GO! Diabetes

A Georgia & Oklahoma Family Medicine Residency Education Project

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GO! Diabetes 2010

Final Outcomes Report March 2011

www.godiabetes.org

Grant 33290

Executive Summary

The GO! Diabetes 2010 project was a success on many levels-from the number of physicians and clinical staff updated on the most current guidelines for treating diabetic patients, to sustained practice changes in diabetic care, and measurable improvements in patient outcomes as recorded in the patient registry.

Here are a few of the highlights from this project:

- Train the Trainer sessions were attended by 127 change agents from 47 residency programs in 21 states and 61 physicians and staff from 37 private practices in Georgia and Oklahoma.

- Change Agents returned to their clinical practice setting and presented 82 GO! Diabetes local presentations to 1,281 physicians, residents and clinical staff.

- Using the AAFP METRIC database, 449 clinicians entered patient data from 4,487 charts of diabetic patients seen in their clinic in the last 90 days and 90+ days later follow up data was entered from 3,016 charts

- 15 eNewsletters, *News on the GO!* were created and delivered for a total of 55,571 individual touches to people who participated in the project. The eNewsletters were archived on the website www.godiabetes.org

- A series of 8 live learning sessions via teleconference were held to extend the education to GO! participants and the faculty notes from the calls were posted on the website after being emailed to all participants in the 37 private practices and 47 residency programs

- The website www.godiabetes.org had over 2,000 visits in seven months

- A video training module was developed to educate physicians on effective communication with clinicians and patients by identifying common barriers to patient compliance and identifying the most common physician responses when patients fail to meet the recommended standards of care. The module was used at the St. Anthony FMRP in Oklahoma City, modified and presented at both GO! Diabetes Summits and posted on the GO! Diabetes website under Resources

- A Research Workshop was held for family medicine residents and faculty led by the Robert Graham Center for Family Medicine and Policy Research which led to more robust research stemming from GO! Diabetes participants.

- Research posters from GO! participants were presented at the AAFP Annual Scientific Assembly, the Annual Diabetes Association Annual Meeting and AAFP Georgia chapter meetings

- The article submitted to the *Annals of Family Medicine* is still pending; however, a residency director has submitted an article on the project to the *Journal of the Society of Teachers of Family Medicine.*

- Looking at the baseline and follow up data from METRIC, there were significant increases in the documentation of five preventive measure goals:

  - ✓ dilated retinal exam in the past 12 months from 35% to 52% in private practices and from 38% to 48% in residency programs
  - ✓ complete foot exam (by visual inspection, monofilament and pulse exam) from 59% to 75% in private practices and 53% to 69% in residency programs
  - ✓ flu vaccine documentation increased from 46% to 57% in private practices and from 44% to 52% in residency programs
  - ✓ there were increases in documentation for recommendation for aspirin therapy and counseling for smoking cessation in residency programs

- GO! Diabetes staff and sanofi-aventis education manager made a presentation at the national Alliance for CME meeting discussing the concept and implementation of the project

Outcomes of the Project

The charts below from the Alliance presentation show how we have reached higher levels of evaluation (based on Moore's Model for Levels of Outcomes) for each year of the project.

These slides from the Alliance presentation show how we have reached higher levels of evaluation (based on Moore's Model for Levels of Outcomes) for each year of the project.

Moore's Levels of Outcomes-based CME Evaluation is a framework for the assessment of continuous professional development for physicians. Created by Donald J. Moore, Jr., PhD from Vanderbilt University, the outcomes reporting was originally designed as six-levels of evaluation but was updated to 7 levels in 2009 to reflect the additional outcome of "competence".

