Healthy Heart, Healthy Brain...

Talking to American Indian and Alaska Native Patients About Brain Health

Guidance for Primary Care Providers - Key Brain Health Promotion Facts

♦ 1 out of 3 American Indians who live to 65 will develop dementia.
♦ Native elders with heart disease, high blood pressure, diabetes, or depression have a higher risk for Alzheimer’s disease or dementia.
♦ Evidence for the following three interventions for healthy brain promotion are encouraging: blood pressure management, increased physical activity, and cognitive training.
♦ Evidence-based behavior change interventions: cognitive-behavioral therapy, motivational interviewing, mindfulness/mind-body, positive psychology, and management of mental health conditions. Consider referrals for behavior modification.
♦ Observe and evaluate cognition in all older adults at every visit. Perform cognitive screening when indicated by observation, patient or family concern.
♦ Alzheimer’s Association offers a cognitive assessment toolkit with brief screenings tools to quickly assess for impairment and aid with referral and management. To learn more, visit: https://www.alz.org/professionals/healthcare-professionals/cognitive-assessment.

Explaining the Heart-Brain Connection to Your Patients

We now know that reducing high blood pressure, which helps preserve heart health and prevents strokes, is the best thing you can do to try to prevent dementia and Alzheimer’s. Your heart and brain are connected by “rivers” in your body. The brain is the command center and the heart works as a pump to send energy through the rivers to the brain to keep us going. There are things you can do to ensure that the rivers are healthy, open and flowing and to keep body and mind healthy.
### Health Factor or Behavior

#### Blood Pressure

**American College of Cardiology/American Heart Association Guidelines (2017)**

<table>
<thead>
<tr>
<th>Status</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>&lt;120 systolic AND &lt;80 diastolic</td>
</tr>
<tr>
<td>Elevated</td>
<td>&gt;120-129 systolic AND &lt;80 diastolic</td>
</tr>
</tbody>
</table>

**Patient Messaging**

The only way to know your blood pressure is to have your blood pressure checked.

Understanding your blood pressure numbers is key to controlling high blood pressure.

It should be less than 120/80 mmHg.

Take your blood pressure medication (if prescribed) even if you feel good.

Have your blood pressure checked regularly.

We can teach you how to check your blood pressure at home.

**Potential Interventions**

- Medication
- Reduce sodium in diet
- Daily physical activity
- Quit smoking
- Referral for medical nutrition therapy
- Routine screening
- Plan for patient self-monitoring

Review sample triage protocol for emergency, urgent and non-urgent management of high blood pressure [http://www.astho.org/Healthy-Aging/](http://www.astho.org/Healthy-Aging/)

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#### Fasting Blood (plasma) Glucose

**American Diabetes Association**

<table>
<thead>
<tr>
<th>Status</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood glucose level</td>
<td></td>
</tr>
<tr>
<td>Normal</td>
<td>less than 100 mg/dl</td>
</tr>
<tr>
<td>Prediabetes</td>
<td>100 mg/dl to 125 mg/dl</td>
</tr>
<tr>
<td>Diabetes</td>
<td>126 mg/dl or higher</td>
</tr>
<tr>
<td>A1C (%) or eAG (mg/dL)</td>
<td></td>
</tr>
<tr>
<td>Normal</td>
<td>&lt; than 5.7%</td>
</tr>
<tr>
<td>Prediabetes</td>
<td>5.7% to 6.4%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>6.5% or higher</td>
</tr>
</tbody>
</table>

**Patient Messaging**

The only way to know your blood glucose level is to have your blood tested.

Understanding your blood sugar numbers and your A1C levels are key to controlling your diabetes.

Normal blood sugar is less than 100 and a normal A1C is less than 5.7%.

Take your diabetes medication (if prescribed) even if you feel good.

Have your blood sugar and A1C levels checked regularly.

Living with diabetes can make you feel stressed or sad. Talk to me (or your diabetes educator) if you start to feel overwhelmed.

**Additional Recommendations**

- Medication
- Referral for diabetes self-management education (DSME); Medicare covered benefit up to 10 hours
- Referral for medical nutrition therapy
- Referral for weight loss, physical activity, diabetes distress counseling
- Annual screening

Review Standards of Medicare Care in Diabetes – 2019: Abridge for Primary Care Providers [http://clinical.diabetesjournals.org/content/36/1/14](http://clinical.diabetesjournals.org/content/36/1/14)
**Health Factor or Behavior**

**Cholesterol**

*American Heart Association*

**HDL** (good cholesterol)

**LDL** (bad cholesterol)

*Ranges no longer used

HDL & LDL are evaluated in context of other risk factors*

**Triglycerides:** A high triglyceride level combined with low HDL cholesterol or high LDL cholesterol is linked with fatty buildup in artery walls.

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**Patient Messaging**

The only way to know your cholesterol is to have it checked through a blood test.

You should have your cholesterol checked regularly and know your numbers.

Take your cholesterol medication (if prescribed) even if you feel good.

