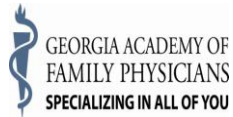




GO! Diabetes

A Georgia &
Oklahoma Family
Medicine Residency
Education Project



GO! Diabetes

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Executive Summary

Overview: The GO! Diabetes practice improvement project was developed by the Georgia and Oklahoma Chapters of the American Academy of Family Physicians to educate family medicine residents and their residency faculty on best practices related to managing the care of their patients with diabetes.

Train the Trainer: The project began with the development of a standardized curriculum that was presented as train the trainer sessions in five states to 105 family medicine residents and faculty representing 55 residencies in 16 states. Those attendees were designated as diabetes change agents and their role in the project was to take the curriculum and present it at their local residency. Within 3 months, 1,070 residents and faculty attended a local program at one of the residencies on the most current guidelines for managing diabetic patients.

Practice Improvement: The practice improvement component of this project used a data base created by the American Academy of Family Physicians. Their METRIC system has a diabetes module that participants used to enter data elements from patient charts to determine a baseline and then to identify a practice change.

Three months later, participants entered a second set of patient charts to learn if their practice change resulted in improved patient outcomes. Some of the data elements included A1c, microalbumin protein screens, BP, lipids, triglyceride levels, eye and foot exams, ASA therapy, flu vaccinations and smoking status. Two control groups were recruited from residencies in different states as an additional evaluation component for this project.

Baseline database has 4,609 patient charts with follow up data from 1,503 patient charts.

The GO! Diabetes project baseline data was tabulated from data entered by 512 physicians from 4,609 diabetic patient charts seen in their clinics in May, June and July. The two control groups entered data from 104 patient charts. The follow up data was collected 90 days later and as of the end of December 2009, 1,503 patient charts had been entered by the GO! Diabetes participants and 102 charts by the two control groups from patients seen in their clinics in August, September and October 2009.

Data Analysis: Analysis of the data from the participating GO! Diabetes residencies after the 90 day practice improvement implementation showed the number of patients meeting treatment goals increased in the following areas:

- A1C
- Total Cholesterol
- LDL
- Documentation of Eye Exams
- Documentation of Foot Exams
- Documentation of Flu Vaccination
- Recommendations for ASA Therapy

Percent of patients' clinical measures meeting treatment goals that did not change were:

- HDL
- Triglycerides
- Systolic and diastolic BP

The two residency control groups showed similar increases in clinical measures.

The most dramatic increases occurred in the preventive care areas with improved documentation of eye and foot exams, flu vaccine administration and recommendations for aspirin therapy. Since many of the practice improvement activities involved system changes, these areas would seem to be the most likely to show a quick improvement. As this project used just 90 days between chart reviews, many of the clinical measures will take longer to change.

Of the 16 practice improvement options offered as a choice for the METRIC participants, the top three choices were (participants may choose more than one intervention):

1. Putting guidelines into practice
2. Incorporate flow sheets into practice
3. Build a patient registry

Extended Education: Various activities took place to extend the education to all participants in the GO! Diabetes residencies. Eight conference calls with educational sessions were held over the 6 months of the project and a specific website was developed with additional resources and tools for the participants.

