Diabetes Education Models

Finding a Structure for You

Susan Johannsen GNP, PA, CDE
Brett Kollars

Diabetes Prevalence

1 of every 10 adults in South Dakota has diabetes diagnosis[1]

- 1 of every 5 adults ≥ age 65

30-35% of adult population in South Dakota is obese[2]

15% of children in South Dakota are obese[2]

….≥ 85% of persons with type 2 diabetes are obese[3]

1. CDC Diabetes State Burden Toolkit, 2013
2. CDC Obesity Prevalence Maps, 2018
3. Harvard Business Review, 2016

Diabetes Prevalence

30% of adult population obese

13% of adult population obese

1. CDC Diabetes State Burden Toolkit, 2013
2. CDC Obesity Prevalence Maps, 2018

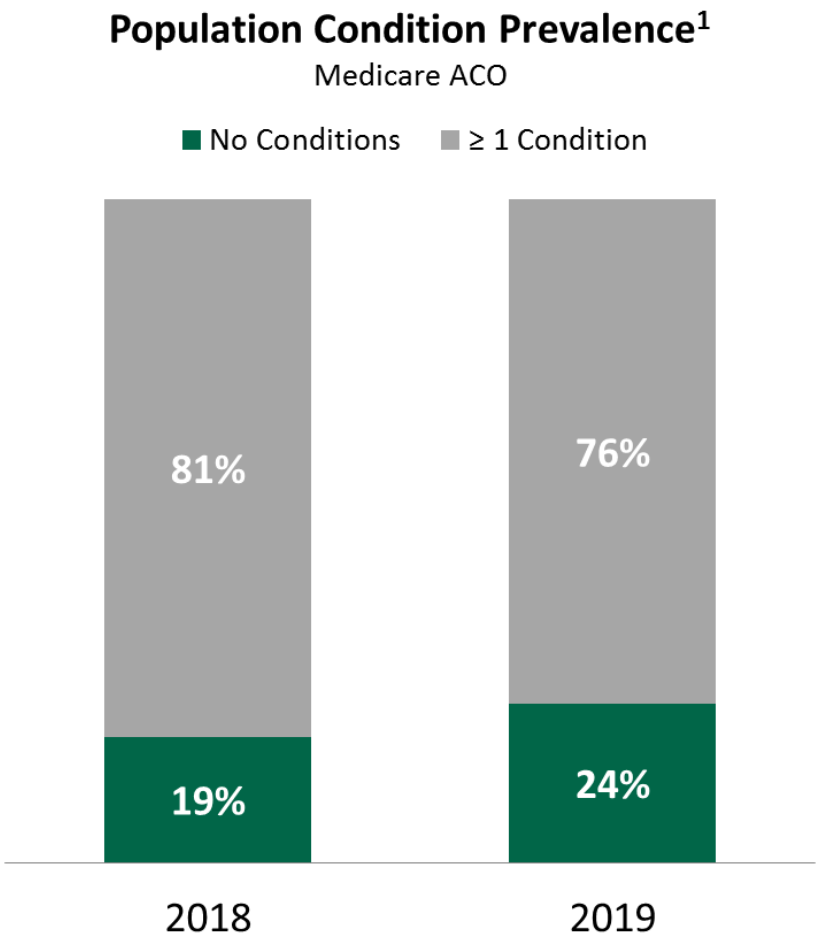
Economic Impact

Annual Spend per Person	
Diabetes[1, 2]	Healthy Person[2]
$17,200	$2,300

1. CDC Diabetes State Burden Toolkit, 2013
2. CMS Claim and Claim Line Feed File Data. August 16, 2019. Via Avera IT Novum Reports

Data Repository & AMG Population Health Management Solution

Economic Impact



Annual Spend per Person[2]		
	No Conditions	≥ 1 Condition
2018	$2,370	$13,100
2019	$2,360	$13,200

1. CMS Beneficiary Assignment Summary Report. April 16, 2019. Via Avera IT Novum Reports
2. CMS Claim and Claim Line Feed File Data. August 16, 2019. Via Avera IT Novum Reports

