DSRIP 1115 Medicaid Waiver Program

Chronic Disease Management for Behavioral Health Providers

Tracy Tinker, RN, MSN, CDE, CNL
Learning Objectives

• Define the latest guidelines for diabetes, hypertension (high blood pressure) and dyslipidemia (cholesterol/lipid disorders)

• Understand the intersection of behavioral health and chronic disease management

• Identify barriers to the integration of behavioral health care and chronic disease management

• Identify and utilize strategies to overcome identified barriers
Outline

• Overview of Chronic Disease Management
• The intersection of Chronic Disease and Behavioral Health
• Integration barriers/solutions
• Case Study/discussion/Q and A
The PROBLEM

People with mental illness die earlier than the general population and have more co-occurring health conditions.

68% of adults with a mental illness have one or more chronic physical conditions.

more than 1 in 5 adults with mental illness have a co-occurring substance use disorder.

Brown et al. 2010
OVERVIEW OF CHRONIC DISEASE MANAGEMENT
Co-occurrence between mental illness and other chronic health conditions:

- **High Blood Pressure**
  - Mental Illness: 21.9%
  - No Mental Illness: 18.8%

- **Smoking**
  - Mental Illness: 36%
  - No Mental Illness: 21%

- **Heart Disease**
  - Mental Illness: 5.9%
  - No Mental Illness: 4.2%

- **Diabetes**
  - Mental Illness: 7.9%
  - No Mental Illness: 6.6%

- **Obesity**
  - Mental Illness: 42%
  - No Mental Illness: 35%

- **Asthma**
  - Mental Illness: 15.7%
  - No Mental Illness: 10.6%


Liu et al. (2017)
Diabetes, HTN, and Depression Prevalence US – 2013 - 2016

Diabetes, HTN, and Depression Prevalence NH – 2013 - 2016

TABLE 2. Criteria for Testing for Diabetes or Prediabetes in Asymptomatic Adults

1. Testing should be considered in overweight or obese (BMI ≥25 kg/m² or ≥23 kg/m² in Asian Americans) adults who have one or more of the following risk factors:
   - First-degree relative with diabetes
   - High-risk race/ethnicity (e.g., African American, Latino, Native American, Asian American, Pacific Islander)
   - History of CVD
   - Hypertension (≥140/90 mmHg or on therapy for hypertension)
   - HDL cholesterol level <35 mg/dL (0.90 mmol/L) and/or a triglyceride level >250 mg/dL (2.82 mmol/L)
   - Women with polycystic ovary syndrome
   - Physical inactivity
   - Other clinical conditions associated with insulin resistance (e.g., severe obesity, acanthosis nigricans)

2. Patients with prediabetes (A1C ≥5.7% [39 mmol/mol], IGT, or IFG) should be tested yearly.

3. Women who were diagnosed with GDM should have lifelong testing at least every 3 years.

4. For all other patients, testing should begin at age 45 years.

5. If results are normal, testing should be repeated at a minimum of 3-year intervals, with consideration of more frequent testing depending on initial results and risk status.
### TABLE 1. Criteria for the Screening and Diagnosis of Diabetes

<table>
<thead>
<tr>
<th></th>
<th>Prediabetes</th>
<th>Diabetes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1C</td>
<td>5.7–6.4%*</td>
<td>≥6.5%†</td>
</tr>
<tr>
<td>FPG</td>
<td>100–125 mg/dL (5.6–6.9 mmol/L)*</td>
<td>≥126 mg/dL (7.0 mmol/L)†</td>
</tr>
<tr>
<td>OGTT</td>
<td>140–199 mg/dL (7.8–11.0 mmol/L)*</td>
<td>≥200 mg/dL (11.1 mmol/L)†</td>
</tr>
<tr>
<td>RPG</td>
<td>—</td>
<td>≥200 mg/dL (11.1 mmol/L)‡</td>
</tr>
</tbody>
</table>

*For all three tests, risk is continuous, extending below the lower limit of the range and becoming disproportionately greater at the higher end of the range.
†In the absence of unequivocal hyperglycemia, results should be confirmed by repeat testing. ‡Only diagnostic in a patient with classic symptoms of hyperglycemia or hyperglycemic crisis. RPG, random plasma glucose.
Hypertension Guidelines

### Dyslipidemia

- **USPSTF updated guidelines in 2016**
- **Universal screening is recommended for all adults 40 – 75 years old**

