

Introduction and Initial Outcomes from an Enhanced Physical Health Clinic for People with Intellectual Disabilities Prescribed Psychotropic Medication

Elizabeth Patteril | Research Assistant
Neurodevelopmental Workstream
HPFT





Acknowledgements

**Project Lead: Dr Inder Sawhney, Clinical
Director, HPFT**



Overview

- **Background**
- **Enhanced Physical Health Clinic**
- **Results**
- **Discussion**
- **Conclusions**



Background



Background

Over the past few decades, the life expectancy of people with intellectual disabilities has increased



This may be due to better identification and treatment of co-existing medical conditions



Despite this progress, this population's life expectancy is still significantly lower in comparison to the general population

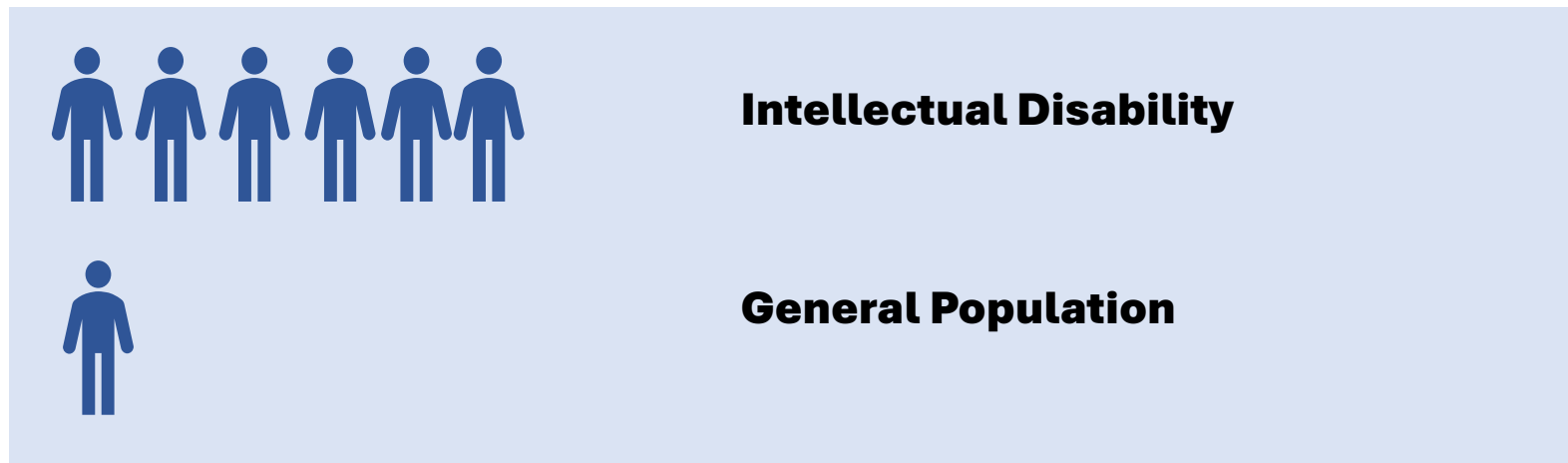
Background



According to the LeDeR report in 2021:
the **median age** of death for people with an
intellectual disability was **62**
compared to **82.7** for the general population in
the corresponding timeframe

Background

Furthermore, 6 out of 10 people with an intellectual disability died before they were 65, as compared to 1 in 10 of the general population



Background



These statistics support the concept of the **mortality gap** described in a paper by Fiorillo and Sartorius in 2021



They investigated this public health scandal and stated that it requires **urgent action** from **healthcare professionals and governments worldwide**

Background

What are the causes for this disparity?

- 1) Genetic conditions
- 2) Stigma – barrier to prompt access to care
- 3) Poor self care

Background

What are the causes for this disparity?

