DIABETES PREVENTION & MANAGEMENT
Given the prevalence of diabetes among health center patients, the impact that poor control has on quality of life, health outcomes, mortality, and costs, and the positive outcomes that can result from improved diabetes management, the Health Resources and Services Administration, Bureau of Primary Health Care (HRSA BPHC) has launched a diabetes quality improvement strategy to advance diabetes prevention and management. The strategy aims to:

- Increase the percentage of adults and children who receive weight screenings and counseling
- Reduce the proportion of patients with poor diabetes control as measured by hemoglobin A1c (HbA1c) greater than 9%
- Increase the proportion of health centers that meet the Healthy People 2020 goal by reducing uncontrolled diabetes prevalence for each racial/ethnic group

The National Association of Community Health Center’s (NACHC) project, Improve Diabetes Care in Health Centers, aims to improve outcomes for health center patients with diabetes through care transformation in diabetes prevention and management. The project sits within HRSA BPHC’s diabetes quality improvement strategy and aligns with and engages other National Cooperative Agreement organizations. In year one of the project, NACHC convened a national Clinical Advisory Group to provide subject matter expertise on the intersection of diabetes and special and vulnerable populations, including agricultural workers, homeless, adolescents, LGBT, elderly, and public housing dwellers.

Now, NACHC has built on the Clinical Advisory Board’s work to develop a Change Package for diabetes prevention and management. This toolkit is a working document that offers tools, strategies, and interventions for health centers to transform their diabetes-related care processes and outcomes. It supports assessing and addressing body mass index (BMI) more effectively to prevent new onset diabetes and promotes better HbA1c control in patients with diabetes to prevent complications.

As NACHC develops a portfolio of tools and resources to help health centers prevent and treat diabetes, this Change Package specifically focuses on a limited set of evidence-based interventions that health centers can “readily” and “quickly” implement. Opportunities to improve care processes are organized by HRSA’s technical assistance strategies: improving health systems and infrastructure; optimizing provider and multidisciplinary teams; and facilitating behavior change in patients. For brevity, and to support alignment with NACHC’s Value Transformation Framework®, this document refers to these areas as: infrastructure, teams, and patients. In addition, HRSA highlights the cross-cutting issue of health disparities reduction, and this change package recognizes this overarching, critical theme in the context of diabetes-related care transformation. Overall, the Diabetes Change Package offers five evidence-based interventions for each HRSA technical assistance strategy area, as well as health disparities reduction, with specific actions for change. Tools and resources accompany each intervention and action step.
HEALTH CENTER TECHNICAL ASSISTANCE PARTNERS STRATEGIES
TO ADDRESS THE DIABETES CONTINUUM OF CARE

REDUCE HEALTH DISPARITIES

OPTIMIZING PROVIDER & MULTIDISCIPLINARY TEAM INTERVENTIONS

- Team Based Care
- Promote National Standards
- New Techniques for Early Detection Screening
- Case Management
- Sharing of Diabetes Management Promising Practices
- Eye, Foot, Dental, & Kidney Screening
- Provider Counseling of Patients

FACILITATING BEHAVIOR CHANGE IN INDIVIDUALS AT-RISK FOR LIVING WITH DIABETES

- CHW Directed Patient Education
- Lifestyle/Self-Management
- Promote Physical Activity and Healthy Diets
- Address Childhood & Adult Obesity
- Increase Patient Health Literacy

IMPROVING HEALTH SYSTEMS & INFRASTRUCTURE INTERVENTIONS

- EHRs with Diabetes Modules
- Diabetic Informatics
- Health Information Exchange (HIE) & Telemedicine
- Patient Centered Medical Home (PCMH)
- Use Patient Portals
- Behavioral Health Integration
- Community Engagement

DECREASED DIABETES RISK & COMPLICATIONS
As one of the three HRSA strategies for decreasing diabetes risk and complications, “Improving Health Systems and Infrastructure Interventions” focuses on key foundational areas, including health information technology and core components of the PCMH model.

The following are five evidence-based interventions in support of HRSA’s infrastructure strategy, along with helpful tools and resources.
LEADERSHIP

EVIDENCE-BASED INTERVENTION

Strong leadership, good communication, and shared goals are required for care transformation.\(^1\), \(^2\), \(^3\)

ACTION STEP

Leadership sets diabetes as a top organizational priority, takes specific actions to communicate this support, and provides resources to improve diabetes prevention and management.

