivational interviewing and behavioral activation to facilitate patient goal setting
- Education and support for treatment adherence and review and discussion of medication (side effects, adherence, etc.)

As treatment progresses, different strategies can be employed. Here is an example of post enrollment tactics.

Engagement and Patient Partnering

Validated and reliable tools can help care managers identify and systematically assess patient’s motivation and knowledge. Based on a patient’s readiness/motivation, the care team can more readily identify the response that will stimulate patient engagement for a more positive course of action.

Motivational Interviewing

By using the “spirit” of motivational interviewing, the care team will use open-ended inquiry and reflective listening to elicit patient’s reasons for change (*Miller and Rollnick, 2012*). Behavioral change is rarely a discreet, single event – rather it’s a process with identifiable stages. The care team should assess the patient’s knowledge and health literacy to determine appropriate self-management tools and style.

[Return to Table of Contents](#)

Behavioral Activation and Goal Setting

Behavioral activation is a brief, structured intervention that aims to activate patients in specific ways that will increase rewarding experiences in their lives (Martell, 2010). “Activity scheduling” is a straightforward behavioral intervention in which patients are taught to increase their daily involvement in pleasant activities and to increase their positive interactions with the environment (Lewinsohn, 1973). This is an attractive intervention because it is simple in concept, easily taught, efficient and does not require complex skills on the part of either patient, clinician, or care manager.

The relative simplicity of encouraging patients to increase their daily participation in pleasant activities makes activity scheduling an attractive treatment approach for otherwise difficult to treat populations such as depressed dementia patients. As an example, regular outings and get-togethers, participation in a senior day care program, or participation in available nursing home activities, are all likely to reduce depression in the elderly (Cuijpers, 2007). Moreover, follow-up assessments reflected that the improvements in depression persisted after the active treatment had been discontinued (Mazzucchelli, 2009; Cuijpers, 2007) (Excerpt taken from the ICSI Depression guideline, 2013).

Problem Solving Treatment in Primary Care

Problem Solving Treatment in Primary Care (PST-PC) is an effective, relevant treatment option for depression to help the patient understand the link between problems and symptoms, develop a systematic strategy for problem-solving, and engage in pleasant activities (Arean, 2008; Hegel, 2003; Haverkamp, 2004; Malouff, 2007).

The goal of PST-PC is to help the patient understand the link between problems and symptoms, develop a systematic strategy for problem-solving, and engage in pleasant activities. This brief form of psychotherapy is delivered over 4-8 sessions by clinicians who have received specialized training. The first session, which is typically 60 minutes, builds the rationale for PST-PC, and collects an initial problem list. Follow-up sessions are typically 30 minutes each. Each session works through at least one problem through the following seven stages, with action between sessions: 1) clarifying and defining the problem; 2) setting a realistic and achievable goal; 3) generating multiple solutions; 4) evaluating and comparing solutions; 5) selecting a feasible and preferred solution; 6) implementing the solution; and 7) evaluating the outcome. In the Improving Mood-Promoting Access to Collaborative Treatment (IMPACT) study (Unützer, 2002), roughly 30% of their patients received a full course of PST-PC sessions in primary care delivered by the care manager. Primary care offices that do not have care managers trained in PST-PC should cultivate relationships with a local therapist who can provide PST-PC or other evidence-based psychotherapies for patients who are not fully responding to antidepressant medications or who prefer psychotherapy to medications. If the psychotherapy is provided outside the practice, the care manager should closely coordinate with this provider to make sure treatment is effective and patients are improving as expected.

Brief Intervention for Patients who Misuse Alcohol or Other Substances

Brief Intervention for substance misuse involves offering feedback and recommendations and assessing readiness to change. All patients who screen positive on the AUDIT for alcohol misuse and/or DAST-10 for drug misuse should have a brief intervention by the care manager. Brief interventions help to raise the patient’s awareness of the risks and consequences with unhealthy substance use, help the patient set and assess specific substance use goals, and elicit the patient’s internal motivation toward behavioral change.

Education and Support for Treatment Adherence

Based on the patient’s health care literacy and knowledge, the primary care team and care manager will provide disease management education and support in a readiness-sensitive approach. Following evidence based guidelines and physician recommendations; the care team should identify the gaps in care with the patient. It should develop a plan of care to reduce these gaps in care and provide the patient with written information that indicates their current status as well as the goals they are trying to attain.

