

# Alcohol Related Brain Damage

Building the Evidence Base in Wales  
and Beyond

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and Professor Gareth Roderique-Davies



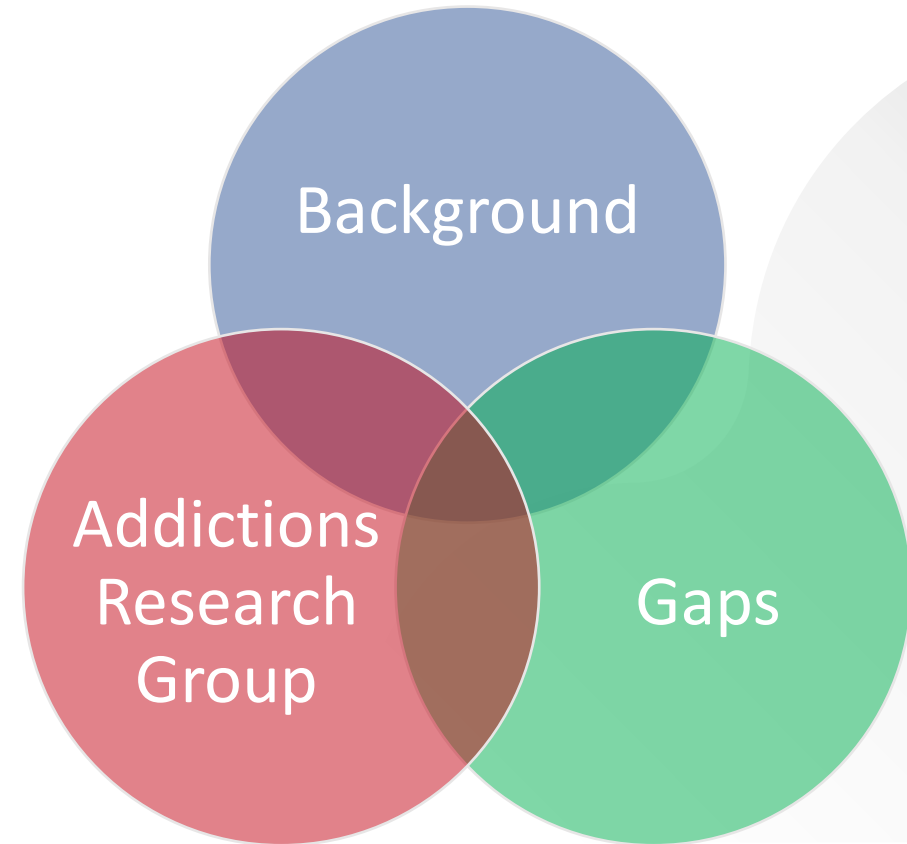
Faculty of Addiction  
Psychiatry Conference 2023

Thank you!

Agenda

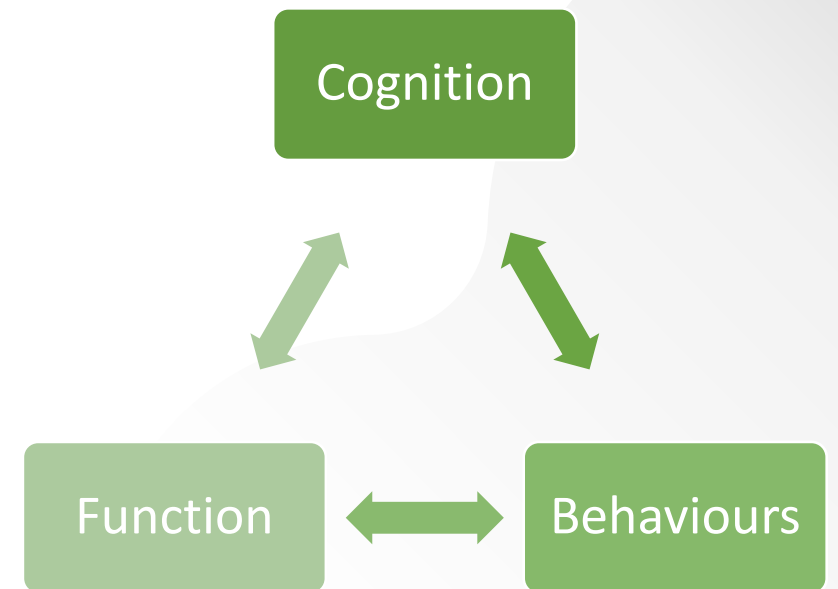


University of  
South Wales  
Prifysgol  
De Cymru

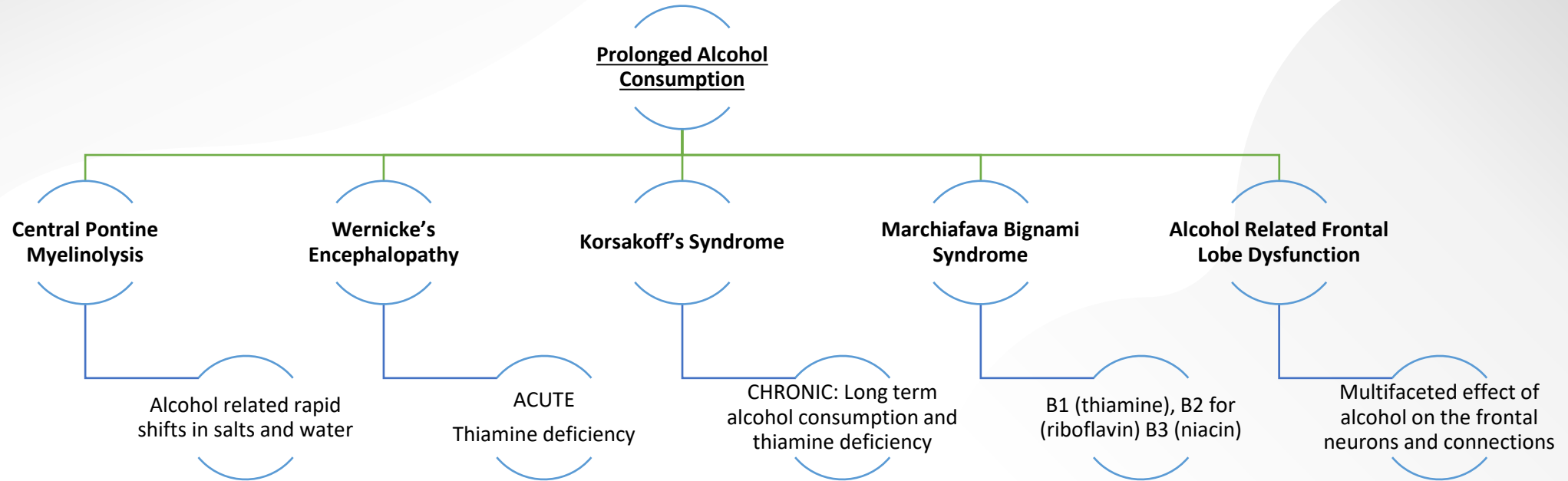


## ARBD is:

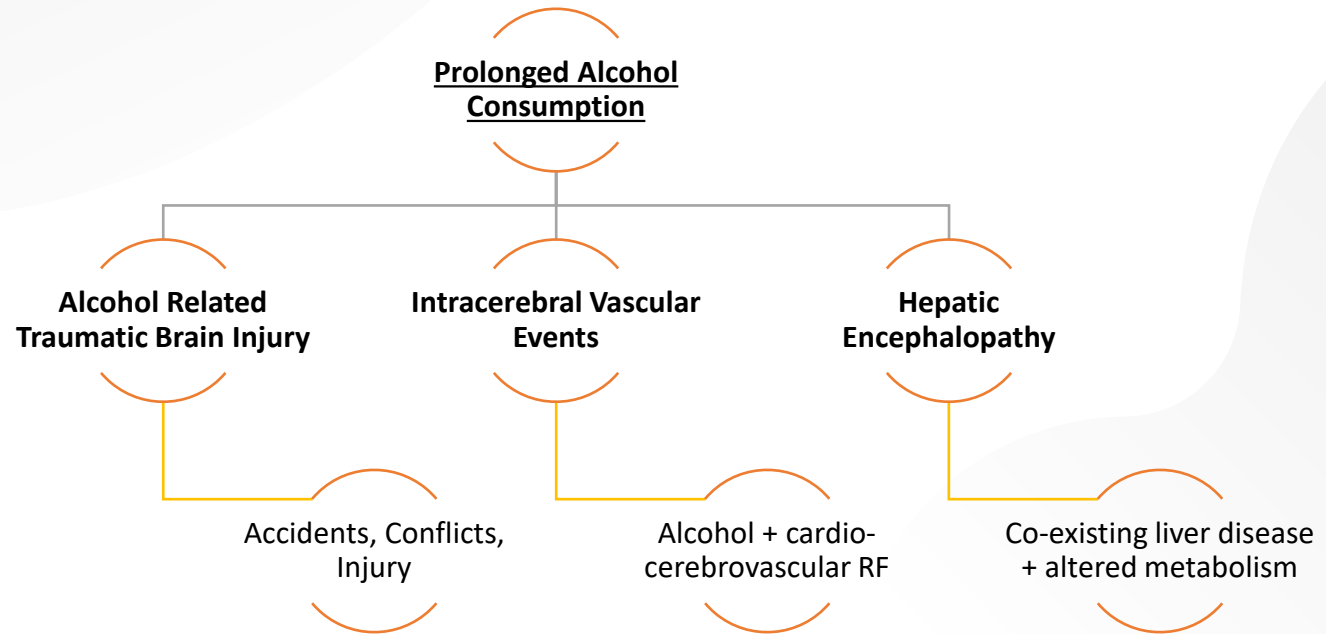
An umbrella term reflecting the direct and indirect effects of alcohol on the brain



