Depression, Alcohol and Farm Stress: Addressing Co-Occurring Disorders in Rural America
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The United States is facing a farm crisis. As a result, farm stress is escalating, and farm families are in need. Growing numbers of farmers are experiencing substance abuse disorders and mental health concerns.

Primary care, behavioral health and social work professionals are being called upon to meet the unique health needs of farming families in rural communities across the nation.

Many recent challenges have placed farmers, ranchers, and agricultural producers at increased risk for poor health from stress and mounting mental health challenges because of their occupation.

The term farm stress is often used to refer to the unique blend of pressures faced by individuals experiencing the challenges of maintaining a profession and livelihood in an agricultural profession.
The Technology Transfer Center Network (TTC Network) was developed by the Substance Abuse and Mental Health Services Administration (SAMHSA) to aid in the dissemination and implementation of evidence-based practices in the areas of prevention, treatment and recovery support for substance use disorders (SUD) and mental illness. The implementation of a national network of regional centers has allowed for focused and responsive training to best address the needs of the communities these centers operate within. In response to the increasing needs of farmers and ranchers, the Mountain Plains Addiction Technology Transfer Center (Mountain Plains ATTC) and the Mountain Plains Mental Health Technology Transfer Center (Mountain Plains MHTTC) have prioritized resources to these communities.

The Mountain Plains ATTC, a partnership between the University of North Dakota and the University of Nevada – Reno, is tasked with providing training and technical assistance in evidence-based resources for substance use treatment providers in Region 8. The Mountain Plains ATTC’s goal is to enhance substance use disorder (SUD) treatment and recovery services for individuals and family members.
The Mountain Plains MHTTC, a partnership between the University of North Dakota and the Western Interstate Commission for Higher Education (WICHE), is tasked with providing free training and technical assistance in evidence-based resources for mental health providers in Region 8.

The Mountain Plains MHTTC’s goal is to increase the ability of mental health providers to respond to the needs of individuals experiencing serious mental illness (SMI) and serious emotional disturbance (SED).

The Mountain Plains work to accomplish their goals by providing free innovative and accessible learning opportunities on evidence-based practices to interested parties in Region 8, especially those residing in rural and remote areas.

SAMHSA has supported the request of the Mountain Plains to leverage their extensive experience working in rural and remote communities, and to focus on providing training and technical assistance resources for mental health and substance use treatment and recovery providers working in rural and remote areas. The two centers utilize their experience and perspective to ensure training is responsive to the unique challenges and barriers presented by delivering care in a rural and remote setting.

There are more than three dozen definitions of rural areas. Applying one definition to “rural” is complicated by changing community demographics, urban sprawl, and diverse geographies.

Regardless of the definition, rural areas are commonly characterized by a combination of low population density (sparseness), isolation (distance from an urban center), and small size (total population).

In addition to the proportion of these states that identify as rural or frontier counties, states in Region 8 also report a majority of their counties as mental health provider shortage areas and primary care health provider shortage areas.
RURAL BARRIERS TO SUBSTANCE USE AND MENTAL HEALTH SERVICES ARE COMMONLY SUMMARIZED WITHIN THREE CATEGORIES: ACCESSIBILITY OF SERVICES, AVAILABILITY OF SERVICES, AND ACCEPTABILITY.  

**Accessibility** – Rural residents may have limited access to mental healthcare due to cost of services, insurance coverage, and lower behavioral health literacy, which allows mental health concerns to go unrecognized and/or untreated. The remote nature of living rural typically requires residents to travel long distances to receive services.

**Availability** – County-level estimates of mental health professional shortage in the United States report that higher levels of unmet need for mental health professionals exist in counties that are more rural and have lower income levels.

**Acceptability** – Rural residents are likely to experience self-stigma, fear, or embarrassment related to seeking out mental healthcare due to internal beliefs, or may not recognize symptoms as mental illness.
The Mountain Plains ATTC and the Mountain Plains MHTTC recognize these unique barriers facing rural communities and understand that rural communities cannot always utilize resources or trainings developed for meeting the needs of individuals with substance use disorders and mental illness more generally. Oftentimes these resources and guides omit discussion of the unique barriers present in rural areas. For example, rural substance use and mental health treatment programs, community members, and care providers must address perceptions of stigma that arise in rural areas as a result of denser social networks.

Additionally, evidence suggests that individuals seeking substance use treatment may face undue burdens to access evidence-based, medically supportive care, possibly limiting treatment and decreasing the likelihood of beginning or maintaining recovery. Similarly, rural populations may have a more difficult time recognizing the signs and symptoms of various mental illnesses which amplifies issues of behavioral healthcare access.
“If you’ve seen one rural town you’ve seen one rural town.” This adage reminds us that not all rural communities are the same and not all rural people are the same.

Rural communities are diverse and their culture is shaped by many factors including weather, primary options for employment, heritage, access to health and behavioral healthcare, and proximity to urban areas to access goods and services.

This resource guide will examine the complexities of working with farmers, farm workers, and farm families who are experiencing the challenges of maintaining a healthy lifestyle in a highly stressful environment. This guide is written with the perspective that providing care in rural and remote settings presents unique barriers when addressing the needs of individuals with co-occurring mental health and substance use disorders. The goal of this document is to provide insight and resources for addressing the needs of farmers, ranchers and agricultural producers who may be experiencing increased mental health challenges because of the stresses of their livelihood.
WHO ARE AMERICA'S AGRICULTURAL PRODUCERS?

America’s agricultural producers represent a wide range of industries, occupations and work environments. They are often part of multi-generational farm workers and are an ever-changing landscape of people.

DEFINITIONS:

» FARM – ANY PLACE FROM WHICH $1,000 OR MORE OF AGRICULTURAL PRODUCTS WERE PRODUCED OR SOLD.*

» FARM PRODUCER – SOMEONE WHO IS INVOLVED IN MAKING DECISIONS FOR A FARM.8

» FARMER – FARMER WILL BE USED THROUGHOUT THE DOCUMENT TO COLLECTIVELY REFER TO ALL TYPES OF FARMERS, RANCHERS, AND AGRICULTURAL PRODUCERS.

*Use of the term farm is not meant to exclude the work of ranchers, dairy farmers, horticulturists, or any of the many industries producing agricultural products.

Farm, as defined by the USDA, is intentionally broad to be inclusive of all the work done by farmers, ranchers, and every variety of agricultural producer as well as the many industries producing agricultural products.

In an interview with Sean Brotherson from the North Dakota State University Extension, Brotherson explained that it is understood that this one definition cannot detail the differences in lifestyle, culture and self-identity that exist for farmers, ranchers, and agricultural producers.

Rather, the broad definitions of farming and agricultural production have helped improve the identification of people involved in agricultural work and have allowed for greater understanding of the type of people involved in America’s agricultural economy.9

Use of the term farm is not meant to exclude the work of ranchers, dairy farmers, horticulturists, or any of the many industries producing agricultural products.
FARMING FAMILIES AND CHANGES TO THE LANDSCAPE OF FARMING

Farming has been, and continues to be, an industry directly tied to long-term family involvement.

Family farms account for 98% of all farms in America and generate 88% of all agricultural production. More than 90% of U.S. farms, most of which are family-owned and operated, are classified as small with a gross cash farm income of $250,000 or less.

In 2017 over 73% of farmers had at least eleven years of experience farming. Furthermore, the 2017 USDA agriculture census data shows that more individuals are identifying as primary producers and that the number of farms with two producers increased by 7% between 2012 and 2017, while the number of individual producers declined during this same period. The 2017 census also found that female producers are becoming increasingly involved in farming with 78% of female producers being involved in day-to-day decision-making.

The 2012 Census of Agriculture noted 151,942 minority-operated farms, and Hispanic principal operators increased by 21% from 2007 to 2012. Between 2012 and 2017 the total number of farm producers increased 6.9% while the number of female farm producers increased 26.6%. During the same period the number of operating farms decreased by 3.2%. The average age of farmers continues to rise and in 2017 the average age of farm producers was 57.5 years.

