# Primary Care Alcohol Nurse Outreach Service (PCANOS)

**Full Evaluation** 



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# **Acknowledgements**

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Thanks are given to the PCANOS Monitoring group who contributed to the development of the data collection methods, along with reviewing and editing the final evaluation report

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A special thanks to the service users of PCANOS, for giving their time so willingly to contribute to the evaluation of the service particularly in the midst of COVID.

# **1.0 Introduction**

## 1.1 Purpose

The purpose of this report is to provide an evaluation of the Primary Care Alcohol Nurse Outreach Service, PCANOS in its first two years.

## 1.2 Background

The Alcohol Related Deaths in Glasgow City study reported that people living in socio-economically deprived communities in Glasgow experience the highest levels of alcohol related deaths. The study revealed that an individual who will die of an alcohol related death in Glasgow City will most likely be a white Scottish male between the ages of 45 and 54 years old. He will be single or divorced and will live alone in his own home (council rented accommodation) in one of the most socio-economically deprived areas of Glasgow City. He will be unemployed at the time of death and in the years leading to it. Moreover in 2020/21 the rate of alcohol-related general acute hospital stays was almost 8 times greater for patients living in the most socio-economically deprived areas compared to those living in the least ones (Public Health Scotland, 2022).

Primary care has a very clear role in the prevention, identification and treatment of alcohol use disorders. A 2013 report which explored the treatment of a cohort of people who experienced an alcohol related death found that over a third of individuals presented to their GP with alcohol related problems in the first instance. GPs had noted alcohol related concerns for 98% of this cohort (Dargan, 2013). Evidence from health board wide alcohol related deaths audits in 2003 and 2010 highlighted that there was a lack of communication between treatment services and primary care. The Deep End Report 11 focused on addressing alcohol related harms and recognised the importance of effective links between tiered ADRS services and general practices.

The roll out of PCANOS across Glasgow City aimed to address this gap. It aimed to build team relationships and foster closer working between GP practices and specialist alcohol nurses; with the nurses being in and around the practice; ensuring a swift referral response; encouraging informal joint discussions about appropriate treatment interventions; and comprehensively recording care planning within GP IT systems.

The Primary Care Alcohol Nurse Outreach Service, works in partnership with the general practice teams and has a strong focus on developing a seamless referral process to engage patients quickly into alcohol care and treatment thus improving the communications with GP's about patient outcomes. The nurses, where assessed as clinically appropriate, provide a flexible outreach service in patients' homes or within the GP surgery, conduct physical health checks, conduct child protection and adult support and protection risk assessments, carry out home supported alcohol detoxes if deemed appropriate, conduct full psycho-social interventions and refer onto other community recovery services for ongoing support.

Primarily the aim of PCANOS is to address the needs of people with problem alcohol use who are in contact with their general practices but who have not previously engaged well with Alcohol and Drug Recovery Services (ADRS). Patients referred who are not previously known to ADRS are triaged by the nurses and directed to the most appropriate service dependant on assessed need. In addition, patients who repeatedly present to Emergency Departments and are admitted as inpatients, and who often have complex physical and mental health needs are linked in with the service. It is crucial that the specialist knowledge, resource and time needed to engage this vulnerable group is acknowledged in the service model. The engagement strategies the nurses use with patients are described as responsiveness, 'stickability' and flexibility.

Like all services PCANOS had to adapt to rapid changes, and manage despite staff shortages during the height of the COVID 19 pandemic. The particular challenges of working remotely and reduced access to general practices is hence reflected in the statistics that follow.

## 1.3 Methods

This evaluation used a mixed methods approach, utilising data from NHS systems, patient self-reported exit questionnaires, GP feedback forms and service audit forms. Both GPS and service users were given the opportunity to complete these questionnaires on a voluntary basis and were given information about what the questionnaires entailed before completing them. This data used included all referrals from October 2019 until November 2021.

