AGENDA

I. Call to Order
   K. Hermayer

II. Minutes of March 3, 2017 meeting
    K. Hermayer

III. Executive/Finance Committee Report
     K. Hermayer

IV. Council Reports
    A. Outreach Council
       E. Todd Heckel
    B. Diabetes Center Council
       P. Arnold
    C. Surveillance Council
       J. Vena/K. Hunt

V. SC DHEC
   R. Hill

VII. Old Business
    A. Strategic Plan Draft
       K. Hermayer
    B. South Carolina Tobacco-Free Collaborative (SCTFC) Board representative
       K. Hermayer

VIII. New Business
    A. The Journal of the South Carolina Medical Association
       K. Hermayer
    B. 23rd Annual Diabetes Symposium cancellation
       J. Benke-Bennett
    C. CCME discontinuing the Diabetes Task Work in SC
       J. Benke-Bennett
    D. DSC/DAC Collaboration
       U. Lilavivat
    E. Adult Guidelines Updates
       P. Arnold

Adjournment

Future meetings:
   December 1, 2017 (Charleston)
   March 2, 2018 (Columbia)
Call to Order

Dr. Hermayer called the meeting to order at 2:08 pm.

Minutes

The minutes of the December 2, 2016 Board meeting were accepted as written and approved.

Executive/Finance Committee Report

Julie Benke-Bennett reported for the Executive/Finance Committee. The Diabetes Strategies Program and the Diabetes Symposium realized losses this year due to the lack of grant funding. Julie will continue to look at other venues and opportunities to reduce costs even further.

Council Reports

Full reports from the Councils are added to these minutes.

Outreach Council

Pam Arnold reported for the Outreach Council.

Dr. Carolyn Jenkins reported the AHA health disparities grant is moving forward. The grant operates on a nurse directed communications model in Charleston, Berkeley, Dorchester and Georgetown counties for stroke survivors.

Dr. Michelle Nichols reported on her work with a team based project aimed at African Americans in Colleton County. The program is faith based and focuses on health disparities.

The Charleston Black Expo will be held on March 9 – 11, 2017. There will be a number of community events, including a “Health Village.”

The Trident United Way continues to plan and implement its’ screening programs. They have encountered issues with community events. The blood sugar monitors are not CLII waived; therefore, there could be liability issues. Dr. Jenkins noted that a screening manual will be developed from the recent Sanofi project.

Dr. Jenkins is looking at a couple of minority health pilots, and Dr. Nichols is applying for increased screening in Ghana.

Diabetes Center Council

Pam Arnold reported for the Diabetes Center Council.

The 2017 Diabetes Strategies for the 21st Century was held on February 7 & 8, 2017 at the North Charleston Marriott. The change in venue did not realize much of a cost savings over recent programs at the Convention Center.

MUSC was recertified as an ADA Education Recognition Program (ERP) on February 15, 2017.

The Surveillance Council reviewed the DSC 5-Year Strategic Plan draft. Three Focus Areas were examined and edits were suggested for inclusion in the final Plan.

SC DHEC  Today DHEC is submitting two grants to the CDC for 2017 - 2018 funding. They also submitted a statewide grant a couple of days ago.

DAC continues to meet quarterly, and focuses mainly on prediabetes and the NDPP.

The 15th Chronic Disease Prevention Symposium is scheduled for March 10 – 11, 2017 in Myrtle Beach.

Old Business  

Strategic Plan:  
Council edits to the draft of the Strategic Plan was reviewed and edits from the Councils were heard, discussed and incorporated. A distribution list was discussed for the Plan which includes SC legislators, DSC Board and Council members, MUSC CEO and others, SC Hospital Association, and SC DHEC.

Diabetes Under the Dome 2017:  
Julie Benke-Bennett noted that the Diabetes Under the Dome will be held on March 15, 2017 at the SC Statehouse in Columbia. Volunteers will include representatives from DSC, MUSC, Fortis College, Presbyterian College of Pharmacy, SC DHEC, Carolina Diabetes & Kidney Center, and Winthrop College.

New Business  

2016 DSC Annual Report:  
The DSC Annual Report has been completed and is in print for distribution to the SC General Assembly during the Diabetes Under the Dome event on March 15, 2017. The Annual Report will also be added to the DSC website.

Professional Education Programs:  
Board members discussed the financial losses that have been realized from professional education programs in the recent years. Suggestions for other venues to explore included Roper on Palmetto Commerce Parkway, and Trident Technical College. Ms. Benke-Bennett will continue to contact other venues for cost saving opportunities.

DSC Board meeting in June, 2017:  
The Board voted unanimously to cancel the June DSC Board meeting because of ADA and vacations, and the September meeting will be rescheduled to September 29th in Columbia because of Labor Day.

SC Tobacco-Free Collaborative (SCTFC):  
The SCTFC is still looking for a representative on their Board from the DSC Board. Ms. Benke-Bennett will contact them to see if all attendance can be done via conference call or web-ex instead of in person.