Changes in the landscape of America’s farm and farm producers signal the long-term effects of many economic pressures. Relative to wage workers, farm producers are often tied by finances and family to the place where they earn their living.

Farmers often carry high levels of debt on their properties and assets even during times of high profitability. These realities create compounding burdens for farmers and their families who experience volatile commodities prices, uncertain trade policies, and unpredictable weather which can diminish the earning potential of a farm for entire seasons or more. From the months of July 2018 to June 2019 farm bankruptcies increased in every region of the United States, except the South East region, and non-real estate agricultural loans reached a six-year high of 2.3%.

The high level of financial volatility and unpredictable profits has led many farmers to seek employment outside of farming in addition to maintaining their farms. In 2017 71% of farmers reported working outside of the farm and only 42% of farmers listed farming as their primary occupation.

Farming in America has been, and will continue to be, a high stress profession that requires farmers and their families to be highly adaptable and resilient in the face of uncertainty.
CASE SCENARIO

JOHN’S STORY: THE SCENE

A hypothetical case scenario is included to address some of the barriers and challenges faced by farm families seeking care for co-occurring disorders in rural communities.

- It is the end of June and raining in this farm community. It has been a very wet spring and early summer. As a result, many farmers have had difficulty getting into the field to plant their crops.
- They are now looking ahead to harvesting and expressing concern about the probability of getting their agricultural products out of the ground before winter.
- Farm stress levels are high in this rural community just as they are equally high in many farming communities across the nation. Farmers, agricultural producers and farm workers have all been affected by the weather this season.

WHAT ARE STRESSORS?
The stress on farmers is significant and has an impact on their wellbeing. A stressor is “a chemical or biological agent, environmental condition, stimulus, or event that triggers stress in an organism.” The reaction to that stress is collectively referred to as the “fight or flight” response. Almost anything has the ability to trigger stress.15, 16, 17

FARM STRESS

“Farm Stress” is similar and yet very different. Many resources interchange farm stress with financial concerns; however, while financial concern is very real, it is not the only contributing factor. Farm stress can be experienced by farmers, agricultural workers and farm families. Farm stress is the “stress experienced by farmers and their families as a result of the unique agricultural work environment”.18
TYPICAL STRESSORS

Typical stressors for farm families include:

CONSTANT RESPONSIBILITIES.
Many farmers have off-farm employment to support the farm and family and to get health insurance. This in turn can lead to increased weariness and loneliness as they often work more than 40 hours a week on the farm in addition to their off-farm employment.

LOCATION.
The farm is both a place of living and a place for earning income, making it very difficult to distance oneself from the stressors.

MULTI-GENERATIONS.
Often multi-generations work together to ensure the day-to-day work of running a farm. As a result, family dynamics and conflict can impact farm management and result in additional farm stress. The younger generation of farmers (ages 18-37) on an intergenerational farm may even experience more stress as a “function of managerial control and support compared to the older generation.”

STIGMA.
Farm families may experience stigma in a variety of manners. Public perceptions and beliefs about mental health, substance use disorders (SUD), and help-seeking actions to address these concerns are influenced strongly by social norms present in communities. Self-stigma can also occur when a person internalizes negative stereotypes and the public stigma directed at mental health and SUDs.

ACCESS TO RELEVANT CARE.
Access to relevant care is an issue due to the lack of mental health resources, lack of behavioral health workforce in rural areas and a lack of preparation for primary care providers on the topic of farm stress.
EXTRAORDINARY STRESSORS

Extraordinary stressors for farm families are those that are beyond the control of farm families. These stressors can often lead to uncertainty and the most distress.

WEATHER.

Weather is the leading reported extraordinary stressor. One region may be facing drought while another is experiencing flooding. The weather contributes to extreme outdoor work conditions. 18

Depending on their location, agriculture producers across the nation may experience flooding, wildfires, hurricanes, or drought in any given year. The collective impact to crops and livestock are staggering. “The US Department of Agriculture estimates that 90% of crop losses in the U.S. occur because of weather and hundreds of millions of dollars in livestock losses also occur.” 20

MARKET PRICES AND TARIFFS.

The United States is the second largest agricultural trader after the European Union. U.S. agricultural exports and imports have increased significantly over the past several years. 21

DEBT AND CASH FLOW.

Taxes, interest rates and commodity pricing are variable and subject to policy changes. When combined with debt-load and cash flow for daily expenses and equipment repairs or upgrades, these things all contribute to increased financial pressure and uncertainty. 18

HEALTH-CARE COSTS.

Healthcare costs include out-of-pocket expenses for health care and health insurance. Health insurance affordability is a concern for rural areas, and individuals without health insurance have less access to healthcare services. 22
JOHN

AGE 39.
MULTI-GENERATIONAL FARMER.
MARRIED. 3 CHILDREN.

THE CASE OF JOHN AND HIS FARMING FAMILY WAS DEVELOPED BY THE AUTHORS TO ILLUSTRATE THE STRESSORS FARM FAMILIES ARE FACING AMIDST A CHALLENGING FARMING ENVIRONMENT AND GROWING RATES OF SUBSTANCE USE AND MENTAL HEALTH DISORDERS IN RURAL COMMUNITIES. THE CASE IS NOT BASED ON A PERSON, RATHER IT IS A COMPOSITE OF ISSUES RURAL FARMERS MAY FACE. IN THIS CASE, JOHN, A LOCAL FARMER, IS DIAGNOSED WITH AN ALCOHOL USE DISORDER AND DEPRESSION.
JOHN'S STORY (SCENARIO)

John is a 39-year-old multi-generational farmer. His family has farmed the same land for over 100 years. Their primary agricultural product is wheat. John took over the farm’s operation about ten years ago. John’s father is retired but helps on the farm occasionally.

John is married to Ann. They have three children ages 15 (son), 11 (daughter) and 8 years (son). In addition to making sure the day-to-day operation of the household occurs, Ann serves as the household and farm bookkeeper and works part-time as a local school paraprofessional. She works outside of the home for additional income and to provide health insurance for her family.

The family lives on the farmstead. The nearest town of 2500 people is 20 minutes from the farm and is home to a primary care clinic and adjacent small critical access hospital. John’s family feels privileged to have access to local healthcare options; this is not the case for all rural communities.

RURAL HEALTHCARE OPTIONS IN REGION 8

FQHCs: Federally Qualified Health Centers (FQHCs) are community-based health care providers that receive funds from the Health Resources & Services Administration (HRSA) Health Center Program to provide primary care services in underserved areas. They must meet a stringent set of requirements, including providing care on a sliding fee scale based on ability to pay and operating under a governing board that includes patients.

Primary care clinics. Primary care is the most basic and, along with emergency and public health services, the most vital service needed in rural communities. It is often the first entry point into the health system for people seeking preventive healthcare services, counseling, education, diagnosis and treatment for acute and chronic illnesses.

Health Professional Shortage Areas (HPSAs). Geographic areas, populations, or facilities with a shortage of primary care, dental, or mental health providers and services.
John arrives at the local clinic at 8 am for evaluation of “heartburn.” Walk-in hours don’t begin until 9 am but he has already been up for hours working on farm equipment, checking the weather reports, listening to the ag news and futures report. It is very important for John to be seen by a provider today because it is another rainy day and John knows he will not be able to work in the field today. However, if the sun comes out there is work that can be done and he knows he won’t have the time to make another trip to town. He arrives at the clinic alone.

When the clinic officially opens, John asks to be seen for heartburn. He describes his symptoms to the nurse and says he frequently uses over-the-counter (OTC) antacids and drinks “lots of milk” with little relief of his heartburn symptoms.

He states, “my wife told me I have to come in. This has been going on too long.”

John explains that because there has been so much rain this summer, he has had to get in the field on every sunny day and simply hasn’t had time to get into the clinic before now. But his wife told him “she is tired of hearing about the heartburn and is worried it could be something else” so he is seeking help today. John tells the nurse that he is worried that he has let this heartburn go on for too long and is concerned it could be “something bad.” He mentions that “my blood pressure was a little high at my last appointment” but that he has not been on any medications. In addition to his heartburn he notes “a little headache” and adds that he is “not sleeping real well and is pretty worried about the crops.”

