Population Health: The Diabetes Educators Evolving Role

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Disclosure to Participants

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  – Please refer to learning goals and objectives
  – Learners must attend the full activity and complete the evaluation in order to claim continuing education credit/hours

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Objectives

To provide background on emerging care models

To identify the Chronic Care Model as an enabling infrastructure for population health

To outline the process of population health to address the needs of those with diabetes

To discuss the role of technology to maximize reach

To describe examples of how new care models create new opportunities for diabetes educators
A Diabetes Educator Delivers So Much More Than Education

Evolving Our Specialty

Changes ranked positive by diabetes educators:

- 79% say we should focus more on new technologies
- 83% think it’s a good idea to expand services to other chronic diseases
- 80% support elevating the role of educators into specialists with defined scope of practice

Vision for our Specialty

To drive optimal outcomes through the integration of diabetes clinical management, education, prevention and support.
Evolving Our Specialty

Changes ranked positive by diabetes educators:
- say we should focus more on new
technologies
- think it’s a good idea to expand services to other chronic diseases
- support elevating the role of educators into specialists with defined scope of practice

Strategies Supporting the Vision

Person-Centered
Advocating for equity to person-centered care.

Quadruple Aim
The optimization of diabetes care delivery for the quadruple aim.

Behavioral Health
The promotion and integration of behavioral health.

Technology
Leveraging technology driven diabetes care, education and support.

Related Conditions
The integration of cardiometabolic and related conditions.

Integration
Driving the integration of diabetes clinical management, self-management education, prevention and support.

Diabetes, hypertension, obesity and cardiac diseases are not isolated disease states. Ed will claim our expertise in these areas of care.

Related Conditions
Diabetes, hypertension, obesity and cardiac diseases are not isolated disease states. Ed will claim our expertise in these areas of care.

Integration
Educators ensure that person centered care plans incorporate self-management education & on-going support. People with diabetes and cardiometabolic conditions benefit when health delivery is holistic and seamless.
## Population Health
### The Diabetes Educator’s Evolving Role

<table>
<thead>
<tr>
<th>Traditional Model</th>
<th>Emerging Model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SYSTEM</strong></td>
<td></td>
</tr>
<tr>
<td>Routine</td>
<td>Proactive</td>
</tr>
<tr>
<td>Fee for service</td>
<td>Value-based</td>
</tr>
<tr>
<td>Pay for volume</td>
<td>Fee for quality</td>
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<tr>
<td>Entire population</td>
<td>Population stratified by risk</td>
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</tbody>
</table>

*Images and text content are repeated on subsequent slides.*
**What is population health?**

- “the health outcomes of a group of individuals, including the distribution of health outcomes within the group”
- These outcomes can be measured in terms of:
  - health outcomes (mortality, morbidity, health, and functional status),
  - disease burden (incidence and prevalence),
  - and behavioral and metabolic factors (exercise, diet, A1C, etc.)


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**Meeting the Expectations of the ACA – The Triple Aim**

- Reduce Total Cost of Care
- Improve Quality of Care
- Improve Patient Experience

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**ADA Recommends Aligning Approaches to Diabetes Management with the Chronic Care Model (CCM)**

- The Chronic Care Model: Enabling Infrastructure
Making Population Health Work

The care system is in the community where the individual lives, learns, works, plays and prays.

Stratification of Risk Based on Need

- **LOW RISK**
  - Require routine diabetes care, preventive services as advised by age, sex, race, and health status.
  - Preventive services include age-appropriate screenings, immunizations, dental care, and general health counseling.

- **MODERATE RISK**
  - Require risk-specific care management and self-management education.
  - Same as all PWD or prediabetes.

- **HIGH RISK**
  - Require more intensive frequent care management and care coordination.
  - Same as low and moderate risk.
  - Require focus on less and inhibit the risk.
Population Health – Using Dashboards

Drill Down Sequence of Reports

• System Level
• Practice Level
• Provider Level
• Patient Profile

System Level Diabetes Dashboard

Practice Level Dashboard
### Provider Level Dashboard

![Dashboard Image]

### Patient Profile Report

![Table Image]

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**EXAMPLE -- risk stratification based on HEDIS measures and tasks with accountability**

- **LOW RISK**
  - A1c < 8 and LDL < 100
  - BP < 140/90
  - Usual care and ensure preventive services
  - Clinic visit Q 3-6 months
  - Annual DSMES review
  - PharmD work with patient on med adjustments – Treat to Target approach
  - CDE provide DSMES as needed
  - CDE work with individual to review treatment plan and adjust meds/therapy/DSMES as needed – Treat to Target approach
  - MA calls individual in for appt and updated labs and Individual is re-stratified based on results