Because outcomes measurements are a critical component in all certified CME activities, we felt it was important to illustrate how we were able to demonstrate various levels of outcomes evaluation throughout the project. **In particular, we were able to achieve the highest level of outcomes, "community health", by using the patient registry as an educational tool for physicians as well as patients to achieve optimal health goals.**

Outcomes

Moore's Level	Year 1	Year 2	Year 3
1. Participation	670	1070	1281
2. Satisfaction	100%		
3a. Learning: Declarative knowledge- use of ARS	0	0	all
3b. Learning: Procedural knowledge-# prepared to give local presentation	50%	100%	100%
4. Learning: Competence- -# started METRIC prior to Train the Trainer	0%	75%	89%

Outcomes

Moore's Level	Year 1	Year 2	Year 3
5. Performance-# local sessions given	17	52	82
6. Patient Health-# participants who completed METRIC	4	104	255
7. Community Health-Patient registry data	1	2	4

Moore DE Jr, Green JS, Gallis HA. Achieving desired results and improved outcomes: integrating planning and assessment throughout learning activities. *J Contin Educ Health Prof*. 2009 Winter; 9 (1):1-15

2010 Project Educational Objectives

Our grant proposal included several educational objectives; the table below shows how we were able to meet each of those objectives, sometimes with multiple interventions:

Clinical Objectives	Tactics	Results
Identify individuals who are at risk for diabetes and utilize screening tests for early diagnosis.	Lecture with case study at Train the Trainer Workshop and same lecture on CD given to change agents for their local program. **Breaking the News without Breaking the Spirit –** November 17, 2010 *News on the GO! article.*	Train the Trainer Workshop Attendees – 188 Local Program Education – 1,281 physicians and clinical staff November 17 Newsletter – 3,704 clinicians
Diagnose individuals with pre-diabetes, metabolic syndrome, and diabetes, and discuss appropriate treatment and disease management options.	Lecture with case study at Train the Trainer Workshop and same lecture on CD given to change agents for their local program. **Scoring Big with your patients: Confidence & Conviction Levels Help Determine Game Plan** – September 30, 2010 *News on the GO!* article.	Train the Trainer Workshop Attendees – 188 Local Program Education – 1,281 physicians and clinical staff November 17 Newsletter – 3,704 clinicians
Appropriately prescribe pharmacotherapy for individuals with metabolic syndrome and all stages of diabetes.	Lecture with case study at Train the Trainer Workshop and same lecture on CD given to change agents for their local program. **Avoiding Clinical Inertia: Adding to or Replacing Orals with Injectables –** August 12, 2010 – *News on the GO! article*	Train the Trainer Workshop Attendees – 188 Local Program Education – 1,281 physicians and clinical staff November 17 Newsletter – 3,704 clinicians
Identify patients who need insulin therapy and appropriately prescribe insulin	Lecture with case study at Train the Trainer Workshop and same lecture on CD given to change agents for their local program. Conference call 6/30/10, "*The Moving Target of Glycemic Control-What to Do When Pills Fail"*	Train the Trainer Workshop Attendees – 188 Local Program Education – 1,281 physicians and clinical staff Conference Call – 40 physicians and clinical staff
Achieve goal levels of blood pressure and lipids in patients with diabetes	Lecture with case study at Train the Trainer Workshop and same lecture on CD given to change agents for their local program	Train the Trainer Workshop Attendees – 188 Local Program Education – 1,281 physicians and clinical staff
Practice Based Change	**Tactics**	**Results**
Understand the principles of quality improvement and implement a practice improvement activity to improve the care of diabetic patients.	Lecture with case study at Train the Trainer Workshop and same lecture on CD given to change agents for their local program. Training on how to use AAFP METRIC tool for PI. AAFP METRIC tool utilized for all participants. Research Workshop offered to Residency Programs and faculty for more robust research on practice improvement.	Train the Trainer Workshop Attendees – 188 Local Program Education – 1,281 physicians and clinical staff Residency Workshop – 15 Residents and Faculty AAFP METRIC – 449 clinicians
Set up systems to ensure that patients are counseled regarding exercise, eating and medication adherence and evaluate the effectiveness of the systems.	Lecture with case study at Train the Trainer and same lecture on CD given to change agents for their local program. Conference call 8/25/10, "*Implementing a Diabetes Registry"* Diabetes Master Clinician Registry Program offered to all GO! practices – 4 practices were selected.	Train the Trainer Workshop Attendees – 188 Local Program Education – 1,281 physicians and clinical staff Conference Call – 40 physicians and clinical staff October 14 Newsletter – 3,704