## Direct



## Indirect



- **M > F**
- **45-65YO**
  - **However, females tend to be younger**
- **Socioeconomic status?**

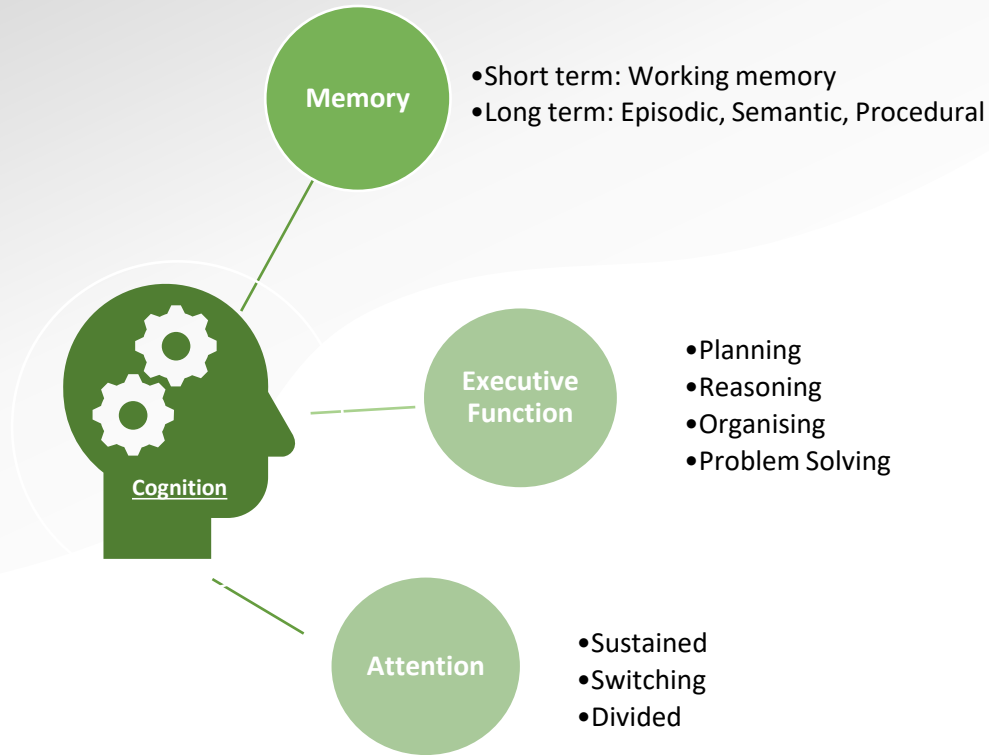


Approximately  
34 in every  
100000



Approximately  
2.9-16.3 in every  
100000

# What Impairments?



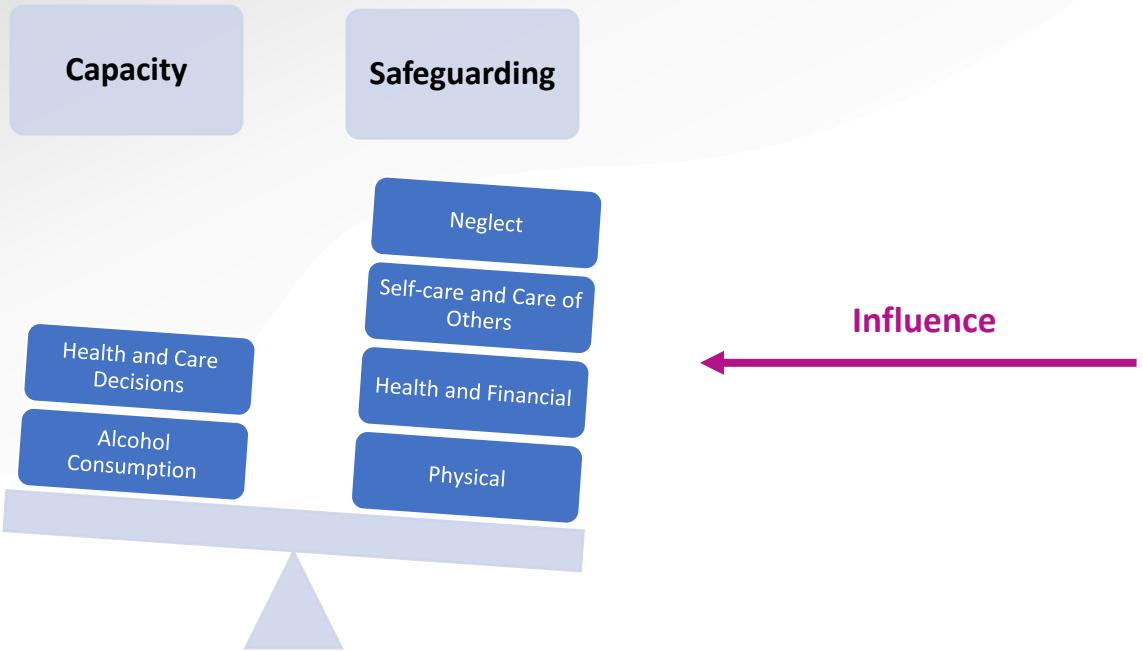
**PRESERVED?**

**IMPAIRED**

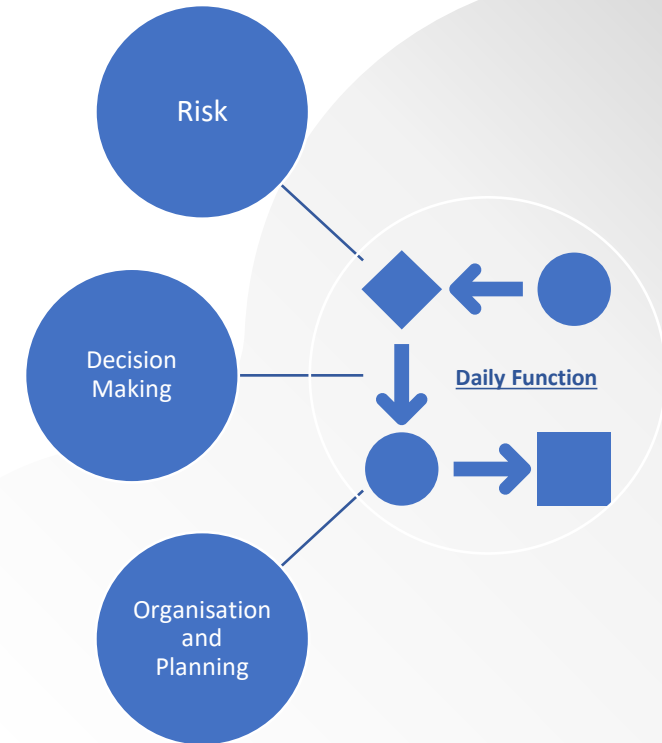
Factual Recognition?  
Spatial Recognition?  
Rate of Forgetting?