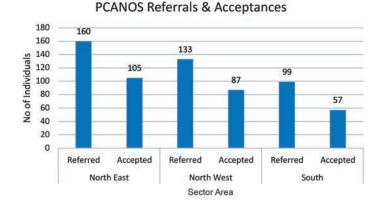
EMIS web was the primary NHS system used to extract patient data including demographic information, information about alcohol and drug use, and any mental or physical health issues. This data was gathered throughout the service users' PCANOS assessment from 1st April 2021 until 31st March 2022. 1 service users with no follow up data was removed from the analysis.

# 2.0 Results

# 2.1 Referral Data

The information below displays the referral data for PCANOS from October 2019 until November 2021.

# 2.1.1 Referrals to PCANOS

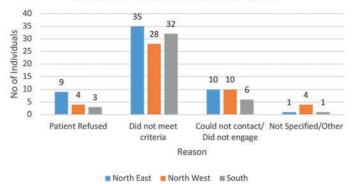


### Figure 1 - Referrals to PCANOS

There were a total of 392 referrals with 249 of these referrals being accepted to PCANOS across all areas from October 2019-November 2021.

## 2.1.2 Reason not accepted to PCANOS

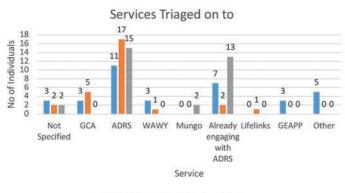
Reason Referrals were not Accepted

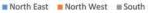


### Figure 2 - Reason not accepted to PCANOS

143 referrals were declined by PCANOS. 16 people did not wish a service, 95 people did not meet the criteria, 26 people could not be contacted or did not engage with PCANOS and 6 referrals were not specified or had other reasons as to why they were declined from PCANOS.

## 2.1.3 Services Triaged on to





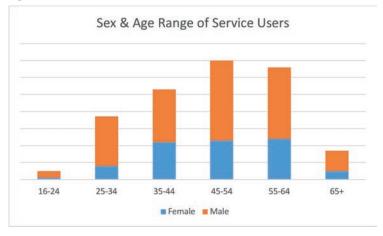
### Figure 3 - Services Triaged on to

For the patient referrals that did not meet the criteria for PCANOS, they were triaged on to a range of other services. 43 referrals were linked into to ADRS, whilst 22 referrals were already engaging with ADRS.

## 2.2 Demographics

The below information only includes the data from individuals who were accepted on to PCANOS from October 2019 until November 2021.

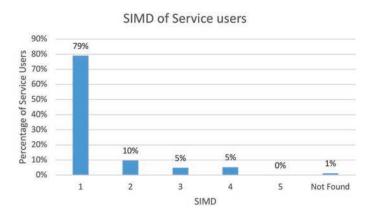
## 2.2.1 Sex & Age Range of Service Users



### Figure 4 - Sex & Age Range of Service Users

The majoirty of service users (67%) were male. The highest proportion of service users (28%) were aged between 45-54 years old, followed by (27%) aged between 55-64 years old. 21% were aged between 45-54 years old, 15% aged between 25-34 years old, 7% were 65 years old or above and 2% were aged between 16-24 years old.

# 2.2.2 SIMD



### Figure 5 - SIMD of Service Users

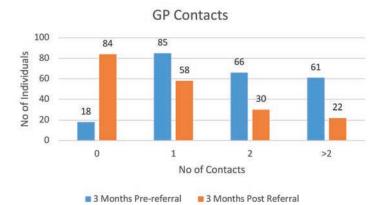
79% of service users were from the most socio-economically deprived quintile area, 10% of service users were from quintile 2, 5% of service users were from quintiles 3 and 4 and no service users were from the least deprived quintile. This is evidence that PCANOS is working with the highest risk target population. 1% of service users' postcodes were unknown due to the inability to locate their postcode on the postcode lookup tool.

