Working Together to Prevent Diabetes

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Objectives

• Explain the impact that the current pre-diabetes population will have on clinical practice volumes over the next 5 years
• Identify the challenges that providers face in treating the pre-diabetes population
• Implement a strategic plan to identify individuals at risk for diabetes and prevent the development of Type 2 Diabetes in the population
• Apply ADA, USPSTF and AMA guidelines for screening
• 29.1 million Americans have diabetes (90-95% T2DM)
• 86 million Americans (1 in 3 adults) have prediabetes (preDM)
• 2 out of 3 people with diabetes die from heart disease or stroke
• US spends >$100 billion/year on diabetes

1 out of 3 Medicare dollars is spent on diabetes
Estimate US spending on personal health care and public health
1996-2013


1st place: Diabetes $101.4 billion
2nd place: Ischemic heart disease $88.1 billion
3rd place: Low back & neck pain $87.6 billion
Public Health Spending in 2013

Table 4. Largest 20 Public Health Spending Conditions for 2013 in the United States

<table>
<thead>
<tr>
<th>Rank</th>
<th>Condition</th>
<th>2013 Spending (Billions of US Dollars), $</th>
<th>Annualized Rate of Change (1996 to 2013), %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HIV/AIDS</td>
<td>76.63</td>
<td>2.69</td>
</tr>
<tr>
<td>2</td>
<td>Lower respiratory tract infections</td>
<td>3.52</td>
<td>4.97</td>
</tr>
<tr>
<td>3</td>
<td>Diarrheal diseases</td>
<td>1.78</td>
<td>15.68</td>
</tr>
<tr>
<td>4</td>
<td>Other infectious diseases (viral and chlamydial infection and streptococcal infection)</td>
<td>0.93</td>
<td>14.11</td>
</tr>
<tr>
<td>5</td>
<td>Hepatitis</td>
<td>0.67</td>
<td>1.25</td>
</tr>
<tr>
<td>6</td>
<td>Preterm birth complications (respiratory distress and extreme immaturity)</td>
<td>0.60</td>
<td>6.77</td>
</tr>
<tr>
<td>7</td>
<td>Varicella</td>
<td>0.39</td>
<td>-0.67</td>
</tr>
<tr>
<td>8</td>
<td>Tobacco (tobacco use disorder and cessation)</td>
<td>0.24</td>
<td>9.58</td>
</tr>
<tr>
<td>9</td>
<td>Family planning</td>
<td>0.12</td>
<td>9.38</td>
</tr>
<tr>
<td>10</td>
<td>Tetanus</td>
<td>0.19</td>
<td>1.66</td>
</tr>
<tr>
<td>11</td>
<td>Whooping cough</td>
<td>0.19</td>
<td>1.66</td>
</tr>
<tr>
<td>12</td>
<td>Diphtheria</td>
<td>0.19</td>
<td>1.66</td>
</tr>
<tr>
<td>13</td>
<td>Sexually transmitted diseases excluding HIV</td>
<td>0.18</td>
<td>3.80</td>
</tr>
<tr>
<td>14</td>
<td>Breast cancer</td>
<td>0.18</td>
<td>30.01</td>
</tr>
<tr>
<td>15</td>
<td>Meningitis</td>
<td>0.18</td>
<td>6.00</td>
</tr>
<tr>
<td>16</td>
<td>Low back and neck pain</td>
<td>0.14</td>
<td>8.96</td>
</tr>
<tr>
<td>17</td>
<td>Tuberculosis</td>
<td>0.14</td>
<td>0.92</td>
</tr>
<tr>
<td>18</td>
<td>Self-harm</td>
<td>0.14</td>
<td>14.51</td>
</tr>
<tr>
<td>19</td>
<td>Other neonatal disorders (feeding problems and temperature regulation)</td>
<td>0.13</td>
<td>1.00</td>
</tr>
<tr>
<td>20</td>
<td>Trachea, bronchus, and lung cancers</td>
<td>0.13</td>
<td>7.39</td>
</tr>
<tr>
<td></td>
<td><strong>Top 20 causes</strong></td>
<td><strong>10.64</strong></td>
<td><strong>5.59</strong></td>
</tr>
</tbody>
</table>
PREDIABETES
Future impact on clinical practice