Attention  
Task Switching  
Processing Speeds  
Contextualised recall strategies  
Immediate/delayed/cued recall  
Cognitive flexibility and shifting  
**EPISODIC MEMORY**

# What Impairments?

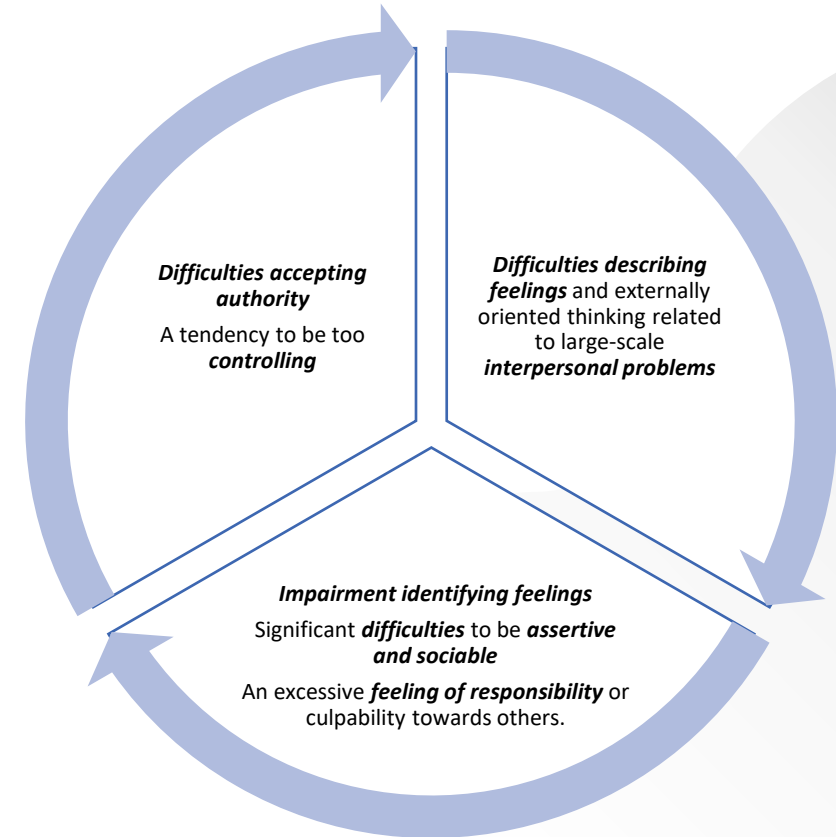
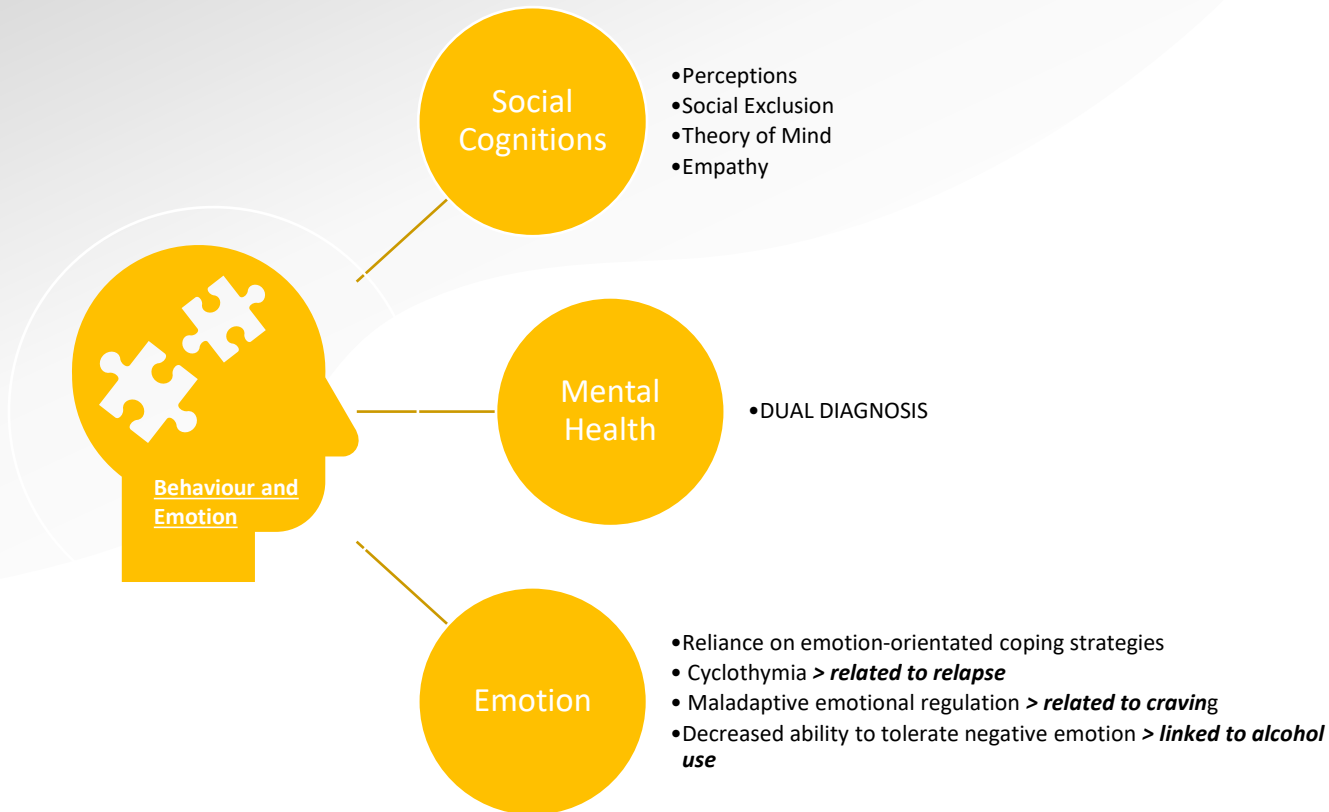


- Abuse
  - Accidents
  - Injury
- 
- Impulsivity
  - Difficulty weighing up information
- 
- ADLS
  - Occupational Deficits
  - Social Impacts