He reports that the last time he had a physical exam was about 3 years ago.
HOW IS HEALTH IMPACTED BY FARM STRESS?

The effects of life stress can accumulate over the lifespan and often exceed those of tobacco use, excessive alcohol consumption, and physical inactivity, and can cause significant morbidity and mortality. Ranked as one of the most stressful jobs in the United States, farming contributes to some of the highest rates of mortality in farmers from stress-related illnesses including heart disease, hypertension, ulcers and nervous disorders.\textsuperscript{15,16,25}

Physical burdens of farming can result from working long and strenuous hours.\textsuperscript{16} If stressors are not addressed, they can lead to physical illness, mental health issues, substance abuse and suicide.\textsuperscript{26} Behavioral and emotional changes can also be symptoms of farm stress.\textsuperscript{18}

Good physical health is necessary for most farm operations. Poor physical health can increase the risk of injury. Chronic stress may specifically contribute to development of depression and anxiety. In the agriculture industry, both anxiety and depression have been connected to work-related injuries, unsafe work behaviors, impaired work performance and lost productivity.\textsuperscript{17}

HOW STRESS CAN AFFECT YOUR BODY\textsuperscript{27}

https://www.stress.org/how-stress-affects-your-body
In a recent survey authors described the prevalence of anxiety and depression among young farmers and ranchers in the Midwest. 71% of the farmers in this study met the criteria for Generalized Anxiety Disorder (GAD). In comparison, an estimated 18.1% of adults experience anxiety in the United States.

Compounding this problem is that “farm families, especially men, are traditionally reluctant to seek help due to a perception of farmers as independent and self-sufficient, social stigma around mental health issues, and a lack of mental health provider in rural areas. Many rural men believe that showing emotion or needing help is a sign of ‘weakness’.”

Instead of seeking professional help, many people with mental health concerns self-medicate with substance use, including alcohol and other drugs.

Alcohol is a substance that can induce a feeling of calm. It is legal for adults 21 years and older and, therefore, easy to acquire. Depression and anxiety are two of the most common mental health conditions associated with alcohol use disorder (AUD).
AUD Definition: Problem drinking that becomes severe is diagnosed as an “alcohol use disorder” or AUD.

AUD is a chronic relapsing brain disease characterized by compulsive alcohol use, loss of control over alcohol intake, and a negative emotional state when not using. An estimated 16 million people in the United States have an AUD. Approximately 6.2 percent or 15.1 million adults in the United States ages 18 and older had AUD in 2015. This includes 9.8 million men and 5.3 million women. Adolescents can be diagnosed with AUD as well, and in 2015, an estimated 623,000 adolescents ages 12–17 had AUD.

WHAT IS BINGE DRINKING?

FOR WOMEN, BINGE DRINKING IS 4 OR MORE DRINKS CONSUMED ON ONE OCCASION

FOR MEN, BINGE DRINKING IS 5 OR MORE DRINKS CONSUMED ON ONE OCCASION

THE REAL COST OF EXCESSIVE ALCOHOL USE

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lost Workplace Productivity</td>
<td>$807 per person</td>
</tr>
<tr>
<td>Healthcare Expenses</td>
<td>$2.05 per drink</td>
</tr>
<tr>
<td>Criminal Justice Costs</td>
<td></td>
</tr>
<tr>
<td>Motor Vehicle Crash Costs</td>
<td></td>
</tr>
</tbody>
</table>

72% Lost Workplace Productivity
11% Healthcare Expenses
10% Criminal Justice Costs
5% Motor Vehicle Crash Costs

Taken from: The Financial Cost of Alcohol Use in the United States.
Substance use disorders (SUDs), including misuse of alcohol, methamphetamines, prescription drugs and other illicit drugs, are a growing problem throughout the nation and people living in rural communities are not immune to the impact of SUDs.

Abuse of opioids is also a concern in farming communities of the United States. According to the Centers for Disease Control and Prevention, opioid painkillers are prescribed for about 20% of farmers and farmworkers who are injured and unable to work. About 75% of farmers reported being directly affected by opioid misuse, addiction, or overdose either themselves, within their family, or among the community population. Almost 77% said they could easily access opioids without a prescription. These data reveal that opioid access and use has entered the farming population in the rural communities of the United States.\textsuperscript{15}

More than 232,000 Americans have lost their lives to overdoses involving prescription opioids from 1999-2018.\textsuperscript{32}
Substance use disorders are often thought of as inner city problems when in fact, they have been prevalent in rural communities for a long time.

Higher rates of alcohol abuse, tobacco use, and methamphetamine use have been noted in rural adults and prescription drug abuse and heroin use have grown in towns of every size.33, 34

The close-knit nature of rural communities contributes to challenges around confidentiality, privacy and stigma for those with SUDs.

RURAL COMMUNITIES FACE MAJOR BARRIERS TO TREATMENT FOR SUDS:

» LIMITED RESOURCES

» FEWER PROVIDERS/FACILITIES

» WIDER GEOGRAPHIC AREA
### QUESTIONS FOR HEALTH PROFESSIONALS

Despite the high prevalence of mental health and substance use disorders in the United States, clients typically do not self-identify with their mental health concerns and/or at-risk drinking behaviors. Therefore, many Americans do not secure the treatment needed for mental health and substance use problems partly because their disorders are not being diagnosed.

Regular screenings can enable earlier identification of mental health and substance use disorders and earlier treatment. Primary care providers should be encouraged to include universal screening assessments into health encounters.\(^{35}\)

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#### WHY

**WHY don’t providers routinely ask questions about mental health and substance use during primary care visits?**

- DIFFICULT TOPIC/STIGMA
- LACK OF TIME
- INEXPERIENCE OR LACK OF CONFIDENCE WITH SCREENING
- NO RESOURCES AVAILABLE
- WORRY ABOUT HURTING RELATIONSHIPS
- PERCEPTION THAT PEOPLE DO NOT WANT TO BE ASKED ABOUT SUBSTANCE USE
- PROVIDERS ARE NOT CONVINCED THAT ANYTHING WILL HELP

#### HOW

**HOW can health professionals ask the questions?**

SBIRT (Screening, Brief Intervention and Referral to Treatment) is a technique readily available for use in primary care settings. SBIRT provides evidence-based tools to screen for substance use in a variety of settings including primary care. All providers can use SBIRT!\(^{37}\)
The United States Preventive Services Task Force (USPSTF) issued a Grade B recommendation for primary care clinicians to screen all adults, 18 years or older for at-risk alcohol use and recommends provision of brief interventions to persons engaged in at-risk drinking.

Universal screening and use of brief intervention are also recommended by the American Academy of Pediatrics (AAP), the American Medical Association (AMA), the NIAAA, and the American Society of Addiction Medicine (ASAM).38

Three universal screening assessments were included in John’s visit: The Patient Health Questionnaire-2, the subsequent Patient Health Questionnaire-9 and the Alcohol Use Disorders Identification Test-Concise. The nurse first conducted an alcohol screen: The Alcohol Use Disorders Identification Test-Concise (AUDIT-C).40

AUDIT-C (SCENARIO)
The AUDIT-C is a three-item screen that can help identify people with hazardous drinking behavior and/or alcohol dependence. The questions address frequency of alcohol use, quantity, and binge drinking frequency.

Each question has five answer choices and the AUDIT-C is scored on a total scale of 0-12. In women, a score of 3 or greater is considered positive. In men, a score of 4 or greater is considered positive and optimal for identifying hazardous drinking. In general, the higher the score, it is more likely that the person’s drinking is affecting his safety.

John scored a total of 9 on the AUDIT-C. He indicated that he drinks alcohol 4 or more times a week and has 5 or 6 drinks on the typical days when he drinks. He has 6 or more alcoholic drinks on one occasion weekly.