The demographic data reveals that the majority of service users were male, aged between 45-54 years old and from the most socio-economically deprived quintile area. The data revealed too that most service users did not have children under the age of 16 years old. This corresponds to the alcohol related death risk profile.

## 2.3 Outcomes of PCANOS

The data displayed below reveals service users' GP contacts, Emergency Department attendances, hospital admissions and engagement with alcohol services at 3 months pre-referral and 3 months post referral.

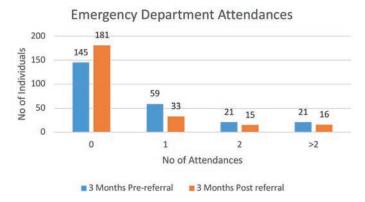
## 2.3.1 Trend in GP Contact



### Figure 6 - Trend in GP Contacts

The chart above presents the number of GP contacts service users had at both 3 months pre-referral and 3 months post referral. There was an average decrease of 1 GP contact (55%) per service user from 3 months pre-referral to 3 months post referral. As GP contact was a main concern for patients involved with PCANOS, it was vital to monitor if there was a reduction in the number of contacts each service user had prior to contact with PCANOS in comparison to after being in contact with the service. The data above shows service users did have a reduction in GP contacts after engaging with PCANOS.

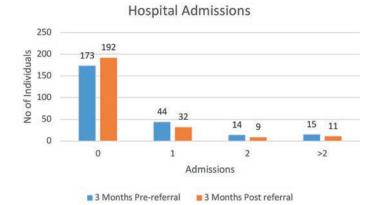
### 2.3.2 Emergency Department Attendance Trend



### Figure 7 - Trend in Emergency Department Attendance

The number of emergency department attendances by service users at 3 months pre-referral and 3 months post referral are displayed in the above chart. There was an average decrease of 39% ED attendances from 3 months pre-referral to 3 months post referral per service user. Again, as service users involved with PCANOS often had regular emergency department attendances, it proved beneficial to monitor if there was any change in the number of emergency department attendances service users had after enagaging with PCANOS in comparison to before contact with PCANOS. The data displayed that there was a reduction in the number of contacts after engagment with the service when compared to the number of ED contacts prior to engagement with the service.

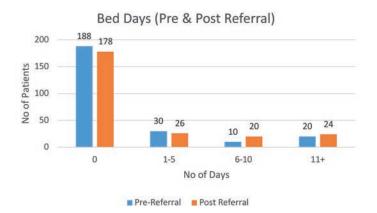
### 2.3.3 Hospital Admissions Trend





The chart above displays the number of hospital admissions at 3 months pre-referral and 3 months post referral. There was an average decrease of 32% hospital admissions per service user from 3 months pre-referral to 3 months post referral. Services users engaged with PCANOS often had regular hospital admissions, therefore monitoring the number of hospital admissions prior to contact with PCANOS in comparison to after engagement with PCANOS was important. There was a reduction in hospital admissions from prior to engagement with PCANOS to after engagement with PCANOS.

## 2.3.4 Bed Days



### Figure 9 - Bed Days

Above displays the number of bed days patients had 90 days pre-referral and 90 days post referral in acute and mental health stays. The average number of bed days pre-referral was 2.3 (Range 0- 46) compared to the average number of bed days post referral, 3.4 (range 0- 124).

# 3.0 Treatment & Interventions

### 3.1 Engagement with Services

Service user engagement was evaluated at 3 months pre-referral and 3 months post referral. 3 months pre-referral focuses on engagement with Alcohol and Drug Recovery Services, whilst 3 months post referral focuses on enagement with PCANOS. There was an average service engagement increase of 65% per service user from 8% engagement at 3 months pre-referral to 73% engagement at 3 months post referral.

### 3.2 Home Detoxes

The table below shows the percentage of patients involved with PCANOS who received a home detox, a tier 4 referral and an adult support and protection referral.