	Controlling Carbs in the Real World – October 14, 2010 – *News on the GO! article*	clinicians Registry – 6 practices – 45 clinicians – 2,953 patients (as of March 2011)
Work collaboratively with members of the care team to promote healthy behaviors in individuals with diabetes.	Lecture with case study at Train the Trainer Workshop and same lecture on CD given to change agents for their local program. Conference call 8/4/10, *Smoking Cessation/SHS exposure: Tips and Pearls"* **It's personal – patients don't care what you know until they know you care** – August 12, 2010 – *News on the GO! article*	Train the Trainer Workshop Attendees – 188 Local Program Education – 1,281 physicians and clinical staff Conference Call – 40 physicians and clinical staff August 12 Newsletter – 2,804 clinicians
Work with members of the care team to implement nutrition and exercise guidelines for glucose, blood pressure, and lipids goals in patients with diabetes	Lecture with case study at Train the Trainer Workshop and same lecture on CD given to change agents for their local program. Conference call 10/6/10, "*Using Your Staff to Implement a Team Approach to Care Management"*	Train the Trainer Workshop Attendees – 188 Local Program Education – 1,281 physicians and clinical staff Conference Call – 40 physicians and clinical staff
Work with a team to screen patients for early signs of complications in order to institute therapeutic interventions.	Lecture with case study at Train the Trainer Workshop and same lecture on CD given to change agents for their local program. Conference call 10/27/10, "*Incorporating Patient Goal Setting into Office Visit Workflow"* **Flowing through a Visit** – July 13, 2010 – *News on the GO! article*	Train the Trainer Workshop Attendees – 188 Local Program Education – 1,281 physicians and clinical staff Conference Call – 40 physicians and clinical staff July 13 Newsletter – 2,804 clinicians
Systems-Based Practice	**Tactics**	**Results**
Analyze through a quality improvement practice, areas of change to increase adherence to ADA guidelines.	Lecture with case study at Train the Trainer Workshop and same lecture on CD given to change agents for their local program. Utilization of AAFP METRIC database with recommended practice changes based on analysis of patient charts. **Practice Improvement & the Patient Registry – Pillars to Success** – June 15, 2010 – *News on the GO! article*	Train the Trainer Workshop Attendees – 188 Local Program Education – 1,281 physicians and clinical staff Conference Call – 40 physicians and clinical staff June 15 Newsletter – 2,804 clinicians Registry – 6 practices – 45 clinicians – 2,953 patients (as of March 2011)
Develop a system to standardize chart reviews for diabetic patients in the practice	Lecture with case study at Train the Trainer Workshop and same lecture on CD given to change agents for their local program. Used the AAFP METRIC system for chart reviews. Recruited five private practices to enroll their entire diabetic patient into the Diabetes Master Clinician Program patient registry. **Transferring Patients from Hospital to Home** – October 28, 2010 *News on the GO! article.*	Train the Trainer Workshop Attendees – 188 Local Program Education – 1,281 physicians and clinical staff Conference Call – 40 physicians and clinical staff October 28 Newsletter – 3,704 clinicians Registry – 6 practices – 45 clinicians – 2,953 patients (as of March 2011)

Control Group

This year we added another partner to specifically look at control group data. The Robert Graham Center for Policy Studies in Family Medicine and Primary Care was created by the AAFP in 1997 (http://www.graham-center.org/online/graham/home.html).

The Control Group consisted of all METRIC Diabetes participants (440) versus the GO! Participants (2,149). The GO! group showed significant improvements at the baseline (for all but one measurement) and then additional improvements at follow up. This chart outlines that GO! Diabetes shows a more sustained and successful practice implementation.

	Control Group		**GO! Participants**	
	Baseline	followup	Baseline	followup
stop_smoking	14.8% (149 records)	11.2% (116 records)	44.0% (648 records)	68.0% (478 records)
lipid_profile	69.1% (440 records)	75.7% (440 records)	83.2% (2,149 records)	85.4% (2,072 records)
A1C_measured	85.0% (440 records)	91.6% (440 records)	89.5% (2,149 records)	91.4% (2,072 records)
foot_exam	35.4% (438 records)	56.4% (438 records)	55.3% (2,136 records)	70.8% (2,069 records)
retinal_exam	17.2% (366 records)	29.3% (375 records)	47.2% (1,627 records)	58.9% (1,605 records)
flu_vaccine	16.7% (401 records)	34.9% (381 records)	43.9% (2,012 records)	55.1% (1,955 records)
protein_screen	31.3% (422 records)	48.4% (405 records)	64.6% (2,021 records)	73.4% (1,973 records)
bp_checked	96.1% (440 records)	98.4% (440 records)	97.9% (2,149 records)	95.7% (2,072 records)
LDL_guideline	17.1% (433 records)	18.5% (437 records)	56.8% (1,864 records)	55.5% (1,803 records)

Records are variable dependent on practice improvement selected.

