Monthly Campaign Webinar
April 2020
Today’s Webinar

• Together 2 Goal® Updates
  – Webinar Reminders
  – AMGA COVID-19 Resources

• Hypoglycemia Prevention Initiative
  – Jeffrey Boord, M.D., MPH of Parkview Physicians’ Group
Webinar Reminders

• This webinar was pre-recorded and made available on April 16th
  – www.Together2Goal.org
AMGA COVID-19 Resources

Since the COVID-19 outbreak began, AMGA has worked closely with members, federal agencies, and other healthcare entities to respond to this challenge and to make sure our member medical groups and health systems have the most up-to-date information and resources.

Here are current tactics and tools from members, our latest advocacy efforts, updated federal policies, and resources from payers and others.
Today’s Featured Presenter

Jeffrey Boord, M.D., MPH

Chief Quality and Safety Officer
Parkview Physicians’ Group
Reducing the Incidence of Hypoglycemia

Jeffrey Boord, MD, MPH
Chair, Hypoglycemia Prevention Initiative Steering Committee

April 2020
Key Messages

• **ASK** about hypoglycemia
  • Ask about hypoglycemia events and the “why” behind them

• **SET** appropriate glycemic targets
  • Engage with your patient, individualize goals

• **MODIFY** therapy where appropriate

• **EDUCATE** your patients
  • Regarding recognition, monitoring, treatment, and prevention

• **MONITOR** clinically and reassess at future visits
Definition of Hypoglycemia

Level | Glycemic Criteria/Description
--- | ---
Level 1 | Glucose < 70 mg/dL (3.9 mmol/L) and Glucose ≥ 54 mg/dL (3.0 mmol/L)
Level 2 | Glucose < 54 mg/dL (<3.0 mmol/L)
Level 3 | A severe event characterized by altered mental and/or physical status requiring assistance

Standardizing Clinically Meaningful Outcome Measures Beyond HbA1c for Type 1 Diabetes: A Consensus Statement of the American Association of Clinical Endocrinologists, the American Association of Diabetes Educators, the American Diabetes Association, the Endocrine Society, JDRF International, The Leona M. and Harry B. Helmsley Charitable Trust, the Pediatric Endocrine Society, and the T1D Exchange
# Definition of Hypoglycemia

<table>
<thead>
<tr>
<th>Level</th>
<th>Glycemic Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypoglycemia alert value (level 1)</td>
<td>≤70 mg/dL (3.9 mmol/L)</td>
<td>Sufficiently low for treatment with fast-acting carbohydrate and dose adjustment of glucose-lowering therapy</td>
</tr>
<tr>
<td>Clinically significant hypoglycemia (level 2)</td>
<td>&lt; 54 mg/dL (3.0 mmol/L)</td>
<td>Sufficiently low to indicate serious, clinically important hypoglycemia</td>
</tr>
<tr>
<td>Severe hypoglycemia (level 3)</td>
<td>No specific glucose threshold</td>
<td>Hypoglycemia associated with severe cognitive impairment requiring external assistance for recovery</td>
</tr>
</tbody>
</table>

The Burden of Hypoglycemia

Hypoglycemia accounted for 300,000 ER visits in 2009 among T1D and T2D patients. Hypoglycemia is the largest single barrier to achieving glycemic control in diabetes. The prevalence and impact of hypoglycemia is substantially underappreciated.

- Incidence of hypoglycemia among patients with T2D on insulin is, on average, **23 mild or moderate events** and **1 severe episode** per year.
- Patients with T1D have hypoglycemia about **2-3X** more often than patients with T2D.
- **4-10% of deaths** in patients with T1D are caused by hypoglycemia.
- Hospitalization as a result of hypoglycemia is associated with a **18.1% 30-day readmission rate** and a **5% 30-day mortality rate**.