Home Detoxes	Tier 4 Referrals	Adult Support Protection Referrals	
6%	6%	4%	

## **4.0 Discharges**

Of the 249 PCANOS patients from October 2019 until November 2021, 243 have been discharged from the service. The average number of days spent open to PCANOS was 98 days. 196 service users (79%) engaged with PCANOS. 51 service users (20%) were transferred to ADRS and 85 service users (34%) were referred to 3rd sector organisations on discharge from the service.

## 4.1 Deaths within PCANOS

4 service users died whilst engaged with PCANOS, none of which were alcohol related. 12 service users have died since being discharged from PCANOS.

Not Specified on Records (Emis/Datix)	Liver Disease/Failure	Other Illness	Unexplained
9	3	3	1

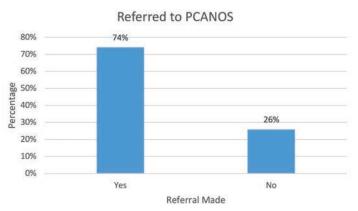
# **5.0 Service Feedback**

The information displayed below shows the data received from service users and GPs in a self-reported questionnaire.

## 5.1 GP Feedback

This includes information from responses received from GP feedback questionnaires. Out of a possible 143 GP practices who have PCANOS available to them as a service, 27 completed the questionnaire.

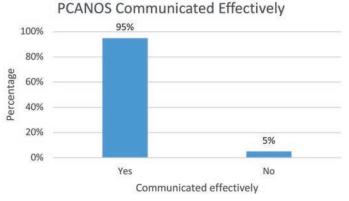
## 5.1.1 Referrals



### Figure 10 - GPs Referred to PCANOS

74% of the GPs who completed the questionairre had stated they have previously referred to PCANOS. Of the 26% who had not previously referred they had stated this was due to not having any patients that were suitable to the service as well as not being aware of the service/forgetting about the service and what it has to offer.

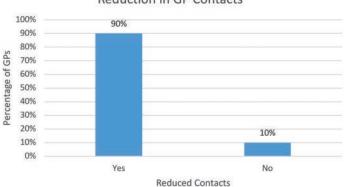
# 5.1.2 Communication



### Figure 11 - PCANOS Nurse Communication

95% of GPs reported the PCANOS nurses had communicated effectively. No explanation was given by the 5% of GPs that stated communication was not effective.

# 5.1.3 GP Contacts

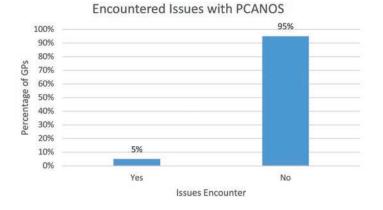


### **Reduction in GP Contacts**

Figure 12 - Reduction in GP Contacts

90% of GPs stated that PCANOS had reduced the number of contacts and time GPs spent with patients in the service.

## 5.1.4 Issues Encountered



### Figure 13 - Issues Encountered

95% of GPs stated they did not encounter any issues with PCANOS. Of the 5% of GPs that said they did experience issues, further detail of these issues were not provided.

### 5.1.5 Further Improvements and Suggestions

Many GPs had overall positive comments on PCANOS,

"Really helpful service",

### "Fantastic service and I very much hope it is rolled out over the city",

### "It is a great service and the nurses engage far more with our more difficult patients.

#### "Please keep the service running".

Whilst it was also suggested that communication and advertising is improved to promote the service and consistently make GPs more aware of the service in place;

#### "Better advertising, many colleagues not aware of service",

"We only use it infrequently so it can fall off the radar as an option",

# *"It took a while for the practice to remember the service was available and reminders or additional promotion of the service may be useful",*

# "The lack of communication means the service is forgotten about. A letter after a referral to say discharged, DNA'd or was offered support would be helpful".

### 5.2 Service User Feedback

This includes details of the anonymised self-reported responses received from each question included in the service user exit questionnaires. Out of a possible 249 service users, 38 completed the exit questionnaire.