1. How often do you have a drink containing alcohol?
   a. Never
   b. Monthly or less
   c. 2-4 times a month
   d. 2-3 times a week
   e. 4 or more times a week

2. How many standard drinks containing alcohol do you have on a typical day?
   a. 1 or 2
   b. 3 or 4
   c. 5 or 6
   d. 7 to 9
   e. 10 or more

3. How often do you have six or more drinks on one occasion?
   a. Never
   b. Less than monthly
   c. Monthly
   d. Weekly
   e. Daily or almost daily

Total Score: 9

AUDIT-C Form John’s Scores (SCENARIO)40

SCORING THE AUDIT-C
The AUDIT-C is scored on a scale of 0-12. Each AUDIT-C question has 5 answer choices.

POINTS ALLOTTED ARE:
a= 0 points, b= 1 point, c= 2 points, d= 3 points, e= 4 points

Scale for identifying hazardous drinking or AUDs:
IN MEN: a score of 4 or more
IN WOMEN: a score of 3 or more
Next, the nurse completed the Patient Health Questionnaire-2 (PHQ-2). The Patient Health Questionnaire-2 (PHQ-2) screens for common mental health disorders. It inquires about the frequency of depressed mood and a person’s inability to feel pleasure. The PHQ-2 does not establish a final diagnosis, rather it screens for depression. Its scores range from 0-6. If patients screen positive, 3 or higher, it is recommended that healthcare providers further evaluate with the Patient Health Questionnaire-9 (PHQ-9).
Based on John’s positive PHQ-2 score of 5, the nurse continued the screening by administering the PHQ-9.42

The PHQ-9 is an effective screening tool for major depression and a reliable and valid measure of depressive symptom severity.43 It has good internal validity, sensitivity and specificity. This tool assesses the 15 most common physical symptoms in primary care and contains modules on 12 different mental health disorders including mood, anxiety, and some of the sleep disorder modules.

Nine statements inquire about the frequency of depressive symptoms experienced in the past 2 weeks. Response options are assigned a point value; not at all (0), several days (1), over half the days (2), nearly every day (3). The response option point values for each of the nine unique depression-related symptoms are added for an individual’s total PHQ-9 score.

The possible score range is 0-27 with the following cut points and severity classification: none/minimal (0-4), mild (5-9), moderate (10-14), moderately severe (15-21) and severe depression (21-27).17, 42

John scored a 17 on the PHQ-9. His response to question #9 was a 1 indicating that on several days over the last two weeks he has thought that he would be better off dead or had thoughts of hurting himself.
The nurse completes her interview and as she is leaving the room, John mentions quietly that in addition to having difficulty finding time to come to the clinic, he is concerned about spending a lot of money on healthcare and he asks if “all these tests and things” are going to be expensive.

Even though John’s family has health insurance through his wife’s employer, it does not cover all healthcare expenses.

“Social and economic factors profoundly influence health and can affect up to 40% of health outcomes.”

A recent move to a value-based payment system has prompted many health care systems to now look beyond medical needs only and also address nonmedical factors and social determinants of health, or “social needs.”

Value-based programs reward health care providers with incentive payments for the quality of care they give to people with Medicare. These programs are part of our larger quality strategy to reform how health care is delivered and paid for.
ONE VERY IMPORTANT FINANCIAL QUESTION THE HEALTH LEADS TOOLKIT SUGGESTS INCLUDES ADDRESSING FINANCIAL CONCERNS BY ASKING THE FOLLOWING:

WHY THEY RECOMMEND THIS QUESTION:
Questions about financial resource strain often produce a high false positive rate, as individuals and families at all income levels experience stress around limited financial resources. This question provides a more targeted focus on health care access and poverty. The question was written as part of the Behavioral Risk Factor Survey, is clinically validated, and is written at a 7th grade level.

"In the last 12 months, was there a time when you needed to see a doctor but could not because of cost?"
THE PRAPARE PROTOCOL

The Protocol for Responding to and Assessing Patients’ Assets, Risks, and Experiences (PRAPARE) is a national initiative to help health centers and other providers collect and apply the data they need to better understand their patients’ social determinants of health, transform care to meet the needs of their patients, and ultimately improve health and reduce costs. PRAPARE is both a standardized patient risk assessment tool as well as a process and collection of resources to identify and act on the social determinants of health.

Upon review of the screening tool results, the APRN uses the SBIRT technique to begin a brief intervention to address John’s findings.

APRN DEFINITION

Advanced Practice Registered Nurses (APRNs) are registered nurses educated at a master’s or post-master’s level in a specific role and patient population.

APRNs assess, diagnose, and manage client problems including ordering tests and prescribing medications. Types of APRNs include nurse practitioners, certified nurse-midwives, clinical nurse specialists and certified registered nurse anesthetists. APRNs are increasingly being called to serve as primary care providers in rural communities.
Brief interventions are patient driven and may not reflect the clinician’s preference for change. Health professionals stay with the client wherever they are in the change process; if they are not ready for change, there is no rush into action.

Brief interventions may occur in a single intervention or over multiple sessions. Brief, 10-15 minutes, multi-contact interventions have the best evidentiary support in changing behavior. It is most effective to engage in the brief intervention during the same visit that the screening took place.

A variety of tools exist to facilitate the intervention and the conversation. The adapted FEEDBACK, LISTEN, OPTIONS (F.L.O.) Brief Intervention is one method that is easy to use, takes minimal time and can be integrated into primary and prenatal care settings.

F.L.O. is a mnemonic developed to encompass the three major elements of a brief motivational intervention and guide the conversation between the clinician and the client.

The clinician begins by offering FEEDBACK about screening results, current behavior compared to at-risk behavior, and known consequences of heavy alcohol drinking. Second, the clinician LISTENS to the client’s questions, gives him an opportunity to respond to feedback, and encourages his thinking and decision-making process. Finally, the clinician helps him explore OPTIONS toward changing behavior if he desires, i.e. reduce amount of alcohol intake, reduce number of drinking days, or abstinence, and assists with establishing goals and planning.38
[F.L.O.] FEEDBACK (SCENARIO)

The APRN explains to John that he scored a 9 on the AUDIT-C. She would like to discuss his drinking a little further.

She first begins by describing the pattern of binge drinking that was noted on John’s AUDIT-C screen and clarifies John’s understanding of standard drink sizes to confirm the score.

She then discusses the difference between low-risk drinking behavior and risky or harmful drinking, and reviews the consequences of risky alcohol use. In particular, she notes that many people who use increased amounts of alcohol complain of stomach issues, asking John if he notices any connection between his drinking and his “heartburn.” She shares “The Gingerbread Man” picture with John and uses the tool during her feedback discussion.

Finally, she completes an additional brief clinical interview using the Diagnostic and Statistical Manual of Mental Disorders (DSM). The most current version, the DSM-5, provides guidance on diagnosis of an AUD.

To be diagnosed with AUD, individuals must meet at least two of 11 criteria during a 12-month period. Severity of AUD is based on the number of criteria met and may be mild, moderate or severe. John met two criteria and the APRN believes he has a mild AUD.

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**LOW-RISK DRINKING LIMITS**

**MEN**

- **ON ANY SINGLE DAY**: No more than 4 drinks on any day
- **PER WEEK**: No more than 14 drinks per week

**WOMEN**

- **ON ANY SINGLE DAY**: No more than 3 drinks on any day
- **PER WEEK**: No more than 7 drinks per week

"Low Risk Drinking Limits For healthy adults age 65 and under" from "Alcohol Patient Education"
In response, John further describes a recent increase in alcohol use that began when “the farming got bad.” He describes worry over getting the crops harvested this year, especially in light of the fact that last year’s harvest was also difficult and commodity prices are poor.

He explains that many of the area farmers meet at the local bar on the weekends to talk about farming and “blow off some steam” playing pool and “having a few beers.” He doesn’t see this as a problem and says he doesn’t drink during the day or when he is working.

He enjoys getting together with the other farmers and finds comfort in spending time with them. He notes that occasionally his wife comes with him but not too often as she prefers to stay home with the kids.

The APRN offers John options for addressing his alcohol use.

Today they discuss the option of participating in a local Alcoholics Anonymous (AA) group, a twelve-step program that meets at the church—a support network.