<table>
<thead>
<tr>
<th>Adults 40 – 75 with NO history of CVD, &gt; 1 CVD risk factors, and calculated 10 year CVD event risk ≥ 10%</th>
<th>Adults aged 40 – 75 with NO history of CVD; &gt; 1 CVD risk factors, and calculated 10 year CVD event risk of 7.5 – 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiate use of low to moderate dose statins</td>
<td>Discuss with patient and selectively offer use of low to moderate dose statins</td>
</tr>
</tbody>
</table>

THE INTERSECTION OF CHRONIC DISEASE AND BEHAVIORAL HEALTH
Psychosocial care should be integrated with a collaborative, patient-centered approach and provided to all people with diabetes, with the goals of optimizing health outcomes and health-related quality of life. A

Providers should consider assessment for symptoms of diabetes distress, depression, anxiety, disordered eating, and cognitive capacities using patient-appropriate standardized and validated tools at the initial visit, at periodic intervals, and when there is a change in disease, treatment, or life circumstance. Including caregivers and family members in this assessment is recommended. B

Consider screening older adults (aged ≥65 years) with diabetes for cognitive impairment and depression. B

Psychosocial care for People with Diabetes: A position statement of the American Diabetes Association. Diabetes Care 2016;39;2126-2140
Is this Depression or Diabetes Distress?

PHQ3 and PHQ9

Patient Health Questionnaire (PHQ-9)

Over the last 2 weeks, how often have you been bothered by any of the following problems? (use "x" to indicate your answer)

<table>
<thead>
<tr>
<th>PHQ3</th>
<th>PHQ9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Little interest or pleasure in doing things</td>
<td>0</td>
</tr>
<tr>
<td>2. Feeling down, depressed, or hopeless</td>
<td>0</td>
</tr>
<tr>
<td>3. Trouble falling or staying asleep, or sleeping too much</td>
<td>0</td>
</tr>
<tr>
<td>4. Feeling tired or having little energy</td>
<td>0</td>
</tr>
<tr>
<td>5. Poor appetite or overeating</td>
<td>0</td>
</tr>
<tr>
<td>6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down</td>
<td>0</td>
</tr>
<tr>
<td>7. Trouble concentrating on things, such as reading the newspaper or watching television</td>
<td>0</td>
</tr>
<tr>
<td>8. Moving or speaking so slowly that other people could have noticed or the opposite—or being so fidgety or restless that you have been moving around a lot more than usual</td>
<td>0</td>
</tr>
<tr>
<td>9. Thoughts that you would be better off dead, or of hurting yourself</td>
<td>0</td>
</tr>
</tbody>
</table>

Add columns: [ ] [ ] [ ]

TOTAL:

**DDS17**

**Figure 1. DDS17 Scoring Sheet**

**Instructions for Scoring:**

The DDS17 yields a total DD scale score plus 4 subscale scores, each addressing a different kind of distress. To score, simply sum the patient’s responses to the appropriate items and divide by the number of items in that scale. The letter in the far right margin corresponds to that item’s subscale as listed below. We consider a mean item score of 3 (moderate distress) as a level of distress worthy of clinical attention. Place a check on the line to the far right if the mean item score is 3 to highlight an above-range value. We also suggest reviewing the patient’s responses across all items, regardless of mean item scores. It may be helpful to inquire further or to begin a conversation about any single item scored 3.

**Total DDS Score:**

- a. Sum of 17 item scores. Divide by: 17. Mean item score: =
- b. Sum of 5 items (1, 3, 9, 11, 14) Divide by: 5. Mean item score: =
- c. Sum of 4 items (2, 4, 9, 15) Divide by: 4. Mean item score: =
- d. Sum of 5 items (5, 6, 10, 12, 16) Divide by: 5. Mean item score: =
- e. Sum of 3 items (7, 13, 17) Divide by: 3. Mean item score: =

**Table 1. Diabetes Distress Screening Test**

Listed below are 17 potential problem areas that people with diabetes may experience. Consider the degree to which each of the 2 items may have distressed or bothered you during the past month and circle the appropriate number. If the scores are 3 or greater for either question, complete the 17-question Diabetes Distress Scale (Table 2).