[Return to Table of Contents](#)

Coordinating Specialty Referrals and Community Resources

Collaborative care management can complement specialty care: it does not replace it. Though the SCR team makes treatment recommendations, the primary care team is still responsible for making and monitoring referrals for specialty care, such as mental health, substance abuse treatment services, and health system or community referrals for diabetes education, health education, or lifestyle classes.

The care manager will actively monitor these referrals for completion. Once a referral has been made, the care manager should routinely ask the patient if he/she has attended the appointments. The care manager will report pertinent findings to the SCR team.

The care manager will assist the patient in connecting with self-help or support groups and other community resources (such as exercise classes), as needed, for chronic medical diseases, substance use, and/or depression.

Steps to build your medical neighborhood:

- In the practice – identify roles and responsibilities for the planned visit, addressing gaps in care, and follow-up on tests/procedures/radiology.
- In the system – establish relationships/communication process/protocols for system services (notification of admissions and discharge, report from home care, communication with system specialist, diabetes and health education, etc.).
- In the community – identify community resources for financial, social and behavioral needs. Establish relationships with key services that are significant to the population served by the practice (see below).
- In the region – establish relationships/communication process/protocols with area home health care agencies not part of the system, skilled nursing facilities, rehab facilities, outpatient services, etc.
- In the state – establish communications/protocols for services/care provided at tertiary centers within the state and out of state.
- Nationally – identify resources for national patient supports such as the rare diseases.

Comprehensive coordination of care including hospital readmissions and transitions of care

- Establish processes for admission/discharge notification (automated or manual process exist), determine whom to call with significant discharge concerns, and for complex patients determine the ability to have care conferences with the treating team.
- Complete a follow-up call within 24-48 hours of discharge. Complete a telephonic risk and safety assessment as well as complete the six-item cognitive screen. If the patient has an abnormal screen check on social support to help with taking medication and transportation to the clinic, conduct medication reconciliation, identify barriers/risk and coordinate as need is identified.

Consider establishing referral assistance for community care services and centers with a focus on the following processes

- Does the practice have a process of informing patients they are available to assist them with financial and or social services?
- Does the practice assist the patient in arranging referrals to community resources?
- Once a referral is provided, does the practice have a tracking system in place (for high risk services) to ensure the patient followed through on the referral, and the referral was able to meet their needs?

[*Return to Table of Contents*](#)

- Does the practice track and follow-up with ongoing recommendations for the community service provider?
(Excerpt taken from *BlueCross BlueShield of Michigan PGIP PCMH 2012 Interpretive Guidelines*)

Supporting Documents

- *SBIRT for Risky Substance Use*
- *ICSI's Adult Depression in Primary Care guideline*
- *ICSI's Diagnosis and Treatment of Hypertension guideline*
- *2013 ACC/AHA Guideline on the Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adults*
- *ICSI's Preventive Services for Adults guideline*
- *BCBS PGIP PCMH 2012 Interpretive Guidelines*
- *Resources for Collaborative Depression Care Management (PIC)*
- *American College of Sports Medicines' "My Exercise Plan"*
- *Six Item Cognitive Impairment Test (6CIT)*
- *Post-Enrollment Phases of COMPASS Care Management*

[Return to Table of Contents](#)

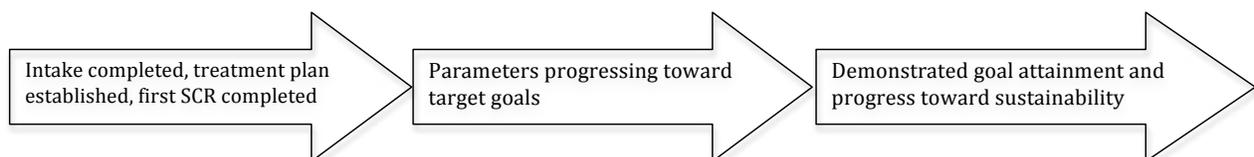
Annotation 6: Patient at Goal?

When the targeted conditions are at the patient’s personalized goals, re-evaluate at three months (a shorter time may also be appropriate, except for HgbA1c testing). If the patient continues to be stable at three months post-target, work with the patient to create a maintenance plan and a relapse prevention plan. It is possible that a patient may be in a maintenance plan for one disease state, but in active care management for others. The care manager’s contact frequency may continue to be monthly, but the follow-up of stable conditions may be less frequent, based on the maintenance plan. As patients will each respond differently to treatment, please refer to the referenced guidelines and/or your organizations guidelines for treatment duration and expected response timelines.