Data Repository & AMG Population Health Management Solution

Diabetes Management Models

- Education
- Incentives
- Improved Access
- Follow-Up

  Nebraska Advance Practice Provider – Access to Diabetes Education

  Sioux Falls Advance Practice Provider – Access to Diabetes Education

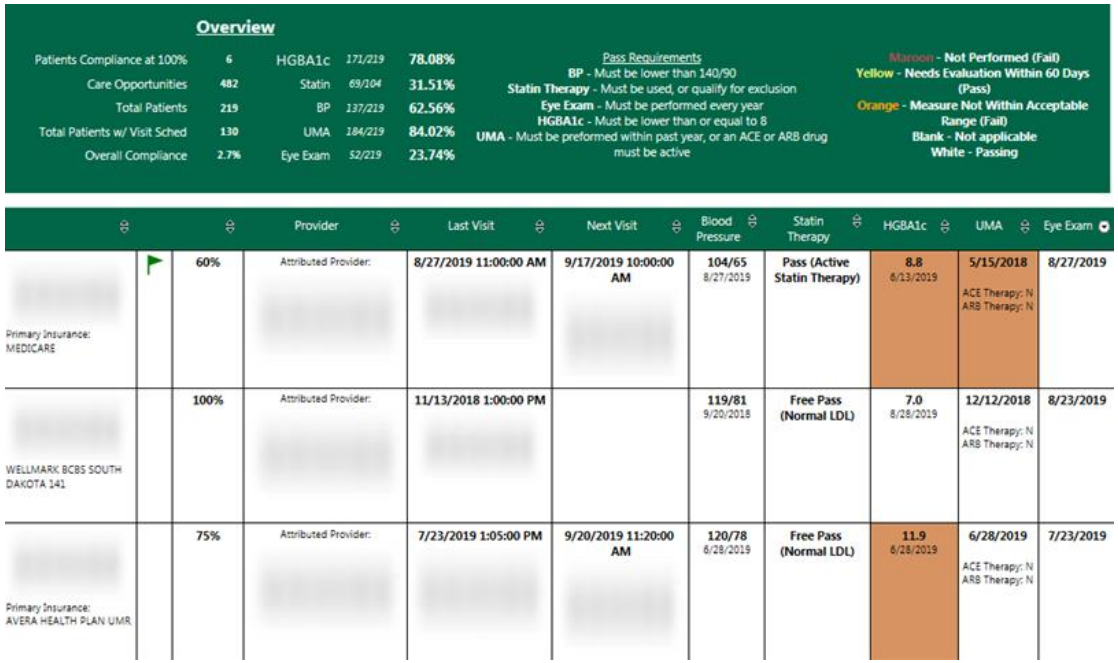
  Diabetic Healthy Living – Patient Incentive Program

  Formal Diabetes Education Centers

  Education and reference material for providers and care teams

Advance Practice Providers

Access to Diabetes Education



Overview

Patients Compliance at 100%	6	HGBA1c	171/219	78.08%
Care Opportunities	482	Statin	69/104	31.51%
Total Patients	219	BP	137/219	62.56%
Total Patients w/ Visit Sched	130	UMA	184/219	84.02%
Overall Compliance	2.7%	Eye Exam	52/219	23.74%

Pass Requirements
BP - Must be lower than 140/90
Statin Therapy - Must be used, or qualify for exclusion
Eye Exam - Must be performed every year
HGBA1c - Must be lower than or equal to 8
UMA - Must be preformed within past year, or an ACE or ARB drug must be active

Maroon - Not Performed (Fail)
Yellow - Needs Evaluation Within 60 Days (Pass)
Orange - Measure Not Within Acceptable Range (Fail)
Blank - Not applicable
White - Passing

		Provider	Last Visit	Next Visit	Blood Pressure	Statin Therapy	HGBA1c	UMA	Eye Exam
Primary Insurance: MEDICARE	60%	Attributed Provider:	8/27/2019 11:00:00 AM	9/17/2019 10:00:00 AM	104/65 8/27/2019	Pass (Active Statin Therapy)	8.8 6/13/2019	5/15/2018 ACE Therapy: N ARB Therapy: N	8/27/2019
WELLMARK BCBS SOUTH DAKOTA 141	100%	Attributed Provider:	11/13/2018 1:00:00 PM		119/81 9/20/2018	Free Pass (Normal LDL)	7.0 8/28/2019	12/12/2018 ACE Therapy: N ARB Therapy: N	8/23/2019
Primary Insurance: AVERA HEALTH PLAN UMR	75%	Attributed Provider:	7/23/2019 1:05:00 PM	9/20/2019 11:20:00 AM	120/78 6/28/2019	Free Pass (Normal LDL)	11.9 6/28/2019	6/28/2019 ACE Therapy: N ARB Therapy: N	7/23/2019

Nebraska & Sioux Falls

Advance Practice Providers

Advanced education in diabetes management

2-3 visits with APP over 3 months

Directed by PCP

Advance Practice Providers - Nebraska

Avera Medical Group

Nebraska Model of Care

- Identification of need
- Standardization of Midlevel Provider education/materials used and visit components
- Visit construction – time spent with patient/visit numbers/content
- Referral from Primary Care associates – no management without consent
- Location of education limited to the clinic during office hours

Advance Practice Provider – Sioux Falls

Avera Medical Group

Sioux Falls Model of Education

- Identification of need
- Primary Care referral
- Standardized visit materials/individualized content based on need/informal
- Visits 1-3 times/setting usually within the Primary Care clinic/Fluid scheduling and location if needed
- No management with consultation with Primary Provider
- Follow up with each by phone
- Flexibility in time and place of education