<table>
<thead>
<tr>
<th>DDS17 Score</th>
<th>Not a Problem</th>
<th>Slight Problem</th>
<th>Moderate Problem</th>
<th>Severe/Series Problem</th>
<th>Very Severe/Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Feeling overwhelmed by the demands of living with diabetes</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Feeling that I am often falling with my diabetes routine</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

## Hyperglycemia and Dyslipidemia Risk 2nd Generation Antipsychotics

<table>
<thead>
<tr>
<th>Drug</th>
<th>Weight Gain/Diabetes</th>
<th>Hypercholesterolemia (High Cholesterol)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aripiprazole (Abilify)</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Asenapine (Saphris)</td>
<td>++</td>
<td>-</td>
</tr>
<tr>
<td>Brexpiprazole (Rexulti)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Cariprazine (Vraylar)</td>
<td>+</td>
<td>-/+</td>
</tr>
<tr>
<td>Clozapine (Colzaril)</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>Iloperidone (Fanapt)</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Lurasidone (Latuda)</td>
<td>-/+</td>
<td>-/+</td>
</tr>
<tr>
<td>Olanzapine (Zyprexa)</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>Paliperidone (Invega)</td>
<td>+++</td>
<td>+</td>
</tr>
<tr>
<td>Pimavanserin (Nuplazid)</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Quetiapine (Seroquel)</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>Risperidone (Risperdal)</td>
<td>+++</td>
<td>+</td>
</tr>
<tr>
<td>Ziprasidone (Geodon)</td>
<td>-/+</td>
<td>-/+</td>
</tr>
</tbody>
</table>

“Atypical antipsychotics have been associated with development of hyperglycemia; in some cases, may be extreme and associated with ketoacidosis, hyperosmolar coma, or death. Use with caution in patients with diabetes or other disorders of glucose regulation; monitor for worsening of glucose control”

ADA; Diabetes Care, 27:2: 596-601
## Monitoring protocol for patients on SGAs

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>4 weeks</th>
<th>8 weeks</th>
<th>12 weeks</th>
<th>Quarterly</th>
<th>Annually</th>
<th>Every 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal/Family History</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight (BMI)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Waist Circumference</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Blood pressure</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Fasting Plasma Glucose</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Fasting lipid profile</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

ADA; Diabetes Care, 27:2: 596-601
Selected Antidepressants Diabetes Risk and Weight Gain

Use with caution in patients with Diabetes; may alter glucose regulation

TCAs

++
Paroxetine
Amoxapine
Maprotiline
Phenelzine

++++
Mirtazapine
Amitriptyline
Clomipramine
Doxepin
Imipramine
Trimipramine

++
Citalopram
Escitalopram
Fluoxetine
Fluvoxamine
Setraline
Trazodone
Desiprimine
Nortriptyline
Protriptyline
Isocarboxazid
Tranylcypromine

Gafoor et al 2018
# When to refer to Behavioral Health

## TABLE 5. Situations That Warrant Referral of a Person With Diabetes to a Mental Health Provider for Evaluation and Treatment

- If self-care remains impaired in a person with DD after tailored diabetes education
- If a person has a positive screen on a validated screening tool for depressive symptoms
- In the presence of symptoms or suspicions of disordered eating behavior, an eating disorder, or disrupted patterns of eating
- If intentional omission of insulin or oral medication to cause weight loss is identified
- If a person has a positive screen for anxiety or fear of hypoglycemia
- If a serious mental illness is suspected
- In youth and families with behavioral self-care difficulties, repeated hospitalizations for diabetic ketoacidosis, or significant distress
- If a person screens positive for cognitive impairment
- Declining or impaired ability to perform diabetes self-care behaviors
- Before undergoing bariatric or metabolic surgery and after surgery if assessment reveals an ongoing need for adjustment support
INTEGRATION
The solution lies in integrated care – the coordination of mental health, substance abuse, and primary care services. Integrated care produces the best outcomes and is the most effective approach to caring for people with complex healthcare needs.