The one anomaly is related to blood pressure guidelines, and should be more heavily incorporated to any followup education to emphasize the importance of this guideline.

Over 88% of the participants received education by the Change Agents *prior* to entering their initial METRIC charts. Therefore, the initial baseline of the GO! group could be skewed higher than the Control Group.

However, overall this highlights that GO! Diabetes has a sustained and higher level of change than the Control Group.

Patient Registry

The data below highlights all of the clinics that utilize the Diabetes Master Clinician Program (DMCP) Registry and also compares the GO! clinics with the non-GO! clinics.

While some GO! practices have only instituted the registry within the last 4-6 months there are some early successes. The GO! practices are ahead of all clinics that utilize the DMCP registry in the following areas:

- Three out of five GO! clinics had a higher percentage of annual eye checks than non-GO! clinics.
- Four out of five GO! clinics had a higher percentage of annual foot checks than non-GO! clinics.
- Four out of five GO! clinics had a higher percentage of micro albumin checks than non-GO! clinics.
- Four out of five GO! clinics had a higher percentage of annual flu shots than non-GO! clinics.
- Four out of five GO! clinics had a higher percentage of daily ASA treatment than non-GO! clinics.

Patients Meeting ADA Goals On Most Recent Tests
GO Diabetes Programs as of March 15, 2011

All Clinics		HbA1c	LDL	BP	HbA1c, LDL BP all 3 at goal same time
	Percentage	56%	60%	56%	22%
	Met Goals	9886	10107	10122	3573
	Patients	17587	6889	8089	16238
	Goals	<7	<100	<130	

Patients Meeting ADA Goals On Most Recent Tests

Clinic ID					
76	Percentage	46%	74%	42%	15%
	Met Goals	252	399	230	82
	Patients	551	541	553	540
90	Percentage	40%	58%	69%	18%
	Met Goals	354	455	613	141
	Patients	877	791	891	780
92	Percentage	43%	53%	48%	11%
	Met Goals	290	340	337	69
	Patients	680	640	709	627
96	Percentage	57%	64%	65%	33%
	Met Goals	52	55	59	28
	Patients	91	86	91	86
98	Percentage	61%	58%	44%	20%
	Met Goals	263	244	195	81
	Patients	429	422	445	408
101	Percentage	67%	64%	51%	26%
	Met Goals	145	136	109	54
	Patients	215	211	215	207

76 Family Medicine Residency Program in Georgia
90 Family Medicine Residency Program in Oklahoma
92 Family Medicine Residency Program in Tennessee
96 Family Medicine Private Practice in Athens, GA
98 Family Medicine Private Practice in Statesboro, GA
101 Family Medicine Private Practice in Rural, GA

Clinic Averages

	Goals	All Clinics	Clinic 76	Clinic 90	Clinic 92	Clinic 96	Clinic 98	Clinic 101
# of Patients		17937	553	899	744	92	445	220
# of Visits		81522	6305	2791	1916	250	1146	481
Weight		213	221	222	222	211	216	209
BMI		34	35	37	37	35	34	34
Waist Range		42						
B/P	119/79	131/76	135/77	128/77	134/80	129/76	135/78	135/73
EyeCheck	Once a year	30%	43%	11%	6%	65%	27%	60%
FootCheck	Once a year	41%	43%	27%	10%	85%	63%	49%
HbA1c	<6	7.3	7.8	7.9	7.8	7.2	7.2	7
Total Chol	<135	174	166	187	180	172	169	172
LDL	<70	96	85	101	100	90	97	95
HDL	(M: >40	45	44	45	47	48	44	45
	F: >50)							
Non-HDL	<100	129	122	142	133	124	125	127
Triglycerides	<150	170	183	226	167	169	140	173
U Micro Alb	Once a year	43%	51%	41%	13%	83%	71%	68%
Pneumovax	Once	51%	75%	25%	9%	61%	36%	28%
FluShot	Once a year	28%	56%	8%	6%	68%	44%	68%
Daily ASA	100%	52%	69%	37%	36%	76%	59%	87%
Attended Group Visit		2%	4%	2%	0%	4%	3%	0%

Educational Success and Happy Outcomes

Learning by experience is the best teacher. We learn and grow and are transformed not so much by what we do but by why and how we do it. Some of you started the process with full support. Others of you began laying a firm foundation with the bricks being hurled at you.