The Burden of Hypoglycemia

- Insulin and oral insulin secretagogues (sulfonylureas) are among the top 3 medication classes that cause emergent hospitalization due to adverse drug events
- Severe hypoglycemic episodes are associated with higher risk of CV events mortality in patients with diabetes
  - Relationships between hypoglycemia, CV events, and mortality are complex
- Hypoglycemia can contribute to cognitive dysfunction, arrhythmias, and autonomic dysfunction
- Hypoglycemia increases the risk of falls and automobile accidents
- Fear of hypoglycemia reduces quality of life, increases diabetes-related distress, and may impact productivity and work

Standl, E. et al. Increased risk of severe hypoglycemic events before and after cardiovascular outcomes in TECOS suggests an at-risk type 2 diabetes frail patient phenotype
Hypoglycemia Unawareness and Hypoglycemia-Associated Autonomic Failure (HAAF)

- Physiologic response to hypoglycemia
  - Adrenergic response (sweating, tachycardia, tremor, hunger)
  - Suppression of insulin secretion
  - Stimulation of glucagon, epinephrine, GH, cortisol secretion

- HAAF Components
  - Defective glucose counterregulation – attenuated glucagon/epinephrine response
  - Hypoglycemia unawareness – attenuated sympathoadrenal activity and minimal or absent adrenergic response

- HAAF is functional and most often caused by antecedent recurrent iatrogenic hypoglycemia
- HAAF associated with 25-fold increase risk of severe hypoglycemia during intensive glycemic therapy
Risk Factors for Hypoglycemia

- Insulin, sulfonylurea, or meglitinide use
- Prior severe hypoglycemia episodes (esp. requiring ED visit or hospitalization)
- History of high glycemic variability / labile glucose
- Older age
- Longer duration of diabetes
- Stage 3-5 CKD
- Cirrhosis
- Dementia or cognitive impairment
- Recent hospitalization with acute kidney injury
- Very tight control (A1c <6%) or poor control (>9%)
- Food insufficiency/malnutrition

Clinic Case Study

- 72 year old female with cognitive impairment, heart failure with preserved ejection fraction, afib on warfarin anticoagulation, prior stroke, hypertension, neuropathy, pulmonary hypertension on chronic O2 therapy, referred for type 2 diabetes management
- Lives in a group home and is on insulin therapy
- Has been on insulin at least 2 years
- A1c: 6.4%, creatinine: 0.7
- Current regimen: Glargine, 35 units, daily in the morning
- Caregiver monitors glucose 3x/day at breakfast, supper, and bedtime
- Eats 3 meals a day and reports good appetite
Hypoglycemia – History

- Self-monitoring of blood glucose
  - Frequency, timing
  - Recent values/log
- Episodes of hypoglycemia
  - Any <70 mg/dl?
  - Any severe hypoglycemia?
  - Context: Diet, activity, medication use, timing
- Hypoglycemia unawareness
  - Can you feel it when your blood sugar is low?
  - Have you had a low reading but no symptoms?
- Self-management
  - What do you do when your blood sugar is low?
  - Do you carry around glucose tablets? Do you have a glucagon kit?
- Nutrition
  - Diet history, weight trend
  - Issues with food insufficiency
Clinic Case Study, Pt. 2

- Caregiver reports patient has hypoglycemia at least 2 times a week during the day, usually before supper or in the morning
- She does not reliably note symptoms during episodes
- Patient has not had any recent hospitalizations or ED visits due to hypoglycemia
2020 ADA Standards: Hypoglycemia

- Individuals at risk for hypoglycemia should be asked about symptomatic and asymptomatic hypoglycemia at each encounter. C
- Glucose (15–20 g) is the preferred treatment for the conscious individual with blood glucose ≤70 mg/dL [3.9 mmol/L]), although any form of carbohydrate that contains glucose may be used. B
- Glucagon should be prescribed for all individuals at increased risk of level 2 hypoglycemia, defined as blood glucose <54 mg/dL (3.0 mmol/L), so it is available should it be needed. Caregivers, school personnel, or family members of these individuals should know where it is and when and how to administer it. Glucagon administration is not limited to health care professionals. E

ADA Standards of Medical Care in Diabetes. Diabetes Care 2020 Jan; 43(Supplement 1): S66-S76
2020 ADA Standards: Hypoglycemia

- Hypoglycemia unawareness or one or more episodes of level 3 hypoglycemia should trigger reevaluation of the treatment regimen. E