Guest Speaker – Mike Hauser (Sanofi):  
Mike Hauser from Sanofi gave a short presentation on quality healthcare and medication assistance programs for people with diabetes.

Dr. Hermayer thanked everyone for their support of DSC, and the meeting was adjourned at 3:04 pm.

Respectfully Submitted,

Kathie L. Hermayer, MD, MS  
Board Chair, Diabetes Initiative of SC

Future Meetings  
September 29, 2017 in Columbia
December 1, 2017 in Charleston
Functions
As defined by Section 44-39-50 amendment to 1976 Code of Laws for South Carolina, the Diabetes Outreach Council shall oversee and direct efforts in patient education and primary care including:
1. Promoting adherence to national standards of education and care.
2. Ongoing assessment of patient care, costs, and reimbursement issues for persons with diabetes in South Carolina.
3. Preparing an annual report and budget proposal for submission to the Diabetes Initiative of South Carolina Board.

WEBSITE: www.musc.edu/diabetes

Prominent Activities this quarter:
Elizabeth Todd Heckel, MS, CDE
- Family Practice Diabetes Education Groups; 1st and 3rd Tuesday of every month; 6-12 participants, 3-4, 3rd yr. medical students, 1-3, 3rd yr. pharmacy students (USC, Presbyterian College)
- Individuals, 2nd and 4th Tuesday's.
- Diabetes Today Advisory Committee (DTAC), 3rd Wednesday of every month.
- Diabetes Advisory Council (DAC), Quarterly; Pillar 3, Sub-Committee-DPP Program: Barriers, recruitment, participation.
Diabetes Initiative of South Carolina
Diabetes Center Council Board Report
September 29, 2017

Professional Education Activities:

- Edited DSC 5 Year Strategic Plan Draft
- 23rd Annual Diabetes Fall Symposium for Primary Health Care Professionals
  September 14 & 15, 2017 at the North Charleston Convention Center was canceled due to hurricane.

Meetings:

- MUSC Hospital Diabetes Task Force.
- MUHA Accreditation/Regulatory Meeting.
- MUSC ADA Education Recognition Program (ERP) Coordinator.
- Leadership Development Institute (LDI), April 2017, September 2017, MUSC Trident Technical College, North Charleston, SC.
- Review and make recommendations for diabetes related issues entered into the University Health Consortium - Patient Safety Institute.
- DKA Retrospective Chart Review in conjunction with MD student and Kathie Hermayer, MD. IRB approval and plan to submit for publication 2017.
The draft DSC Strategic Plan was discussed by the Surveillance Council at the December meeting. Editing assignments were made for reviewing the goals under each Focus Area. Members of the Council submitted comments and edits to DISC. At the March meeting the Surveillance Council members conducted a comprehensive review of the assigned Focus Areas of the DSC Strategic Plan, and made edits for inclusion in the draft.

The Surveillance Council continued to explore available sources for data. Contact will be made with various persons/groups who may be able to assist with data retrieval. The Council reviewed the various data points already available, and discussed which markers may be important to add to an existing tracking system.

The Surveillance Council continues to increase its membership of highly qualified health care professionals.

The 23rd Annual Diabetes Fall Symposium was scheduled for September 14-15, 2017 at the North Charleston Convention Center but was cancelled due to hurricane Irma.
The South Carolina Department of Health and Environmental Control (DHEC) is dedicated to the prevention of chronic disease disparities such as diabetes. The overarching diabetes efforts at DHEC are to prevent complications, disabilities, and burden associated with diabetes as well as to eliminate diabetes-related health disparities.

I. State and Federal Updates:

CDC Grant Applications Update
- The Diabetes, Heart Disease, Obesity and School Health Division is in the final year of both the 1305 year 05 (June 30, 2017 through June 29, 2018) and the 1422 year 04 (September 30, 2017 – September 29, 2018) CDC grants. There has been no official word when the new NOGA will be released; however, the division has been brainstorming partners and activities that could possibly be included in the next application.

Diabetes Advisory Council of SC (DAC)
- The Diabetes Advisory Council of SC (DAC) continues to work across all four pillars to move work focused on prediabetes forward in the state of South Carolina. Pillar 1 (Provider Engagement) has completed the pilot Provider Toolkit and the toolkit is currently being pilot tested in a total of 4 identified Medical Practices throughout the state. Upon completion of the pilot phase the toolkit will be revised and a plan for statewide implementation will be launched. The chair of DAC Pillar 2 (National DPP Availability), Lisa Sanders resigned and Ms. Ava Dean with the SC Kidney Foundation has volunteered to lead pillar 2. Pillar has completed the statewide roundtables focused on gaining insight on how to effectively market and recruit for the National DPP, along with provider engagement, participant retention, implementation and sustainability. Pillar 3 is currently working to create one page summaries that concisely display the findings of the roundtables to share with the public as well as National DPPs throughout the state. Pillar 4 (Coverage) is currently working on developing a toolkit to assist with gaining leverage with insurers to promote coverage of the National DPP. The toolkit will be a variation of the NACDD and CDC Coverage Toolkit with South Carolina specific information and resources.
- Michelle Moody, along with Dr. Gerald Wilson (DAC Chair) and Lisa Wear Ellington (SC Business Coalition on Health) attended the Diabetes Prevention Stakeholder Meeting, June 13-14, 2017, AMA Plaza, Chicago, IL. The meeting was informative and we will continue to work with AMA, NACDD and CDC on our diabetes prevention efforts.