4) Poor socioeconomic status

5) Patients increased likelihood of experiencing mental health difficulties – increased likelihood of being prescribed psychotropic medication

6) Medication side effects

Background

As such, this group experience increased risks to their physical health comorbidity and mortality



Enhanced Physical Health Clinic



Enhanced Physical Health Clinic



At present, the monitoring of physical health conditions related to mental health difficulties or use of psychotropic medication are carried out in primary care



**Novel physical health monitoring clinic
East of England (HPFT)
Service users who are currently open to a secondary care intellectual disability mental health team
On psychotropic medications**

Aims of the clinic



To improve the physical health outcomes by supporting patients to uptake eligible screening



Appropriate treatment of any identified health needs



**Participants
and Setting**



n = 463

2021-2023

Measures and procedures



The EPHC offers two core functions:



Psychotropic medication side effects and cardiometabolic/cardiovascular risks monitoring



A comprehensive health assessment including lifestyle factors and specific health issues

Data

Data was recorded on a database for each patient seen by the EPHC clinic.

This database was utilised for this study.

The key tests, assessments and interventions carried out by the EPHC are described in the next couple of slides.

Function 1 - Psychotropic medication side effects and cardiometabolic/cardiovascular risks monitoring

BMI and waist circumference

A blood pressure and pulse check (diastolic and systolic blood pressure + pulse rate)

A blood lipid including cholesterol test

HbA1c measurement blood test

Function 1 - Psychotropic medication side effects and cardiometabolic/cardiovascular risks monitoring

Biochemical monitoring of:

- urea and electrolytes
 - liver function test
 - full blood count
 - thyroid function test
 - vitamin B12 and folate
 - calcium serum calcium (if patient is on lithium)
 - e-GFR (if patient is on lithium)
 - serum prolactin (if patient is on anti-psychotic medication)
 - vitamin D
-

Function 1 - Psychotropic medication side effects and cardiometabolic/cardiovascular risks monitoring

Cardiovascular Disease risk calculation using QRISK3 risk calculator

QFracture assessment, a prediction algorithm that estimates the 10-year absolute risk of osteoporotic fractures and hip fractures in men and women.

Completion of 12 lead ECG with rhythm

Function 1 - Psychotropic medication side effects and cardiometabolic/cardiovascular risks monitoring

Recording of prescribed medication according to categories (Antipsychotics, Antidepressants, Anxiolytics, Antiepileptics/Mood stabilisers, Stimulants and Lithium), compliance (categorised as compliant or non-compliant)

Psychotropic medication side effect monitoring using the Glasgow Antipsychotic Side-effect Scale (GASS)

Function 2 - Comprehensive health assessment including lifestyle factors and specific health issues

- Physical and mental disorders recorded according to ICD-11
- Lifestyle factors:
 - nutritional status, diet, and level of physical activity
 - smoking status
 - use of illicit substance/non prescribed drugs

Function 2 - Comprehensive health assessment including lifestyle factors and specific health issues

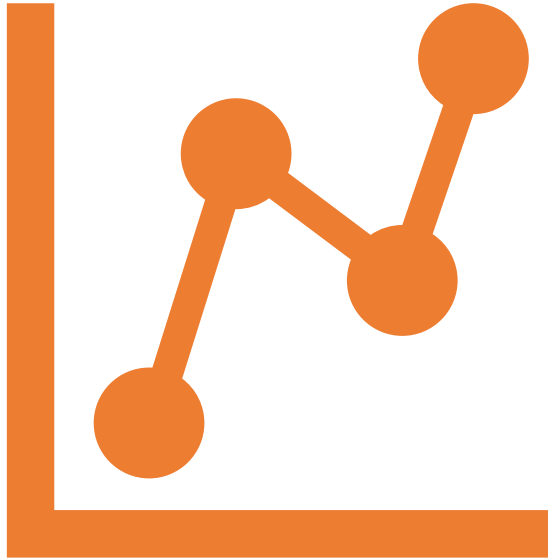
- Review of dysphagia status
- Screening for constipation with Bristol stool chart
- Cancer screening - Bowel, breast, cervical and prostate
- Abdominal aortic aneurysm (AAA) screening
- Allied health professional checks - Audiology, Opticians and Dental

Referrals

If any abnormal results were found, appropriate referrals were made



Analysis



Descriptive statistics were used to analyse data from the EPHC clinical database.

Data is presented regarding:

- Sociodemographic
- Clinical characteristics
- Prescribed medication

Process data regarding the activity of the clinic in **terms of numbers of interventions** provided to patients in the timeframe covered by the study are provided, alongside test results.

