



Diabetes Clinical Improvement Team Final Report - March 2006

I. Background:

The mission of the Puget Sound Health Alliance (the Alliance) is to forge a leadership alliance among patients, employers, physicians, hospitals, health plans, and others to design and implement an innovative, high quality, and affordable health care system in the Puget Sound region. In June 2005, the Alliance Board of Directors agreed to focus the Alliance's initial efforts in this mission on four health conditions: heart disease, diabetes, back pain, and depression. The Board adopted a structure for this work that includes a Quality Improvement Committee coordinating the effort and a group of Clinical Improvement Teams (CITs), one for each condition.

The Board charged the Quality Improvement Committee with developing the Alliance's quality improvement initiatives and recommending strategies to the Board regarding evidence-based clinical practice guidelines; performance measures based on national metrics; preventive health care; health promotion; alignment of quality improvement with financial incentives; and improvements in health benefits coverage.

The Board charged Alliance CITs with developing recommendations for standard clinical practice guidelines and related performance measures for the health condition they are addressing, and for developing strategies for implementing and monitoring both the guidelines and measures. The CITs work collaboratively with, and report to, the Quality Improvement Committee. Each CIT comprises volunteer professional clinical care and quality improvement experts, as well as purchaser, consumer, and health plan representatives, from the Alliance five-county region.

The Board established the Diabetes Clinical Improvement Team in November 2005. The Diabetes CIT, the subject of this report, includes 13 experts from the fields of diabetes clinical care, including both allopathic and natural, or alternative care; health plan design; health benefit purchasing; public health; and dentistry; as well as consumer representatives. [Appendix 4](#) provides a list of the Diabetes CIT members.

II. Defining the Problem: Diabetes Mellitus

Prevalence

Nearly 10 percent of all Americans age 20 or older - 20.6 million people - have diabetes. One and a half million new cases of the condition were diagnosed in people in this age group in 2005. In Washington State, 4.5 percent of adults age 20 or older—218,215 people—had diagnosed diabetes in 2002; another 106,000 are estimated to have undiagnosed diabetes.¹ More recent data from the national Behavioral Risk Factor Surveillance System indicate that in 2004, 6.3 percent of Washington adults age 18 and older had diagnosed diabetes, and 0.9 percent had pre- or borderline diabetes. In King County, 5.1 percent of adults age 18 and older - 70,000 people - had diagnosed diabetes that year.²

Diagnoses of diabetes increase with age. In 2003, for example, seven percent of Washingtonians age 45-54, 13 percent age 55-64, and 16 percent age 64 and older had diagnosed diabetes.³ Diabetes is more prevalent among African-Americans and American Indians/Alaska Natives.⁴

Diabetes is the fifth leading cause of death in both the U.S. and Washington State among adults age 20-74, and the seventh leading cause of death among all Washingtonians. In 2004, diabetes accounted for 5.1 percent of deaths among those age 20-74 (543 adults) and 3.4 percent among all Washingtonians (1,506). Mortality rates and prevalence are higher for Washingtonians with lower incomes and those with lower education levels, and for Washingtonians of Hispanic descent, compared to non-Hispanics.⁴

Because complications of diabetes include health conditions often listed as the cause of death on death certificates—such as heart disease, stroke, and kidney disease—diabetes itself is not always listed as the cause. Research indicates that only about 35-40 percent of decedents with diabetes actually have "diabetes" listed anywhere on their death certificate. Consequently, experts project deaths actually attributable to diabetes to be much higher.

Table 1 offers age-adjusted death rates (per 100,000 people) for the top seven causes of death in Washington State, including both state data and data for each of the five counties participating in the Alliance. The data suggest that King County has lower death rates (among the five counties) for each of the leading causes.

¹ WA DOH estimate. See *Washington State Diabetes Statistics, 2002*.

www.doh.wa.gov/cfh/diabetes/publications/2002_county_profiles/state2002.pdf.

² Public Health - Seattle & King County. *Health of King County 2006, Chapter 6: Chronic Disease*.

www.metrokc.gov/health/hokc/index.htm.

³ CDC, Behavioral Risk Factor Surveillance System. 2003. www.cdc.gov/brfss. [The survey question asked, "Have you ever been told by a doctor that you have diabetes?"]

⁴ WA State Dept. of Health. *The Health of Washington State, 2002 and 2004 Supplement*. www.doh.wa.gov/HWS/CD.shtm.

Table 1: Leading Causes of Death in Washington State and Selected Counties, 2004 (Causes for Age 20-74 indicated in bold type.)						
Cause of Death	WA State¹	King County²	Kitsap County	Pierce County	Snohomish County	Thurston County
<i>Age-adjusted death rate per 100,000</i>						
Cancer	178.0	164.7	198.3	197.4	182.7	189.7
Heart Disease³	172.3	153.6	170.9	200.0	197.9	165.0
Cerebrovascular Diseases	52.5	50.2	75.9	59.8	57.9	55.7
Chronic Lower Respiratory Diseases	41.2	31.7	52.9	52.6	43.9	47.7
Unintentional Injury (Accident)	37.7	31.8	34.0	35.7	34.8	33.3
Alzheimer's Disease	36.2	33.6	55.8	35.2	45.6	38.0
Diabetes Mellitus	24.4	20.2	22.3	33.4	22.2	26.3

1. State data source: WA DOH. *Mortality Table C3. Leading Causes by Age Group and Sex for Residents, 2004.*

2. County data sources: WA DOH. *Mortality Table D3, Mortality Table C7, Mortality Table C8, Mortality Table E8, Mortality Table C6—all 2004.*

3. County definition: "Diseases of the Heart (ICD-10 Codes 100-109, 111, 113, 120-151)."

Costs

The economic and social impact of diabetes is significant. Complications from diabetes include not only heart disease, stroke, and kidney disease, but additional health conditions that can affect daily quality of life: for example, high blood pressure, blindness, nervous system disease—which can lead to lower-extremity amputations, dental disease, and complications of pregnancy.⁵ The Washington State Collaborative estimates that diabetes annually accounts for nearly 1,000 amputations of lower extremities, nearly 300 cases of kidney failure requiring lifelong dialysis or kidney transplant, and over 49,000 hospitalizations. The hospitalizations account for nearly half a billion dollars in annual hospital costs.⁶

The estimated direct and indirect financial costs associated with diabetes in 2005 were \$132 billion nationwide, and \$2 billion in Washington State. Indirect costs accrue largely to the employment sector. They include

⁵ National Diabetes Information Clearinghouse. *National Diabetes Statistics.* diabetes.niddk.nih.gov/dm/pubs/statistics/index.htm.

⁶ Washington State Collaborative. *The Washington State Collaborative 4: Diabetes and Cardiovascular Disease.* www.doh.wa.gov/CFH/WSC/default.htm.

disability expenditures, work loss (including absenteeism and reduced productivity on-the-job, or *presenteeism*), and premature mortality.

Given these sobering statistics, the Alliance and the Diabetes CIT made it a high priority to define strategies to improve the quality of care and optimize outcomes for people with diabetes in the Puget Sound region.