II. Diabetes Surveillance Systems:

Goal: Monitor the statewide diabetes burden and identify gaps to assist with planning, decision-making, and evaluation.
- No update at this time.

III. Health Systems Improvement:

Goal: To increase the number of health care providers engaged in professional education on recommended standards of care.
- Work has been done to recruit additional practices statewide for participation in ADA-recognized, AADE-accredited, state-accredited/certified, and/or Stanford licensed diabetes self-management
education (DSME) programs. To date for year 4 there is 1 active contract, 2 pending, and 3 potential. The program area, in collaboration with the evaluation team, have worked to identify DSME sites that have lost their accreditation/recognition status. Contact has been made with 5 of the 6 sites to inquire about their interest in re-applying for accreditation/recognition. In addition, the evaluation team has assisted with identifying practices in two of the top counties with high numbers of patients with diabetes that do not have a DSME. Additional follow-up and outreach is currently underway with both of the above mentioned groups.

16th Annual Chronic Disease Prevention Symposium
- Planning is underway for the 16th Annual Chronic Disease Prevention Symposium Scheduled for March 9-10th, 2018. The theme for the 2018 Symposium is Evidence Based Strategies to Improve Access, Outcomes and Impact: Patients, Providers and Community Connections. Tentative session topics include opioid use and abuse, innovative approaches to working with patients across the lifespan on chronic disease prevention, successfully navigating patient resources, obesity, healthy weight management, lifestyle change program sustainability, and much more. Due to the positive feedback received on last year’s Symposium evaluations, sessions will be scheduled for all day Friday with an early release on Saturday by 1 pm. The Awards Luncheon will take place on Friday. For more information contact: Felicia G. Brown at brownfb@dhec.sc.gov.

Care Coordination Institute Partnership
- The division partnered with Care Coordination Institute (CCI) to host four Chrysalis workshops aimed at informing, educating and preparing healthcare practices and providers within the state for payment reform changes related to quality care for 2017 (MACRA legislation), Quality Improvement and Practice Transformation. The last of the two workshops were held in 1) Greenville with a focus on QPP updates, HCC Coding and Risk Assessment of Patients, Increasing Adaptive Reserve and Waste Busters; and in 2) Columbia with a record number of 83 in attendance. The agenda included presentations from Valinda Rutledge and Michelle Stanek from the South Carolina Office or Rural Health. The feedback received was very positive and most attendees enjoyed Jeff Cole’s piece on interactive Process Improvement. The next workshop will be on Wednesday, December 6th at the Cooper River Room in Mt. Pleasant.

Health System Partnerships
- As of September 2017, the SC PHASE teams have provided technical assistance to a total of eight contracted medical practices to facilitate the development and adoption of policies/protocols supporting self-monitoring of high blood pressure linked to a self-management plan. The division continues to partner with the American Heart Association to implement the Check Change Control program with at least one medical practice per SC PHASE Community. The Check Change Control program aims to eliminate high blood pressure as a health disparity among Americans and help achieve the goal of improving cardiovascular health by 20%, while reducing cardiovascular mortality by 20% by 2020 (AHA 2020 Impact Goal).

IV. Community Awareness and Outreach:
Goal: Increase diabetes knowledge and awareness across disparate and hard to reach communities.
- Mary Ann Hodorowicz with Mary Ann Hodorowicz Consulting, LLC, presented a two session interactive course on keys to increasing sustainability of lifestyle change programs including DSME and NDPP at the Farm to Institution Summit on September 19th. The session was well attended and Ms. Hodorowicz presented excellent information that will assist each of the NDPPs.
- The Division partnered with the Division of Healthy Aging to participate in their Evidence Based Self-Management Roundtable Discussion to seek input and guidance on the expansion and sustainability of
evidence based programs in South Carolina. Six organizations delivering one or more of the following programs (CDSMP, DSME, National DPP, and WWE) participated in the interactive discussion. Findings from the discussion are currently being analyzed and will be made available when completed.