### Table 1. Six Levels of Collaboration/Integration (Core Descriptions)

<table>
<thead>
<tr>
<th>Coordinated</th>
<th>Co-located</th>
<th>Integrated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key Element:</strong> Communication</td>
<td><strong>Key Element:</strong> Physical Proximity</td>
<td><strong>Key Element:</strong> Practice Change</td>
</tr>
<tr>
<td><strong>Level 1</strong></td>
<td><strong>Level 2</strong></td>
<td><strong>Level 3</strong></td>
</tr>
<tr>
<td>Minimal Collaboration</td>
<td>Basic Collaboration at a Distance</td>
<td>Basic Collaboration Onsite</td>
</tr>
<tr>
<td><strong>Behavioral health, primary care and other healthcare providers work:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In separate facilities, where they:</td>
<td>In separate facilities, where they:</td>
<td>In same facility not necessarily same offices, where they:</td>
</tr>
<tr>
<td><strong>Have separate systems</strong></td>
<td><strong>Have separate systems</strong></td>
<td><strong>Have separate systems</strong></td>
</tr>
<tr>
<td>Communicate about cases only rarely and under compelling circumstances</td>
<td>Communicate periodically about shared patients</td>
<td>Communicate regularly about shared patients, by phone or e-mail</td>
</tr>
<tr>
<td>Communicate, driven by specific patient issues</td>
<td>Communicate, driven by need for each other’s services and more reliable referral</td>
<td>Collaborate, driven by need for consultation and coordinated plans for difficult patients</td>
</tr>
<tr>
<td>May meet as part of larger community</td>
<td>Meet occasionally to discuss cases due to close proximity</td>
<td>Have regular face-to-face interactions about some patients</td>
</tr>
<tr>
<td>Appreciate each other’s roles as resources</td>
<td>Feel part of a larger yet ill-defined team</td>
<td>Have a basic understanding of roles and culture</td>
</tr>
<tr>
<td><strong>Level 4</strong></td>
<td><strong>Level 5</strong></td>
<td><strong>Level 6</strong></td>
</tr>
<tr>
<td>Close Collaboration Onsite with Some System Integration</td>
<td>Close Collaboration Approaching an Integrated Practice</td>
<td>Full Collaboration in a Transformed/Merged Integrated Practice</td>
</tr>
<tr>
<td><strong>Behavioral health, primary care and other healthcare providers work:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In same space within the same facility (some shared space), where they:</td>
<td>In same space within the same facility, sharing all practice space, where they:</td>
<td></td>
</tr>
<tr>
<td><strong>Share some systems, like scheduling or medical records</strong></td>
<td><strong>Actively seek system solutions together or develop work-a-rounds</strong></td>
<td><strong>Have resolved most or all system issues, functioning as one integrated system</strong></td>
</tr>
<tr>
<td><strong>Communicate in person as needed</strong></td>
<td><strong>Communicate frequently in person</strong></td>
<td><strong>Communicate consistently at the system, team and individual levels</strong></td>
</tr>
<tr>
<td><strong>Collaborate, driven by need for consultation and coordinated plans for difficult patients</strong></td>
<td><strong>Collaborate, driven by desire to be a member of the care team</strong></td>
<td><strong>Collaborate, driven by shared concept of team care</strong></td>
</tr>
<tr>
<td><strong>Have regular team meetings to discuss overall patient care and specific patient issues</strong></td>
<td><strong>Have an in-depth understanding of roles and culture</strong></td>
<td><strong>Have roles and cultures that blur or blend</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE 3. Advantages and Weaknesses at Each Level of Collaboration/Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COORDINATED</strong></td>
</tr>
<tr>
<td>LEVEL 1</td>
</tr>
<tr>
<td>Minimal Collaboration</td>
</tr>
</tbody>
</table>

### Advantages

- **COORDINATED**
  - Each practice can make timely and autonomous decisions about care
  - Readily understood as a practice model by patients and providers

- **CO-LOCATED**
  - Maintains each practice's basic operating structure, so change is not a disruptive factor
  - Provides some coordination and information-sharing that is helpful to both patients and providers

- **INTEGRATED**
  - Removal of some system barriers, like separate records, allows closer collaboration to occur
  - High level of collaboration leads to more responsive patient care, increasing engagement and adherence to treatment plans

- **LEVEL 1**
  - Opportunity to truly treat whole person

- **LEVEL 2**
  - All or almost all system barriers resolved, allowing providers to practice as high functioning team

- **LEVEL 3**
  - All patient needs addressed as they occur

- **LEVEL 4**
  - Shared knowledge base of providers increases and allows each professional to respond more broadly and adequately to any issue

### Weaknesses

- **COORDINATED**
  - Services may overlap, be duplicated or even work against each other
  - Important aspects of care may not be addressed or take a long time to be diagnosed

- **CO-LOCATED**
  - Sharing of information may not be systematic enough to affect overall patient care
  - No guarantee that information will change plan or strategy of each provider

- **INTEGRATED**
  - System issues may limit collaboration
  - Practice changes may create lack of fit for some established providers

- **LEVEL 1**
  - Practice changes may stress the practice

- **LEVEL 2**
  - Few models at this level with enough experience to support value

- **LEVEL 3**
  - Outcome expectations not yet established

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Does Integrated care work?