III. The Diabetes Clinical Improvement Team: Scope and Process

The Diabetes CIT conducted four monthly meetings between November 2005 and February 2006. The meetings progressed sequentially through four work objectives:

- Meeting 1/Objective 1 Define the scope of the disease on which the CIT would focus, and identify the target population, service settings, and clinical practice area(s) of focus.
- Meeting 2/Objective 2 Review and select nationally recognized, expert-reviewed, evidence-based clinical practice guidelines.
- Meeting 3/Objective 3 Review and select from among nationally recognized, expert-reviewed performance measures directly related to the chosen clinical practice guidelines.
- Meeting 4/Objective 4 Develop a set of change strategies for providers, purchasers, health plans, and consumers. The change strategies represent activities that the stakeholders can engage in to: 1) conform to Alliance-recommended clinical practice guidelines and 2) optimize provider performance on measures monitoring the care of patients with diabetes. These change strategies were then prioritized for the Alliance to focus our efforts in supporting and enhancing the ability of stakeholders to engage in the change strategies.

Objective 1: Disease Scope, Target Population, Service Settings, and Clinical Practice Area(s) of Focus

To create a framework for its subsequent review of clinical practice guidelines, performance measures, and change and implementation strategies, the Diabetes CIT first defined the scope of diabetes upon which it would focus, and the target population, service settings, and clinical practice areas of focus. After discussion, the CIT agreed to the following:

Disease Scope	<p>Type 1 and Type 2 Diabetes</p> <p>The CIT chose both types of diabetes because much of the clinical care related specifically to diabetes is the same for patients with either form of the condition, especially in the treatment of adults.</p>
Target Population	<p>Adults Age 18 and Older (Upper Age Limit of 75 for Performance Measurement)</p> <p>The CIT chose to focus on working-age adults for this initial Alliance effort concerning diabetes. The team noted that most, if not all, clinical guidelines for diabetes would apply to all adults regardless of age. Performance measurement data for adults over age 75 would be confounded, however, by other health factors unrelated to their diabetes. The CIT therefore agreed to recommend a set of clinical practice guidelines for all adults age 18 and older, and a set of performance measures for adults age 18-75.</p>
Service Setting	<p>Ambulatory Care</p> <p>The CIT chose ambulatory care because patients with diabetes are treated in both the primary and specialty care settings. For example, some diabetes patients use endocrinologists as their primary provider for diabetes care. Inpatient treatment of diabetes was excluded from consideration at this time.</p>
Clinical Practice Area(s) of Focus	<p>Long-Term Management of Diabetes</p> <p>The CIT chose to focus on long-term management of the disease because diabetes is a chronic condition with no cure. Diabetes clinical care focuses on managing the condition over the life of the affected individual.</p> <p>Risk Reduction in Patients with Diabetes</p> <p>The CIT chose to focus on risk reduction because diabetes is a condition that affects, and is affected by, multiple organs and systems in the human body. Risk behaviors such as smoking and poor nutrition will influence the progress and severity of the condition.</p>

**Clinical Areas of Focus Not Addressed:
Risk Reduction Prior to Diagnosis, and Screening and Early Detection**

The Diabetes CIT chose to limit their work to patients already diagnosed with Type 1 or Type 2 diabetes. Consequently, the team did not address two clinical areas of focus that occur prior to a diagnosis: general risk reduction, and screening for/early detection of diabetes. The Diabetes CIT was unanimous in asserting, however, that because preventing the onset of diabetes is critical in slowing the rising rates of the condition in both adults and children, the Alliance should play a leadership role in this area.

Preventive care is designed to prevent disease entirely, screen for disease early, and help people manage the course of existing disease. It includes services most often provided in the clinical care setting, such as smoking cessation treatment, vaccination, and screening for cancer, high blood pressure, and high cholesterol. Preventive care also includes services and

programs—frequently referred to as *interventions*—targeted at health-related lifestyles, such as tobacco use, physical activity, nutrition, and weight management. These interventions can be provided both within and as an adjunct to the clinical care setting, as well as independently by individuals.

The Diabetes CIT observed that in health care practice, a great number of preventive care services and interventions are the same for nearly all chronic health conditions—such as diabetes, heart disease, cancer, and chronic lower respiratory disease, which account for over half of all deaths among adult Washingtonians.⁷ The CIT also noted that targeted preventive care services and interventions could be included in the clinical practice guidelines and performance measures for each chronic disease or condition on which the Alliance chooses to focus. Many, if not most, of these will overlap across conditions. Given the prevalence of chronic disease and the critical importance of prevention, the Diabetes CIT recommended that the Alliance convene a separate Disease Prevention/Health Promotion CIT or workgroup to review and select a uniform set of evidence-based guidelines and performance measures for preventive care services and interventions that the Alliance would advocate to its partners.

Definitions of Key Terms

To ensure at the outset that all Alliance Clinical Improvement Teams were operating with the same understanding of key terms that would help define their work, Alliance staff worked with the Diabetes and Heart Disease CITs to adopt a standard definition for four terms:⁸

Evidence-Based Guideline	A set of systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances. Guidelines briefly identify, summarize, and evaluate the best evidence and most current data about prevention, diagnosis, prognosis, therapy, risk/benefit, and cost/effectiveness. They define the most important questions related to clinical practice, identify possible decision options and their outcomes, and provide evidence-based recommendations.
Recommendation	An evidence-based recommendation for action, often graded, that is drawn from the guidelines.
Measure	A tool derived from practice guidelines and recommendations that defines a specific, measurable element of care that is used to measure the quality of care provided by practitioners.
Target	A level of achievement, such as a number, rate, proportion, or percentage of patients within a population achieving a particular score on a measure that is deemed an acceptable level of clinical performance.

⁷ WA DOH. *Mortality Table C3. Leading Causes by Age Group and Sex for Residents, 2004.*

⁸ *Alliance Staff* refers to both Alliance personnel and professional consultants hired to assist the Alliance with coordinating the work of the CITs.

IV. Recommended Diabetes Clinical Practice Guidelines

To support the Diabetes CIT's efforts in selecting clinical practice guidelines to recommend to the Quality Improvement Committee - and subsequently the Board of Directors - Alliance staff and consultants conducted an initial scan of existing guidelines literature from prominent regional, national, and international quality-improvement collaboratives, disease-specific advocacy and research organizations, and medical specialty groups. Working together, staff and the Diabetes CIT used four criteria to select clinical practice guidelines for the CIT to evaluate and consider:

- Guidelines must be:
- Nationally recognized
 - Widely disseminated
 - Based on peer-reviewed clinical evidence
 - Based on accepted standards of care

The Diabetes CIT reviewed the guidelines it selected based on these criteria for the quality of evidence from which they were derived and for their wide acceptance into practice by national and local medical organizations and provider groups.

The Diabetes CIT chose to recommend adopting guidelines developed by the American Diabetes Association (ADA), as they most clearly met the four selection criteria. In addition, the CIT recommended guidelines for lipid management developed by the National Cholesterol Education Program (NCEP) Adult Treatment Panel III (ATP III) for specific aspects of diabetes care. The guidelines and links to their Web Sites are provided in Table 2.

Table 2: Recommended Sources for Diabetes Clinical Practice Guidelines	
Guideline	Link
American Diabetes Association <i>Standards of Medical Care in Diabetes—2006.</i>	http://care.diabetesjournals.org/cgi/content/full/29/suppl_1/s4
National Cholesterol Education Program (NCEP) (National Heart, Lung, and Blood Institute, National Institutes of Health) <i>Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III), 2001 and 2004 Update</i>	http://www.nhlbi.nih.gov/guidelines/cholesterol/

The ADA guidelines provide substantial detail for multiple aspects of diabetes care. The Diabetes CIT selected only those guidelines that were appropriate for the disease scope, target population, and service setting on

which it was currently focusing. Once the team identified the performance measures, it again reviewed the ADA and ATP III guidelines to ensure that it had selected all appropriate guidelines that matched chosen measures.