National Diabetes Prevention Program (NDPP)

- Under the 1422 grant, there is currently 33 organizations, with 41 sites that are conducting 52 NDPP cohorts of which five are completed.
- Michelle H. presented information and materials promoting prediabetes awareness and availability of the National DPP at the Jazzin' With Sugar health seminar at the Low Country Jazz Festival in Charleston on September 2nd. Several physicians and a certified diabetes educator presented information about prediabetes risk, diabetes prevention and diabetes self-management to approximately 100 attendees.
- Two outreach campaigns consisting of print ads and radio commercials promoting prediabetes awareness and the National DPP were launched with media outlets across the state between early June and the first half of September. The print campaigns featured CDC Prevent T2 ads and were launched in daily and weekly newspapers. The radio commercials utilized a CDC script and ran on stations across the state in English and Spanish. Based on this campaign, to date, central office has received 30 inquiries by phone or email. We also received a few calls from individuals that had diagnoses of diabetes and they were referred to the appropriate staff person. Follow-up will continue with both state and local staff to ensure the interested individuals are paired with the correct program. The division has an email address, ndpp@dhec.sc.gov that is earmarked for individuals that are interested in diabetes prevention to contact for more information.

Staff Updates and General Information

- Michelle Harris, the 1422 Central Office Prevention Coordinator resigned effective September 16th to work with the Bureau of Health Improvement and Equity as the Communications Liaison. A transition plan to continue to support the diabetes prevention work in the regions with the 1422 communities has been developed. Cameron Mason, MPH currently works with the division on an hourly basis to assist with collaboration among lifestyle change programs and will assist with the 1422 staff transition.
- Ms. Amy Curran began as the Health Systems Program Administrator on September 5th. Before joining our division she was a Risk Communication Specialist with PHSIS/Environmental Public Health Tracking. Amy will help support the health systems and quality improvement work of the division.
Goals may further reduce microvascular complications at the cost of increasing hypoglycemia; postprandial glucose may be targeted if A1C goals are not met despite reaching preprandial glucose goals.

<table>
<thead>
<tr>
<th>Exam/Test</th>
<th>Care of the Person with Type 1 Diabetes</th>
<th>Care of the Person with Type 2 Diabetes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office visits</td>
<td>Quarterly, but dictated by severity of condition and response to treatment; if uncontrolled, visits may be more often. Inform the relatives of patients with type 1 diabetes of the opportunity to be tested for type 1 diabetes risk, but only in the setting of a clinical research study.</td>
<td></td>
</tr>
<tr>
<td>Body Mass Index</td>
<td>Each visit. Diet, physical activity, and behavioral therapy to achieve &gt;5% weight loss should be prescribed for overweight (BMI &gt; 25-29.9) and obese (BMI &gt; 30) patients with type 2 DM ready to achieve weight loss. FDA approved weight loss medications are available to be used as adjuncts in patients with BMI &gt;27 kg/m2 with one or more obesity associated comorbid conditions and in patients with BMI &gt; 30 kg/m2 without comorbidities who are motivated to lose weight. Metabolic surgery should be recommended to treat type 2 DM in appropriate surgical candidates with BMI &gt; 40 kg/m2 (BMI &gt; 37.5 kg/m2 in Asian Americans), regardless of the level of glycemic control or complexity of glucose-lowering regimens, and in adults with BMI 35.0– 39.9 kg/m2 (32.5–37.4 kg/m2 in Asian Americans) when hyperglycemia is inadequately controlled despite lifestyle and optimal medical therapy.</td>
<td></td>
</tr>
<tr>
<td>A1C</td>
<td>Quarterly, then 2x/year if meeting goal; more stringent goals (&lt; 6.5%) may further reduce complications at the cost of increased risk of hypoglycemia and may be considered in individual patients. In older adult with hypoglycemia, goal may be 7.5-8% to avoid hypoglycemia episodes, if history of severe hypoglycemia, advanced complications or limited life expectancy.</td>
<td></td>
</tr>
<tr>
<td>Blood pressure</td>
<td>Each visit. Prescribe medications for BP &gt; 140/90 mmHg along with lifestyle change. Recommended treatment: ACE-I or ARB, thiazide - like diuretics, or dihydropyridine calcium channel blockers. If using combination therapy to achieve target, then examine risks vs. benefits of goal of &lt; 140/90 and monitor for side effects. With increased cardiovascular risk, the BP target should be &lt; 130/80 mmHg.</td>
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**Screening for Diagnosis of Diabetes**

At age 45, all adults should be screened regardless of weight. To test for diabetes or to assess risk of future diabetes, either A1C, Fasting Plasma Glucose (FPG), or 2-h 75 g Oral Glucose Tolerance Test (OGTT) are appropriate. An A1C level of 5.7% to 6.4% indicates increased risk for diabetes. The presence of diabetes is indicated by: A1C level of 6.5% or higher; FPG level of > 126 mg/dL; OGTT level of 6.5% or presence of diabetes.

**Prevention/delay of type 2 diabetes:** refer to support program targeting weight loss of 7% of body weight and physical activity to at least 150 min/week (i.e. National Diabetes Prevention Program).

In those identified with prediabetes, identify and if appropriate, treat other CVD risk factors.

