DIABETES DISEASE MANAGEMENT
PROGRAM DESCRIPTION
FY11 – FY12
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1 Introduction

Network Health’s Diabetes Disease Management program is aimed at improving the health outcomes for people with Diabetes. The program uses a multi-faceted approach to achieve the best possible therapeutic outcomes based on assessment of Enrollee needs, ongoing care monitoring, evaluation, and tailored Enrollee and practitioner interventions.

Diabetes is widely recognized as one of the leading causes of death and disability in the United States. According to the American Diabetes Association, there are 25.8 million people in the United States, or 8.3% of the population, who have Diabetes. In 2010 1.9 million new cases were diagnosed in people aged 20 and over. Diabetes is associated with an increased risk for a number of serious, sometimes life-threatening, complications. The disease often leads to blindness, heart and blood vessel disease, stroke, kidney failure, amputations, and nerve damage. Diabetes control can help reduce the risk of complications and decrease the cost of care. The total annual economic cost of Diabetes care in 2007 was estimated to be $174 billion, direct care costs totaled $116 billion and indirect costs such as work loss, disability and premature mortality totaled $58 billion.1

The most recent data from the Massachusetts Department of Public Health reports the rate of Diabetes in the State to be 7.5% for adults (over 18 years of age).2 The prevalence of diabetes in Massachusetts is higher for racial and ethnic minorities Asian, non-Hispanics (16.0%); Hispanics (14.2%); and Black, non-Hispanics (12.8%) versus White, non-Hispanics (6.5%). Also aging appears to be a factor that increases the likelihood that one will develop diabetes. 4.3% of those in the 35-44 year group have diabetes but 19.5% of those 65 to 75 years of age.3 Network Health reported for the same time period the rate of Diabetes among its Enrollees was 6.71%.

“Researchers from the University of Chicago predict that the number of people with both diagnosed and undiagnosed diabetes will increase from 23.7 to 44.1 million over the next 25 years. For the population aged 24 to 85 years, the study estimates about 19.5 million cases of diagnosed and 4.25 million cases of undiagnosed diabetes without significant changes in private or public strategies. The overall population with diabetes is expected to rise over the next 12 years, but the number of overweight or obese people without diabetes is expected to remain stable, at about 65 percent. Over the next 25 years, annual spending on diabetes and its complications is predicted to reach $336 billion (in 2007 dollars), up from $113 billion today, with related Medicare spending to rise to $171 billion by 2034, up from $45 billion.”4

In 2008, the Massachusetts Department of Public Health reported the rate of Diabetes in the State was 7.2% for adults (over 18 years of age) and that Diabetes was the ninth leading cause of death in the state in 2007.5 Residents of the state with Diabetes were also reported to be twice as likely

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to have heart disease and their prevalence for heart attacks and strokes was three times the rate for those without the chronic condition.

Network Health reported for the same time period the rate of Diabetes among its Enrollees was 6.73% for adults and children. Diabetes is one of the most common chronic diseases in children and adolescents; about 151,000 people below the age of 20 years have diabetes.

2 Scope

Network Health’s Diabetes Disease Management program is a population-based approach to the clinical and quality management of this chronic condition. This approach identifies individuals with Diabetes, and through the use of disease-specific interventions, attempts to alter the course of the disease. Referrals may be received from a number of sources: Network Health staff, practitioners, facility staff, vendors, Health Integrated (Network Health’s health-coaching vendor), or self-referral by an Enrollee. The Disease Management team works collaboratively with other clinicians and licensed professionals at Network Health to improve disease state outcomes and maximize individual Enrollee functioning. Enrollees with complex issues or the need for more intense interventions are referred to Care Management. Program components include mailed educational materials, provider education on evidence-based clinical guidelines, telephonic Enrollee education, and care coordination. The clinical basis for our program was established by Massachusetts Guidelines for Adult Diabetes Care and Network Health’s Diabetes care guidelines.

Diabetes is associated with an increased risk for a number of serious, sometimes life-threatening, complications. The disease often leads to blindness, heart and blood vessel disease, stroke, kidney failure, amputations, and nerve damage. Diabetes control can help reduce the risk of complications and decrease the cost of medical care, as indicated below.