# What Impairments?

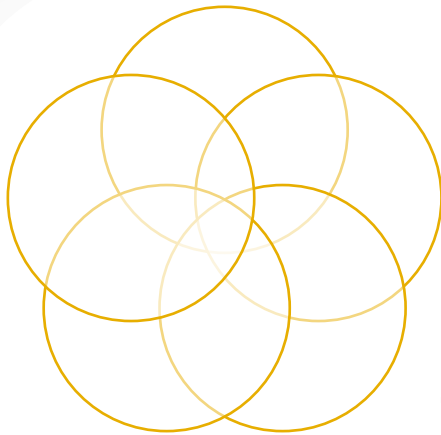


# Impairments in WKS

## KS Patterns

Memory impairment out of proportion to other cognitive functions

Apathy  
Behaviour  
Emotion



Possible confabulations

Lack of insight into condition

Otherwise alert and responsive

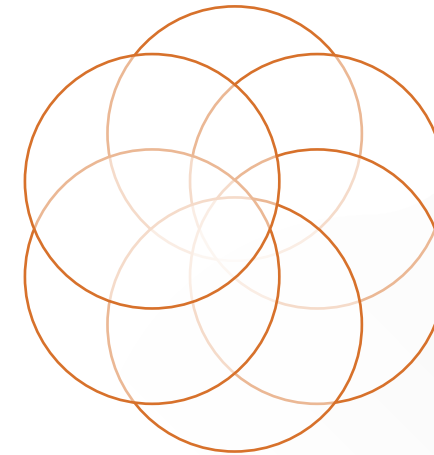
## WE Patterns

Attention deficits

Altered executive function

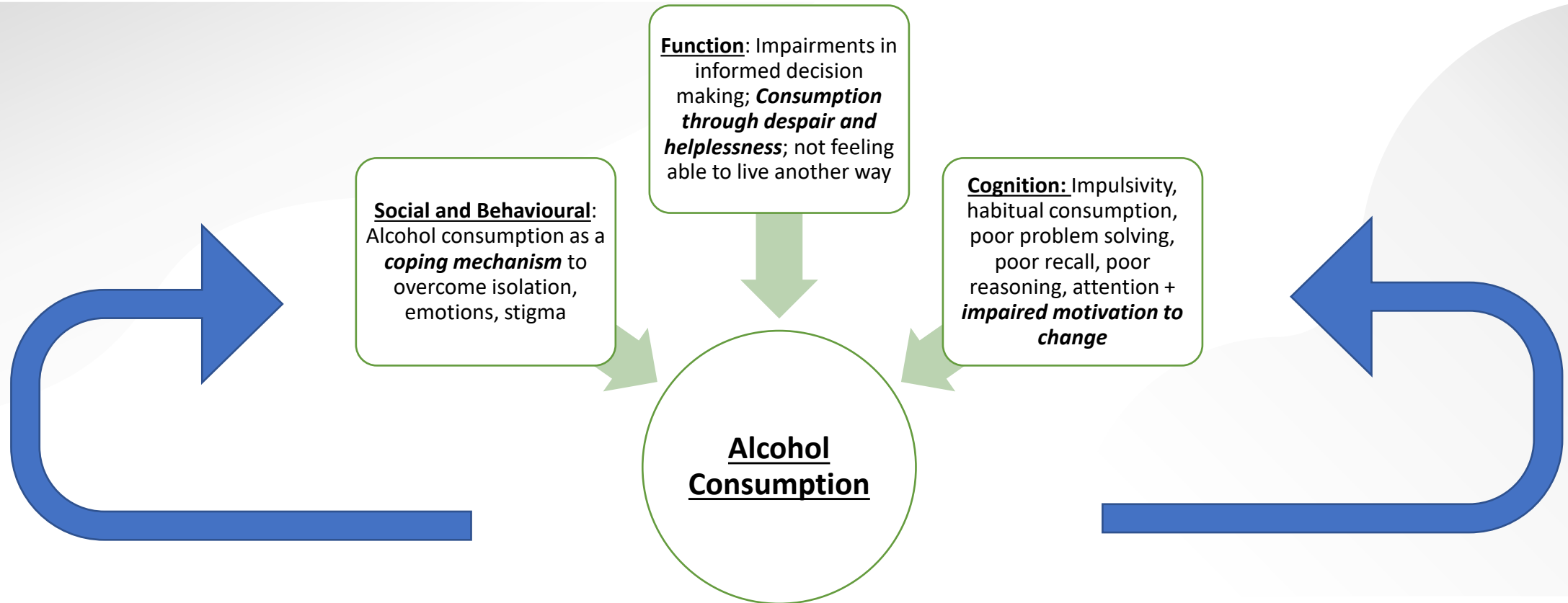
Global confusion and disorientation

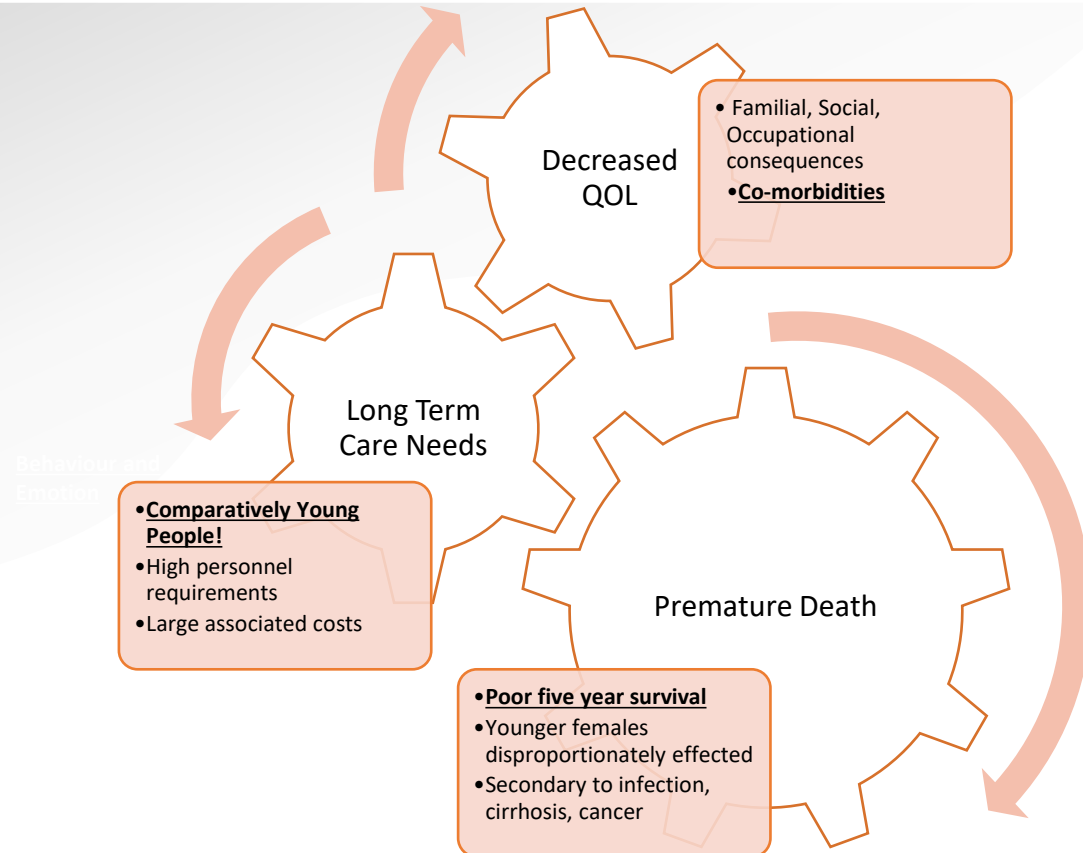
Reduced orientation



Remote and recent memory deficits

IQ affected



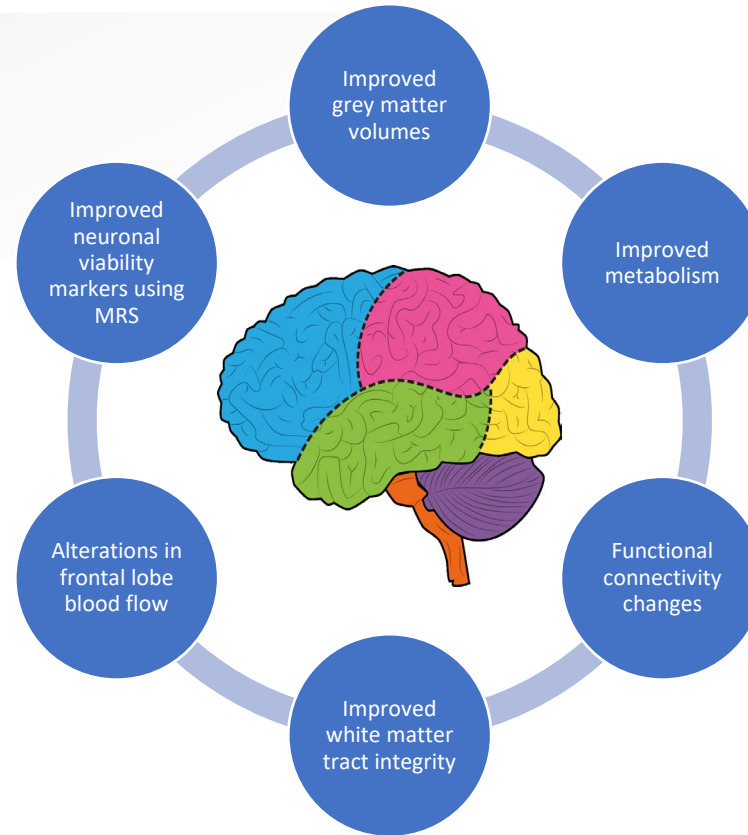


Early  
Recognition