INFRASTRUCTURE

CLINICAL CHAMPION

EVIDENCE-BASED INTERVENTION

Change champions – both project and organizational change champions – are critical players in supporting both innovation-specific and transformative change efforts.\(^4\), \(^5\), \(^6\), \(^7\)

ACTION STEP

Identify and communicate to all staff the clinical champion(s) for diabetes, and then provide resources to support the designated clinical champion (e.g., QI team, IT support).
Clinical policies and procedures are necessary to organizational change and quality improvement.\(^8\), \(^9\), \(^10\)

**ACTION STEP**

› Create a clinical policy for diabetes care.

### INFRASTRUCTURE

#### EHR: STRUCTURED DATA

**EVIDENCE-BASED INTERVENTION**

Meaningful use of data from the EHR enhances quality improvement efforts and improves performance.\(^11\), \(^12\), \(^13\), \(^14\), \(^137\), \(^138\)

**ACTION STEP**

› Create a registry of patients with and at-risk for diabetes using EHR data. Begin to develop a gap list through this registry. Map data for one diabetes-related care indicator (e.g., BMI, lifestyle behaviors, exercise) from where it is documented to where it is stored in the database; conduct improvement cycle and repeat with the next indicator. These first steps should ultimately lead to the creation of a diabetes dashboard that allows a deeper dive into a patient population with diabetes.

### TOOLS AND RESOURCES:

#### STANDARDS OF DIABETES CARE/
SAMPLE DIABETES POLICIES

- Standards of Medical Care in Diabetes-2019. Abridged for Primary Care Providers: American Diabetes Association
- Obesity Policy and Procedure: Coastal Community Health Services
- Pre-Diabetes Identification and Intervention Algorithm: Maine Center for Disease Control and Prevention

#### DATA QUALITY ASSURANCE PLAN TEMPLATES

- Capturing High Quality Health Records Data to Support Performance Improvement: Appendix D: ONC
- Data Quality Assurance Plan Template: Louisiana Public Health Institute
- Team as Treatment: Driving Improvement in Diabetes: HITEQ
- Diabetes Dashboard: Azara Healthcare
STANDING ORDERS

› EVIDENCE-BASED INTERVENTION
  
  Widespread use of protocols and standing orders increases efficiency by allowing staff to work independently. \(^\text{15}\)

› ACTION STEP
  
  › Implement standing orders for diabetes.

TOOLS AND RESOURCES: SAMPLE STANDING ORDERS FOR DIABETES CARE AND MONITORING

- Care Team Medical Assistant Standing Order: West County Health Center
- Diabetes Care Standing Orders: Kentucky Diabetes Network, Inc.
- Standing Orders Diabetes Mellitus-Type II: Providence St. Peter Family Medicine

INFRASTRUCTURE: IMPLEMENTATION TIPS

› Frame messaging of performance on diabetes-related UDS measures around the impact of improvements on strategic goals, such as those associated with the HRSA site visit diabetes review and revenue (e.g., HRSA Quality Improvement (QI) Awards, reimbursement for telehealth activities, and other value-based payment programs).

› Identify a Board champion for the diabetes QI initiative. This person would update the Board/QI Committee regarding QI progress on a monthly or quarterly basis. Address any obstacles to success that might surface.

› Fully leverage health IT (e.g., EHR, population health management system, patient portal, etc.) to embed diabetes-related policies and protocols into easy and efficient workflows.
As one of the three HRSA strategies for decreasing diabetes risk and complications, “Optimizing Provider & Multidisciplinary Team Interventions” focuses on team-based care, care management and practices, and provider-patient communication.

The following are five evidence-based interventions in support of HRSA’s team strategy, along with helpful tools and resources.
EXPAND JOB ROLES

› EVIDENCE-BASED INTERVENTION

Engagement of support and ancillary staff in the care of patients with diabetes (e.g., medical assistants, medical scribes, clinical pharmacists) is related to increased patient and provider satisfaction, as well as improved health outcomes for patients. For example, use of medical scribes is associated with improvements in chart quality, provider productivity, and provider and patient satisfaction. 17, 18, 35, 36, 37, 38

› ACTION STEP

› Expand the roles of support and ancillary staff in the care of patients at risk for, or living with, diabetes.