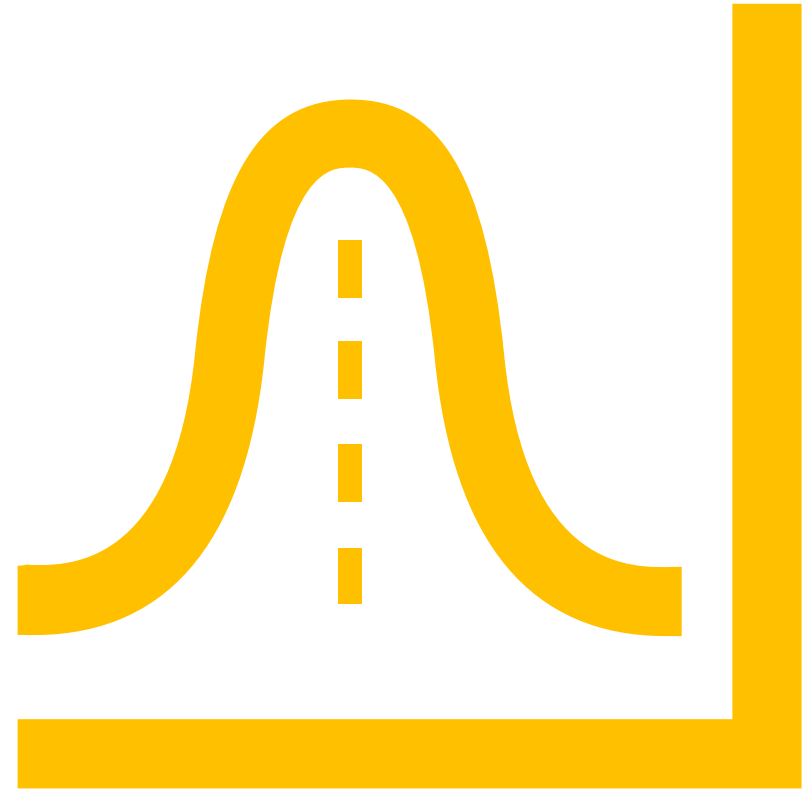
Results



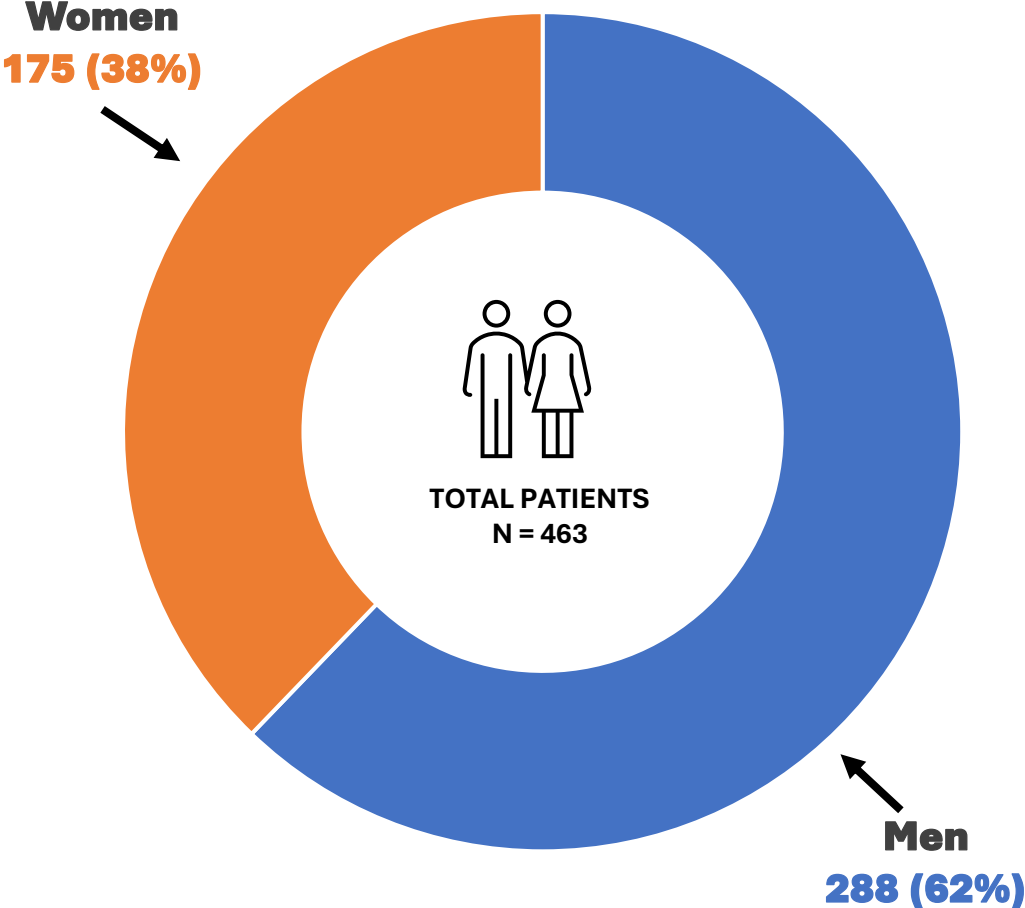
Sociodemographic Age

Average = 44

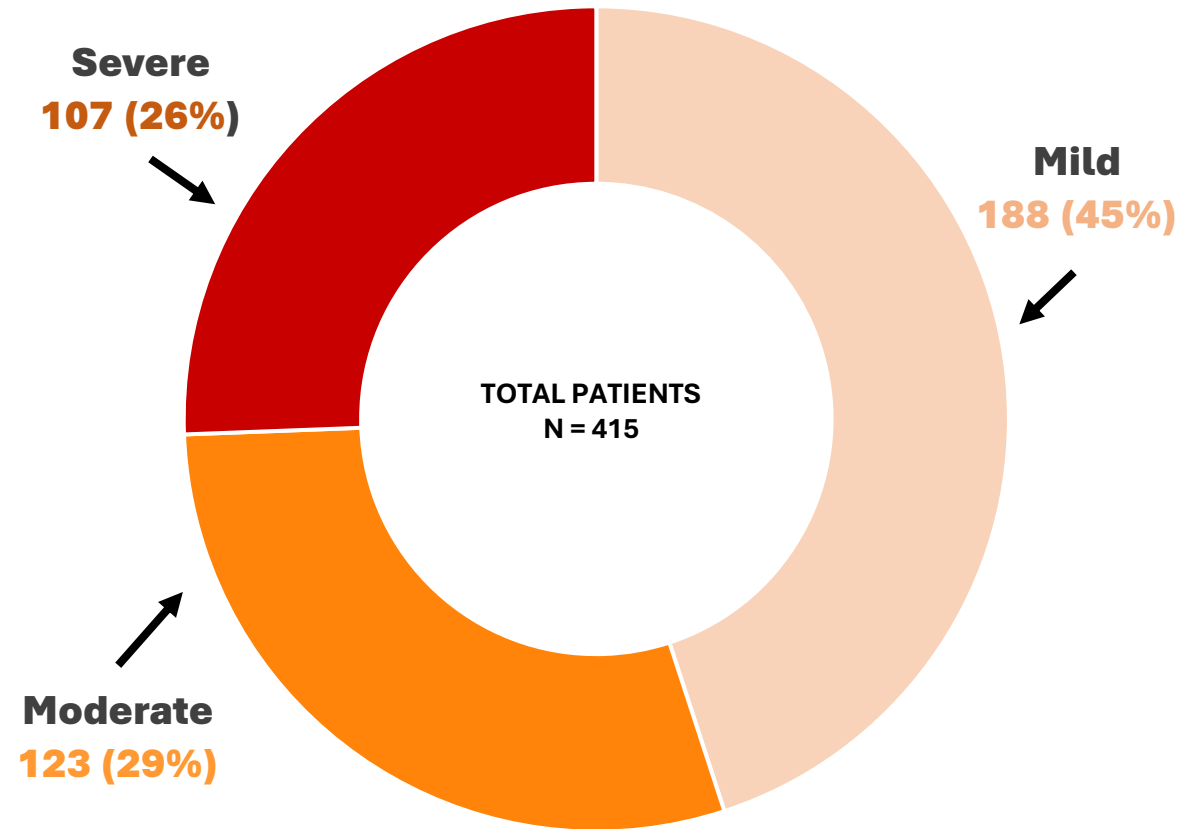
