Suggested Citation:

This document is in the public domain and may be used and reprinted without permission except those copyrighted materials that are clearly noted in the document. Further reproduction of those copyrighted materials is prohibited without the specific permission of copyright holders.
Contents

Introduction ........................................................................................................................................ iv

Jumpstart Guide: A Tool to Navigate the Atlas .............................................................................. v

Acknowledgments ............................................................................................................................. vi

1. Why Was the Clinical-Community Relationships Measures Atlas Developed? ......................... 1
   1.1 Purpose ....................................................................................................................................... 3
   1.2 Intended Audience ...................................................................................................................... 3
   1.3 Scope .......................................................................................................................................... 3
   1.4 An Emerging Field ..................................................................................................................... 4

2. What Is a Clinical-Community Relationship? ............................................................................... 7
   2.1 Examples of Clinical-Community Relationships ....................................................................... 7
   2.2 Difference Between Care Coordination and Clinical-Community Relationships .................... 8
   2.3 The Role of Public Health in Clinical-Community Relationships ............................................. 8

   3.1 Overview of the Measurement Framework ............................................................................... 9
      Table 3-1. Clinical-Community Relationships Measures Framework ....................................... 10
      Table 3-2. Definitions of Measurement Domains ......................................................................... 11
   3.2 The Context of the Measurement Framework .......................................................................... 13
      Figure 3-1. Socioecological model .............................................................................................. 14
      Figure 3-2. Expanded chronic care model .................................................................................... 15
   3.3 The Foundation of the Measurement Framework ..................................................................... 15
      3.3.1 Expanded Bridging Model ................................................................................................ 15
      Figure 3-3. Foundation of the measurement framework for clinical-community relationships ...... 16
      3.3.2 Types of Measurement Domains ....................................................................................... 17
   3.4 Contents of the Measurement Framework .............................................................................. 18
      3.4.1 Elements of the Measurement Framework ......................................................................... 19
      3.4.2 Relationships Among Elements of the Measurement Framework .................................... 19

   4.1 Measure Mapping Table ........................................................................................................... 21
      Exhibit 4-1. Measurement profile template .................................................................................. 22
   4.2 Master Measure Mapping Table ............................................................................................... 23
Contents (continued)

Table 4-1. Master Measure Mapping Table .......................................................... 24
4.3 How to Select a Measure – The Measure Selection Guide ................................. 26
4.3.1 An Example of How to Use the Guide ......................................................... 26

5. What Are the Existing Measures of Clinical-Community Relationships? ........ 29

Table 5-1. List of measures .................................................................................. 29
Exhibit 5-1. Measure 1: Patient recall of referral to local agencies
(Safety Check Parental/Guardian Post-Visit Survey) ........................................ 30
Exhibit 5-2. Measure 2: Parental interest in following up on the local
agency referral (Safety Check Parental/Guardian Post-Visit Survey) .......... 31
Exhibit 5-3. Measure 3: Parental confidence in being able to use a
local agency referral (Safety Check Parental/Guardian
Post-Visit Survey) .......................................................................................... 32
Exhibit 5-4. Measure 4: Clinician recall of referral to a local agency
(Safety Check Practitioner Post-Visit Survey) ................................................ 33
Exhibit 5-5. Measure 5: Clinician perception of parent interest in referral
(Safety Check Practitioner Post-Visit Survey) ................................................. 34
Exhibit 5-6. Measure 6: Clinician confidence in ability to instruct
patient/family in proper use of local agency referral (Safety Check
Practitioner Post-Visit Survey) ...................................................................... 35
Exhibit 5-7. Measure 7: Information about area (community) resources
is offered by clinician (Wrap-Around Observation Form-2) ............................ 36
Exhibit 5-8. Measure 8: Plan of care includes at least one public
and/or private community service/resource (Wrap-Around
Observation Form-2) ..................................................................................... 37
Exhibit 5-9. Measure 9: Physician satisfaction with service coordination
(Alzheimer’s Service Coordination Program [ASCP] Physician Survey) .... 38
Exhibit 5-10. Measure 10: Changes in clinicians’ knowledge of available
services in the local community (ASCP Physician Survey) .............................. 39
Exhibit 5-11. Measure 11: Whether or not a clinician would refer any
family caregiver to intervention in the future (ASCP Physician Survey) ....... 40
Exhibit 5-12. Measure 12: Clinician receipt of treatment plan from the
service coordinator (ASCP Physician Survey) ............................................... 41
Exhibit 5-13. Measure 13: Clinician discussion of treatment plan with
patients or family caregivers (ASCP Physician Survey) .................................. 42
Exhibit 5-14. Measure 14: Patients referred to a community health
educator referral liaison (CHERL) ............................................................... 43
Exhibit 5-15. Measure 15: Patient engagement with CHERL.............................. 44
Exhibit 5-16. Measure 16: CHERL referrals to community resources .............. 45
Exhibit 5-17. Measure 17: Referral rate for intensive counseling from a
community program ........................................................................................ 46
Exhibit 5-18. Measure 18: Rate of patients that were ready to improve a
targeted behavior ............................................................................................ 47
Contents (continued)

Exhibit 5-19. Measure 19: Connection to resource (Continuity of Care Practices Survey – Practice Level [CCPS-P]) ...............................................48
Exhibit 5-20. Measure 20: Coordination of care (CCPS-P) ............................49
Exhibit 5-21. Measure 21: The effectiveness of communication between practice and community resource (GP-LI) ....................................................50
Exhibit 5-22. Measure 22: The quality of the service provided by community resource to a practice (GP-LI) ....................................................51

References ....................................................................................................................53

Web Sites ......................................................................................................................54

Appendix A. USPSTF Clinical Preventive Services Included in the Measurement Framework ....................................................................................................................55

Table A-1. USPSTF clinical preventive services determined to be feasible to deliver in nonclinical settings ...............................................................55

Appendix B. National Quality Measures Clearinghouse Data Sources ..............57

Appendix C. Environmental Scan Process .................................................................61

Table C-1. Search terms for literature review and Web search ...........................62
Table C-2. Experts identified for author search .......................................................63
Table C-3. Targeted organization Web sites ...............................................................64

Appendix D. Clinical-Community Relationships Measures Instruments ..........67

Safety Check Parental/Guardian Post-Visit Survey ...........................................67
Safety Check Practitioner Post-Visit Survey ........................................................70
Wrap-Around Observation Manual – Second Version ........................................73
Alzheimer’s Service Coordination Program (ASCP) Physician Survey ..............98
Continuity of Care Practices Survey – Practice Level [CCPS-P] .....................101
Capacity for Chronic Disease Management in General Practice Research Study Practice Profile Interview – Linkages with External Organisations of Providers (GP-LI) .................................................................109
**Introduction**

A promising approach to enhancing the delivery of preventive services in clinical settings is for providers to coordinate, cooperate, and collaborate with community-based organizations to help deliver these services. The Agency for Healthcare Research and Quality (AHRQ) refers to this collaborative approach to the delivery of preventive services as clinical-community relationships. AHRQ has set a long-term goal of understanding whether fostering relationships between clinical practices and community organizations is an effective and feasible way to enhance the delivery of specific clinical preventive services.

The *Clinical-Community Relationships Measures (CCRM) Atlas* is:

- Designed to provide users with a measurement framework and listing of existing measures for clinical-community relationships;

- Intended to help facilitate research, quality improvement projects, and other interventions investigating clinical-community relationships that have been formed for the purposes of improving the delivery of clinical preventive services; and

- Intended to be used by researchers studying clinical-community relationships as well as evaluators of these relationships.
Jumpstart Guide: A Tool to Navigate the Atlas

This Jumpstart Guide is a tool to help users navigate the Clinical Community Relationships Measures Atlas. By following the listed steps, users will be able to identify existing measures of clinical-community relationships.

To quickly return to the Jumpstart Guide and continue with the next step, click on the symbol. It will appear at the end of each section.

- **Step 1: Gain an Understanding of the Measurement Framework**
  All measures contained within this Atlas are organized according to the domains of this framework.

- **Step 2: Review the Measurement Framework Domain Definitions**
  An explanation of each of the domains is provided in the table of domain definitions.

- **Step 3: Examine the CCRM Mapping Table**
  The Master Measure Mapping Table is used to link measures to the framework domains. A quick review of the table will help you during Step 4.

- **Step 4: Follow the Measure Selection Guide**
  This guide will walk you through the steps of identifying the domains pertinent to your interests and identifying relevant measures.

- **Step 5: Review the Profiles of Identified Measures**
  Once you have identified measures that may meet your needs, review the details of measure development, testing, and application.
Acknowledgments

We thank Janice Genevro, Ph.D., M.S.W., of the Agency for Healthcare Research and Quality (AHRQ), and Claire Weschler, M.S.Ed., CHES, (formerly of AHRQ) for their guidance, support, insightful comments, and enthusiasm.

We thank members of the Clinical-Community Relationships Measures Expert Panel for sharing their time and expertise to improve this work:

Lynda Anderson, Ph.D.                    Russell E. Glasgow, Ph.D.
Cheryl Aspy, M.Ed., Ph.D.                Cheryl Irmiter, Ph.D., L.C.S.W., CADC
Carol Cahill, M.L.S.                     Robert Pestronk, M.P.H.
Rebecca Etz, Ph.D.                       Ruta Valaitis, R.N., Ph.D.

We also thank users who reviewed the Clinical-Community Relationships Measures Atlas and provided feedback:

Sarah Bennett-Harper, M.A.              Rebecca Noftsinger, B.A.
Allen Cheadle, Ph.D.                    Wes Quattrone, M.A.
Lisa Gary, Ph.D.                        Shelly Sital, M.A.
Shannon Fair, R.N., M.P.H.

While their input guided and improved the Atlas, they are not responsible for the contents of the final product.
1. Why Was the Clinical-Community Relationships Measures Atlas Developed?

Acknowledging the role of prevention in curbing the growing costs of health care and reducing morbidity and mortality in the United States, the 2010 Patient Protection and Affordable Care Act mandates that insurers provide coverage for specific preventive services without imposing cost-sharing requirements (U.S. Congress, 2010). Covered services include:

- Recommendations of the United States Preventive Services Task Force (USPSTF);
- Recommendations of the Advisory Committee On Immunization Practices (ACIP) that have been adopted by the Director of the Centers for Disease Control and Prevention (CDC);
- Guidelines supported by Health Resources and Services Administration’s (HRSA’s) Bright Futures Project and Uniform Panel of the Secretary’s Advisory Committee on Heritable Disorders in Newborns and Children; and
- Recommendations of the Institutes of Medicine (IOM) for HRSA’s Women’s Preventive Services.

Of particular interest in this project are services that are recommended by the U.S. Preventive Services Task Force (USPSTF) as Grade A and B recommendations (USPSTF, 2010). An “A” or “B” letter grade indicates that the panel recommends a service because there is at least a moderate net benefit for performing the service. The USPSTF recommendations include a broad range of clinical preventive health care services such as screenings, counseling, referrals, and preventive medications. Despite the existence of the USPSTF recommendations, a 2003 study found that patients receive only half of the recommended clinical preventive services overall, and less than 20 percent of recommended counseling or education services (McGlynn et al., 2003). There are many constraints and barriers that can limit delivery of these services in primary care settings, including time constraints, lack of appropriate staffing, and reimbursement issues (Infante et al., 2007). A promising approach to enhancing the delivery of preventive services in clinical settings is for providers to coordinate, cooperate, and collaborate with external nonclinical organizations such as local health departments and community-based organizations that share an interest in improving health and preventing disease and that can deliver these services.

The Agency for Healthcare Research and Quality (AHRQ) refers to this collaborative approach to the delivery of preventive services as clinical-community relationships. AHRQ has set a long-term goal of understanding whether fostering relationships between clinical practices and community organizations is an effective and feasible way to enhance the delivery of specific clinical preventive services. This work is integral to the mission of AHRQ’s Prevention and Care Management Portfolio to improve the quality, safety, efficiency, and effectiveness of evidence-based care.

---

1 U.S. Department of Health & Human Services Recommended Preventive Services
based preventive and chronic-care management services in primary care settings. AHRQ has funded a series of projects in an effort to better understand and support these relationships.

AHRQ implemented a series of activities from 2008 to 2010 that included:

• Convening a Clinical-Community Linkages Summit in 2008 to encourage collaboration, coordination, and integration among health care clinicians, institutions, and community organizations;

• Conducting a literature review and environmental scan of linkages between clinical practices and community organizations;

• Developing case studies of promising linkages; and

• Convening a 2010 summit of representatives from Federal agencies and other stakeholder organizations to develop a national strategy for promoting linkages to increase the delivery of clinical preventive services.

Stakeholders participating in the 2010 summit identified strategies to support local efforts to develop clinical-community linkages. One key strategy recommended was to develop metrics related to linkages between clinical practices and community organizations. In response, AHRQ launched a research project with the following aim:

• To develop an atlas to help evaluators identify appropriate measures for clinical-community relationships interventions in research studies and demonstration projects, particularly those measures focusing on USPSTF A and B preventive services, which are feasible in community settings.

In developing this *Clinical-Community Relationships Measures Atlas (CCRM Atlas)*, we investigated existing clinical-community relationships measurement approaches based on results from a targeted environmental scan and input from expert stakeholders.

The *CCRM Atlas* includes structure, process, and outcome measures related to clinical-community relationships. The measures are organized according to a measurement framework that focuses on the characteristics and activities of clinicians, patients, and community organizations, as well as their interactions and relationships. This framework for describing and organizing the measures reflects the important aspects of establishing and operating clinical-community relationships in practice.

---

2 At the time of the summit, AHRQ referred to clinical-community relationships as clinical-community linkages.
1.1 Purpose

The *CCRM Atlas* aims to support the field of clinical-community relationships measurement by:

- Providing a framework for understanding the measurement of clinical-community relationships;
- Providing a list of existing measures of clinical-community relationships;
- Aligning the existing measures within a clinical-community relationships measurement framework; and
- Providing further details regarding the existing measures, including contextual information such as the preventive service(s) addressed in the setting(s) where the measure was used.

1.2 Intended Audience

The *CCRM Atlas* is designed with the following key audiences in mind:

- Researchers studying clinical-community relationships;
- Evaluators of interventions or demonstration projects that aim to improve clinical-community relationships; and
- Primary care clinicians and community organizations/programs utilizing clinical-community relationships to provide prevention services to patients.

1.3 Scope

The measures within the *CCRM Atlas* focus on the structures, processes, and outcomes that are fundamental to clinical-community relationships. AHRQ’s focus on clinical-community relationships seeks to explore how partnerships among primary care settings and community resources are developed, strengthened, and sustained to provide quality preventive care to patients and families. The framework and measures highlighted in the *CCRM Atlas* are based on the following assumptions:

- **The prevention strategy originates in the primary care setting.** The role of a primary care practice encompasses providing for and recognizing the need for preventive health services, including arranging for the delivery of services not provided in the primary care setting (i.e., providing referrals to community resources). Some of the measures listed in the *Atlas* may not have been applied in a primary care setting, but were deemed to be applicable in a primary care setting.
• **There is differentiation between clinics/clinicians and community-based resources.** Primary care clinics/clinicians and community-based resources are defined as separate entities. Some organizations, such as public health departments, may include both clinical and nonclinical resources; however, the aspects of communication and coordination highlighted in the framework are relevant to relationships within these organizations as well.

• **The prevention strategies are focused on counseling and screening services provided in nonclinical community resource settings.** While prevention strategies may vary from practice to practice and community to community, the Atlas selected a set of clinical preventive services focused on counseling and screenings that could be provided in community settings. A listing of these services is provided in Appendix A. For example, a family physician could refer a patient to a community-based organization that provides tobacco cessation counseling.

• **Prevention is focused on primary and secondary strategies.** The selected counseling and screening services in the Atlas exclude tertiary prevention services such as a clinic’s/clinician’s referral to a community resource to provide counseling for a patient diagnosed with cancer.

• **Patient health outcome measures are excluded.** The Atlas contains measures of the functioning of relationships among clinics/clinicians, patients, and community-based resources. Since evidence exists on patient health outcomes from preventive services delivery and patient health outcome measures are well-defined, patient health outcome measures are not within the scope of this Atlas.

• **Measures are accessible.** Only measures that users can access without a fee were included in this CCRM Atlas.

### 1.4 An Emerging Field

The idea of measuring clinical-community relationships is relatively new, and as the field of clinical-community relationships develops, the measurement domains discussed in the CCRM Atlas may change; definitions for domains may alter and/or domains may be added or removed. New models for delivering preventive services as well as evolving policies related to health care delivery may affect the applicability or relevance of the domains within the Atlas.

Further, there are some domains referenced in this Atlas for which no measures currently exist, or the measures that do exist might require additional evidence to establish their effectiveness in evaluating clinical-community relationships. The Atlas is being established, in part, to investigate potential measures for evaluating clinical-community relationships. We envision that, as measures for this field are developed and tested, new measures will be added to the Atlas.
The framework discussed in the CCRM *Atlas* is intended to be specific enough so that readers can understand the key components of a clinical-community relationship. However, it is also intended to be flexible enough to accommodate this emerging field of study.
This page intentionally left blank.
2. What Is a Clinical-Community Relationship?

In the context of this *CCRM Atlas*, a clinical-community relationship exists when a primary care clinician makes a connection with a community resource to provide certain preventive services such as tobacco screening and counseling and, when the clinical practice and the community resource engage in at least one of Himmelman’s strategies for working together—networking, coordinating, cooperating, and collaborating (Himmelman, 2002). These strategies are distinguished by the formality of the relationships, key characteristics (e.g., time commitments, levels of trust, access to resources), and levels of resource sharing.

2.1 Examples of Clinical-Community Relationships

The [AHRQ Health Care Innovations Exchange](http://innovations.ahrq.gov) contains several examples of clinical-community relationships. These examples, while varying by the community resources used, the communities served, and the preventive services provided, all demonstrate effective use of clinical-community relationships as a strategy for the provision of preventive services.

**Example 1:** In Richmond, Virginia, a group of medical practices incorporated a system called Electronic Linkage System (eLinkS) into its daily workflow (AHRQ, 2008a). eLinkS prompted clinicians to offer behavior counseling and then referred patients to community resources to help provide those services. The community resources provided services such as group counseling for alcohol and smoking behavior as well as telephone counseling for weight loss. Another component of this clinical-community relationship was a community resource’s ability to update patient records through a Web site that automatically sent information regarding a patient’s progress back to the patient’s clinician. This clinical-community relationship resulted in a high rate of referrals for counseling services as well as improved behaviors such as high quit rates among smokers.

**Example 2:** The Community Health Educator Referral Liaisons (CHERL) project in Michigan used liaisons, also known as health navigators, to help reduce patients’ risky health behaviors (e.g., drinking, smoking, physical inactivity) (AHRQ, 2008c). After receiving the referral from a clinician, the CHERL provided ongoing counseling to the patient and referred the patient to appropriate community resources. The CHERL updated clinicians on the patients’ goals and intervention plans as well as patients’ progress in meeting goals. Patients who participated in the program reported better diets, more physical activity, and less smoking and drinking.

**Example 3:** The [King County Steps to Health](https://www.kingcounty.gov/departments/community-health/health-promotion/steps-to-health) project used community health workers as liaisons among clinic/clinicians, patients, and community resources (AHRQ, 2008b). The clinical-community relationships formed in this project fostered referrals to community resources for various health promotion services. The project provided evidence of patients’ improved healthy behaviors such as increased physical activity, and better outcomes for asthma and diabetes patients.
2.2 Difference Between Care Coordination and Clinical-Community Relationships

There is a distinction between care coordination and clinical-community relationships as defined here. The Agency for Healthcare Research and Quality’s *Care Coordination Measures Atlas* defines care coordination as, “the deliberate organization of patient care activities between two or more participants (including the patient) involved in a patient’s care to facilitate the appropriate delivery of health services” (McDonald et al., 2010, p. 4). Organizing care involves the marshaling of personnel and other resources needed to carry out all required patient care activities and is often managed by the exchange of information among participants responsible for different aspects of care. Clinical-community relationships would fit under this definition of care coordination. However, most activities typically measured under “care coordination” are between groups commonly thought of as health care organizations. Care coordination is often employed to address the needs of a specific population of patients including those with multiple co-morbidities and consumers of high levels of health resources. Measuring care coordination is essential in improving the quality of primary care services. The *CCRM Atlas* focuses on a subset of care coordination between clinics and community-based resources that are not typically considered health care organizations.

2.3 The Role of Public Health in Clinical-Community Relationships

AHRQ recognizes that the specific activities and collaborative relationships involving local public health departments vary depending on the needs of local delivery systems. In some localities the public health department may fill the role of the primary care clinic or clinician as we have defined it, in other localities it may fill the role of a community resource (e.g., providing services in a nonclinical setting), and in some places it may serve in both roles. In any of these situations, the measurement framework for clinical-community relationships presented in this *Atlas* still applies as the elements of communication highlighted in the framework are still needed. This is equally true whether the relationship is between a public health primary care site and a private community resource, a private primary care site and a public health community resource, or a public health primary care site and a public health community resource. Even in this third situation it is important to measure and track the structure and functioning of the relationship to ensure that it is meeting the needs of the community for delivery of the relevant clinical preventive services. This *CCRM Atlas* is intended to provide a common framework to help understand and evaluate clinical-community relationships.
3. What Is the Clinical-Community Relationships Measurement Framework?

This chapter contains:

- An overview of the Clinical-Community Relationships Measurement (CCRM) Framework;
- An explanation of the larger context within which the framework exists; and
- A description of the foundation and contents of the framework.

3.1 Overview of the Measurement Framework

The Measurement Framework is a conceptual framework for the Atlas that provides a structure for identifying, categorizing, and understanding the basic components of effective relationships between primary care practices and community resources for providing certain clinical preventive services. The framework is organized around a series of measurement domains that can provide the basis for empirical assessments of the structures, processes, and outcomes of the relationship at the practice or community level.