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**Potential Interventions**

- Medication
- Heart-healthy diet
- Daily physical activity
- Smoking cessation intervention if relevant
- Weight loss
- Referral for medical nutrition therapy, weight loss, physical activity counseling
- Routine screening

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**Medication Adherence**

Adherence is an important health factor for the management of hypertension, high cholesterol, and diabetes. Suggest adherence vs. compliance.

Effective two-way communication with healthcare providers doubles the odds of patients taking medication properly.

Consider working with local pharmacists to assist with counseling and monitoring.

Medication may be prescribed by your health care provider to help control your blood pressure, cholesterol or diabetes numbers.

It is important to go to a pharmacy to have the prescription filled and to take the medication as directed by your health care provider.

If you have trouble paying for your prescriptions or the medicine makes you feel bad, talk to your doctor about your concerns. Don’t just stop taking them.

Your pharmacist can talk to you about your medications and if needed contact us if you are having side effects or problems taking them.

**SIMPLE method for medication adherence:**

- **Simplify** the regimen: promote adherence tools; match to daily routine
- **Impart** knowledge: write it down for them; reinforce verbally
- **Modify** patients’ beliefs and behavior: provide positive reinforcement; understand fears
- **Provide** communication and trust: let patients speak freely; use plain language; ask for input
- **Leave** the bias: ask questions about attitudes, beliefs, and cultural norms
- **Evaluate** adherence: ASK; use medication adherence scale

### Health Factor or Behavior

**Smoking**

Ceremonial tobacco used infrequently is not likely to have the same negative health effects as commercial tobacco use.

### Patient Messaging

Never smoke or if you do smoke, stop now.

Ceremonial tobacco use may be okay if it is not done regularly.

We can talk about steps we can take together to help you quit.

Cigarette smoking harms nearly every organ of the body, causes many diseases, and reduces the health of smokers in general.

Quitting smoking lowers your risk for smoking-related diseases and can add years to your life.

### Potential Interventions

- Brief physician counseling (up to 8 counseling sessions may be covered by Medicare Part B at no cost to the patient)
- Medication (nicotine replacement or Bupropion)
- Referral to quit line/telephone counseling

**5A Model for smoking cessation:**

- **Ask:** every patient at every visit about tobacco use
- **Advise:** about the benefits of smoking cessation
- **Assess:** patient’s readiness to quit; introduce harm reduction strategies
- **Assist:** patients with a quit plan. Combination of counseling and medications is most successful.
- **Arrange:** follow-up visits starting at 1 week

Review more on the 5A Model or Ask-Advise-Refer programs [https://dcp.psc.gov/OSG/pharmacy/sharedresources_tctp.aspx](https://dcp.psc.gov/OSG/pharmacy/sharedresources_tctp.aspx)
Health Factor or Behavior

Physical Activity

American Heart Association

Adults should also do muscle-strengthening activities on 2 or more days per week.

Patient Messaging

Be physically active every day.
Try to get 1½ - 2 hours of exercise EVERY week.
Try three 10-minute walks each day instead of 30 minutes of exercise at a time.
You should also work on keeping up or building muscle strength. Simple things like wall push-ups (demonstrate) or chair squats can be done at home while watching TV.

Potential Interventions

Recommended exercise guidelines (modify as necessary for chronic conditions):

- Adults should do 2 hours and 30 minutes a week of moderate-intensity, or 1 hour and 15 minutes (75 minutes) a week of vigorous-intensity aerobic activity, or equivalent combination of moderate- and vigorous-intensity aerobic physical activity.
- Aerobic activity should be performed in episodes of at least 10 minutes, spread throughout the week.

Weight/ Body Mass Index (BMI)

US Department of Health and Human Services

*BMI range: 18.5-24.9 kg/m² (use BMI calculator)
Weight loss of 5-10 percent of initial weight will lower risk of disease.

Frail elders or those with low muscle mass should NOT try to lose weight

Maintain your ideal body weight.
You can work to lose weight by changing how you eat and getting more physical activity.
If you lose just 10% of your weight, it will make a big difference in your risk factors.
We can help you with steps to lose weight and be more active.

- Referral to registered dietitian
- Referral to structured weight loss program
- Follow-up for management of weight reduction program by primary care

3 steps to talk about weight management:

- Set an effective tone: ask permission, non-judgmental
- Assess motivation/readiness: “On a scale of 1-10, how ready are you to lose weight?”
- Build a partnership with the patient: set 2-3 realistic goals together

Review more discussion tips
Health Factor or Behavior

Heart-Healthy Diet

*American Heart Association*

**Food choices:**
5 fruits/vegetables a day, low-fat dairy & lean meats, avoid processed food and meats, and sugary beverages

**Sodium:**
1 tsp salt = 2300 mg of sodium, ideal is 1500 mg/day, but no more than 2300 mg/day (most eat 3400 mg/day)

**Food labels:**
140 mg or less/serving is "low sodium"

Patient Messaging

Traditional foodways may be an opportunity to improve dietary habits; “tell me about what you eat each day.”

Read food labels for sodium content and know what the serving size is.

Eat plenty of vegetables and fruits, and whole grains.

Switch to fat-free or low-fat foods and meat and eat more fish, poultry, beans, and nuts.