* Reference: International Diabetes Federation (IDF) Consensus Worldwide Definition of the Metabolic Syndrome

**Lipid profile**

Screening at diabetes diagnosis, initial medical evaluation, and/or at age 40. Thereafter every 5 years if not on a statin or frequently if on a statin or indicated. **In addition to lifestyle therapy.** ASCVD risk factors include LDL >100 mg/dL, high blood pressure, smoking, overweight, and obesity, and family history of premature ASCVD.

<table>
<thead>
<tr>
<th>Age</th>
<th>Risk Factors</th>
<th>Recommended Statin Intensity**</th>
<th>Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;40</td>
<td>0</td>
<td>none</td>
<td>Annualy or as needed to check adherence</td>
</tr>
<tr>
<td>40 – 75</td>
<td>0</td>
<td>Moderate</td>
<td>As needed to check adherence</td>
</tr>
<tr>
<td>&gt;75</td>
<td>0</td>
<td>Moderate</td>
<td>As needed to check adherence</td>
</tr>
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</table>

**Diabetic Kidney disease**

Assess spot urine albumin creatinine ratio (UACR) and estimated glomerular filtration rate eGFR in all patients with comorbid hypertension. If UACR < 30 mg/g Cr → refer to nephrologist. ACE-I or ARB recommended for treatment of microalbuminuria when 2 of 3 tests are elevated within a 6-month period. Should begin after five years duration then annually At diagnosis and annually

**Management of CKD with calculated eGFR**

Yearly measurement of UACR, serum Cr, potassium; more frequent monitoring depending on the eGFR at the time.

**Aspirin therapy**

75-162 mg/day All patients with type 1 or type 2 (unless contraindicated) with increased CV risk for primary prevention, including most men and women > age 50 with at least one other CVD risk factor. As secondary prevention for all with history of CVD. For patients with atherosclerotic cardiovascular disease and documented aspirin allergy, clopidogrel 75mg/d should be used.

**Dilated eye exam**

By an ophthalmologist or experienced optometrist in diabetic retinopathy Within 5 years after onset of diabetes, then annually; less frequent exams (every 2 years) may be considered when eye exam normal. At diagnosis of diabetes, then annually; less frequent exams (every 2 years) may be considered when eye exam normal.

**Foot examination**

Visual inspection at each visit. Comprehensive exam annually should include inspection of the skin, neurological assessment (10-g monofilament testing with at least one other assessment: pinprick, temperature, vibration, ankle reflexes, and vasculard assessment including pulses in the legs and feet, assessment of foot deformities (focal lesions, interdigital calluses, maceration, nails) musculoskeletal (ROM, foot type, digits, bony prominences). Specialized therapeutic footwear is recommended for high-risk patients with diabetes including those with severe neuropathy, foot deformities, or history of amputation.

5 years after diagnosis and at least annually thereafter. At diagnosis and at least annually thereafter.

**Self-monitored blood glucose (SMBG)**

Goals: Preprandial glucose 80-130 mg/dL Peak post-prandial glucose < 180 mg/dL Prior to driving > 90 mg/dL

Three or more times daily for patients using multiple insulin injections or insulin pump therapy, including before meals or snacks, and occasionally postprandial at bedtime, and prior to exercise, if suspect low BG and critical tasks such as driving. CGM is useful to lower A1c in type 1 DM > 25 yrs. May be helpful to guide treatment/self-management for patients using less frequent insulin injections or non-insulin therapies.

Continued on next page
### Key concepts:
- Goals should be individualized.
- Certain populations (children, pregnant women, and elderly) require special considerations.
- Less intensive glycemic goals may be indicated in patients with severe or frequent hypoglycemia.
- More intensive glycemic goals may further reduce microvascular complications at the cost of increasing hypoglycemia.
- Postprandial glucose may be targeted if A1C goals are not met despite reaching preprandial glycemic goals.