The theoretical basis for the measurement framework presented is twofold. The Etz bridging model (Etz et al., 2008) and Donabedian’s structure-process-outcome model (Donabedian, 1980) provide the foundation of the measurement framework.

Etz’s bridging model describes a set of characteristics on the clinic/clinician side of the “bridge” that influences the ability to initiate connections to community resources, and a set of characteristics on the community resource side that facilitates connections to primary care practices. These attributes can be considered foundational anchors that must be established on each side of the bridge for a clinical-community relationship to be developed. The measurement framework expands on this model to take explicit account of the patient role and relationship with both the clinic/clinician and the community resource sides of the bridge. The patient, clinic/clinician, and community resource elements and the relationships among these elements form one dimension of the measurement framework. A more detailed explanation of this bridging model is given in Section 3.3.1.

For the purpose of examining clinical-community relationships, Donabedian’s structure-process-outcome model has been applied as the second dimension used to categorize measurement domains within the measurement framework. This approach allows measures of structure, process, and outcome to be considered and examined for the clinic/clinician, patient, and community resource elements and for the relationships between these three elements.

Table 3-1 presents the measurement domains within the clinical-community relationships measurement framework. Brief definitions of the measurement domains are listed below in Table 3-2.
<table>
<thead>
<tr>
<th>Categories of measurement domains</th>
<th>Measurement Domains</th>
<th>Relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Elements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clinic/clinician</td>
<td>Patient</td>
</tr>
<tr>
<td>Structure Domains</td>
<td>Information technology infrastructure</td>
<td>Information technology infrastructure</td>
</tr>
<tr>
<td></td>
<td>Service capacity</td>
<td>Capacity for self-management</td>
</tr>
<tr>
<td></td>
<td>Accessibility</td>
<td>Ability to access primary care</td>
</tr>
<tr>
<td></td>
<td>Training</td>
<td>Ability to access the community resource</td>
</tr>
<tr>
<td></td>
<td>Delivery system design</td>
<td>Organizational infrastructure</td>
</tr>
<tr>
<td></td>
<td>Organizational infrastructure</td>
<td>Proactive and ready clinician</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Informed and activated patient</td>
</tr>
<tr>
<td>Process Domains</td>
<td>Readiness for behavior change</td>
<td>Readiness for behavior change</td>
</tr>
<tr>
<td></td>
<td>Outreach to obtain knowledge of and familiarity with community resources</td>
<td>Marketing of services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Referral process</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assessment and goal setting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-management support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shared decision making</td>
</tr>
<tr>
<td>Outcome Domains</td>
<td>Stage of behavior change</td>
<td>Stage of behavior change</td>
</tr>
<tr>
<td></td>
<td>Knowledge of and familiarity with community resources</td>
<td>Marketing results</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stage of behavior change</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marketing results</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Patient experience</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cost/efficiency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Delivery of service</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Patient-centeredness</td>
</tr>
</tbody>
</table>

Notes:
The table presents measurement domains within the CCRM Framework
The elements (clinic/clinician, patient, and community resource) and the relationships among these elements form one dimension of the measurement framework.
Refer to Section 3.3.1 for more information.
Donabedian's structure-process-outcome model is the second dimension used to categorize measurement domains.
<table>
<thead>
<tr>
<th>Domain</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to access primary care</td>
<td>The degree to which a patient has or perceives that he/she has the ability to access primary care services</td>
</tr>
<tr>
<td>Ability to access the community resource</td>
<td>The degree to which a patient has or perceives that he/she has the ability to access the community resource</td>
</tr>
<tr>
<td>Accessibility</td>
<td>The degree to which the attributes of the clinic/clinician or the community resource affect how accessible its services are (e.g., open scheduling and open hours)</td>
</tr>
<tr>
<td>Assessment and goal setting</td>
<td>The degree of interaction between a clinic/clinician or referred community resource and a patient to develop a plan of action for preventive services</td>
</tr>
<tr>
<td>Capacity for self-management</td>
<td>The degree of environmental support that a patient has for his/her health management, which could include family, community, psychological, and social support</td>
</tr>
<tr>
<td>Clinician experience</td>
<td>The level of utility from a clinic/clinician’s perspective of participation in the clinical-community resource relationship</td>
</tr>
<tr>
<td>Communication and follow through/followup</td>
<td>The level of interaction between a community-based resource and patient after the initial connection between them</td>
</tr>
<tr>
<td>Community resource experience</td>
<td>The level of utility from a community resource's perspective of participation in the clinical-community resource relationship</td>
</tr>
<tr>
<td>Cost/efficiency</td>
<td>The amount of resources, time, energy, and productivity associated with the provision of the services and activities connected with the relationship</td>
</tr>
<tr>
<td>Delivery of service</td>
<td>The rate of completion or receipt of services</td>
</tr>
<tr>
<td>Delivery system design</td>
<td>The scope of professional services provided and how those services are provided by a clinic/clinician and/or community resource (i.e., this domain contains measures of the presence or degree to which certain professional services exist as well as measures of the methods of providing such services)</td>
</tr>
<tr>
<td>Feedback and communication</td>
<td>The level and means of communication between the community resource and the clinic/clinician</td>
</tr>
<tr>
<td>Health literacy</td>
<td>The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions</td>
</tr>
<tr>
<td>Information technology infrastructure</td>
<td>The degree of availability and use of relevant aspects of information technology within a clinic/clinician organization, patient, or community resource</td>
</tr>
<tr>
<td>Informed and activated patient</td>
<td>The level of trust and increase in level of information a patient has (or is perceived to have) for participating in a relationship</td>
</tr>
<tr>
<td>Knowledge of and familiarity with community resources</td>
<td>The clinician’s and/or patient’s degree of awareness of the availability, range of services, level of cultural competency, and quality of services provided by various community resources</td>
</tr>
<tr>
<td>Marketing of services</td>
<td>The level of action and effort taken by a community resource to share information with clinics/clinicians and patients about the availability and types of preventive services provided</td>
</tr>
<tr>
<td>Marketing results</td>
<td>The results of marketing activities that a community resource could be engaging in</td>
</tr>
<tr>
<td>Nature and strength of the inter-organizational relationship</td>
<td>The level of intensity of a relationship between a clinic/clinician and community resource (based on Himmelman’s definitions of networking, coordinating, cooperating, and collaborating). This includes the degree to which the relationship can overcome common barriers of working together— time, trust, and turf (Himmelman, 2002).</td>
</tr>
<tr>
<td>Domain</td>
<td>Definition</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Organizational infrastructure</td>
<td>The way in which a clinic/clinician and/or community resource organizes the people and office process components of its business; the degree to which it is supported by a sustainable business model and governance structure (i.e., this domain contains measures of the presence or degree to which such organizational infrastructure exists)</td>
</tr>
<tr>
<td>Outreach to obtain knowledge of and familiarity with community resources</td>
<td>The level of action and effort taken by a clinic/clinician to learn about the availability of community resources and the services provided</td>
</tr>
<tr>
<td>Patient-centeredness</td>
<td>The degree to which attributes of whole-person care, family-centered care, respectfulness, cultural sensitivity, and advocacy for a patient exist</td>
</tr>
<tr>
<td>Patient experience</td>
<td>The level of utility from a patient’s perspective of participation in the clinician-patient or patient-community resource relationship</td>
</tr>
<tr>
<td>Proactive and ready clinician</td>
<td>The level of involvement a clinician provides in a clinical-patient relationship</td>
</tr>
<tr>
<td>Proactive and ready community resource</td>
<td>The level of involvement a community-based resource provides in a patient-community resource relationship</td>
</tr>
<tr>
<td>Readiness for behavior change</td>
<td>The level and/or type of activity that a clinic/clinician, patient, or community resource engages in to prepare for behavioral change that might be affected by a referral to a community resource</td>
</tr>
<tr>
<td>Referral process</td>
<td>Data (e.g., frequency) related to the process of developing, obtaining, and confirming a referral among all of the relationships</td>
</tr>
<tr>
<td>Self-management support</td>
<td>The level of interaction between the clinician and the patient aimed at helping patients stay informed about recommended clinical preventive services, and overcoming any barriers to the receipt of services that would prevent them from being active participants in their own care</td>
</tr>
<tr>
<td>Service capacity</td>
<td>The level of capacity, including amount of staff, resources, etc. that a clinic/clinician and/or community resource has to provide preventive services as well as manage the relationship(s)</td>
</tr>
<tr>
<td>Shared decision making</td>
<td>The level of clinician-patient information sharing regarding the preventive health services being addressed and the level of patient expression of his or her preferences and values</td>
</tr>
<tr>
<td>Stage of behavior change</td>
<td>The level, movement, or degree of sustainability achieved by a clinic/clinician, patient, and/or community resource among the various stages of readiness for behavioral change (i.e., pre-contemplation, contemplation, preparation, action, and maintenance)</td>
</tr>
<tr>
<td>Timeliness</td>
<td>The amount of time it takes for clinical preventive services to be delivered when clinicians make referrals to community resources</td>
</tr>
<tr>
<td>Training</td>
<td>The level of education and/or competency of individuals within a clinic/clinician and/or community resource to provide preventive services</td>
</tr>
</tbody>
</table>
3.2 The Context of the Measurement Framework

We recognize that the core elements of the framework—the clinic/clinician, the patient, and the community resource—exist within a broader context that includes many other influential factors.

The effects of each of the framework’s elements and the interactions between them should be understood within this broader context. However, there was no attempt to include all aspects of the broader policy environment in the framework, nor is the framework a comprehensive model for the entirety of primary care. Rather, it is a way to understand, assess, and improve the functioning of an approach to the delivery of preventive services that is consistent with the direction of national policy and strategy, and is likely to be responsive to the needs of patients.

We recognize that preventive health screenings may occur in a large variety of settings including faith-based organizations, supermarkets, senior centers, and others that do not involve a referral from a primary care clinician. This Clinical-Community Relationships Measures Atlas represents the first phase of a multi-phase endeavor. While we acknowledge the need for measures of different types of clinical-community relationships, our focus in this first phase is on measures of clinical-community relationships for the delivery of certain preventive services where the referral to the community service is initiated in the primary care setting.

Because each community is unique, the utility and relevance of the measure domains that fall into the three elements of the framework may differ from community to community. Communities differ in population size, wealth, educational attainment, cultural diversity, the challenges they face, and their approach to addressing those challenges. The specific health and community resources available and accessible in each community are unique and may logically influence the relationships between the clinic/clinician and patient elements.

The patient element exists within a broader socioecological model, as illustrated in Figure 3-1. Individual characteristics of patients, the influence of their family structure, the control of work space and organizational environments, and broader community policies all have an effect on the individual patient.
Providing a broader context for the clinic/clinician element, the Expanded Chronic Care Model (Barr et al., 2003) depicted in Figure 3-2 recognizes that patient-centered interaction is not limited to the one-on-one encounter in the exam room. The clinician is supported by a team of health professionals whose roles are diverse. Some provide care management or care coordination; some serve as boundary spanners between various resources; and some help patients navigate the complexity of the health system. In Example 2, from Section 2.1, clinicians engaged the assistance of Community Health Educator Referral Liaisons (CHERLs) to help manage their clients and orchestrate their clients’ preventive services.

The model for clinical-community relationships illustrated in Figure 3-3 can be thought of as a way of re-conceptualizing the interactions between the components of the system labeled informed activated patient, prepared pro-active practice team, and prepared pro-active community partners in Figure 3-2.
In sum, the measurement framework is an attempt to provide an overall description of the factors that may influence clinical-community relationships for the purpose of providing certain clinical preventive services. As noted above, the particular characteristics that may influence clinical-community relationships vary from community to community. For this reason, the elements of the framework that are relevant or useful, and the measures that arise from the framework, would be expected to vary accordingly. This framework should not be construed as a checklist to be completed the same way in every patient or every primary care practice, but rather as a guide for clarifying the specific category or categories of measures that are relevant in particular circumstances.

### 3.3 The Foundation of the Measurement Framework

This section describes the foundation of the measurement framework that is presented in Table 3-1. The theoretical work that supports the framework is further discussed, as well as the rationale for how different types of measures are conceptualized and organized in the framework.

#### 3.3.1 Expanded Bridging Model

Figure 3-3 depicts the foundation of the framework. The three interconnected circles in the Venn diagram represent the three principal elements of the framework—the patient, the primary...
care clinic/clinician, and the community resource. The patient element is defined as the individual who receives primary care services, including preventive care and illness care; this definition includes family members and/or others directly responsible for the care of the individual. The clinic/clinician element includes individual clinicians and clinic support staff operating in clinical settings in which primary care is delivered. The community resource element encompasses a range of organizations and programs that provide services to patients.

**Figure 3-3. Foundation of the measurement framework for clinical-community relationships**

Imposed over the diagram is the Etz bridge (Etz et al., 2008), which connects the clinic/clinician and the community resource. According to Etz et al., the concept of a bridge “suggests a dynamic and interactive connection as well as the need for strong foundations, for knowledge of local landscapes, and for continuous maintenance” (2008, p. S391). Etz’s bridging model describes a set of characteristics on the clinic/clinician side that influence the ability to initiate connections to community resources, and a set of characteristics on the community resource side that facilitate connections to primary care practices. These attributes can be considered as foundational anchors that must be established at each side of the bridge for a clinical-community relationship to be developed. Anchoring characteristics on the clinic/clinician side include the capacity to assess patient risk, ability to provide brief counseling, capacity and ability to refer, and awareness of community resources. Anchoring characteristics on the community resource side include the availability, accessibility, affordability, and perceived value of services provided by the community resource. The factors that allow or facilitate development of structural anchors on both sides of the bridge represent measurement domains in the clinical-community relationship measurement framework. The existence, prevalence, and strength of these factors are potential measures that can be mapped to the measurement domains.
Establishing a bridge between primary care clinics/clinicians and community resources can be accomplished without involving the patient element. Etz’s bridging model does not factor in patient measures; therefore, the larger bridge in Figure 3-3 does not extend to the intersection that includes the patient element. Nevertheless, this measurement framework expands on this model to take explicit account of the patient role and relationship with both the clinic/clinician and the community resource.

Figure 3-3 also contains a “shadow bridge” that connects all three elements. This shadow bridge has been inserted to suggest the possibility that this framework may evolve to include measure domains that capture measures of the relationship of the triad, if warranted by further research.

### 3.3.2 Types of Measurement Domains

Donabedian’s structure-process-outcome model provides a seminal framework for examining health services and patient outcomes (Donabedian, 1980). According to Donabedian, structure refers to the physical and organizational properties of a setting in which care is provided; process is the treatment or service being provided to a patient; and outcomes are results of the treatment or service.

For the purpose of examining clinical-community relationships, the structure-process-outcome model has been expanded beyond the context of health services and applied to patients and community resources, so that it provides a means to categorize measurement domains along one dimension of the measurement framework presented in Table 3-1. This allows the examination of how specific factors intrinsic to primary care clinics/clinicians, patients, and community resources may contribute to an overall understanding of the effectiveness of clinical-community relationships.

Measures of structure, process, and outcome may be considered and examined at six different points in Figure 3-3, which include: the clinic/clinician, patient, and community resource elements in themselves; the three intersections representing the interaction between the patient and clinic/clinician; the patient and the community resource; and the clinic/clinician and community resource.

The following three examples illustrate how structure domains may manifest within the measurement framework:

- A primary care clinic with a robust information technology infrastructure may be well equipped to make electronic referrals to community-based organizations. Measures of such an infrastructure would be placed within the information technology infrastructure domain.

- A community-based organization that employs allied health professionals—mental health specialists, alcohol and drug counselors, or lactation coaches—may have an increased capacity to deliver specific recommended preventive services. Measures of these capacities would be placed within the service capacity domain.
A patient who does not have a convenient way of traveling to a community resource or whose work hours overlap with the hours that the community resource is open may be less likely to use that community resource. Measures of the existence or prevalence of such barriers would be placed within the *ability to access the community resource* domain.

The **process** domains in the framework relate to care planning and referrals. Process factors in this context may also be broadened to include any activity or service that would facilitate providing preventive services by a community resource. Examples of these activities include:

- Work that a clinic or clinician might undertake to obtain knowledge of existing community resources. Measures of these actions would be placed within the *outreach to obtain knowledge and familiarity with community resources* domain.

- From the community resource perspective, marketing activities to promote clinic/clinician and patient awareness of services offered. Measures of these activities would be placed within the *marketing of services* domain.

**Outcome** domains relate to the patient’s receipt of services and clinician and patient experiences of care as shown in *Table 3-1*. An outcome can be construed as the result of any activity or process germane to this context. While domains related to patient health outcomes are beyond the scope for this effort, other outcomes resulting from activities or processes engaged in by any element within the framework may be within scope. Examples of these results include:

- After collaborating with a community organization to provide preventive services, a physician may have more office time and see more patients in his/her work week. Measures of these types of results would be placed within the *cost/efficiency* domain.

- A patient received behavioral counseling by visiting a community organization he/she was referred to. Measures of the patient’s rate of completion for these counseling services would be placed with the *delivery of service* domain.

### 3.4 Contents of the Measurement Framework

*Table 3-1* above presents the Clinical-Community Relationships Measurement Framework. The contents of the table represent measurement domains, or broad conceptual or functional areas that can be used to categorize specific measures.

Measurement domains in the table are organized along two dimensions. Within columns, domains are organized according to the three principal elements—the clinic/clinician, patient, and community resource—and the relationships between those elements—clinic/clinician-patient, clinic/clinician-community resource, and patient-community resource. Within rows, domains are organized according to the categories of measures that fall under each domain—structure, process, and outcome. It should be noted that several measurement domains can be used to categorize measures in multiple elements. For example, *organizational infrastructure* is a structure domain that applies to both the clinic/clinician element and the community resource element.
3.4.1 Elements of the Measurement Framework

Each element in the framework—patient, community resource, and clinic/clinician—possesses intrinsic characteristics and factors that may be important candidate measurement domains in an overall framework for examining the functioning and effectiveness of clinical-community relationships.

The Clinic/ Clinician Element

This element encompasses two entities—the primary care clinic and the individual primary care clinician. For the purpose of this framework, the primary care clinic/clinician element serves as the initiation point for clinical-community relationships (i.e., where referrals for preventive services originate). In the CHERL program, (Example 2, Section 2.1), the clinicians and the CHERL are both within the clinic/clinician element. Measures of the existence of liaisons would be contained within the delivery system design domain.

The Patient Element

The patient is the subject of a referral and there are factors specific to a patient outside of the patient’s relationship with either the clinician or the community resource that may affect whether or not a clinician’s referral to a community resource has the desired result. One such structural factor was mentioned above—namely, the patient’s ability to access the community resource.

The Community Resource Element

The community resource element encompasses a range of organizations and programs that provide services to patients, including USPSTF-recommended clinical preventive services. A community resource needs to maintain staffing and other resources to provide its range of services and programs. Measures of these structural factors would fall within the service capacity domain.

3.4.2 Relationships Among Elements of the Measurement Framework

Each element does not operate in isolation. The interactions between the elements, depicted by the intersections of the overlapping circles in Figure 3-3, are also essential domains of measurement for understanding clinical-community relationships for prevention.

The Clinic/ Clinician-Patient Relationship

The interaction between the clinic/clinician and patient plays an important role in evaluating clinical-community relationships. There must be a level of trust between the clinician and the patient for the clinical-community relationship to work. These parties must be cognizant of each other’s expectations, needs and situation; the better the communication between the clinician and patient, the more likely a clinical-community relationship will be effective. Measures of the level of trust a patient has in this relationship would be included within the Informed and activated
patient domain. A way to measure the clinician’s level of involvement in the relationship would be found within the Proactive and ready clinician domain.

The Clinic/Clinician-Community Resource Relationship

The clinical-community relationship is at the center of the measurement framework and builds on the concept of the Etz bridge. To create a linkage or relationship, two organizations must be aware of each other, find some common benefit that can be derived from the connection, and then establish routine systems of maintaining that connection in a manner that produces a positive cost-benefit ratio or increased perceived value. To the extent that communication and coordination between organizations appears to be seamless from the patient’s perspective, there will likely be more effective service delivery.

Well-functioning clinical-community relationships also can help each organization achieve its mission, both financially and operationally. Having well-defined relationships and roles for service delivery can improve organizational efficiency and sustainability, along with staff development, motivation, and improved job satisfaction. In the eLinkS program, (Example 1, Section 2.1), there was a level of trust between the medical practices and community resources, which enabled both parties to share and update the patient’s records. Measures of these levels of trust would be found within the nature and strength of the inter-organizational relationship domain.

The Patient-Community Resource Relationship

Similar to the clinic/clinician-patient relationship, the interaction between the patient and the community resource plays an important role in evaluating clinical-community relationships. The level of patient trust in a relationship with a community resource and the community resource’s ability to engage the patient can affect the community resource’s success in providing appropriate preventive services. Such measures would be found by specifying this relationship as the relationship of interest (as opposed to the clinic/clinician-patient relationship) and then looking within the informed and activated patient and proactive and ready community resource domains respectively.
4. How Do Existing Measures of Clinical-Community Relationships Align with the Measurement Framework?

This chapter contains:

- An overview of how existing measures for clinical-community relationships are organized within the measurement framework described in Chapter 3;
- A table of existing measures mapped to the measurement framework; and
- An explanation of how to use the table (Table 4-1) to identify measures of clinical-community relationships.

4.1 Measure Mapping Table

To classify the clinical-community relationship measures according to the two dimensions of the measurement framework, a Measure Mapping Table was developed that displays the intersection of clinical-community relationship measurement domains (listed vertically) and the elements or relationships that would be the focus of each measure (listed horizontally). Measures were indexed, or “mapped,” according to the measure domain into which they fall in order to indicate which aspect of clinical-community relationships the measure is assessing.