Range = 17-85



Sociodemographic – Gender



Intellectual Disability



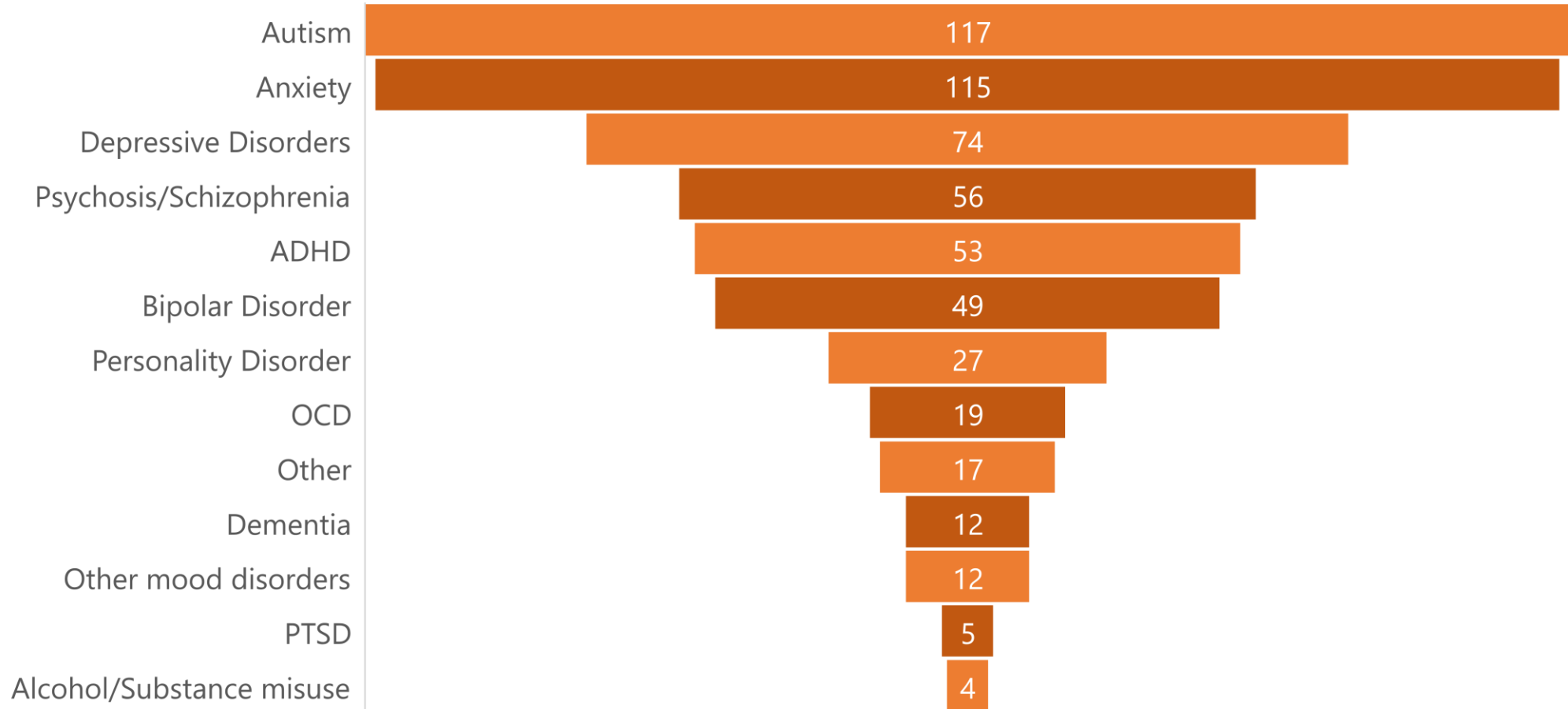
Genetic Syndromes

Genetic syndromes were recorded for **64 patients (14% of the total cohort)**

The most common syndromes were:

- **Downs Syndrome - 15 patients**
- **Fragile X syndrome - 7 patients**
- **Tourette's Syndrome - 6 patients**