CARE TEAM TRAINING

› EVIDENCE-BASED INTERVENTION

Maximizing the role of support staff through additional training in diabetes management can help ensure high-quality diabetes care that is patient-centered, cost-effective, and results in improved provider and patient satisfaction. 16, 17, 18, 19

› ACTION STEP

› Analyze the current support staff roles and competencies within the organization and determine how best to maximize the skills and knowledge of different team members.

TOOLS AND RESOURCES:

SAMPLE ROLES AND RESPONSIBILITIES

Using Medical Scribes in a Physician Practice: AHIMA

Care Teams Action Guide: NACHC

EndoECHO Program: University of New Mexico

Mental Health & Diabetes: AADE

Tools for Diabetes Educators: AADE

SAMPLE DIABETES PROFICIENCY CHECKLIST AND TRAINING EXAMPLE

Competencies for Diabetes Educators and Diabetes Paraprofessionals: American Association of Diabetes Educators

Lifestyle Coach Training: Pennsylvania Association of Community Health Centers
MOTIVATIONAL INTERVIEWING

EVIDENCE-BASED INTERVENTION
Provider and staff training in motivational interviewing has been shown to improve patient engagement.20, 21, 22, 23, 24, 25

ACTION STEP
Train staff in motivational interviewing.

TOOLS AND RESOURCES:
SAMPLE CONVERSATION FLOW AND QUESTIONS

CCNC Motivational Interviewing (MI) Resource Guide (See: Conversation Flow and Sample Questions): Community Care of North Carolina

Motivational Interviewing: Tips for Engaging Patients with Type 2 Diabetes: CarePath Healthy Engagements

10 Elements of Competence for Using Teach-back Effectively: Iowa Health System

PRE-VISIT PLANNING

EVIDENCE-BASED INTERVENTION
Pre-visit planning has been shown to improve compliance with delivery of screening tests and care.26, 27, 28

ACTION STEP
Implement a pre-visit checklist.

TOOLS AND RESOURCES

Pre-Visit Planning module (See: Resources): American Medical Association

T2CM Office-Visit Checklist: UBM Medica (can be modified to reflect 2019 ADA Standards)

Be Prepared to be Engaged: Agency for Healthcare Research and Quality

Helping Patients and Families Prepare for an Appointment: A Guide for Clinicians
GROUP VISITS

› EVIDENCE-BASED INTERVENTION

Group visits optimize time and reduce health care associated costs, while remaining patient-centered, interactive and empowering. Group diabetes visits are effective strategies for managing diabetes, and improving clinical results such as improved HbA1c, cholesterol, and blood pressure levels.

› ACTION STEP

› Create and test a diabetes group visit.

TOOLS AND RESOURCES

- Diabetes Group Visits Leader’s Manual:
  University of Colorado
  
- Empowerment Diabetes Group Visit Curriculum for the Rural-Urban Underserved:
  Oregon Health & Science University

TEAMS: IMPLEMENTATION TIPS

› Prior to initiating care team training, analyze current roles to determine how best to maximize the skills and knowledge of different team members.

› Ensure staff can accurately gather and document key diabetes-related data and understand the importance of adhering to care protocols.

› Include diabetes training in staff onboarding and compliance trainings. Periodically evaluate staff to ensure ongoing skill competence and protocol adherence.

› Consider expanded role of non-clinical staff for pre-visit planning to reduce burden on clinical staff and explore other engagement strategies.

› Offer continuing education credits where possible to encourage staff participation in training.

› Examine and discuss data at care team, site, and health center levels, ensuring data and attributions are correct. Identify patterns of care, deficits to improve, and system solutions for frequent or widespread gaps.

› Leverage the EHR/registries to make key data available in user-friendly, action-oriented formats — highlight care gaps such as lack of counseling for BMI and/or elevated HbA1c.
As one of the three HRSA strategies for decreasing diabetes risk and complications, “Facilitating Behavior Change in Individuals at Risk for or Living with Diabetes” focuses on patient lifestyle and self-management, literacy, and engagement with care support such as community health workers.

The following are a set of five evidence-based interventions in support of HRSA's patient strategy, along with helpful tools and resources.
PATIENT SELF-MANAGEMENT

EVIDENCE-BASED INTERVENTION

The participation of individuals with diabetes in their own care has been shown to make a dramatic impact on the progression and development of their disease.39, 40, 41

ACTION STEP

› Create instructions and processes to engage patients in self-management (e.g., routine foot exams, grocery shopping, overall goal setting).