Prevention

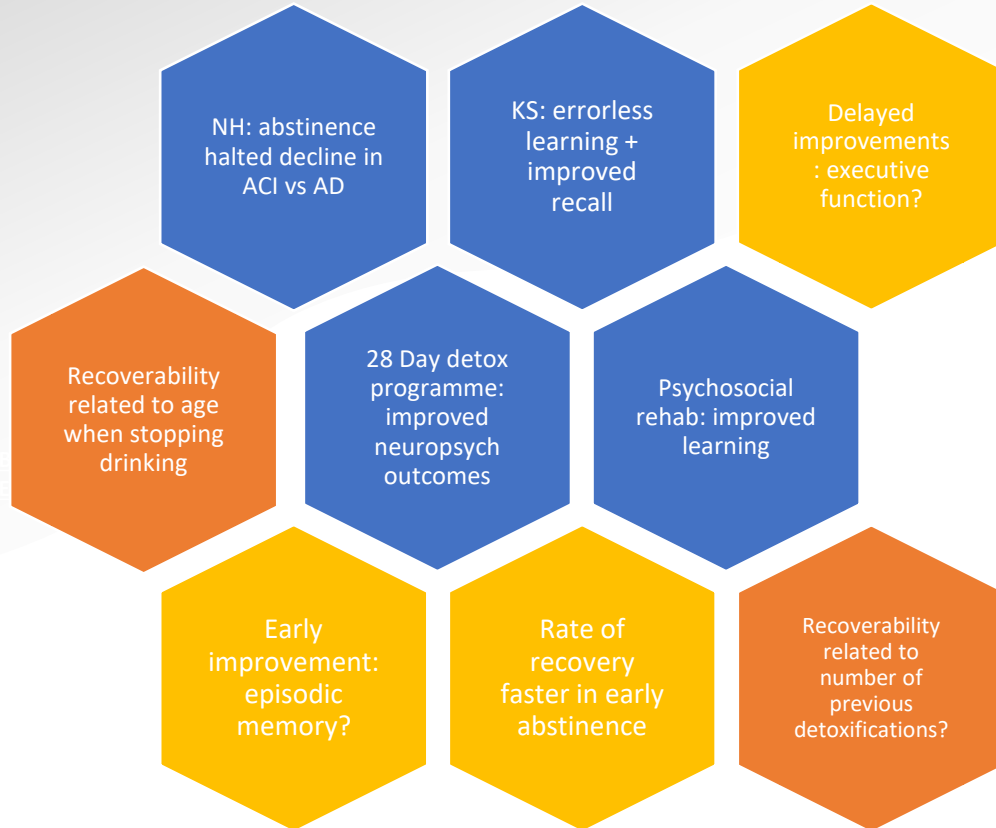
Improvement

Distinguishes  
Driving factor for change



Abstinence

# Recoverability

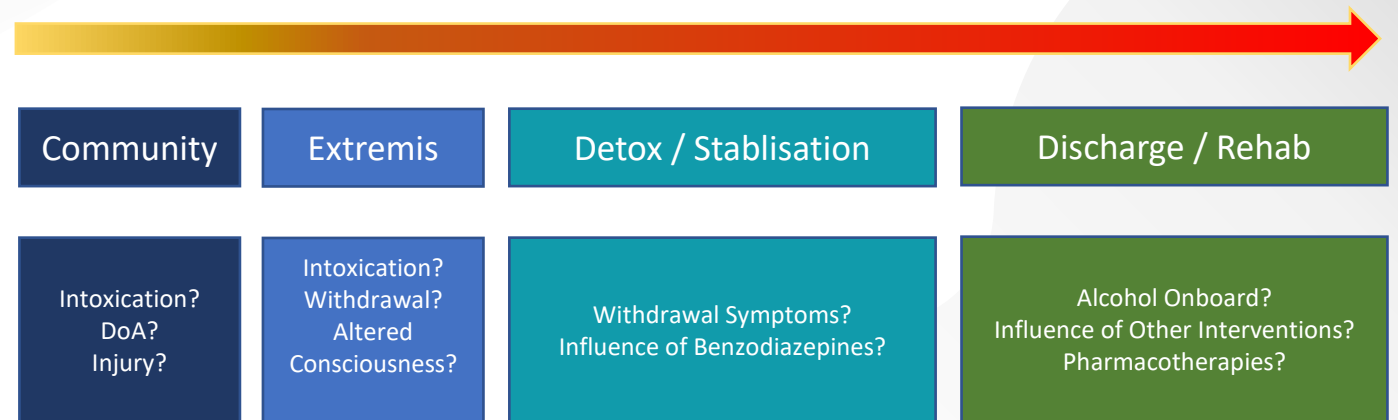


WHAT function(s) get better?  
WHO Does best?  
HOW do we best promote recoverability?  
HOW do we measure it?

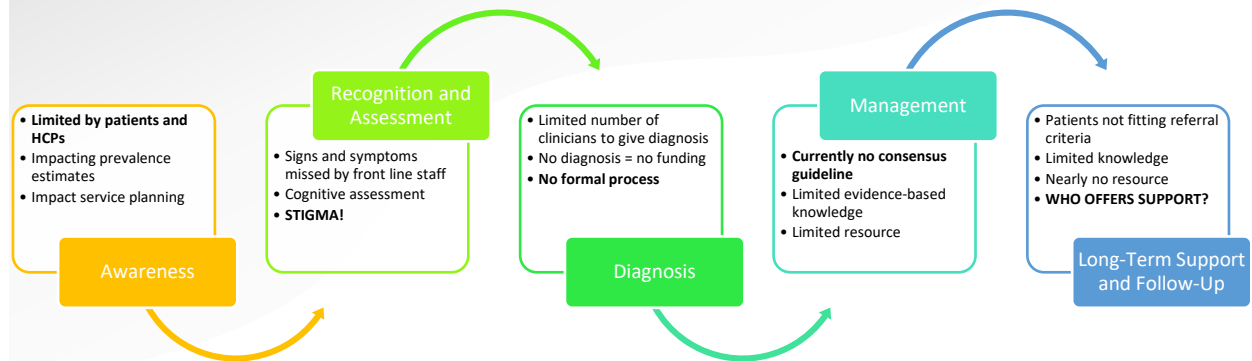
# Confounders – Assessment and Management

Lots of data, however relating it back to the person in front of you in clinic or on the ward is complicated by...

What is the baseline measure?  
What assessments are appropriate and when?

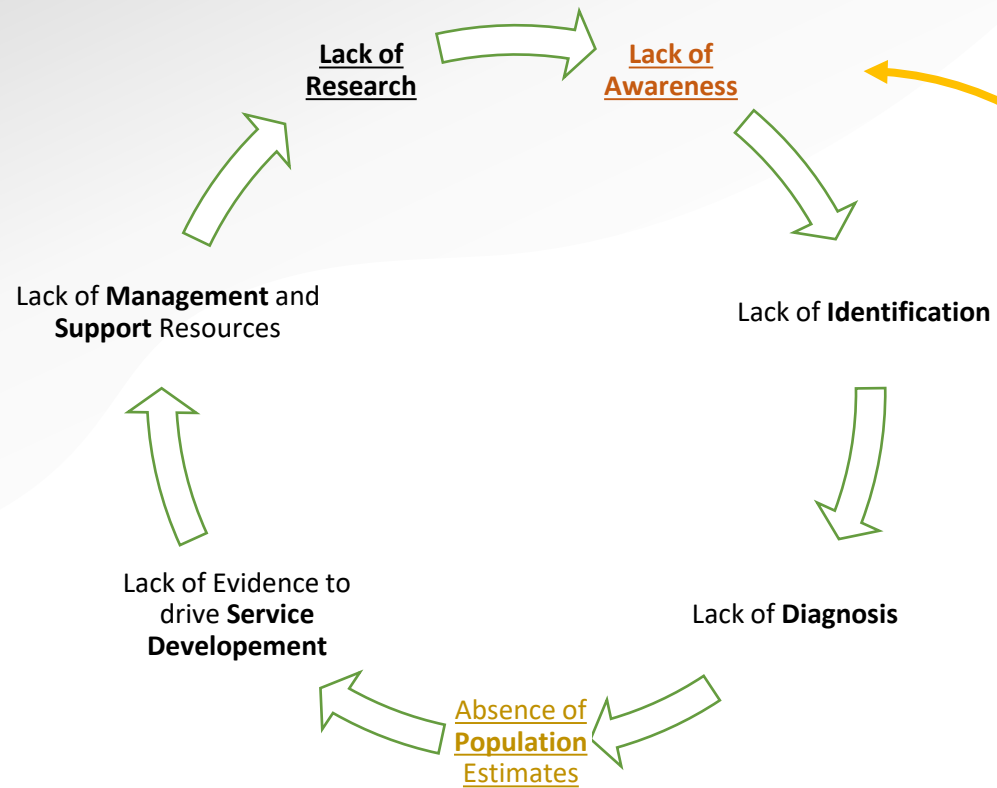


WHO DOES IT? WHO FOLLOWS UP?