- **MODERATE RISK**
  - A1c < 9 and LDL > 100
  - and/or BP > 140/90
  - Usual care and ensure preventive services
  - Clinic visit Q 3-6 months
  - Annual DSMES review
  - PharmD work with patient on med adjustments – Treat to Target approach
  - CDE provide DSMES as needed
  - CDE work with individual to review treatment plan and adjust meds/therapy/DSMES as needed – Treat to Target approach
  - MA calls individual in for appt and updated labs and Individual is re-stratified based on results

- **HIGH RISK**
  - A1c > 9
  - Usual care and ensure preventive services
  - Clinic visit Q 3-6 months
  - Annual DSMES review
  - PharmD work with patient on med adjustments – Treat to Target approach
  - CDE provide DSMES as needed
  - CDE work with individual to review treatment plan and adjust meds/therapy/DSMES as needed – Treat to Target approach
  - MA calls individual in for appt and updated labs and Individual is re-stratified based on results
DSMES Program Intervention

<table>
<thead>
<tr>
<th>Initiative/Program</th>
<th>Intervention</th>
<th>Topic</th>
<th>Funding Source</th>
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<tr>
<td>DSMES Program</td>
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<tr>
<td>CCM: Decision Support</td>
<td>Utilize Best Practice Guidelines to Individualize Clinical Goals</td>
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CCM: Decision Support -- --
Utilize Best Practice Guidelines to Individualize Clinical Goals

1. Review and agree on management plan
2. Address key patient characteristics
3. Consider specific factors which impact on choice of treatment
4. Implement management plan
5. Agree on management

CCM: Self-management support
* Individualize the Plan
* Help people with diabetes and their carers be successful self managers as they are able
* The Process is Ongoing, iterative and Collaborative

CCM: Decision Support -- --
Utilize Best Practice Guidelines to Individualize Clinical Goals
Stratifying the Population Based on Risk

### Risk Stratification of the Diabetes Population

1. Whole population
   - NO RISK
2. People identified with diabetes getting usual preventive care receiving initial DSME/S
   - LOW RISK
3. People with moderate-risk obtaining DSME/S and care management
   - MODERATE RISK
4. People at very high risk receiving intensive management and DSME/S and MNT
   - HIGH RISK

**CARE STUDY**

- **Case 1:** A 39-year-old Hispanic male with type 2 diabetes who was diagnosed when he was 30 years old.
- **Case 2:** A 36-year-old female with type 2 diabetes who was diagnosed at 35 years old.
- **Case 3:** A 38-year-old male with type 2 diabetes who was diagnosed at 36 years old.
- **Case 4:** A 37-year-old female with type 2 diabetes who was diagnosed at 35 years old.

- **Risk Factors for Type 2 Diabetes:**
  - Family history
  - History of diabetes in parents or siblings
  - Obesity
  - Sedentary lifestyle
  - History of gestational diabetes
  - Polycystic ovary syndrome
  - Hypertension
  - High cholesterol levels
  - History of heart disease
  - Age
  - Race/ethnicity

- **Management Strategies:**
  - Dietary modifications
  - Physical activity
  - Medications
  - Monitoring blood glucose levels
  - Education and support

- **Outcomes:**
  - Improved glycemic control
  - Reduced risk of complications
  - Improved quality of life

**Key Points:**

- Early detection and management of diabetes can significantly improve outcomes.
- Lifestyle modifications are crucial in preventing and managing diabetes.
- Regular follow-up and monitoring are essential for effective management.

**References:**

1. American Diabetes Association (2019). Standards of Medical Care in Diabetes—2019. Diabetes Care, 42(S1), S1-S112.
Summary of Core Principles of Population Health

- Identifying and assessing the population
- Stratifying populations by risk
- Proactively engaging people in programs
- Providing interventions appropriate for their level of risk
- Measuring improvement at the individual level
- Continually reassessing the individual to be certain they are receiving the right intervention at the right time provided by the right person in the right way
- On a regular basis, reassessing the entire population
- The cycle starts over again.

What Does Population Health Mean for Diabetes Educators?

[Image of a person walking near a beach]
“Disease is easier to recognize than the individual with the disease.”

