



## **“Set For Success” A Multifaceted Approach to Managing Diabetes in the Workplace**

*Presented by:*

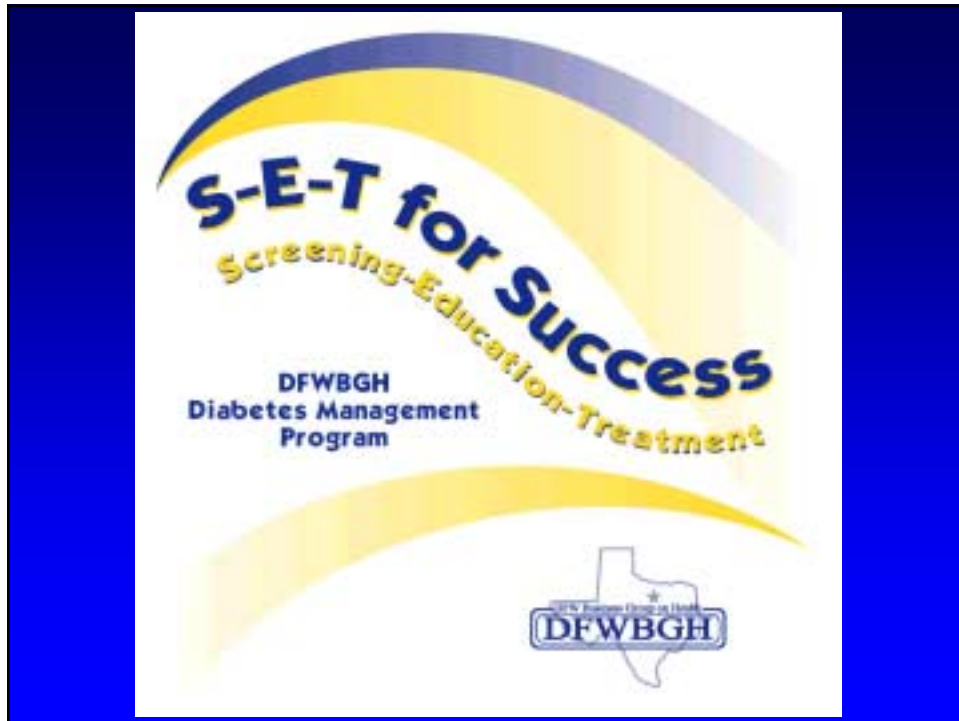
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**Dallas-Fort Worth Business Group on Health**



### **DFW Business Group on Health**

- Coalition of **115 employers** (50 Corporate & 65 Allied)
- Represents **327,000 DFW-based employees**
- Members spend **\$2.6 billion/year** on employee health care in DFW area
- **Mission:**
  - **Promote health care quality and cost effectiveness**
  - **Empower employers to make informed health care purchase decisions**



S-E-T for Success

## **Disease Management The New Frontier**



**Managing chronic conditions is becoming the “new frontier” for employers seeking to control health care costs and improve employee productivity.**

## Sobering Statistics about Diabetes

- 5<sup>th</sup> leading cause of death in U.S.
- Approximately 2,700 Americans are diagnosed with diabetes each day
- Leading cause of adult blindness, end-stage kidney disease and lower extremity amputations
- 60%-70% of people with diabetes have mild to severe forms of nervous system damage
- \$1 of every \$10 of health care spending is spent on diabetes

Source: American Diabetes Association

## Burden on Employers

### Estimated Cost: \$132 billion per year

- **Direct costs: \$92.2 billion**  
(Hospital, physician, Rx, diabetic supplies, etc.)
- **Indirect costs: \$39.8 billion**  
(Lost work days, restricted activity, permanent disability, mortality)



### Lost Work Days:

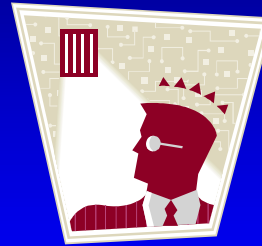
- Diabetics: **8.3 days**
- Non-diabetics: **1.7 days**





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## How/why a diabetes worksite management program is a solution



Captured audience for more than  
 $\frac{1}{2}$  of waking hours

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## S-E-T for Success Project Goals

1. Develop a multi-faceted worksite diabetes education and management program model
2. Test and refine what works best:
  - Program components
  - Implementation process
  - Participation
  - Measures of success

*Project underwritten by GlaxoSmithKline  
with in-kind support from Bayer Corp. and Roche Diagnostics*