- Insulin-treated patients with hypoglycemia unawareness, one level 3 hypoglycemic event, or a pattern of unexplained level 2 hypoglycemia should be advised to raise their glycemic targets to strictly avoid hypoglycemia for at least several weeks in order to partially reverse hypoglycemia unawareness and reduce risk of future episodes. A

- Ongoing assessment of cognitive function is suggested with increased vigilance for hypoglycemia by the clinician, patient, and caregivers if low cognition or declining cognition is found. B

ADA Standards of Medical Care in Diabetes. Diabetes Care 2020 Jan; 43(Supplement 1): S66-S76
For a Patient at Risk for Hypoglycemia

**Determine appropriate glycemic goals with patient / caregiver**
- Glycemic targets: A1c, FSBG ranges
- Explicit goal to minimize/ prevent hypoglycemia

**Determine appropriate pharmacotherapy**
- Change medications
- Modify dosing

**Educate patient / caregiver and monitor**
- FSBG monitoring
- Prescribe glucagon, when appropriate
- Clinical follow up
- When to notify provider between visits
Approach to the Management of Hyperglycemia

<table>
<thead>
<tr>
<th>Patient / Disease Features</th>
<th>More stringent</th>
<th>A1C 7%</th>
<th>Less stringent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risks potentially associated with hypoglycemia and other drug adverse effects</td>
<td>low</td>
<td>A1C 7%</td>
<td>high</td>
</tr>
<tr>
<td>Disease duration</td>
<td>newly diagnosed</td>
<td>A1C 7%</td>
<td>long-standing</td>
</tr>
<tr>
<td>Life expectancy</td>
<td>long</td>
<td>A1C 7%</td>
<td>short</td>
</tr>
<tr>
<td>Important comorbidities</td>
<td>absent</td>
<td>A1C 7%</td>
<td>few/mild</td>
</tr>
<tr>
<td>Established vascular complications</td>
<td>absent</td>
<td>A1C 7%</td>
<td>few/mild</td>
</tr>
<tr>
<td>Patient attitude and expected treatment efforts</td>
<td>highly motivated, excellent self-care capabilities</td>
<td>A1C 7%</td>
<td>less motivated, poor self-care capabilities</td>
</tr>
<tr>
<td>Resources and support system</td>
<td>readily available</td>
<td>A1C 7%</td>
<td>limited</td>
</tr>
</tbody>
</table>

Inzucchi SE, et al. Diabetes Care 2015; 38:140-149
**Older Adults – Treatment Goals**

<table>
<thead>
<tr>
<th>Overall Health Category</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good health</td>
<td>Intermediate health</td>
<td>Poor health</td>
<td></td>
</tr>
<tr>
<td>Patient characteristics</td>
<td>No comorbidities or 1-2 non-diabetes chronic illnesses* and No ADL(^*) impairments and ≤1 IADL impairment</td>
<td>3 or more non-diabetes chronic illnesses* and/or Any one of the following: mild cognitive impairment or early dementia ≥2 IADL impairments</td>
<td>Any one of the following: End-stage medical condition(s)** Moderate to severe dementia ≥2 ADL impairments Residence in a long-term nursing facility</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Use of drugs that may cause hypoglycemia (e.g., insulin, sulfonylurea, glinides)</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fasting: 90–130 mg/dL</td>
<td>Fasting: 90–150 mg/dL</td>
<td>Fasting: 100–180 mg/dL</td>
</tr>
<tr>
<td>Bedtime: 90–150 mg/dL</td>
<td>Bedtime: 100–180 mg/dL</td>
<td>Bedtime: 110–200 mg/dL</td>
</tr>
<tr>
<td>&lt;7.5%</td>
<td>&lt;8%</td>
<td>&lt;8.5%(^*)</td>
</tr>
<tr>
<td>≥7.0 and &lt;7.5%</td>
<td>≥7.5 and &lt;8.0%</td>
<td>&gt;8.0 and &lt;8.5%(^*)</td>
</tr>
</tbody>
</table>

*Shared decision-making: individualized goal may be lower or higher*

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LeRoith D. et al. Treatment of Diabetes in Older Adults. *J Clin Endocrinol Metab*, 104: 1520-1574, 2019

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**Reasonable glucose target ranges and HbA1c by group**