John is not interested in this option so the APRN talks with him about harm reduction and ways to cut down on alcohol use.

John states that he is not really concerned about his drinking behavior at this time and comments that his alcohol use is much less than many of the other farmers in the bar. However, he listens respectfully and notes that he will “think about everything.”

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### [F.L.O.] OPTIONS (SCENARIO)

The APRN offers John options for addressing his alcohol use.

Today they discuss the option of participating in a local Alcoholics Anonymous (AA) group, a twelve-step program that meets at the church—a support network.

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### ONE DRINK IS:

<table>
<thead>
<tr>
<th>1 CAN</th>
<th>12OZ CAN OF BEER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 GLASS</td>
<td>5OZ GLASS OF WINE</td>
</tr>
<tr>
<td>1 SHOT</td>
<td>1.5OZ SHOT OF HARD LIQUOR</td>
</tr>
</tbody>
</table>

“What Counts as One Drink?” UMKC SBIRT: Patient Education

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### JOHN & THE APRN DISCUSS: ALCOHOL USE REDUCTION (SCENARIO)

- MEASURING AND COUNTING THE NUMBER OF DRINKS
- “PACING AND SPACING:” HAVING NO MORE THAN ONE DRINK PER HOUR – INCLUDE WATER, SODA OR JUICE IN BETWEEN ALCOHOLIC DRINKS
- AVOIDING TRIGGERS
- NEVER DRINKING AND DRIVING

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°F.L.O.° LISTEN (SCENARIO)

In response, John further describes a recent increase in alcohol use that began when “the farming got bad.” He describes worry over getting the crops harvested this year, especially in light of the fact that last year’s harvest was also difficult and commodity prices are poor.

He explains that many of the area farmers meet at the local bar on the weekends to talk about farming and “blow off some steam” playing pool and “having a few beers.” He doesn’t see this as a problem and says he doesn’t drink during the day or when he is working.

He enjoys getting together with the other farmers and finds comfort in spending time with them. He notes that occasionally his wife comes with him but not too often as she prefers to stay home with the kids.
Following identification of a substance use concern, clinicians may use motivational interviewing principles to begin the discussion about referral for further evaluation or treatment if needed. Clinicians using SBIRT in primary care settings are not expected to provide addiction treatment as part of the SBIRT model.

It is helpful if clinicians are mindful that just as with brief interventions, referrals for treatment are also patient driven and may not reflect the clinician’s preference for change. Health professionals continue to stay with the client wherever THEY are in the change process. If a client declines referral to treatment, clinicians are encouraged to continue brief interventions during follow-up appointments.

Treatment for alcohol use disorders may include: outpatient or residential counseling, medication assisted treatment, self-help programs such as Alcoholics Anonymous, complementary or wellness activities, use of a recovery coach, or a combination of any of these.

Treatment does not have a one-size-fits-all model and what is best for one person may not benefit another. Twelve-step programs such as Alcoholics Anonymous, intensive outpatient or inpatient treatment programs and pharmacotherapeutic interventions all have established efficacy.

Treatment options in rural areas may be especially difficult to find and navigate. The Rural Prevention and Treatment of Substance Use Disorders Toolkit identifies and explains several of these key rural barriers.
Clinicians must be aware of the complexity of barriers clients may encounter when seeking access to treatment, especially in rural areas. Of particular concern is the barrier of stigma.

Stigma definition: The complex attitudes, beliefs, behaviors and structures that interact at different levels of society and manifest in prejudicial attitudes about and discriminatory practices against people with mental and substance use disorders.19

Stigma in rural areas may be further heightened. Do you recognize these common rural barriers that diminish privacy and make it difficult to maintain confidentiality?

Geographic impact on referral to treatment is significant. Rural communities are more geographically dispersed with typically few public transportation options. There may be a lack of local, or even close distance treatment facilities, which contributes to people living in rural communities NOT seeking treatment for SUDs.31, 34
If a client is open to referral, primary care clinicians and staff should have working knowledge of services and addiction treatment providers available in their community to facilitate a “warm-handoff” to the next point of care whenever possible. A warm handoff is a transfer of care between two members of the health care team, where the handoff occurs in front of the patient and family. This transparent handoff of care allows patients and families to hear what is said and engages patients and families in communication, giving them the opportunity to clarify or correct information or ask questions about their care.

SAMHSA provides a variety of open-access resources for clinicians using SBIRT, including sample referral forms and tool kits to ensure use of evidence-based processes.

Next the APRN moves on to discuss John’s PHQ-9 screen and his score of 17. According to the PHQ-9 scoring guidelines, a score of 17 tells us John falls into a “Major depression, moderately severe” category. Based on her evaluation, including the use of this screening tool, the APRN must consider recommended treatment options with pharmacotherapy (possible antidepressants) or psychotherapy or a combination of these treatment options.
Using the same SBIRT technique, she and John begin to explore a diagnosis of depression.

DEPRESSION DEFINITION:
Depression is one of the most common mental disorders in the United States. It can be caused by a combination of genetic, biological, environmental and psychological factors and can happen at any age, although it often begins in adulthood. Several treatment options for depression are available and include medications, psychotherapies or a combination of modalities. Not everyone with depression will experience every symptom and the severity and frequency of symptoms varies from person to person. They may also vary depending on the stage of depression.

According to the DSM-5 Criteria for Major Depressive Disorder, depression may be diagnosed when a depressed mood or a loss of interest or pleasure in daily activities occurs for more than two weeks. The mood represents a change from the person’s baseline.

SIGNS OF DEPRESSION
The person experiences impaired social, occupational or educational function and at least 5 of the following 9 symptoms are experienced nearly every day:

- DEPRESSED MOOD OR IRRITABLE MOST OF THE DAY, NEARLY EVERY DAY, AS INDICATED BY EITHER SUBJECTIVE REPORT (E.G., FEELS SAD OR EMPTY) OR OBSERVATION MADE BY OTHERS (E.G., APPEARS TEARFUL)
- DECREASED INTEREST OR PLEASURE IN MOST ACTIVITIES, MOST OF EACH DAY
- SIGNIFICANT WEIGHT CHANGE (5%) OR CHANGE IN APPETITE
- CHANGE IN SLEEP: INSOMNIA OR HYPERSONMIA
- CHANGE IN ACTIVITY: PSYCHOMOTOR AGITATION OR RETARDATION
- FATIGUE OR LOSS OF ENERGY
- GUILT/WORTHLESSNESS: FEELINGS OF WORTHLESSNESS OR EXCESSIVE OR INAPPROPRIATE GUILT
- CONCENTRATION: DIMINISHED ABILITY TO THINK OR CONCENTRATE, OR MORE INDECISIVENESS
- SUICIDALITY: THOUGHTS OF DEATH OR SUICIDE OR HAS SUICIDE PLAN
SUICIDALITY (SCENARIO)

Secondary to increased rates of suicide in the United States during the past 15 years and its increasing attention as a major public health concern, routine screening of depressed patients for suicidal ideation and intent has been recommended in practice in primary care, emergency departments and psychiatric outpatient clinics.\(^43\)

Item #9 on the PHQ-9 has been used as a brief screening measure for suicide risk. It specifically evaluates the frequency of passive thoughts of death or self-injury in the last two weeks; however, it does not assess past suicide attempts or current suicidal plans or intent, essential elements of suicide risk assessment.

Nonetheless, Item #9 may be a useful initial screening measure that can be coupled with a validated suicide risk assessment instrument like the Columbia Suicide Severity Rating Scale (C-SSRS) or the Suicide Assessment Five-step Evaluation and Triage (SAFE-T) and followed by appropriate clinical assessment of suicide risk.\(^43,56\)
FARMERS AND SUICIDE

According to the CDC, the rate of suicide for males in the Farmer, Ranchers and Other Occupational Managers category was 32.2 per 100,000 in 2015.

Suicide accounts for 8-14% of farm deaths and suicide rates are high among farmers who are owner-operators and among rural males.

Common factors for farmers at risk for suicide include financial stress, social isolation, physical injury, chronic pain, and access to lethal means, with firearms identified as the most frequent method used. In addition, poor access to mental and health care services can be contributing factors.