The total cost of Diabetes care in 2007 was estimated to be $174 billion. Medical expenditures totaled $116 billion and were comprised of $27 billion for diabetes care, $58 billion for chronic Diabetes-related complications, and $31 billion for excess general medical costs.¹

Network Health’s numbers for Diabetes (some of which were reported on past submissions to the state)

<table>
<thead>
<tr>
<th>CY05</th>
<th>CY06</th>
<th>CY07</th>
<th>CY08</th>
<th>APR08-MAR09</th>
<th>BASELINE CY09</th>
<th>REMEASURE FY10</th>
<th>REDO 10/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2%</td>
<td>6.73%</td>
<td>6.55%</td>
<td>6.73%</td>
<td>6.81%</td>
<td>6.7%</td>
<td>6.6%</td>
<td>6.7%</td>
</tr>
</tbody>
</table>

We are reporting to the state 18-64 years of age in CY09 and CY10

National rate 8.3% or 25.8 million children and adults in the U.S. according to 2011 National Diabetes fact sheet released Jan. 26, 2011

Massachusetts prevalence in 2009, 360,000 residents or 7.2%
HEDIS 11 for Network Health

<table>
<thead>
<tr>
<th>Comprehensive Diabetes Care</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>HbA1c Testing</td>
<td>89.05%</td>
</tr>
<tr>
<td>Poor HbA1c Control (&gt;9)</td>
<td>41.36%</td>
</tr>
<tr>
<td>HbA1c Control &lt; 8</td>
<td>48.42%</td>
</tr>
<tr>
<td>HbA1c Control &lt; 7</td>
<td>NA</td>
</tr>
<tr>
<td>Eye Exam</td>
<td>67.40%</td>
</tr>
<tr>
<td>LDL-C Screening</td>
<td>82.00%</td>
</tr>
<tr>
<td>LDL-C Level &lt;100</td>
<td>36.98%</td>
</tr>
<tr>
<td>Attention for Nephropathy</td>
<td>81.27%</td>
</tr>
<tr>
<td>BP&lt;130/80</td>
<td>40.15%</td>
</tr>
<tr>
<td>BP&lt;140/90</td>
<td>66.18%</td>
</tr>
</tbody>
</table>

3 Program Structure

The components of Network Health’s Diabetes Disease Management program are described below. The program is depicted in flow-chart format in Attachment 1. A summary of program interventions are in Attachment 2.

3.1 General Diabetes Educational Interventions

The goal of our general education campaign is to ensure that Enrollees, practitioners, and health plan staff are aware of the existence of the Diabetes Disease Management program and how to access its services. Since January 2010, all Network Health members are made aware of the Diabetes Disease Management program and the RN information line when they are sent the “Welcome!”, a booklet which explains the Disease Management program that is part of their initial mailing from the health plan. Network Health targets two audiences in its general education campaigns: Enrollees and practitioners. Through distribution of disease-specific information, such as in member and practitioner newsletter articles and special mailings, Network Health attempts to raise awareness in Enrollee and practitioner populations about the signs and symptoms of Diabetes and interventions to control this disease. Along with notifying an Enrollee with Diabetes and the practitioners treating the disease about our program, these materials also provide support and encouragement for undiagnosed Enrollees to speak with their health care practitioners about possible symptoms, thereby reducing the rate an Enrollee with Diabetes remains undiagnosed. Program information contains an option for Enrollees to “opt out” of the program or any parts of the program; and to “opt in” to portions of the program. Network Health informs practitioners about services offered to Enrollees with Diabetes and how to use the Disease Management program through the Provider Manual, the Network Health Web site, provider updates, and new provider orientation.
3.2 Identification of At-Risk Enrollees

Identification of Enrollees with Diabetes occurs monthly based on medical and pharmacy claims data using HEDIS® criteria (without continuous enrollment criteria) which feeds into Network Health’s Disease Monitor Identification Criteria.

3.2.1 Network Health uses information from the following sources to identify Enrollees who might benefit from Diabetes Disease Management program:

- Claims data
- Pharmacy data
- Health Needs Assessment-Core (HNA-C) results
- Referrals from UM and Integrated Care Management
- Referrals from Enrollees and practitioner
- Other Disease Management programs, as applicable

3.2.1. Data from Claims-based sources are used on a monthly basis to identify individuals newly diagnosed with Diabetes by Network Health’s Disease Monitor Identification. Referrals from UM processes/data, care managers, practitioners and self-referral from Enrollees (including via HNA-C) occur on an ongoing basis. All Enrollees diagnosed with Diabetes and all those who may benefit from the Diabetes Disease Management program are eligible. In FY 2012, the diabetes registry has been updated to allow for high, moderate and low stratification levels which would enable Network Health the opportunity to provide specific interventions. The stratification levels are as follows:

**Diabetes Disease Severity Stratification Level: HIGH**

**Disease Identification Certainty level: Definitive**

- At least ONE (1) open CCMS case with case type = Diabetes; OR
- On all Rx claims, at least ONE (1) prescription for Insulin; OR
- On all Rx claims, at least TWO (2) prescriptions for Oral Hypoglycemics; OR
- On Inpatient claims ONLY, a least ONE (1) diagnosis of Diabetes mellitus as primary diagnosis; OR
- On Inpatient claims ONLY, a least ONE (1) diagnosis of diabetes related complication as primary diagnosis AND on any claim at least ONE (1) claim with diagnosis of diabetes with manifestations; OR
- On all non-inpatient claims, at least TWO (2) claims for Observation Care (Rev code 0762; CPT 99217-99220) with a diagnosis of Diabetes mellitus as primary diagnosis; OR
- On all non-inpatient claims, at least TWO (2) claims for Observation Care (Rev code 0762; CPT 99217-99220) with a diagnosis of diabetes related complication as primary diagnosis AND on any claim at least ONE (1) claim with diagnosis of diabetes with manifestations; OR
- On all non-inpatient claims, at least TWO (2) claims for Emergency Room Care (Rev code; CPT) with a diagnosis of Diabetes mellitus as primary diagnosis; OR
On all non-inpatient claims, at least TWO (2) claims for Emergency Room Care (Rev code; CPT) with a diagnosis of diabetes related complication as primary diagnosis AND on any claim at least ONE (1) claim with diagnosis of diabetes with manifestations; OR
On all E&M claims, at least TWO (2) claims (include initial/follow-up) with a diagnosis of Diabetes mellitus as primary diagnosis; OR
On all E&M claims, at least TWO (2) claims (include initial/follow-up) with a diagnosis of diabetes related complication as primary diagnosis AND on any claim at least ONE (1) claim with diagnosis of diabetes with manifestations; OR

Diabetes Disease Severity Stratification Level: MODERATE

Disease Identification Certainty level: Definitive

On all Rx claims, at least ONE (1) prescription for Oral Hypoglycemics; OR
On all non-inpatient claims, at least ONE (1) claim for Observation Care (Rev code 0762; CPT 99217-99220) with a diagnosis of Diabetes mellitus as primary diagnosis; OR
On all non-inpatient claims, at least ONE (1) claim for Observation Care (Rev code 0762; CPT 99217-99220) with a diagnosis of diabetes related complication as primary diagnosis AND on any claim at least ONE (1) claim with diagnosis of diabetes with manifestations; OR
On all non-inpatient claims, at least one (1) claim for Emergency Room Care (Rev code; CPT) with a diagnosis of Diabetes mellitus as primary diagnosis; OR
On all non-inpatient claims, at least one (1) claim for Emergency Room Care (Rev code; CPT) with a diagnosis of diabetes related complication as primary diagnosis AND on any claim at least ONE (1) claim with diagnosis of diabetes with manifestations; OR

Diabetes Disease Severity Stratification Level: LOW

Disease Identification Certainty level: Probable

On all non-inpatient claims, at least ONE (1) claim for Observation Care (Rev code 0762; CPT 99217-99220) with a diagnosis of Diabetes mellitus as ANY diagnosis; OR
On all non-inpatient claims, at least ONE (1) claim for Observation Care (Rev code 0762; CPT 99217-99220) with a diagnosis of diabetes related complication as ANY diagnosis; OR
On all non-inpatient claims, at least ONE (1) claim for Emergency Room Care (Rev code; CPT), with a diagnosis of Diabetes mellitus as ANY diagnosis; OR
On all non-inpatient claims, at least ONE (1) claim for Emergency Room Care (Rev code; CPT) with a diagnosis of diabetes related complication as ANY diagnosis; OR
On all E&M claims, at least ONE (1) claim (include initial/follow-up) with a diagnosis of Diabetes mellitus as ANY diagnosis; OR
On all E&M claims, at least ONE (1) claim (include initial/follow-up) with a diagnosis of Diabetes related complication as ANY diagnosis; OR
On any claim, at least four (4) claims with a CPT code for Glycated Hemoglobin Test
3.2.2
(*Similar to HEDIS Current Year Criteria) eliminating requirement for continuous enrollment)

3.3 Program Steps

3.3.1 Distribution of Network Health Diabetes Disease Management program information starts with the Enrollee being sent a Welcome letter that introduces the components of the program.

