Uses of Indicators for Evaluation of State Primary Prevention Efforts

DDT Evaluation Team
Purpose

1. Overview of Proximal Indicators Compendium (PIP) and general usefulness for the measurement of Primary Prevention efforts

2. Share an operationalized example from the Pilot Indicators study
Background

- Past measurement of DPCP work had focused on ABCs and prevention of complications

- Need for DPCP work to be assessed at more proximal points along the causal pathway to achieving improved health outcomes

- August 2009 – 5 year Contract to RTI for identification of proximal indicators to measure outcomes

- Development of Pilot Study on using indicators for performance measurement (Year 4 of the FOA)
Methodology (Proximal Indicators)

• Development of Logic Model showing the two pathways for Prevention and Care

• Indicator pool from published and grey literature, practice based evidence

• Expert panel review of indicators
Product

- 74 Indicators (Care and Prevention)
- 24 specifically for Primary Prevention
  - See handout
# Indicator 1.4 – Profile (handout)

**Indicator 1.4**

Proportion of persons with prediabetes or at high risk for type 2 diabetes who have been referred to an evidence-based lifestyle change program

<table>
<thead>
<tr>
<th>Logic Model Component</th>
<th>Box 1. Health Care Organization Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>What to Measure</td>
<td>Proportion of persons diagnosed with prediabetes or identified as at high risk for type 2 diabetes in targeted health care systems who have been referred to an evidence-based lifestyle change program</td>
</tr>
<tr>
<td>Why this Indicator is Useful</td>
<td>The CDC-led National Diabetes Prevention Program is designed to bring to communities evidence-based lifestyle change programs for preventing type 2 diabetes (CDC, 2012). Health care providers play a critical role in identifying persons with diabetes. Referral policies and practices are needed in health care systems to help connect persons with prediabetes or at high risk for type 2 diabetes to evidence-based lifestyle change programs offered in the community.</td>
</tr>
<tr>
<td>Example Data Source(s)</td>
<td>Administrative medical records (e.g., patient charts, electronic medical records, or registries)</td>
</tr>
<tr>
<td>Example Survey Question(s)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
| Comments | ► This indicator may be operationalized to address specific, targeted health care delivery settings, timeframes, or populations.  
► Evidence-based lifestyle change programs are those that have obtained CDC recognition, those for which CDC recognition is pending, or other lifestyle change interventions that have undergone efficacy trials and have been proven to delay or prevent type 2 diabetes. |

<table>
<thead>
<tr>
<th>Ratings</th>
<th>Overall quality</th>
<th>Resources needed</th>
<th>Strength of evaluation evidence</th>
<th>Utility</th>
<th>Face validity</th>
<th>Accepted practice</th>
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<tbody>
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</tbody>
</table>

**References**

Logic Model for Diabetes Prevention and Control Program Grantees

The DDT logic model includes two pathways:
1) primary prevention of diabetes (boxes 1-4 → 5 → 6 → 9
2) diabetes care (boxes 1-4 → 5 → 7 → 8 → 10&11 → 12&13)

**Short-term Outcomes**

**Box 1** Health Care Organization Changes:
- Improved Delivery and Quality of Care in Health Care Settings for People With and at Risk for Diabetes through Implementation of Models and Practice Changes (PCM, PCMH), supported by Provider Education; and Improved Access to:
  - Evidence-based Lifestyle Change Programs*
  - Diabetes Self Management Education and Training (DSME/T) and Chronic Disease Self Management (CDSM) Programs**
  - Quitlines

**Box 2** Worksite Changes:
- Improved Employee Access to Programs and Services through Changes to Reimbursement, Coverage, Referral, and Payment/Incentive Policies:
  - Evidence-based Lifestyle Change Programs*
  - DSME/T and CDSM Programs**
  - Quitlines

**Box 3** Community Changes:
- Improved availability of quality programs and services through policy changes including expanded use of CHWs and pharmacists in the delivery of these programs and services through increased reimbursement and integration with health systems:
  - Evidence-based Lifestyle Change Programs*
  - DSME/T and CDSM Programs**

**Box 4** Payor Changes:
- Improved reimbursement policies for:
  - Diabetes care (including supplies)
  - Preventive care services (including tobacco cessation)
  - Evidence-based Lifestyle Change Programs*
  - DSME/T and CDSM Programs**

**Intermediate Outcomes**

**Box 5** Improved Utilization of:
- Evidence-based Lifestyle Change Programs*
- DSME/T & CDSM Programs**
- Preventive Care Services (including tobacco cessation)

**Box 6** Reduction in Modifiable Risk Factors for Type 2 Diabetes

**Box 7** Improved Diabetes Self Management

**Box 8** Increased Control of Hemoglobin A1c, Blood Pressure, Cholesterol, and Smoking (ABCS) For Persons with Diabetes

**Long-term Outcomes**

**Box 9** Reduced Incidence of Type 2 Diabetes

**Box 10** Reduced Morbidity

**Box 11** Reduced Levels of Health Disparities in Diabetes

**Box 12** Reduced Costs Associated with Diabetes:
- Individual
- Health care
- Employer
- Societal

**Box 13** Reduced Mortality Due to Diabetes

**Targets to Populations with Health Disparities**

*Evidence-based lifestyle change programs are those that have obtained CDC recognition, those for which CDC recognition is pending, or other lifestyle change interventions that have undergone efficacy trials and have been proven to delay or prevent type 2 diabetes.
**DSME/T & CDSM programs that are recognized, accredited, state-certified, or licensed.
## Example Strategies and Indicators