- **Group 1 (Good health)**: Fasting: 90–130 mg/dL, Bedtime: 90–150 mg/dL
  - HbA1c: <7.5%
- **Group 2 (Intermediate health)**: Fasting: 90–150 mg/dL, Bedtime: 100–180 mg/dL
  - HbA1c: <8%
- **Group 3 (Poor health)**: Fasting: 100–180 mg/dL, Bedtime: 110–200 mg/dL
  - HbA1c: <8.5%
For a Patient at Risk for Hypoglycemia

Determine appropriate glycemic goals with patient / caregiver
- Glycemic targets: A1c, FSBG ranges
- Explicit goal to minimize/ prevent hypoglycemia

Determine appropriate pharmacotherapy
- Change medications
- Modify dosing

Educate patient / caregiver and monitor
- FSBG monitoring
- Prescribe glucagon, when appropriate
- Clinical follow up
- When to notify provider between visits
Patient on glyburide or glimepiride

- Change to shorter acting SU (glipizide) or meglitinide
- Switch to lower risk agent
- Reduce dose or stop agent

Patient on Insulin

- Reduce dose or frequency
- Modify insulin preparation
- Reduce/eliminate prandial or correction insulin dosing

**Diabetes Medications with Low Hypoglycemia Risk**

- DPP-4 inhibitors
- GLP-1 Agonists
- Metformin
- SGLT-2 Inhibitors
- Thiazoladinediones (TZDs)
- Meglitinides (lower risk than SU)

**Tapering Advice**

- Set blood glucose and A1c targets, plus thresholds for returning to previous dose, restarting drug, or maintaining dose
- Develop tapering plan with patient / caregiver
- Doses may be increased or medication restarted at any time if blood glucose persists above individual target or symptomatic hyperglycemia returns

For a Patient at Risk for Hypoglycemia

Determine appropriate glycemic goals with patient / caregiver
- Glycemic targets: A1c, FSBG ranges
- Explicit goal to minimize/ prevent hypoglycemia

Determine appropriate pharmacotherapy
- Change medications
- Modify dosing

Educate patient / caregiver and monitor
- FSBG monitoring
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- When to notify provider between visits
Patient & Caregiver Education

- Signs and symptoms of hypoglycemia
- Hypoglycemia unawareness
- Treatment of hypoglycemia with oral carbohydrates or glucagon
- Risk factors for hypoglycemia
- Dietary factors
  - Carbohydrates and blood glucose
- Understand diabetes medications
  - How they work, how to take them, when they may need adjustment
- Exercise management
- Glucose Monitoring

[Hyperlinks]
http://clinical.diabetesjournals.org/content/30/1/38
Hypoglycemia Prevention Initiative
Endocrine Society Prioritizes Hypoglycemia Prevention

**Objective:** increase national awareness of hypoglycemia and facilitate joint action by stakeholders to reduce its incidence

<table>
<thead>
<tr>
<th>Established the Hypoglycemia Quality Collaborative (HQC)</th>
<th>Developed the HQC Strategic Blueprint</th>
<th>Implementing Outpatient Quality Improvement Pilot</th>
<th>Partnering with Federal Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coalition of diabetes stakeholders including medical specialty societies, payers, industry, patient advocates, diabetes educators, and research organizations</td>
<td>Provides a comprehensive framework for reducing the incidence of hypoglycemia</td>
<td>A project testing the impact of risk assessment and education on the incidence of hypoglycemia in patients with T2D on insulin or sulfonylureas in the primary care setting</td>
<td>A collaborative of Federal agencies (FDA, CMS, VA, HHS), Endocrine Society, and quality improvement organizations for raising awareness, improving surveillance, and improving quality of care</td>
</tr>
</tbody>
</table>
Hypoglycemia Quality Collaborative

LAUNCHED JANUARY 2016 BY THE ENDOCRINE SOCIETY

18 Organizations Participate in the Hypoglycemia Quality Collaborative

- Abbott Diabetes Care Inc.
- Aetna
- American Association of Clinical Endocrinologists
- American Association of Diabetes Educators
- American College of Physicians
- American Diabetes Association
- AstraZeneca
- Close Concerns
- Dexcom