Care Management Phases and Follow-Up Guide

This tool provides guidance for the COMPASS team assisting a patient through the phases of care. Each system has to determine the tailoring needed within their own processes to operationalize this guide to its fullest. Above all, remember the patient is fluid and not a referral to be “handed off” to any one team member and then “given back.” Communication leading up to and following each transition is critical to ensure all members of the team including the patient, are aligned with the same goals. The patient’s readiness for change is a parallel aspect of this flow, and must be considered.

Active Engagement Phase <i>1st and 2nd contacts</i>	Active Management Phase <i>Weekly contacts in the first month Every other week during active management phase</i>	Active Transition Phase <i>Frequency gradually extended Average duration 5-18 weeks</i>	Maintenance Phase <i>Monthly to every 3 months Average duration 6-12 months</i>
<ul style="list-style-type: none"> • Determine eligibility and appropriateness • Introduce COMPASS and set the roadmap for care • Start building relationship with patient to identify preferences, strengths and challenges • Establish primary care team communication strategy, engagement plans, caseload impact and understanding of patient care needs 	<ul style="list-style-type: none"> • Clinical prioritization, assessment of red flag risks and identify patient preferences • Establish treatment plan including both short and long term goals for optimal improvement • Purposeful care management using Motivational Interviewing, Behavioral Activation and goal setting that links treat-to-target clinical plan including med intensification with personal health goals by developing strategies for self-monitoring, treatment (including medications) adherence and problem solving skills • Shared understanding of working toward optimal maintenance of the chronic conditions and the organic but intentional process of outcome oriented care management 	<ul style="list-style-type: none"> • Based on pt’s progress with clinical and personal goals and agreement that significant improvement has been made • Less frequent contacts as an opportunity for pt to practice identifying triggers, problem solve and self-monitor • Duration may need to be variable based on patient readiness, unanticipated pitfalls and ongoing coaching needs but overall becomes longer periods of self-management success • Starting to build maintenance plan using patients own words for what has contributed to improvement and problem solve obstacles 	<ul style="list-style-type: none"> • Patient has been practicing and more consistently demonstrating self-management including ability to identify triggers, setbacks and opportunities • Maintenance Plan has been developing along the way and patient can now articulate and complete own written plan for sustainment (example: own personal “yellow zone” and when to contact clinic when things come up and assistance is needed) • Schedule established for PCP follow-up and lab/clinical monitoring intervals • Primary care team understanding of maintenance plan including support role and routine follow-up expectations



[Return to Table of Contents](#)

Annotation 7: Treatment Plan Adjustment

If the patient is not improving or meeting agreed upon goals, the care manager and the SCR team need to consider whether the overall plan of care needs to be re-adjusted or whether the specific interventions being used are ineffective. Patient complexity factors and severity of illness may also need to be assessed (*Shippee, 2012*).

Considerations

- Is/are the diagnosis correct?
- Does the patient agree with the goals of care?
- Is the patient able to carry out the treatment plan?
- Is there another problem that needs to be addressed first? (Depression, pain, financial, etc.)
- Are there treatment adherence barriers?
- Is the dose insufficient or duration of treatment not long enough?
- Is this treatment modality ineffective?
- Are side effects limiting medication usage?
- Are there other resources needed? (Pharmacist medication management, diabetic educator, community agencies, etc.)
- Is there an undiagnosed problem? (Substance misuse)
- Other complicating factors (psychological barriers, social barriers, family support missing, etc.)

After consulting with the SCR team, the care manager should either continue with the treatment plan, use alternative strategies, and/or consult further with the primary care team.

Supporting Documents

- *An Orientation to Complexity Assessment Tool*
- *Pain Scales*
- *GAD7*
- *SAMSHA Screening Tools*
- *CAGE*
- *AUDIT*
- *PTSD Screening*
- *Self-Care Activity Plan*
- *Scheduling Activities*
- *Teach Back*
- *Patient PASS: A Transitions Record*
- *Project Boost: Overview*
- *Patient Activation Assessment*
- *Patient Activation Assessment Instructions*
- *8 P's: Assessing Your Patient Risk for Adverse Events After Discharge*

[Return to Table of Contents](#)

Annotation 8: Maintenance Planning and Relapse Planning

It can be very discouraging to experience a setback or a recurrence of symptoms. However, relapse is common. Having the care manager develop a written maintenance plan with the patient is an important step in preventing this setback. A maintenance plan helps support patients in their effort to maintain healthy behaviors, identify early signs associated with poor disease control, and prevent relapse. The maintenance plan is designed to be printed out and given to the patient. It should be included in the EMR, with a note to the patient's PCP (*McGregor, 2011*). The local care system capabilities to manage chronic disease must also be taken into account when planning and creating the maintenance and follow-up plans.

