

Quality Improvement Report

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Quality Improvement Models

Initiating Meaningful Quality Improvement

Improving the quality of care and outcomes for patients are often the goals when changing a process or system in the health care setting. Often quality improvement (QI) work involves applying changes to close the gap between a process or system's actual and desired operation.

Health care systems in Montana can access help sheets for QI projects at <http://www.risprojects.org/dqcms/HelpSheets.aspx>. These tools include tips for generating project ideas and using graphs to view trends in patient data. The help sheets describe methods for initiating projects, conducting appropriate follow-up, and asking evaluation questions. By applying these changes, a health system can improve their quality measures and meet standards of care for A1C, blood pressure, and cholesterol control; medication adherence; foot and eye exams; screening for kidney disease; immunizations; and tobacco cessation.

Methods for Testing Changes

It is important to test a change to preview the result prior to full implementation throughout the entire organization.¹ Testing allows the organization to try a change in a controlled situation, which minimizes risk when the change is implemented system-wide. It is imperative to use reliable data in testing the process.

Reasons to test changes:

- ◆ Engage stakeholders to increase buy-in and confidence
- ◆ Assess which changes will lead to improvement
- ◆ Evaluate how much improvement can be expected
- ◆ Decide if the change will work in the current setting
- ◆ Evaluate costs, benefits, impact, and unintended consequences from a proposed change
- ◆ Encourage staff to adopt the change during full implementation due to past successes in testing the change

Diabetes Care Indicators

Primary Care Practices and Diabetes Education Programs

Figure 1. Diabetes care indicators from primary care practices in Montana participating in the DQCMS, 4th Quarter (Oct - Dec 2013). N = 21 clinics; 9,673 patients.

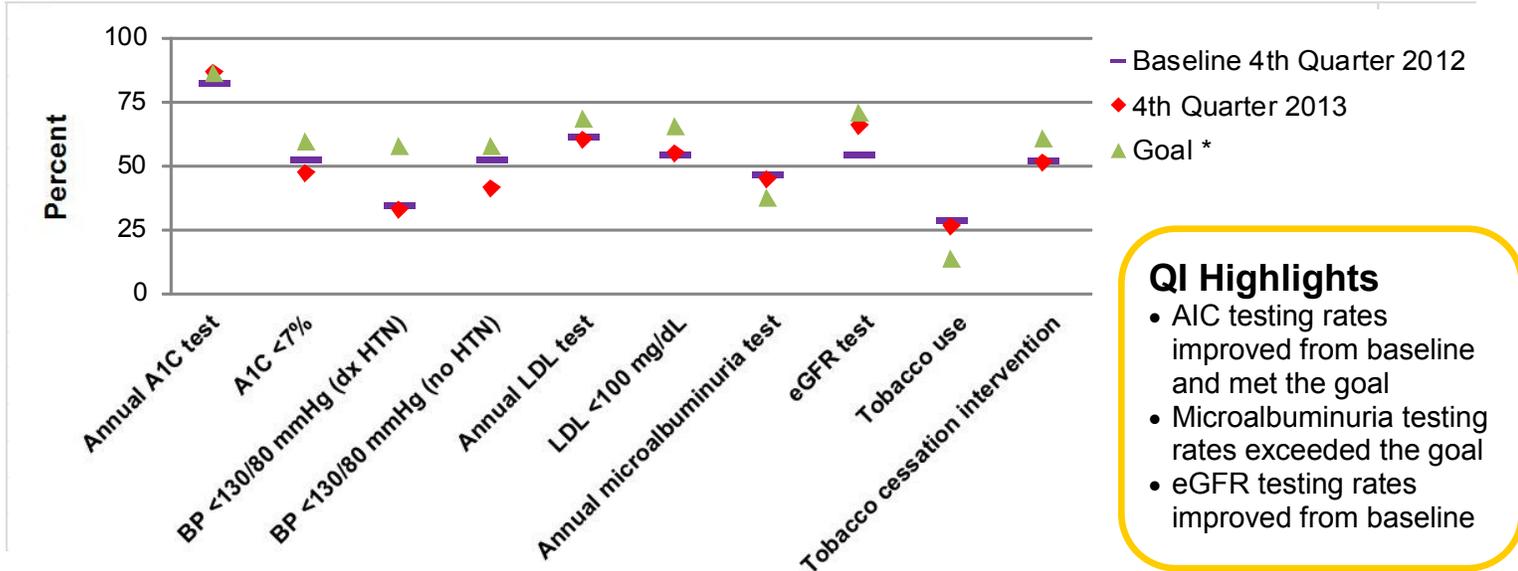
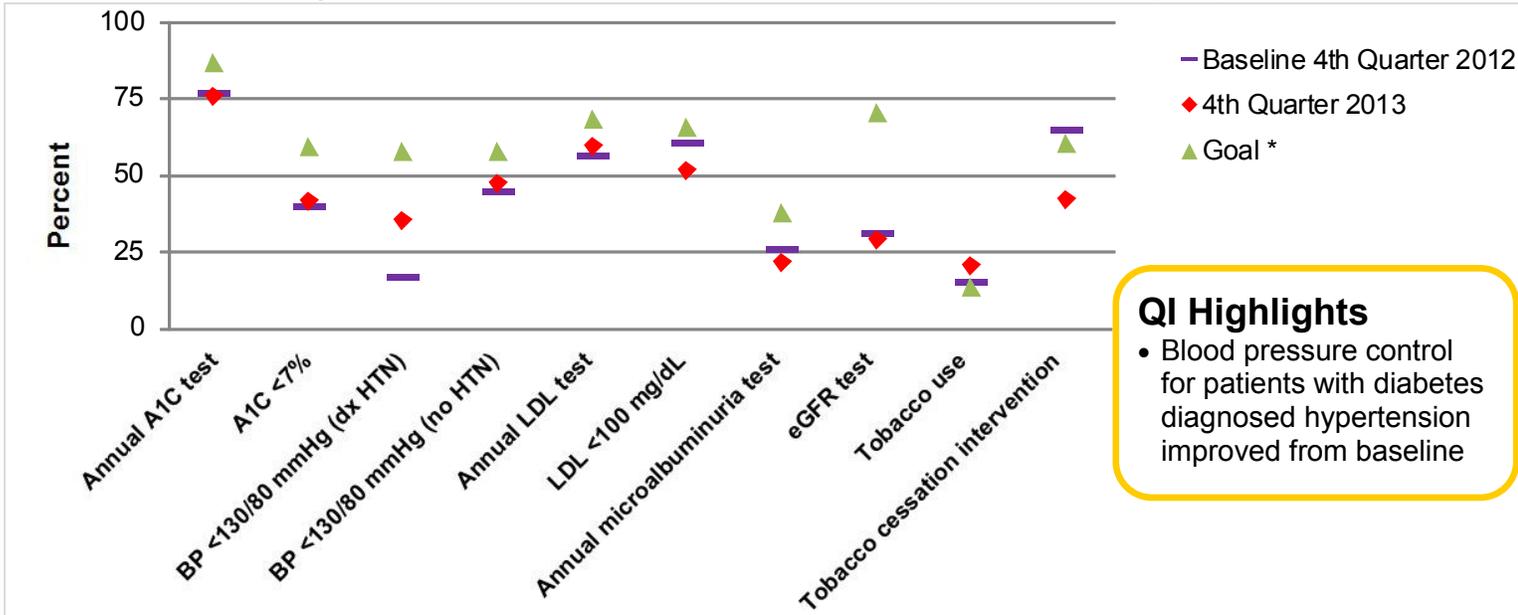


Figure 2. Diabetes care indicators from diabetes self-management education and support programs in Montana participating in the DQCMS, 4th Quarter (Oct—Dec 2013). N=8 clinics; 2,769 patients.



DQCMS = Diabetes Quality Care Monitoring System. Data presented here are for adult patients with diabetes seen within the last year. Montana's statewide quality improvement goals for diabetes were updated in 2013 based upon Healthy People 2020 targets or a 10% improvement from baseline.

Quality Improvement

Choosing Interventions and Testing the Change

Continued from page 1

The Model for Improvement provides a framework for designing, testing and implementing change.¹ The model combines three fundamental questions to guide the work and the four-step Plan-Do-Study-Act (PDSA) cycle.



Part 1 — Fundamental questions to guide the work

1. What are we trying to accomplish?

Clarify which improvements to target and the desired outcomes.

2. How will we know the change is an improvement?

Improvement is demonstrated through measurement of change. Decide what data are necessary to collect. Establish a baseline measure and a target level.

3. What changes can be made that will result in improvement?

Improvement occurs when a change is implemented, but not all changes result in improvement. Testing the change before implementing it will help identify which change are likely to result in improvement.

Part 2 — The PDSA cycle that tests change and is repeated for continuous improvement²

Plan

Define the problem. Describe the current process. Ask questions and make predictions about possible causes of the problem and effects on the process or system. Identify and prioritize potential solutions. Write objectives or an aim statement. Develop measures that will show if the change is an improvement toward the desired result. Create an action plan to carry out the cycle.

Do

Carry out the plan in a controlled environment. Document observations, problems, and unexpected findings. Collect data and begin data analysis on how the change is working.

Study

Complete analysis. Review results to compare to predictions. Summarize lessons learned.

Act

Reflect on the results and assess what should be done. Should the changes be adopted as-is, adjusted, or abandoned? Decide the next PDSA cycle.

Tips for successful PDSA cycles:

1. Get buy-in from management, staff, and patients
2. Plan multiple cycles for testing a change; it is an iterative process
3. Make tests feasible
4. Use a small test size (number of patients)
5. Test over a wide range of conditions
6. Collect useful data
7. Use a quick test. For example, "What change can we test by next Tuesday?"

References

1. U.S. Department of Health and Human Services Health Resources and Services Administration. (2011). *Testing for improvement*. Retrieved from: <http://www.hrsa.gov/quality/toolbox/methodology/testingforimprovement/>
2. Moran, John and Grace Duffy. *The Public Health Quality Improvement Encyclopedia*. Washington, DC: Public Health Foundation, 2012. Print.

Report Highlights

- **Quality Improvement Models**
 - **Initiating Meaningful Quality Improvement**
 - **Choosing Interventions and Testing the Change**
- **Diabetes Care Indicators:**
 - **Primary Care Practices**
 - **Diabetes Education Programs**

Upcoming Events

Diabetes Advisory Coalition Meeting

April 11, 2014
Great Falls, MT

Diabetes Advisory Coalition 20th Anniversary Celebration

July 11, 2014
Helena, MT

QI Coordinators Meeting and 17th Annual Montana Diabetes Professional Conference

October 23-24, 2014
Fairmont Hot Springs Resort, MT

*For more information,
contact Susan Day (406) 444-6677*

Announcements

Chronic Disease Self-Management Program, Montana: Living Life Well Funding Opportunity

- Application due March 19, 2014
- Includes: \$1,500 for training and marketing plus a start-up kit, license, and technical assistance.
- Contact Heather Beck at hbeck@mt.gov or (406) 444-0958

Alert Day[®] - Take It. Share It.

Tuesday, March 25 is American Diabetes Association Alert Day[®]. Encourage your patients to take the Diabetes Risk Test to find out their risk for type 2 diabetes, share the risk test with others who may be at risk, and then start living a healthy and active lifestyle. The risk test can be found at diabetes.org/risktest or by calling 1-800-DIABETES.

Online Resources

www.diabetes.mt.gov

- Montana Diabetes Program State Plan 2009-2014
- Report on the Burden of Diabetes
- Archived Diabetes Quality Improvement Reports and Surveillance Reports from 1998 to present
- Resources for clinicians, diabetes educators, and schools

DQCMS Information

www.risprojects.org/dqcms

- User Manual
- Training Videos
- Helpful Hints
- Help Sheets

Add Printing Disclosure Text



26TH ANNUAL AMERICAN DIABETES ASSOCIATION ALERT DAY[®] 2014

What is American Diabetes Association Alert Day?

American Diabetes Association Alert Day, which is held every fourth Tuesday in March, is a one-day, “wake-up call” asking the American public to take the Diabetes Risk Test to find out if they are at risk for developing type 2 diabetes. This year, Alert Day will kick-off on March 25 and we will continue our campaign through April 25.

In 2013, on Alert Day, we had over 39,000 people take the risk test and during the month of March, we had over 148,000 with 37 percent of them being at high risk for developing type 2 diabetes. We are excited to once again encourage the public to take the risk test by driving them to Facebook where they can also ask questions, engage with our community, and share the test with friends and loved ones. For every Diabetes Risk Test taken, Boar’s Head Brand[®] - a leading provider of premium delicatessen products - will donate \$5 to the American Diabetes Association starting March 25 through April 25, 2014, up to \$50,000.

The tagline for our 26th Annual American Diabetes Association Alert Day will be *“Take it. Share it. Step Out.”* We will not only be encouraging the public to take the risk test and share it, but we will be asking them to start living a healthy and active lifestyle. One way to do this is by joining one of our Step Out: Walk to Stop Diabetes[®] events nationwide. Our Step Out events happen mainly in October and what better way to get active now than by gearing up for a walk event in your area.

Why is Alert Day important?

Diabetes is a serious disease that strikes nearly 26 million children and adults in the United States, and a quarter of them—seven million—do not even know they have it. An additional 79 million, or one in three American adults, have prediabetes, which puts them at high risk for developing type 2 diabetes. Unfortunately, diagnosis often comes seven to 10 years after the onset of the disease, after disabling and even deadly complications have had time to develop. Therefore, early diagnosis is critical to successful treatment and delaying or preventing some of its complications such as heart disease, blindness, kidney disease, stroke, amputation and death.

The Association has made a strong commitment to primary prevention of type 2 diabetes by increasing awareness of prediabetes and actively engaging individuals in preventative behaviors like weight loss, physical activity and healthful eating. Alert Day is a singular moment in time in which we can raise awareness and prompt action among the general public – particularly those at risk.

Who should participate in Alert Day?

Everyone should be aware of the risk factors for type 2 diabetes. People who are overweight, under active (living a sedentary lifestyle) and over the age of 45 should consider themselves at risk for the disease. African Americans, Hispanics/Latinos, Native Americans, Asian Americans, Pacific Islanders and people who have a family history of the disease also are at an increased risk for type 2 diabetes. Studies have shown that type 2 diabetes can often be prevented or delayed by losing just 7 percent of body weight (such as 15 pounds if you

Diabetes Information

call 1-800-DIABETES (1-800-342-2383)
online www.stopdiabetes.com

The Mission of the American Diabetes Association is to prevent and cure diabetes and to improve the lives of all people affected by diabetes.



weigh 200) through regular physical activity (30 minutes a day, five days a week) and healthy eating. By understanding your risk, you can take the necessary steps to help prevent the onset of type 2 diabetes.

What will happen on Alert Day?

For 26 years, the American Diabetes Association has set aside one special day for people to learn if they are at risk for developing type 2 diabetes. Type 2 diabetes is a growing epidemic in the United States, but it can be controlled with knowledge and healthy behavior. From March 25 through April 25, the Association will be encouraging the public to take the Diabetes Risk Test, as well as to share the test with **everyone** they care about - friends, family members and colleagues. As previously mentioned, the Association will be encouraging the public to start living a healthy and active lifestyle by asking them to join a Step Out: Walk to Stop Diabetes event in their area. With each person that takes the test, knows their risk and gets started living a healthy and active lifestyle, the Association is that much closer to stopping diabetes.

The Diabetes Risk Test asks users to answer simple questions about weight, age, family history and other potential risks for prediabetes or type 2 diabetes. Preventative tips are provided for everyone who takes the test, including encouraging those at high risk to talk with their health care provider.

How does one obtain the Association's Diabetes Risk Test and additional information about diabetes and a Step Out event near them?

You can be part of the movement to Stop Diabetes® and get your free Diabetes Risk Test (English or Spanish), as well as information about diabetes and joining a Step Out event by visiting us on [Facebook](#), diabetes.org/risktest or by calling 1-800-DIABETES (1-800-342-2383). Walgreens is supporting the American Diabetes Association Alert Day efforts and you can ask your local Walgreens pharmacist for a copy of the Diabetes Risk Test. Although Alert Day is a one-day event, the Diabetes Risk Test is available year-round.

Who is the primary target audience?

Americans with prediabetes

There are an estimated 79 million, or one in three American adults, who have prediabetes. Those with prediabetes have blood glucose (sugar) higher than normal, but not high enough to be diagnosed with type 2 diabetes. Early intervention via lifestyle changes such as weight loss and increased physical activity can help delay or prevent the onset of type 2 diabetes.

Americans with undiagnosed diabetes

The following segments of the population are at greater risk for having undiagnosed diabetes:

- **Older Americans:** As people grow older, they are at an increased risk for developing diabetes. One out of every four Americans 65 and older has diabetes.
- **High risk ethnic populations:** African Americans, Hispanic/Latinos, Native Americans, Asian Americans and Pacific Islanders.

Don't forget to "Take It. Share It. Step Out." starting on Alert Day!

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online www.stopdiabetes.com

The Mission of the American Diabetes Association is to prevent and cure diabetes and to improve the lives of all people affected by diabetes.



HEALTHY LIVING ZONE AHEAD

Take the important steps to stop an epidemic. On American Diabetes Association Alert Day[®], March 25th, take our one-minute Diabetes Risk Test and find out if you are at risk for type 2 diabetes. Share the test to help others who also may be at risk. Then, participate in a Step Out: Walk to Stop Diabetes[®] event in your community. Begin the path toward a healthier you.



1-800-DIABETES | DIABETES.ORG/RISKTEST
FACEBOOK.COM/AMERICANDIABETESASSOCIATION

ARE YOU AT RISK FOR

TYPE 2 DIABETES?



Diabetes Risk Test

1 How old are you?

- Less than 40 years (0 points)
- 40—49 years (1 point)
- 50—59 years (2 points)
- 60 years or older (3 points)

Write your score in the box.



2 Are you a man or a woman?

- Man (1 point) Woman (0 points)

3 If you are a woman, have you ever been diagnosed with gestational diabetes?

- Yes (1 point) No (0 points)

4 Do you have a mother, father, sister, or brother with diabetes?

- Yes (1 point) No (0 points)

5 Have you ever been diagnosed with high blood pressure?

- Yes (1 point) No (0 points)

6 Are you physically active?

- Yes (0 points) No (1 point)

7 What is your weight status? (see chart at right)

Height	Weight (lbs.)		
4' 10"	119-142	143-190	191+
4' 11"	124-147	148-197	198+
5' 0"	128-152	153-203	204+
5' 1"	132-157	158-210	211+
5' 2"	136-163	164-217	218+
5' 3"	141-168	169-224	225+
5' 4"	145-173	174-231	232+
5' 5"	150-179	180-239	240+
5' 6"	155-185	186-246	247+
5' 7"	159-190	191-254	255+
5' 8"	164-196	197-261	262+
5' 9"	169-202	203-269	270+
5' 10"	174-208	209-277	278+
5' 11"	179-214	215-285	286+
6' 0"	184-220	221-293	294+
6' 1"	189-226	227-301	302+
6' 2"	194-232	233-310	311+
6' 3"	200-239	240-318	319+
6' 4"	205-245	246-327	328+
	(1 Point)	(2 Points)	(3 Points)

You weigh less than the amount in the left column (0 points)

Add up your score.



If you scored 5 or higher:

You are at increased risk for having type 2 diabetes. However, only your doctor can tell for sure if you do have type 2 diabetes or prediabetes (a condition that precedes type 2 diabetes in which blood glucose levels are higher than normal). Talk to your doctor to see if additional testing is needed.

Type 2 diabetes is more common in African Americans, Hispanics/Latinos, American Indians, and Asian Americans and Pacific Islanders.

For more information, visit us at www.diabetes.org or call 1-800-DIABETES

Visit us on Facebook
Facebook.com/AmericanDiabetesAssociation

Adapted from Bang et al., Ann Intern Med 151:775-783, 2009. Original algorithm was validated without gestational diabetes as part of the model.

Lower Your Risk

The good news is that you can manage your risk for type 2 diabetes. Small steps make a big difference and can help you live a longer, healthier life.

If you are at high risk, your first step is to see your doctor to see if additional testing is needed.

Visit diabetes.org or call 1-800-DIABETES for information, tips on getting started, and ideas for simple, small steps you can take to help lower your risk.



Did your patient score 5 or higher on the Diabetes Risk Test?

If so, this person is at increased risk for developing type 2 diabetes.

**Refer your patient to this evidence-based lifestyle change program
delivered by trained lifestyle coaches.**

Program locations are available in:

Anaconda

- Community Hospital of Anaconda (563-8551)

Billings

- Billings Clinic (238-2205)
- St. Vincent Healthcare & the Billings Family YMCA (237-8599)

Bozeman

- Bozeman Deaconess Diabetes Center (556-5331)

Butte

- Butte Community Diabetes Network (723-2960)

Choteau

- Teton Medical Center (466-6051)

Dillon

- Barrett Hospital & HealthCare (683-3041)

Great Falls

- Benefis Health System (455-5516)

Helena

- St. Peter's Hospital (444-2386)

Lewistown

- Central Montana Medical Center (535-6209)

Libby

- Cabinet Peaks Medical Center (283-7319)

Kalispell

- Kalispell Regional Medical Center (751-6707)
Also provides the program in Eureka

Miles City

- Holy Rosary Healthcare (233-4067)
Also provides the program via telehealth to locations in southeastern Montana

Missoula

- Community Medical Center CPG Diabetes and Nutrition Center (327-4420)
Also provides the program in Stevensville
- Missoula City-County Health Department (258-4935)
- St. Patrick Hospital (329-2602)

Polson

- Providence St. Joseph Medical Center (883-8454)

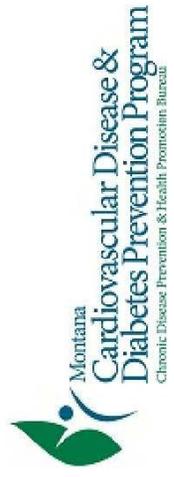
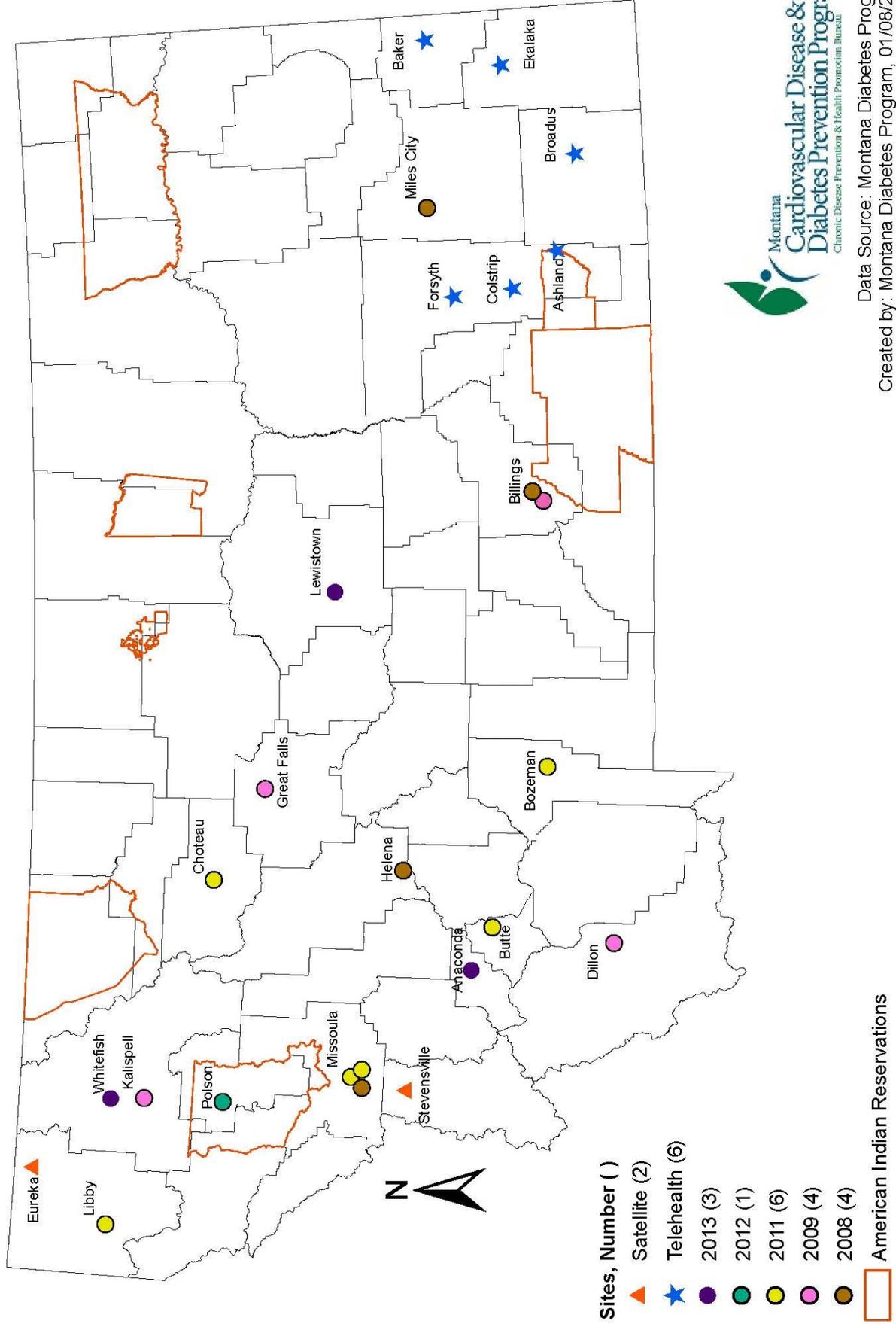
Whitefish

- North Valley Hospital (863-3519)



Learn more and access a referral form at
www.mtprevention.org
or by contacting
Paul Campbell, MS, NASM-CPT
Health Educator
Phone: (406) 444-0593
Email: pcampbell@mt.gov

Cardiovascular Disease and Diabetes Prevention Program Sites, 2008-2014, Montana



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