Psychiatric Characteristics



Conditions	N	%
Certain infectious or parasitic diseases	3	<1
Neoplasms	4	<1
Diseases of the blood or blood-forming organs	5	<1
Diseases of the immune system	2	<1
Endocrine, nutritional or metabolic diseases	92	20
Hypothyroidism	40	9
Hyperthyroidism	4	<1
Hyperlipidaemia	4	<1
Hypercholesterolemia	5	1
Diabetes	35	8
Adrenal	3	<1
Other (with ICD-11)	1	<1
Sleep-Wake Disorders	2	<1
Diseases of the Nervous System	41	9
Cerebral Palsy	18	4
Other	23	5
Diseases of the Visual System	15	3
Diseases of the ear or mastoid process	6	1
Diseases of the circulatory system	45	10
Hypertension	35	8
Diseases of the respiratory system	33	7
Asthma	27	6
Other	6	1
Diseases of the digestive system	9	2
Diseases of the skin	3	<1
Diseases of the musculoskeletal system or connective tissue	24	5
Arthritis	5	1
Other	19	3
Diseases of the genitourinary system	13	3
Brain Injury	1	<1
Syndromes	64	14
Developmental Anomalies	13	3
Symptoms, signs or clinical findings, not elsewhere classified	11	2
Injury, poisoning or certain other consequences of external causes	4	<1
Epilepsy	112	24

Physical Health Characteristics



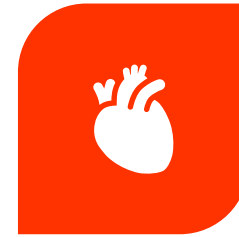
**MOST COMMON:
EPILEPSY (N = 112,
24%)**