- Abraham Verghese

Diabetes Educators: Our Emerging Role

Identify the Diabetes Population

- Target those in most need of an intervention

Diabetes Educators: Our Emerging Role

Utilize the appropriate intervention and care provider

- Appropriate allocation of resources
- The right provider at the right time
- Work at the top of license or scope of practice
- Community health workers
- Cultural competencies
Plan and Manage Care
• Use a “treat to target” approach (it’s not just for insulin!)
• Collaborative goal setting
• Facilitating behavior and lifestyle change

Provide Self-Care Support and Community Resources
• They are done with your “program”:
  • They are not at target – Now what?
  • They ARE at target – Now what?
• Consider:
  • Support groups
  • Online resources
  • Follow-up

Collect and use data for population management
• Proactively engage existing persons with diabetes if:
  • Not at goal
  • Have not been in
• Allocate resources/other team members according to needs of the person with diabetes
Emerging Role: We are the Diabetes Experts!

- Work closely with entire health care team
- Prioritize patients based on risk level and need
- Identify the need for and make referrals as needed
- Remember the “whole patient”
- POS education
- Therapy adjustments based on protocols
- Collaborative goal setting
- Ongoing follow-up (phone/face-to-face/e-visits)

The Diabetes Educators Role in Population Health

What are some potential challenges and considerations?

Important Considerations

Focus on person-centered care:
- Care can still be in “silos” according to conditions
Consumer engagement:
- Engage each individual as an active partner
Potential Challenges

- Re-defining roles
  - Everyone working at the top of their licensure
- Links to community resources
- Clinic transformation and readiness:
  - Requires whole-practice redesign

Welcome to the Future

DANA: An Essential tool for you and your Diabetes Program

DANA is a resource to enable professionals working in partnership with persons with prediabetes and diabetes to have access to best in class information about lifestyle information and technology.

DANA’s goal is to empower collaborative decision making in the care and management of people with prediabetes and diabetes, leading to positive health outcomes.
Changing Focus!  
**Diabetes Specialists: Our Emerging Roles**
- **S** Specialist. Establish yourself as the diabetes expert and specialist.
- **P** Participate in clinical quality and population health structure.
- **E** Embrace and utilize current and emerging technologies.
- **C** Clinical information systems.
- **I** Implement standardized stratification strategy.
- **A** Always partner with key stakeholders.
- **L** Lead healthcare systems workforce training.
- **I** Initiate and advocate for DSEMES.
- **S** Support ongoing monitoring of quality performance and communications.
- **T** Take the lead and get involved with in professional associations.

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**Diabetes Educators Do SO Much More Than Educate!**

**Working with the WHOLE person**
- Medication management
- Coping skills
- Nutrition
- Physical activity
- Emotional and mental health

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**Let’s get involved!**

**Action steps:**
- Learn about population health. What’s going on in your community and organization?
- Embrace emerging technologies in diabetes care, delivery and decision support.
- Understand quality performance measures.
- Implement and facilitate the development of risk-stratification pathways.
- Educate and advocate at community and national levels for diabetes issues that impact social determinants of health (SDOH).
Let's get involved!

Action steps:
• Lead the charge of workforce training on diabetes care management
• Design and develop cutting-edge interventions on preventing diabetes complications
• Meet people with diabetes where they are, providing the best intervention at the appropriate time
• Support Diabetes Prevention Programs (DPP’s) and advise on improving participant retention

MedStar Diabetes Boot Camp
Conception & Background
• Championed by the Chief Medical Officer
• 18 month period to gather input from system stakeholders including patients
• Integrated into the MedStar Health strategic plan and part of Population Health as of March 2019

MedStar Health
Type 2 Diabetes Population Stratification
All Patients with Diabetes
T2DM Outpatients
A1C >9%
MedStar Diabetes Pathway Boot Camp

Visits 1 and 2
- In person: "human engagement"
- DM assessment
- DSME / MNT
- DM Rx management
- Realtime BG meter
- Daily BG review
- Virtual visits
- Rx intensification & management
- DSME
- Care integration.

Diabetes High Risk – High Cost:
A1C > 9

Virtual Clinic Visits
- Provider support
- PCP referral
- Timely

MedStar Diabetes Boot Camp
Key Innovative Features

Ongoing DSME
- CDEs medication management based on approved medication algorithm

Virtual Clinic (Command Center)
- Smart meter (cellular enabled)