Diabetic Healthy Living – Spencer, IA

Avera Medical Group

Spencer, Iowa Model of Education

- Collaborative with hospital and clinic
- Medicare ACO population only
- Selected participants >8 A1C
- Incentive on the original plan – limitations to incentive based on payer
- Primary purpose was engagement of the patient and relationship development with provider and staff members
- Punch card set up to allow 6-8 months to complete
- Persistent and maintained improvement in measures

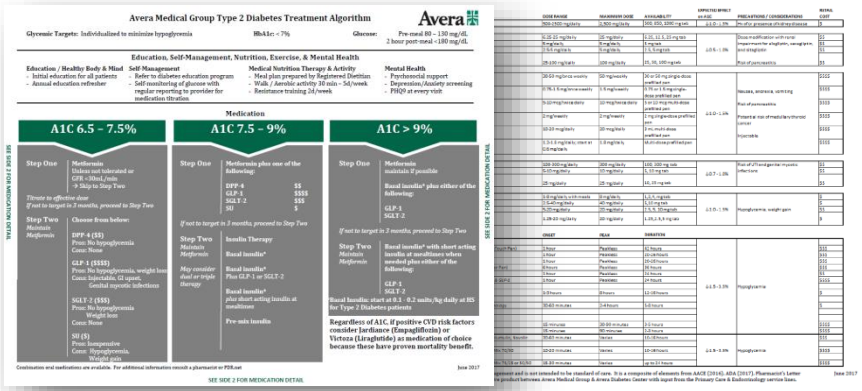
Diabetic Healthy Living – Spencer, IA

Incentive Program

- One punch = $10 HyVee gift card
- One punch per visit
- One punch card per year

Education & Support

Provider education and support


Avera Medical Group Type 2 Diabetes Treatment Algorithm

Avera

Glycemic Target: Individualized to minimize hypoglycemia HbA1c: < 7% Glucose: Pre-meal 80 – 130 mg/dL, 2 hour post-meal <180 mg/dL

Education, Self-Management, Nutrition, Exercise, & Mental Health

Education / Healthy Body & Mind
- Initial education for all patients
- Annual education refresher

Self-Management
- Refer to diabetes education program
- Self-monitoring of glucose with regular reporting to provider for medication titration

Medical Nutrition Therapy & Activity
- Meal plan prepared by Registered Dietitian
- Walk / Aerobic activity 30 min – 5d/week
- Resistance training 2d/week

Mental Health
- Psychosocial support
- Depression/Anxiety screening
- PHQ9 at every visit

Medication

A1C 6.5 – 7.5%	A1C 7.5 – 9%	A1C > 9%
Step One: Metformin. Titrate to effective dose if not to target in 3 months, proceed to Step Two	Step One: Metformin plus one of the following: DPP-4 $$; GLP-1 $$$$; SGLT-2 $$$; SU $. If not to target in 3 months, proceed to Step Two	Step One: Metformin maintain if possible. Basal insulin* plus either of the following: GLP-1, SGLT-2. If not to target in 3 months, proceed to Step Two
Step Two: Maintain Metformin. Choose from below: DPP-4 ($$) Pros: No hypoglycemia Cons: None; GLP-1 ($$$$) Pros: No hypoglycemia, weight loss Cons: Injectable, GI upset, Genital mycotic infections; SGLT-2 ($$$) Pros: No hypoglycemia, Weight loss Cons: None; SU ($) Pros: Inexpensive Cons: Hypoglycemia, Weight gain	Step Two: Maintain Metformin. May consider dual or triple therapy. Insulin Therapy: Basal insulin*; Basal insulin* Plus GLP-1 or SGLT-2; Basal insulin* plus short acting insulin at mealtimes; Pre-mix insulin	Step Two: Maintain Metformin. Basal insulin* with short acting insulin at mealtimes when needed plus either of the following: GLP-1, SGLT-2

*Basal Insulin: start at 0.1 - 0.2 units/kg daily at HS for Type 2 Diabetes patients

Regardless of A1C, if positive CVD risk factors consider Jardiance (Empagliflozin) or Victoza (Liraglutide) as medication of choice because these have proven mortality benefit.

Combination oral medications are available. For additional information consult a pharmacist or PDR.net

June 2017

SEE SIDE 2 FOR MEDICATION DETAIL

SEE SIDE 2 FOR MEDICATION DETAIL

Patient education

Results

Diabetic Healthy Living (Patient Incentive Program)

100 persons

1.9 average A1c improvement

91% improved A1c

79% converted to controlled

$3,154 reduction in TCOC

+51% increased to DM education visits

UPDATE…12 months post start of program 88% converted to controlled and remain so today

Advance Practice Providers

150 persons

1.8 average A1c improvement

83% improved A1c

69% converted to controlled

Diabetes Management Models

Avera Medical Group

JUST DO SOMETHING!!!!