Over the next 5 years, a typical large clinical practice could experience a **32% increase** in the number of patients with diabetes.
Challenges faced by practicing physicians

• Physicians and care teams cannot address the health care needs of 86 million people
• Physicians and care teams do not have time to counsel patients about lifestyle changes required to prevent diabetes
• Physicians and care teams do not have adequate information about community-based resources for diabetes prevention
• Social determinants of health are often a root cause of diabetes
• Inequities in health care delivery result in observed outcome disparities
Diabetes Prevention Works **and** Saves Money

This is the first time a preventive service pilot funded by the government’s CMMI office has been proven to reduce cost and lower incidence of type 2 diabetes. When compared with similar beneficiaries not in the program, Medicare estimated **savings of $2,650 for each enrollee in the Diabetes Prevention Program over a 15-month period**, more than enough to cover the cost of the program.
Medicare Payment for DPP – Jan 2018

Eligible Beneficiaries

- Medicare Part B
- Have a body mass index (BMI) of at least 25 or 23 if self-identified as Asian
- Have, within the 12 months a hemoglobin A1c 5.7-6.4% or FPG 110-125 mg/dL, or 2-hour OGTT 140-199 mg/dL
- Have no previous diagnosis of type 1 or type 2 diabetes with the exception of gestational diabetes
- Do not have end-stage renal disease (ESRD)
Intermountain efforts to prevent type 2 diabetes

DPP started in August 2013 – lead by the PCCP in partnership with Clinical Nutrition Services

- Developed Prediabetes 101 (2 hour class)
- Diabetes Prevention Care Process Model
- Medical Nutrition Therapy and Weigh to Health
- Creation of a Prediabetes Development Team
- Pilot program with Omada Health to offer web-based DPP
- Strategic research agenda to inform future operational steps
Evaluation & Research

**Stepping Back to Move Forward: Evaluating the Effectiveness of a Diabetes Prevention Program Within a Large Integrated Healthcare Delivery System**

**Incidental Risk of Type 2 Diabetes Mellitus among Patients with Confirmed and Unconfirmed Prediabetes**


**From Clinic to Community: A Framework for Providing Diabetes Prevention Services That Cross the Care Continuum**

- Kimberly D. Brunisholz, PhD; Elizabeth A. Joy, MD, MPH; Sharon Hamilton, MSN; Mark R. Greenwood, MD
Moving Forward......

Developed a Diabetes Prevention Strategic Plan
Integrated screening and referral advisories into iCentra
Developed a prediabetes registry
Diabetes prevention area of focus for Community Health Improvement
November is National Diabetes Month– look for our marketing campaign
Diabetes Prevention Strategic Plan

Purpose:

- Intermountain will develop and implement a systematic and comprehensive approach to identify individuals at-risk for diabetes and match them with evidence-based interventions in an effort to prevent type 2 diabetes.
Strategic Priorities
SBIRT: Screening, Brief Intervention, and Referral to Treatment

Screening: Develop a systematic and comprehensive screening process across many different venues (e.g. clinics, emergency rooms, hospitals, employees, and community settings)

Brief Intervention: Develop, disseminate and implement best-practices regarding diabetes prevention appropriate for different venues

Refer to Treatment: Refer individuals to evidence-based interventions based on their preference

In addition, perform ..... Comprehensive evaluation to include program reach, adoption, implementation, effectiveness (clinical, cost, patient experience), and maintenance.
Decision Rights, Implementation, Management, and Other Stakeholders

**Approve**: Primary Care Clinical Program Guidance Council

**Recommend**: Diabetes Prevention Steering Committee, Diabetes Development Team

**Consult**:
- Community Benefit, SelectHealth, Population Health, Medical Group, Intermountain Human Resources, LiVe Well, Intermountain Nutrition Services, Patient Engagement (PESC and PFAC)

**Inform**:
- Geographic Committees, Clinical Programs, Clinical Support Services, Regional Vice Presidents, Medical Group Operations

**Execute**
- Implementation will be owned by each operational stakeholder group*
2017 Goals

Screening:
• Develop screening standards and work processes for target populations
• Collaborate with clinical programs to implement 2017 Community Benefit Board Goals
  o Women & Newborns – screening for T2DM after GDM pregnancies
  o CV Clinical Program – screening for prediabetes in CV surgery patients