## The Gaps! Knowledge and Practice

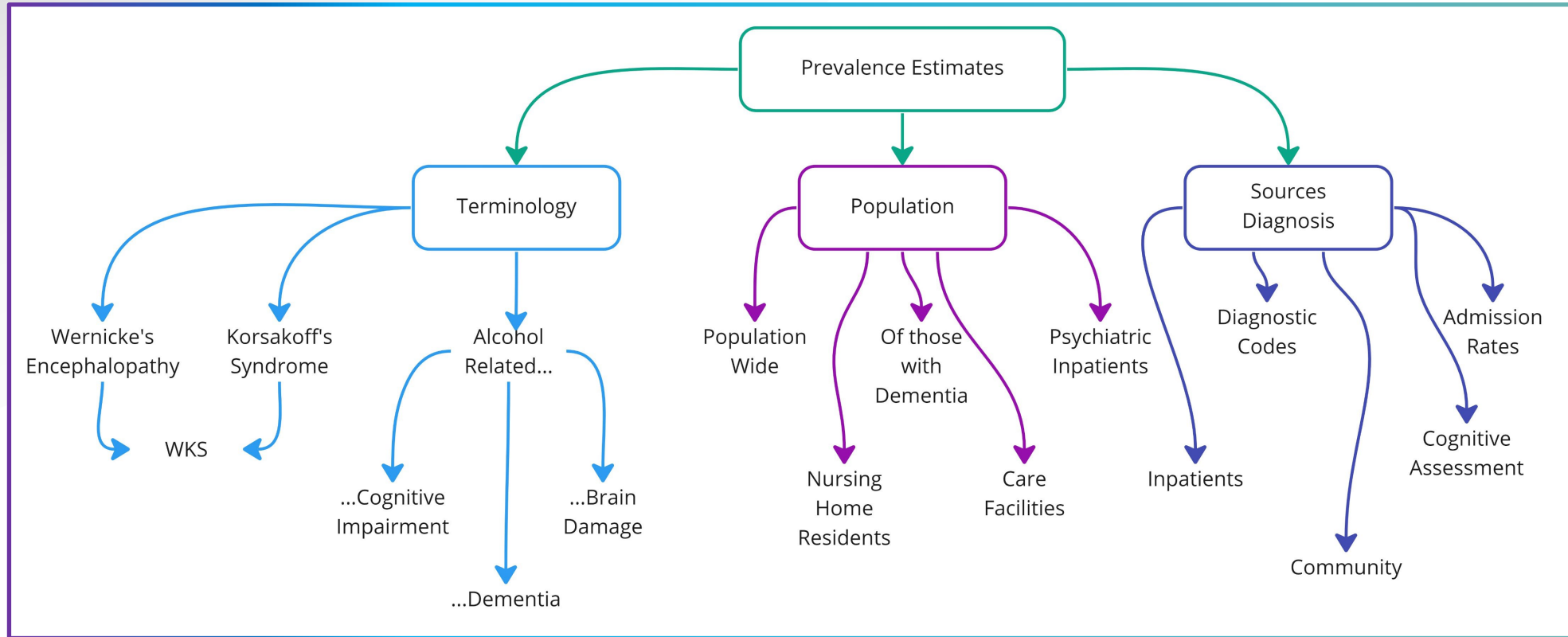




- Limited by patients and HCPs
- Impacting prevalence estimates
- Impact service planning

Awareness

# For example...



# For example...

?

ARCI 24% in care facilities

- WKS ~0.35%
- ARD >65yo in Nursing homes 10.1%
- ARD 13% of all dementias presenting to Out Pts in 1985-1990

ARD 5.7% of all dementia patients in neurology unit

- Ger: WKS ~0.3%
- Fr: WKS ~0.9%
- Czech: WKS ~1.0%
- Belg: WKS ~0.1%
- Aust: WKS ~1.0%

WKS ~0.75%

ARD psychiatric inpatients with AUD 11.2%

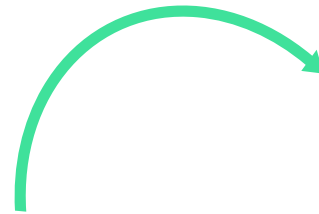
WKS ~2.45%  
ARD 1.19%  
ARD 22% of Dementia patients <65

© 2009 www.outline-world-map.com



- Limited number of clinicians to give diagnosis
- No diagnosis = no funding
- **No formal process**

## Diagnosis



## Management

- **Currently no consensus guideline...YET!**
- Limited evidence-based knowledge
- Limited resource

- Patients not fitting referral criteria
- Limited knowledge
- Very limited resource
- **WHO OFFERS SUPPORT?**

Long-Term Support and  
Follow-Up

## Falling Through The Gaps



- Neuro rehab services?
- Memory services?
- Geriatrics?
- Older Adult Psychiatry?
- Residential support

## WHO?!?!

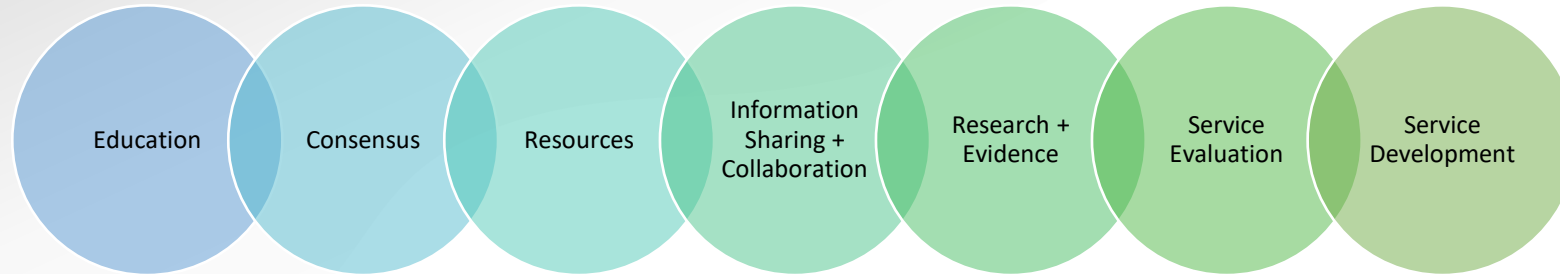


- Assesses?
- Diagnoses?
- Manages?
- Facilitates discharge and long-term support?

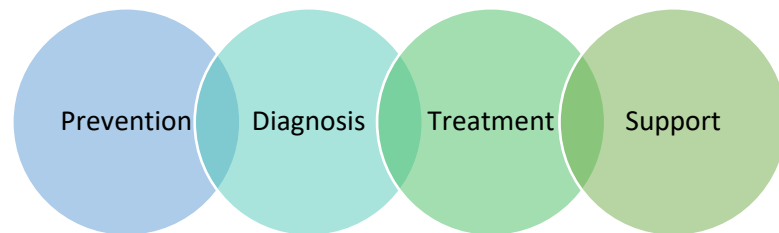
<https://southwales.onlinesurveys.ac.uk/arbd-support-availability>



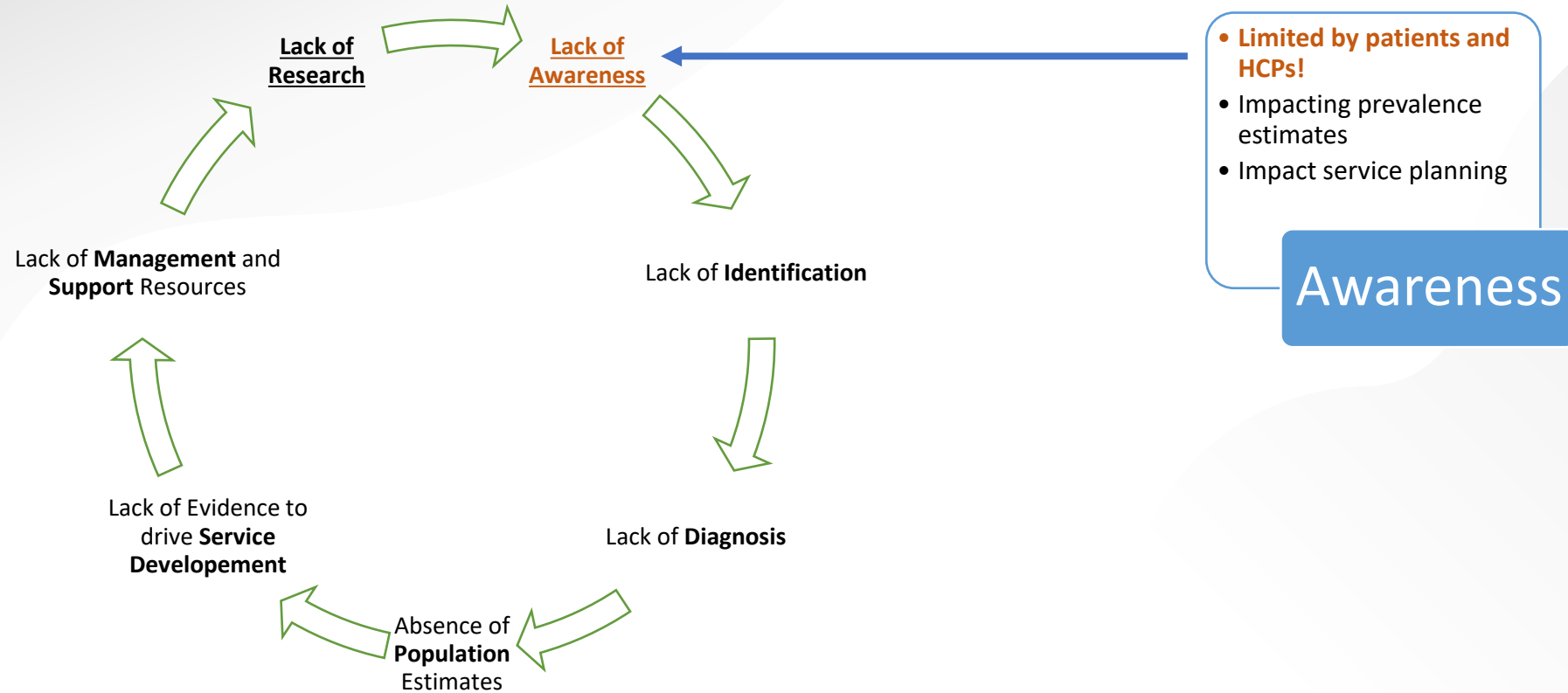
## Big Change Needed!