[Appendix 2](#) provides a table that outlines the specific guidelines the Diabetes CIT recommended and their related performance measures.

V. Recommended Diabetes Performance Measures

Alliance staff and consultants worked with the Diabetes and Heart Disease CITs to identify goals for selecting Alliance performance measures:

The selection process should:

- Promote regional consistency in performance measurement
- Align measures with national direction in performance measurement
- Avoid duplicating the work of others
- Select measures that are *measurable* (i.e., readily available through the means at hand), *valid* (capture the essence of what they profess to measure), and based on recommendations from *evidence-based* clinical practice guidelines

On December 1, 2005, the Institute of Medicine (IOM) released *Performance Measurement: Accelerating Improvement*. This is the first of three IOM reports that ultimately will be published in the IOM's *Pathways to Quality Health Care* series. *Performance Measurement: Accelerating Improvement* identifies approaches for selecting performance measures that support quality improvement efforts among diverse health system stakeholders, and proposes a common infrastructure for guiding and managing a consistent set of measures both nationally and regionally. The report culminates with a proposed *starter set* of over 200 performance measures.⁹

The Alliance Quality Improvement Committee immediately recognized that this starter set of performance measures met the CIT performance measurement selection criteria, especially in building on the work of others who are experts and working toward regional and national consistency in performance measurement. The Committee recommended that the Alliance adopt the IOM's starter-set, thereby promoting consistency between the Puget Sound region and national efforts to improve the quality of health care delivery. The Alliance Board approved this recommendation on December 20, 2005.

Following the direction of the Alliance Board, the Diabetes CIT subsequently

⁹Institute of Medicine, 2006. *Performance Measurement: Accelerating Improvement, Appendix G: Performance Measure Starter Set*, National Academy of Sciences. www.nap.edu/openbook/0309100070/html/179.html

adopted eleven measures from the IOM starter set. Seven specifically address diabetes care and correspond with the CIT's *long-term management of diabetes* clinical practice area of focus. Four specifically address prevention and correspond with the CIT's *risk reduction in patients with diabetes* clinical practice area of focus. The Diabetes CIT also adopted three additional measures that were not in the IOM starter set but that the ADA, and other expert sources, identify as key areas of care for patients with diabetes: foot care, screening for depression, and working with a patient to identify and adopt diabetes self-management goals.

Table 3 offers a list of the 14 performance measures recommended by the Diabetes CIT. This matrix also is provided in [Appendix 1](#), along with an additional matrix ([Appendix 2](#)) that lists each measure with its corresponding clinical practice recommendation derived from selected ADA and NCEP guidelines. The appendix offers links to each reference source.

The measures chosen by the Diabetes CIT are a combination of *process* and *outcome* measures. Process measures measure the activities that health care providers (and others) *do*; for example, conducting HbA1c tests (Measure 1), taking and documenting blood pressure readings (Measure 3), and screening for depression (Measure 13). Outcome measures measure change, or lack of change, in the health status of individual patients and patient populations as a whole; for example, how many patients with diabetes have blood glucose and LDL cholesterol levels within an acceptable range (Measures 2 and 5), and what percentage of patients received advice to quit smoking (Measure 10, which is an outcome of querying patients about tobacco use, Measure 9).

Performance Measure Data Collection

One of the Alliance's five guiding principles states: *Sharing data in a regional public/private collaborative is essential for the Alliance's success.* In support of this principle, the Alliance is developing strategies, methods, and an infrastructure for collecting and sharing data across Alliance partners. The Alliance anticipates performance measurement data will be drawn from insurance claims, lab vendors, paper and electronic charts, and disease-specific registries maintained by providers. One challenge will be collecting and aggregating these data in a meaningful way for Alliance partners. Processes for obtaining, aggregating, and interpreting data are being developed by the Alliance Health Information and Technology Committee. Claims-based data will be used initially, with the expectation that in the future data collection can be expanded to include information from other sources including lab vendors, electronic health records and disease-specific electronic patient registries for specific chronic conditions. The HI&TC will be issuing a separate report later this year on data aggregation methods, measurement approaches and related topics.

Table 3: Recommended Diabetes Clinical Practice Performance Measures

Category	Performance Measure*	Data Source
Long-term management of diabetes:		
1. HbA1c management	Percentage of patients with diabetes with one or more HbA1c test(s) conducted during the [prior twelve months]**	Claim
2. HbA1c management control	Percentage of patients with diabetes with most recent HbA1c level > 9.0% (poor control)	Lab Vendor***
3. Blood pressure management	Percentage of patients with diabetes who had their BP documented < 140/90 mmHg [during the prior twelve months]	Chart****
4. Lipid measurement	Percentage of patients with diabetes with at least one Low Density Lipoprotein cholesterol (LDL-C) test (or ALL component tests) [during the prior twelve months]	Claim
5. LDL cholesterol level	Percentage of patients with diabetes with most recent LDL-C <100 mg/dL or <130 mg/dL	Lab Vendor***
6. Eye exam	Percentage of patients with diabetes who received a retinal or dilated eye exam by an eye care professional (optometrist or ophthalmologist) [at least once during the prior twenty-four months]	Claim
7. Kidney disease screening	Percentage of patients with diabetes with one or more kidney screening tests conducted [during the prior twelve months]	Claim
8. <i>Foot exam</i>	<i>Percentage of patients with diabetes who received a foot exam during the prior twelve months</i>	<i>Chart</i>
Risk reduction in patients with diabetes:		
9. Tobacco use	Percentage of patients [with diabetes] who were queried about tobacco use one or more times [during the prior twenty-four months]	Chart
10. Advising smokers to quit	Percentage of patients [with diabetes] who received advice to quit smoking [during the prior twelve months]	Chart
11. Influenza vaccination	Percentage of patients [with diabetes] ≥ 50 who received an influenza vaccination [during the prior twelve months]	No Reliable Source
12. Pneumonia vaccination	Percentage of patients [with diabetes] who have ever received a pneumonia vaccination	Claim (?)
13. <i>Depression screening</i>	<i>Percentage of patients with diabetes who were screened for depression during the prior twelve months</i>	<i>Chart</i>
14. <i>Self management goals identification</i>	<i>Percentage of patients who have self-management goals documented in their chart during the prior twelve months</i>	<i>Chart</i>

* Italics indicate non-IOM measures recommended for inclusion by the Puget Sound Health Alliance Diabetes Clinical Improvement Team (CIT).

** Brackets indicate language clarified or added to the IOM measure by the Puget Sound Health Alliance Diabetes CIT.

*** These measurements are increasingly being performed at the health care provider's office.

**** All references to "chart" include paper or electronic charts, but any paper data extraction would be voluntary.

Performance Measurement Targets

The Diabetes CIT considered whether to identify specific targets for each performance measure it selected. Some expert-reviewed, nationally distributed diabetes care performance measures do suggest targets.¹⁰ The CIT opted to not recommend targets at this time, but to recommend instead that the Alliance go through an initial round of data gathering to develop a baseline of performance data for the five-county region. The Alliance can then compare these baseline data against national targets and determine whether and what targets to recommend to its partners.