COMMON FACTORS

» Financial stress
» Social isolation
» Physical injury
» Chronic pain
» Access to lethal means
» Poor access to services
SUICIDE RISK (SCENARIO)

John clarifies that he does not have a current suicide plan. He states, “I wouldn’t do that to my family. Life gets really hard sometimes and you just think about it.”

» The APRN stresses the significance of reaching out to family/friends/medical community when thoughts of suicide occur.

» The APRN also stresses harm reduction measures and provides John with the following resources:

1. NATIONAL SUICIDE HOTLINE
   1-800-273-8255

2. THE LOCAL CLINIC’S CONTACT NUMBERS (INCLUDING AFTER HOURS)

EMERGENCY ACCESSIBILITY

CALLING 911 OR ACCESSING THE LOCAL EMERGENCY ROOM

"Rural and tribal communities may face special challenges reaching 911 because of the sparsely populated large geographic areas served. Call-takers in rural areas often perform a variety of duties not directly related to taking 911 calls.

Also, since first responders may take longer to reach the scene of an emergency, call-takers stay on the phone longer with callers, providing more extensive pre-arrival instructions."
WHY REDUCING ACCESS TO LETHAL MEANS IS IMPORTANT:

» MANY SUICIDE ATTEMPTS TAKE PLACE DURING A SHORT-TERM CRISIS, SO IT IS IMPORTANT TO CONSIDER A PERSON’S ACCESS TO LETHAL MEANS DURING THESE PERIODS OF INCREASED RISK.

» ACCESS TO LETHAL MEANS IS A RISK FACTOR FOR SUICIDE.

» REDUCING ACCESS TO LETHAL MEANS SAVES LIVES.

Primary care settings have become the gateway to the behavioral health system. Primary care providers are increasingly in need of extra support and resources to screen patients for behavioral healthcare needs in addition to general health care needs.

This primary care clinic practices in an integrated care model and has behavioral health staff on site.

Integrated care is the systematic coordination of behavioral and general healthcare. Integrated care can improve a practice’s ability to address both behavioral health and medical conditions, prevent fragmentation of care between those conditions, and build relationships with mental health specialists outside of the primary care setting. Integrated care also offers more informed and immediate responses to the emergent issues typically posed by clinical comorbidities, and when combined with regular screening and identification of mental health and substance use disorders, even earlier care for rural patients.
CO-OCCURRING DISORDER
JOHN’S FORMAL DIAGNOSES:
AUD AND MAJOR DEPRESSIVE DISORDER

JOHN’S OPTIONS (SCENARIO)

The APRN offers a brief visit with the behavioral health worker. John refuses. Antidepressants are offered, with a discussion of potential risks and benefits, and John states that he will take the prescription.

He also agrees to cut down on alcohol use but again states that he is not interested in attending AA meetings or speaking with his clergy.

He agrees to start medication for his heartburn and work on his diet. A plan is made for John to return to the clinic in one month, sooner if concerns arise or changes occur.

People with both a SUD (drugs or alcohol) AND mental illness (depression, anxiety, etc.) may be given a diagnosis of a co-occurring disorder (COD). This may also be known as a dual diagnosis. Sometimes the mental health disorder develops before the substance abuse disorder and in other cases the addiction appears first. In most cases, a combination of issues contributes to the COD and often includes biology, genetics, trauma, the environment and life experiences.67

According to the National Survey on Drug Use and Health: 2018, 9.2 million people 18 years and older had BOTH a SUD and a mental illness.

Mental Illness & Substance Use Disorders in America

In 2018, 57.8M Americans had a mental and/or substance use disorder.

Among those with a substance use disorder (SUD):

- 38.3% (3 in 8 or 7.4M) struggled with illicit drugs
- 74.5% (3 in 4 or 14.4M) struggled with alcohol use
- 12.9% (1 in 8 or 2.5M) struggled with illicit drugs alcohol use

Among those with a mental illness:

- 7.8% (19.3 Million) People aged 18 or older had an SUD
- 19.1% (47.6 Million) People aged 18 or older had a mental illness
- 3.7% (9.2 Million) People aged 18 or older had both an SUD and a mental illness

According to the National Survey on Drug Use and Health: 2018.68
It can be difficult to diagnose someone with a COD. Symptoms of a substance use disorder can mask symptoms of mental illness, and symptoms of mental illness can be confused with symptoms of a substance use disorder.\textsuperscript{69}

A strong bidirectional relationship exists between AUD and depression. Untreated depression may lead to “self-medication” with alcohol to relieve symptoms and is often looked at as a temporary solution to relieve depression symptoms.

Similarly, people who do not have baseline depression can still be at an increased risk of developing depression if they are chronically using alcohol; either indirectly through alcohol’s disruptive effect on social relationships or directly through alcohol’s physiological effect on the brain. Genetics can also increase susceptibility to both disorders.\textsuperscript{70}

Co-occurring mental health and substance use disorders impact one another and therefore should be treated together; however, it is very important to first complete a comprehensive assessment to determine if the depression is independent of the AUD or induced by the AUD.

Treating just one disorder will not cause the other to automatically improve. Likewise, separate, parallel care for the disorders does not result in one effective treatment plan. To be effective, both disorders must be treated at the same time, in the same place, by the same treatment team. Integrating medication with psychotherapy can be beneficial for treating co-occurring depression and AUD.
Unfortunately, only 7.4% of people with COD are currently receiving treatment for both disorders and approximately 55% are receiving no treatment at all.

A recent study examined barriers to client-centered treatment in rural communities.

Flexible, community-based, wrap-around services that use an integrated approach to address SUDs, mental health and basic needs may increase the likelihood of people accessing treatment when barriers especially prevalent in rural areas like transportation, childcare and geographic proximity to services are concerns.

In addition, another key barrier to accessing services for those with COD is a lack of capacity in healthcare providers to identify SUDs and mental health disorders. Increased interprofessional collaboration and communication, increased use of universal screening tools and targeted workforce development, as well as recruitment of substance abuse and mental health providers to rural areas can greatly decrease barriers.69
John “no shows” for his one-month appointment. The clinic called and left a voicemail asking John if he wanted to schedule another appointment.

Shortly after, Ann calls the clinic back to reschedule John’s appointment for later in the week.

However, after days of rain, the region has experienced a short burst of good weather and area farmers are able to work in the field. Many are working around the clock to harvest whatever they can.

Not surprising, John fails to show for this second appointment too.

When it is raining, farmers try to catch up on many farm tasks. They often use rainy days to make equipment repairs or catch up on farm business.

As a farmer who spoke with the authors about this document stated,

“When it rains my depression feels worse. When the sun is out and I can be in the field, I at least feel like I’m doing something. When I’m not busy, that’s when the bad thoughts just don’t go away.”

“John’s Story: Follow-Up Visit (Scenario)
Three days later John presents to the emergency room (ER) in the afternoon for an injury. A return of rain sent many farmers to their shops to work on equipment.

John was working in his shop making repairs on his combine. While working on the hopper’s auger he cut his hand.

When the bleeding wouldn’t stop, he felt it was severe enough that it might need stitches. He wrapped his hand in a shop towel and drove himself to the critical access hospital’s ER. He says he called his wife who will come to meet him at the hospital.

During triage the nurse conducts his initial physical assessment, starts an IV and starts cleaning the wound. John describes his injury as “an accident.” The AUDIT-C screen is completed again. John’s score today is an 11. His score indicates that he is now drinking 4 or more times a week but he is having 7 to 9 alcoholic drinks on a typical drinking day, and is having 6 or more drinks daily or almost daily. This score is elevated from John’s previous score of 9 about 5 weeks ago.

A PHQ-9 is also completed. John scores a 23 today.
The nurse notes an approximately 3" long, deep laceration to John’s left hand along the thumb line.

The APRN arrives from the clinic into the ER to see John. John’s physical needs are addressed first and the wound is cleaned, sutured and John is given some IV pain medication.

Next, the APRN addresses John’s alcohol use and his depression screen.