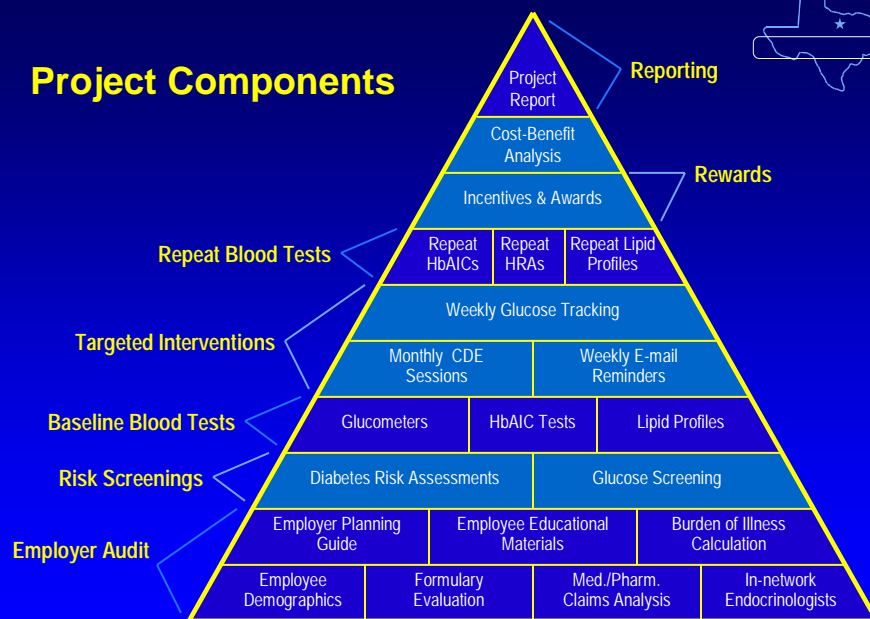


## Project Phases

1. Employer Selection and Education
2. Employer Resource Audit
3. Participant Selection
4. Worksite Education and Interventions
5. Program Evaluation
6. Report Results



## Project Components





## Employer Selection

- Federal Reserve Bank of Dallas - 1000 DFW employees
- TXU - 13,000 DFW employees



## Employer Audit

- Employee demographics
- Diabetes prevalence
- Financial burden of illness
- Internal resources



## FRBD District Employees, LTD, Retirees & Survivors

	Employee Demographics				
Sex	20-39	40-49	50-59	60-74	Total EEs
<b>Both</b>	<b>604</b>	<b>499</b>	<b>400</b>	<b>527</b>	<b>2,030</b>
Male	319	218	185	271	993
Female	285	281	215	256	1,037



## Estimated FRBD Diabetics

*Based on NHANES III Data*

	Prevalence by Age/Sex				
Sex	20-39	40-49	50-59	60-74	Total EEs
<b>Both</b>	<b>7</b>	<b>19</b>	<b>32</b>	<b>66</b>	<b>120</b>
Male	4	7	18	32	59
Female	3	12	14	33	61



# FRBD Cost Estimates

*based on ADA estimates*

**Est. medical costs per employee:**

- Without diabetes or chronic condition	\$2,560
- With Diabetes	\$13,240

**More per diabetic employee: \$10,680**

**FRBD est. medical costs per employee in 2002:**

Non-diabetic employees:	2,030 x \$2,560 = \$5,196,800
<u>Est. diabetic employees:</u>	<u>120 x \$10,680 = \$1,281,600</u>
Total medical costs:	1,880 \$6,478,400



# FRBD Annual Diabetes Medical Costs

**FRBD est. medical costs per employee in 2002:**

Non-diabetic employees:	2,030 x \$2,560 = \$5,196,800
<u>Covered EEs purchasing diabetic supplies in 2002</u>	<u>150 x \$10,680 = \$1,602,000</u>
Total medical costs:	1,880 \$6,789,800



## Implementation

- Glucose Screenings identified employees at high risk or diagnosed with diabetes
- External and internal promotions of program
- Voluntary enrollment process
- Baseline glucose & HbA1C blood tests
- Interventions  
*(Monthly CDE "Lunch & Learns"; weekly email reminders with health tips; self-management logs; health educational materials)*
- Incentives  
*(Free lunches, T-shirts & glucometers)*