## Recommendations:



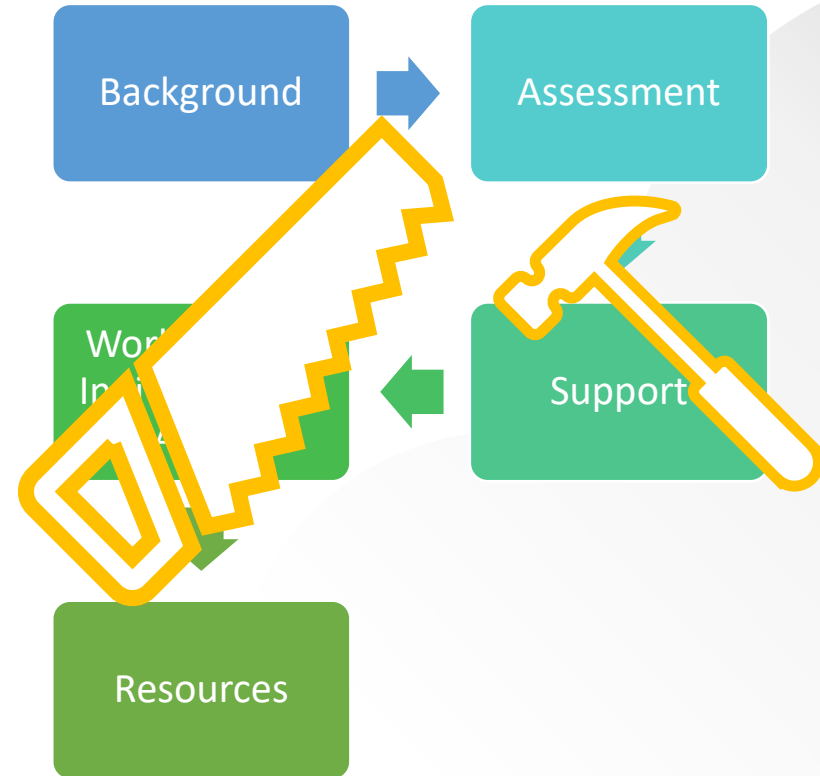
# Starting With Awareness





# Starting With Awareness

**A three-tiered training  
program for Health Care  
Professionals**



# Starting With Awareness

Received: 19 January 2022 | Revised: 12 August 2022 | Accepted: 22 August 2022  
DOI: 10.1111/dar.13545

ORIGINAL PAPER

Drug and Alcohol Review WILEY

## Alcohol-related brain damage: A mixed-method evaluation of an online awareness-raising programme for frontline care and support practitioners

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Higher Education Funding Council for  
Wales

### Abstract

**Introduction:** Alcohol-related brain damage (ARBD) is an umbrella term referring to the neurocognitive impairments caused by excessive and prolonged alcohol use and the associated nutritional deficiencies. This study evaluated the outcomes of an online research-informed training program for ARBD which aimed to improve client outcomes by promoting support staff's awareness and confidence in working with clients who may have (or who are at risk of developing) the condition.

**Methods:** Staff working within a large non-governmental non-profit housing organisation ( $n = 883$ ) enrolled in the training program. Questionnaires were used pre- and post-training to collect self-reported awareness of ARBD and confidence in supporting individuals with the condition. Semi-structured interviews were conducted with 27 staff members approximately 10 weeks post-completion of the program. Interviews were audio-recorded, transcribed verbatim and analysed by employing qualitative content analysis.

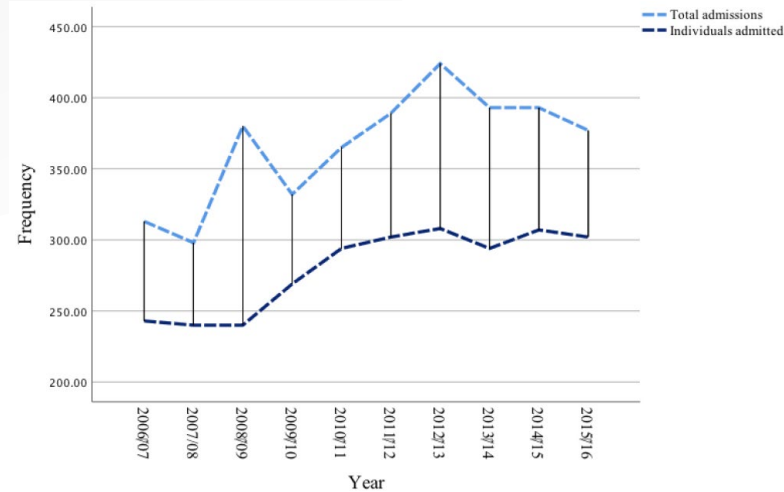
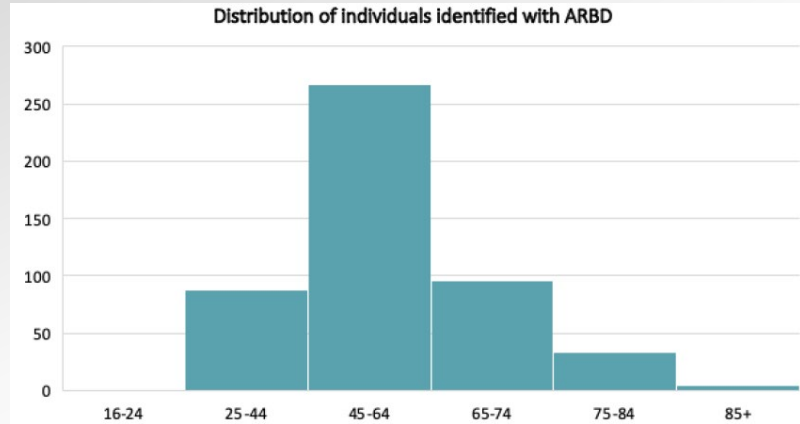
**Results:** Findings from the questionnaires indicated a significant increase in all measures after completing the training program. Three main themes were developed based on the interview data: changes to awareness and understanding; professional practice; and training specific characteristics. Participants reported changes in their ability to identify potential service users with ARBD and confidence in doing so.

**Discussion and Conclusion:** Our findings demonstrate that online training programs can be effective in improving support staff's ability to identify ARBD, potentially leading an increase in signposting service users to relevant services. The research-informed nature of the training demonstrates that translating research findings directly to frontline workers can have a substantial impact and may improve outcomes for this client group.

Trialed in a local third sector organisation with promising results!