The measures contained in the CCRM Atlas were identified during an environmental scan that was conducted in 2011 to identify existing measures of linkages between clinical practices and community organizations. Appendix C provides further details regarding the environmental scan and how the information for each measure was extracted.

Each existing measure identified to be relevant to clinical-community relationships has a profile that provides details regarding the measure. Exhibit 4-1 provides a listing and explanation of the information collected for measures. The profiles for each measure are in Chapter 5. Relevant information for each section of the profile was obtained and extracted from publications identified through the environmental scan of clinical-community relationship measures mentioned above. It should be noted that when measures that focused on mental health settings were determined to be adaptable for primary care settings, these measures were included in the CCRM Atlas.

As noted previously, the field of clinical-community relationships is in its infancy as are the measures that assess these relationships. Many measures included in the CCRM Atlas are from selected sections of survey instruments. Users are cautioned that even though individual items from surveys are mapped to particular domains, most instruments should be used in their entirety. Typically, measure testing is conducted on the entire measure; performance of measurement based on individual items is usually unknown. Further research, such as psychometric and validity testing may need to be conducted on these measures in a clinical-
community relationship setting. It may be possible to seek advice directly from a measure developer about any potential adaptations.

**Exhibit 4-1. Measurement profile template**

Number of the measure in the *Atlas* and the title of measure as described by the measure developer

<table>
<thead>
<tr>
<th>Domain</th>
<th>The domain the measure belongs to</th>
<th>Element/relationship</th>
<th>The element/relationship the measure belongs to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument</td>
<td>For those measure that apply, the instrument from which the measure is derived</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose</td>
<td>The intent of the measure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Format/data source</td>
<td>Identifies how the measure data were collected. The data sources are based on the National Quality Measures Clearinghouse (AHRQ, 2011) full listing of data sources. Appendix B provides a listing and description of the data sources.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure type</td>
<td>Identifies whether the measure is a structure, process, or outcome measure</td>
<td>Date</td>
<td>The date the measure was originally developed/released/or published</td>
</tr>
<tr>
<td>Preventive service/ USPSTF</td>
<td>Provides the listing of the preventive service(s) that the measure has previously addressed, including USPSTF recommendations (USPSTF, 2010)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical practice</td>
<td>Identifies the primary care setting where the measure was applied. These include physical and/or clinical settings where clinicians and support staff deliver primary care, including family medicine, internal medicine, pediatrics, and obstetrics and gynecology. Clinicians include licensed physicians, doctors of osteopathy, nurse practitioners, registered nurses, nurse midwives, or physician assistants who provide primary care services.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denominator</td>
<td>Describes the lower part of the fraction used to calculate a rate or ratio defining the total population of interest for a measure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numerator</td>
<td>Describes the upper part of the fraction used to calculate a rate or ratio defining the subset of the population of interest that meets a measure’s criterion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development &amp; testing</td>
<td>A summary of relevant information concerning the development of the measure, as well as reliability and validity testing applied to the measure. Measure developers were contacted to seek updated testing information.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past or validated application</td>
<td>Describes the settings and target populations to which the measure was applied. This includes the type of clinical practice to which the measure was applied.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citation(s)</td>
<td>List of relevant sources for the measure, and its development or testing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes</td>
<td>Contains any additional relevant information</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.2 Master Measure Mapping Table

Each existing measure of clinical-community relationships was mapped to a domain in the measurement framework. The Master Measure Mapping Table (see Table 4-1) presents the existing measures that align to clinical-community relationship domains and the element(s) or relationship(s) that the measure assesses. A shaded cell for a domain in a particular row indicates that the domain does not apply to the element or relationship in the corresponding column. A non-shaded cell for a domain in a particular row indicates that the domain does apply to the element or relationship in the corresponding column. A blank non-shaded cell indicates that no measures currently exist for the domain.

The numbers in parentheses indicate the total existing measures for a specific domain and element/relationship. For example, there are three identified measures for the clinician experience domain to assess the clinic/clinician-community resource relationship. The measure numbers following the parentheses correspond to the number assigned to each measure on Table 5-1, the List of Measures. Hence, the following three measures are under the clinician experience domain to assess the clinic/clinician-community resource relationship:

- #9 - Physician satisfaction with service coordination (Alzheimer’s Service Coordination Program [ASCP] Physician Survey)
- #11 - Whether or not a clinician would refer any family caregiver to intervention in the future (ASCP Physician Survey); and
- #21 - The effectiveness of communication between practice and community resource (GP-CLI Interview).
### Table 4-1. Master Measure Mapping Table

**Table is divided into two pages.**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Element/Relationship</th>
<th>Clinic/clinician</th>
<th>Patient</th>
<th>Community resource</th>
<th>Clinic/clinician – patient</th>
<th>Clinic/clinician – community resource</th>
<th>Patient – community resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to access primary care</td>
<td></td>
<td>Clinic/clinician</td>
<td>Patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to access community resource</td>
<td></td>
<td>Clinic/clinician</td>
<td>Patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accessibility</td>
<td></td>
<td>Clinic/clinician</td>
<td>Patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment and goal setting</td>
<td></td>
<td>Clinic/clinician</td>
<td>Patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacity for self-management</td>
<td></td>
<td>Clinic/clinician</td>
<td>Patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinician experience</td>
<td></td>
<td>Clinic/clinician</td>
<td>Patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication and follow through/follow-up</td>
<td></td>
<td>Clinic/clinician</td>
<td>Patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community resource experience</td>
<td></td>
<td>Clinic/clinician</td>
<td>Patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost/efficiency</td>
<td></td>
<td>Clinic/clinician</td>
<td>Patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery of service</td>
<td></td>
<td>Clinic/clinician</td>
<td>Patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery system design</td>
<td></td>
<td>Clinic/clinician</td>
<td>Patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feedback and communication</td>
<td></td>
<td>Clinic/clinician</td>
<td>Patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health literacy</td>
<td></td>
<td>Clinic/clinician</td>
<td>Patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information technology infrastructure</td>
<td></td>
<td>Clinic/clinician</td>
<td>Patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informed and activated patient</td>
<td></td>
<td>Clinic/clinician</td>
<td>Patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge of and familiarity with</td>
<td></td>
<td>Clinic/clinician</td>
<td>Patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>community resources</td>
<td></td>
<td>Clinic/clinician</td>
<td>Patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing of services</td>
<td></td>
<td>Clinic/clinician</td>
<td>Patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- A shaded cell indicates that the domain does not apply to the element or relationship.
- A non-shaded cell indicates that the domain does apply to the element or relationship.
- A blank non-shaded cell indicates that no measures currently exist for the domain.
- The numbers in parentheses indicate the total existing measures for a specific domain and element/relationship.
- The measure names can be found in Table 5-1
### Table 4-1. Master Measure Mapping Table (continued)

<table>
<thead>
<tr>
<th>Domain</th>
<th>Element/Relationship</th>
<th>Clinic/clinician</th>
<th>Patient</th>
<th>Community resource</th>
<th>Clinic/clinician – patient</th>
<th>Clinic/clinician – community resource</th>
<th>Patient – community resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing results</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nature and strength of the inter-organizational relationship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational infrastructure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outreach to obtain knowledge of and familiarity with community resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient-centeredness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactive and ready clinician</td>
<td></td>
<td></td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactive and ready community resource</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Readiness for behavior change</td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Referral process</td>
<td></td>
<td></td>
<td></td>
<td>(7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-management support</td>
<td></td>
<td></td>
<td></td>
<td>(1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared decision making</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage of behavior change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timeliness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- A shaded cell indicates that the domain does not apply to the element or relationship.
- A non-shaded cell indicates that the domain does apply to the element or relationship.
- A blank non-shaded cell indicates that no measures currently exist for the domain.
- The numbers in parentheses indicate the total existing measures for a specific domain and element/relationship.
- The measure names can be found in Table 5-1.
4.3 How to Select a Measure – The Measure Selection Guide

This section is intended to help users identify existing clinical-community relationship measures that can help evaluate their clinical-community relationship interventions, demonstration projects, or other research initiatives.

Two key steps are involved in finding a measure to meet your evaluation needs:

1. Identify the measures relevant to your intervention; and
2. Review the relevant measure profiles.

Identifying the measures relevant to your intervention involves the steps outlined below:

a. Specify the element(s) or relationship(s) of interest (i.e., choose a column in Table 4-1);

b. Specify the domains of a clinical-community relationship that are of interest (i.e., choose a row in Table 4-1); and

c. Go to the intersection of the column you selected in step (a) and the row you chose in step (b) to identify the relevant measures.

Once you have identified the relevant measures, go to the Measure Profiles in Chapter 5 to examine the relevant measures in more detail and determine whether they meet your evaluation needs.

4.3.1 An Example of How to Use the Guide

More detailed guidance for implementing the above steps is provided below.

1. Identify the measures relevant to your intervention.

Example: ³

Dr. X is developing a 6-month program to improve awareness of sexually transmitted infections (STIs) among his patients. Dr. X is going to refer patients to one of three available community centers that provide STI and sexual health counseling. Dr. X will use a brief questionnaire during his consultations with patients to prescreen those eligible for a referral as

³ This example is a quality improvement activity and it is assumed that the clinician explicitly obtained the patients’ approval to share/receive information with the community resources.
well as assess the patient’s level of readiness for behavior change. Those patients who agree to participate in the program will be given a prescription for counseling, which serves as a referral form for free counseling at any of the three community centers. The community centers agreed to maintain a list of all clients who came for STI and sexual health counseling at the respective sites as well as who completed the counseling. At the end of the program, the community centers will supply Dr. X with the listing of clients who came at least once and a list of those who actually completed their services.

Dr. X is interested in understanding the following:

- Is there any correlation between the patient’s level of readiness for behavior change and the patient’s acting on the referral?
- Will the prescription for free counseling result in more patients using the counseling services? Dr. X tried verbal referrals a year ago with a similar group of patients; most patients from that group did not use the counseling services.

a. Specify the element(s) or relationship(s) of interest

A single intervention may involve multiple elements or relationships as units of analysis in an evaluation of the intervention. Hence, it is important that you first identify which element(s) and/or relationship(s) you are interested in. Questions to consider include: Who is the intervention primarily targeted toward? Who will carry out the intervention?

The intervention in the above example is targeted toward patients. The community centers will be helping to carry out the intervention by supplying Dr. X with the listing of clients who (1) used the services (i.e., came at least once) and who (2) completed the services. Hence the element and relationship that are of interest here are:

- Element: patient; and
- Relationship: patient – community resource.

b. Specify the domains of a clinical-community relationship that are of interest

A single intervention may employ multiple mechanisms whose effect you may want to measure. Therefore, you will want to map each one to a measurement domain.

Using the example listed above, Dr. X is interested in the effect of the patient’s readiness for change and the prescription for a free referral on the rate of confirmed referrals and the rate of delivery of services. Hence, the measurement domains of interest are:
Readiness for behavior change (patient element); referral process (patient-community relationship element); and delivery of service (patient-community relationship element).

Each domain is listed on the relevant rows of the Master Measure Mapping Table (Table 4-1).

c. Identify relevant clinical-community relationship measures.

Using the element(s) and/or relationship(s) you identified in step “a” and the domain(s) you identified from step “b”, locate the relevant clinical-community relationships measures on the Master Measure Mapping Table by finding where they intersect.

For example, if you are looking for a measure of patient’s readiness for behavior change, scan down the Patient Element column until you reach the row with readiness for behavior change. The box that represents the intersection of this column and row lists the existing measure(s) in the CCRM Atlas that evaluate a patient’s readiness for behavior change - measures 2 and 18.

Similarly, if you are interested in evaluating the prescription for counseling effect on the patient’s rate of confirming the referral by contacting the community service, look at the measure(s) in the referral process domain of the patient-community resource relationship: Measure 16. Since you might also be interested in the effect of either the prescription or the patient’s readiness for change on actual completion of counseling services, look at the measure(s) in the delivery of service domain of the patient-community resource relationship: there currently aren’t any measures within this domain indicating the need for measure development and testing.

2. Review relevant measure profiles.

Once you have identified the measures you need to evaluate your intervention, go to the Measure Profiles in Chapter 5 to obtain more information about each measure. This information should be used to guide the selection of specific measures for use in evaluating the intervention.

---

4 Several measurement domains can be used to categorize measures that apply to multiple elements/relationships.
5. What Are the Existing Measures of Clinical-Community Relationships?

This chapter presents specific measure mapping tables with profiles for each measure. Each individual measure has a measure profile designed to provide more detailed information on the measure’s purpose, format and data source, validation and testing, applications, and key sources. **Table 5-1** below provides an index to the measure numbers (left column) cited in the **Master Measure Mapping Table** (Table 4-1) and the order in which the individual measure mapping tables with profiles appear in this chapter.

<table>
<thead>
<tr>
<th>#</th>
<th>Measure name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Patient recall of referral to local agencies (Safety Check Parental/Guardian Post-Visit Survey)</td>
</tr>
<tr>
<td>2</td>
<td>Parental interest in following up on the local agency referral (Safety Check Parental/Guardian Post-Visit Survey)</td>
</tr>
<tr>
<td>3</td>
<td>Parental confidence in being able to use a local agency referral (Safety Check Parental/Guardian Post-Visit Survey)</td>
</tr>
<tr>
<td>4</td>
<td>Clinician recall of referral to a local agency (Safety Check Practitioner Post-Visit Survey)</td>
</tr>
<tr>
<td>5</td>
<td>Clinician perception of parent interest in referral (Safety Check Practitioner Post-Visit Survey)</td>
</tr>
<tr>
<td>6</td>
<td>Clinician confidence in ability to instruct patient/family in proper use of local agency referral (Safety Check Practitioner Post-Visit Survey)</td>
</tr>
<tr>
<td>7</td>
<td>Information about area (community) resources is offered by clinician (Wrap-Around Observation Form-2)</td>
</tr>
<tr>
<td>8</td>
<td>Plan of care includes at least one public and/or private community service/resource (Wrap-Around Observation Form-2)</td>
</tr>
<tr>
<td>9</td>
<td>Physician satisfaction with service coordination (Alzheimer’s Service Coordination Program [ASCP] Physician Survey)</td>
</tr>
<tr>
<td>10</td>
<td>Changes in clinicians’ knowledge of available services in the local community (ASCP Physician Survey)</td>
</tr>
<tr>
<td>11</td>
<td>Whether or not a clinician would refer any family caregiver to intervention in the future (ASCP Physician Survey)</td>
</tr>
<tr>
<td>12</td>
<td>Clinician receipt of treatment plan from the service coordinator (ASCP Physician Survey)</td>
</tr>
<tr>
<td>13</td>
<td>Clinician discussion of treatment plan with patients or family caregivers (ASCP Physician Survey)</td>
</tr>
<tr>
<td>14</td>
<td>Patients referred to a community health educator referral liaison (CHERL)</td>
</tr>
<tr>
<td>15</td>
<td>Patient engagement with CHERL</td>
</tr>
<tr>
<td>16</td>
<td>CHERL referrals to community resources</td>
</tr>
<tr>
<td>17</td>
<td>Referral rate for intensive counseling from a community program</td>
</tr>
<tr>
<td>18</td>
<td>Rate of patients that were ready to improve a targeted behavior</td>
</tr>
<tr>
<td>19</td>
<td>Connection to resource (Continuity of Care Practices Survey – Practice Level [CCPS-P])</td>
</tr>
<tr>
<td>20</td>
<td>Coordination of care (CCPS-P)</td>
</tr>
<tr>
<td>21</td>
<td>The effectiveness of communication between practice and community resource (GP-LI)</td>
</tr>
<tr>
<td>22</td>
<td>The quality of the service provided by community resource to a practice (GP-LI)</td>
</tr>
</tbody>
</table>
Exhibit 5-1. Measure 1: Patient recall of referral to local agencies (Safety Check Parental/Guardian Post-Visit Survey)

<table>
<thead>
<tr>
<th>Domain: Referral process</th>
<th>Element/relationship:</th>
<th>Clinic/clinician-patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument: Safety Check Parental/Guardian Post-Visit Survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose: Clinicians in the Pediatric Research in Office Settings program were trained on providing violence prevention related community referrals. This measure tracks patient recall of referrals to local agencies.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Format/data source: Patient/Individual Survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure type: Process</td>
<td>Date: 2006</td>
<td></td>
</tr>
<tr>
<td>Preventive service/USPSTF: Other–Mental Health*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical practice: Primary care–Pediatrics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denominator: Number of respondents to parent/guardian post-visit survey (Q2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numerator: Number of respondents who selected “Yes” to local agency referral (Q2d)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development &amp; testing:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past or validated application:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes: Please be aware that this measure is using only a selected section of an entire survey instrument. Therefore, this individual measure may need to undergo further reliability and validation testing to ensure that it can be applied in a clinical-community relationship setting.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* This is a measure that was originally applied in a mental health setting, but it could be adapted for a primary care setting.
### Exhibit 5-2. Measure 2: Parental interest in following up on the local agency referral (Safety Check Parental/Guardian Post-Visit Survey)

<table>
<thead>
<tr>
<th>Domain:</th>
<th>Readiness for behavior change</th>
<th>Element/relationship:</th>
<th>Patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument:</td>
<td>Safety Check Parental/Guardian Post-Visit Survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose:</td>
<td>Clinicians in the Pediatric Research in Office Settings program were trained on providing violence prevention-related community referrals. This measures the parent’s level of interest in following up on the local agency referral.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Format/data source:</td>
<td>Patient/Individual Survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure type:</td>
<td>Process</td>
<td>Date:</td>
<td>2006</td>
</tr>
<tr>
<td>Preventive service/ USPSTF:</td>
<td>Other–Mental Health*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical practice:</td>
<td>Primary care–Pediatrics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denominator:</td>
<td>Number of respondents to parent/guardian post-visit survey (Q3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numerator:</td>
<td>Number of respondents who selected “Interested” or “Very interested” in following up on the local agency referral (Q3d)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development &amp; testing:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past or validated application:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes:</td>
<td>Please be aware that this measure is using only a selected section of an entire survey instrument. Therefore, this individual measure may need to undergo further reliability and validation testing to ensure that it can be applied in a clinical-community relationship setting.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* This is a measure that was originally applied in a mental health setting, but it could be adapted for a primary care setting.
### Exhibit 5-3. Measure 3: Parental confidence in being able to use a local agency referral (Safety Check Parental/Guardian Post-Visit Survey)

<table>
<thead>
<tr>
<th>Domain:</th>
<th>Ability to access the community resource</th>
<th>Element/relationship:</th>
<th>Patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument:</td>
<td></td>
<td>Safety Check Parental/Guardian Post-Visit Survey</td>
<td></td>
</tr>
<tr>
<td>Purpose:</td>
<td>Clinicians in the <em>Pediatric Research in Office Settings</em> program were trained on providing violence prevention related community referrals. This measures the parents’ confidence that they will be able to use the local agency referral.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Format/data source:</td>
<td>Patient/Individual Survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure type:</td>
<td>Structural</td>
<td>Date:</td>
<td>2006</td>
</tr>
<tr>
<td>Preventive service/ USPSTF:</td>
<td>Other–Mental Health*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical practice:</td>
<td>Primary care–Pediatrics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denominator:</td>
<td>Number of respondents to parent/guardian post-visit survey (Q4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numerator:</td>
<td>Number of respondents who selected “Confident” or “Very confident” in following up on the local agency referral (Q4d)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development &amp; testing:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past or validated application:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Notes: | Please be aware that this measure is using only a selected section of an entire survey instrument. Therefore, this individual measure may need to undergo further reliability and validation testing to ensure that it can be applied in a clinical-community relationship setting. | *

* This is a measure that was originally applied in a mental health setting, but it could be adapted for a primary care setting.
Exhibit 5-4. Measure 4: Clinician recall of referral to a local agency (Safety Check Practitioner Post-Visit Survey)

<table>
<thead>
<tr>
<th>Domain:</th>
<th>Referral process</th>
<th>Element/relationship: Clinic/clinician-patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument:</td>
<td>Safety Check Practitioner Post-Visit Survey</td>
<td></td>
</tr>
<tr>
<td>Purpose:</td>
<td>Clinicians in the Pediatric Research in Office Settings program were trained on providing violence prevention-related community referrals. This measure tracks the clinicians’ recall of referrals to local agencies.</td>
<td></td>
</tr>
<tr>
<td>Format/data source:</td>
<td>Health professional survey</td>
<td></td>
</tr>
<tr>
<td>Measure type:</td>
<td>Process</td>
<td>Date: 2006</td>
</tr>
<tr>
<td>Preventive service/ USPSTF:</td>
<td>Other–Mental Health*</td>
<td></td>
</tr>
<tr>
<td>Clinical practice:</td>
<td>Primary care–Pediatrics</td>
<td></td>
</tr>
<tr>
<td>Denominator:</td>
<td>Number of respondents to practitioner post-visit survey (Q4)</td>
<td></td>
</tr>
<tr>
<td>Numerator:</td>
<td>Number of respondents who selected “Yes” to Local Agency Resource (Q4d)</td>
<td></td>
</tr>
<tr>
<td>Development &amp; testing:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past or validated application:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes:</td>
<td>Please be aware that this measure is using only a selected section of an entire survey instrument. Therefore, this individual measure may need to undergo further reliability and validation testing to ensure that it can be applied in a clinical-community relationship setting.</td>
<td></td>
</tr>
</tbody>
</table>

* This is a measure that was originally applied in a mental health setting, but it could be adapted for a primary care setting.
**Exhibit 5-5. Measure 5: Clinician perception of parent interest in referral (Safety Check Practitioner Post-Visit Survey)**

<table>
<thead>
<tr>
<th>Domain:</th>
<th>Informed and activated patient</th>
<th>Element/relationship:</th>
<th>Clinic/clinician-patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument:</td>
<td>Safety Check Practitioner Post-Visit Survey</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Purpose:** Clinicians in the *Pediatric Research in Office Settings* program were trained on providing violence prevention-related community referrals. This measures the clinicians’ perception of their patient’s interest in the local agency referral.