## Screening Results

### 1st Shift

Screening dates: Aug. 26 & 27, 2002

Diabetes diagnosis and positive screen:	9	3.44%
Diabetes diagnosis and a negative screen:	7	2.67%
No diabetes diagnosis and positive screen:	1	0.38%
No diabetes diagnosis and negative screen:	<u>245</u>	<u>93.51%</u>
<b>Total Number screened</b>	<b>262</b>	<b>100.00%</b>
<b>Percent diagnosed diabetics &amp; non-diagnosed with positive screen</b>		<b>6.49%</b>



## Screening Results

2nd & 3rd Shift

Screening date: Oct. 3, 2002

Diabetes diagnosis and positive screen:	3	5.66%
Diabetes diagnosis and a negative screen:	4	7.55%
No diabetes diagnosis and positive screen:	5	9.43%
No diabetes diagnosis and negative screen:	41	77.36%
<b>Total Number screened</b>	<b>53</b>	<b>100.00%</b>
<b>Percent diagnosed diabetics &amp; non-diagnosed with positive screen</b>		<b>22.64%</b>



## Program Promotion

- Invitations mailed by Liberty Direct Services (LDS) to employees currently purchasing diabetic supplies
- Nurse contacted employees identified through glucose screening or self identification
- Solicited participation via e-mail and posters throughout the building

**Result: 35 FRBD employees joined up**



## Participation

- Voluntary enrollment
  - Waiver and PHI Release Form required
  - Agreement to attend sessions and track progress
- Baseline HbA1C blood tests
- Free glucometers for daily testing
- No co-pay for diabetic supplies from Liberty Direct Services



## Initial Meeting



Held in the executive dining room



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## Initial Meeting



- Free glucometer & supplies distributed
- Participants instructed in proper use of glucometer
- LDS Schedule of Benefits distributed: **No Copay**

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## CDE Educational Sessions

Monthly: January – July 2003

1. Orientation and glucometer training
2. Nutrition and Therapy
3. Benefits of Increasing Activity Level
4. Medical Management of Diabetes
5. Prevention of Complications
6. Long Term Goal Setting



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# Monthly Maintenance

Email meeting notices to participants



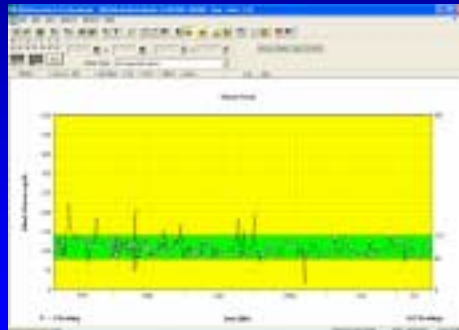
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# Monthly Maintenance

**FRBD Nurse:**

- Downloaded glucometer readings
- Printed charts for each participant
- Distributed at each meeting
- Monitored and encouraged compliance





## Monthly Maintenance

- Eligibility report sent monthly to LDS
- Audit and pay monthly LDS invoices
- FRBD paid participants' co-pays

*FRBD diabetic supply costs dropped 44% from Jan. 2003 to June 2003 (\$1,328.13 to \$742.55)*



## Monthly Maintenance

Participant Tracking Form

A screenshot of a Microsoft Excel spreadsheet titled "Diabetes Self-Management Tracking Form". The spreadsheet has multiple columns and rows, with a header row containing various labels. The data rows are mostly empty, with some cells containing text or numbers. The spreadsheet is displayed in a window with a standard Windows interface.



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## Special Services

Videotaped meetings  
for presentation to 2<sup>nd</sup>  
& 3<sup>rd</sup> Shift employees



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## Special Services



Assisted employees without e-mail and PC skills to  
access computer based resources



## Project Results

- 262 employees initially screened for diabetes
- 9.2% (29 employees) were at high risk or diagnosed with diabetes (*higher than average*)
- 35 employees participated in program
- 60% had a lower HbA1c level at end of the 6 month program
- Expenditures on diabetic supplies dropped 44% from Jan. 2003 (\$1,328.13) to June 2003 (\$742.55)
- 14 participants completed a feedback survey



## Lessons Learned

- **Corporate culture** of wellness and **senior management support** is essential for success
- **6 months is not long enough** to generate behavior changes: 12 -18 month program is better
- Educators should include CDE, nutritionist, exercise physiologist, endocrinologist, psychologist, pharmacist, podiatrist
- Sensitivity to cultural diversity and health disparity

## Lessons Learned

- Other components that should be included:
  - Health Risk Assessments
  - “Readiness to change” Survey
  - Weight management program