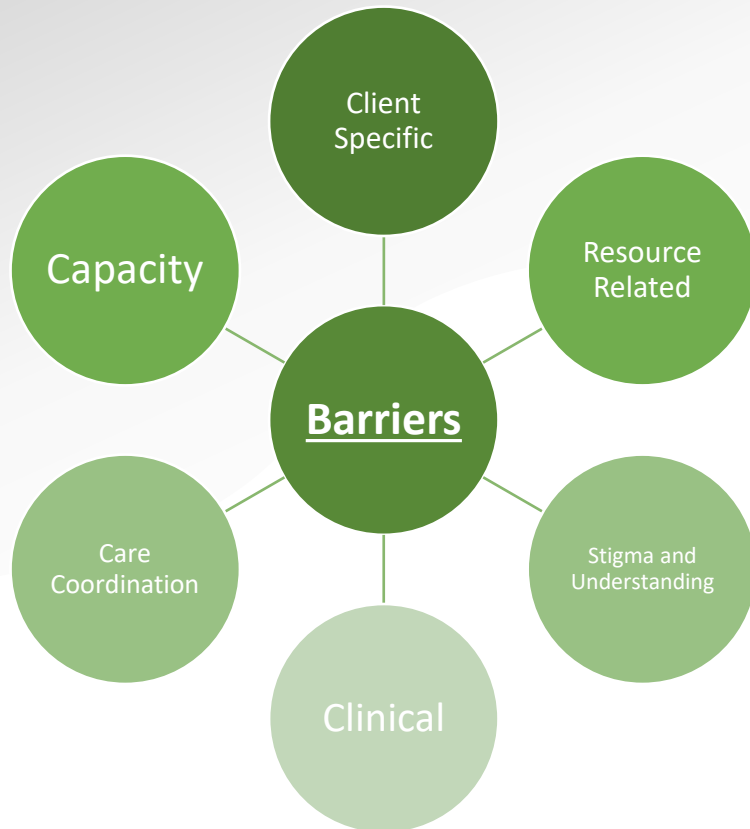
Improvements observed in Awareness, Understanding, ability to Identify individuals with ARBD and confidence in Supporting those with ARBD

# ARBD In Wales

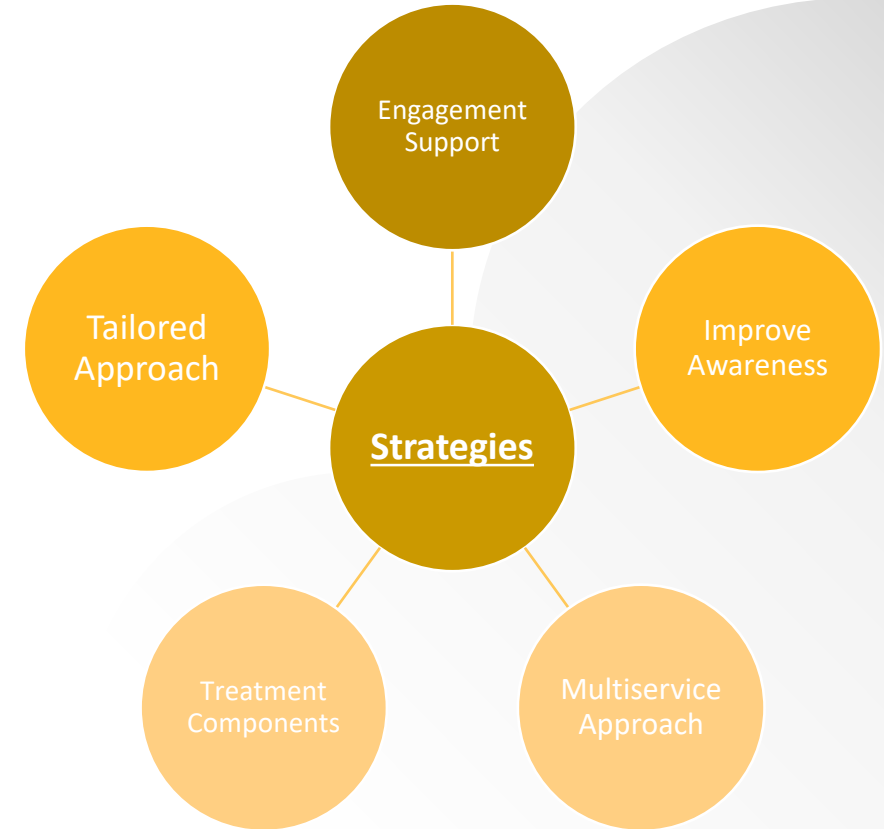


The associated hospital cost for ARBD is an estimated £4,786,851 per year.

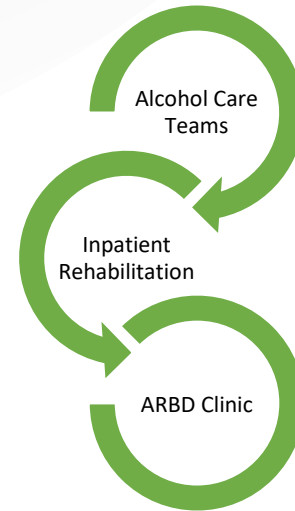
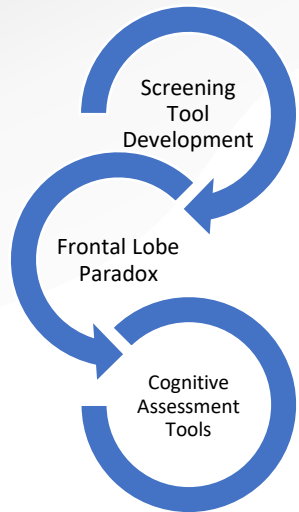
The outcomes for those admitted to hospital with ARBD is relatively poor with a mortality rate of 14.3%.



**VERY** few people have a diagnosis

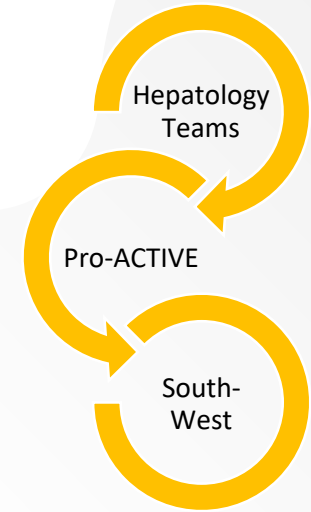


## Identification and Knowledge



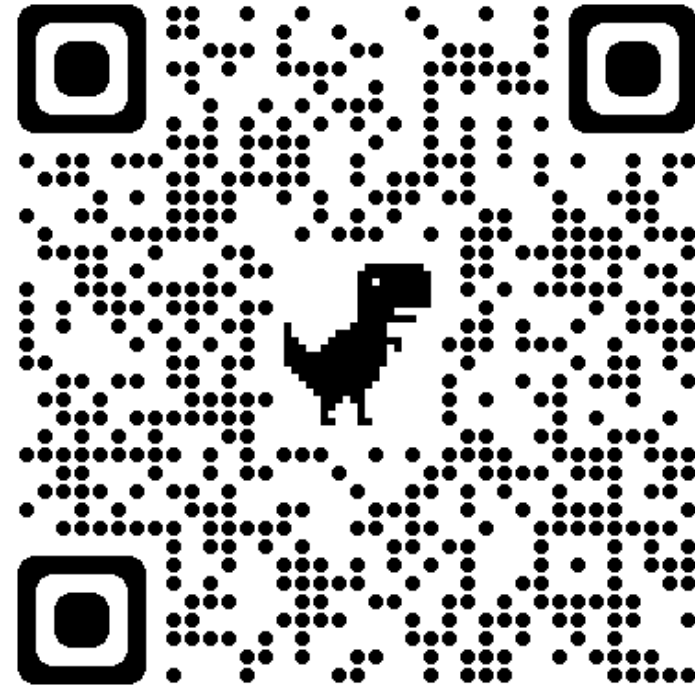
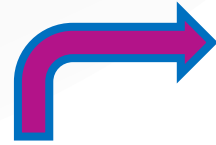
## Service Development

## Wider Engagement



# It's Good To Talk

We'd like to know about  
ARBD support available  
in your area



# It's Good To Talk

We'd like to hear from you, as experts and practitioners, about

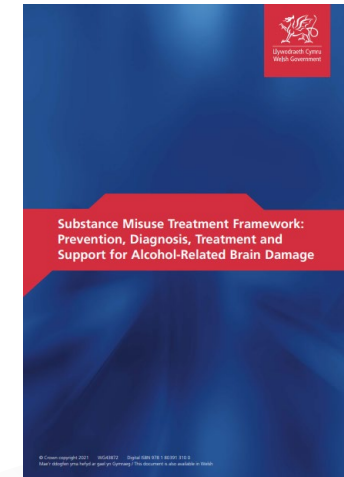
- Your experiences surrounding this condition
- How you have needed to adapt and change your approaches
- Your awareness and knowledge
- How you foresee implementable services in your area being shaped and deployed?



<https://health.research.southwales.ac.uk/about-us/addictions-research/>



@USW\_Addictions



<https://www.gov.wales/sites/default/files/publications/2021-11/substance-misuse-treatment-framework-prevention-diagnosis-treatment-and-support-for-alcohol-related-brain-damage.pdf>