John acknowledges that his drinking has escalated over the last month. He states the weather has been incredibly depressing and he is very worried about getting “his crops off.” He feels alcohol has helped him “relax a little.” He admits to putting a little “bump” in his coffee over the noon hour today.

*Note: John did consent to an alcohol and drug lab test upon arrival to the emergency room. His screen is positive only for alcohol and his blood alcohol content is .019, well below the legal intoxication level.

JOHN'S STORY:
TREATMENT BARRIERS
(SCENARIO)

During a review of his current medications, John states that he is taking his heartburn medication but he stopped the antidepressant after about 2 weeks because he “didn’t notice any change and I didn’t want people to think I’m crazy.”

EDUCATING PATIENTS ON ANTIDEPRESSANTS’ EFFECTIVENESS OVER TIME

Antidepressants are medications that can treat depression, but they take time to start working. Most antidepressants take 2-4 weeks to cause a change in symptoms. Clients may first notice improvements in sleep, appetite and concentration problems before their mood lifts, so it is very important to educate clients about the window needed to achieve a fully therapeutic dose. It is also extremely important that clients are aware that they should not stop taking antidepressants abruptly. It is best to taper off these medications slowly to prevent withdrawal symptoms.

Learn More: Free Booklets and Brochures
National Institute of Mental Health
https://www.nimh.nih.gov/health/topics/depression/index.shtml

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*Note: John did consent to an alcohol and drug lab test upon arrival to the emergency room. His screen is positive only for alcohol and his blood alcohol content is .019, well below the legal intoxication level.
John’s symptoms of depression have also escalated since his first visit. John has answered “nearly every day” to most of the PHQ-9 questions.

John’s response to Question #9, regarding suicidal thoughts, has now increased and indicates that John has been experiencing suicidal thoughts on more than half of the days in the last two weeks. John adamantly denies that his injury was a suicide attempt nor was he trying to hurt himself.

John’s wife Ann has arrived in the ER. She is teary and asks to see her husband. John gives permission to have her come back to the exam room. The APRN has asked the on-call social worker (SW) to assist in a brief intervention. The SW shares her time between the primary care clinic and the critical access hospital and has been trained in SBIRT.

SWs provide care in a variety of settings and serve people across the life span in a variety of roles. These roles include, but are not limited to, providing therapeutic interventions, providing strength-based wrap-around services, addressing social system change as an advocate, and providing social policy expertise to assist in addressing social and health disparities.

Strengths in their skill set include a strong understanding of social determinants of health and the biopsychosocial aspects of health/illness.72

Motivational interviewing, a clinical approach that helps clients make positive behavioral changes,71 has been a core component of social work education for years. Newer additions to SW curricula include advanced training on using the SBIRT technique for SUDs and mental health which positions SWs to have a key role in integrated behavioral health models in primary care. SWs are critical to the implementation of BI and brief treatments in interprofessional clinical practice especially in those that serve vulnerable and diverse populations.73
The social worker (SW) uses motivational interviewing techniques to further assess John’s state of mind. It is critical to assess John’s suicidal thoughts and review his access to lethal means. She determines that a full suicide risk assessment is needed to detail his risk, protective factors, historical factors, previous mental health history and medications and uses the SAFE-T card during her assessment.

Based on the results of the SAFE-T assessment, the SW notes that John has no prior history of suicide attempts and no family history of suicide. He does have access to lethal means. He does have a co-occurring disorder. John also identifies several protective factors, however: he has positive family support and speaks lovingly of his wife and children, he has engaged in primary care and he expresses a love of farming and a desire to keep farming even though times are tough now. For the first time, John also mentions his beloved dog, Bear, and states that Bear is often with him in the pickup and helps him feel less stressed.
The social worker addresses John’s alcohol use and explains that even though he is using alcohol to cope with his depression and farming challenges, his substance abuse actually increases his risk of harming himself.

They briefly discuss other strategies that could bring him some relief during periods of higher stress like relaxation and breathing techniques and they practice them in the exam room. They also discuss how to reach out to family and friends, healthcare providers, and how to access Emergency Services when needed.

The social worker leaves and Ann also excuses herself from the room. Ann is crying and she tells the social worker she is afraid to take John home.

She says she has been so worried about John and has noticed his increased use of alcohol and was angry when he stopped taking his antidepressant.

She says everything has been so hard on her and the children and she doesn’t know what to do. She asks if there are services available for them too.
Women, regardless of the role on the farm, are more likely than men to experience stress. Women can feel many different avenues of stress as they balance traditional responsibilities of caretaking with on-and-off-farm jobs.

Many women, even those who serve as bookkeepers for the farm or help with harvest responsibilities, may feel they lack a say in the farm operation.26 In addition, farm women typically play a supportive role in helping their husbands deal with their stress and frustration but often do not get the same kind of support in return.75

Children are also far from immune to farm stressors. Farm children often work on the farm and identify closely with rural values. A study of Kansas farm families found that many parents were unwilling to talk with their children about the family’s financial situation, which increased children’s uncertainty and stress. Children can even blame themselves for economic conditions beyond their control.26

Children’s stress may manifest itself emotionally, physically and socially.76
Farm stress can affect youth emotionally, physically and socially. Warning signs of stress in youth in those categories follow:

**EMOTIONAL**
- Acting out (physically or verbally, out of character)
- Mood swings
- Depression
- Excessive sleeping
- Lack of motivation
- Anxiety

**PHYSICAL**
- Excessive tiredness
- Trouble sleeping
- Headaches
- Tension (muscles in back or neck)
- Excessive sickness and absenteeism
- Butterflies in stomach
- Experimentation with use of drugs and alcohol

**SOCIAL**
- Change in normal routines, temperament and behavior
- Change in friends who influence in negative ways
- Loss of interest in extracurricular activities
- Dropping out of social engagements
- Isolation

The social worker (SW) finds a quiet room and educates Ann on recognition of suicide crisis. She encourages Ann to enlist the help of other trusted people in her family/friend circle who can help watch over John.

They spend some time discussing the difficulties of trying to help loved ones when they don’t make it very easy and SW stresses that even though Ann may feel like she is betraying John or overreacting by reaching out to her family and friends during a crisis, she really is protecting him.

The SW encourages Ann to speak with a counselor and reminds her that self-care is critical for her own well-being. The SW provides a list of counseling service options that are available locally for her and her children. She also discusses the new telehealth option now available at the clinic.
People living in rural communities have less access to behavioral health services than those living in more urban areas. They also identify unique barriers to receiving behavioral health services like a lack of privacy and the desire to avoid being the subject of local gossip or feeling ostracized for seeking behavioral health services locally.

Technology can facilitate the delivery of confidential behavioral health services to people in rural areas by connecting clients to behavioral health practitioners located at different sites. This enables access to treatment without inadvertent disclosure in their home community.

Equally important, telehealth can also connect primary care providers to networks of behavioral health specialists throughout the country for case consultation, training and education.

**TELEHEALTH**

*Telehealth is a newer modality that uses internet and communications technologies (ICTs) to provide health information and treatments in real time. Services can be delivered through videoconferencing, chat, and text messaging.*

Telehealth is different from telemedicine because it refers to a broader range of healthcare services than telemedicine. Telemedicine refers specifically to remote clinical services and telehealth can refer to remote non-clinical services, such as provider training, administrative meetings, and continuing medical education, in addition to clinical services.

**TELEHEALTH AND RURAL BARRIERS**

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Equally important, telehealth can also connect primary care providers to networks of behavioral health specialists throughout the country for case consultation, training and education.
JOHN'S STORY: HOW DOES IT END? (SCENARIO)

Ann is grateful for the resources and leaves the social worker to go back to John. By this time, John is feeling more in control and tells Ann that “I just want to go home. I have to finish fixing the combine.” John is already getting ready to leave his exam room.

The APRN enters the room again to go through discharge instructions and recommendations, and advises follow up, not only for John’s injury, but for his co-occurring alcohol use disorder, depression and suicidal ideation. John states, “Whatever. I just need to get going.”