VI. Recommended Change Strategies and Implementation Strategies

The Diabetes CIT was charged with recommending *change strategies* for providers, purchasers, health plans, and consumers. These change strategies represent activities that the identified stakeholders can engage in to enhance their ability to conform to Alliance-recommended clinical practice guidelines and to optimize their performance on measures in the care of patients with diabetes. These change strategies were then prioritized by the Diabetes CIT for the Alliance to focus our efforts in supporting and enhancing the ability of its stakeholders to engage in the change strategies.

Change Strategies

To support the Diabetes CIT's efforts in considering possible *change strategies*, Alliance staff conducted a targeted literature review of evidence-based evaluations of strategies for improving or enhancing clinical care. The staff and the CIT then created a grid of potential *actors* in the health system who might be the focus for change, including providers, provider staff, patients, community organizations (such as state and local public health, higher education, and other community-based service and advocacy organizations), purchasers, insurers, and hospitals. The CIT then identified strategies for effecting change in diabetes care and the actors who held the greatest potential for implementing each strategy. As CIT members identified change strategies, discussed their evidential support and merit, and selected potential actors, they were careful to consider that the literature on health care quality improvement clearly shows that implementing multiple strategies in combination is more effective at creating change than implementing any single strategy in isolation.¹¹

¹⁰ See, for example: National Diabetes Quality Improvement Alliance, January 2005. *Performance Measurement Set for Adult Diabetes*. www.nationaldiabetesalliance.org/measures.html.

¹¹ See, for example: 1) www.thecommunityguide.org/vaccine/vpd-int-acc-multicomponent.pdf; 2) www.thecommunityguide.org/tobacco/tobac-int-phone-support.pdf

The Diabetes CIT recommended six change strategies for Alliance partners—and for the larger community, as appropriate. Table 4 presents the change strategies in priority order: the priority reflects only where the CIT felt that, given limited resources, a greater proportion of these resources could be allocated. It does not reflect any preferred order of implementation.

Table 4: Recommended Change Strategies for Improving and Enhancing Diabetes Care	
Change Strategies	Explanation
1. Patient Registries	<ul style="list-style-type: none"> • Emphasize the importance of patient registries (either stand-alone or incorporated into Electronic Health Records, or EHRs) in clinical quality improvement efforts. • Promote and facilitate the use and dissemination of registries in ambulatory care settings in the five-county region.
2. Financial Incentives	<ul style="list-style-type: none"> • Encourage health plans and purchasers to create incentives and eliminate access barriers so that patients and providers can most effectively manage diabetes. For example: <ul style="list-style-type: none"> ➢ Encourage health plans and purchasers to eliminate or reduce out-of-pocket costs for diabetes medications and supplies if they are not already doing so.
3. Promotion of Self Management	<ul style="list-style-type: none"> • Promote and support discussion of self management between the provider and the patient in the clinical care setting. • Identify vetted tools and resources for providers to use in promoting patient self management and encourage and facilitate their use. (Strategy is related to but separate from patient education)
4. Patient Education	<ul style="list-style-type: none"> • Promote diabetes education between providers and patients in the clinical care setting. • Identify vetted private and public patient education resources in the community and encourage and facilitate providers in making referrals to them. (Strategy is related to but separate from promotion of self-management)
5. Clinical Reminders and Feedback to Providers	<ul style="list-style-type: none"> • Promote the use of clinical reminders to providers regarding the service needs of individual patients. For example: <ul style="list-style-type: none"> ➢ Remind provider when a patient with diabetes is overdue for a specific service. • Promote the use of performance feedback to providers for individual patients with diabetes as well as their total diabetes patient population.
6. Patient Reminder Systems	<ul style="list-style-type: none"> • Promote the use of patient reminders—sent directly to the patient with diabetes.

Implementation Priorities

In support of each change strategy, the Diabetes CIT identified several priority implementation approaches the Alliance could pursue. In selecting approaches to recommend, the CIT considered the current strengths and resources of the Alliance and selected actions that could be achievable by Alliance staff and partners in both the short- and long-term. The Diabetes CIT's recommended strategies are summarized in [Appendix 3](#) and include, for example:

Develop Collaborations Targeted at Funding Patient Registries

Many of the Alliance's quality improvement recommendations, especially performance measures, can be accomplished only if health care providers have effective disease-specific registries in place. A very high proportion of individual physicians and clinics in the Alliance's five-county region lack, however, the financial capacity to implement and sustain registries. The Alliance is in an excellent position to create collaborations among its partners, and between partners and other community, state, and national resources, to identify and help fund and disseminate registries. The Alliance already has identified several potential funding sources at each of these levels. The Diabetes CIT also recommends that the Alliance collaborate with the Washington State Department of Health to facilitate further dissemination of its Chronic Disease Electronic Management System (CDEMS) for diabetes, which is an application that is free (albeit with start-up time and personnel costs), but somewhat limited in its support.

Support Physician Participation in NCQA Diabetes Physician Recognition Program

The National Committee for Quality Assurance (NCQA), an independent not-for-profit health care quality organization, has developed the national Diabetes Physician Recognition Program (DPRP) with the ADA as a co-sponsor.¹² The recognition program is a voluntary program for individual physicians or physician groups that provide care to people with diabetes. Physicians achieve DPRP *recognition* by submitting data on a set of performance measures. Through promulgating and reporting on these measures, the DPRP program helps providers become more thorough about the processes and outcomes that are essential in diabetes care, and impact their success at achieving high-quality care for their patients. Providers that achieve performance measurement targets are *recognized*, which can result in publication in health plan provider directories and on NCQA's and ADA's Web Sites. They also receive referrals through the ADA's toll-free National Call Center. There may also be financial incentives for this recognition, as has occurred elsewhere through the *Bridges to Excellence* program being prompted by the National Business Coalition on Health.

¹² (www.ncqa.org/dprp)

The education, feedback, and public recognition offered by the DPRP are all incentives for physicians to provide nationally recognized, expert-reviewed diabetes clinical care services. Although participation in the program is voluntary, the fees to participate may be perceived as a barrier to participation by many smaller physician practices. Most of the DPRP performance measures are identical to the measures recommended by the Alliance Diabetes CIT, though they are fewer in number. Consequently, the Diabetes CIT suggests that the Alliance take a lead role in working with its partners and the larger community to develop funding that supports help with the physician fees required to participate in the DPRP. The Alliance also can take a lead role in informing physicians about the program and the value it can provide to their practice.

Encourage Health Plans and Purchasers to Eliminate Barriers to Appropriate Care

The research literature indicates that patient cost-sharing—including co-payments, co-insurance, and deductibles—can be a significant barrier to using clinical preventive services. The literature also indicates reducing or eliminating cost-sharing results in increased use of many services.¹³ Structural barriers, including service location, hours of operation, and availability of child care, also affect use of clinical care services.

Alliance partners include health plans and employers, who together design the health benefits packages made available to insured employees in the five-county region. The Alliance can encourage and assist these partners in evaluating their health insurance benefits and workplace policies to determine whether there are imbedded barriers to their full use. The Alliance can prepare an evidence base for this evaluation by conducting baseline research into health plan coverage levels in the Puget Sound region for diabetes supplies, vision benefits, and self-management promotion. The Alliance can support its partners in developing pilot projects that reduce access barriers, such as a pilot project that eliminates or reduces patient cost-sharing for diabetes medications and supplies. The Alliance also can assess whether other existing pilot programs that address access barriers, such as the American Pharmacists Association Foundation's *Diabetes Ten City Challenge*,¹⁴ might be appropriate for the Alliance as a whole or for a subset of Alliance partners.