- How an enrollee is identified eligible for our program, a description of services included, and how to “opt out” (an enrollee is presumed to be in the program unless they choose to “opt out”)
- Encouragement to call Network Health to be referred to the Neighborhood Diabetes program
  - The booklet “Living Health with Diabetes” containing disease-specific information is included with the Welcome letter. It includes: Information about condition monitoring including self-management of a chronic disease Information discussing Diabetes Trigger identification, and cholesterol, blood pressure, and blood sugar control, encouraging goal setting and appropriate lifestyle modification around diet and exercise
- Encouragement to work with their practitioner, to develop and adhere to recommended treatment and screenings, and to discuss medications, tests, and goals

3.3.3 Condition monitoring occurs on an ongoing basis. Analysis of clinical gaps is performed and notification of any care gaps is provided to Enrollees and the Enrollee’s PCP through the following mechanisms:

**Enrollee Notification**

- HbA1c – claims within the past 12 months are analyzed for gaps in HbA1c tests (Enrollees need 2 HbA1c per 12 months) for Diabetes.
- Eye Exam – claims within the past 12 months are analyzed for a gap in Diabetes eye exam.
- LDL-C lipid screening – claims within the past 12 months are analyzed for a gap in LDL-C lipid screening test.
- Nephropathy and ACE inhibitor/ARB medication – claims within the past 12 months are analyzed for a gap for Diabetics without nephropathy and no ACE inhibitor/ARB medication.
- Microalbumin test – claims within the past 12 months are analyzed for a gap for Diabetes without nephropathy and no microalbumin test.
  - If a gap is identified, a mailing is forwarded to the Enrollee identifying the gap, educating him/her about the importance of obtaining tests, eye exams, filling their prescriptions, and encouraging him/her to seek additional care to ameliorate the gap. The vendor utilizes a 360-day look-back semi-annually to select those members who require a mailing.
Practitioner Notification

- Trigger Reports to PCP for Enrollees meeting HEDIS® criteria (without continuous enrollment criteria) with Diabetes lacking appropriate screenings (HbA1c, eye exam, LDL testing, microalbumin screening) with fax-back forms for feedback on individual Enrollees.
- PCP visit – claims within the previous 12 months are analyzed for a gap for a practitioner visit for Diabetes.
- HbA1c screening – claims within the previous 12 months are analyzed for a gap in HbA1c screening test for Diabetes
- Eye Exam – claims within the previous 12 months are analyzed for a gap in Diabetic eye exam.
- LDL-C lipid screening test – claims within the previous 12 months are analyzed for a gap in the LDL-C lipid screening test.
- Nephropathy screening test – claims within the previous 12 months are analyzed for a gap in Nephropathy screening test.
  - If a gap is identified, a mailing is forwarded to the Enrollee’s PCP identifying the gap. Gaps for no screening test found in the last 12 month period, places the Enrollee in a non-compliant with regard to our clinical guidelines.

3.3.6. Additional Interventions for High-Risk Enrollees with:

- Diabetes identified by Network Health Disease Monitor Identification Criteria*
- Enrollees in Care Management for post acute stabilization receive:
  Care Management services for complex Enrollees with Diabetes and significant co-morbidities. Referrals to vendors if appropriate for health coaching and/or inclusion in the Neighborhood Diabetes program. (*Similar to HEDIS® Current Year Criteria) eliminating requirement for continuous enrollment.

3.3.7 Health Coaching Services

- An Enrollee is referred for personal outreach and health coaching or identified by the vendor’s Health Integrated Synergy Program. Health coaches provide support to individuals to facilitate improved behavior, motivation, confidence, decision-making skills, and knowledge and awareness of their disease and self-management.
  - Any gaps in care or educational needs are reassessed and addressed during health coaching encounters; need-specific written materials are forwarded to the Enrollee as needs are identified.

If the health coach determines that more intensive Care Management is necessary s/he refers the Enrollee to Network Health Integrated Care Management program.
## 4 Program Evaluation

4.1. **Participation rates** are measured annually. Network Health’s Diabetes Disease Management program is a passive participation program. Outreach success is monitored.