Boot Camp Combined Phase 1 & 2
Demographics

<table>
<thead>
<tr>
<th></th>
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<th>Control</th>
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<tbody>
<tr>
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<td>56.7(10.6)</td>
<td>57.4(12.3)</td>
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</tr>
<tr>
<td>Female</td>
<td>225 (62)</td>
<td>227 (60)</td>
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<tr>
<td>White</td>
<td>49 (7.8)</td>
<td>51 (7.9)</td>
<td>0.67</td>
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<tr>
<td>AA</td>
<td>796 (81)</td>
<td>344 (38)</td>
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<tr>
<td>Hispanic</td>
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<td>Commercial</td>
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<tr>
<td>Medicaid</td>
<td>154 (42)</td>
<td>172 (42)</td>
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<tr>
<td>Medicare</td>
<td>64 (18)</td>
<td>76 (18)</td>
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<tr>
<td>Other</td>
<td>134 (37)</td>
<td>129 (37)</td>
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<tr>
<td>Self Pay</td>
<td>8 (2)</td>
<td>14 (4)</td>
<td></td>
</tr>
</tbody>
</table>
A1C Results

Risk for Acute Care Utilization at 90 days: Boot Camp Patients
- Overall risk for acute care utilization: 51%
- Risk for inpatient admissions: 77%
- Risk for ED visits: 38%
- p < 0.001

Conclusions
- The technology enabled MedStar Diabetes Boot Camp has proven to be effective in reducing A1C and acute care utilization as compared to standard of care.
- Patients and providers have expressed high satisfaction with the program.
- System spread is an incremental process that requires careful site selection with identification of local providers and champions.
DIABETES IN PREGNANCY WITHIN INDIGENT PRENATAL CLINIC

Indigent Prenatal Clinic

- Meeting Community Needs
  - Clinic housed within Hall County Health Department
  - Collaboration of District 2 Public Health, Northeast Georgia Health System and Longstreet Clinic
  - Large population of Latino immigrants

- Population Health and Value Based Care
  - Local Accountable Care Organization
    - Longstreet Clinic and Northeast Georgia Health System

Case – Initial OB Visit

- YM, 24 year old, with pre-existing type 2 diabetes presents at 9 weeks gestation to indigent prenatal clinic within local health department.
- Previous pregnancies: 3 (2 living children and 1 stillborn)
- Self reports blood glucose 199-200 mg/dL, and taking metformin 1000 mg twice daily (patient decreased dose to 1000 mg once daily when found out pregnant)
- Labs and current results:
  - Urine protein 3+
  - Urine glucose 2+
  - Urine leukocytes trace
  - Hemoglobin A1c 8.1%
Case – Initial Endo Visit

- Glucose 137 mg/dL at visit
- Clinician cared for patient with regards to diabetes during three previous pregnancies
- Medication regimen
  - Novolog 13 units before meals
  - Humulin N 13 units in morning and evening
  - Metformin 1000 mg 1 tablet in morning and evening

Case – Follow Up Endo Visit

- YM misses next endo follow up endo visit due to lack of child care
- YM returns for endo visit 6 weeks later
  - Patient does not bring blood glucose log to visit
    - Clinician is unsure of patient’s literacy
  - Patient ran out of insulin before visit
    - Reminded to call clinic next time so she does not go without insulin
  - Hemoglobin A1c test completed during visit
    - Decreases from 8.1% to 7.7%
  - Patient given blood glucose testing supplies and insulin

Case – Follow Up Endo Visits

- Three Week Follow Up Visit
  - No blood glucose log so verbally self reports
  - Nocturnal hypoglycemia due to patient taking additional dose of Novolog at bedtime
  - Education to reinforce to limit Novolog to before meals

- Next Follow Up Visit
  - Fasting glucose 80 – 115 mg/dL
  - 2 hour PP meals 130 – 180 mg/dL
  - Increase dose increased by 10% across the board
  - Insulin and testing supplies given to patient
Case – Follow Up Endo Visits

• Next 2 follow up visits missed due to lack of child care
  – Phoned patient to complete visits
  – Blood glucose has remained elevated
    • Further 10% increase across the board for insulin doses
• Final Endo Follow Up Visit
  – A1c has further decreased down to 6.3%
  – Blood glucose at visit 195 mg/dL (note: < 1 hour PP)
  – Further 10% increase in insulin doses across the board
• YM delivers at 38 weeks gestation

Population Health

• Social Determinants of Health
  – Economic stability
  – Education
  – Social and community context
  – Health and Health Care
  – Neighborhood and Environment
• YM’s needs reflective of larger community
  – Uninsured – access to health care
  – Limited English language proficiency
  – Limited financial resources
  – Limited education
  – Low income neighborhood – safety concern
  – Limited child care

“People don’t always remember what you say or even what you do, but they always remember how you made them feel.”

- Maya Angelou
Thank you

References

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