¹³ See, for example: 1) Hopkins DP, Briss PA, Ricard CJ, et al. Reviews of evidence regarding interventions to reduce tobacco use and exposure to environmental tobacco smoke. *Am J of Preventive Medicine* 20(2S): 16-51. 2) Solanki G and HH Schauffler. Cost-sharing and the utilization of clinical preventive services. *American Journal of Preventive Medicine* 17(2): 127-133. 3) Stone EG, Morton SC, Hulscher ME, et al. Interventions that increase use of adult immunization and cancer screening services: A meta-analysis. *Annals of Internal Medicine* 136(9): 641-651.

¹⁴ www.aphafoundation.org/CityChallenge/TenCityChallenge.htm

Identify, Collect, and Disseminate Tools and Information Resources

The research literature and anecdotal evidence indicate that there are many tools to support providers in helping patients manage their diabetes, and many tools designed to educate patients about their diabetes condition, care, and management. But looking across any array of providers of diabetes care, and any array of patients, would reveal that the knowledge and use of these tools is hit-or-miss: some providers, for example, will have one or some tools, other providers may have others, and still other providers will have none. Further, having a tool does not necessarily mean it is used.

The Diabetes CIT noted that, just as with its recommended clinical practice guidelines and performance measures, Alliance implementation strategies for encouraging change should promote regional consistency in quality improvement efforts, align with national direction in quality improvement, and avoid duplicating the work of others wherever appropriate. The Alliance is in an excellent position to work with its partners to: identify existing appropriate tools that support providers in discussing self-management with their patients and existing appropriate patient education tools and resources; evaluate these tools and resources based on a defined set of criteria; and then disseminate them to Alliance partners through multiple venues and methods. Dissemination might include, for example, posting tools on the Alliance website or linking to them via the site; co-sponsoring continuing medical education (CME) events, provider workshops, and patient workshops; and developing information sheets and other targeted publications to disseminate to partners and other community organizations.

VII. Diabetes CIT Recommendations to the Alliance Board

Based on its research and selection process, the Diabetes CIT makes the following recommendations to the Alliance Board for specific actions to improve the quality of care for diabetes patients in the Puget Sound region:

- Adopt the complete list of 14 performance measures developed by the Diabetes CIT, along with their associated clinical practice guidelines, as regional standards of care for adults age 18 and older with Type 1 or Type 2 diabetes.
- Promote and facilitate the use and dissemination of patient registries (either stand-alone or incorporated into electronic health records) in ambulatory care settings in the five-county region.
- Encourage health plans and purchasers to create incentives for patients to access appropriate diabetes care and to eliminate barriers to access—such as out-of-pocket costs for diabetes medications and supplies—so that patients and providers can most effectively manage diabetes.

- Identify vetted tools and resources for providers to use in promoting patient self management, and encourage and facilitate their use.
- Identify vetted private and public patient education resources available in the community and encourage and facilitate providers in making referrals to them.
- Promote the use of automated tracking systems to implement: 1) clinical reminders to providers regarding the service needs of individual patients; 2) patient reminders about upcoming service needs and educational opportunities; and 3) feedback to providers on their performance against measures, at the individual patient and patient population levels.

Ultimately, the Diabetes CIT recognizes that collaboration that builds on and shares the strengths of Alliance partners and of the larger community will be the most effective means for achieving improvement and consistency in the quality of care provided to people with diabetes in the Puget Sound region. System-wide change can occur only with the collaborative participation of all who have a stake in improving the outcome.

Appendix 1: Measures grid

Puget Sound Health Alliance – Diabetes Clinical Improvement Team

February 24, 2006

Measures adapted from the IOM Starter Set⁺

Italics -Non IOM Measures recommended for inclusion by the Puget Sound Health Alliance Diabetes Clinical Improvement Team

Category	Recommended Puget Sound Health Alliance Diabetes Measures Based on the IOM Starter-Set	Data Source
Long-Term Management of Diabetes		
1. HbA1c management	Percentage of patients with diabetes with one or more HbA1c test(s) conducted during the [prior twelve months*]	Claim
2. HbA1c management control	Percentage of patients with diabetes with most recent HbA1c level > 9.0% (poor control)	Lab Vendor**
3. Blood pressure management	Percentage of patients with diabetes who had their BP documented < 140/90 mmHg [during the prior twelve months*]	Chart
4. Lipid measurement	Percentage of patients with diabetes with at least one Low Density Lipoprotein cholesterol (LDL-C) test (or ALL component tests) [during the prior twelve months*]	Claim
5. LDL cholesterol level	Percentage of patients with diabetes with most recent LDL-C <100 mg/dL or <130 mg/dL	Lab Vendor**
6. Eye exam	Percentage of patients with diabetes who received a retinal or dilated eye exam by an eye care professional (optometrist or ophthalmologist) [at least once during the prior twenty-four months*]	Claim
7. Kidney disease screening	Percentage of patients with diabetes with one or more kidney screening tests conducted [during the prior twelve months*]	Claim
8. <i>Foot exam</i>	<i>Percentage of patients with diabetes who received a foot exam during the prior twelve months</i>	<i>Chart</i>
Risk Reduction in Diabetic Patients		
9. Tobacco use	Percentage of patients [with diabetes*] who were queried about tobacco use one or more times [during the prior twelve months*]	Chart
10. Advising smokers to quit	Percentage of patients [with diabetes*] who received advice to quit smoking [during the prior twelve months*]	Chart
11. Influenza vaccination	Percentage of patients [with diabetes*] ≥ 50 who received an influenza vaccination [during the prior twelve months*]	No Reliable Source
12. Pneumonia vaccination	Percentage of patients [with diabetes*] who have ever received a pneumonia vaccination	Claim (?)
13. <i>Depression screening</i>	<i>Percentage of patients with diabetes who were screened for depression during the prior twelve months</i>	<i>Chart</i>
14. <i>Self management goals identification</i>	<i>Percentage of patients who have self-management goals documented in their chart during the prior twelve months</i>	<i>Chart</i>

⁺ Institute of Medicine, *Performance Measurement: Accelerating Improvement*, 2006. Appendix G: Performance Measure Starter Set <http://www.nap.edu/books/0309100070/html/179.html>

* Brackets indicate language added to the IOM Measure by the Puget Sound Health Alliance.