Generally, a written maintenance plan contract between the care manager and patient includes the following steps: (1) review progress, (2) review risk factors, (3) review the rationale for continuing treatment and reinforce the patient's autonomy and motivations, (4) discuss early warning signs (such as insomnia as a prodromal symptom of depression), (5) make a maintenance plan, (6) remind the patient how the care manager and PCP can be reached, (7) reinforce messages about long-term treatment, and (8) discuss future follow-up contacts (*Unützer, 2004*).

Caregivers, family or friends may notice the warning signs before the patient does, so it can be helpful to involve them in the monitoring process. It is also important to remind the patient that a follow-up PHQ-9 and quantity and frequency questions for alcohol and drug use (if applicable) will still be conducted at 6 and 12 months post-enrollment as part of routine care, even if the patient is no longer active in the program.

Leading up to the maintenance plan, it is important to prepare the patient for the transition into the maintenance phase by emphasizing their healthy lifestyle changes (*McGregor, 2011*).

Complete a maintenance plan for each condition once the target for the condition has been achieved and maintained over three months. In other words, if one condition is at target and stable, but the other is not, then the care manager should complete the maintenance plan with the patient for the stable condition and continue to work with the patient for the condition that is not yet at target.

Depression

The ultimate goals of depression treatment are to achieve symptomatic remission (PHQ-9 < 5), reduce relapse and recurrence, and return to previous level of occupational and psychosocial function (*ICSI, 2013*). It is more challenging for aging patients to reach remission despite adequate treatment, but many will at least achieve a 50% or more decrease in depression symptoms and improved functioning. After the patient has been in remission (PHQ-9 < 5) or had a 50% or more reduction in depressive symptoms for three consecutive months, the care manager initiates the maintenance plan with the patient. The maintenance plan is a document that facilitates the development of the patient's plan to maintain symptomatic remission, minimize stress, and continue self-monitoring, pleasant activities, and a healthy lifestyle.

Monthly contacts for about 6-12 months are helpful to actively monitor the patient's treatment adherence, self-management skills, and relapse of symptoms (*Unützer, 2004*). Typically, these may occur via telephone calls, however, individual or maintenance groups may be considered. Routine follow-up is important, because relapse is common within the first six months (20-85% may relapse [*APA, 2010*]) and patients with recurrent depression may not seek help from their PCP as soon as symptoms reappear. Patients who show signs of relapse during this follow-up period should be discussed in the SCR team and with the primary care team to determine next steps for intervention as clinically indicated (e.g., a PHQ-9 ≥ 10) (*McGregor, 2011*).

[Return to Table of Contents](#)

When encouraging patients to stay on their treatment after their depression is in remission, the following guidelines may be considered to prevent reoccurrence of depression (*ICSI, 2012*):

- Patients with a single episode of major depression should continue treatment for four to nine months after they achieve remission.
- Patients with a second episode of major depression should stay on the treatment for three years after they achieve remission.
- Patients with persistent depressive disorder or three or more episodes of major depression with complicating factors (e.g., rapid recurrent of episodes, over 60 years of age at onset of major depression, severe episodes, or family history) should stay on the treatment indefinitely, if appropriate.

After these recommended treatment durations, for those taking antidepressants, they can be tapered off the medication over a period of several weeks to months, if clinically appropriate (*ICSI, 2012*). When considering these guidelines, it is helpful to keep in mind that 70% of patients with diabetes and depression have been depressed for two or more years (*Katon, 2004*).

Diabetes and Cardiovascular Disease

Once diabetes or cardiovascular disease (e.g., SBP, HgbA1c, LDL) is at target for three months, complete the maintenance plan with the patient for the relevant condition. The same relapse prevention process, as described for above for depression, can be used to create a continued care plan for diabetes or cardiovascular disease to maintain adherence to their continued care medication, glycemic and blood pressure home monitoring, and their healthy lifestyle behaviors (*McGregor, 2011*).