TOOLS AND RESOURCES:
SAMPLE GOAL SETTING INSTRUCTIONS


Diabetes Initiative-Goal Setting Resources: Robert Wood Johnson Foundation

Diabetes Planned Visit Notebook: Agency for Healthcare Research and Quality

Conquering the Grocery Store: American Association of Diabetes Educators

Patient/Family/Caregiver Teaching Checklist for Diabetes Education: U.S. Department of Veterans Affairs
PATIENTS

PATIENT EDUCATION

› EVIDENCE-BASED INTERVENTION

Patients with low literacy, low numeracy, and/or linguistic needs can experience challenges understanding diabetes information and applying concepts to their self-management.42, 43, 44, 45, 46

› ACTION STEP

› Create/adopt a low or “no” literacy (i.e., images only) diabetic educational tool for patients to understand Hba1c and related diabetes self-management goals/practices.

TOOLS AND RESOURCES:
RISK TESTS/SAMPLE LOW LITERACY EDUCATIONAL TOOLS

Do I have Prediabetes?: Ad Council/American Medical Association/CDC

Type 2 Diabetes Risk Test: American Diabetes Association

Living With Type 2 Diabetes Program: American Diabetes Association

Blood Sugar Too High or Too Low?: Association of Clinicians for the Underserved English / Spanish

Live Free with Diabetes: Blood Sugar: Connecticut Department of Public Health English / Spanish
OBESITY SCREENING AND REDUCTION

EVIDENCE-BASED INTERVENTION
The United States Preventive Services Task Force (USPSTF) recommends screening for obesity in individuals 6 years of age and older with referral to behavioral interventions. This recommendation considers the risk for prediabetes starting in childhood, while emphasizing multiple opportunities for intervention at every age. In addition, for individuals with diabetes, a loss of 5–10% of body weight can improve fitness, reduce HbA1c levels, improve cardiovascular disease (CVD) risk factors, and decrease use of diabetes, hypertension, and lipid-lowering medications. 47, 48, 49, 50, 51, 52

ACTION STEP
› Revise patient visit processes to screen all patients 6 years of age and older for obesity with referral to behavioral interventions as necessary. Consider developing a written process for referring patients with diabetes to weight reduction programs and/or provide written prescriptions for weight reduction.

PEER COACHING

EVIDENCE-BASED INTERVENTION
Peer support through peer coaching among patients with diabetes has been shown to improve diabetes self-management and emotional support. 53, 54, 55, 56

ACTION STEP
› Consider starting a peer support group that contacts patients by telephone or meets in a group setting.
PATIENTS

DEPRESSION SCREENING

› EVIDENCE-BASED INTERVENTION
  Depression affects nearly 1 in 10 patients with diabetes. Depression is associated with nonadherence to diabetes self-care—including following dietary restrictions, medication compliance, and blood glucose monitoring—resulting in worse overall clinical outcomes.

40, 57, 58, 59, 60, 61

› ACTION STEP
  › Institute routine depression screening for all patients (not just patients with diabetes).

TOOLS AND RESOURCES: DEPRESSION SCREENING

TOOLS AND SAMPLE FOLLOW-UP FLOW CHARTS

Depression Screening and Follow-up Flow Chart: Gateway Community Health Center, Inc.

Patient Health Questionnaire-2

Living a Balanced Life with Diabetes-PHQ-9: National Diabetes Education Program

PATIENTS: IMPLEMENTATION TIPS

› In applying HRSA’s technical assistance strategies, link “patient” improvement strategies to efforts related to “teams” and “infrastructure”.

› Incentivize lifestyle modification with community partners through vouchers from local farmer’s markets, gyms, and municipality parks and recreation divisions.

› Develop materials that use images only, - no text- for patients with little/no reading skills.

› Use community health workers for warm handoffs of patients to community resources.

› Initiate a patient advisory committee to design the care model for patients with pre-diabetes/diabetes that considers the community perspective on patient education, patient needs, and ways to incentivize participation.
The HRSA framework recognizes that there are cross-cutting issues that affect all quality improvement efforts. This is especially prominent in the realm of diabetes quality improvement. The three strategies discussed above (i.e., Infrastructure, Teams, Patients) are all influenced by the existence of persistent health disparities, and the need to reduce disparities, in care and outcomes, to see meaningful change in diabetes prevention and management.
COMMUNITY PARTNERSHIPS

› EVIDENCE-BASED INTERVENTION
Relevant linkages with other community organizations, agencies, and businesses can facilitate increased support and enhanced resources for patients with diabetes. 24, 62, 63, 64, 65

› ACTION STEP
› Foster health center-community partnerships to encourage community support for diabetes self-management.

