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**Building the Business Case for
DSME: Or the lessons I have learned on my way to
the President's office**



Teresa L. Pearson, MS, RN, CDE, FAADE
President and Owner
Innovative Healthcare Designs, LLC
Minneapolis, MN
tpearson9@comcast.net

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- Notice of Requirements For Successful Completion
 - 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 identify changes in health care environment putting DSMES programs at risk
- To discuss the value of DSMES beyond reimbursement
- To identify new opportunities for diabetes educators

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The Call

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Rule #1 -- How to respond

Never hold a crucial conversation by phone or e-mail

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Two weeks later in the President's Office

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The President says:

- *Teresa, glad you came in. We are not meeting budget and I am in a position of having to cut my expenses by 5% across the board.*
- *I have a list of departments where we are either losing money or barely covering expenses. Your program is on that list.*

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I say:

- *How can we cut the diabetes program? Where will all of those patients go?*

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The President says:

- *If I keep your program, I have to let four other people go. How will I explain to them why this program stays when you are barely making budget?*

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Toward Describing Practice

The AADE National Diabetes Education Practice Survey: Diabetes Education in the United States—Who, What, Where, and How

- Profit/Loss
 - 42% of managers indicated that their programs operated at a loss.
 - Only 14% indicated that their programs operated at a profit.

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You are me – what are you thinking?

- *DSMES can prevent complications*
- *I want my patients to get good care.*
- *Diabetes education seems like a no brainer to me. Doesn't everyone want diabetes patients to get good care?*
- *I don't want to lose my job?*

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What is the president thinking?

- Cost of heart bypass surgery—\$85,000
- Cost of an lower extremity amputation—\$47,000
- Annual cost of kidney dialysis—\$75,000



Kaching!!!

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Fact

- ***The largest portion of revenue generated from any inpatient is from the first 24-48 hours.***

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The state of our health care system

- The one who bears the expense is not always the one who reaps the benefit

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It's a new day...

- Enter value-based contracts, risk sharing and pay-for-performance.
 - We are all in this together.

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Rule #2: Make it relevant

- *Put yourself in the president's shoes*
 - *What's important to him?*

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Rule #3: Use the KISS principle

- Use **clear, concise, evidence based arguments**

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Rule # 4: Be Prepared



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Building your Case: Key Point #1

- Diabetes is a growing health care challenge

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The Burden of Diabetes

- 30.3 million Americans, or 9.4% of the population, had diabetes.
 - 25.2% of the US population > 60 years of age
 - 95% have type 2 diabetes
- 84.1 million Americans age 18 and older had prediabetes.
- Even higher prevalence in American Indians, African Americans, Latino-Hispanic Americans, Asian Americans, and Pacific Island Americans

Centers for Disease Control and Prevention. National Diabetes Statistics Report, 2017. Atlanta, GA: Centers for Disease Control and Prevention, U.S. Dept of Health and Human Services, 2017.

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**Make your argument relevant
-- Make it local**

- State level data
- County level data
- Organization-level data

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Building your Case: Key Point #2

- Diabetes and its complications have a substantial impact on healthcare costs

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The Economic Burden of Diabetes: Direct medical costs

- The total estimated cost of diagnosed diabetes in 2017 is \$327 billion, including \$237 billion in direct medical costs and \$90 billion in reduced productivity.
- The largest components of medical expenditures are:
 - hospital inpatient care (30% of the total medical cost),
 - prescription medications to treat complications of diabetes (30%, diabetes agents and diabetes supplies (15%), and physician office visits (13%).

Economic Costs of Diabetes in the U.S. in 2017. American Diabetes Association Diabetes Care May 2018, 41 (5) 917-928; DOI: 10.2337/dci18-0007

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Direct and Indirect costs

- Estimated economic cost of diagnosed diabetes -- **\$327 billion**
 - a 26% increase from 2012 estimate of \$245 billion
- Avg medical expenditures for people with diabetes -- **\$13,700/yr.**
 - About \$7,900 of this amount attributed to diabetes.
 - 2.3 times higher than those for people without diabetes.
- Accounts for **1 in 4 health care dollars**
 - more than half of that expenditure is directly attributable to diabetes.