**Format/data source:** Health professional survey

**Measure type:** Structural  
**Date:** 2006

**Preventive service/ USPSTF:** Other–Mental Health*

**Clinical practice:** Primary care–Pediatrics

**Denominator:** Number of respondents to practitioner post-visit survey (Q5)

**Numerator:** Number of respondents who selected “Interested” or “Very interested” in following up on the local agency referral (Q5d)

**Development & testing:**

**Past or validated application:**


**Notes:** Please be aware that this measure is using only a selected section of an entire survey instrument. Therefore, this individual measure may need to undergo further reliability and validation testing to ensure that it can be applied in a clinical-community relationship setting.

* This is a measure that was originally applied in a mental health setting, but it could be adapted for a primary care setting.
### Exhibit 5-6. Measure 6: Clinician confidence in ability to instruct patient/family in proper use of local agency referral (Safety Check Practitioner Post-Visit Survey)

<table>
<thead>
<tr>
<th>Domain:</th>
<th>Proactive and ready clinician</th>
<th>Element/relationship: Clinic/clinician-patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument:</td>
<td>Safety Check Practitioner Post-Visit Survey</td>
<td></td>
</tr>
<tr>
<td>Purpose:</td>
<td>Clinicians in the Pediatric Research in Office Settings program were trained on providing violence prevention related community referrals. This measures the clinicians' level of confidence in instructing the patient/family in the proper use of a local agency referral.</td>
<td></td>
</tr>
<tr>
<td>Format/data source:</td>
<td>Health professional survey</td>
<td></td>
</tr>
<tr>
<td>Measure type:</td>
<td>Process</td>
<td>Date: 2006</td>
</tr>
<tr>
<td>Preventive service/USPSTF:</td>
<td>Other–Mental Health*</td>
<td></td>
</tr>
<tr>
<td>Clinical practice:</td>
<td>Primary care–Pediatrics</td>
<td></td>
</tr>
<tr>
<td>Denominator:</td>
<td>Number of respondents to practitioner post visit survey (Q6)</td>
<td></td>
</tr>
<tr>
<td>Numerator:</td>
<td>Number of respondents who selected “Confident” or “Very confident” in ability to instruct this patient-family in the proper use of a local agency referral (Q6d)</td>
<td></td>
</tr>
<tr>
<td>Development &amp; testing:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past or validated application:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes:</td>
<td>Please be aware that this measure is using only a selected section of an entire survey instrument. Therefore, this individual measure may need to undergo further reliability and validation testing to ensure that it can be applied in a clinical-community relationship setting.</td>
<td></td>
</tr>
</tbody>
</table>

* This is a measure that was originally applied in a mental health setting, but it could be adapted for a primary care setting.
Exhibit 5-7. Measure 7: Information about area (community) resources is offered by clinician (Wrap-Around Observation Form-2)

<table>
<thead>
<tr>
<th>Domain: Proactive and ready clinician</th>
<th>Element/relationship: Clinic/clinician-patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose: For families involved in a care team receiving wrap-around services, the question assesses whether information about resource interventions in the area is offered to the team.</td>
<td></td>
</tr>
<tr>
<td>Format/data source: External audit. Question 1 of the 48-item Wrap-Around Observation Form-2, which elicits information from a trained observer on whether a team mentions at least one specific resource/intervention (e.g., A.A, vocational rehab, Teammates) to the parent or asks if the parent is involved or needs community resources/intervention.</td>
<td></td>
</tr>
<tr>
<td>Measure type: Structural</td>
<td>Date: 2003</td>
</tr>
<tr>
<td>Preventive service/ USPSTF: Other–Mental Health*</td>
<td></td>
</tr>
<tr>
<td>Clinical practice: Other</td>
<td></td>
</tr>
<tr>
<td>Denominator: Number of patients or families eligible for wraparound services and form filled by observer. (Question 1)</td>
<td></td>
</tr>
<tr>
<td>Numerator: Number of “yes” responses noted by observer during family meeting with care coordinator. “Yes” if the team mentions or asks if the parent is involved in resources/interventions. “Yes” if the team asks about or mentions resources/interventions and the parent is already involved or does not show an interest in such services, and thus the team does not provide contact information. (Question 1)</td>
<td></td>
</tr>
<tr>
<td>Development &amp; testing: Reliability of the WOF-2 was assessed during 30 family planning meetings with 26 different families during a 24-month period. Data were collected by eight graduate students and one research assistant who served as observers at the family planning meetings. To assess reliability at each meeting, two observers went to the meeting to collect data using the WOF-2.</td>
<td></td>
</tr>
<tr>
<td>Past or validated application: Those in Lancaster County, Nebraska, who participated in an evaluation designed to examine the impact of a system of care for children with serious emotional disturbance and their families.</td>
<td></td>
</tr>
<tr>
<td>Notes: Please be aware that this measure is using only a selected section of an entire survey instrument. Therefore, this individual measure may need to undergo further reliability and validation testing to ensure that it can be applied in a clinical-community relationship setting.</td>
<td></td>
</tr>
</tbody>
</table>

* This is a measure that was originally applied in a mental health setting, but it could be adapted for a primary care setting.
**Exhibit 5-8. Measure 8: Plan of care includes at least one public and/or private community service/resource (Wrap-Around Observation Form-2)**

<table>
<thead>
<tr>
<th>Domain:</th>
<th>Referral process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose:</td>
<td>For families involved in a care team receiving wrap-around services, the question assesses if information about resource interventions in the area is offered to the team.</td>
</tr>
<tr>
<td>Format/data source:</td>
<td>External audit. Question 2 of the 48-item Wrap-Around Observation Form-2, which elicits information from a trained observer of whether a team specifically identifies at least one public (e.g., Health and Human Services, Lincoln Public Schools, Social Security Income) and/or private (e.g., private therapists/counselors, drug rehab centers) community service/resource in the plan of care.</td>
</tr>
<tr>
<td>Measure type:</td>
<td>Process</td>
</tr>
<tr>
<td>Preventive service/ USPSTF:</td>
<td>Other–Mental Health*</td>
</tr>
<tr>
<td>Clinical practice:</td>
<td>Other</td>
</tr>
<tr>
<td>Denominator:</td>
<td>Number of patients or families eligible for wraparound services and form filled by observer. (Question 1)</td>
</tr>
<tr>
<td>Numerator:</td>
<td>Number of “yes” responses noted by observer during family meeting with care coordinator. “Yes” only if one public and/or private service is included in the plan. These agencies must be accessible from the client's community. (Question 1)</td>
</tr>
<tr>
<td>Development &amp; testing:</td>
<td>Reliability of the WOF-2 was assessed during 30 family planning meetings with 26 different families during a 24-month period. Data were collected by eight graduate students and one research assistant who served as observers at the family planning meetings. To assess reliability at each meeting, two observers went to the meeting to collect data using the WOF-2.</td>
</tr>
<tr>
<td>Past or validated application:</td>
<td>Those in Lancaster County, Nebraska, who participated in an evaluation designed to examine the impact of a system of care for children with serious emotional disturbance and their families.</td>
</tr>
<tr>
<td>Notes:</td>
<td>Please be aware that this measure is using only a selected section of an entire survey instrument. Therefore, this individual measure may need to undergo further reliability and validation testing to ensure that it can be applied in a clinical-community relationship setting.</td>
</tr>
</tbody>
</table>

* This is a measure that was originally applied in a mental health setting, but it could be adapted for a primary care setting.

<table>
<thead>
<tr>
<th>Domain:</th>
<th>Clinician experience</th>
<th>Element/relationship:</th>
<th>Clinic/clinician-community resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument:</td>
<td>Alzheimer’s Service Coordination Program (ASCP) Physician Survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose:</td>
<td>Questionnaire asked clinician’s satisfaction with the Alzheimer’s Service Coordination Program - the program was a care partnership arrangement linking primary care physicians with a community organization that specializes in dementia education and support.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Format/data source:</td>
<td>Health professional survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure type:</td>
<td>Outcome</td>
<td>Date:</td>
<td>1997</td>
</tr>
<tr>
<td>Preventive service/ USPSTF:</td>
<td>Other–Mental Health*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical practice:</td>
<td>Primary Care - Family Practice; Primary Care - Internal Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denominator:</td>
<td>Clinicians in the area who have at least six dementia patients and who referred family caregivers diagnosed with dementia to a service coordinator and responded to question (Q10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numerator:</td>
<td>Number of clinicians responding “Very Satisfied” or “Satisfied”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development &amp; testing:</td>
<td>Tested versions of the survey with academic general internists for clarity and brevity before the instrument was fielded.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past or validated application:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes:</td>
<td>Please be aware that this measure is using only a selected section of an entire survey instrument. Therefore, this individual measure may need to undergo further reliability and validation testing to ensure that it can be applied in a clinical-community relationship setting. * This is a measure that was originally applied in a mental health setting, but it could be adapted for a primary care setting.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

* This is a measure that was originally applied in a mental health setting, but it could be adapted for a primary care setting.
Exhibit 5-10. Measure 10: Changes in clinicians’ knowledge of available services in the local community (ASCP Physician Survey)

<table>
<thead>
<tr>
<th>Domain:</th>
<th>Knowledge and familiarity with community resource</th>
<th>Element/relationship:</th>
<th>Clinic/clinician</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument:</td>
<td>Alzheimer's Service Coordination Program (ASCP) Physician Survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose:</td>
<td>Physicians are asked whether their knowledge of community resources available to their patients with dementia and these patients’ families increased, remained unchanged, or decreased compared with before their participation in the Alzheimer’s Service Coordination Program.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Format/data source:</td>
<td>Health professional survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure type:</td>
<td>Outcome</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date:</td>
<td>1997</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preventive service/ USPSTF:</td>
<td>Other–Mental Health*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical practice:</td>
<td>Primary Care - Family Practice; Primary Care - Internal Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denominator:</td>
<td>Clinicians in the area who have at least six dementia patients and who referred family caregivers diagnosed with dementia to a service coordinator and responded to question (Q7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numerator:</td>
<td>Number of clinicians responding “Yes”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development &amp; testing:</td>
<td>Tested versions of the survey with academic general internists for clarity and brevity before the instrument was fielded.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past or validated application:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes:</td>
<td>Please be aware that this measure is using only a selected section of an entire survey instrument. Therefore, this individual measure may need to undergo further reliability and validation testing to ensure that it can be applied in a clinical-community relationship setting. * This is a measure that was originally applied in a mental health setting, but it could be adapted for a primary care setting.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* This is a measure that was originally applied in a mental health setting, but it could be adapted for a primary care setting.
Exhibit 5-11. Measure 11: Whether or not a clinician would refer any family caregiver to intervention in the future (ASCP Physician Survey)

<table>
<thead>
<tr>
<th>Domain:</th>
<th>Clinician experience</th>
<th>Element/relationship:</th>
<th>Clinic/clinician-community resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument:</td>
<td>Alzheimer’s Service Coordination Program (ASCP) Physician Survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose:</td>
<td>Physicians are asked whether they would refer their patients to the Alzheimer’s Service Coordination Program after participating in the program.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Format/data source:</td>
<td>Health professional survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure type:</td>
<td>Outcome</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date:</td>
<td>1997</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preventive service/ USPSTF:</td>
<td>Other–Mental Health*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical practice:</td>
<td>Primary Care - Family Practice; Primary Care - Internal Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denominator:</td>
<td>Clinicians in the area who have at least six dementia patients and who referred family caregivers diagnosed with dementia to a service coordinator and responded to question (Q9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numerator:</td>
<td>Number of clinicians responding “Yes”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development &amp; testing:</td>
<td>Tested versions of the survey with academic general internists for clarity and brevity before the instrument was fielded.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past or validated application:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes:</td>
<td>Please be aware that this measure is using only a selected section of an entire survey instrument. Therefore, this individual measure may need to undergo further reliability and validation testing to ensure that it can be applied in a clinical-community relationship setting.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* This is a measure that was originally applied in a mental health setting, but it could be adapted for a primary care setting.
### Exhibit 5-12. Measure 12: Clinician receipt of treatment plan from the service coordinator (ASCP Physician Survey)

<table>
<thead>
<tr>
<th>Domain:</th>
<th>Feedback and communication</th>
<th>Element/relationship:</th>
<th>Clinic/clinician-community resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument:</td>
<td>Alzheimer's Service Coordination Program (ASCP) Physician Survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose:</td>
<td>Physicians are asked whether they received a service plan from the ASCP Service Coordinator while participating in the program.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Format/data source:</td>
<td>Health professional survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure type:</td>
<td>Process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date:</td>
<td>1997</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preventive service/ USPSTF:</td>
<td>Other - Mental Health*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical practice:</td>
<td>Primary Care - Family Practice; Primary Care - Internal Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denominator:</td>
<td>Clinicians in the area who have at least six dementia patients and who referred family caregivers diagnosed with dementia to a service coordinator and responded to question (Q1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numerator:</td>
<td>Number of clinicians responding “Yes” (a or b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development &amp; testing:</td>
<td>Tested versions of the survey with academic general internists for clarity and brevity before the instrument was fielded.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past or validated application:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes:</td>
<td>Please be aware that this measure is using only a selected section of an entire survey instrument. Therefore, this individual measure may need to undergo further reliability and validation testing to ensure that it can be applied in a clinical-community relationship setting. * This is a measure that was originally applied in a mental health setting, but it could be adapted for a primary care setting.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

* CCRM Framework (Table 3-1)
* Conceptual Framework Domains and Definitions (Table 3-2)
* Master Measurement Table (Table 4-1)
Exhibit 5-13. Measure 13: Clinician discussion of treatment plan with patients or family caregivers (ASCP Physician Survey)

<table>
<thead>
<tr>
<th>Domain: Assessment and goal setting</th>
<th>Element/relationship: Clinic/clinician-patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument: Alzheimer's Service Coordination Program (ASCP) Physician Survey</td>
<td></td>
</tr>
<tr>
<td>Purpose: Physicians are asked whether they reviewed or discussed treatment plan with patients or family caregivers while participating in the program.</td>
<td></td>
</tr>
<tr>
<td>Format/data source: Health professional survey</td>
<td></td>
</tr>
<tr>
<td>Measure type: Process</td>
<td>Date: 1997</td>
</tr>
<tr>
<td>Preventive service/ USPSTF: Other - Mental Health*</td>
<td></td>
</tr>
<tr>
<td>Clinical practice: Primary Care - Family Practice; Primary Care - Internal Medicine</td>
<td></td>
</tr>
<tr>
<td>Denominator: Clinicians in the area who have at least six dementia patients and who referred family caregivers diagnosed with dementia to a service coordinator and responded to question (Q2). Must have answered “Yes” (a or b) to (Q1) as well.</td>
<td></td>
</tr>
<tr>
<td>Numerator: Number of clinicians responding “Yes”</td>
<td></td>
</tr>
<tr>
<td>Development &amp; testing: Tested versions of the survey with academic general internists for clarity and brevity before the instrument was fielded.</td>
<td></td>
</tr>
<tr>
<td>Past or validated application:</td>
<td></td>
</tr>
<tr>
<td>Notes: Please be aware that this measure is using only a selected section of an entire survey instrument. Therefore, this individual measure may need to undergo further reliability and validation testing to ensure that it can be applied in a clinical-community relationship setting.*</td>
<td></td>
</tr>
</tbody>
</table>

* This is a measure that was originally applied in a mental health setting, but it could be adapted for a primary care setting.
Exhibit 5-14. Measure 14: Patients referred to a community health educator referral liaison (CHERL)

<table>
<thead>
<tr>
<th>Domain:</th>
<th>Referral process</th>
<th>Element/relationship:</th>
<th>Clinic/clinician-patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument:</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose:</td>
<td>This measure calculates the proportion of eligible patients who received referrals to a CHERL by a clinician if the patient was identified by the clinician as needing improvement in one or more of the four unhealthy behaviors.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Format/data source:</td>
<td>Electronic health/medical record. A computerized support system was developed to collect patient data; track patient calls, dates of service, and clinician feedback; and guide the counseling. Patient-specific health behavior and demographic information was entered by the CHERL based on self-report by the patients.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure type:</td>
<td>Process</td>
<td>Date:</td>
<td>2006</td>
</tr>
<tr>
<td>Preventive service/ USPSTF:</td>
<td>Alcohol Misuse Counseling; Healthy Diet Counseling; Obesity Screening and Counseling – Adults; Tobacco Use Counseling and Interventions - Non-Pregnant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical practice:</td>
<td>Primary Care - Family Practice; Primary Care - Internal Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denominator:</td>
<td>Number of eligible patients (those identified by the clinician as needing improvement in one or more unhealthy behaviors): Patients eligible for improvement were those who had smoked one puff or more in the past 7 days; had drunk two alcoholic drinks per one occasion most days in the past month; did not eat a low-fat diet or at least five total fruits and/or vegetables per day; and/or did not participate in moderate exercise at least 5 days per week, or vigorously at least 3 days per week.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numerator:</td>
<td>This was an accounting of the number of faxes received for each CHERL (the practices faxed referrals to the CHERL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development &amp; testing:</td>
<td>The Reach, Efficacy/Effectiveness, Adoption, Implementation, Maintenance (RE-AIM) model provided the framework for the analysis of study results.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past or validated application:</td>
<td>Adult patients at fifteen practices selected for convenience in three Michigan communities were eligible for CHERL referral if a patient was identified by the clinician as needing improvement in one or more of the four unhealthy behaviors.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
### Exhibit 5-15. Measure 15: Patient engagement with CHERL

<table>
<thead>
<tr>
<th>Domain</th>
<th>Referral process</th>
<th>Element/relationship</th>
<th>Clinic/clinician-patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose</td>
<td>This measure calculates the proportion of eligible patients who received referrals to a CHERL by a clinician if the patient was identified by the clinician as needing improvement in one or more of the four unhealthy behaviors.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Format/data source</td>
<td>Electronic health/medical record. A computerized support system was developed to collect patient data; track patient calls, dates of service, and clinician feedback; and guide the counseling. Patient-specific health behavior and demographic information was entered by the CHERL based on self-report by the patients.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure type</td>
<td>Process</td>
<td>Date: 2006</td>
<td></td>
</tr>
<tr>
<td>Preventive service/ USPSTF</td>
<td>Alcohol Misuse Counseling; Healthy Diet Counseling; Obesity Screening and Counseling – Adults; Tobacco Use Counseling and Interventions - Non-Pregnant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical practice</td>
<td>Primary Care - Family Practice; Primary Care - Internal Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denominator</td>
<td>Number of eligible patients (those identified by the clinician as needing improvement in one or more unhealthy behaviors): Patients eligible for improvement were those who had smoked one puff or more in past 7 days; had drunk two alcoholic drinks per one occasion most days in the past month; did not eat a low-fat diet or at least five total fruits and/or vegetables per day; and/or did not participate in moderate exercise at least 5 days per week, or vigorously at least 3 days per week.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numerator</td>
<td>This was a count of the number of patients who had at least one “visit” with a CHERL (visits were by phone).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development &amp; testing</td>
<td>The Reach, Efficacy/Effectiveness, Adoption, Implementation, Maintenance (RE-AIM) model provided the framework for the analysis of study results.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past or validated application</td>
<td>Adult patients at 15 practices selected for convenience in three Michigan communities were eligible for CHERL referral if a patient was identified by the clinician as needing improvement in one or more of the four unhealthy behaviors.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Exhibit 5-16. Measure 16: CHERL referrals to community resources

<table>
<thead>
<tr>
<th>Domain:</th>
<th>Referral process</th>
<th>Element/relationship: Patient-community resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument:</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Purpose:</td>
<td>This measure calculates the proportion of patients working with a CHERL who were referred to at least one community resource that provided assistance with one or more of the four unhealthy behaviors.</td>
<td></td>
</tr>
<tr>
<td>Format/data source:</td>
<td>Electronic health/medical record. A computerized support system was developed to collect patient data; track patient calls, dates of service, and clinician feedback; and guide the counseling. Patient-specific health behavior and demographic information was entered by the CHERL based on self-report by the patients.</td>
<td></td>
</tr>
<tr>
<td>Measure type:</td>
<td>Process</td>
<td>Date: 2006</td>
</tr>
<tr>
<td>Preventive service/ USPSTF:</td>
<td>Alcohol Misuse Counseling; Healthy Diet Counseling; Obesity Screening and Counseling – Adults; Tobacco Use Counseling and Interventions - Non-Pregnant</td>
<td></td>
</tr>
<tr>
<td>Clinical practice:</td>
<td>Primary Care - Family Practice; Primary Care - Internal Medicine</td>
<td></td>
</tr>
<tr>
<td>Denominator:</td>
<td>Number of eligible patients (those identified by the clinician as needing improvement in one or more unhealthy behavior): Patients eligible for improvement were those who had smoked one puff or more in past 7 days; had drunk two alcoholic drinks per one occasion most days in the past month; did not eat a low-fat diet or at least five total fruits and/or vegetables per day; and/or did not participate in moderate exercise at least 5 days per week, or vigorously at least 3 days per week. The patient must have completed a baseline call with the CHERL.</td>
<td></td>
</tr>
<tr>
<td>Numerator:</td>
<td>The number of clients who received at least one referral from the CHERL to a community resource.</td>
<td></td>
</tr>
<tr>
<td>Development &amp; testing:</td>
<td>The Reach, Efficacy/Effectiveness, Adoption, Implementation, Maintenance (RE-AIM) model provided the framework for the analysis of study results.</td>
<td></td>
</tr>
<tr>
<td>Past or validated application:</td>
<td>Adult patients at 15 practices selected for convenience in three Michigan communities were eligible for CHERL referral if a patient was identified by the clinician as needing improvement in one or more of the four unhealthy behaviors.</td>
<td></td>
</tr>
<tr>
<td>Notes</td>
<td>2K</td>
<td></td>
</tr>
</tbody>
</table>
### Exhibit 5-17. Measure 17: Referral rate for intensive counseling from a community program

<table>
<thead>
<tr>
<th>Domain:</th>
<th>Referral process</th>
<th>Element/relationship:</th>
<th>Clinic/clinician-patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument:</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose:</td>
<td>An electronic linkage system (eLinkS) tracked the promotion of health behavior counseling and automation of patient referrals to community counseling services. This measure calculated the proportion of all patients with risk factors referred for intensive counseling.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Format/data source:</td>
<td>Electronic health/medical record. Utilizing the electronic medical record as a platform, eLinkS was designed to (1) help clinicians systematically perform elements of the 5A’s that are feasible in busy practice settings (i.e., asking about health behaviors, offering brief advice, and agreeing on next steps); (2) make it fast and easy to refer patients to intensive counseling outside the office; and (3) establish bidirectional communication between practices and community counselors.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure type:</td>
<td>Process</td>
<td>Date:</td>
<td>2008</td>
</tr>
<tr>
<td>Preventive service/ USPSTF:</td>
<td>Alcohol Misuse Counseling; Healthy Diet Counseling; Obesity Screening and Counseling – Adults; Tobacco Use Counseling and Interventions - Non-Pregnant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical practice:</td>
<td>Primary Care - Family Practice; Primary Care - Internal Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denominator:</td>
<td>Patients who reported they wanted to address an unhealthy behavior and engaged to address the unhealthy behavior (A1-A3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numerator:</td>
<td>Number of patients referred to intensive counseling (A4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development &amp; testing:</td>
<td>Prompts of the eLinkS were applied to the 5A’s of health behaviors.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past or validated application:</td>
<td>Nine primary care practices in the Tidewater region of Virginia were recruited. The practices, members of a single medical group and of the Virginia Ambulatory Care Outcomes Research Network (ACORN), share a common type of EMR (GE Centricity Physician Office©) that is managed by a central informatics staff. The practices have used the EMR for 3 to 10 years. Practice size ranged from 1 to 30 clinicians (median = 3), and 48 (87%) clinicians participated in the study. Two sites were solo practices, five had three clinicians, one had eight clinicians, and one (a family medicine residency program) had 30 part-time clinicians and residents.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes
### Exhibit 5-18. Measure 18: Rate of patients that were ready to improve a targeted behavior

<table>
<thead>
<tr>
<th>Domain: Readiness for behavior change</th>
<th>Element/relationship:</th>
<th>Patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument: N/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Purpose:** An electronic linkage system (eLinkS) tracked the promotion of health behavior counseling and automation of patient referrals to community counseling services. This measure calculated the proportion of all patients who were engaged to address an unhealthy behavior.