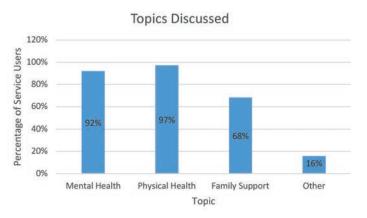
### 5.2.1 Appointment Location



### Figure 14 - Appointment Location

All service users were seen in their own home, with one service user also being seen in a friend/family member's home. All service users deemed this as a suitable location.

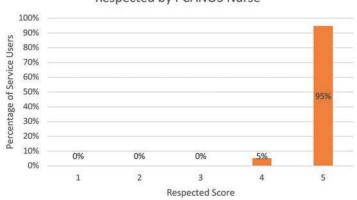
# 5.2.2 Topics Discussed



### Figure 15 - Topics Discussed at Appointments

97% of service users that completed the exit questionairres were given time to discuss their physical health, 92% were given time to discuss their mental health, 68% of service users were given time to discuss family support and 16% were given time to discuss other topics including but not limited to benefits and housing support.

## 5.2.3 How Respected did you feel by your PCANOS Nurse

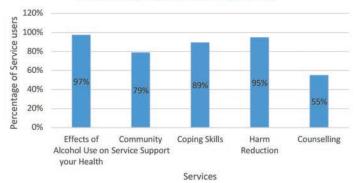


### Respected by PCANOS Nurse

### Figure 16 - Respected by PCANOS Nurse

On a scale of 1 to 5 (1 being not respected and 5 being highly respected) service users scored an average of 4.95 on how respected they felt by their PCANOS nurse. 95% of service users said they felt highly respected.

### 5.2.4 Services service users were given written or verbal information on

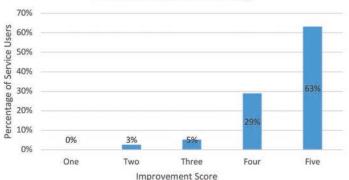


#### Services Information was given on

### Figure 17 - Service Information was given on

All service users were given information on the treatment options avaiable to them.

## 5.2.5 General Health and Wellbeing Improved

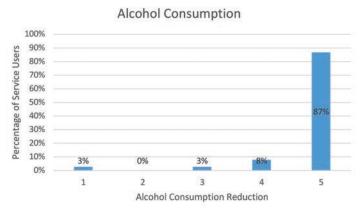


General Health & Wellbeing

### Figure 18 - General Health & Well-being Improvement Score

Service users were asked, on a scale of 1 to 5, has your general health and wellbeing improved since engagement with your PCANOS nurse, 5 meaning "more than expected" and 1 meaning "not at all". There was an average general health and wellbeing score of 4.5, with no service users reporting "not at all".

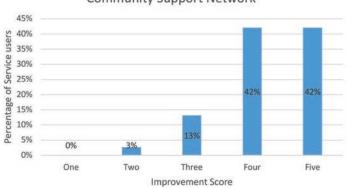
# 5.2.6 Alcohol Consumption Reduced



### Figure 19 - Reduction in Alcohol Consumption

When asked how much their alcohol consumption has reduced since engagement with their PCANOS nurse, 5 meaning "more than expected" and 1 meaning "Not at all", 87% of service users rated their alcohol consumption reduction as 5, with an average score of 4.8.

## 5.2.7 Community Support Network

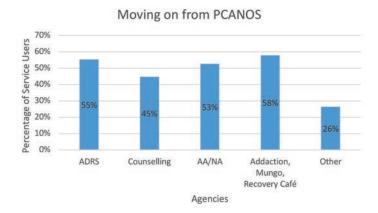


## Community Support Network

### Figure 20 - Community Support Network Improvement Score

Service users were asked if their community support network had changed since engaging with PCANOS on a scale of 1 to 5, (1 being not at all and 5 being more than expected). The average community support network improvement score was 4.2.