• Integrated care improved quantitative and qualitative measures related to diabetes, hypertension, dyslipidemia as well as depression (Katon et. Al. 2011)
• Improved blood pressure control and adherence to antihypertensive medications and antidepressants (Bogner et al. 2008)
• Improves patient engagement and is cost effective (Goodrich et al 2013)
• Improvement in depression symptom severity, treatment response and remission rates was consistently positive across all levels of integration (Butler et al 2011)
• Patients perceived personal, interpersonal and organizational benefits from integrated care. (Davis et al 2018)
HTN and Depression

HTN

Medication Adherence

- Integrated Care: 78.1%
- Usual Care: 31.3%

Depression

Medication Adherence

- Integrated Care: 71.9%
- Usual Care: 31.3%

Bogner et al, AnnFamMed 2008
Mental Health Provider Directory Listing

The American Diabetes Association Mental Health Provider Directory lists individuals who treat the psychosocial/mental health needs of people with diabetes. Listing in the Directory is available to providers that certify that they meet the following criteria:

1. Currently licensed as a mental health provider
2. Professional member of the ADA (Associate, Professional 1, Professional 2); and
3. Demonstrated competence treating the mental health needs of people with diabetes by: (a) Successful completion an APA continuing education program (Learn more.) Or (b) Two or more years of experience addressing the mental health needs of people with diabetes. Apply now.

Disclaimer: The Association does not render medical advice nor recommend specific providers or treatment.

Search for Telemedicine providers

<table>
<thead>
<tr>
<th>Adult Services</th>
<th>Pediatric Services</th>
<th>Miles Radius</th>
<th>From Postcode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>- Any -</td>
<td>50 Miles</td>
<td>03102</td>
</tr>
<tr>
<td>Apply</td>
<td>Reset</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Show/Hide Map

Name: Kara Harrington, PhD  
Adult Services: Yes  
Pediatric Services: Yes  
Phone: 978-254-3023  
Driving directions  
Distance: 45.32 miles  

Name: Ann Goebel-Fabbri, PhD  
Adult Services: Yes  
Pediatric Services: Yes  
Phone: 617-513-9327  
Driving directions  
Distance: 49.78 miles

https://professional.diabetes.org
BARRIERS/SOLUTIONS OF INTEGRATED CARE
Language

Medical

- Diabetic vs. PWD
- “what did I do wrong”
- Triage
- Inclusion/Exclusion criteria

Behavioral Health

- Schizophrenic vs. Person with Schizophrenia
- Supervision
- “that is not in my scope of practice”
- Eligibility criteria
Integration barriers

- Physical proximity
- Differing treatment goals and priorities
- Medication reconciliation
- Care Coordination - Shared care plans
- Education
  - Social Workers
  - Psychiatrists
- Work-arounds
- Technology is critical for tying together the health care system

Siantz et al 2017
Weiner et al 2005
Benzer et al 2015
42 CFR Part 2

- Intended to ensure that a patient receiving treatment for a SUD does not face adverse consequences
- Protects the confidentiality of SUD patient records by restricting disclosure or re-disclosure of such records
- What is the impact on integrated care? (McCarty et al 2017)
  - Legal uncertainty
  - Barrier to communication and information sharing
  - Different interpretations of the law (HIPAA versus 42CFR2)
  - Difficulty in securing an ROI

McCarty et al. 2017
Case Study - James

- 56 year old male with a history of Type 2 Diabetes, Peripheral neuropathy, Orthostatic hypotension, substance use disorder, schizophrenia

- Diagnosed with a diabetic foot ulcer, osteomyelitis and released to the shelter from the local hospital with instructions for no weight bearing. Has appointment with wound care in 1 week

- He was advised to quit smoking, and given a prescription for nicotine patches

- He was given prescriptions for his basal/bolus insulins, metformin, an antibiotic, and an antipsychotic.

- Has Medicare with QMB and income from SSDI
Case Study – James

Outcome

- Readmitted to hospital multiple times
- Spent 2 months inpatient receiving IV antibiotics. Discharged and readmitted the same day for bleeding after walked on wound to get wound supplies
- Multiple surgeries with amputations of parts of foot to address osteomyelitis
- Moved out of area and had amputation
- Returned to area and was hospitalized when he ran out of insulin. Released to a rooming house. Readmitted for cardiac issue – discharged to Mental Health Supportive Housing with Mental Health Case Manager
Case Study – James
Final Outcome

- Exercising daily and
- Eating 3 balanced meals daily,
  - Improvement in:
    - daily blood sugar results
    - self-efficacy as evidenced by daily blood sugar checking prior to each meal and asking for help with managing frequent hypoglycemia

- Referrals:
  - DSMES with MH Case Manager attending
  - PT/OT for new prosthesis
“Of all the forms of inequality, injustice in health care is the most shocking and inhumane.”

Dr. Martin Luther King, Jr.
in a speech to the Medical Committee for Human Rights, 1966
References

• Standards of Medical Care in Diabetes-2018. (2018). Diabetes Care, 41(Suppl 1), S1-S153. doi:10.2337/dc18-Sint01
• https://www.nasmhpd.org/sites/default/files/Mortality%20and%20Morbidity%20Final%20Report%208.18.08.pdf accessed 5/9/18
References


References

References