No matter the case, the GO! Diabetes program prizes your valiant efforts. We realize in the process of change, we are changed. More benefits are reaped from you and your team's transformation than from data compilation. But intentional actions create long-standing habits, so we go through the tedious chart reviews and processes with the bigger picture in view.

From an overall program point of view, here are some of the lessons learned and challenges gleaned from year three of the GO! Diabetes program:

- Faculty support is extremely important to implement system changes in a residency program. ***Share the vision early and often.***

- Participation in the practice improvement part of this project (including METRIC) was higher in Change Agents who traveled out of town for their "Train the Trainer" session. ***Create and communicate more value.***
- Maintaining momentum requires frequent interaction with the Change Agents after they return to the demands of patient care and other practice requirements. ***Uncover the most effective way for outreach and instruction.***
- Private practice recruitment for the pilot in Georgia and Oklahoma worked well when tied into an existing chapter meeting. ***Remain respectful of time by streamlining participation and processes.***
- From anecdotal evidence, the private practice training session that taught performance improvement tools resulted in more use of METRIC and more participation in practice improvement activities. ***Interactive learning builds confidence and develops a deeper understanding and command of the process.***

Over the course of GO! Diabetes' three-year history, program proliferation continued with 47 residency programs and 37 private practices participating in 2010. That's a 488 percent growth since the program's inception. This year, 188 Change Agents lead the way for 1,281 trained physicians and clinical staff members to implement practice improvement changes to better care for people with diabetes.

By developing a team system to encourage accountability, utilizing the diabetes registry report card for each patient and instituting standing protocol orders for staff to implement, measurable program results took a remarkable leap forward.

GO! Diabetes Research Poster Presenters – November 2010

“A-HA” Moments Captured from GO! Diabetes Summits

Confidence. We know now implementing process change can be done.

Communication. Although our message was the same, we discovered the message shared in the group visits was heard and embraced totally different. Our group visit patients significantly changed their behavior.

Complete. We learned how to best engage our clinical team to gather information. We implemented a "cheat sheet" to cover pertinent questions before the physician entered the room. We used a template for a patient report card to help our patients become more involved in their care.

Purpose. The program helped jumpstart our multidisciplinary team to work toward a common goal through this change process.

Advocacy. Since we put educational posters in exam rooms, our patients are now proactively asking for tests.

Consistency. GO! Diabetes has provided consistency in our care of patients with diabetes by helping us put into place guidelines and flow sheets that reveal what's missing in our care.

Teamwork. Seeing results from the hard work of creating a patient registry paid off with our first group visit. The team buy-in and buzz was positive.

Vision. We're seeing the benefit of creating the patient registry for diabetes caused some people to say "when are we going to start one for asthma?" The program has made a big impact – we're more willing to move to the next level by instituting group visits.

Comprehensive. We are now using all available resources to provide the best care in one visit. We now have a team approach to diabetes care.

Conviction. I had to work on creating a transitional mindset within our residency program. We face a lot of red tape. We had the opportunity to change perceptions of residents and faculty and it worked!

Proactive. All of our residents are now more proactive in their patient care. We've seen positive change in every area of our patient report cards. Now we believe we're giving our patients the proper and best care.

Sharing "A-HA" moments at the Atlanta GO! Diabetes Summit

A1C (TO THE TUNE OF JINGLE BELLS)

Dashing through the day,
Now METRIC's underway
O'er the data we go,
Laughing all the way
Happy patients sing
"I won't give up the fight,"
What fun it is to call and sing
"Your sugars are all right," oh -
A1C, A1C
Under 7.5
O what fun it is to see
Practice changes changing lives!