Brief Intervention:
• Optimize Prediabetes 101 class availability
• Produce a videotape of Prediabetes 101 for community-based utilization
2017 Goals

Referral to Treatment:

• Obtain CDC recognition for the Weigh to Health program

• Optimize the patient referral processes to Medical Nutrition Therapy and the Weigh to Health to increase number of people attending each class session
  
  o Consider iCentra decision support for referral to program

  o Consider “dietician” Collaborative Practice Agreements to allow streamlined referral after attendance

• Market Medical Nutrition Therapy and the Weigh to Health program to other targeted populations
What should care teams be doing to prevent diabetes...
Prevent Diabetes STAT Screen / Test / Act Today™
### ADA, USPSTF & AMA

<table>
<thead>
<tr>
<th>ADA</th>
<th>USPSTF</th>
<th>AMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Screen adults 45 and older every 3 years</td>
<td>• Screen adults 40 - 70 with BMI ≥ 25 every 3 years</td>
<td>• Screen adults ≥18 with BMI ≥ 25 (≥ 22 if Asian) every 3 years</td>
</tr>
<tr>
<td>• Screen adults 18 - 44 with a BMI ≥ 25, (&gt; 23 in Asians) AND 1 additional risk factor *</td>
<td>• Screen with FPG HbA1c, or OGTT</td>
<td>• Screen with CDC Prediabetes Screening Test or ADA Diabetes Risk Test</td>
</tr>
<tr>
<td>• Screen with FPG or HbA1c, or OGTT</td>
<td>• Confirm (+) results <em>(repeated testing with the same test on a different day)</em></td>
<td>• If at risk for prediabetes then FPG, HbA1c, or OGTT</td>
</tr>
<tr>
<td>• Screen children and adoles with BMI ≥ 85th %ile + 2 additional risk factors</td>
<td></td>
<td>• Confirm (+) results</td>
</tr>
</tbody>
</table>

* (high risk ethnicity, HTN, hyperlipidemia, h/o PCOS, h/o GDM or baby > 9 lbs, sedentary lifestyle, 1st degree relative with T2DM)
The American Diabetes Association Disappointed in Scope of New Screening Guidelines for Type 2 Diabetes And Pleased with Expansion of Lifestyle Interventions

ALEXANDRIA, Va., Oct. 26, 2015 /PRNewswire-USNewswire/ -- The American Diabetes Association (http://www.diabetes.org/) (Association) thanks the United States Preventive Services Task Force (USPSTF) for releasing a final recommendation for Screening for Abnormal Blood Glucose and Type 2 Diabetes Mellitus that improves upon the previous guidelines released in 2008. However, the Association is tremendously disappointed that the new USPSTF recommendation falls short of the well-established screening guidelines of diabetes experts around the world, including those of the Association. The final guidelines also fall short of the USPSTF’s own draft recommendation, released in October of 2014. Under the draft guidelines, which the

diabetes. While the USPSTF acknowledged the importance of screening individuals with risk factors in its draft recommendation, it backtracked substantially in today’s final recommendation. By recommending screening solely for overweight or obese adults ages 40-70, the USPSTF ignores the populations most highly impacted by undiagnosed diabetes – notably, in adults aged 20-44, the rate of undiagnosed diabetes is nearly 60 percent higher than in the adult population as a whole. Minority populations are at increased risk for type 2 diabetes.

“In addition to the at-risk, minority populations that are not addressed in the new guidelines, the age bracket covered for screening does not encompass all who are at risk,” Ratner continued. “Diabetes screening should not be limited to ages 40-70. This grossly ignores the evidence of the National Institutes of Health’s Diabetes Prevention Program (DPP) that found individuals at high risk as young as age 25 are able to reduce their risk for type 2 diabetes. Moreover, there was no upper age limit in the DPP trial, and seniors had an even higher success rate with lifestyle intervention. Also of note, women with a history of gestational diabetes are at the highest risk of developing type 2 diabetes, with fifty percent developing type 2 diabetes within five years. Beginning screening at age 40 is too little too late for many of these women with a history of gestational diabetes. They may have had diabetes for 5-10 years by then.”
Intermountain

**Intermountain**

- Screen adults ≥ 45 every 3 years
- Screen adults 18-44 with BMI ≥ 25 (22 for Asian Americans) + 1 additional risk factor *
- Screen with FBG or HbA1c
- Confirm (+) FBG test *(repeated testing with the same test on a different day)*

* **Risk Factors**
- High risk ethnicity,
- High blood pressure,
- Hyperlipidemia
- H/o PCOS
- H/o GDM
- Baby > 9 lbs
- Sedentary lifestyle
- 1st degree relative with T2DM)
CDC Risk Screening Tool

A score of 5 or greater indicates a *higher risk of prediabetes*

https://doihaveprediabetes.org

SO...DO I HAVE PREDIABETES?