TOOLS AND RESOURCES:
Tools for Building Clinic-Community Partnerships to Support Chronic Disease Control and Prevention: Robert Wood Johnson Foundation
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SYSTEMS TRANSFORMATION

› EVIDENCE-BASED INTERVENTION
Taking a systems approach that incorporates value-driven, evidence-based interventions can lead to improved health outcomes, by increasing screening rates for chronic diseases. 43, 44, 66, 67

› ACTION STEP
› Apply systems transformation and quality improvement strategies to diabetes improvement efforts.

TOOLS AND RESOURCES:
Value Transformation Framework: Elevate: National Association of Community Health Center Quality Center's
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CARE TEAM AWARENESS OF DIVERSITY, EQUITY, INCLUSION, AND IMPLICIT BIAS

- EVIDENCE-BASED INTERVENTION
  Health care organizations can reduce health disparities by focusing on disparities that occur at the point of care and training staff to recognize issues of diversity, inclusion, equity, inclusion, and implicit bias.28, 68, 69, 70, 71, 72, 73

- ACTION STEP
  Include training on diversity, inclusion, equity, and implicit bias in the training given to staff across the organization.

TOOLS AND RESOURCES:
- Implicit Bias in Healthcare: The Joint Commission, Division of Health Care Improvement
- Think Cultural Health: HHS Office of Minority Health
- Project Implicit: Harvard University

REDUCE HEALTH DISPARITIES

SOCIAL RISK SCREENING

- EVIDENCE-BASED INTERVENTION
  When making treatment decisions and assessing health outcomes for patients with diabetes, care team members should consider social context, including, but not limited to, possible food insecurity, housing consistency, employment stability, and insurance status.25, 75, 76, 77, 79, 80

- ACTION STEP
  Incorporate social risk screening into diabetes screening and treatment visits.

TOOLS AND RESOURCES:
- PRAPARE Implementation and Action Toolkit: National Association of Community Health Centers
- Adverse Childhood Experience (ACE) Questionnaire: CDC
  For more information visit the CDC website
- An Overview of Food Insecurity Coding in Health Care Settings: National Community of Practice
COMMUNITY HEALTH WORKER INTEGRATION

- **EVIDENCE-BASED INTERVENTION**
  
  Incorporation of community health workers into care teams can enhance patient outreach in traditional community settings and improve health behaviors. 81, 82, 83, 84

  - **ACTION STEP**
    
    Integrate community health workers into the chronic care management team to assist with patient navigation to community resources.

**TOOLS AND RESOURCES:**

- Community Health Workers in Health care for the Homeless/ A guide for administrators: National Health Care for the Homeless Council
- Community Health Workers and Diabetes Interventions: A Resource for Program Managers and Administrators: MHP Salud

**REDUCE HEALTH DISPARITIES: IMPLEMENTATION TIPS**

- Collect relevant social risk/social determinants of health data at registration, via patient questionnaires or similar method, and add pertinent portions of that data to the record during rooming.

- Stratify diabetes/pre-diabetes data by race/ethnicity and/or special population status, and use this data for quality improvement efforts.

- Explore and cultivate support from community resources (e.g., health departments, community health workers, community-supported agriculture, and religious and social organizations) for assistance with key efforts such as patient engagement, outreach, and addressing social determinants of health.

- Explore and cultivate relationships with local academic organizations for clinical training and support for patient management.

- Add warm handoffs to behavioral health/mental health, care managers, and/or Community Health Workers (CHWs) to workflows to ensure appropriate referrals to social service agencies that address upstream factors (e.g., homelessness, food insecurity, lack of insurance coverage).

- Create culturally appropriate diabetes management education tools, including the use of illustrations and little/no words.
Special thanks to the National Nurse-Led Care Consortium, the Migrant Clinicians Network and their associated partners, the National Center for Health and Public Housing and the National Health Care for the Homeless Council, for their contribution to this Diabetes Change Package. Their efforts and input along with the Diabetes Clinical Advisory Group and NACHC Quality Center's Quality Improvement Advisory Board helped to craft this comprehensive document.

For Additional Resources please visit: https://ww.healthcenterinfo.org
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