#### Exam/Test | Care of the Person with Type 1 Diabetes | Care of the Person with Type 2 Diabetes
---|---|---
**Hypoglycemia** | The preferred treatment is glucose (15-20 grams) for a conscious individual; any glucose containing carbohydrate is appropriate. Repeat treatment if SMBG in fifteen shows persistent hypoglycemia. When SMBG returns to normal, the person should eat a meal or snack to prevent hypoglycemia recurrence. Prescribe glucagon 1 mg SC/IM for all individuals at significant risk of severe hypoglycemia. If patient drives, assess patient's medical history for loss of consciousness and ability to drive. |  
**Review self-management goals** | Each visit emphasizes glycemic and hypertensive control; weight loss recommended for all overweight or obese individuals at risk for or with diabetes using Mediterranean, low fat/calorie restricted or low-carbohydrate diet. At least 150 minutes per week of moderate-intensity aerobic physical activity*. If no contraindications, encourage people to perform 2 DM to perform resistance training ≥ 2 times/week; review eating patterns with emphasis on carbohydrate - key strategy in glycemic control, if hypertensive- encourage DASH** style dietary pattern including reducing sodium and increasing potassium intake, and saturated fats; (should be < 7% of total calories); minimize intake of trans fat; substitute monounsaturated for saturated and trans fat (AACE). Encourage dietary fiber of 14 gm of fiber/1,000 kcal and whole grain foods. Limit daily alcohol to 1 drink or less for women and 2 drinks or less for men. For lipids, increase omega 3 fats; viscous fiber, and plant stanols/stereols; reduce saturated, trans fat and dietary cholesterol. |  
**Diabetes self-management education and support (DSMS)** | Education should be individualized, based on the National Standards for DSM and include the AADE7™:  
- Being Active - regular physical and working towards an appropriate BMI.  
- Problem Solving - Assessment of patient knowledge, attitudes, self-management skills and health status; strategies for making health behavior changes and addressing psychosocial concerns.  
- Taking Medication - safe and effective use of medications; prevention, detection and treatment of acute and chronic complications, including recognition of hypoglycemia.  
- Healthy Eating - importance of nutrition management and healthy diet.  
- Monitoring - Role of self-monitoring of blood glucose in glycemic control.  
- Reducing Risks - Cardiovascular risk reduction, smoking cessation intervention and secondhand smoke avoidance, sexual dysfunction, self-care of feet, preconception counseling, dental care.  
- Healthy Coping – Set achievable behavioral goals and provide encouragement and coping strategies.  
Individuals with pre-diabetes or diabetes should receive individualized Medical Nutrition Therapy (MNT) by registered dietitian (RD). |
**Assessment of patient's psychological & social situation** | Initial and ongoing part of management of diabetes. |  
**Mental health screen:**  
--Depression screen  
--Anxiety screen  
--Disordered eating behavior | All adult members with a diagnosis of diabetes will be screened for depression using any screening method that the provider prefers *** or asking the following two questions: 1. “Over the past 2 weeks have you felt down, depressed, or hopeless?” 2. “Have you lost interest or pleasure in things you used to enjoy?” (If positive for the 2 questions, screen further for depression.) Depression: Referrals for treatment of depression should be made to experienced mental health providers in conjunction with collaborative care with the patient's diabetes treatment team. Anxiety: Consider screening in people exhibiting anxiety regarding diabetes complications, insulin injections or infusion, taking medications, and/or hypoglycemia that interferes with self-management behaviors. Disordered eating behavior: Consider reevaluating the treatment regimen if patient presents with symptoms of disordered eating behavior, an eating disorder, or disrupted patterns of eating. ***Zung, Beck, PHQ-9, CES-D |  
**Immunizations:**  
Influenza  
Pneumonia: 2 pneumococcal conjugate vaccines available (PCV13 and PPSV23)  
Hepatitis B | Influenza: Annually for all patients > 2 years of age.  
Pneumonia: All people with diabetes, 2 through 64 years of age, with pneumococcal polysaccharide vaccine (PPSV23). At age > 65 years, administer (PCV13) at least 1 year after vaccination with PPSV23, followed by another dose of vaccine PPSV23 at least 1 year after PCV13, and at least 5 years after the last dose of PPSV23.  
Hepatitis B: Consider administering 3-dose series of hepatitis B vaccine to unvaccinated adults with diabetes who are age > 60 years. |  
**Smoking cessation** | Advise smoking/tobacco cessation counseling and other forms of treatment. Advise all patients not to smoke. Refer to SC Quit Line available at 1-800-QuilNow. E-cigarettes SHOULD NOT be used as an alternative to smoking. |  
**Others:**  
Oral Health, Obstructive Sleep Apnea, Liver function tests | Consider Oral exam every 6 months, screening for OSA in symptomatic patients. LFTs annually |  
**Preconception and family planning counseling** | Preconception counseling for all women of childbearing age. Women with gestational diabetes should be screened for diabetes 6 to 12 weeks postpartum and should have subsequent screening for the development of diabetes or prediabetes at least every 3 years. |  
**Autoimmune disease screening** | Screen for thyroid disease (TSH), Celiac disease, Pernicious Anemia in persons with type 1 soon after diagnosis and as appropriate. TSH can be rechecked every 1-2 years or with symptoms of thyroid dysfunction. Free T4 should be measured if TSH abnormal. |
### South Carolina Adult Guidelines for Diabetes Care in the Hospital – 2017

Key concepts: documentation of diabetes diagnosis; written blood glucose monitoring protocols; order consistent carbohydrate diet; protocols for treatment of hypoglycemia and hyperglycemia, data collection; standardized order entry; staff education, patient education - hospital and post-discharge; special considerations and patient safety.

#### Screening for Diagnosis of Diabetes:
To test for diabetes or to assess risk of future diabetes, either Hemoglobin A1C, Fasting Plasma Glucose (FPG), or 2- h 75 g Oral Glucose Tolerance test (OGTT) are appropriate.

An A1C level of 5.7% to 6.4% indicates increased risk for diabetes (pre-diabetes).

The criteria for the diagnosis of diabetes (indicated by one of the following):
1. A1C level of 6.5% or higher
2. FPG level of ≥ 126 mg/dL
3. Two hour OGTT level of ≥ 200 mg/dL

Prevention/delay of type 2 diabetes: refer to support program targeting weight loss of 7% of body weight and physical activity to at least 150 min/week (i.e. Diabetes Prevention Program).