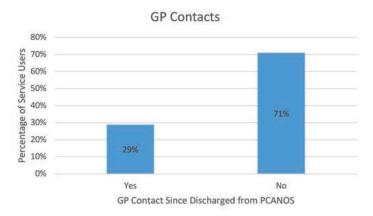
# 5.2.8 Moving on from PCANOS



### Figure 21 - Agencies Moving on from PCANOS

The chart above displays the agencies that were discussed with service users about a move onto after PCANOS discharge.

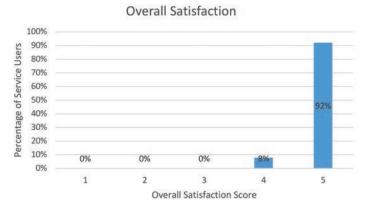
## 5.2.9 GP Contact



### Figure 22 - GP Contact Since PCANOS Discharge

71% of service users had self-reported not having any GP contacts since their last contact with their PCANOS nurse, whilst 29% self-reported that they had.

# 5.2.10 Overall Satisfaction with PCANOS





Services user were asked about their overall satisfaction with PCANOS on a scale of 1 to 5, 1 being not satisfied and 5 being very satisfied. 92% of service users rated their overall satisfaction as 5 with an overall average score of 4.9.

# 5.2.11 Suggestions for the service to improve

The majority of service users did not have any suggestions to improve the service or had only positive comments.

One service user had stated:

"More frequent visits would be beneficial however they realise this is not possible",

Whilst others stated:

"Service has been 1st class, "I just want to say I have had the best service and are very pleased with the service. I wouldn't change a thing",

*"The experience has been great and has had a great help on changing my perspective on drinking"* 

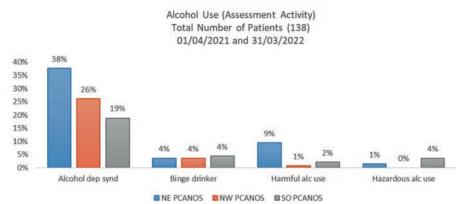
And,

*"In my particular experience your service cannot be improved on. \*PCANOS nurse\* has been a wonderful support to me and my family. \*they\* have really helped me turn my life around".* 

# 6.0 Assessment Tool

The information below presents the data extracted from the PCANOS assessment tool on EMIS web from the 1st April 2021 until 31st March 2022. The information has been separated into 3 sector areas, North East, North West and South. These 3 sector areas represent the 3 areas within Glasgow City.

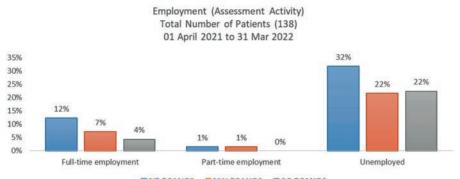
# 6.1 Alcohol Use



### Figure 24 - Alcohol Use Disaggregated (April 2021- March 2022)

The above displays the disaggregation of alcohol use for each sector area. The North East reported 38% of service users were diagnosed with alcohol dependent syndrome, 4% were binge drinking, 9% had harmful alcohol use and 1% were consuming alcohol at a hazardous level. The North West reported 26% of service users with alcohol dependent syndrome, 4% were binge drinking, 1% were consuming alcohol at a harmful level. In the South, 19% had alcohol dependent syndrome, 4% were binge drinking, 2% reported harmful alcohol use and 4% were consuming alcohol at a hazardous level.

# 6.2 Employment Status



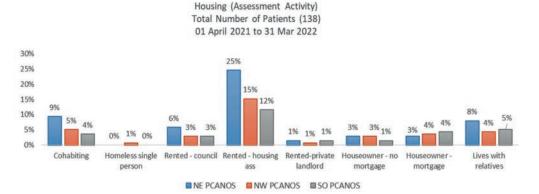
■ NE PCANOS ■ NW PCANOS ■ SO PCANOS

### Figure 25 - Employment Status (April 2021- March 2022)

Overall, 72% of service users were unemployed at time of assessment, 2% were in part-time employment and 23% were in full-time employment.