So how does John’s story really end? All healthcare providers want clients to engage fully in their healthcare, but must remember that clients ultimately make their own choices.

In the ideal ending to this case, John would choose to seek additional services through his primary care clinic. He would attend his follow-up appointments, utilize his on-site, local providers and counselors, or even choose the telehealth option to remain in his community and receive individual counseling and counseling with his family. He would take his antidepressants and heartburn medication as directed, make healthier lifestyle choices and flourish in his role as a farmer.
In reality, any of these scenarios could and actually do occur throughout our region:

**A**

John simply walks away and the clinic and hospital staff do not treat John again. The small town gossip suggests John is still struggling.

**B**

John chooses to seek additional services outside of his local community. This is difficult as he now must travel farther. But, after finishing harvest, he commits to this decision and spends the winter months attending an out-patient program for his alcohol use and counseling for his depression. He and his wife work on a financial plan to continue farming and prepare for the next year.

**C**

John engages in rural mental health care that truly “meets him where he is.” John reached out to a mobile crisis team when he felt he had “reached his breaking point.” He was able to engage in short-term crisis counseling services and then began a relationship with Rural Mental Health Counselors who came to his farm site. The relationship is currently ongoing.

**D**

The stigma surrounding John’s co-occurring disorder is simply too much. He is embarrassed and doesn’t feel safe seeking further treatment in his rural community. He continues to use alcohol excessively; the depression worsens and eventually John dies by suicide, leaving his grieving family to run the farm.
The Minnesota Rural Mental Health Specialist Program consists of two mental health specialists who provide mental health outreach to farmers, farm spouses, and farm families. They are also available for training and education on issues related to farm stress. The Rural Mental Health Specialists provide phone and/or in-person support on a variety of issues ranging from stress management, relationship concerns, depression, and anxiety. They are able to meet with individuals/families on their farm or at a neutral office location.

All services are free and confidential.

Check out important tools for coping with farm stress from the MN Department of Agriculture.
While the uncertain ending to John’s story may leave readers frustrated, similar stories are experienced every day by the many healthcare providers who have committed to caring for rural farm families across our region.

The escalating SUDs, mental health concerns and resulting co-occurring disorders being diagnosed in growing numbers of rural clients are also impacting healthcare providers and likewise taking a toll on provider health.

Overwhelming job demands, insufficient job resources and workforce shortages are leading to burnout in healthcare professionals.

Burnout is characterized by high emotional exhaustion, high depersonalization, and low sense of personal accomplishment from work. Burnout is a problem among all clinical disciplines and across care settings.79

After completing her workday, the SW who cared for John and Ann in the ER sat down and reflected on her day. She felt very worried about most of the clients she saw in the ER and the clinic that day but especially John and his family.
She considered how obvious it was that John’s struggles were having an impact on people around him, certainly his wife, and although not clearly mentioned, his children and other loved ones.

The social worker, like many of her colleagues, felt frustrated, exhausted and just couldn’t seem to “let the day go.” She knew it was likely that her emotional response to the day’s struggles would carry over to her own family that evening.

Farm stress can be a particularly difficult thing for behavioral health providers to treat, and there may be unique factors that increase their likelihood of developing something called compassion fatigue.

In addition to the effects of burnout, compassion fatigue has been described as the physical and emotional exhaustion that some caregivers experience over the course of their service to others.  

The consequences of compassion fatigue can lead to symptoms of burn out, such as apathy, fatigue, feelings of being trapped or ineffective, or even the more serious condition of secondary traumatic stress, where caregivers actually experience symptoms of being traumatized through their work with people who directly experienced a traumatic event.

What makes farm stress so difficult for caregivers like John’s social worker is that she may be a member of the farming community as well, and John’s situation may feel very personal. Her family or friends may be going through something similar. Entire communities may be experiencing this collective stress making it difficult to be objective.

In addition, trying to treat farmers like John is difficult because they may be isolated and feel entirely too busy to be bothered with counseling. This can lead a caregiver to feel ineffective at treating someone like John.
One thing that caregivers like John’s social worker can do is take a self-assessment to determine if they may struggle with compassion fatigue.

The Professional Quality of Life (PROQOL) tool is a self-administered assessment that rates the professional on compassion fatigue and compassion satisfaction.

---

**PROQOL:**

**COMPASSION FATIGUE ASSESSMENT**

(SCENARIO)

The assessment is brief and free and may be very helpful for clinicians to recognize compassion fatigue early so they can find assistance.

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<table>
<thead>
<tr>
<th>1=Never</th>
<th>2=Rarely</th>
<th>3=Sometimes</th>
<th>4=Often</th>
<th>5=Very Often</th>
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</thead>
<tbody>
<tr>
<td>1. I am happy.</td>
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<tr>
<td>2. I am preoccupied with more than one person I [help].</td>
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<td>3. I get satisfaction from being able to [help] people.</td>
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<td>4. I feel connected to others.</td>
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<td>5. I jump or am startled by unexpected sounds.</td>
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<td>6. I feel invigorated after working with those I [help].</td>
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<tr>
<td>7. I find it difficult to separate my personal life from my life as a [helper].</td>
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<tr>
<td>8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I [help].</td>
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<tr>
<td>9. I think that I might have been affected by the traumatic stress of those I [help].</td>
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<td>10. I feel trapped by my job as a [helper].</td>
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<tr>
<td>11. Because of my [helping], I have felt &quot;on edge&quot; about various things.</td>
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<tr>
<td>12. I like my work as a [helper].</td>
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<tr>
<td>13. I feel depressed because of the traumatic experiences of the people I [help].</td>
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<tr>
<td>14. I feel as though I am experiencing the trauma of someone I have [helped].</td>
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<tr>
<td>15. I have beliefs that sustain me.</td>
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<tr>
<td>16. I am pleased with how I am able to keep up with [helping] techniques and protocols.</td>
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<tr>
<td>17. I am the person I always wanted to be.</td>
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<tr>
<td>18. My work makes me feel satisfied.</td>
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<td>19. I feel worn out because of my work as a [helper].</td>
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<tr>
<td>20. I have happy thoughts and feelings about those I [help] and how I could help them.</td>
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<td>22. I believe I can make a difference through my work.</td>
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<td>23. I avoid certain activities or situations because they remind me of frightening experiences of the people I [help].</td>
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<td>24. I am proud of what I can do to [help].</td>
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<tr>
<td>25. As a result of my [helping], I have intrusive, frightening thoughts.</td>
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<tr>
<td>26. I feel &quot;bogged down&quot; by the system.</td>
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<tr>
<td>27. I have thoughts that I am a &quot;success&quot; as a [helper].</td>
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<td>28. I can't recall important parts of my work with trauma victims.</td>
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<td>29. I am a very caring person.</td>
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<tr>
<td>30. I am happy that I chose to do this work.</td>
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</tbody>
</table>
Farm stress is not just a farm problem. Healthcare providers, families, communities and policy makers must work together to address the ongoing impact of farm stress in our region and our nation.
REFERENCES


REFERENCES


REFERENCES


RESOURCES

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17. Professional Quality of Life Measure, https://proqol.org/
18. Rural Health Information Hub, https://www.ruralhealthinfo.org/
20. SBIRT, SAMHSA- Substance Abuse and Mental Health Services Administration, https://www.samhsa.gov/sbirt
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Maridee is the daughter of a farmer. Dr. Shogren has practiced as a certified nurse-midwife for almost 20 years in a variety of settings where she shares her passion for women’s health with her colleagues and her patients. Maridee has extensive knowledge regarding Screening, Brief Intervention and Referral to Treatment (SBIRT) in rural health systems and much of her academic work has focused on interprofessional education and training. She is a technical trainer with the SAMHSA funded Mountain Plains Addiction Technology Transfer Center and the Mountain Plains Mental Health Technology Transfer Center grant teams. Maridee serves as a full-time faculty member at the University of North Dakota College of Nursing and Professional Disciplines where she has taught across the nursing curriculum. Maridee grew up in a small, rural community in Northwestern Minnesota where her brothers continue to run the family farm and she continues to love a harvest ride in the combine.

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