Welcome! Today we’ll discuss some of the important relationships between physical health and substance use that clinicians may encounter as they apply the SBIRT process in practice.
We’ll start by considering substance-related health effects that occur concurrently with substance use – both “risky” drinking that is the focus of the SBIRT process, and also substance use disorders.

We’ll also review the health effects of alcohol and think about substance intoxication that may require medical attention and specialized treatment.
As we briefly reviewed in our introductory SBIRT program, substance use can have an impact on many parts of our bodies. For individuals with pre-existing health problems – and particularly for those with complex medical problems that are treated with a variety of different medications – substance use can really complicate the person’s health AND treatment of their medical problems.

Reference: Beyond Hangovers – understanding alcohol’s impact on your health
In the earlier training module, *SBIRT for the Special Needs of Older Adults*, we briefly reviewed some of the common health challenges older adults face, and how drinking – in particular – can complicate the course and outcome of treatment. Today we’ll take a little deeper look at some of those problems.
Most of what is known today about health risks relates to excessive alcohol use. However, there is also a growing body of evidence about both illicit drugs and misuse of opioids. As listed on the slide, there are some great educational materials available at no cost, which can help with educating peers in health care settings and clients alike. We encourage you to take time to review these to supplement the content provided in this module.
While it’s beyond the scope of this module to review common physical findings, lab values, or other data that may relate to substance use, we urge you to think carefully about health-related complications of alcohol and drug use as antecedents to discussion. The SBIRT annual screen is just one way that health care providers may detect substance use.
Alcohol-related disruptions to neurotransmitters can trigger mood and behavioral changes, including depression, agitation, memory loss, and even seizures. With long-term and heavy use, alterations in neurons lead to brain mass and structure changes that may affect a wide range of abilities.

And as we reviewed in the program for youth, there are special risks associated with substance use early in life, from pregnancy through adolescence.

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References:
Beyond Hangovers – understanding alcohol’s impact on your health

The Affects of Long Term Drug Use On The Brain (http://www.narconon.org/blog/drug-use/the-affects-of-long-term-drug-use-on-the-brain/)

The Influence of Substance Use on Adolescent Brain Development (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2827693/)
Researchers now understand that drinking moderate amounts of alcohol can protect some individuals from the risks of coronary artery disease. However, they also know that binge or long-term drinking and drug use cause a wide variety of cardiovascular risks. Evidence also indicates that drug use has considerable implications for cardiac health – from risks of myocardial infarction to arrhythmias.

References:
Beyond Hangovers – understanding alcohol’s impact on your health

Addiction, Heart Disease, and Stroke
(https://www.recoveryconnection.com/addiction-resources/addiction-health-issues/addiction-heart-disease-stroke/)
The more a person drinks, the higher the risk for a variety of cancers.

The National Cancer Institute identifies alcohol as a risk factor for mouth, esophagus, pharynx, larynx, liver, and breast cancers. Heavy drinking can also increase the risk of developing other types of cancer, such as colon or rectal cancer.

References:
Beyond Hangovers – understanding alcohol’s impact on your health

Medical Consequences of Drug Abuse – Cancer
Drinking too much alcohol can weaken the immune system, which makes it easier for diseases to overtake the body. It can suppress both the innate and acquired immune systems, creating vulnerability to illness and disease that the person would otherwise resist.

References:
Beyond Hangovers – understanding alcohol’s impact on your health
Heavy drinking causes fat to build up in the liver, which can lead to dangerous inflammations and also development of scar tissue. Excessive scar tissue can lead to cirrhosis of the liver. Complications of cirrhosis may include jaundice, insulin resistance and type 2 diabetes, and liver cancer. Chronic use of some drugs – such as heroin, inhalants, steroids, and opioids – can also lead to significant liver damage.

References:
Beyond Hangovers – understanding alcohol’s impact on your health
Long-time excessive alcohol consumption can lead to pancreatitis. Damage can also be caused by heroin, cocaine, and non-medical use of prescription drugs. Pancreatitis is a risk factor for the development of pancreatic cancer.