** Increasingly being measured at physician's office.

Appendix 2: Measures and recommendations grid

Puget Sound Health Alliance – Diabetes Clinical Improvement Team

February 24, 2006

Measures adapted from the IOM Starter Set⁺

Italics -Non IOM Measures recommended for inclusion by the Puget Sound Health Alliance Diabetes Clinical Improvement Team

Category	Recommended Puget Sound Health Alliance Diabetes Measures Based on the IOM Starter-Set	Recommendations from the American Diabetes Association*** (ADA)	Data Source
Long-Term Management of Diabetes			
1. HbA1c management	Percentage of patients with diabetes with one or more HbA1c test(s) conducted during the [prior twelve months*]	Perform the A1c test at least 2 times a year in patients who are meeting treatment goals (and who have stable glycemic control) (E) Perform the A1c test quarterly in patients whose therapy has changed or who are not meeting glycemic goals (E)	Claim
2. HbA1c management control	Percentage of patients with diabetes with most recent HbA1c level > 9.0% (poor control)	The A1C goal <i>for patients in general</i> is an A1C goal of <7%. (B) The A1C goal <i>for the individual patient</i> is an A1C as close to normal (<6%) as possible without significant hypoglycemia. (E)	Lab Vendor**
3. Blood pressure management	Percentage of patients with diabetes who had their BP documented < 140/90 mmHg [during the prior twelve months*]	BP should be measured at every routine diabetes visit. Patients found to have systolic BP ≥130 mmHg or diastolic BP ≥80 mmHg should have BP confirmed on a separate day (C) Patients with diabetes should be treated to a systolic BP <130 mmHg (C) Patients with diabetes should be treated to a diastolic BP <80 mmHg (B)	Chart
4. Lipid measurement	Percentage of patients with diabetes with at least one Low Density Lipoprotein cholesterol (LDL-C) test (or ALL component tests) [during the prior twelve months*]	In adult patients, test for lipid disorders at least annually and more often if needed to achieve goals. In adults with low-risk lipid values (LDL <100 mg/dl, HDL >50 mg/dl, and triglycerides <150 mg/dl), lipid assessments may be repeated every 2 years. (E)	Claim

Category	Recommended Puget Sound Health Alliance Diabetes Measures Based on the IOM Starter-Set	Recommendations from the American Diabetes Association*** (ADA)	Data Source
5. LDL cholesterol level	Percentage of patients with diabetes with most recent LDL-C <100 mg/dL or <130 mg/dL	<p>In individuals without overt CVD:</p> <ul style="list-style-type: none"> ▪ The primary goal is an LDL <100 mg/dl (2.6 mmol/l). (A) ▪ For those over the age of 40 years, statin therapy to achieve an LDL reduction of 30–40% regardless of baseline LDL levels is recommended. (A) ▪ For those under the age of 40 years but at increased risk due to other cardiovascular risk factors who do not achieve lipid goals with lifestyle modifications alone, the addition of pharmacological therapy is appropriate. (C) <p>In individuals with overt CVD:</p> <ul style="list-style-type: none"> ▪ All patients should be treated with a statin to achieve an LDL reduction of 30–40%. (A) ▪ A lower LDL cholesterol goal of <70 mg/dl (1.8 mmol/l), using a high dose of a statin, is an option. (B) ▪ Lower triglycerides to <150 mg/dl (1.7 mmol/l) and raise HDL cholesterol to >40 mg/dl (1.15 mmol/l). In women, an HDL goal 10 mg/dl higher (>50 mg/dl) should be considered. (C) <p>From NCEP on High Blood Cholesterol[†]: The presence of diabetes should modify treatment goals for LDL cholesterol. Persons with type 2 diabetes should be managed as a coronary heart disease (CHD) risk equivalent.</p>	Lab Vendor**
6. Eye exam	Percentage of patients with diabetes who received a retinal or dilated eye exam by an eye care professional (optometrist or ophthalmologist) [at least once during the prior twenty-four months*]	<p>Adults and adolescents with type 1 diabetes should have an initial dilated and comprehensive eye examination by an ophthalmologist or optometrist within 3–5 years after the onset of diabetes. (B)</p> <p>Patients with type 2 diabetes should have an initial dilated and comprehensive eye examination by an ophthalmologist or optometrist shortly after the diagnosis of diabetes. (B)</p> <p>Subsequent examinations for type 1 and type 2 diabetic patients should be repeated annually by an ophthalmologist or optometrist. Less frequent exams (every 2–3 years) may be considered in the setting of a normal eye exam. Examinations will be required more frequently if retinopathy is progressing. (B)</p>	Claim
7. Kidney disease screening	Percentage of patients with diabetes with one or more kidney screening tests conducted [during the prior twelve months*]	<p>Perform an annual test for the presence of microalbuminuria in type 1 diabetic patients with diabetes duration of ≥5 years and in all type 2 diabetic patients, starting at diagnosis and during pregnancy. (E)</p> <p>Serum creatinine should be measured at least annually for the estimation of glomerular filtration rate (GFR) in all adults with diabetes regardless of the degree of urine albumin excretion. The serum creatinine alone should not be used as a measure of kidney function but instead used to estimate GFR and stage the level of chronic kidney disease (CKD). (E)</p>	Claim

Category	Recommended Puget Sound Health Alliance Diabetes Measures Based on the IOM Starter-Set	Recommendations from the American Diabetes Association*** (ADA)	Data Source
8. Foot exam	Percentage of patients with diabetes who received a foot exam during the prior twelve months	<p>Perform a comprehensive foot examination annually on patients with diabetes to identify risk factors predictive of ulcers and amputations. Perform a visual inspection of patients' feet at each routine visit. (E)</p> <p>The foot examination can be accomplished in a primary care setting and should include the use of a Semmes-Weinstein monofilament, tuning fork, palpation, and a visual examination. (B)</p>	Chart
Risk Reduction in Diabetic Patients			
9. Tobacco use	Percentage of patients [with diabetes*] who were queried about tobacco use one or more times [during the prior twelve months*]	Include smoking cessation counseling and other forms of treatment as a routine component of diabetes care. (B)	Chart
10. Advising smokers to quit	Percentage of patients [with diabetes*] who received advice to quit smoking [during the prior twelve months*]	Advise all patients not to smoke. (A)	Chart
11. Influenza vaccination	Percentage of patients [with diabetes*] \geq 50 who received an influenza vaccination [during the prior twelve months*]	Annually provide an influenza vaccine to all diabetic patients 6 months of age or older (C)	No Reliable Source
12. Pneumonia vaccination	Percentage of patients [with diabetes*] who have ever received a pneumonia vaccination	Provide at least one lifetime pneumococcal vaccine for adults with diabetes. A one-time revaccination is recommended for individuals >64 years of age previously immunized when they were <65 years of age if the vaccine was administered >5 years ago. Other indications for repeat vaccination include nephritic syndrome, chronic renal disease, and other immunocompromised states, such as after transplantation (C)	Claim (?)
13. Depression screening	Percentage of patients with diabetes who were screened for depression during the prior twelve months	<p>Preliminary assessment of psychological and social status should be included as part of the medical management of diabetes. (E)</p> <p>Psychosocial screening should include but is not limited to: attitudes about the illness, expectations for medical management and outcomes, affect/mood, general and diabetes related quality of life, resources (financial, social, and emotional), and psychiatric history. (E)</p>	Chart
14. Self management goals identification	Percentage of patients who have self-management goals documented in their chart during the prior twelve months	<p>People with diabetes should receive Diabetes Self Management Education (DSME) according to national standards when their diabetes is diagnosed and as needed thereafter. (B)</p> <p>DSME should be provided by health care providers who are qualified to provide that DSME based on their professional training and continuing education. (E)</p> <p>DSME should address psychosocial issues, since emotional well-being is strongly associated with positive diabetes outcomes. (C)</p> <p>DSME should be reimbursed by third-party payors. (E)</p>	Chart

+ Institute of Medicine, *Performance Measurement: Accelerating Improvement*, 2006. Appendix G: Performance Measure Starter Set <http://www.nap.edu/books/0309100070/html/179.html>

* Brackets indicate language added to the IOM Measure by the Puget Sound Health Alliance.