Economic Costs of Diabetes in the U.S. in 2017. American Diabetes Association Diabetes Care May 2018, 41 (5) 917-928; DOI: 10.2337/dci18-0007



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Burden of diabetes

- **7th leading cause of death** in the US
- Associated with high rates of hospitalization and/or treatment for CVD and KD.
- On any given day, an average of **30% of in-patients have diabetes**

Economic Costs of Diabetes in the U.S. in 2017. American Diabetes Association Diabetes Care May 2018, 41 (5) 917-928; DOI: 10.2337/dci18-0007



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2014 hospital discharges and ED visits

- 7.2 million hospital discharges with diabetes as any listed diagnosis among U.S. adults aged 18 years or older
- 14.2 million ED visits with diabetes as any listed diagnosis among adults aged 18 years or older

Centers for Disease Control and Prevention. National Diabetes Statistics Report, 2017. Atlanta, GA: Centers for Disease Control and Prevention, U.S. Dept of Health and Human Services; 2017.



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Make it local

- Look at claims data re:
 - Discharges
 - ED visits
 - Encounters
 - Length of stay

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Impact on Readmissions

- Individual histories of hospitalization were ascertained from hospital discharge summaries for Philadelphia residents ages 25 – 84 who had at least one diabetes hospitalization from 1994 through 2001 (291,752 discharges)

Readmissions within 30 days of discharge occurred in 20% of those discharges (58,308 readmissions)

Robbins JM, Webb DA. Diagnosing Diabetes and Preventing Rehospitalizations. The Urban Diabetes Study. Medical Care. 2006;44(1):292-296

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Readmissions

1% - 3% Penalty
\$17 billion in Preventable readmission costs

1. <https://www.aif.org/...aiming-for-fewer-hospital-uh-turns-the-medicare-hospital-readmiss...>
 2. <https://www.aif.org/medicare-issue-brief/aiming-for-fewer-hospital-uh-turns-the-medicare-hospital-readmission-reduction-program/Readmission-The-Medicare-Hospital-Readmission-Reduction-Program>
 3. "Community-based Care Transitions Program." Baltimore, Md.: Centers for Medicare & Medicaid Services, 2001. innovation.cms.gov/initiatives/CCTP/index.html (accessed January 2019).
 4. Jencks SF, Williams MV and Coleman EA. "Rehospitalizations Among Patients in the Medicare Fee-for-Service Program." New England Journal of Medicine. 360(14): 1418-1428, 2009.

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Building your Case Key Point #3

- There is effective treatment of diabetes and related complications
- Prevention of diabetes complications will reduce overall healthcare expenditure

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Good Glycemic Control Lowers the Risk of Complications

- DCCT
- UKPDS
- EDIC
- Kumamoto
- Van denBerghe

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The Stamford Hospital Experience

Savings of \$1,339,500 in intensive treatment group (\$1580 per patient)

ICU Hours	(17.2%)
Ventilator Costs	(20.4%)
Lab Costs	(15.4%)
Pharmacy Costs	(4.3%)
Imaging Costs	(18.6%)

KRINSLEY JS, JONES R. Cost Analysis of Intensive Glycemic Control in Critically Ill Adult Patients. Chest. 2006; 129: 644-650 (% cost savings adopted from Table 6 data utilizing adjusted cost savings)

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Cost Analysis: Leuven Study
 Savings of 2,638 € per patient in Intensive Treatment Group *

	Total Costs	Per Patient
Conventional Group	8,275,394 €	10,569 €
Intensive Treatment Group	6,067,237 €	7,931 €

cost savings due to reduced LOS, renal failure, sepsis, blood transfusions and mechanical ventilation dependency

VAN DEN BERGHE G, et al. Analysis of Healthcare Resource Utilization with Intensive Insulin Therapy in Critically Ill Patients. Crit Care Med. 2006; 34 (No3): 1-5.

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DSMES reduces readmissions

- Formal DSMES independently associated with a lower frequency of all- cause hospital readmission within 30 days
 - this relationship was attenuated by 180 days.
 - One "dose" is not enough

Healy SL, Black D, Harris C, Lorenz A, Dungan KM. Inpatient Diabetes Education Is Associated With Less Frequent Hospital Readmission Among Patients With Poor Glycemic Control. Diabetes Care Oct 2013, 36 (10) 2960-2967;DOI: 10.2337/6c13-0108

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DSMES improves performance measures

- Standardized DSMES is strongly associated with:
 - a substantial improvement in patients meeting all five elements of a diabetes bundle
 - a decline in HbA1c beyond usual care.
- Given the low operating cost of the DSMES program, these results strongly support the value adding benefit of this program in treating T2DM patients.