<table>
<thead>
<tr>
<th>Primary Prevention Strategies</th>
<th>Indicators Box 1: Health Care Organization Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Strategies for raising awareness among health care providers of how to recognize and treat prediabetes;</td>
<td>1.1 Proportion of health care systems with policies or practices to identify persons with prediabetes or at high risk for type 2 diabetes</td>
</tr>
<tr>
<td>2) Strategies for working with health care providers to increase referrals to CDC-recognized lifestyle change programs;</td>
<td>1.2 Proportion of health care systems with policies or practices to refer persons with prediabetes or at high risk for type 2 diabetes to an evidence-based lifestyle change program</td>
</tr>
<tr>
<td>3) Strategies for developing and implementing systems for referral of people with prediabetes or at high risk for type 2 diabetes to sites offering CDC-recognized lifestyle change programs;</td>
<td>1.3 Proportion of health care systems that obtain recognition as a CDC lifestyle change program</td>
</tr>
</tbody>
</table>

1.4 Proportion of persons with prediabetes or at high risk for type 2 diabetes who have been referred to an evidence-based lifestyle change program

1.5 Proportion of persons with prediabetes who are aware of their diagnosis

1.6 Percentage of persons without diabetes who have been told by a doctor or other health professional that they have prediabetes, borderline diabetes, impaired fasting glucose (IFG), impaired glucose tolerance (IGT), or high blood sugar or glucose
Uses of Indicators

• State Evaluations

• National Evaluation/Performance Measurement
Operationalizing Indicators for National Reporting

- Indicators for core intervention areas covering health systems and clinical-community linkages were operationalized for a pilot study for year 4 of the current FOA to permit aggregate reporting of program impact.

- While primary prevention was not included in the pilot, a similar process could be used to operationalize a subset of the proximal indicators for national reporting.
Operationalizing Indicators for National Reporting (cont’d)

– We will be working with NACDD to see whether and how this process could be used to report results from these supplemental awards

– To assist in that decision, we are presenting a brief review of how the operationalization process worked for the pilot study
### Indicator Profile Example

**Self-Management Program Indicator**

<table>
<thead>
<tr>
<th>Definition of Terms</th>
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<tbody>
<tr>
<td>Active Patients: Glossary, p. 27</td>
</tr>
<tr>
<td>DSME/T: Glossary, p. 29</td>
</tr>
<tr>
<td>Referral: Glossary, p. 31</td>
</tr>
<tr>
<td>Reporting Period: Glossary, p. 31</td>
</tr>
<tr>
<td>Targeted Settings/FQHCs: Glossary, p. 32</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core Diabetes Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1—Increase access to sustainable self-management education and support services</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intent of the Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>To measure changes in providers’ awareness and use of DSME/T for their patients with diabetes in targeted settings</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rationale for the Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes self-management education (DSME/T) offered in community gathering places is effective in improving glycemic control for adults with type 2 diabetes (Norris et al., 2002). Participation in DSME/T is associated with increased use of primary and preventive services and lower use of acute, inpatient hospital services (American Diabetes Association, 2011; Duncan 2009). Increasing provider referrals to clinic and community self-management education services can increase use by people with diabetes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Numerator:</strong></td>
</tr>
<tr>
<td>- Required: Number of Active Patients with diabetes receiving care at Targeted FQHCs with at least one provider Referral for DSME/T during the Reporting Period</td>
</tr>
<tr>
<td>- Optional: Number of Active Patients with diabetes receiving care at Targeted Settings (FQHCs and/or other health care organizations) with at least one provider Referral for DSME/T during the Reporting Period</td>
</tr>
<tr>
<td><strong>Denominator:</strong></td>
</tr>
<tr>
<td>- Required: Number of Active Patients with diabetes receiving care at Targeted FQHCs during the Reporting Period</td>
</tr>
<tr>
<td>- Optional: Number of Active Patients with diabetes receiving care at Targeted Settings (FQHCs and/or other health care organizations) during the Reporting Period</td>
</tr>
<tr>
<td>- Number and type of Targeted Settings</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stratification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optional:</td>
</tr>
<tr>
<td>- Report patients referred by care, ethnicity, primary language, and/or disability status</td>
</tr>
</tbody>
</table>
Indicator Profile Fields

- Definition of Terms
  - Relevant Glossary references
- Core Diabetes Strategy being measured
  - i.e.) Strategies for raising awareness among health care providers of how to recognize and treat prediabetes
- Intent of the Indicator
- Rationale for the Indicator
- Definition
  - What should be counted in the numerator and the denominator
  - Any other information needed to fully report on the indicator
- Stratification
- Data Sources
- Additional Information/Guidance
The “Supplemental Awards” vs. the new combined FOA

- National performance measures will be operationalized for the new FOA
- Those measures may or may not overlap with any indicators chosen for evaluation of the supplement
- Operationalizing a standard set of measures for the supplement and working to identify data sources for those measures will be helpful preparatory work, regardless of which measures are actually selected for the new FOA
Questions/Comments?