4.2. **Program effectiveness** is measured by:
   - HEDIS® criteria, HbA1c screenings, eye exam, LDL screening, and nephropathy screening
   - Predicted versus actual medical costs for Network Health Enrollees with targeted chronic diseases
   - Complaints and inquiries about the program
   - Enrollee satisfaction with the program

The Diabetes Disease Management program (DDMP) is evaluated annually using the following metrics.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Numerator/Denominator</th>
<th>Data Source/Frequency of Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participation Rate</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of Enrollees who participated in each intervention of the Diabetes Disease Management program</td>
<td>Number of Enrollees who received each intervention / Number of Enrollees who were identified for participation in the DDMP</td>
<td>DDMP/annually</td>
</tr>
<tr>
<td><strong>Enrollee Satisfaction Measures</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes Disease Management program complaints &amp; inquiry rate</td>
<td>Number of complaints received/Enrollees enrolled in the ADMP x 1000</td>
<td>Network Health Enrollee complaint logs/annually</td>
</tr>
<tr>
<td>Results of Network Health’s Disease Management Enrollee satisfaction survey</td>
<td>N/A</td>
<td>Enrollee self-report/annually</td>
</tr>
<tr>
<td><strong>Clinical Effectiveness Measures</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Diabetics who had at least one HbA1c test in the measurement period, per HEDIS® specifications</td>
<td>Number of Diabetics who had at least one HbA1c test in the measurement period/Total number of Diabetics</td>
<td>Claims data/annually</td>
</tr>
<tr>
<td>Percentage of Diabetics who had at least one eye exam in the measurement period, per HEDIS® specifications</td>
<td>Percentage of Diabetics who had at least one eye exam in the measurement period/Total number of Diabetics</td>
<td>Claims data/annually</td>
</tr>
<tr>
<td>Percentage of Diabetics who had at least one LDL-C test in the measurement period, per HEDIS® specifications</td>
<td>Percentage of Diabetics who had at least one LDL-C test in the measurement period/Total number of Diabetics</td>
<td>Claims data/annually</td>
</tr>
<tr>
<td><strong>Cost Savings Measures</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost savings for Neighborhood Diabetes program.</td>
<td>Various measures of cost savings</td>
<td>Claims data/quarterly</td>
</tr>
</tbody>
</table>


Attachment 1

Diabetes Disease Management (DDM) Workflow

Enrollee Diagnosed with Diabetes

Mail Welcome Letter & “Living Healthy with Diabetes”

Referrals if Appropriate To Neighborhood Diabetes Care Management Health Coaching

Analyze Enrollee Clinical History For Gaps in Care

Send Trigger Reports to Practitioners and Gap Reports to Enrollees Semi-annually

Attachment 2

Network Health’s Diabetes Disease Management Program: Summary of Program Interventions

<table>
<thead>
<tr>
<th>Network Health’s Diabetes Disease Management Program Interventions</th>
<th>Low Risk</th>
<th>Medium Risk</th>
<th>High Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Welcome letter/booklet and disease-specific educational materials</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>2. Notification to Enrollees of clinical gaps</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>3. Notification to Enrollees’ PCPs of impending clinical gaps</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>4. Notification to PCPs of Enrollees’ actual clinical gaps</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>5. Telephonic nurse support</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>6. Automated calls to recruit for Health Coaching</td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>7. Health Coaching:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Chronic condition support</td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>• Decision support</td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>• Decision support for symptom support</td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>• Information support</td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>• Prevention support</td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>• Practitioner communication support</td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td>8. Care Management program</td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
</tbody>
</table>
Attachment 3

Network Health’s Diabetes Disease Management Program:
Summary of Program Interventions

<table>
<thead>
<tr>
<th>Network Health’s Diabetes Disease Management Program Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome letter/booklet and disease-specific educational materials</td>
</tr>
<tr>
<td>1. Notification to Enrollees of clinical gaps</td>
</tr>
<tr>
<td>2. Notification to PCPs of Enrollees’ actual clinical gaps</td>
</tr>
<tr>
<td>3. Telephonic nurse support (Nurse Advice Line)</td>
</tr>
<tr>
<td>4. Care Management program</td>
</tr>
<tr>
<td>5. Health Coaching</td>
</tr>
<tr>
<td>Version</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>V1</td>
</tr>
<tr>
<td>V1.2</td>
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<td>V2</td>
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<tr>
<td>V3</td>
</tr>
</tbody>
</table>

**Document History**

- **Document Name**: Diabetes Disease Management Program Description
- **Category**: Utilization Management
- **Effective Date**: 02/27/2009

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  - V1 02/27/2009  Utilization Management Committee (UMC) C. Dedes Original
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  - V2 02/11/2011  UMC M McKendry Revision
  - V3 05/04/2012 04/12/2012  UMC M McKendry Revision