Transition is defined as the first three months after the patient's targets were met. During this phase, the contacts should be monthly. As a general guideline, the next follow-up contact could be scheduled two to three months after the maintenance plan visit and then every three to four months. Encourage the patient to monitor their blood work and complete tests to check on their diabetes control or heart disease risk about every three months (*McGregor, 2011*). Inform the patient to call their primary care provider before changing his/her medications.

Alcohol and Other Drug Misuse

After the patient has met his/her behavior change goals and has stated that he/she feels comfortable sustaining these changes independently, the care manager may suggest that the patient create a maintenance plan to increase the likelihood that the changes will be sustained over time. The plan should include the following: reasons the patient wants to sustain these changes, activities or environments that the patient would like to avoid, behaviors and people that support them in continuing their success, ways that the patient can identify if they are getting off track, and actions they will take if they feel they are getting off track.

Care Coordination and Transitions

As part of the routine follow-up process, the care manager should continue to assist in coordinating the patient's care, including tracking and responding to transitions between care settings, such as hospitals and nursing facilities. After receiving the admission and discharge notification, the care manager should complete a follow-up call within 24-48 hours of discharge and schedule a follow-up visit with the PCP within five to seven days. Assess your current system to understand its capabilities to accept patients to COMPASS, and to transition patients back to routine care.

Supporting Documents

- [Summary of Care Letter](#)
- [Relapse Prevention Plan Letter](#)
- [Strategies for Community Coordination of Care](#)
- [PIC Maintenance Plan Guide](#)
- [PIC Maintenance Plan Template](#)
- [Registry Maintenance Plan Example](#)
- [CM Follow-Up Contact Best Practices](#)
- [PRHI Follow-Up Contact QI Project](#)

[Return to Table of Contents](#)

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[Return to Table of Contents](#)

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[Return to Table of Contents](#)

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[Return to Table of Contents](#)

Appendix A: Overview of the COMPASS Consortium

Collaborative care management for patients with chronic medical and mental health conditions can greatly improve their quality of care, outcomes and satisfaction, as well as be cost-effective and even cost-saving in the long run. However, this care model has not been widely used, in part because it requires major changes from the traditional way of doing things and in part because existing payment designs do not compensate its costs.

Through a three-year cooperative agreement with the Centers for Medicare and Medicaid Services (CMS), a consortium of 10 organizations developed, implemented and evaluated the success and sustainability of a collaborative care management model (CCMM) to improve the care of patients with both mental and physical health problems.

The goal of COMPASS is to show effectiveness in treating adult Medicare and Medicaid patients in the primary care setting who have depression along with diabetes and/or cardiovascular disease and also (optional) substance misuse. Doing so could help care systems achieve the Triple Aim (*Berwick, 2008*) of improving the health of the population, the patient's care experience, and the affordability of care for these patients.

The COMPASS model targets a population of underserved and low-income people multiple comorbidities and risk factors who tend to have disparate rates of services and outcomes.

The COMPASS model was implemented in eight states through a consortium of partner organizations led by the Institute for Clinical Systems Improvement (ICSI). They include the Community Health Plan of Washington, Kaiser Permanente Colorado, Kaiser Permanente Southern California, Mayo Clinic Health System, Michigan Center for Clinical Systems Improvement (MI-CCSI), Mount Auburn Cambridge Independent Practice Association (MACIPA), and the Pittsburgh Regional Health Initiative. The HealthPartners Institute for Education and Research (HPIER) and the Advancing Integrated Mental Health Solutions (AIMS) Center at the University of Washington are provided technical assistance with registry, implementation and evaluation.

COMPASS was co-created by the consortium partners, drawing on several widely supported approaches to improving primary care practice for individuals with chronic illnesses and research evidence that suggests that the application of such approaches for patients with specific illnesses such as depression, diabetes, and heart disease can improve the effectiveness and cost effectiveness for patients with these conditions.

The COMPASS intervention builds on several foundational frameworks to improving health care:

- Explicit evaluation of the importance of outcomes of alternative management strategies.
- Wagner's Chronic Care Model to lay the groundwork for organizing multiple levels of health systems needed to make this work possible.
- Practice Coaching (*Grumbach, 2012*) to emphasize a systematic approach to supporting the transformation necessary in primary care (*Bodenheimer, 2010*).
- Patient Centered Medical Home principles to ensure consistency and continuity with NCQA accreditation standards. These are: whole person orientation, physician-directed medical practice, coordinated and/or integrated care, quality and safety, personal physician, access to care, and payment that recognizes appropriate value.