- Johnson & Johnson
- Joslin Diabetes Center
- Juvenile Diabetes Research Foundation
- Lilly
- Medtronic Diabetes
- Merck & Co
- Novo Nordisk
- Pharmacy Quality Alliance
- T1D Exchange
HQC Strategic Blueprint to Reduce the Incidence of Hypoglycemia

- Define and Describe Hypoglycemia
  - Create the Definition
  - Implement the Definition
  - Maintain the Definition
- Advance Hypoglycemia Evidence
  - Identify Areas for Research
  - Conduct Research
  - Adopt Best Practices from Research
- Measure Hypoglycemia Quality of Care
  - Review Quality Measures
  - Develop New Quality Measures
  - Adopt Quality Measures
- Advocate for Focus on Hypoglycemia
  - Increase Awareness for Hypoglycemia
  - Support Payment and Delivery Reform
  - Promote Use of Innovative Technology
- Deliver Hypoglycemia Education
  - Conduct Provider Education
  - Improve Patient Education
  - Conduct Health Plan Education
- Recognize Hypoglycemia in Public Health
  - Incorporate Federal Incentives
  - Engage State Level Initiatives
  - Engage Local Level Initiatives

www.endocrine.org/hypoglycemia
Hypoglycemia Prevention Initiative

Objectives

1. Increase Outpatient Hypoglycemia Surveillance & Risk Assessment
   - Integrate risk assessment into clinical workflow in primary care
   - Develop outpatient hypoglycemia quality measures

2. Improve Management of Patients on Insulin and Sulfonylureas
   - Provide clinical decision support tools to guide assessment of appropriate A1c goals and medication management options
   - Use shared decision making to set goals and modify treatment
   - Provide educational tools to help patients identify and manage hypoglycemia

3. Align Provider Reimbursement to Promote Best Practices
   - Incorporate clinical improvement activities and quality measures into value-based reimbursement programs
   - Incentivize care teams that provide high-quality care
Environmental Scan Supports Development of the Initiative

- Clinicians have a general lack of awareness of resources to identify, assess, and manage patients at high risk for hypoglycemia
- A few risk assessment tools exist but are not systematically incorporated in clinical workflow
- Educational resources are available but rarely used
- There are no outpatient quality measures on hypoglycemia and there is a clinical need to develop them

Robert W Lash, Deborah O Lucas, Judit Illes; Preventing Hypoglycemia in Type 2 Diabetes, The Journal of Clinical Endocrinology & Metabolism, https://doi.org/10.1210/jc.2017-02804
Providers Face Challenges Managing Hypoglycemia

Individuallyized Goals

• I'm not convinced than an A1c less than 7% is good for everyone. The goal is to accomplish the best A1c possible without hypoglycemia, without too much cost, without too much finger pricking, and without too much weight gain.

• I used to believe that lower A1c was better. Last few years I have seen patients with hypoglycemia and changed my practice to decrease hypoglycemia. I don't push for an A1c goal less than 7% for elderly patients. Cost of medications is an issue. Push target A1c down less than 7% and cost of meds increases.

Medication Modification

• Protocols on how to manage polypharmacy and switch meds to avoid hypoglycemia would be nice. Biggest challenge is knowing how to safely reduce insulin intake while still controlling their condition

• Biggest challenges with elderly patients are managing polypharmacy and multiple comorbidities, patient concerns on cost of medication, and patient access to enough glucose testing strips for SMBG.

Educating Providers and Patients

• I think it would be helpful to have patient education materials for hypoglycemia because patients are conditioned to think that they need to be treated for everything.

• Physicians need to know what medicines patients are on, assess risk of hypo (age, renal function, medications), which insulins are better to reduce risk of hypo, and patient goals and expectations.
Patients Report Lack of Education on Hypoglycemia

Fear and Knowledge of Hypoglycemia and Patient Quality of Life

- It’s very scary living alone and having hypoglycemia.
- I didn’t really learn about hypo until getting involved in peer support groups.
- Hypoglycemia is not always about being below a certain number, but often relative.
- I quit my job years ago and am now in a job that allows me to eat every few hours.