Primary Care Alcohol Nurse Outreach Service (PCANOS) Full Evaluation

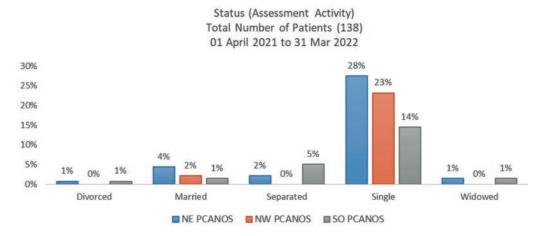
## 6.3 Housing Status



### Figure 26 - Housing Status (April 2021 - March 2022)

The majority of service users, 52%, were living in rented housing association whilst the lowest number of service users, 1%, were experiencing homelessness.

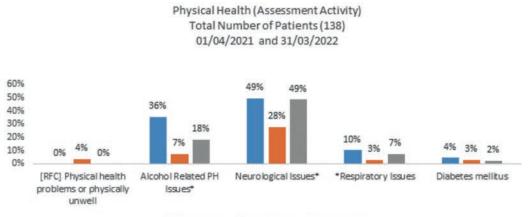
## 6.4 Relationship Status



### Figure 27 - Relationship Status (April 2021- March 2022)

The majority of service users, 65%, were single, followed by 7% of service users being married or separated.

## 6.5 Physical Health



■ NE PCANOS ■ NW PCANOS ■ SO PCANOS

### Figure 28 - Physical Health Assessment (April 21- March 21)

The graph above displays the percentage of patients who experience extensive physical health problems.

# 6.6 Weight Health

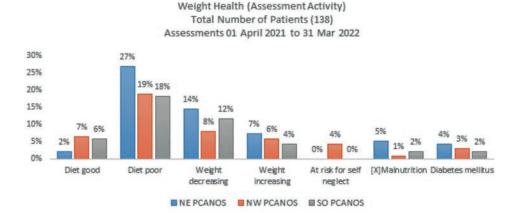


Figure 29 - Weight Health Assessment (April 21-March 21)

The above graph presents the range of health issues service users experience in relation to their weight.

# 6.7 Mental Health

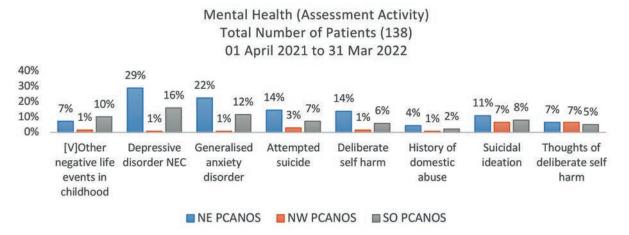


Figure 30 - Mental Health Assessment (April 2021 - March 2022)

The graph above displays the extensive list of complex mental health issues service users experience.

# 7.0 Conclusion

These results show the Primary Care Alcohol Nurse Outreach Service is targeting the appropriate population of service users. They have a similar profile of characteristics to the patients identified in the Alcohol Related Deaths in Glasgow City report (Dargan, 2013). The outcome data shows positive outcomes across all domains based upon the aims and criteria of the service; increased engagement with alcohol treatment and reduced use of general practice, ED and reduced hospital admissions.

Feedback from GPs and service users was also highly positive which is also reflected in the recently published external academic evaluation of attached alcohol nurses in Deep End General Practices (Mohan et al., 2022). Future long term follow up of patient outcomes is desirable.

# References

Dargan, S., 2013. Alcohol Related Deaths in Glasgow City. NHS Greater Glasgow and Clyde.

Mohan, A., Mitchell, D., Sharp, C., Fitzgerald, N. and Eadie, D., 2022. Exploring the management of alcohol problems in Deep End practices in Scotland.

Public Health Scotland, 2022. Alcohol-Related Hospital Statistics 2020/21.

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