** Increasingly being measured at physician's office.

*** **Standards of Medical Care in Diabetes—2006: American Diabetes Association** http://care.diabetesjournals.org/cgi/content/full/29/suppl_1/s4

ADA ratings: ADA evidence grading system for clinical practice recommendations

Level of Evidence / Description:

A. Clear evidence from well-conducted, generalizable, randomized controlled trials that are adequately powered including:

- Evidence from a well-conducted multicenter trial
- Evidence from a meta-analysis that incorporated quality ratings in the analysis
- Compelling nonexperimental evidence, i.e., "all or none" rule developed by Center for Evidence Based Medicine at Oxford

Supportive evidence from well-conducted randomized controlled trials that are adequately powered including:

- Evidence from a well-conducted trial at one or more institutions
- Evidence from a meta-analysis that incorporated quality ratings in the analysis

B. Supportive evidence from well-conducted cohort studies

- Evidence from a well-conducted prospective cohort study or registry
- Evidence from a well-conducted meta-analysis of cohort studies

Supportive evidence from a well-conducted case-control study

C. Supportive evidence from poorly controlled or uncontrolled studies

- Evidence from randomized clinical trials with one or more major or three or more minor methodological flaws that could invalidate the results
- Evidence from observational studies with high potential for bias (such as case series with comparison to historical controls)
- Evidence from case series or case reports

Conflicting evidence with the weight of evidence supporting the recommendation

E. Expert consensus or clinical experience

† Refers to the NCEP, *Report on Detection, Evaluation and Treatment of High Blood Cholesterol (ATP III)*, 2001 and 2004 Update.

Appendix 3: Change strategies document

Implementation Strategies Based on Priority Change Strategies

1	Patient Registries	<ul style="list-style-type: none"> ▪ Emphasize the importance of patient registries (either stand-alone or incorporated into Electronic Health Records, or EHRs) in clinical quality improvement efforts. ▪ Promote and facilitate the use and dissemination of registries in ambulatory care settings in the five-county region.
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Potential Examples:

- ◆ Washington State Collaborative: The Alliance could partner with the WA State Department of Health (DOH) in developing and disseminating the diabetes patient registry (CDEMS), as part of the Washington State Collaborative project.
- ◆ WSMA grants: The Alliance could partner with the Washington State Medical Association (WSMA), which has funding to facilitate the development of patient registries for the disease conditions that form the Alliance's four initial areas of focus: diabetes, heart disease, depression, and back pain. These registries will likely be based on claims data.
- ◆ HCA/First Choice Grants: The Alliance could partner with the WA State Health Care Authority and First Choice Health Network, Inc. to distribute grants of up to \$20,000 each to small clinical practices in the region for the acquisition and development of EHRs.
- ◆ Qualis Health DOQ-IT: The U.S. Centers for Medicare and Medicaid Services (CMS) initiated the Doctors Office Quality-Information Technology program to accelerate the transition to EHRs. In Washington and Idaho, Qualis Health has been contracted by CMS to provide assistance in selecting and implementing EHR systems in participating practices. The Alliance could collaborate with Qualis Health on this effort or publicly support the effort in the community. (Note: DOQ-IT participants are required to submit clinical measures to CMS). Website: <http://www.qualishealth.org/doqit/index.cfm>
- ◆ Information Collection and Dissemination: The Alliance will identify, collect, and disseminate information on EHRs for providers. Dissemination methods may include: Alliance website, CME events, and workshops. Sample resources on EHRs for providers include:
 - American Academy of Family Physicians (AAFP) IT Resource Center: <http://www.centerforhit.org/>
 - Open source VistA: <http://www.vista-office.com/> or <http://www.virec.research.med.va.gov/DataSourcesName/VISTA/VISTA.htm>
- ◆ NCQA Diabetes Physician Recognition Program (DPRP): The Alliance will encourage and explore funding mechanisms for physicians to participate in the National Committee for Quality Assurance's (NCQA) DPRP. The DPRP (www.ncqa.org/dprp) is a voluntary, fee-based program that recognizes high quality of care provided by physicians for persons with diabetes. Recognition is based on key measures that are consistent with the Alliance's recommended diabetes measures.
- ◆ Bridges to Excellence Program: The Alliance will also consider the NCQA / Bridges to Excellence Program as a pay-for-performance model for diabetes care in the Puget Sound region to create incentives for health care practices to develop systems to improve and enhance the care they provide.

Recommended Alliance Action Plan:

- ◆ Initiate and develop collaborations between the Alliance and the Washington State Collaborative, WSMA, HCA and First Choice, and NCQA-DPRP
- ◆ Look at ways of collaborating with the Qualis Health DOQ-IT program
- ◆ Collect and provide information on resources for patient registries and vetted EHR systems with registries on Alliance web site
- ◆ Encourage purchasers and health plans to support the development and use of registries by providers

2	Financial Incentives	<ul style="list-style-type: none">▪ Encourage health plans and purchasers to create incentives and eliminate access barriers so that patients and providers can most effectively manage diabetes. For example:<ul style="list-style-type: none">➤ Encourage health plans and purchasers to eliminate or reduce out-of-pocket costs for diabetes medications and supplies if they are not already doing so.
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Potential Examples:

- ◆ For the purpose of developing a set of recommendations for health plans and purchasers, the Alliance will conduct baseline research into current financial incentives in the market. This may include:
 - Determining coverage levels for diabetes supplies by health plans in the Puget Sound region as compared to other regions.
 - Determining the prevalence of vision benefits for patients with diabetes in the Puget Sound region.
 - Determining the prevalence of coverage of self-management promotion.
 - Evaluating other ideas for health plan benefit financial incentives, such as hyperbaric treatment coverage, nutrition counseling, and other treatment/preventive measures.
 - Assessing the feasibility of implementing pilot projects, such as the American Pharmacists Association Foundation's *Diabetes Ten City Challenge*.
- ◆ The Alliance will encourage and explore funding mechanisms for physicians to participate in the NCQA Diabetes Physician Recognition Program, which may include the Bridges to Excellence pay-for-performance model - See Change Strategy #1

Recommended Alliance Action Plan:

- ◆ Complete preliminary research on existing financial incentives for diabetes medications and supplies.
- ◆ Encourage health plans and purchasers to eliminate or reduce out-of-pocket costs for diabetes medications and supplies if they are not already doing so.
- ◆ Encourage and explore funding mechanisms for providers who treat patients with diabetes to achieve the levels of care necessary to apply for recognition from the NCQA Diabetes Physician Recognition Program.