Avoiding Episodes

- I don’t find them [hypoglycemic episodes] always so predictable.
- I don’t like to take instant sugar/soda. It [treatment] is a little more complicated than just having more carbs, sometimes it’s a lack of protein.
- Most episodes happen in the middle of the night.

Patient Experience with Medical Care

- I think PCPs believe that even with testing, most diabetics are not going to test their blood or be advocates.
- My PCP never asks about low blood sugar, my endocrinologist always does (and handles all my medications).

Response to Educational Materials

- When I saw these, I was jumping up and down saying “wow I didn’t know that” though I consider myself very educated from Diabetes Sisters and self-education.
Hypoglycemia Prevention Study (HypoPrevent)
HypoPrevent is a Component of the Hypoglycemia Prevention Initiative

The Hypoglycemia Prevention Study, a central component of the Initiative, is designed to test a dual-pronged intervention in primary care practices to:

1. Identify at-risk patients
2. Assess methods that decrease risk
   a) Individualizing A1c goals
   b) Changing medications
Research Questions & End Points

1. Can the hypoglycemia reduction intervention be integrated into primary care workflow?

2. What is the impact of the use of the hypoglycemia reduction intervention on provider behavior and patient outcomes?

3. What is the impact of the use of the hypoglycemia reduction intervention on the size of the at-risk population?
HypoPrevent Will Evaluate a Two-Pronged Intervention

Hypoglycemia Risk Tool
- Identifies patients potentially at risk of medication-related hypoglycemia

Hypoglycemia Reduction Clinical Decision Support Tool
- Supports providers in assessing patients, care planning, and monitoring and ongoing evaluation focusing on:
  - Shared decision-making
  - Individualization of A1c goals
  - Medication management changes
Study Workflow

- Identify patients 65 years old and older with T2D
  - Includes prescription for insulin and/or sulfonylureas
  - Includes A1c of < 7% in previous 6 months
  - Excludes patients on insulin less than 3 months and/or with limited life expectancy of < 12 months

- Invite patients to participate in the study via telephone outreach
- Obtain patient informed consent in-person during Baseline visit

- At Baseline visit and subsequent follow-up visits:
  - Patients complete surveys assessing impact of hypoglycemia and self-efficacy
  - Providers use information on the Decision Support Tool for clinical decision-making
  - Patients and providers either engage in 1) shared decision-making discussion on an individualized A1c target and/or modifications to treatment to reduce risk of hypoglycemia or 2) assess progress to changes to reduce risk of hypoglycemia
  - Recommended frequency of follow-up visits is every three months

Evaluate

- Impact of hypoglycemic events
- Provider self-efficacy
- Size of at-risk population
- Clinician assessment of acceptability
- Barriers & facilitators to implementing the study
HypoPrevent Recruitment & Interim Analysis
Overview of Study Site: Pottstown Medical Specialists, Inc.

Overview
PMSI is a physician-owned multispecialty group practice with offices in Berks and Montgomery Counties in Southeastern Pennsylvania. They are committed to delivering the highest quality medical healthcare through the coordination of properly planned, managed and utilized medical services. PMSI has accreditation as a Diabetes Self-Management Support and Education (DSMES) service through AADE and is a recognized provider of the CDC’s National Diabetes Prevention Program.

A certified diabetes educator (CDE) coordinates the study across the participating PMSI practices. The office manager ("site coordinator") in each practice and each participating provider was trained on the conduct of the study using a “train the trainer” approach. After training was complete, the first step was to identify and enroll patients into the study.

1,063 Total Patients 65+ with T2D
15 Total Participating PMSI Providers
5 Total Participating Locations

PMSI: Pottstown Medical Specialists, Inc.; CDC: Centers Disease Control and Prevention; AADE: American Academy of Diabetes Educator; CDE: Certified Diabetes Educator; T2D: Type 2 Diabetes
Enrollment Period

The enrollment period was extended 3 times due to slower than expected enrollment.