**Format/data source:** Electronic health/medical record. Utilizing the electronic medical record (EMR) as a platform, eLinkS was designed to (1) help clinicians systematically perform elements of the 5A’s that are feasible in busy practice settings (i.e., asking about health behaviors, offering brief advice, and agreeing on next steps); (2) make it fast and easy to refer patients to intensive counseling outside the office; and (3) establish bidirectional communication between practices and community counselors.

**Measure type:** Process

**Preventive service/USPSTF:** Alcohol Misuse Counseling; Healthy Diet Counseling; Obesity Screening and Counseling – Adults; Tobacco Use Counseling and Interventions - Non-Pregnant

**Clinical practice:** Primary Care - Family Practice; Primary Care - Internal Medicine

**Denominator:** Patients who reported an unhealthy behavior and were advised by clinician to change their behavior (A1-A2)

**Numerator:** Number of patients engaged to modify their behavior (A3)

**Development & testing:** Prompts of the eLinkS were applied to the 5A’s of health behaviors.

**Past or validated application:** Nine primary care practices in the Tidewater region of Virginia were recruited. The practices, members of a single medical group, and of the Virginia Ambulatory Care Outcomes Research Network (ACORN), share a common type of EMR (GE Centricity Physician Office©) that is managed by a central informatics staff. The practices have used the EMR for 3 to 10 years. Practice size ranged from 1 to 30 clinicians (median = 3), and 48 (87%) clinicians participated in the study. Two sites were solo practices, five had three clinicians, one had eight clinicians, and one (a family medicine residency program) had 30 part-time clinicians and residents.

### Exhibit 5-19. Measure 19: Connection to resource (Continuity of Care Practices Survey – Practice Level [CCPS-P])

<table>
<thead>
<tr>
<th>Domain:</th>
<th>Referral Process</th>
<th>Element/relationship:</th>
<th>Clinic/clinician-patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument:</td>
<td></td>
<td><strong>Continuity of Care Practices Survey – Practice Level [CCPS-P]</strong></td>
<td></td>
</tr>
<tr>
<td>Purpose:</td>
<td></td>
<td>This measure assesses whether clinicians and their staffs participating in the Veterans Affairs Substance Use Disorder (SUD) treatment program were able to arrange for their patient to connect with a community resource.</td>
<td></td>
</tr>
<tr>
<td>Format/data source:</td>
<td></td>
<td>Health professional survey that is completed for each practice by a designated member of that practice.</td>
<td></td>
</tr>
<tr>
<td>Measure type:</td>
<td></td>
<td>Process</td>
<td>Date: 2004</td>
</tr>
<tr>
<td>Preventive service/ USPSTF:</td>
<td>Alcohol Misuse Counseling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical practice:</td>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denominator:</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numerator:</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development &amp; testing:</td>
<td>Program-level CCPS data were obtained from directors/coordinators of 129 intensive inpatient/residential and outpatient Department of Veterans Affairs SUD programs. These data were used to examine the internal consistency and discriminant validity of the CCPS-P. CCPS-P demonstrated acceptable psychometric properties. CCPS-P subscales and the overall CCPS-P score predicted corresponding continuity of care services that staff provided to patients within programs, offering support for predictive validity. Lack of significant correlations between CCPS-P subscales and SUD program characteristics (e.g., size, staffing) provided preliminary evidence for discriminant validity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past or validated application:</td>
<td>129 intensive SUD treatment programs (58 inpatient/residential and 71 outpatient); methadone maintenance programs were excluded. Directors of the programs completed the CCPS by mailed questionnaire or telephone interview.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes</td>
<td>A composite measure using the Connect to Resources Subscale – Add 7A-F (except E) and subtract the number of responses without missing data, e.g., if one item has missing data, subtract 5, the number of complete responses. Please be aware that this measure is using only a selected section of an entire survey instrument. Therefore, this individual measure may need to undergo further reliability and validation testing to ensure that it can be applied in a clinical-community relationship setting.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Exhibit 5-20. Measure 20: Coordination of care (CCPS-P)

<table>
<thead>
<tr>
<th>Domain:</th>
<th>Feedback and communication</th>
<th>Element/relationship:</th>
<th>Clinic/clinician-community resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument:</td>
<td></td>
<td><strong>Continuity of Care Practices Survey – Practice Level [CCPS-P]</strong></td>
<td></td>
</tr>
<tr>
<td>Purpose:</td>
<td></td>
<td>This measure assesses whether a clinician and his staff participating in the Veterans Affairs Substance Use Disorder (SUD) treatment program were able to arrange for their patient to connect with a community resource.</td>
<td></td>
</tr>
<tr>
<td>Format/data source:</td>
<td></td>
<td>Health professional survey that is completed for each practice by a designated member of that practice.</td>
<td></td>
</tr>
<tr>
<td>Measure type:</td>
<td></td>
<td>Process</td>
<td>Date: 2004</td>
</tr>
<tr>
<td>Preventive service/ USPSTF:</td>
<td></td>
<td>Alcohol Misuse Counseling</td>
<td></td>
</tr>
<tr>
<td>Clinical practice:</td>
<td></td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Denominator:</td>
<td></td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Numerator:</td>
<td></td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Development &amp; testing:</td>
<td></td>
<td>Program-level CCPS data were obtained from directors/coordinators of 129 intensive inpatient/residential and outpatient Department of Veterans Affairs SUD programs. These data were used to examine the internal consistency and discriminant validity of the CCPS-P. CCPS-P demonstrated acceptable psychometric properties. CCPS-P subscales and the overall CCPS-P score predicted corresponding continuity of care services that staff provided to patients within programs, offering support for predictive validity. Lack of significant correlations between CCPS-P subscales and SUD program characteristics (e.g., size, staffing) provided preliminary evidence for discriminant validity.</td>
<td></td>
</tr>
<tr>
<td>Past or validated application:</td>
<td></td>
<td>129 intensive SUD treatment programs (58 inpatient/residential and 71 outpatient); methadone maintenance programs were excluded. Directors of the programs completed the CCPS by mailed questionnaire or telephone interview.</td>
<td></td>
</tr>
<tr>
<td>Notes:</td>
<td></td>
<td>This is a composite measure using the Coordinate Care Subscale – Add 8A-E and subtract the number of responses without missing data, e.g., if one item has missing data, subtract 4, the number of complete responses. Please be aware that this measure is using only a selected section of an entire survey instrument. Therefore, this individual measure may need to undergo further reliability and validation testing to ensure that it can be applied in a clinical-community relationship setting.</td>
<td></td>
</tr>
</tbody>
</table>
### Exhibit 5-21. Measure 21: The effectiveness of communication between practice and community resource (GP-LI)

<table>
<thead>
<tr>
<th>Domain</th>
<th>Referral Process</th>
<th>Element/relationship:</th>
<th>Clinic/clinician-patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument:</td>
<td>Capacity for Chronic Disease Management in General Practice Research Study Practice Profile Interview - Linkages with External Organisations of Providers (GP-LI)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose:</td>
<td>This question assesses the clinician’s perception of the effectiveness of communication with the community resource(s).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Format/data source:</td>
<td>Health professional survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure type:</td>
<td>Outcome</td>
<td>Date: 2005</td>
<td></td>
</tr>
<tr>
<td>Preventive service/ USPSTF:</td>
<td>Other – Non-Mental Health*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical practice:</td>
<td>Primary Care - Family Practice; Primary Care - Internal Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denominator:</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numerator:</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development &amp; testing:</td>
<td>The interview to measure surgery-level (rather than individual clinician-level) clinical linkages was developed, piloted, reviewed, and evaluated with 97 Australian general practices. Two validated survey instruments were posted to patients, and a survey of locally available services was developed and posted to participating Divisions of General Practice (support organizations). Hypotheses regarding internal validity, association with local services, and patient satisfaction were tested using factor analysis, logistic regression, and multilevel regression models.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past or validated application:</td>
<td>Setting: General practices in Australia Population: General practitioners and practice managers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes</td>
<td>This question is part of a composite measure for one practice: For each provider or organization the clinician has a linkage with, rate on a scale of 0 – 5 (0 being the lowest and 5 being the highest), the effectiveness of the communication between the two organizations. This tool was originally developed to examine both the clinical and nonclinical links in general practice that exist at a practice level with external providers or organizations. This tool is only designed to look at links that are at the practice level, as defined by a link which the principal GP would tell a new GP about when they joined the practice. The links are recognized in regards to the functions they fulfill, for example, does the practice have a link for referral or advice for asthma. For the purposes of this Atlas, the composite scoring was broken and one question was identified as a measure of clinical-community relationships. Please be aware that this measure is using only a selected section of an entire survey instrument. Therefore, this individual measure may need to undergo further reliability and validation testing to ensure that it can be applied in a clinical-community relationship setting. * This is a measure that was originally applied in a chronic care setting, but it could be adapted for a primary care setting.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

* This is a measure that was originally applied in a chronic care setting, but it could be adapted for a primary care setting.
### Exhibit 5-22. Measure 22: The quality of the service provided by community resource to a practice (GP-LI)

<table>
<thead>
<tr>
<th>Domain:</th>
<th>Knowledge and familiarity with community resources</th>
<th>Element/relationship:</th>
<th>Clinic/clinician</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument:</td>
<td><strong>Capacity for Chronic Disease Management in General Practice Research Study Practice Profile Interview - Linkages with External Organisations of Providers (GP-LI)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose:</td>
<td>This question assesses a provider’s view of the quality of service provided by the community resource(s).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Format/data source:</td>
<td>Health professional survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure type:</td>
<td>Outcome</td>
<td>Date:</td>
<td>2005</td>
</tr>
<tr>
<td>Preventive service/ USPSTF:</td>
<td>Other – Non-Mental Health*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical practice:</td>
<td>Primary Care - Family Practice; Primary Care - Internal Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denominator:</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numerator:</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development &amp; testing:</td>
<td>The interview to measure surgery-level (rather than individual clinician-level) clinical linkages was developed, piloted, reviewed, and evaluated with 97 Australian general practices. Two validated survey instruments were posted to patients, and a survey of locally available services was developed and posted to participating Divisions of General Practice (support organizations). Hypotheses regarding internal validity, association with local services, and patient satisfaction were tested using factor analysis, logistic regression, and multilevel regression models.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past or validated application:</td>
<td>Setting: General practices in Australia Population: General practitioners and practice managers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Exhibit 5-22. Measure 22: The quality of the service provided by community resource to a practice (GP-LI) (continued)**

| Notes | This question is part of a composite measure for one practice: For each provider or organization the clinician has a linkage with, rate on a scale of 0 – 5 (0 being the lowest and 5 being the highest), the quality of service provided to your practice.

This tool was originally developed to examine both the clinical and nonclinical links in general practice that exist at a practice level with external providers or organizations. This tool is only designed to look at links that are at the practice level, as defined by a link which the principal GP would tell a new GP about when they joined the practice. The links are recognized in regards to the functions they fulfill, for example, does the practice have a link for referral or advice for asthma. For the purposes of this Atlas, the composite scoring was broken and one question was identified as a measure of clinical-community relationships. Please be aware that this measure is using only a selected section of an entire survey instrument. Therefore, this individual measure may need to undergo further reliability and validation testing to ensure that it can be applied in a clinical-community relationship setting.

* This is a measure that was originally applied in a chronic care setting, but it could be adapted for a primary care setting.*
References


References

Web Sites


Appendix A. USPSTF Clinical Preventive Services Included in the Measurement Framework

Table A-1 presents a listing of the services determined to be feasible to deliver in nonclinical settings. These services were guided by the U.S. Preventive Services Task Force (USPSTF) A and B recommendations.

Table A-1. USPSTF clinical preventive services determined to be feasible to deliver in nonclinical settings

<table>
<thead>
<tr>
<th>Preventive service</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol misuse counseling</td>
<td>The USPSTF recommends screening and behavioral counseling interventions to reduce alcohol misuse by adults, including pregnant women, in primary care settings.</td>
</tr>
<tr>
<td>Breastfeeding counseling</td>
<td>The USPSTF recommends interventions during pregnancy and after birth to promote and support breastfeeding.</td>
</tr>
<tr>
<td>Obesity screening and counseling – adults</td>
<td>The USPSTF recommends that clinicians screen all adult patients for obesity and offer intensive counseling and behavioral interventions to promote sustained weight loss for obese adults.</td>
</tr>
<tr>
<td>Obesity screening and counseling – children</td>
<td>The USPSTF recommends that clinicians screen children aged 6 years and older for obesity and offer them or refer them to comprehensive, intensive behavioral interventions to promote improvement in weight status.</td>
</tr>
<tr>
<td>Screening for and management of obesity in adults</td>
<td>The USPSTF recommends that clinicians screen for obesity. Patients with a body mass index (BMI) of 30 kg/m2 or higher should be offered or referred to intensive, multicomponent behavioral interventions.</td>
</tr>
<tr>
<td>Sexually transmitted infections (STIs) counseling</td>
<td>The USPSTF recommends high-intensity behavioral counseling to prevent sexually transmitted infections (STIs) for all sexually active adolescents and for adults at increased risk for STIs.</td>
</tr>
<tr>
<td>Tobacco use counseling and interventions – non-pregnant adults</td>
<td>The USPSTF recommends that clinicians ask all adults about tobacco use and provide tobacco cessation interventions for those who use tobacco products.</td>
</tr>
<tr>
<td>Tobacco use counseling - pregnant women</td>
<td>The USPSTF recommends that clinicians ask all pregnant women about tobacco use and provide augmented, pregnancy-tailored counseling to those who smoke.</td>
</tr>
<tr>
<td>Behavioral counseling in primary care to promote physical activity</td>
<td>The USPSTF concludes that the evidence is insufficient to recommend for or against behavioral counseling in primary care settings to promote physical activity.</td>
</tr>
</tbody>
</table>
This page intentionally left blank.
Appendix B. National Quality Measures Clearinghouse Data Sources

The data sources are based on the National Quality Measures Clearinghouse (AHRQ, 2011) full listing of data sources.

- **Administrative Clinical Data:** Data such as enrollment or eligibility information, claims information, and managed care encounters. The claims and encounters may be for hospital and other facility services, professional services, prescription drug services, laboratory services, and so on, gathered from billing codes or other coding systems. This refers to information that is collected, processed, and stored in automated information systems.

- **Administrative Management Data:** Data that describe attributes of delivery organizations, staff, equipment, nonclinical operations, and financing.

- **Clinical Training Documentation:** The recording of the details of educational and related activities intended to augment the skills and knowledge of clinical personnel.

- **Documentation of Organizational Self-Assessment:** An organization’s recordkeeping of its identifiable strengths and noticeable gaps in agency performance. The assessment serves to provide agencies with the means to evaluate and understand their own systems and program operations in order to strengthen the services delivered to the community and gain accreditation.

- **Electronic Health/Medical Record:** In health informatics, an electronic medical record (EMR) is considered to be one of several types of electronic health records (EHRs), but EMR and EHR are also used interchangeably. EHRs are sometimes defined as including other systems that keep track of medical information, such as practice management software that facilitates the day-to-day operations of a medical practice. Such software frequently allows users to capture patient demographics, schedule appointments, maintain lists of insurance payers, perform billing tasks, and generate reports.

- **External Audit:** A review of a health care organization by a separate organizational entity that examines structures in the health care setting (e.g., facilities, staffing, or the availability of drugs and equipment) or the management of particular clinical or administrative processes.

- **Flowsheet:** A prospectively maintained tabular or graphic summary in a patient record of changes over time in clinical factors or patient care such as the patient’s vital signs, preventive services delivered, or medications prescribed.

- **Health Professional Survey:** An investigation aimed at gathering information from health professionals to search and disseminate information relating to their professions.
Appendix B
National Quality Measures Clearinghouse
Data Sources

- Inspections/Site Visits: A formal visit to a hospital or health care facility by representatives from an accrediting organization.

- Laboratory Data: Data collected from a site equipped for experimentation, observation, testing and analysis, or practice in a field of study. In regards to clinical practice, laboratory data may provide information on diagnosis, prognosis, prevention, or treatment of disease based on close examination of the human body.

- Medical Record: That part of a client’s health record that is made by physicians and is a written or transcribed history of various illnesses or injuries requiring medical care, inoculations, allergies, treatments, prognosis, and frequently health information about parents, siblings, occupation, and military service. The record may be reviewed by a physician in diagnosing the condition.

- National Public Health Data: Public health data include national health status (gathered through birth and death certificates, hospital discharge diagnoses, other epidemiologic sources), communicable disease (food/water/air/waste/vector borne), environmental health risks, presence of and use of health care facilities and providers, preventive services, and other information identified by the nation as helpful for planning.

- Organizational Policies and Procedures: Refers to the principles and methods, whether formalized, authorized, or documented, that enable people affiliated with an organization to perform in a predictable, repeatable, and consistent way.

- Patient/Individual Survey: An instrument that assesses patients’ perspectives on any of the following: their health and the care they receive, including the level of patients’ satisfaction, or patients’ understanding of their health status.

- Pharmacy Data: A database that provides information on prescription and/or dispensing of drug and non-drug products that may be obtained from a pharmacy (retail or health care institution-based).

- Provider Characteristics: Specific descriptive information about the clinician provider or the facility caring for the patient.

- Region, County, or City Public Health Data: Public health data include community health status on a region/county/city level (gathered through birth and death certificates, hospital discharge diagnoses, local surveys, other epidemiologic sources), communicable disease (food/water/air/waste/vector borne), environmental health risks, presence of and use of health care facilities and providers, preventive services, and other information identified by the local community as helpful for planning.

- Registry Data: An organized system that uses observational study methods to collect uniform data (clinical and other) to evaluate specified outcomes for a population defined by a particular disease, condition, or exposure, and that serves one or more predetermined scientific, clinical, or policy purposes.
• Special or Unique Data: A data source that is unique to an organization and inaccessible to outside entities or persons.

• State/Province Public Health Data: Public health data include community health status on a State/province level (gathered through birth and death certificates, hospital discharge diagnoses, statewide and local surveys, other epidemiologic sources), communicable disease (food/water/air/waste/vector borne), environmental health risks, presence of and use of health care facilities and providers, preventive services, and other information identified by the community as helpful for planning.

• Other: Another data source that does not fit any of the criteria listed above.

• Not Specified: The reference/Web site did not indicate how measure data were to be collected.
This page intentionally left blank.
Appendix C. Environmental Scan Process

The environmental scan focused on identifying previous work that may be relevant to measuring the structures and processes surrounding effective clinical-community relationships for prevention. A resource was deemed relevant if it highlighted some form of relationship between a clinical and community resource and evaluated the relationship in some manner. Beyond surveying published peer-reviewed articles, unpublished literature such as dissertations, white papers, and other forms of publicly available information were included in the search. The environmental scan was performed in two phases—a literature review and a Web search. The scan did not evaluate identified resources for the quality of methods used or research rigor.