Cut down on foods that are high in saturated fat, such as fatty meats, dairy products, and tropical oils such as coconut, palm kernel, and palm oils; sugar-sweetened beverages and sweets.

We can help you learn to read labels and make healthier food choices.

Potential Interventions

- Referral to registered dietitian
- Follow-up appointments for physician office counseling on diet
- Refer to community resources and programs on health and nutrition

Alcohol Use

*American Heart Association*

No more than 2 drinks/day (men)

No more than 1 drink/day (women)

Consider cultural significance of alcohol and drug use in and availability of services. Targeted referrals enhance physical health as well.

Don’t drink more than one alcoholic drink per day if you’re a woman and two if you’re a man.

Drinking a lot at one time or drinking many days of the week can have a direct impact on how your brain functions. You can have trouble concentrating, have memory loss, have trouble focusing your attention and more.

We can help you if you feel like you have a problem with alcohol or drug use.

“To help us understand how we can help you, I would like to spend a few minutes asking you some questions that we ask everyone. How many times in the past year have you:”

- (for men) had 5 or more drinks (beer, wine, or hard liquor) in a day?
- (for women or anyone over 65) had 4 or more drinks in a day?
- used recreational or prescription drugs to get high?

If response to either question is yes, implement CAGE questionnaire [https://www.integration.samhsa.gov/A_Discussion_Guide_for_Primary_Health_Care_Providers.pdf](https://www.integration.samhsa.gov/A_Discussion_Guide_for_Primary_Health_Care_Providers.pdf)
Health Factor or Behavior

**Sleep**

*American Academy of Sleep Medicine and Sleep Research*

Typical adults need 7 hours of sleep/night

Less than 7 hours is linked to greater risk of obesity and diabetes

**Patient Messaging**

Get 7 hours of sleep per night.

Not getting enough sleep can cause or make it harder to control other health problems like diabetes or weight problems.

If you are having trouble sleeping, we can help you if we talk about it.

**Potential Interventions**

- Referral for sleep study
- Review of medications that can interfere with sleep

Implement the Pittsburg Sleep Quality Index to assess degree of sleep interference

[http://sleep.pitt.edu/research/instruments.html](http://sleep.pitt.edu/research/instruments.html)

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**Falls**

Falls with resultant moderate or severe head injuries can injure the brain and increase the risk of certain types of dementia or Alzheimer’s.

Utilize the Centers CDC’s STEADI algorithm for fall risk screening, assessment and intervention to assess fall risk [https://www.cdc.gov/steadi/pdf/STEADI-Algorithm-508.pdf](https://www.cdc.gov/steadi/pdf/STEADI-Algorithm-508.pdf)

Falling and hitting your head can injure your brain and increase the chance of dementia or Alzheimer’s.

Reduce the chance of falling by doing simple strength and balance exercises at home three times per week.

To help reduce the chance of you falling at home:

- Get rid of small rugs, floor mats, and things you can trip over at home.
- Put grab bars in your bath tub or shower.
- Move slower when getting up.
- Use a cane or walker if you are unsteady.
- Add more lights around the house and use a night light when sleeping.

- Conduct falls assessment
- For home-bound or frail adults, consider home occupational therapy assessment

**Selected STEADI interventions:**

**Low risk:**

- Patient education
- Vitamin D +/- calcium
- Refer for strength and balance exercise (community or fall prevention program)

**Moderate risk:**

- Low risk interventions + refer to PT to improve gait, strength and balance

**High risk:**

- Low risk + moderate interventions +
- Conduct multifactorial risk assessment
- Manage and monitor hypotension
- Manage medications
- Address foot problems
- Optimize vision
- Optimize home safety
Cognitive Activities

NASEM recommends cognitive training as an intervention to aid in prevention of cognitive impairment. In older adults with normal cognition, training in reasoning and speed improves performance in these areas and select IADL function for up to 10 years.

Patient Messaging

It’s important to keep your mind active. Your mind is like a muscle and if you don’t use it, you lose it.

Work to keep your mind busy: take classes, do cross word puzzles, read, go to your senior center, play cards, or visit with friends and family.

The local senior center has several programs for older adults you should consider. [Provide contact information for referral]

Potential Interventions

- Recommend community programs/services designed to provide individual and group interventions aimed at promoting cognitive training-like activities, e.g., senior center, Title VI agencies, congregate meal sites.
- Consider referral for cognitive training if indicated.
- Consider referrals for transportation services if needed.

Social Isolation

Social isolation increases risk of depression, abuse, falls, substance abuse, heart disease, dementia, and contributes to other health issues. It can also lead to increased health care utilization.

It’s important to that you maintain connections with people in the community. Being isolated from people can cause problems with your health.

It gets harder to go out as you get older and sometimes driving is harder, but you should still try to go out and visit in the community as much as you can.

Good places to meet and talk with people are church if that is something you like to do, the local senior center, and visiting with family and friends.

The local senior center has several programs for older adults you should consider. [Provide contact information for referral]

Potential Interventions

- Recommend community programs/services designed to provide individual and group interventions aimed at reducing social isolation, e.g., senior center, Title VI agencies, congregate meal sites.
- Consider referrals for transportation services if needed.

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