*Enrolled declined in September due to unforeseen loss of PMSI staff member (Avalere notified 9/23)

** Only patients enrolled prior to 11/8 are included in Interim Report (n=3 for November).
Demographic Data for Enrolled Patient Population*

Patient Age

<table>
<thead>
<tr>
<th>Age Ranges</th>
<th>Number of Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>65-69</td>
<td>13 (21%)</td>
</tr>
<tr>
<td>70-74</td>
<td>25 (40%)</td>
</tr>
<tr>
<td>75-79</td>
<td>10 (16%)</td>
</tr>
<tr>
<td>80-84</td>
<td>5 (8%)</td>
</tr>
<tr>
<td>85-89</td>
<td>8 (13%)</td>
</tr>
<tr>
<td>90-95</td>
<td>2 (3%)</td>
</tr>
</tbody>
</table>

Median age = 73; Mean age = 75

- **Race**
  - White: 95% (60/63)
  - Black or African American: 3% (2/63)
  - 2 or more races: 2% (1/63)

- **Ethnicity**
  - Non-Hispanic: 98% (60/61)
  - Hispanic: 2% (1/61)

- **Preferred Language**: 100% English (n=62)

**Patient Sex**

<table>
<thead>
<tr>
<th>Sex</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>42</td>
<td>68%</td>
</tr>
<tr>
<td>Male</td>
<td>20</td>
<td>32%</td>
</tr>
</tbody>
</table>

1 n reflects number of records reporting this data.
* Based on patients enrolled prior to November 8, 2019
Demographic Data for Enrolled Patient Population*

Data reported by PMSI indicates that almost all (42/43) patients with Medicare reported having Part D coverage.
Demographic Data for Enrolled Patient Population

Comorbid Conditions

- **50/63 (79%)** of patients reported at least 1 comorbid condition
- Of those reporting a comorbid condition, **25/50 (50%)** reported more than 1 comorbid condition

**Duration of Diabetes**
- **29 of 63 (46%)** patients reported a value for duration of diabetes
- Values reported range from 4 to 27 years with the median duration being 10 years

*Other conditions include Parkinson’s Disease, Breast Cancer, CAD/OSA

CKD: Chronic Kidney Disease; ESRD: End Stage Renal Disease; CHF: Chronic Heart Failure; CAD: Coronary Artery Disease; OSA: Obstructive Sleep Apnea
Baseline Visit: Shared Decision-Making, A1c Goal Setting, and Medication Changes

97% (61/63) of enrolled patients had an SDM discussion at their baseline visit.

- 61 of 63 enrolled patients had an SDM conversation.
- 35 of those 61 patients had an SDM conversation and an individualized goal.
- 8 of those 35 with an individualized goal set had a medication change.

Patients may have had their medications changed during different types of conversations with their provider.

- 31% (19/61) of total patients had a medication change.
- 8 of these patients had an A1c goal set as part of an SDM conversation.
- 11 of these patients had a medication change made, but no individualized A1c goal was set.
- 3 of these patients had their medication change made during a follow-up telephonic encounter.
- 2 of these patients had their medication change made during a follow-up telephonic encounter.

While almost a third of patients with an SDM discussion (19/61) had a medication change made either during the visit or during a follow-up phone call or in office visit, many of them (11/19) did not have an individualized A1c goal set during the baseline visit. We will continue to explore the reasons for this care decision, including potential alternative metrics to A1c being used to measure successful treatment changes.

SDM: Shared Decision-Making
Outpatient Hypoglycemia Quality Measures
Outpatient Hypoglycemia QMs

- Proportion of Patients Who Were Assessed to be at Greater Risk for Hypoglycemia

- Educational Intervention for Patients at Greater Risk for Hypoglycemia

- Patient Reported Level 3 Hypoglycemic Event Requiring Assistance
Outpatient Hypoglycemia QMs

● Published in *Journal of Clinical Endocrinology & Metabolism* (April 2020)
  - Available online

● Develop “instructions” for using measures in practice
  - Implementation manual is in development

● Dissemination of measures to primary care practices
How You Can Become Involved

Interested in learning about how your practice can become involved in HypoPrevent? Would you like to be alerted when the study tools and QM implementation guide is available?

Contact
Stephanie Kutler
Director, Advocacy & Policy
skutler@endocrine.org
Hypoglycemia Prevention Initiative
Supporters

Abbott

novo nordisk®

MERCK

Lilly

SANOFI
Thank you!

www.endocrine.org/hypoglycemia-prevention-initiative