In those identified with prediabetes, identify, and if appropriate, treat other CVD risks.


<table>
<thead>
<tr>
<th>Diabetes Diagnosis</th>
<th>Diagnosis should be clearly identified in the medical record (MR) by the physician using current classification: Diabetes Type: type 1, type 2, suspect type 1, suspect type 2, CF-related diabetes, gestational, pre-diabetes or other (drug or stress induced)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemoglobin A1C</td>
<td>Order A1C on all patients with diabetes or hyperglycemia if not able to document level in MR within 90 days of admission (excluding gestational) and/or prior to elective surgery to assess glycemic control.</td>
</tr>
<tr>
<td>Whole Blood Glucose (WBG) Point of Care (POC) Testing</td>
<td>Written protocols or orders for WBG POC testing to include frequency and individual plan for subsequent monitoring. WBG POC testing results should be available to all members of the health care team. WBG POC testing policy should include limitations of WBG POC testing in critically ill patients defined by the institution (i.e., hypothermia, anasarca, pressors, etc.).</td>
</tr>
</tbody>
</table>
| Diet Order         | a. Diet orders should be based on body weight and comorbidities (NPO, PO, Enteral and Parenteral Nutrition)  
                    b. Consistent carbohydrate should be provided or added to other diet orders  
                    c. Written policy/protocol for the coordination of WBG POC testing, insulin administration and meal tray delivery  
                    d. Nutrition consult ordered, if indicated |
| Insulin Therapy    | Insulin therapy should be initiated per written orders sets. Insulin therapy is the preferred method during hospitalization. In critical care units, validated protocols for IV insulin infusion is the preferred route of insulin administration with goals for blood glucose levels of 140-180mg/dL. More stringent goals such as 110 -140mg/dL may be appropriate in select patients.  
                    In non-critically ill patients, scheduled subcutaneous insulin with basal, nutritional and correctional components is the preferred method with a goal of 140-180mg/dL  
                    a. Basal insulin: to control glucose between meals and suppress overnight hepatic glucose production (NPH, glargine, detemir, U-500)  
                    b. Prandial/nutritional insulin: to cover carbohydrate load from meals or enteral nutrition - give as rapid acting insulin analog with meals (aspart, lispro, glulisine)  
                    c. Correction insulin (give as rapid acting insulin analog): to correct pre-meal hyperglycemia  
                    d. The sole use of sliding scale insulin is discouraged. |
| Hypoglycemia       | Written policy, protocol and/or order set for treatment of hypoglycemia. Hypoglycemia is defined as a blood glucose (BG) < 70 mg/dL. Severe hypoglycemia is defined as <50 mg/dL. Written nurse driven protocols and order sets to include:  
                    a. Treatment for hypoglycemia and a plan for prevention of hypoglycemia for each patient  
                    b. Recheck of WBG POC test within 30 minutes of the first WBG POC test < 70mg/dL  
                    c. Adjustment of anti-hyperglycemic regimen, if applicable |
| Treatment of hyperglycemia (Diabetic Ketoacidosis [DKA] and Hyperosmolar Hyperglycemic Syndrome [HSH]) | Written protocols and order sets to include:  
a. Fluid replacement  
b. Correct electrolytes  
c. Low dose insulin therapy  
d. Hourly BG testing when patient is receiving IV Insulin infusion  
e. Policy for transitioning from IV Insulin Infusion to subcutaneous insulin regimen (i.e., basal insulin given 2 hours prior to discontinuing IV Insulin Infusion) |
| Data Collection    | Hospitals are encouraged to collect data on incidences of hyperglycemia and reasons as well as other identified opportunities for improvement. |
| Standardized written protocols and order sets | Standardized written policies, protocols and order sets are recommended to integrate components of care, preserve the necessary complexity of management of diabetes, standardize order entry, protect the safety of the patient, facilitate patient individualization, and permit patient self-management, where appropriate. This includes:  
a. WBG POC Testing  
b. Hemoglobin A1C  
c. Consistent carbohydrate diet  
d. Hypoglycemia protocol  
e. Insulin Order Set: Basal, prandial/nutritional and correction  
f. IV Insulin Infusion, transition from IV Insulin Infusion to subcutaneous insulin administration and transition to home regimen prior to discharge  
g. Continuous Subcutaneous Insulin Infusion Pump Therapy (CSI) |
| Staff Education    | The following groups have education specific to policies, protocols, order sets and patient management related to diabetes: dietitians and others involved in medical nutrition therapy, staff involved in WBG POC testing, medical staff, nursing staff including advanced practice, pharmacists, physician assistants and interdisciplinary team. |
| Transitioning for Discharge | Preparing the patient for discharge should include:  
Medication reconciliation including an explanation of medication changes, pending tests and studies with patient and caregivers  
Diabetes education (medication,nutrition, exercise, hypoglycemia, hyperglycemia, BG monitoring, sick day guidelines, discharge and contact information)  
Document in MR a diabetes follow-up appointment after hospital discharge and other provider appointments, if applicable  
Referral to ADA recognized or AADE accredited Diabetes Self-Management Education/Training (DSME/T) Program if applicable |
| Specific Settings/Populations | Written protocols and order sets are recommended for the following patients with diabetes:  
a. Perioperative and pre-procedural  
b. Gestational |