(Take the Risk Test)

(It'll only take a minute!)
Individualized nutrition counseling taught by RDs

Locations for counseling:
- Hospital & Clinics

Personalized eating plan & support

Commercial insurers have no co-pay for 3 to 5 visits annually

12 sessions over 6 months

Hospital-based; RD taught
≥ 70% overlap with CDC-accredited DPP

Only select commercial insurers will reimburse; IH health plan covers 100% if you complete

Prediabetes 101 Class

2 hr, Group Setting
Taught by CDE & RD
Classes located in:
- Clinics
- Community
Patient engagement tool

Free of charge

Medical Nutrition Therapy

Individualized nutrition counseling
Taught by RDs
Locations for counseling:
- Hospital & Clinics

Personalized eating plan & support

Commercial insurers have no co-pay for 3 to 5 visits annually

Omada

CDC-Accredited
Dedicated Health Coach
Asynchronous; Personalized Weekly Interactive Lessons

Peer Support Group
iOS and Android Mobile Apps
Digital Pedometer/Cellular Scale

Weigh to Health (W2H)

12 sessions over 6 months
Hospital-based; RD taught
≥ 70% overlap with CDC-accredited DPP

Only select commercial insurers will reimburse; IH health plan covers 100% if you complete
Live, Learn, Work, Play and Pray

- DPP curriculum
- Personalized health coaching
- Small-group support
- Digital tracking tools
What about medications for prediabetes?

1st choice: lifestyle change and weight loss

2nd choice: lifestyle medication and weight loss

3rd choice: consider medication → Metformin

Remember, lifestyle change and weight loss outperformed metformin in preventing type 2 diabetes nearly 2 to 1 at 10 years in the National Diabetes Prevention Program.
**Blood glucose test recommended prior to enrollment; and required for program scholarship**

In some locations, HSE participants who screen (+) for a risk of prediabetes will be directly provided DPP resources

**Data collected from a random sample of risk screen (+) participants @ 6 months following HSE**

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**PREDIABETES PATHWAY**

- Number of participants at health screening events (HSE)
- Number screened for prediabetes risk
- Number screened positive for prediabetes risk (CDC Risk Score ≥ 5) or (+) GDM and provided resources for further evaluation & treatment
- Number who seek PCP follow up and care
- Number who do not seek additional treatment
- Number achieve self-reported 5-7% weight loss
- Number who participate in Prediabetes 101
- Number who participate in community-based DPP**

**Non-participants**

**Prediabetes 101**

**Community-based DPP**

**PCP follow-up and care**

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**Data collected at HSE**
Diabetes Prevention Recognition Program - Find a Program Near You

Find a program near you by selecting your state or territory. Or, find an online or combination in-person/online program by selecting that link to the right. Some online providers may also have an in-person program. Please contact the organization for in-person program locations.

Location: - Select from list -

GO

REGISTRY OF RECOGNIZED ORGANIZATIONS

• 21 DPP Programs

“Helping people live the healthiest lives possible”

- What will be Dr. Harrison’s focus for Intermountain?
  - Patients first, caregivers a close second, and building our services and reputation locally and nationally.
  - Providing excellent care to patients and community.
    - Promoting wellness
    - Getting out in front of chronic diseases
    - Expanding more personalized care including use of digital devices
    - Improving patient experience
    - Keeping patients safe
    - Keeping cost of care as low as possible
    - Expanding sustainability efforts
    - Growing collegial relationships with other health organizations
      learnings and promote community health
It's not that diabetes, heart disease and obesity runs in your family. It's that no one runs in your family.

- Prioritize prevention and healthy lifestyle behaviors
- Positive role models – patients, staff, families and communities
- **Can we do to diabetes what we did to polio?**

Thank you……Liz.Joy@imail.org