References:
Beyond Hangovers – understanding alcohol’s impact on your health

The Effects of Drug Abuse on Your Pancreas (http://www.drugrehabfl.net/the-effects-of-drug-abuse-on-your-pancreas/)
Certain drugs and the excessive use of alcohol can cause kidney damage or lead to kidney failure.

References:
Alcohol and Your Kidneys (https://www.kidney.org/atoz/content/alcohol)

Medical Consequences of Drug Abuse – Kidney Damage
Another important consideration is the relationship between tobacco use and substance use. As outlined on the slide, there’s a strong relationship between smoking and both alcohol and drug use. In turn, we urge thoughtful consideration of possible substance use among clients who may smoke, particularly youth.

References:
Smoking and Adolescence
(https://www.drugabuse.gov/publications/research-reports/tobacco/smoking-adolescence)

Alcohol and Tobacco

Substance Use and Tobacco
(http://www.publichealth.va.gov/smoking/substance-use-tobacco.asp)

This is just a brief list of medical conditions that may become more complex when substance use is involved. Alcohol and drug use can make the medical condition worse, or more difficult to manage. For those who use multiple drugs to treat their health conditions, alcohol use can interact with those medications and cause problems, particularly in older adults who have multiple medical conditions. In short, this is another important sub-population to carefully monitor for substance use!

References:
Psychotropic drug use and alcohol consumption among older adults in Germany (http://bmjopen.bmj.com/content/6/10/e012182.reviewer-comments.pdf)

Alcohol, drugs and much more in later life (http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1516-44462002000500008)
You are not expected to use detoxification methods with your clients. However, it’s important to understand warning signs that a client may be using alcohol or drugs at a level where they need help to safely stop. Being prepared is really the main issue.
The signs and symptoms of withdrawal from alcohol and drug use cover a wide range of both emotional and physical symptoms. Of equal importance, withdrawal symptoms vary from person to person.

References: Withdrawal
(http://www.addictionsandrecovery.org/withdrawal.htm)
The most dangerous physical withdrawal symptoms come from suddenly stopping the use of alcohol and tranquilizers. The risk of having withdrawal symptoms that require hospitalization increases with each sudden withdrawal.

Reference: Withdrawal
(http://www.addictionsandrecovery.org/withdrawal.htm)
Some individuals may present to you asking for help with detoxification from alcohol or drugs. Decisions about next steps should be guided by thorough evaluation AND also what options are readily available.

For example, you may attempt to refer the patient for specialty treatment, but the service is already full and wait-listed. Having a working relationship with specialty services ahead of time will help in the decision-making process needed to keep the person safe. As discussed in the SBIRT Core curriculum, a “warm handoff” that supports the person as they get to treatment is essential. Individuals with strong support systems are more likely to succeed.

In some cases, emergency services may be indicated, and clearly any dangerous symptoms of withdrawal will require immediate emergency care.

Reference: Detox: Summary & Key Issues to Remember (http://iusbirt.org/course2/detox-summary-key-issues-to-remember/)
While every individual’s experience with detox will be different, there are guidelines to assist in clinical decision-making. The one provided by the American Addiction Centers is a good example, but there are others that may provide better guidance based on your clinical setting and the primary population that you serve. As before, collaborating with substance use specialty care providers in advance of a crisis can ease the tension of knowing what is best for individual clients in your practice.

Reference: Alcohol Withdrawal Treatment, Symptoms, and Timeline (http://americanaddictioncenters.org/withdrawal-timelines-treatments/alcohol/)
In summary, concurrent medical and substance use disorders demand thoughtful assessment and treatment. Using standardized scales and physical findings based on assessments helps clinicians better gauge therapeutic next steps. While treatment can be challenging for those with dual diagnoses or co-occurring conditions, understanding the complexity of issues is an important first step in the provisions of comprehensive, competent care and treatment.