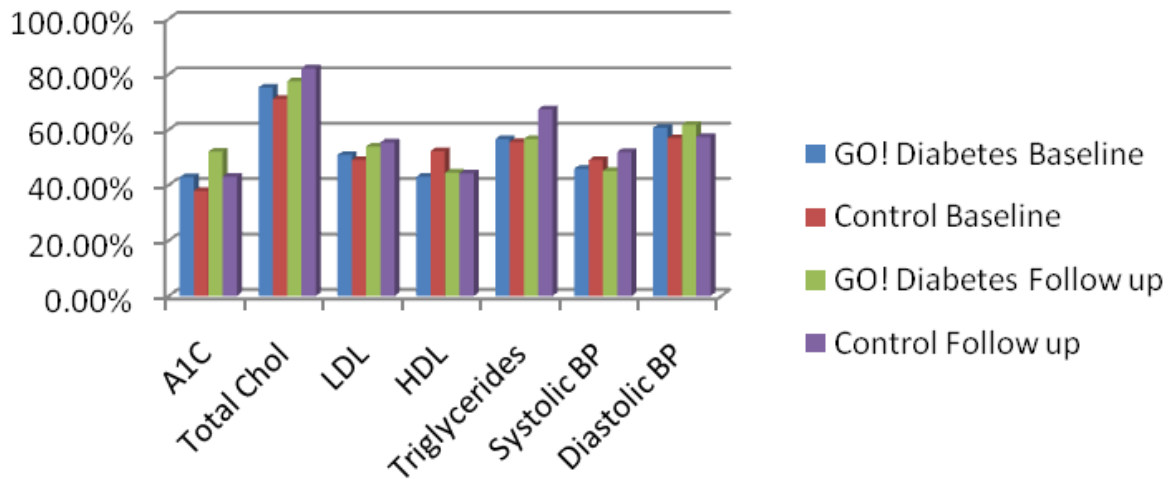
Patient Registry: The Georgia and Oklahoma Chapters partnered with the Florida Academy of Family Physicians to incorporate our GO! Diabetes program into a current diabetes registry (FAFP Master Clinician Diabetes Program). One residency program in Georgia began their registry in 2008. For the 2009 cycle, residencies in Oklahoma and Tennessee have started the data entry and training process to participate in this registry.

The GO! Diabetes Summit and Research Poster Competition was held in Atlanta, Georgia on November 13, 2009 and attended by GO! Diabetes participants from 10 states (Florida, Georgia, Illinois, Kentucky, Louisiana, Michigan, Missouri, Oklahoma, Texas and Virginia).

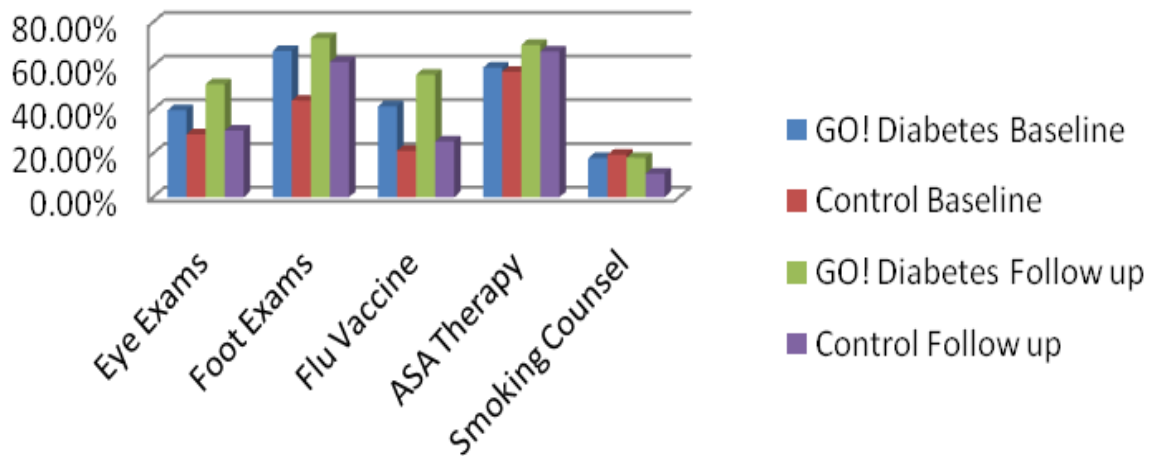
This project was a multidimensional, multi touch activity that involved 55 residency programs in 16 states, directly giving at 1,070 family physicians the most current clinical information for managing their diabetic patients. The recommendations included using a team approach and encouraged the use of group visits and diabetic educators as resources to improve patient self management. Incorporation of a practice improvement component with analysis of patient clinical measures added to the value of the project. The use of the patient registry enabled this project to achieve a Level 5 outcomes measurement.