For the literature review, iterative database searches were conducted. Various combinations of terms were searched and citation titles and abstracts were scanned to determine if the content related to measures of clinical-community relationships. As part of the search strategy, the following search parameters and terms were employed to facilitate the scanning of databases:

**Search Parameters.** The following parameters for database searches of published literature were employed:

- English language;
- 2000–present;
- United States and international; and
- Exclusion of editorials, commentaries, and book reviews.

**Search Terms.** A list of keywords was generated and then grouped into four categories:

- Terms relating to community resources;
- Terms dealing with clinical practices;
- Terms describing relationships; and
- Terms related to measures.

Table C-1 contains a complete list of search terms used for both the literature review and the Web search.
To operationalize the search, Boolean operators (i.e., AND, OR) between each of the keywords and their categories were used. Within an article, the goal was to find at least one of the terms within the column; thus, using “OR” between all of the terms within a column. There was also an interest in the combination of terms across columns, therefore the “AND” term was used for terms across columns. For example, a search incorporating both concepts of measurement and relationships would proceed as follows: (“effectiveness” OR “metric” OR “measurement” OR “evaluation”) AND (“referrals” OR “sharing” OR “system” OR “linkage”). Further, variants of the search terms were included; for example, “medical home” and “medical homes.” Along with the four categories mentioned, exact phrases were searched, including “clinical community relationships,” “clinical community linkages,” and “clinical community partnerships.”

Experts were also identified in the field of clinical-community relationships and a search of publications since 2007 was conducted; these experts are listed in Table C-2.
Table C-2. Experts identified for author search

<table>
<thead>
<tr>
<th>Expert</th>
<th>Expert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melinda K. Abrams, MS</td>
<td>Russell E. Glasgow, PhD</td>
</tr>
<tr>
<td>Richard C. Antonelli, MD, MS, FAAP</td>
<td>Lawrence W. Green, DrPH</td>
</tr>
<tr>
<td>Cheryl B. Aspy, MEd, PhD</td>
<td>Charles J. Homer, MD, MPH</td>
</tr>
<tr>
<td>Stephanie B. Bailey, MD, MSHSA</td>
<td>David Labby, MD, PhD</td>
</tr>
<tr>
<td>Leslie M. Beitsch, MD, JD</td>
<td>Therese Miller, DrPH</td>
</tr>
<tr>
<td>Peter Beilenson, MD</td>
<td>Amy Schultz, MD, MPH</td>
</tr>
<tr>
<td>Allen D. Cheadle, PhD</td>
<td>Ruta K. Valaitis, RN, PhD</td>
</tr>
<tr>
<td>Rebecca S. Etz, PhD</td>
<td>Claire Weschler, MEd, CHES</td>
</tr>
<tr>
<td>Janice L. Genevro, PhD</td>
<td></td>
</tr>
</tbody>
</table>

Using the search terms from Table C-1 and the parameters mentioned above, the following electronic databases were scanned:

- **Applied Social Sciences Index and Abstracts (ASSIA).** Covers health, social services, psychology, sociology, economics, politics, race relations, and education literature.

- **FirstSearch.** A Web-based online information service that provides access to bibliographic and full-text databases in all subject disciplines.

- **Health and Psychosocial Instruments (HAPI).** Provides information on measurement instruments (i.e., questionnaires, rating scales, tests, index measures, coding schemes, checklists) in the fields of public health and medicine, psychosocial sciences, communication, organizational behavior, and others. HAPI records do not contain the actual instruments, but often direct the researcher to sources of measures needed for research, assessment, and evaluation.

- **PsycINFO.** Covers international literature in the psychological, psychiatric, social, behavioral, and health sciences.

- **PUBMED.** Covers all aspects of health and medical literature.

For the Web search, using similar search queries to those for the database, the first 20 links were reviewed for possible clinical-community relationships. Further, the Web sites highlighted in Table C-3 were reviewed.
### Table C-3. Targeted organization Web sites

<table>
<thead>
<tr>
<th>Measurement Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Quality Measures Clearinghouse (NQMC)</td>
</tr>
<tr>
<td>National Quality Forum (NQF)</td>
</tr>
<tr>
<td>Continuous Enhancement of Quality Measurement (CEQM)</td>
</tr>
<tr>
<td>National Committee for Quality Assurance (NCQA)</td>
</tr>
<tr>
<td>Physician Consortium for Performance Improvement (PCPI)</td>
</tr>
<tr>
<td><strong>Government Agencies</strong></td>
</tr>
<tr>
<td>Agency for Healthcare Research and Quality (AHRQ)</td>
</tr>
<tr>
<td>Centers for Disease Control and Prevention (CDC)</td>
</tr>
<tr>
<td>Community Preventive Services Task Force</td>
</tr>
<tr>
<td>Health Resources and Services Administration (HRSA)</td>
</tr>
<tr>
<td><strong>Public and Private Organizations</strong></td>
</tr>
<tr>
<td>Robert Wood Johnson Foundation (RWJF)</td>
</tr>
<tr>
<td>W.K. Kellogg Foundation (WKKF)</td>
</tr>
<tr>
<td>Kaiser Family Foundation (KFF)</td>
</tr>
<tr>
<td><strong>Practitioner and Public Health-Related Organizations</strong></td>
</tr>
<tr>
<td>American Medical Association (AMA)</td>
</tr>
<tr>
<td>American Academy of Family Physicians (AAFP)</td>
</tr>
<tr>
<td>American Public Health Association (APHA)</td>
</tr>
<tr>
<td>American College of Preventive Medicine (ACPM)</td>
</tr>
<tr>
<td>American Academy of Pediatrics (PPC)</td>
</tr>
<tr>
<td><strong>Other Prevention Partnerships</strong></td>
</tr>
<tr>
<td>Association of Prevention Teaching and Research (APTR)</td>
</tr>
<tr>
<td>Association of State and Territorial Health Officials (ASTHO)</td>
</tr>
<tr>
<td>National Association of County and City Health Officials (NACCHO)</td>
</tr>
</tbody>
</table>

The following specific inclusion/exclusion criteria were used to select relevant resources for further review:

- Must contain a linkage or relationship between a clinical setting (internal medicine, pediatrics, family practice, OB/GYN) and a community health organization;
- Must contain a description of a measurement or an evaluation of the linkage/relationship between the clinical setting and the community health organization; and
- Should not only report on the evaluation of the health outcomes of patients/participants (e.g., changes in body mass index [BMI], weight loss, quit cessation rates, etc.) – those that did were not included in the list of relevant articles.
Once resources were identified, a review team determined whether the selected articles or Web Sites contained measures of the structures and processes surrounding effective clinical-community relationships for prevention. In order to determine this, the articles were analyzed for the following information:

- **Clinical Setting.** What clinical setting participated in the relationship? The clinical setting must focus on primary care.

- **Prevention.** What prevention strategy is the relationship addressing? Specifically, which U.S. Preventive Services Task Force recommendation(s)?

- **Community Setting.** What nonclinical community resource/entity participated in the relationship?

- **Nature of Relationship.** Is there a formal relationship between/among the clinical setting and community? Are resources shared? What processes fostered the relationship?

- **Denominator.** Specifies which members of the eligible population are to be counted in the denominator.

- **Numerator.** A count of the members of the denominator who achieved specified outcomes.

- **Data Source(s).** How are the data collected? This may include claims data, community assessments, or surveys.

A total of 534 unduplicated abstracts were reviewed and, ultimately, 9 articles describing 20 measures were included from the literature search. An additional 4 measures were found in the Internet search for a combined total of 24 measures. Initially, only articles describing a linkage or relationship between a primary care clinical setting and a nonclinical community organization were included. Articles that focused on mental health settings were ultimately included, however, but only when it was determined that measures from these articles could be adapted for primary care settings.
Appendix D. Clinical-Community Relationships Measures Instruments

Safety Check Parental/Guardian Post-Visit Survey

*C CRM Atlas Measure(s): 1, 2, 3*

Contact Information:

Contact information unavailable.

Copyright Details:

These surveys were developed by Dr. Shari Barkin in conjunction with colleagues from the Pediatric Research in Office Settings (PROS) network. The study was funded by the National Institute of Child Health and Human Development (R01 HD 42260), the Agency for Healthcare Research and Quality, the Health Resources and Services Administration Maternal and Child Health Bureau, the Robert Wood Johnson Generalist Faculty Scholars Program, and the American Academy of Pediatrics’ (AAP) Friends of Children Fund. They are reprinted with permission from the AAP.
PARENT/GUARDIAN POST-VISIT SURVEY

Please answer before leaving your doctor’s office.

1. **What topics did your child’s doctor discuss with you today? (please check all that apply)**
   - [ ] TV/computer games/video watching
   - [ ] Discipline
   - [ ] Bike helmets
   - [ ] Drowning prevention
   - [ ] Reading aloud
   - [ ] Family fights
   - [ ] Care of teeth
   - [ ] Car seats/seat belts
   - [ ] Smoking around your child
   - [ ] Guns around children
   - [ ] Storing medicines or home cleaning products
   - [ ] Child nutrition
   - [ ] Regular exercise
   - [ ] None of the above

2. **Did you receive a … (check one box for each)**
   a. Recommendation Guide? [ ] Yes [ ] No
   b. Minute Timer? [ ] Yes [ ] No
   c. Cable Lock? [ ] Yes [ ] No
   d. Local Agency Referral? [ ] Yes [ ] No

   Please answer these next questions on a scale from 1-5, with “1” indicating “Not at all interested” and “5” indicating “Very interested. **(check one box for each question)**

3. **How interested are you in …**

<table>
<thead>
<tr>
<th></th>
<th>Not at all interested</th>
<th>Somewhat interested</th>
<th>Neutral</th>
<th>Interested</th>
<th>Very interested</th>
<th>Doesn't apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. using the minute timer for time-out/cool-down periods?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>b. using the minute timer to limit media use?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>c. installing a cable lock(s) on gun(s)?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>d. following up on the local agency referral?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>
4. **How confident are you that you will be able to use a ...**

<table>
<thead>
<tr>
<th></th>
<th>Not at all interested</th>
<th>Somewhat interested</th>
<th>Neutral</th>
<th>Interested</th>
<th>Very interested</th>
<th>Doesn't apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. using the minute timer for time-out/cool-down periods?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>b. using the minute timer to limit media use?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>c. a cable lock(s)</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>d. local agency referral?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Thank you! We’ll contact you in 1 month and 6 months.

G1 8/26
Safety Check Practitioner Post-Visit Survey

CCRM Atlas Measure(s): 4, 5, 6

Contact Information:

Contact information unavailable.

Copyright Details:

These surveys were developed by Dr. Shari Barkin in conjunction with colleagues from the Pediatric Research in Office Settings (PROS) network. The study was funded by the National Institute of Child Health and Human Development (R01 HD 42260), the Agency for Healthcare Research and Quality, the Health Resources and Services Administration Maternal and Child Health Bureau, the Robert Wood Johnson Generalist Faculty Scholars Program, and the American Academy of Pediatrics’ (AAP) Friends of Children Fund. They are reprinted with permission from the AAP.
FOR THE PRACTITIONER:
Please answer these questions now that you are finished with this child’s exam.

1. When was this patient’s first contact with your practice? /________ Month Year

2. This patient is: (select best response)
   - [ ] My primary care patient
   - [ ] In our practice
   - [ ] Self-referred (from another practice)
   - [ ] Referred by another provider
   - [ ] Other: _______________________________

3. What topics did you discuss today with this patient’s family? (check all that apply)
   - [ ] TV/computer games/video watching
   - [ ] Discipline
   - [ ] Bike helmets
   - [ ] Drowning prevention
   - [ ] Reading aloud
   - [ ] Family fights
   - [ ] Care of teeth
   - [ ] Car seats/seat belts
   - [ ] Smoking around your child
   - [ ] Guns around children
   - [ ] Storing medicines or home cleaning products
   - [ ] Child nutrition
   - [ ] Regular exercise
   - [ ] None of the above

4. Did you provide a . . . (check one box for each)
   a. Recommendation Guide? [ ] Yes [ ] No
   b. Minute Timer? [ ] Yes [ ] No
   c. Cable Lock? [ ] Yes [ ] No
      If yes, how many? __________
   d. Referral? [ ] Yes [ ] No [ ] Unable (no appropriate resources in community)
      If yes, what was it for? (check all that apply)
      - [ ] Behavioral Problems
      - [ ] Anger Management
      - [ ] Other _________________
      If yes, to… (check all that apply)
      - [ ] Mental Health Professional (e.g., psychologist)
      - [ ] Parenting Classes
      - [ ] Local Agency Resource (e.g., Boys & Girls Club)
      - [ ] Other _________________
Please answer these next questions on a scale from 1-5, with “1” indicating “Not at all interested” and “5” indicating “Very interested.” (check one box for each question)

5. **How interested do you think the family was in following your recommendations about ...**

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Not at all interested</th>
<th>Somewhat interested</th>
<th>Neutral</th>
<th>Interested</th>
<th>Very interested</th>
<th>Doesn’t apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. using the minute timer for time-outs/cool-down periods?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. using the minute timer to limit media use?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. using a cable lock(s)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. following up on the local agency referral?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. **How confident were you in your ability to instruct this patient-family in the proper use of ...**

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Not at all confident</th>
<th>Somewhat confident</th>
<th>Neutral</th>
<th>Confident</th>
<th>Very confident</th>
<th>Doesn’t apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. minute timer for time-outs/cool-down periods?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. minute timer to limit media use?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. a cable lock(s)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. local agency referral?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PLEASE GIVE THIS SURVEY TO YOUR OFFICE COORDINATOR THANK YOU!
Appendix D
Clinical-Community Relationships Measure Instruments

Wrap-Around Observation Manual – Second Version

CCRM Atlas Measure(s): 7, 8

Contact Information:

Contact information unavailable.

Copyright Details:

The copy of the measure instrument that follows is reprinted with permission from Michael Epstein, Ed.D.
1. Information about resources/interventions in the area is offered to the team.

   The team mentions at least one specific resource/intervention (e.g., A.A, vocational rehab, Teammates) to the parent or asks if the parent is involved or needs community resources/intervention. The team provides specific information about accessing these resources/interventions if the parent expresses a wish to utilize the resource/intervention. *Parent need not be present for a Yes response to occur.

   **SCORING**

   1. **Yes** if the team mentions or asks if the parent is involved in resources/interventions. Score **Yes** if the team asks about or mentions resources/interventions and the parent is already involved or does not show an interest in such services, and thus the team does not provide contact information.

   2. **No** if the team mentions support resources/interventions but does not provide a contact person/number or the parent expresses an interest in accessing the resource/intervention, but it is not followed up by the team.

2. Plan of care includes at least one public and/or private community service/resource.

   The team specifically identifies at least one public (e.g., HHS, Lincoln Public Schools, SSI) and/or private (e.g., private therapists/counselors, drug rehab centers) community service/resource in the plan of care. It is clear that these services are easily accessible from the family’s home community (i.e., no services are far from home community).

   **Scoring**

   1. **Yes** only if one public and/or private service is included in the plan. These agencies must be accessible from the client’s community.

   2. **No** if at least one public and/or private services in the client’s community are not included in the plan.
3. **Plan of care includes at least one informal resource.**

   *The team specifically identifies at least one informal resource (e.g., YMCA, Big Brother/Big Sister, recreation program, family member providing respite). It is clear that the resource is not provided by a public agency. If service is purchased by flexible funds it is a formal resource.*

   **Scoring**

   1. **Yes** only if one informal resource is included in the plan.
   2. **No** if at least one informal resource in the child/family community is not included in the plan.

4. **When residential placement is discussed, team chooses community placements for child (children) rather than out-of-community placements, whenever possible.**

   *The team discusses, recommends, and plans for community placement. Out-of-community placements are not recommended or planned for unless no home community alternative exists.*

   **Scoring**

   1. **Yes** if the placement the team recommends and plans for the child/family is in the community.
   2. **No** if the team plans for a placement that is out of the community.
   3. **NA** if residential placement is not discussed.
5. Individuals (non-professionals) important to the family are present at the meeting.

   Individuals important to the family and who are from the family’s community or 
natural support system are present at the meeting. This may include extended family 
members, community leaders, ministers, and friends. However, professional service 
providers (e.g., therapists, homemakers) are not considered here.

Scoring

1. Yes if at least one individual like those described above attends the meeting.

2. No if no individual like those described above attends the meeting.

6. If an initial plan of care meeting, the parent is asked what treatments or 
interventions he/she felt worked/didn’t work prior to F3.

   The team explicitly asks the parent what services, treatments or interventions (e.g., 
drug treatment, psychotherapy, medication, vocational training, token economy) that 
have been attempted in the past worked or did not work. Treatments or interventions 
include only formal services received by the family.

Scoring

1. Yes if the team asks the parent about previous services, intervention(s) or 
treatments.

2. No if question is not asked.

3. NA if family has never received services, or, if this is not an initial plan of care 
meeting, past events may not be discussed.
7. **Care Coordinator advocates for services and resources for the family (e.g., identifies and argues for necessary services).**

   *At least one Care Coordinator assertively identifies (i.e., continues to state the importance of) a necessary service for the family and is persistent in securing (or persists in attempting to secure) that service. If other professionals disagree, at least one Care Coordinator continues to convey the importance of that service or resource to the team.*

**Scoring**

1. **Yes** if at least one Care Coordinator worker assertively identifies (to the team) a needed service or intervention for the family member AND continues to pursue the importance of that service (when necessary) even if others (e.g., team members) disagree.

2. **No** if needed services or interventions are not identified by a Care Coordinator worker OR services or interventions are identified but their importance is not pointed out when necessary.

8. **All services needed by family are included in plan (i.e., no needed services were not offered).**

   *All services the family and team identifies as necessary for the family are written into the plan of care. The team does not exclude a needed service from the plan.*

**Scoring**

1. **Yes** if all identified needed services are included in the plan of care.

2. **No** if the team excludes from the plan of care any service needed by the family.
9. **Barriers to services or resources/interventions are identified and solutions discussed.**

   If barriers were identified team members discuss possible solutions. Examples of barriers include transportation, funding, location, eligibility, etc. Solutions may not be possible but at least one solution must be discussed.

**Scoring**

1. **Yes** if at least one barrier identified and solution discussed.
2. **No** if at least one barrier identified and no solution discussed.
3. **NA** does not apply if no barriers were identified.

10. **The steps needed to implement the plan of care are clearly specified by the team.**

   The team clearly specifies the steps needed to implement the plan. Specific services, resources, interventions, or other actions are discussed in specific behavioral/operational terms. Examples would include the steps needed to attend outpatient therapy once a week, or attend drug therapy once a week, or how to obtain public aid or food stamps.

**Scoring**

1. **Yes** if the team clearly specifies (i.e., in behavioral/operational terms) how the plan of care will be implemented.
2. **No** if the steps for achieving service plan goals are not specified, or if they are specified only in general terms, without mention of specific interventions, services, resources and/or actions to be taken.
11. **Strengths of family members are identified and discussed at the meeting.**

   Care Coordinators identify and discuss the behavioral, emotional, familial, and/or social strengths of individual family members or of the family unit. A strength can include a skill, action, and/or knowledge competency.

   **Scoring**

   1. **Yes** if a strength of at least one family member is identified and addressed at the meeting.

   2. **No** if no strength of at least one family member is identified and addressed at the meeting. Merely complimenting a youth in a general manner is scored a No.

12. **Plan of care that includes life domain(s), goals, objectives, and resources/interventions is discussed (or written).**

   Life domain(s), goals, objectives, and resources/interventions necessary for child/family’s plan of care are discussed.

   **Scoring**

   1. **Yes** if the goals(s), objectives, and resources/interventions for at least one life domain are completed/discussed and agreed upon by team members.

   2. **No** if a goal(s), objective, and resource/intervention for at least one life domain is excluded or at least one life domain is not completed.

   3. **NA** if this is a discharge meeting.
13. **Plan of care goals, objectives, or interventions are based on family/child strengths.**

   Team develops (discusses or writes) plan of care based on strengths of the child or family member.

   **Scoring**
   1. **Yes** if at least one goal or objective in plan is developed (or written) based on at least one strength of the child or a family member.
   2. **No** if plan of care is developed (or written) without being based on child or family strength.
   3. **NA** if this is a discharge meeting.

14. **Safety plan/crisis plan developed/reviewed.**

   Safety plan/crisis plan to protect the safety of the child/family or to implement in the event of a crisis is discussed, written or reviewed. Crisis may include but is not limited to substance abuse, running away, hospitalization, domestic violence, etc.

   **Scoring**
   1. **Yes** if the team clearly specifies (i.e., in behavioral/operational terms) the goals, objectives and resources/interventions in discussing, writing or reviewing of a safety plan/crisis plan.
   2. **No** if the steps for implementing a safety plan/crisis plan are not specified, or if they are specified only in general terms without mention of specific interventions, resources, or services.
   3. **NA** does not apply if child/family safety is not an issue or if child/family are not expected to experience a crisis.
15. Convenient arrangements for family’s presence at the meeting are made (e.g., location, time, transportation, day care arrangements).

*F3 staff arranged the meeting at a time convenient to at least one family member and transportation to the meeting and day care were offered, if necessary.*

**Scoring**

1. **Yes** if it is evident that F3 workers scheduled the meeting at a time that at least one family member was available to attend AND transportation and day care was offered if the family needed it.

**NOTE:** If this is not alluded to, the observer may have to ask the family members if this occurred (AFTER the meeting).

2. **No** if it is not evident that efforts were not made by F3 staff to schedule the meeting at a time convenient to family OR score **No** if they provided a time that was convenient but neglected to offer transportation or day care if needed.

3. **NA** if observer cannot ascertain whether or not family was consulted about the meeting or observer cannot speak with family member or if child/family member is not present.