Updated Guidelines adopted: 2016, 2017
From: Sharon Eubanks
To: Benke-Bennett, Julie; Amick, Bryan; Arnold, Pamela C.; Baylis, Jaclyn R. (baylisir@dhec.sc.gov); Boateng, Yaw (yawboat@juno.com); Bransome, Edwin; Cole, David J.; Colwell, John; David Keisler (dlkeisler@aptcomm.net); Egan, Brent MD (BEgan@carecoordinationinstitute.org); Egede, Leonard E.; Gustaveson, Leonard E.; Gurr, David R.; Epps, Cydney Carson; Heckel, Elizabeth Todd; Hermayer, Kathie L.; Hill, Rhonda; Jenkins, Carolyn; Kwon, Soon ho; Lackland, Daniel T.; Lewis, Katherine; Lilavivat, Usah; Lilavivat’s asst - Kelly Pettitt; Mayfield, Ron (rmayfield@arcrmrd.com); McNinch, Ed; Owens, Ed; Reeves, Karen (SCHA); Rizvi, Ali; Smith, Steve; Sothmann, Mark S.; Steve Williams (1984carrera@gmail.com); Trotter, Hobart; Arnold, Pamela C.; Brittain, Kristy; Burshell, Dana; Cyglinda Boykin (cyglinda1@gmail.com); Davis, Gwenn; Hitch, Angela D’Antonio; Hunt, Kelly J.; Jennifer O’Donnell (jennifer@qualityhealthcareconsultingllc.com); Johnson, Tommy; Johnson, Timmy (Novo); Johnson, Tommy; King, Freda; Magwood, Gayenell; Mathews, Diane; Miller, Andrea Cantey; Moody, Michelle; Moonan, Aunyika; Myers, Patsy; Nichols, Michelle; Riley, Marla; Santiago, Carmen; Taylor, Wendy; Ward, Eileen (edward@presby.edu); Winder, Marquita (marquita.winder@gmail.com); Woodward, Anne; Beeha, Carolyn; Bury, Terri; Carrigan, Cindy; Clark, Melanie; Dodd, Andrew (Janssen); DuPree, Sherry (Novo); Hart, Laurie Ann (Merck); Hauser, Mike; Hubbard, Ann Marie (Janssen & Merck); Kirakio, Karla; Lee, Larry; Unvillie, Kipper; Mason, Timmy (Novo); Osborne, Wayne; Paul, Jim; Piezer, Kevin; Raleigh, Jennifer; Roshelli, Mark; Szymanski, Keith (Takeda); Thompson, Sharron; Tremer, Kathryn (Boehringer); Willer, Steven T (Merck); Adams, Robert J.; Chen, Liwei; Finney, Chris; Jaut, Edward C.; Kaushik, Kartikay; Liese, Angela D.; Stinson, Shawn; Ussery, Odessa B.; Vena, John; Voeks, Jennifer H.; Wear-Ellington, Lisa
Subject: Re: REMINDER - Friday, September 29th DSC Board & Council Meetings
Date: Friday, September 22, 2017 11:22:10 AM

CAUTION: External

It is with regret that I must share the following information. I will miss my collaboration with all of you.

Unfortunately, we must discontinue the diabetes task work in South Carolina for the present time due to funding limitations. The Carolinas Center for Medical Excellence (CCME), as part of the Atlantic Quality Improvement Network (AQIN) has already far exceeded CMS’ initial DSME goal for the state, having educated and graduated more than 1,100 Medicare Beneficiaries with diabetes to date. This number does not include the caregivers that were also educated and graduated. The impact for the state of South Carolina is substantial. This will make a difference in the health of our citizens who had the opportunity to participate in the programs.

We are sorry to have to cancel this program, but cannot move forward without additional funding. We hope to be able to educate and assist additional Medicare beneficiaries in South Carolina during the next CMS Health Quality Improvement Statement of Work in 2019. CCME’s other quality improvement work in South Carolina is not affected and will continue as planned. CCME looks forward to assisting SC healthcare providers and to improving the quality of care given to Medicare beneficiaries, now and in the future. We appreciate all you have done partnering with us on this diabetes initiative and we look forward to continuing to partner together as new opportunities become available.

If you have any questions or wish to discuss this further, please contact Diane Babuin, SC State Program Director at dbabuin@thecarolinasccenter.org or 803-212-7584.

Thanks so much for your support of our program.

Sincerely,
Sharon

Sent from my Verizon LG Smartphone