Charts Summarize key results from both data sets

Percent of All Residency Charts Meeting Clinical Treatment Goals



Percent of All Residency Charts Meeting Physical Exam and Preventive Measure Treatment Goals

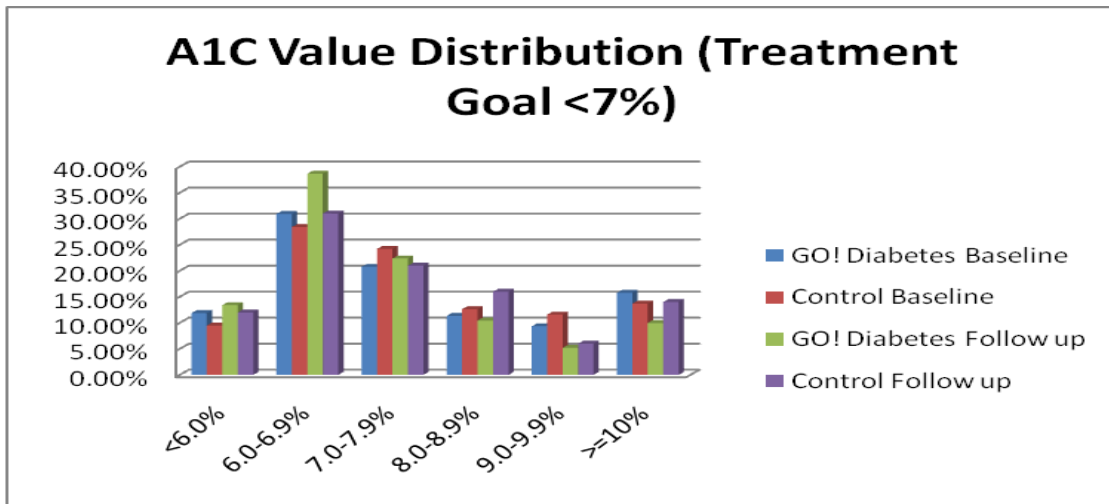


Phase Four: Baseline and Follow up Data

The following charts reflect the data collected by the control groups and the GO! Diabetes residency programs.

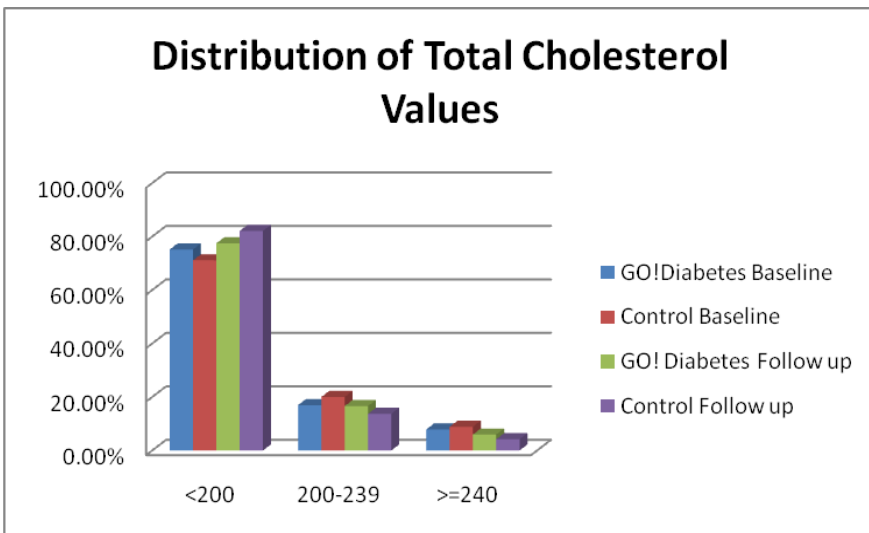
1. The documentation of a Hemoglobin A1C within the past 12 months showed a slight increase in the GO! Diabetes participating residencies (92.6 percent to 93.4 percent) and a greater increase in the control group charts (91.3 percent to 98.0 percent).

Both groups increased their percentage of patients meeting their A1C treatment goal of <7.0 percent. GO! Diabetes participants' data went from 42.8 percent to 52.4 percent and the control groups went from 37.9 percent to 43 percent.

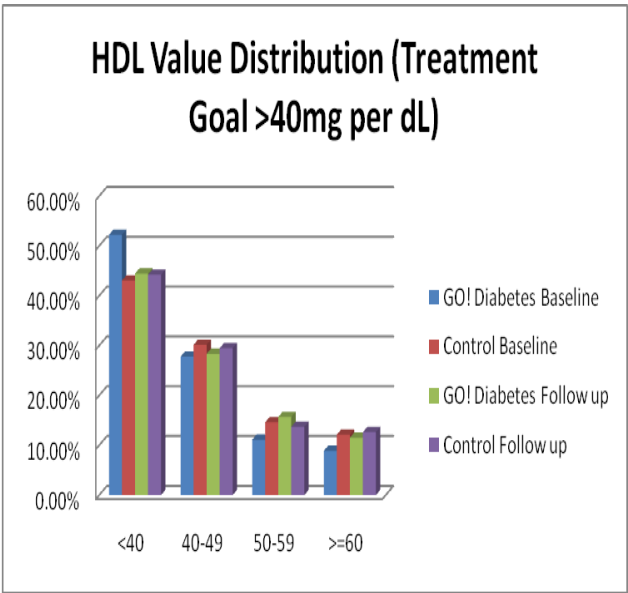
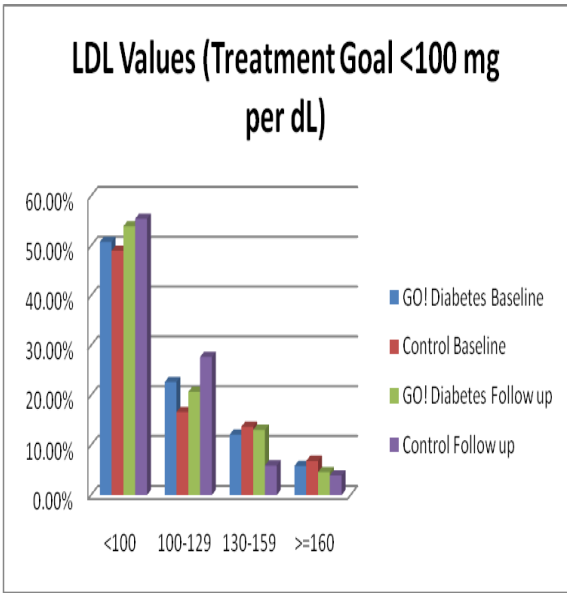


2. Urine microalbumin protein screens in the past 12 months were reported to have increased in the follow up data from 60.9 percent to 71.5 percent in the GO! Diabetes residencies and from 46.2 percent to 49 percent in the two control groups.

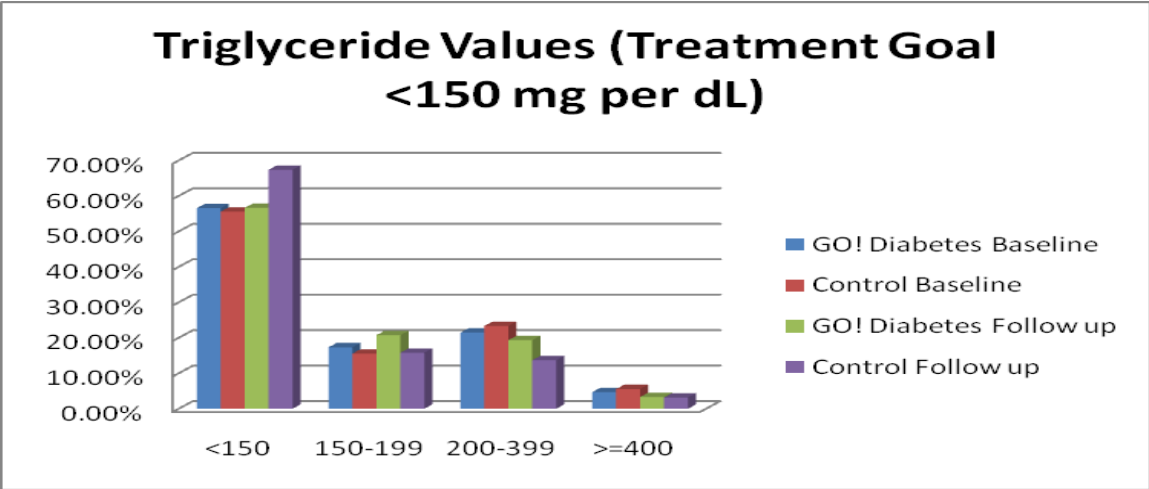
3. Charting of Lipid profiles in the past 12 months increased in both groups (86.1 percent to 87.5 percent of the GO! residency charts and 86.5 percent to 93.1 percent of the control groups charts). Baseline data reflected 75.2% of the GO! Diabetes residency and 71.1% of the control groups had patients with total cholesterol under 200. Follow up data showed an increase to 77.5% in the GO! Diabetes residency and 81.2% in the control groups' charts.



4. LDL and HDL levels were documented in 50.8 percent of the GO! Diabetes residency charts and 49 percent of the control groups have patients meeting the LDL target of <100 mg. per dL. The HDL goal of 40 mg. per dL was met by 43 percent of the GO! Diabetes residency and 52.2 percent of the control group residencies.

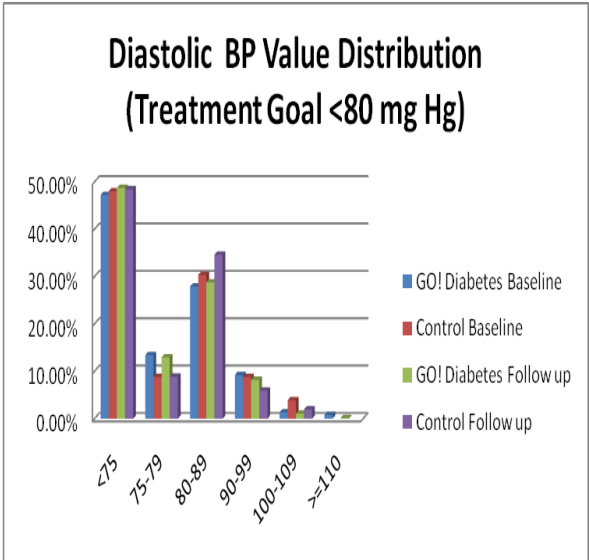
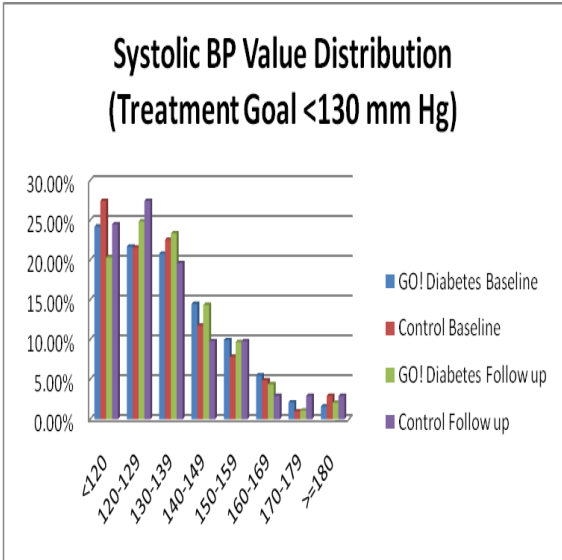


5. Just over 50 percent of the charts from both the GO! Diabetes residencies and the control groups reflect their patients are at the triglyceride goal of <150 mg per dL. Follow up data showed no significant increase in GO! Diabetes patients meeting the goal, but the control groups' numbers increased to 67.4 percent.



6. Blood pressure was a fairly consistently documented measure, with 98.6 percent of the GO! Diabetes residencies and 98.1 percent of the control groups charts reflecting that a BP was taken in the past 12 months in the baseline data and the follow up data was similar (97.9 percent of the GO! Diabetes residencies and 100 percent of the control groups).

However neither group had more than half of their patients meeting systolic BP goals in both sets of collected data. The diastolic goal of <80 mm Hg was met by 60.7 percent of the GO! Diabetes residency charts and 56.8 percent of the control groups charts in the baseline collection with no change in their follow up data collection.



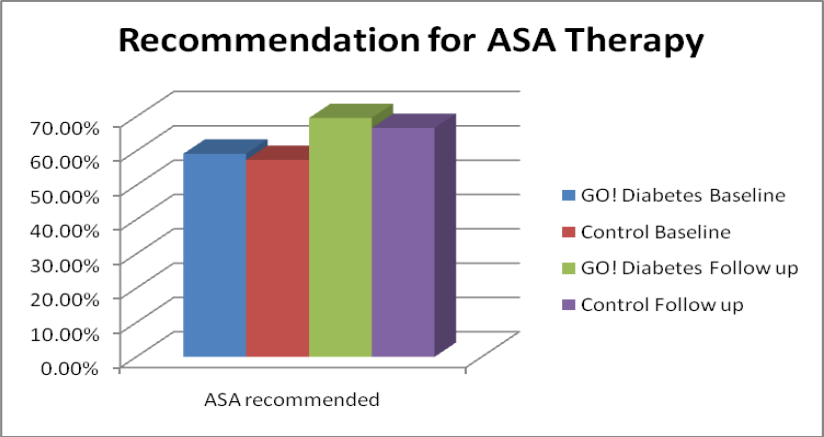
Phase Four: Chart Baseline Data-Preventive Care

7. The baseline chart review revealed that 39.7 percent of the GO! Diabetes residency patients and 28.8 percent of the control groups' patients had documentation of a dilated retinal exam in the past 12 months. The follow up data showed a significant increase to 51.6 percent in the GO! Diabetes residencies and a slight increase to 30.4 percent in the control groups.

8. Documentation of a complete foot exam (by visual inspection, monofilament and pulse exam) within the past 12 months was found in 66.9 percent of the GO! Diabetes residencies and 44.2 percent of the control groups and follow up data showed increases to 72.7 percent in GO! Diabetes residency and 61.8 percent in the control group residencies.

9. GO! Diabetes residency charts revealed 45.5 percent of their patients received a flu vaccine in the past 12 months versus 21.2 percent of the control groups' patients. Documentation of flu vaccines increased to 56 percent on the GO! Diabetes residency charts and 25.5 percent on the control group's charts.

10. A recommendation for aspirin therapy was documented in over half of the charts (59.2% for GO! Diabetes residencies and 57.4% of the control groups) and that documentation increased by 10% in both groups' follow up data collection (69.6% and 66.7%).



11. Documentation of smoking status of a diabetic patient was found in 96.7 percent of the GO! Diabetes residency and 100 percent of the control group charts and those percentages did not change in the follow up data collection.

12. For the patients who are currently smokers (just under 25 percent for all residencies) counseling to stop smoking was documented on 90.8 percent of the GO! Diabetes residency charts and 90.3 percent of the control groups' charts in the baseline data. The follow up data showed an increase in the documentation in the GO! Diabetes residency charts (to 92.3 percent) and no change in the control group charts (90.2 percent).

Phase Four: Patient Registry



One of our areas of focus for practice change was the Diabetes Master Clinician Program. The Georgia and Oklahoma Chapters partnered with the Florida Academy of Family Physicians (FAFP) to incorporate our GO! Diabetes program into the diabetes registry, FAFP Master Clinician Diabetes Program. This registry automatically produces report cards for both the patients and the clinician. We marketed this opportunity to all of the residency programs participating in GO! Diabetes and five expressed interest in participating. 2 from Texas, 1 each from Georgia, Oklahoma and Tennessee. By the deadline two programs (one in Oklahoma and one in Tennessee) submitted letters of interest. Dr. Edward Shahady, the medical director of the program is in the process of vetting each program.

Attached is a letter from Florida Surgeon General Dr. Viamonte-Ros recognizing the FAFP Foundation Diabetes Master Clinician Program as one of the first annual recipients of the State Surgeon General Health Innovation, Prevention and General Management Awards.

Both the Oklahoma and Tennessee residencies made the commitment to join the FAFP Master Clinician Diabetes Program and their data entry and training will be done the first quarter 2010.

Phase Six: Research Poster Competition-Update from 2008 Project

Neeru Chopra, a third-year resident in the Floyd Family Medicine Residency program, recently won third place and an honorable mention award for her presentation at the National American Academy of Family Physicians Scientific Assembly.

“Patients as Change Agents: The New Era” detailed the re-engineering of the Family Medicine Residency Clinic to enhance diabetic care. The presentation focuses on the success of a patient-centered home care model for chronic diabetes through the use of a free, online chronic disease registry and physician-based interventions.

“Through system change and redesign, with the patient’s needs at the core of our purpose, we have been able to demonstrate cost savings by focusing on value-based care. With the adaptation of this diabetic registry, patients will get comprehensive, up-to-date diabetic care, which is so important today,” said Chopra.



Chopra was also awarded first place for the project in the 2008 GO! Diabetes research competition. She earned the Family Medicine Resident Award for Scholarship from the Association of Family Medicine Residency Directors, the North American Primary Care Research Group and the College of Family Physicians of Canada, developed to recognize resident scholarly activity and promote increased family medicine research.

Phase Six: Research – Partnership with Harvard School of Medicine

GO! Diabetes and the Harvard School of Medicine have partnered to do additional data mining from the 2009 project and plan to use the compiled data to draft abstract and journal manuscripts to be completed by July 2010.