16. The parent/child is seated or invited to sit where he/she can be included in the discussion.

*The parent/child is seated where he/she is not isolated from the rest of the group and is seated in a size-appropriate chair. If the parent/child does not initially sit with the group, the team invites him/her to do so.*

**Scoring**

1. **Yes** if the parent/child is seated where he/she is not isolated from the rest of the group and is seated in a size-appropriate chair. Also, **Yes** if the parent is seated away from the group but has been invited to sit with the group.

2. **No** if the parent/child is not seated with the group and was not invited to do so. Also, **No** if parent/child is seated in a chair that is too small.

3. **NA** if child/family member is not present.
17. **Family members are treated in a courteous fashion at all times.**

   *Examples include, but are not limited to: The team establishes eye contact with family members, family is listened to, the team speaks to family members in a calm, non-confrontational tone of voice.*

   **Scoring**

   1. **Yes** if the team interacts with the family courteously at all times.

   2. **No** if the team is not courteous to the family at all times (give specific instance by writing on form.)

   3. **NA** if family members are not present.

18. **The family’s perspective is presented to professionals from other agencies.** (*If NA, include 25, 28, 29*)

   *Care Coordinator(s) ensures that the family’s view of their problems/situation is presented to all other professionals at the meeting. This can be either a) Care Coordinator speaks on behalf of the family or b) family members are given time to speak for themselves. Family’s perspective includes such areas as identifying needs, strengths, goals, services required, etc.*

   **Scoring**

   1. **Yes** if the family’s point of view is expressed by either Care Coordinator or the family themselves.

   2. **No** if the family’s point of view is not discussed at any time in the meeting.

   3. **NA** if other professionals are not present.
19. The family is asked what goals they would like to work on.

   The team explicitly asks the family about what goals they would like help with. This could include (but is not limited to) asking the family what they would like to work on, improve, or change.

**Scoring**

1. **Yes** if the team asks this type of question.
2. **No** if question is not asked.
3. **NA** if the family is not present.

20. The parent is asked about the types of services or resources/interventions he/she would prefer for his/her family.

   The team specifically asks the parent about the types of services or resources/interventions he/she would or would not want to be used with their family. Examples include medication, psychotherapy, homemaker services, drug counseling, housing, vocational training.

**Scoring**

1. **Yes** if the team asks the parent about the services or resources/interventions he/she would prefer.
2. **No** if question is not asked.
3. **NA** if the child or family is not present.
21. **Family members are involved in designing the plan of care.**

   *The family’s ideas about the plan of care are elicited by the team. The family is allowed to contribute ideas in the formulation of the plan of care. The team specifically asks the parent/child to participate in the design of the plan of care.*

**Scoring**

1. **Yes** if the team allows and asks the parent to contribute ideas to the design of the plan of care.

2. **No** if the team does not allow nor asks family members contributions.

3. **NA** if family is not present.

22. **In the plan of care, the family and team members are assigned (or asked) tasks and responsibilities that promote the family’s independence (e.g., accessing resources on own, budgeting, maintaining housing).**

   *Team members write goals or objectives in the plan of care that require family members to complete tasks and accept responsibilities that will help build their independence from formal service providers. Examples include taking GED classes, enrolling in vocational training, learning to budget, etc.*

**Scoring**

1. **Yes** if at least one family member is assigned tasks and responsibilities that will enable him/her to increase their level of independence from formal service providers.

2. **No** if the team does not assign tasks/responsibilities to any family member in the plan.

3. **NA** if family is not present.
23. The team plans to keep the family intact or to reunite the family.

The team writes goals or objectives in the plan of care that outline the steps necessary for either a) keeping the family intact OR b) reuniting family members in placement. Look at plan of care (permanency plan) to see that it states that the family will be reunited or remain intact.

**SCORING**

1. **Yes** if goals or objectives are written in the plan of care to fulfill either of the above criteria. (This question refers to the child remaining or reuniting with one or both of the parents. A child moving in with a brother or sister would not qualify as a Yes.)

2. **No** if the team does not include goals or objectives in the plan of care that is not directed towards family preservation (keeping family intact, reunification).

3. **NA** if reunification is not an option for the family (e.g., parents rights have been severed, permanent foster care is the child’s goal) or if child is age of majority.

24. Family members voice agreement/disagreement with plan of care.

As the plan of care is being developed a family member states whether he/she agree/disagree with the plan’s goals, objectives, and/or resources/interventions. Family member(s) statements may be unsolicited or solicited by Care Coordinator or team member.

**SCORING**

1. **Yes** if the family member voices opinion with plan of care’s goals, objectives, and/or interventions/resources.

2. **No** if the family member does not voice an opinion or Care Coordinator does not solicit opinion.

3. **NA** if the family member is not present.
25. **Staff from other agencies who care about or provide resources/interventions to the family are at the meeting.**

   *At least one professional (other than F3 care coordinator) that provides services is present at the meeting.*

   **Scoring**

   1. **Yes** if at least one professional from another agency is present at the meeting.
   2. **No** if no outside professional(s) attend the meeting.

26. **Staff from other facilities or agencies (if present) have an opportunity to provide input.**

   *If professionals from other facilities or agencies are present, the team specifically asks them to provide input.*

   **Scoring**

   1. **Yes** if professionals volunteer input for the plan, or if the team specifically asks other non-F3 professionals to provide input, even if other professionals do not provide any.
   2. **No** if the team does not ask for input from other non-F3 professionals present at the meeting.
   3. **NA** if professionals from other agencies are not present at meeting.
27. **Informal supports (if present) have an opportunity to provide input.**

*If informal supports are present, the team specifically asks them to provide input.*

**Scoring**

1. **Yes** if informal supports volunteer input for the plan, or if the team specifically asks at least one informal support to provide input.

2. **No** if the informal supports do not volunteer input for the plan or if the team does not solicit input from at least one informal support.

3. **NA** if informal supports are not present.

28. **Problems that can develop in an interagency team (e.g., turf problems, challenges to authority) are not evident or are resolved.**

*There are no obvious conflicts among team members OR if conflicts between professionals arise, team members identify them and make every effort to achieve their resolution.*

**Scoring**

1. **Yes** if there are no conflicts among professionals OR if problems arise, Care Coordinator acknowledges them and makes reasonable efforts to resolve them.

2. **No** if conflicts arise and attempts are not made to resolve them OR if conflicts are identified but there is little effort towards finding agreement.

3. **NA** if professionals from other agencies are not present.
29. **Staff from other agencies describes support resources/interventions available in the community.**

   *If professionals from other agencies are present, they volunteer or are asked by the Care Coordinator to identify support resources/interventions available in the community.*

   **Scoring**

   1. **Yes** if a professional provides information (either voluntarily or being solicited) on support resources/interventions available in the community.

   2. **No** if a professional does not provide information on support resources/interventions in community or if such information is not solicited by Care Coordinator or other team member.

   3. **NA** if professionals from other agencies are not present.

30. **Statement(s) made by a staff member or an informal support indicates that contact/communication with another team member occurred between meetings.**

   *Verbal (e.g., telephone, in person) or written communication between two or more team members (i.e., professional/informal supports) occurred between the last and present meeting.*

   **Scoring**

   1. **Yes** if verbal or written communication occurred between two or more team members.

   2. **No** if verbal or written communication did not occur between two or more team members or it is not evident.

   3. **NA** if professionals/informal supports are not present or initial meeting.
31. Availability of alternative funding sources is discussed before flexible funds are committed.

Team member(s) discuss alternative sources of funding (e.g., Medicaid, community grants, United Way, juvenile justice) before using flexible funds. If it is not clear whether flex funds were being discussed or used ask the care coordinator.

Scoring

1. Yes if at least one alternative funding source is discussed.
2. No if no alternative funding source is discussed.
3. NA if funding of services or resources/interventions is not discussed.

32. Termination of F3 Services is discussed because of the multiplicity or severity of the child’s/family’s behaviors/problems.

Team discusses termination of F3 services based solely on the severity or number of difficult behaviors/problems experienced by the family or any of its members.

Scoring

1. Yes if termination is discussed.
2. No if termination is not discussed.
3. NA mark NA if termination is discussed because of funding issues, or if a family is, at that time, not presenting significant behavioral issues.
33. **Termination of other services (non-F3 services) is discussed because of the multiplicity or severity of the child’s/family’s behavioral problems.**

   *Team discusses termination of other services (non-F3) based solely on the severity or number of difficult behaviors/problems experienced by the child/family.*

**Scoring**

1. **Yes** if termination of other services is discussed.
2. **No** if termination of other services is not discussed.
3. **NA** mark NA if a family is, at that time, not presenting significant behavioral issues.

34. **For severe behavior challenges (e.g., gangs, drugs) discussion focuses on safety plans/crisis plans (e.g., services and staff to be provided) rather than termination.**

   *When discussing severe behavior problems (e.g., gang activity or drug abuse), Care Coordinator talks about possible solutions, additional services or increasing intensity of services. Discharge is not identified as an option.*

**Scoring**

1. **Yes** if team discusses, writes or refers to the safety/crisis plan.
2. **No** if team does not discuss, write or refer to the safety/crisis plan, or if termination is discussed.
3. **NA** does not apply if severe behavior challenges are not discussed.
35. **The plan of care goals are discussed in objective, measurable terms.**

   *The goals that are discussed define changes in behavior, living situation, placement, etc. Goals are described in objective, behavioral terms. Target behaviors are clearly identified and defined in behavioral terms.*

   **Scoring**

   1. **Yes** if plan of care goals are discussed in a way that meets the criteria in the above definition.

   2. **No** if plan of care goals are not discussed, or if they are discussed only in general, non-specific terms.

   3. **NA**, if a discharge meeting.

36. **The criteria for ending F3 involvement are discussed.**

   *The team discusses the criteria in terms of the discharge from services (i.e., from F3). Level of achievement is clearly defined in behavioral terms. The team discusses the time period during which services will be provided.*

   **Scoring**

   1. **Yes** if the team discusses the criteria for discharge of services in clear, specific, and behavioral terms. The discussion should be focused on specific criteria that need to be achieved within a specified time period.

   2. **No** if termination of services is not discussed, or if it is discussed only in general, non-behavioral terms.

   3. **NA** if the family has received services from F3 for 6 months or less.
37. Objective or verifiable information on child and parent functioning is used as outcome data.

Specific behaviors or actions of the child, parent, and/or other family members are identified and used by team members as a measure to assess whether or not the goals/objectives in the plan of care have been achieved. For example, a parent providing adequate supervision of her children, a parent secures public aid for her/his family, a child’s school attendance increases, etc.

Scoring

1. Yes if team members discuss specific child/parent behaviors and use these behaviors as criteria for rating the client’s progress toward a goal/objective in the plan of care.

2. No if the team does not use child/parent behaviors as criteria for rating client’s progress towards a goal/objective in the plan of care.

38. Key participants are invited to the meeting (i.e., family members, CPS worker, teacher, therapist, others identified by the family).

Care Coordinator has invited the necessary participants to the family meeting. This includes: family members, professionals and paraprofessionals involved with the family, and members of the family’s natural or informal support system or community.

Scoring

1. Yes if it is mentioned or implied that the Care Coordinator has invited at least 2 key people other than F3 staff and immediate family members to the meeting.

NOTE: The observer may need to ask Care Coordinator who was invited AFTER the meeting.

2. No if it is evident that at least two key participants were not invited.

3. NA if a team has not been assembled yet.
39. Current information about the family (e.g., social history, behavioral and emotional status) is gathered prior to the meeting and shared at the meeting (or beforehand).

There is enough basic demographic and current functioning information about the family, such as name, date of birth, current identifying information and current functioning data, so that the meeting can proceed in a timely manner, without undue time being spent gathering this information. It is clear that this information was gathered prior to the meeting and shared with meeting participants (or beforehand).

Scoring

1. **Yes** only if the two criteria (information gathered and shared) in the definition are met.

2. **No** if one of these two criteria is not met.

40. All meeting participants introduce themselves (if applicable) or are introduced.

Everyone present at the start of the meeting states his or her name and agency/occupation (e.g., psychiatrist, probation officer, HHS worker).

Scoring

1. **Yes** only if all meeting participants state their name and agency or occupation (role) at the start of the meeting.

2. **No** if only some of the participants introduce themselves or if they only state their name but not their occupation (role).

3. **NA** does not apply if all team members have worked with family for a reasonable period of time (i.e., 4 months based on enrollment date).
41. The family is informed that they may be observed during the meeting.

_The family is told that he/she may be observed during the meeting by the evaluation staff. The team explains to the parent that the observers are there to assess the Care Coordinator’s performance and that all note taking reflects staff actions, not client information._

NOTE: If not mentioned at meeting, observer will ask parent if they were informed of the observer’s presence prior to the meeting.

**Scoring**

1. **Yes** if the family is told that he/she is being observed and why.
2. **No** if an observer is present and the family is not informed and told why.
3. **NA** if family member is not present OR if the observer has missed the beginning of the meeting, or is unable to ascertain whether or not these criteria have been met.

42. Plan of care is agreed on by all present at the meeting.

_All meeting participants agree to a plan of care by the end of the meeting._

**Scoring**

1. **Yes** if the service plan is agreed upon either implicitly or explicitly by all present.
2. **No** if the service plan is not agreed upon either implicitly or explicitly by all present.

43. Care Coordinator makes the agenda of meeting clear to participants.

_At the beginning of meeting Care Coordinator states the agenda and purpose of meeting to those in attendance._

**Scoring**

1. **Yes** if Care Coordinator verbalizes or hands out printed agenda.
2. **No** if written or verbal agenda is not provided by Care Coordinator.
3. **NA** if the observer has missed the beginning of the meeting.
44. **Care Coordinator reviews goals, objectives, interventions, and/or progress of plan of care.**

   *Present plan of care is reviewed by Care Coordinator for the participants early in the meeting.*

   **Scoring**

   1. **Yes** if Care Coordinator reviews (verbally or in writing) present plan of care for team early in the meeting.
   2. **No** if Care Coordinator does not review present plan or reviews plan later in the meeting.
   3. **NA** if observer has missed the beginning of the meeting, or if an initial meeting.

45. **Care Coordinator directs (or redirects) team to discuss family/child strengths.**

   *Team participants discuss family/child strength(s) at the direction (redirection) of Care Coordinator.*

   **Scoring**

   1. **Yes** if Care Coordinator directs team to talk about specific strength(s) at the beginning of the meeting or later on in the meeting.
   2. **No** if Care Coordinator does not direct team to discuss strength(s) after a substantial amount of time of discussing child deficits.

46. **Care Coordinator directs (or redirects) team to develop/revise/update plan of care.**

   *Plan of care (life domain, goals, objectives, or resources/interventions) is revised or updated at the direction (redirection) of Care Coordinator.*

   **Scoring**

   1. **Yes** if Care Coordinator directs (redirects) team to develop/revise/update plan.
   2. **No** if Care Coordinator does not direct (redirect) team to revise/update plan.
47. Care Coordinator summarizes content of the meeting at the conclusion of the meeting.

At the conclusion of meeting Care Coordinator summarizes the content (i.e., what was discussed and agreed upon) of the meeting.

Scoring

1. Yes if Care Coordinator verbally summarizes the meeting.
2. No if Care Coordinator does not verbally summarize the meeting.

48. Care Coordinator sets next meeting date/time.

At the conclusion of the meeting, Care Coordinator sets next meeting date/time and asks family member if time/date are convenient.

Scoring

1. Yes if the Care Coordinator sets date/time for next meeting and if it is convenient for family.
2. No if one of above criteria is not satisfied.
3. NA if discharge meeting.
Alzheimer’s Service Coordination Program (ASCP)
Physician Survey

_CCRM Atlas Measure(s):_ 9, 10, 11, 12, 13

**Contact Information:**

Richard H. Fortinsky, PhD
UConn Center on Aging
University of Connecticut Health Center
263 Farmington Avenue
Farmington, CT 06030-5215
Email: fortinsky@uchc.edu
Phone: 860-679-8069

**Copyright Details:**

Developed and used with permission by Richard H. Fortinsky, Ph.D.
Dear Doctor __________:

Thank you for referring _____ patients and their family caregivers to the Service Coordinator for the Alzheimer’s Service Coordination Program (ASCP). Please take a few minutes to answer the questions below. Your answers will help us understand how well the ASCP has been working for you.

********************************************************************************
****************************************************
1. After you referred your patients and family caregivers to the ASCP, did you receive a treatment plan listing actions planned, such as reading educational material and using community services, to help your patients and their families better manage dementia care? (Circle your answer)
   a. Yes, for all patients (even if only one patient referred)
   b. Yes, but only for some patients
   c. Never (SKIP to question 4)

2. Have you ever reviewed or discussed this treatment plan with patients or family caregivers? (Circle your answer)
   a. Yes
   b. No

3. How helpful is this treatment plan as a way for you to discuss dementia care with patients and family caregivers in the office? (Circle)
   a. Very helpful
   b. Somewhat helpful
   c. Not at all helpful

4. Have you had any telephone contact with the ASCP Service Coordinator since referring your patients and their family caregivers to her? (Circle)
   a. Yes
   b. No (SKIP to question 7)

5. How helpful has this telephone contact been in helping you discuss dementia care with your patients and their family caregivers in the office? (Circle)
   a. Very helpful
   b. Somewhat helpful
   c. Not at all helpful
6. Would you like to have more, less, or about the same contact with the ASCP Service Coordinator after you refer a patient and family caregiver to her? (Circle)
   a. More contact
   b. About the same amount of contact
   c. Less contact

7. Has your involvement in the ASCP increased your awareness of the kinds of help available to our patients with dementia and their families? (Circle)
   a. Yes
   b. No

8. Compared to before your involvement in the ASCP, how confident are you now in your ability to discuss dementia care with your patients and families? (Circle)
   a. More confident than before
   b. About the same level of confidence as before
   c. Less confident than before

9. Do you plan to refer more patients and family caregivers to the ASCP in the future? (Circle)
   a. Yes
   b. No

10. In general, how satisfied are you with the ASCP? (Circle)
    a. Very satisfied
    b. Satisfied
    c. Dissatisfied
    d. Very dissatisfied

11. What recommendations would you make to improve the ASCP? Please use the space below

Thank you. Please fax this completed form to
Continuity of Care Practices Survey – Practice Level
[CCPS-P]

*CCRM Atlas Measure(s):* 19, 20

**Contact Information:**

Jeanne A. Schaefer  
Center for Health Care Evaluation  
Veterans Affairs Palo Alto Health Care System  
795 Willow Road (152)  
Menlo Park, CA 94025, USA  
Jeanne.Schaefer@va.gov

**Copyright Information:**

The Continuity of Care Practices Survey – Program version versions (CCPS-P) are in the public domain and freely available for use without copyright restrictions. The measure developer, Jeanne A. Schaefer, grants permission to the Agency for Healthcare Research and Quality (AHRQ) to print a copy of the measure instrument in the *Clinical-Community Relationships Measurement Web-based Atlas.*

Any use of the measure instruments must be accompanied by the following citation: Schaefer, J. A, Cronkite, R. C., & Ingudomnukul, E. (2004). Assessing continuity of care practices in substance use disorder treatment programs. *Journal of Studies on Alcohol, 65,* 513-520. The measure owner requests that users send a copy of any modifications or alterations made to the instrument to Dr. Jeanne A. Schaefer (contact information listed above).
CONTINUITY OF CARE PRACTICES SURVEY (CCPS-P)

Your responses to this survey will help us gain a better understanding of the continuity of care practices currently used by clinicians in VA substance use disorder treatment programs.

Please respond to each question. If you do not want to answer a particular question, please circle the number beside it so that we know you did not skip it accidentally.

All questions on this survey concern the program listed below. Please check the information on the attached label and make any necessary corrections

Today's Date: ________________________________

If you are not the person listed on the label, please provide the following information:

Your Name: ________________________________

Job Title: ________________________________

Telephone #: (_____)(_____)(____) – ext. ________

CCPS-P – Developed by Jeanne Schaefer, PhD
Center for Health Care Evaluation
VA Palo Alto Health Care System
795 Willow Road (152)
Menlo Park, CA 94025
FIRST, WE WANT TO GET SOME GENERAL INFORMATION ABOUT PATIENTS IN YOUR PROGRAM (INCLUDING ALL COMPONENTS). A "ROUGH BALLPARK" ESTIMATE OF THE NUMBER OR PERCENT OF PATIENTS IS FINE.

1. How many unique patients were treated in your program in FY (specify)?
   (Patients admitted more than once should be counted only once.)
   
2. What was the total full-time equivalent staff (FTEE) in your program in FY (specify)?
   (Include FTEE for positions that are vacant if currently recruiting for them.)

3. Approximately what percent of patients in your program in FY (specify) had the following characteristics at intake:
   A. Were female?
   B. Were members of racial or ethnic minorities (African American, Hispanic, Asian or Pacific Islander, Native American)?
   C. Were dependent on both alcohol and other drugs?
   D. Had both a substance use disorder and a major psychiatric disorder (excluding PTSD)?
   E. Had a diagnosis of PTSD?

DEFINITIONS – PLEASE READ THESE DEFINITIONS BEFORE CONTINUING WITH THE SURVEY.

The questions that follow ask about the substance use disorder services that your program provided during the past 3 months. Please keep these definitions in mind as you answer the questions.

**Intensive inpatient/residential programs** – For these programs, the intensive treatment component of the program means inpatient, residential, or domiciliary services that include more than detoxification and involve a stay of at least 14 days.

**Outpatient programs** (e.g., day hospital, intensive outpatient clinic) – For these programs, the intensive treatment component means that part of the program in which patients receive 3 or more hours of treatment per day for 3 or more days per week.

**Continuing outpatient substance use disorder care** – This is outpatient care (aftercare) that follows intensive inpatient or outpatient care and provides treatment less than 3 hours per day and less than 3 days per week.