COMPASS is not usual care. A team approach of care managers and consulting psychiatrists and medical physicians help primary care providers 'treat patients to target' goals for identified medical conditions. This demonstrates the use of evidenced-based research in collaborative care programs implemented for chronic care principles in primary care.

[Return to Table of Contents](#)

There is significant evidence that an application of the chronic care management model to depression in primary care improves patient outcomes, both in the short term and over 18-24 months (*Gilbody, 2006; Glied, 2010; Klinkman, 2010*). A recent study of intervention known as TEAMcare showed that a multi-condition collaborative care model can be used to improve both depression and medical disease control in patients with co-morbid depression, diabetes and/or heart disease (*Katon, 2010; Lin, 2012*).

The COMPASS model was designed by integrating several existing and proven CCMMs and the best practices discovered in their implementation. These include: the IMPACT model for depression; the DIAMOND (Depression Improvement Across Minnesota, Offering a New Direction) program (based on IMPACT); TEAMcare, which addresses depression and diabetes and cardiovascular disease, and SBIRT (Screening, Brief Intervention, and Referral to Treatment) for risky substance use. The approach taken in COMPASS for implementation is based on extensive experience in implementing those care models plus our collective experience with organizational approaches to quality improvement of any care process.

Top leadership must be able to support this work, make it a priority, and plan for the resources needed for sustainability. We believe that the COMPASS model is an excellent foundation on which to redesign primary care, transforming it from the traditional approach to those supportive of accountable care organizations and the patient-centered medical home. System requirements should be in place to support and drive COMPASS, including clinic leadership, payment models, data-driven quality improvement, performance reporting, health information technology, and training and coaching.

COMPASS Goals

One third of Medicare patients have diabetes and another 30% have coronary artery disease, and when depression is present (as it is 15% of the time), health care costs are 65% higher (*Adler, 2007; Bambauer, 2007; Unützer, 2009*). Also, many patients with depression have other chronic problems. Approximately 70% of people who have comorbid depression and diabetes have depression for two years or more (*Katon, 2004*).

There is a bidirectional relationship between depression and many chronic medical disorders, with each side contributing to disease and care costs for the other (*Dirmaier, 2010; Katon, 2011; Rush, 2008*). For example, among health plan members with the 15% highest number of office visits in two successive years, 20% were depressed, and 42% of them had one or more chronic medical conditions, as well as 50% more hospitalizations and hospital days/year than high utilizers without depression (*Pearson, 1999*).

Overall goals for COMPASS:

- Achieve depression improvement measured by a decrease in PHQ-9 by 5 points or a PHQ-9 of less than 10 for 40% of the patients
- Improve diabetes (DM) and hypertension control rates by 20%
- Decrease un-needed hospitalizations and emergency department visits
- Improve patient and clinician satisfaction with care process by 20%
- Reduce healthcare costs of Medicare and Medicaid measured patients by \$25 million (which relies in the short run almost entirely on reduction of unneeded hospitalizations and emergency department visits)

Supporting Documents:

- *COMPASS Executive Summary*
- *The Medical Science Supporting the COMPASS Program*
- *COMPASS QandA*
- *Potential Cost Savings*

[Return to Table of Contents](#)

Appendix B: Aims and Measures

Definition of COMPASS patients: Patients with depression and comorbid conditions (heart disease and/or diabetes).

1. Increase the percentage of COMPASS patients who have an improvement in depression symptoms.
(Goal: at least 40% of patients have an improvement)

Measure for accomplishing this aim:

- a. Percentage of patients who have a decrease in PHQ-9 by 5 points or a PHQ-9 < 10.
2. Increase the percentage of COMPASS patients whose diabetes and/or hypertension are controlled.
(Goal: increase control rates by 20%)

Measures for accomplishing this aim:

- a. Percentage of patients whose diabetes is controlled (A1c < 8%).
- b. Percentage of patients whose hypertension is controlled (BP < 140/90 mmHg).
3. Decrease the percentage of COMPASS patients with hospitalizations and ED visits.

Measure for accomplishing this aim:

- a. Percentage of patients with hospitalizations and ED visits.
(Comparison of rates before COMPASS intervention and after COMPASS intervention)
4. Increase the percentage of COMPASS patients and clinicians who are satisfied with care process.
(Goal: increase satisfaction with care process by 20%)

Measures for accomplishing this aim:

- a. Percentage of patients who are satisfied with the care process.
- b. Percentage of clinicians who are satisfied with the care process.

[Return to Table of Contents](#)

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[*Return to Table of Contents*](#)