Brunsholz KD, Briot P, Hamilton S, et al. Diabetes self-management education improves quality of care and clinical outcomes determined by a diabetes bundle measure. J Multidiscip Healthc. 2014;7:533-542. Published 2014 Nov 21. doi:10.2147/JMDH.S69000

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DSME/T improves quality measures

- DSME/T is effective for diabetes management.
 - DSME/T participants generally experience reduced HbA1c levels, reduced BMI, reduced blood pressure, and better clinical care outcomes.
- DSME/T is cost-effective across health care settings.
- DSME/T leads to reduced hospitalization rates and lower health care expenditures.

Diabetes Self-Management Education and Training (DSME/T)
Research and Policy Review By ChangeLab Solutions and funded by the Centers for Disease Control and Prevention



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DSMES reduces costs

- Those using DSMES have lower average costs than those who do not use DSMES.
- However, physicians exhibit high variation in their referral rates to diabetes education.
- Need to increase referrals
- States are working with CDC to improve access to DSMES with an emphasis on DSMES programs that meet national quality standards.

Centers for Disease Control and Prevention. National Diabetes Statistics Report, 2017. Atlanta, GA: Centers for Disease Control and Prevention, U.S. Dept of Health and Human Services; 2017.



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DSMES -- When, what and how



Powers MA et al. DSMES Position Statement (2015)
The Diabetes Educator, Diabetes Care, Journal of Academy of Nutrition and Dietetics



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**Building your Case
Key Point # 4 –**

- How has **your** program impacted costs?

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Know your patient volume.

- How many people do you see per year?
- Your financial statement will indicate charges NOT actual reimbursement
 - Are there any discounts applied?
- Ask the billing department for individual patient information.
 - Determine number of encounters
 - You should have this information in your database if you have or are applying for education recognition.
 - If you bill for MNT and DSMT, include them both in your analysis.

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Know the cost of running your program.

- Look at your financial statement.
- Personnel will most likely be your largest expense.
- Other expenses could include rent, telephone, utilities, supplies, etc.
- Revenue is from ambulatory face time
- What you see at the bottom of your financial statement is a figure for net revenue.

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Reimbursement is just a part of your value --

**How does YOUR program impact the quality measures?
Know your outcomes**

- Track A1C before and after your program,
 - determine the average drop in A1C for your participants.
- Track other data in the quality measures:
 - blood pressure,
 - LDL
 - body mass index (BMI)

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Example of Performance Measures: HEDIS

- Ages 18-75
- Annual screening of the following:
 - A1C
 - A1c result < 8% and > 9%
- LDL-C < 100 mg/dL
- Retinal eye exam
- Nephropathy screening or Rx of an ACE or ARB
- Blood pressure < 140/90 mm/Hg

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What the "STAR" Ratings Mean

Star Rating	Plan Quality Performance
★★★★★	Excellent
★★★★☆	Above Average
★★★☆☆	Average
★★☆☆☆	Below Average
★☆☆☆☆	Poor

Year round enrollment
 Quality Bonus Plans for MA/PO only
 Risk of termination if consistently below average

- Star Ratings are publicly reported to enable Medicare beneficiaries to compare quality among MA Plans and to promote quality improvement
- Population level measures
- Recognizes PCPs for demonstrated improvement.
- Ratings are updated annually during the Annual Enrollment Period
- 4 and 5 stars lead to a competitive advantage

Medicare Advantage Plan Star Ratings and Bonus Payments in 2012. November 2011. The Henry J. Kaiser Family Foundation

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Articulate the impact and the savings

- If you can run the numbers -- DO
- If you don't have the capability to run the numbers – Do a PROJECTION

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***So what if in spite of all
your best efforts your
program is still shut down
or cut back?
OR you are asked to take
on more?***

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***Is it time to reinvent
yourself?***

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Be in the know

- Population health
- Value-based Contracts
- Performance Measures
 - HEDIS
 - STAR Ratings
 - Other?
- **Be at the table**

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In Summary

- Be prepared
- Hold all crucial conversations in person
- Know the literature
- Know your own outcomes and stats
- BRIEFLY present your case
- Follow-up
- Stay on top of your clinical and financial outcomes
- Tell people know how well you are doing

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