3	Promotion of Self Management	<ul style="list-style-type: none"> ▪ Promote and support discussion of self management between the provider and the patient in the clinical care setting. ▪ Identify vetted tools and resources for providers to use in promoting patient self management and encourage and facilitate their use. (Strategy is related to but separate from patient education)
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Potential Examples:

- ◆ Promote use of “The Planned Visit” during which the provider and patient focus on self management by setting realistic goals and expectations.
- ◆ Identify, collect, and disseminate tools for providers to use in discussing self management with their patients. Develop standard review criteria to determine which tools will be disseminated.
 - Methods of disseminating these tools to providers may include: Alliance website, CME events, and workshops.
- ◆ Identify and review programs, and develop partnerships with existing groups in the region who are working toward improving consumer behavior with regard to diabetes self management.
 - Methods of disseminating these vetted community resources to patients and providers may include: Alliance website, CME events, patient workshops, and other patient-centered community resources.
- ◆ Encourage providers to assign staff resources (or other group) to follow up with patient after referrals (also ties to clinical reminders).
- ◆ The Alliance will encourage and explore funding mechanisms for physicians to participate in the NCQA Diabetes Physician Recognition Program, which may include the Bridges to Excellence pay-for-performance model - See Change Strategy #1
- ◆ Encourage and assist employers in identifying and recommending health promotion programs to their employees via the Internet or corporate intranet (while maintaining patient / employee anonymity). These programs often dovetail with diabetes patient self-management goals, such as weight loss, tobacco cessation, and dietary changes resulting from nutrition counseling.
- ◆ Examples of resources, tools, and programs may include:
 - Seattle King County Public Health - Steps to Health: <http://www.metrokc.gov/health/steps/>
 - Seattle King County Public Health REACH 2010 Coalition (to reduce diabetes health disparities experienced by communities of color): <http://www.metrokc.gov/health/reach/index.htm>
 - Joslin Diabetes Center at Swedish: <http://www.swedish.org/body.cfm?id=136>
 - The National Diabetes Education Program (NDEP) web site - for both patients and providers: <http://www.ndep.nih.gov/>
 - NDEP module for systems change in diabetes care (for providers): <http://betterdiabetescare.nih.gov/>
 - The American Diabetes Association: <http://diabetes.org>
 - Compare Your Care - diabetes tool developed by the Foundation for Accountability, owned by HealthGrades: <http://www.compareyourcare.org/>

Recommended Alliance Action Plan:

- ◆ Identify and collect self-management tools for providers to use and place links on the Alliance website; inform participating organizations of their availability.
- ◆ Initiate contact with community organizations (such as Public Health - Seattle & King County and hospital diabetes centers) to discuss and review their self-management programs.
- ◆ Work with employers to place links on their corporate intranet and/or public Internet website.

4	Patient Education	<ul style="list-style-type: none">▪ Promote diabetes education between providers and patients in the clinical care setting.▪ Identify vetted private and public patient education resources in the community and encourage and facilitate providers in making referrals to them. (Strategy is related to but separate from self-management promotion)
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Potential Examples:

- ◆ Identify and review programs, and develop partnerships with existing groups in the region who are working toward improving consumer behavior with regard to diabetes education. Develop standard review criteria to determine which programs will be identified by the Alliance.
 - Methods of disseminating these vetted community resources to patients and providers may include: Alliance website, CME events, diabetic patient workshops, and other patient-centered community resources.
- ◆ Encourage health plans to pay for patients to use Alliance-recommended patient education tools and resources.
- ◆ Encourage providers to assign staff resources (or other group) to follow up with patient after referrals to education programs (also ties to clinical reminders).
- ◆ Encourage and assist employers in identifying and recommending patient education programs to their employees via the Internet or corporate intranet (while maintaining patient / employee anonymity).
- ◆ The Alliance will encourage and explore funding mechanisms for physicians to participate in the NCQA Diabetes Physician Recognition Program, which may include the Bridges to Excellence pay-for-performance model - See Change Strategy #1
- ◆ Examples of resources, tools, and programs include:
 - Joslin Diabetes Center at Swedish: <http://www.swedish.org/body.cfm?id=136>
 - Seattle King County Public Health - Steps to Health: <http://www.metrokc.gov/health/steps/>
 - Seattle King County Public Health REACH 2010 Coalition (to reduce diabetes health disparities experienced by communities of color): <http://www.metrokc.gov/health/reach/index.htm>
 - The National Diabetes Education Program (NDEP) web site - for both patients and providers: <http://www.ndep.nih.gov/>
 - NDEP module for systems change in diabetes care (for providers): <http://betterdiabetescare.nih.gov/>
 - The American Diabetes Association: <http://diabetes.org>
 - Compare Your Care - diabetes tool developed by the Foundation for Accountability, owned by HealthGrades: <http://www.compareyourcare.org/>

Recommended Alliance Action Plan:

- ◆ Initiate contact with community organizations (such as Public Health - Seattle & King County and hospital diabetes centers) to discuss and review their patient education programs.
- ◆ Place links to vetted educational tools and resources on the Alliance website and inform participating organizations of their availability.
- ◆ Work with employers to place links on their corporate intranet and/or public Internet website.

5	Clinical Reminders and Feedback to Providers	<ul style="list-style-type: none"> ▪ Promote the use of clinical reminders to providers regarding the service needs of individual patients. For example: <ul style="list-style-type: none"> ➤ Remind provider when a patient with diabetes is overdue for a specific service. ▪ Promote the use of performance feedback to providers, for individual patients with diabetes as well as their diabetes patient population as a whole.
6	Patient Reminder Systems	<ul style="list-style-type: none"> ▪ Promote the use of patient reminders—sent directly to the patient with diabetes.

Comments and Potential Examples:

- ◆ The use of clinical and patient reminders could be a direct output of patient registries in ambulatory care settings.
- ◆ The creation and maintenance of a patient registry would serve as an important bridge between the paper medical record and full electronic health record adoption.
- ◆ Feedback to providers will include the measurement and reporting efforts of the Health Information & Technology Committee, with the ultimate goal of having a single standardized report card for providers in this region.
- ◆ Patient reminder systems have proven to be a highly effective strategy for chronic disease management according to the literature and CIT members' experience.
- ◆ The Alliance will encourage and explore funding mechanisms for physicians to participate in the NCQA Diabetes Physician Recognition Program, which may include the Bridges to Excellence pay-for-performance model - See Change Strategy #1

Recommended Alliance Action Plan:

- ◆ Incorporate clinical reminders, feedback to providers, and patient reminder systems into Alliance strategies to promote use of patient registries.
- ◆ Continue to incorporate feedback to providers, purchasers, and health plans into the measurement and reporting efforts of the Alliance.
- ◆ Encourage purchasers and health plans to support the development and use of registries by providers.

Appendix 4: Diabetes Clinical Improvement Team Members

Name	Title	Affiliation
Dr. Bobbie Berkowitz	PhD, RN, FAAN Alumni Endowed Professor of Nursing	University of Washington School of Nursing
Dr. Ryan Bradley	Research Fellow	Bastyr Center for Natural Health
Mr. Geoff Brown	Health Benefits Consultant	Watson Wyatt
Dr. Sharon Eloranta	MD; Senior Quality Improvement Consultant	Qualis Health
Dr. Warren Fein	MD; Medical Director, Swedish Physicians Division	Swedish Medical Center
Dr. Cheza Garvin	PhD, MPH; Manager, Chronic Disease Prevention and Healthy Aging Unit	Public Health – Seattle & King County
Dr. Ron Inge	DDS; Vice President and Dental Director	Washington Dental Service
Dr. Michelle Matin	Physician	Seattle Primary Physicians
Dr. Brenda Montgomery	Program Manager	University of Washington Diabetes Prevention Program
Dr. Andrew Oliveira	MD, Medical Director	Aetna US Healthcare
Mr. Scott Pritchard	Office of Community Wellness and Prevention, Employer-Based Health & Productivity	Washington State Department of Health
Ms. Colette Rush	RN	Polyclinic
Ms. Giselle Sampson	Employee Benefits Manager	REI

Appendix 5: Alliance Diabetes CIT Staff and Consultants

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