4. In the past 3 months, was continuing outpatient substance use disorder care available on-site to patients at your VA facility after they completed intensive substance use disorder treatment?
   No ☐ Yes ☐
## MAINTAINING CONTACT WITH PATIENTS

5. In the past 3 months, how often did continuing outpatient substance use disorder care staff in your program:

<table>
<thead>
<tr>
<th></th>
<th>Never/rarely 1</th>
<th>Sometimes 2</th>
<th>Fairly often 3</th>
<th>Almost always 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Make reasonable attempts to contact patients within 3 working days of a missed outpatient continuing care substance use disorder appointment?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.</td>
<td>Send appointment reminders to patients prior to their scheduled outpatient continuing care substance use disorder appointments?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. In the past 3 months, how often did program staff:

<table>
<thead>
<tr>
<th></th>
<th>Never/rarely 1</th>
<th>Sometimes 2</th>
<th>Fairly often 3</th>
<th>Almost always 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Make reasonable attempts to call patients within 14 days of discharge from intensive treatment to find out if patients had contacted the services to which they had been referred?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.</td>
<td>Make reasonable attempts to get discharged patients back into treatment if they were not doing well?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Maintain Contact Subscale – Add scores for 5A-B and 6A-B and subtract the number of responses without missing data, e.g., if one item has missing data, subtract 3 (the number of complete responses); if no responses are missing, subtract 4.*
FACILITATING TREATMENT ACROSS LEVELS OF CARE

Here, we ask about practices that aid patients’ transition from intensive treatment to continuing outpatient care. Keep in mind that clinicians may rarely use some of these practices. Also, if the continuing outpatient care counselors mentioned in the questions (e.g., 7B, 8-A-E) are the same staff who provided patients’ intensive treatment, mark the “Almost always” response.

7. How often in the past 3 months did staff in your program do the following prior to patients’ discharge from intensive treatment:

<table>
<thead>
<tr>
<th></th>
<th>Never/ rarely</th>
<th>Sometimes</th>
<th>Fairly often</th>
<th>Almost always</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Arrange for patients to meet or talk to the counselor who would be providing them with continuing outpatient substance use disorder care?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>B</td>
<td>Arrange for patients to attend continuing care outpatient substance abuse therapy groups during intensive treatment?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>C</td>
<td>Arrange for patients to meet or talk to an AA, NA, or CA sponsor in their community?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>D</td>
<td>Arrange for patients to attend an AA, NA, or CA meeting in their community during intensive treatment?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>E</td>
<td>Secure drug-free or sober living arrangements for patients?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>F</td>
<td>Have family members participate in patients’ discharge planning for those patients who had contact with their family members?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

*Connect to Resources Subscale Part 1 – Add 7A-F and subtract the number of responses without missing data, e.g., if one item has missing data, subtract 5, the number of complete responses.*
Appendix D

Clinical-Community Relationships Measure Instruments

8. How often in the past 3 months did staff in the **intensive** treatment component of your program:

<table>
<thead>
<tr>
<th></th>
<th>Never/rarely</th>
<th>Sometimes</th>
<th>Fairly often</th>
<th>Almost always</th>
</tr>
</thead>
</table>
   | A. Speak directly (in
     person, by phone) with
     VA outpatient substance
     use disorder counselors
to review patients' discharge
     summary prior to their first
     appointment with their
     counselors?              |
   | B. Work with outpatient
     substance use disorder
     counselors to jointly
     develop discharge plans
     for patients?            |
   | C. Notify outpatient
     substance use disorder
     counselors when patients
     who were being referred
to them were discharged
     from intensive treatment?|
   | D. Meet with or contact
     outpatient substance
     use disorder counselors
     at least once a month to
     review patients’ progress
     and treatment?           |
   | E. Contact outpatient
     substance use disorder
     counselors within 14 days
     of patients' discharge
     from intensive treatment
to check if patients were
     keeping continuing care
     outpatient substance
     use disorder appointments?|

   *Coordinate Care Subscale – Add 8A-E and subtract the number of responses without missing data, e.g., if one item has missing data, subtract 4, the number of complete responses.*

9. Substance use disorder patients have many coexisting problems, and it's obviously not feasible for staff to address all of the problems of every patient. For each problem listed, please select the **one** referral action that staff in your program typically took prior to patients’ discharge from intensive treatment during the past 3 months.

<table>
<thead>
<tr>
<th>DESCRIPTIONS OF REFERRAL ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Patient self-referral – Left it up to patients to refer themselves to an appropriate program.</td>
</tr>
<tr>
<td>2. Program name or brochure – Gave patients the name of a program (e.g. a referral slip) or written information (e.g., a program brochure), but did not give them the name of a specific person to contact.</td>
</tr>
<tr>
<td>3. Name &amp; Phone # of contact – Gave patients the telephone number and name of a specific person to contact at a program.</td>
</tr>
<tr>
<td>4. Set up appointment – Set up an appointment for patients with a specific staff person at a program.</td>
</tr>
</tbody>
</table>
### PATIENT PROBLEM

<table>
<thead>
<tr>
<th>A. Medical problems</th>
<th>Patient Self-referral</th>
<th>Program Name or brochure</th>
<th>Name &amp; phone # of contact</th>
<th>Set up appointment</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Employment problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Housing problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Psychiatric problems (excluding PTSD)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. PTSD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. Family Problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DEFINITIONS – Please read these definitions before continuing with Question 10.**

Substance use disorder programs vary considerably and program staff define counselor and case manager in many different ways. The definitions we present here may not match your program precisely. Please answer using the definition that best fits your program.

- **Primary counselor** (e.g. a physician, nurse, psychologist, social worker, addiction therapist) – Provides most of the patient's psychological or psychosocial treatment.

- **Case Manager** – Coordinates patient services across different levels of care, but is not the primary psychosocial counselor for patients. For example, the case manager might make sure that patients’ needs (e.g., for housing or employment) are addressed and that patients get connected to community resources.

- **Primary counselor/case manager** – Is a staff member who is the primary counselor for patients and also serves as their case manager.
10. In the past 3 months, approximately what percent of patients in the intensive component of your program:

<table>
<thead>
<tr>
<th>Percent of patients (0-100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Had the same primary counselor during intensive treatment and continuing outpatient substance use disorder care?</td>
</tr>
<tr>
<td>B. Had the same case manager during intensive treatment and continuing outpatient substance use disorder care?</td>
</tr>
<tr>
<td>C. Had the same primary counselor/case manager during intensive treatment and continuing outpatient substance use disorder care?</td>
</tr>
</tbody>
</table>

Provider Continuity Subscale score Part I – Add 10A-C and divide by the number of responses without missing data, e.g., if one item has missing data, divide by 2, the number of complete responses.

11. In the past 3 months, roughly what percent of patients in your program were assigned to the same counselor, case manager, or addictions treatment team if they relapsed and needed intensive substance use disorder treatment again?

To obtain the final Provider Continuity Subscale score – Add the Part I Provider Continuity Subscale score to the percent from Q11, then divide by 100.

YOU HAVE COMPLETED THIS SURVEY.

THANK YOU VERY MUCH FOR HELPING US BETTER UNDERSTAND TREATMENT PRACTICES IN VA SUBSTANCE USE DISORDER PROGRAMS.

Additional Information For Scoring Subscales With Missing Data.

When scoring the subscales, give the subscale a score if the respondent answers more than half of the items. For subscales with missing data, the sums for the subscale should be weighted by a correction factor which is the ratio of the maximum score if all items are complete over the maximum score for the number of items without missing data. For example, the maximum score for the Coordinate Care subscale is 15 if all 5 items are complete. If a respondent completes 4 items, the maximum score is 12. Consequently, the score for the subscale with one item missing (sum of 4 items) should be weighed by the ratio of 15 over 12, so that the range of values will be the same as it would have been if the respondent had completed all 5 items.
Capacity for Chronic Disease Management in General Practice Research Study Practice Profile Interview – Linkages with External Organisations of Providers (GP-LI)

CCRM Atlas Measure(s): 21, 22

Contact Information:

Professor Mark Harris
Centre for Primary Health Care and Equity
University of New South Wales
Sydney NSW 2052
Australia
Email: m.f.harris@unsw.edu.au

Copyright Details:

The Centre for Primary Health Care and Equity at the University of New South Wales grants a free license to the use of this instrument. Please acknowledge the Centre for Primary Health Care and Equity at the University of New South Wales in any publications arising from using it.
CAPACITY FOR CHRONIC DISEASE MANAGEMENT IN GENERAL PRACTICE RESEARCH STUDY
PRACTICE PROFILE INTERVIEW
LINKAGES WITH EXTERNAL ORGANISATIONS OR PROVIDERS

Notes to Researchers:

BEFORE THE INTERVIEW

- Before commencing the interview, check the Pre-visit Questionnaire: Q12 to identify services offered at the practice by attending health professionals as these may be included where appropriate.

DURING THE INTERVIEW

- Please follow the suggested wording / script in red
- Capture as much information as you can. If you are unsure about the validity of an answer, ask for details.
- Where interviewees indicate that they have no more linkages in a category, insert n/a in the free text field and 8 (not applicable) in each associated number field

AFTER THE INTERVIEW

- Use F1 Help to code the responses.
- Green shaded areas are to be scored after the interview.
INTRODUCTION:

"I'd now like to ask you some questions about the linkages and relationships that the practice has with other providers or organisations. This includes services offered at the practice by visiting health professionals.

For the purposes of this part of the interview, consider the situation where you are briefing a new GP who has joined your practice. You're informing the GP about the various links and relationships that the practice has with other providers or organisations.

I’ll ask you to describe your practice’s clinical links for asthma, type 2 diabetes, and hypertension or ischaemic heart disease. This will be followed by a section on non-clinical links.

While your practice may have links maintained by individual GPs, these questions focus on practice linkages.”

Starting with asthma:

1. Does your practice have any links with other providers or organisations for referral or clinical advice for asthma?

   If no go to Q2

Comments:

1.1 1st link:

   a. Who is the linkage with? (If individual providers, ask for profession and initials)

   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:

   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:
1.2 2nd link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)* 
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:

1.3 3rd link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)* 
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:

2. Continuing with asthma, does the practice provide shared care or care plans? 
   *Prompt only if necessary*
   
   Shared care = care delivery in which generalist and specialists work together to meet a patient’s needs

   *If yes*, does the practice have links for shared care or care planning that you’d tell a new GP about? 
   
   *If no*, go to Q3

   1 = yes
   0 = no
   9 = don’t know / unsure / missing data

   1 = yes
   0 = no
   8 = not applicable
   9 = don’t know / unsure / missing data

Comments:
2.1 1st link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:

2.2 2nd link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:

2.3 3rd link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:

3. Does your practice have any links to outside providers for patient education or self help for asthma?  
   *If no go to Q4*

<table>
<thead>
<tr>
<th></th>
<th>1 = yes</th>
<th>0 = no</th>
<th>9 = don’t know / unsure / missing data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments:
3.1 1st link:
   a. Who is the linkage with? (If individual providers, ask for profession and initials)
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:

3.2 2nd link:
   a. Who is the linkage with? (If individual providers, ask for profession and initials)
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:

3.3 3rd link:
   a. Who is the linkage with? (If individual providers, ask for profession and initials)
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:

4. Does your practice have any links or relationships with outside providers to improve community awareness of Asthma or to improve community access to services or resources?  
   \[1 = \text{yes} \quad 0 = \text{no} \quad 9 = \text{don’t know / unsure} \quad / \text{missing data}\]
   \text{If no go to Q5}

Comments:
4.1 1st link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the effectiveness of the **communication** between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the **quality** of the service provided to your practice:

4.2 2nd link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the effectiveness of the **communication** between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the **quality** of the service provided to your practice:

4.3 3rd link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the effectiveness of the **communication** between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the **quality** of the service provided to your practice:

5. Finally for Asthma, are there any aspects of asthma management that **are needed, but not covered** by your practice’s linkages?  
   *If no go to Q6*
5.1 If yes, please describe:

Moving on to Type 2 Diabetes now.

Again, consider the situation where you’re briefing a new GP about the linkages the practice has for clinical purposes.

6. Does your practice have any links or relationships with other providers or organisations for referral or advice for type 2 Diabetes? *(including clinical information and second opinions)*

*If no* go to Q7

Comments:

6.1 1st link:

a. Who is the linkage with? *(If individual providers, ask for profession and initials)*

b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:

c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:
Appendix D
Clinical-Community Relationships Measure Instruments

6.2 2nd link:
   a. Who is the linkage with? *If individual providers, ask for profession and initials*
   b. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the **quality** of the service provided to your practice:

6.3 3rd link:
   a. Who is the linkage with? *If individual providers, ask for profession and initials*
   b. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the **quality** of the service provided to your practice:

7. Continuing with Diabetes, does the practice provide **shared care or care plans**?
   
   *Prompt only if necessary*

   **Shared care = care delivery in which generalist and specialists work together to meet a patient’s needs**

   If **yes**, does the practice have links for **shared care or care planning** that you’d tell a new GP about?
   
   If **no**, go to Q8

Comments:
7.1 1st link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the quality of the service provided to your practice:

7.2 2nd link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the quality of the service provided to your practice:

7.3 3rd link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the quality of the service provided to your practice:

8. Does your practice have any links to outside providers for **patient education or self help** for type 2 diabetes?
   *If no* go to Q9

Comments:
8.1 1st link:
   a. Who is the linkage with? (If individual providers, ask for profession and initials)
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:

8.2 2nd link:
   a. Who is the linkage with? (If individual providers, ask for profession and initials)
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:

8.3 3rd link:
   a. Who is the linkage with? (If individual providers, ask for profession and initials)
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:

9. Finally for type 2 diabetes, does your practice have any links to outside providers to improve community awareness of Type 2 Diabetes or to improve community access to services or resources?
   If no go to Q10
   Comments:
9.1 1st link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the 
      communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to 
      your practice:

9.2 2nd link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the 
      communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to 
      your practice:

9.3 3rd link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the 
      communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to 
      your practice:

10. Are there any aspects of type 2 diabetes management that are needed, but not 
    covered by your practice’s linkages?
    *If no* go to Q11

10.1 If yes, please describe:
"Now I want to ask to you about Hypertension/ Ischaemic Heart Disease. Again, consider the situation where you’re briefing a new GP about the linkages the practice has for clinical purposes."

11. Does your practice have any links or relationships with other providers or organisations for referral or advice for hypertension or ischaemic heart disease? (including clinical information and second opinions)

   If no go to Q12

   Comments:

11.1 1st link:
   a. Who is the linkage with? (If individual providers, ask for profession and initials)
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:

11.2 2nd link:
   a. Who is the linkage with? (If individual providers, ask for profession and initials)
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:
11.3 3rd link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:

12. Continuing with Hypertension or IHD, does the practice provide shared care or care plans?
   **Prompt only if necessary**
   
   *Shared care = care delivery in which generalist and specialists work together to meet a patient’s needs*
   
   If yes, does the practice have links for shared care or care planning that you’d tell a new GP about?
   If no, go to Q13

Comments:

12.1 1st link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:
12.2 2nd link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the effectiveness of the **communication** between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the **quality** of the service provided to your practice:

12.3 3rd link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the effectiveness of the **communication** between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the **quality** of the service provided to your practice:

13. Does your practice have any links to outside providers for **patient education or self-help** for hypertension or ischaemic heart disease?
   *If no* go to Q14

   Comments:

13.1 1st link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the effectiveness of the **communication** between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the **lowest** and 5 is the **highest**) rate the **quality** of the service provided to your practice:
Appendix D
Clinical-Community Relationships Measure Instruments

13.2 2nd link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:

13.3 3rd link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:

14. Finally, does your practice have any links to outside providers to improve community awareness of ischaemic heart disease or hypertension or to improve community access to services or resources?  
   *If no* go to Q15

   Comments:

14.1 1st link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:
14.2 2nd link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:

14.3 3rd link:
   a. Who is the linkage with? *(If individual providers, ask for profession and initials)*
   b. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the effectiveness of the communication between the two organisations:
   c. On a scale of 0 – 5, (where 0 is the lowest and 5 is the highest) rate the quality of the service provided to your practice:

15. Are there any aspects of hypertension / IHD management that are needed, but not covered by your practice’s linkages?  
   *If no go to Q16*

15.1 *If yes, please describe:*

"Now a general question:"

© University of NSW & University of Adelaide, 2004125
To be used only with permission and by trained interviewers
16. Does the practice have a resource directory of services?  
*If no go to Q17*

a. If a GP was new to the practice, how helpful would the directory be for making chronic disease referrals? Rate (0 – 5)  
b. On a scale of 0 – 5, how complete would he/she find the directory:  
   *Prompt: does it include all the necessary types of specialists etc*  
c. On a scale of 0 – 5, how up to date would she/he find this directory?  
   *Prompt: are the numbers and addresses correct? Are new services included in the directory?*

**Note: the practice principal does not need to be present for the remainder of this interview**

17. Does the practice have any links or relationships with any outside providers/organisations to conduct *quality improvement or research*?  
*Prompt: clinical audits, surveying of patients, etc.*  
*If no go to Q18*

Comments:  
17.1 For each linkage, answer the following questions:  
1st link:  
a. Who is linkage with?  
b. How does this linkage work?  
   *Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?*  
c. On a scale of 0 – 5, rate the quality of the service provided to your practice:
17.2 2nd link:
a. Who is linkage with?
b. How does this linkage work?
   
   Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?

c. On a scale of 0 – 5, rate the quality of the service provided to your practice:

17.3 3rd link:
a. Who is linkage with?
b. How does this linkage work?
   
   Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?

c. On a scale of 0 – 5, rate the quality of the service provided to your practice:

18. If non-GP staff members require professional development or training, does the practice have a link with any organisations to help in obtaining this?

If no go to Q19

Comments:

18.1 For each linkage, answer the following questions:

1st link:
a. Who is linkage with?
b. How does this linkage work?
   
   Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?

c. On a scale of 0 – 5, rate the quality of the service provided to your practice:
Appendix D
Clinical-Community Relationships Measure Instruments

18.2 2nd link:
a. Who is linkage with?
b. How does this linkage work?

Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?
c. On a scale of 0 – 5, rate the quality of the service provided to your practice:

18.3 3rd link:
a. Who is linkage with?
b. How does this linkage work?

Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?
c. On a scale of 0 – 5, rate the quality of the service provided to your practice:

19. Does the practice have links or relationships with individuals or organisations that provide technical support (such as IT or equipment assistance)?

If no go to Q20

Comments:

19.1 For each linkage, answer the following questions:

1st link:
a. Who is linkage with?
b. How does this linkage work?

Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?
c. On a scale of 0 – 5, rate the quality of the service provided to your practice:
19.2 2nd link:
a. Who is linkage with?
b. How does this linkage work?

Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?
c. On a scale of 0 – 5, rate the quality of the service provided to your practice:

19.3 3rd link:
a. Who is linkage with?
b. How does this linkage work?

Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?
c. On a scale of 0 – 5, rate the quality of the service provided to your practice:

20. Does the practice have links or relationships with individuals or organisations that provide practice staff to expand the range of services offered by the practice?

If no go to Q21

Comments:

20.1 For each linkage, answer the following questions:

1st link:
a. Who is linkage with?
b. How does this linkage work?

Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?
c. On a scale of 0 – 5, rate the quality of the service provided to your practice:
20.2 2nd link:
a. Who is linkage with?
b. How does this linkage work?
   Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?
c. On a scale of 0 – 5, rate the quality of the service provided to your practice:

20.3 3rd link:
a. Who is linkage with?
b. How does this linkage work?
   Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?
c. On a scale of 0 – 5, rate the quality of the service provided to your practice:

21. Does the practice have links or relationships with individuals or organisations that provide business support (accounting, strategic planning etc)?

   If no go to Q22

Comments:

21.1 For each linkage, answer the following questions:

1st link:
a. Who is linkage with?
b. How does this linkage work?
   Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?
c. On a scale of 0 – 5, rate the quality of the service provided to your practice:
21.2 2nd link:
   a. Who is linkage with?
   b. How does this linkage work?
      Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?
   c. On a scale of 0 – 5, rate the quality of the service provided to your practice:

21.3 3rd link:
   a. Who is linkage with?
   b. How does this linkage work?
      Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?
   c. On a scale of 0 – 5, rate the quality of the service provided to your practice:

22. Does the practice have links or relationships with individuals or organisations with which resources, equipment, or services are shared? (eg share practice manager, nurse, computer templates)  
   1 = yes  
   0 = no  
   9 = don't know / unsure / missing data
   If no go to Q23
   Comments:

22.1 For each linkage, answer the following questions:
   1st link:
   a. Who is linkage with?
   b. How does this linkage work?
      Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?
   c. On a scale of 0 – 5, rate the quality of the service provided to your practice:
22.2 2nd link:
   a. Who is linkage with?
   b. How does this linkage work?
      
      *Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?*
   c. On a scale of 0 – 5, rate the quality of the service provided to your practice:

22.3 3rd link:
   a. Who is linkage with?
   b. How does this linkage work?
      
      *Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?*
   c. On a scale of 0 – 5, rate the quality of the service provided to your practice:

23. Does the *practice* have any other links or relationships with *organisations, professional bodies or networks* for the benefit of the practice?  
   
   1 = yes  
   0 = no  
   9 = don’t know / unsure / missing data

   Comments:

23.1 For each linkage, answer the following questions:

1st link:
   a. Who is linkage with?
   b. How does this linkage work?
      
      *Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?*
   c. On a scale of 0 – 5, rate the quality of the service provided to your practice:
23.2 2nd link:
   a. Who is linkage with?
   b. How does this linkage work?
      
      Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?
   c. On a scale of 0 – 5, rate the quality of the service provided to your practice:

23.3 3rd link:
   a. Who is linkage with?
   b. How does this linkage work?
      
      Prompt: Who contacts whom? Is the link for ongoing work or on a casual / ad hoc basis?
   c. On a scale of 0 – 5, rate the quality of the service provided to your practice:

That brings us to the end of this section of the interview. Thank you for your input.

Researcher comment: