



Diabetes Education: Thinking Outside the Box

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Native American Rehabilitation Association of the NW, Inc.

IHS Advancements in Diabetes Webinar

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Objectives

- Identify two to three new opportunities to add diabetes education to their daily practice.
- Learn how to assemble and use low-cost diabetes education tools



NARA NW Portland, Oregon

Native American Rehabilitation Association of the Northwest, Inc (NARA NW)

NARA NW

- Founded in 1970 and located in Portland, Oregon
- Originally an outpatient substance abuse treatment center.
- NARA now operates a residential family and youth treatment center, outpatient treatment center, family resource and youth program, a dental program, and two primary health care clinics.
- All sites offer mental health services.
- NARA provides services to over 4,300 urban American Indians and Alaska Natives annually, representing over 250 tribes.
- Active Diabetes Registry: 251 people
- Active Prediabetes Registry: 550 people

NARA Diabetes Treatment and Prevention Team

- **Ruth Anne McGovern, MS, FNP, CDE:** Assistant Medical Director
- **Alison Goerl, RD, LD:** Program Director
- **Patricia Foster:** Program Coordinator/JVN Technician (Hopi/Tewa)
- **Sheila Heuschkel, RD, LD, CDE:** Registered Dietitian (Aleut)
- **Alicia Deas, MSW:** Project Coordinator/Data Manager
- **Dylan Jones, MS, RD, LD, CES, CDE:** Dietitian/Exercise Specialist



Every Visit Is a Diabetes Visit

- Incorporate diabetes education into every medical visit
- EHR (electronic health record) and paper reminders
- Provider RN/MA care team work together
- Socks off — check those feet!
- Chart flag
- Vitals include CBG
- POC A1c and Cholesterol for quick medical evaluation
- Same day JVN referral; often able to see after medical appointment



Education Around Every Corner

- Dedicated Diabetes Team bulletin board: health awareness months, upcoming classes, diabetes education (“Yes Eye Did” and “Knock Your Socks Off”)
- Educational and motivational posters (IHS Catalog, “Rethink Your Drink” poster)



Education Around Every Corner (2)

- Coaches have an open-door policy, hallway check-ins
- Demonstration garden

NARA's Demonstration Garden

Organic and sustainable practices return basic life materials to the soil. Through caring for the land, we continue the ancient practices of our ancestors and pass down a world that supports generations to come.



NARA's Demonstration Garden (2)

For our Urban Gardening class, we teach about organic gardening. Our clinic garden is all organic, and when preparing foods for class, we use as many organic ingredients as possible.



Education Around Every Corner (3)

- Diabetes Prevention Program
 - CDC Prevent T2 Curriculum
 - 26 sessions, taught over one year
- Diabetes Self-Management Class
 - Journey for Control Conversation Map Curriculum
 - Four sessions, taught over four weeks



We Can Prevent Diabetes



Integration of Services

- Relationships with other departments and programs
- Cancer Early Detection Programs, Mental Health/Behavioral Health Consultant, Dental, Nutrition, Inpatient Addiction Treatment
- Saturday Clinics: multidisciplinary “one-stop shop” for annual diabetes care
- Podiatrist, Retinal JVN imaging, Foot Care RN, Provider Visit, Behavioral Health Consultant, Healthy Heart Screening, Casey Eye Institute Mobile Van, Dietitian/Diabetes Educator

Educational Outreach Activities

- Cultural events
- Pow Wows
- Walk With Ease
- Grocery store tour
- Farmers' Market
- Cooking Matters/Food Bank



Educational Outreach Activities (2)

- Building relationships and having fun!
- Gear up: diabetes swag



Teaching Tools

- In many communities, visual teaching tools have been shown to be effective to enhance diabetes education. Today, we plan to share how we teach the basics of diabetes self-management education. We will use hands-on teaching tools made from common household items.
- We would like to acknowledge and thank the Northwest Portland Area Indian Health Board, our fellow IHS Special Diabetes Program for Indians grantees, and the Health Resources and Services Administration for sharing ideas and resources to create this toolkit.

What Are Diabetes Complications?

- Cardiovascular Disease: Damage to the heart, blood & arteries
- Neuropathy: Damage to nerves
- Retinopathy: Damage to eyes
- Nephropathy: Damage to kidneys



Cardiovascular Disease/Heart, Blood & Arteries

- Diabetes dramatically increases the risk of various cardiovascular problems, including coronary artery disease, heart attack, stroke and narrowing of arteries (atherosclerosis).
- If you have diabetes, you are more likely to have heart disease, a heart attack or stroke.
- To reduce your risk of heart disease, stop smoking, monitor your A1C, blood pressure, and cholesterol.

DIABETES
and your **HEART**

NDEP
National Diabetes
Education Program
A program of the National Institutes of Health and
the Centers for Disease Control and Prevention

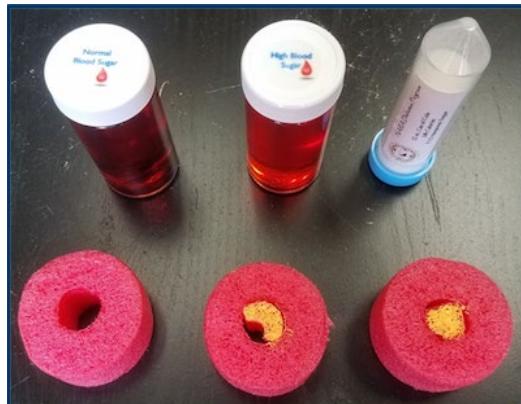

2 out of 3 people
with diabetes die
of heart disease
or stroke.¹

If you have diabetes, you are
2-4 times
more likely to have heart
disease or a stroke than if
you do not have diabetes.¹

Smoking
doubles
the risk of
heart disease
in people with
diabetes.²

Diabetes Kit & Kaboodle: Heart, Blood, and Arteries

- Blood bottles: Normal and high blood sugar. Add corn syrup and red food coloring to one bottle (three parts corn syrup and one part water) to show how sluggishly cells move when sugar is high. The second bottle is water and red food coloring only.
- Blocked Arteries: Made of pool noodles/car wash sponge. This illustrates how high sugar or fat will block arteries, increasing the risk of heart attack or stroke.
- Sugar Tube: amount of sugar in a can of Coca Cola (~ 9 tsp).



Neuropathy/Nerve Disease

- Excess sugar can injure the walls of the tiny blood vessels (capillaries) that nourish your nerves, especially in your legs. This can cause tingling, numbness, burning or pain that usually begins at the tips of the toes or fingers and gradually spreads upward. Left untreated, you could lose all sense of feeling in the affected limbs.
- Nerve damage and poor blood flow to the feet increases the risk of complications. Left untreated, cuts and blisters can develop serious infections, which often heal poorly and can lead to amputations.
- Damage to the nerves related to digestion can lead to nausea, vomiting, diarrhea or constipation.
- And, in men, nerve damage may lead to erectile dysfunction.

Neuropathy/Nerve Disease (2)

- To reduce your risk of neuropathy, stop smoking, monitor your A1C, blood pressure, and cholesterol.
- To reduce your risk of amputation, check your feet daily, remove your shoes and socks at all medical visits, and get a complete foot exam annually.



Diabetes Kit and Kaboodle: Neuropathy

- With bare hands, feel the roughness of the scrub brush and screw the wing-nut onto the bolt.
- Put on the “neuropathy” gloves and attempt to do the same two activities. This simulates how neuropathy affects the way that things feel to us. It affects fine motor skills as well.



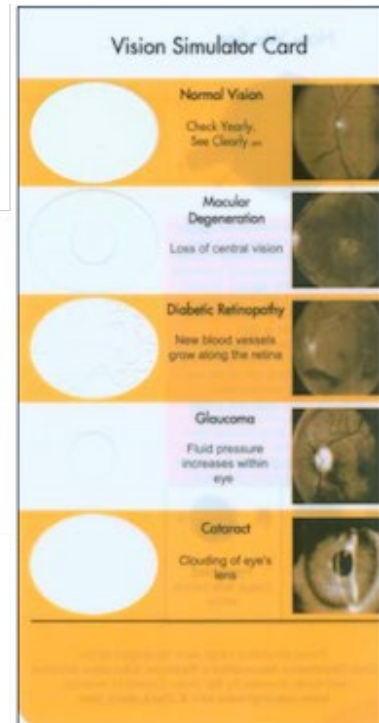
Retinopathy/Eye Disease

- Diabetes can damage the blood vessels of the retina (diabetic retinopathy), potentially leading to blindness.
- Diabetes also increases the risk of other serious vision conditions, such as cataracts and glaucoma.
- To reduce your risk of retinopathy, get an annual diabetic eye exam, stop smoking, monitor your A1C, blood pressure, and cholesterol.



Diabetes Kit and Kaboodle: Retinopathy

- **Vision Simulation Card:** Hold the card up to your eye to see how your vision is affected by different eye conditions.
- **Retinopathy glasses:** Reading glasses with clear nail polish applied to lenses. Simulates vision changes with retinopathy. Try reading through them or attempt to place the nut on the bolt (from the Neuropathy kit.)



Nephropathy/Kidney Disease

- The kidneys contain millions of tiny blood vessel clusters (glomeruli) that filter waste from your blood (like a colander.)
- Diabetes can damage this delicate filtering system (punch holes in the colander).
- Severe damage can lead to kidney failure or irreversible end-stage kidney disease, which may require dialysis or a kidney transplant.
- To reduce your risk of nephropathy, ask your provider to monitor your kidney function, stop smoking, monitor your blood pressure, cholesterol and A1C.

Diabetes Kit and Kaboodle: Nephropathy

- Place some of the beads labeled “Glucose & Protein” into the colander labeled “Healthy Kidney”. None of them pass through, which simulates the kidney’s ability to remove waste while holding onto sugar and protein.
- Place the colander with the holes cut into it into the colander labeled “Distressed Kidney” and repeat #1. Some of the beads will pass through. This simulates the damage that can be done by high blood sugars.
- This is a great one to practice ahead of time. Be sure to have a colander under the distress kidney colander or you will have a lot of beads to pick up.



Diabetes Kit and Kaboodle



Working Toward a Diabetes-Free Future



Resources

- Indian Health Services, Division of Diabetes Treatment & Prevention
- <https://www.ihs.gov/diabetes/?CFID=173885804&CFTOKEN=10647543>
- American Diabetes Association website
- <https://www.diabetes.org/>

Thank You for Joining Us!

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