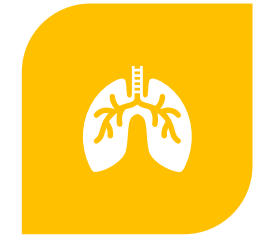
**HYPOTHYROIDISM
(N = 40, 9%)**



**DIABETES (N = 35,
8%)**



**HYPERTENSION (N
= 35, 8%)**



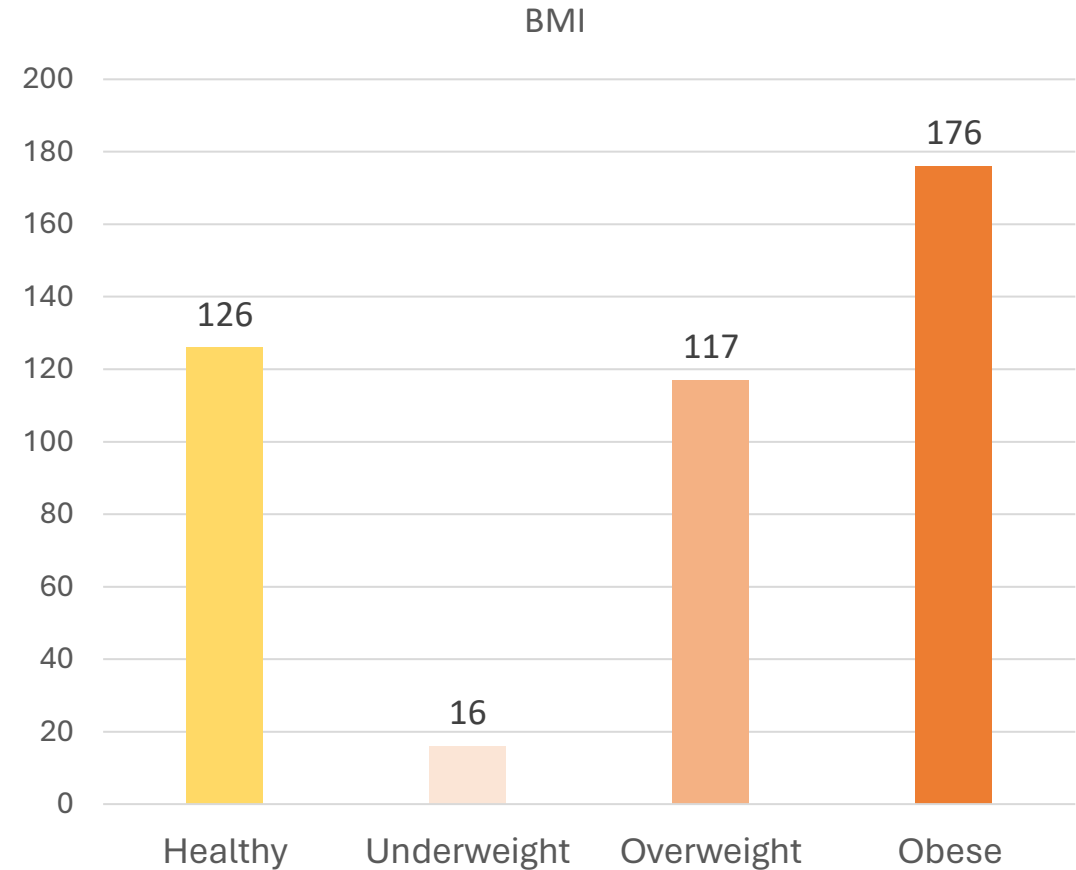
**ASTHMA (N = 27,
6%)**

Function 1

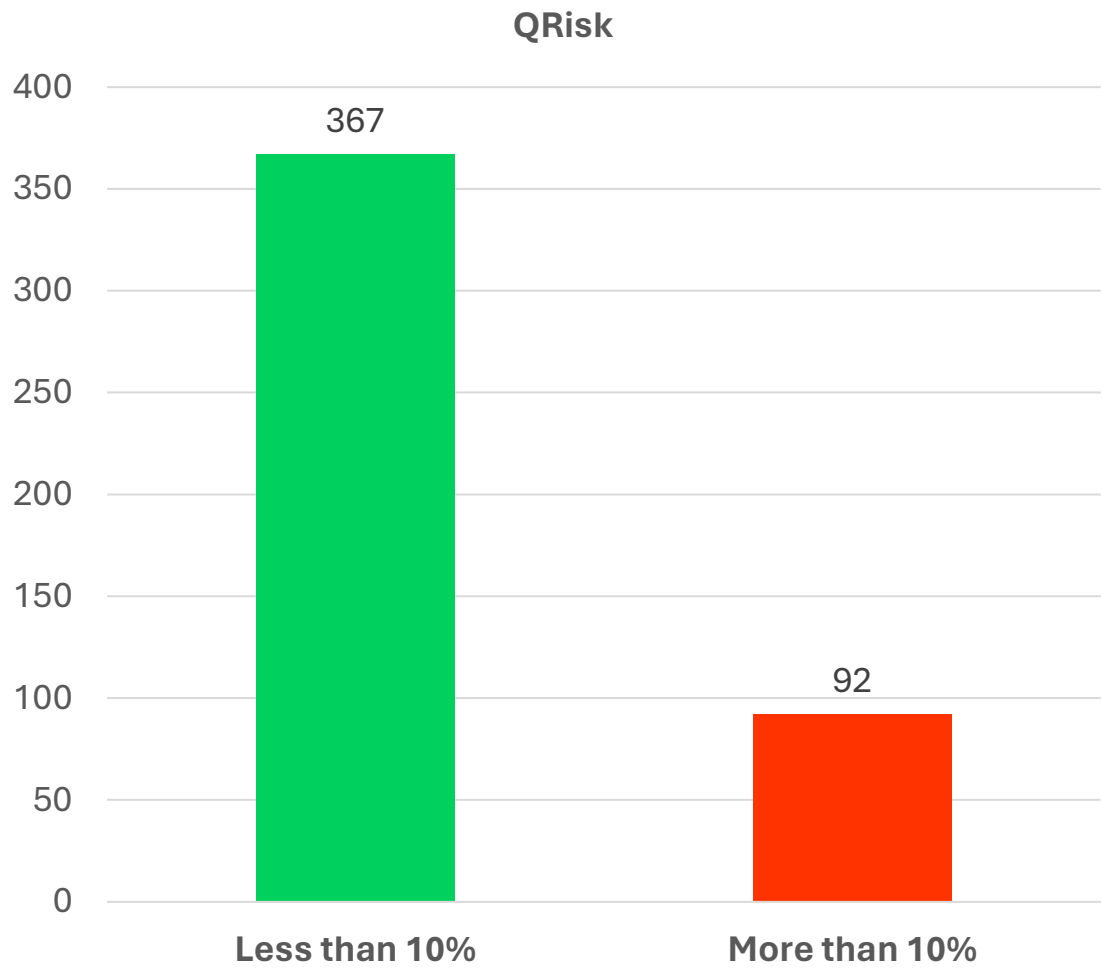
Results

Cardiometabolic/ Cardiovascular monitoring

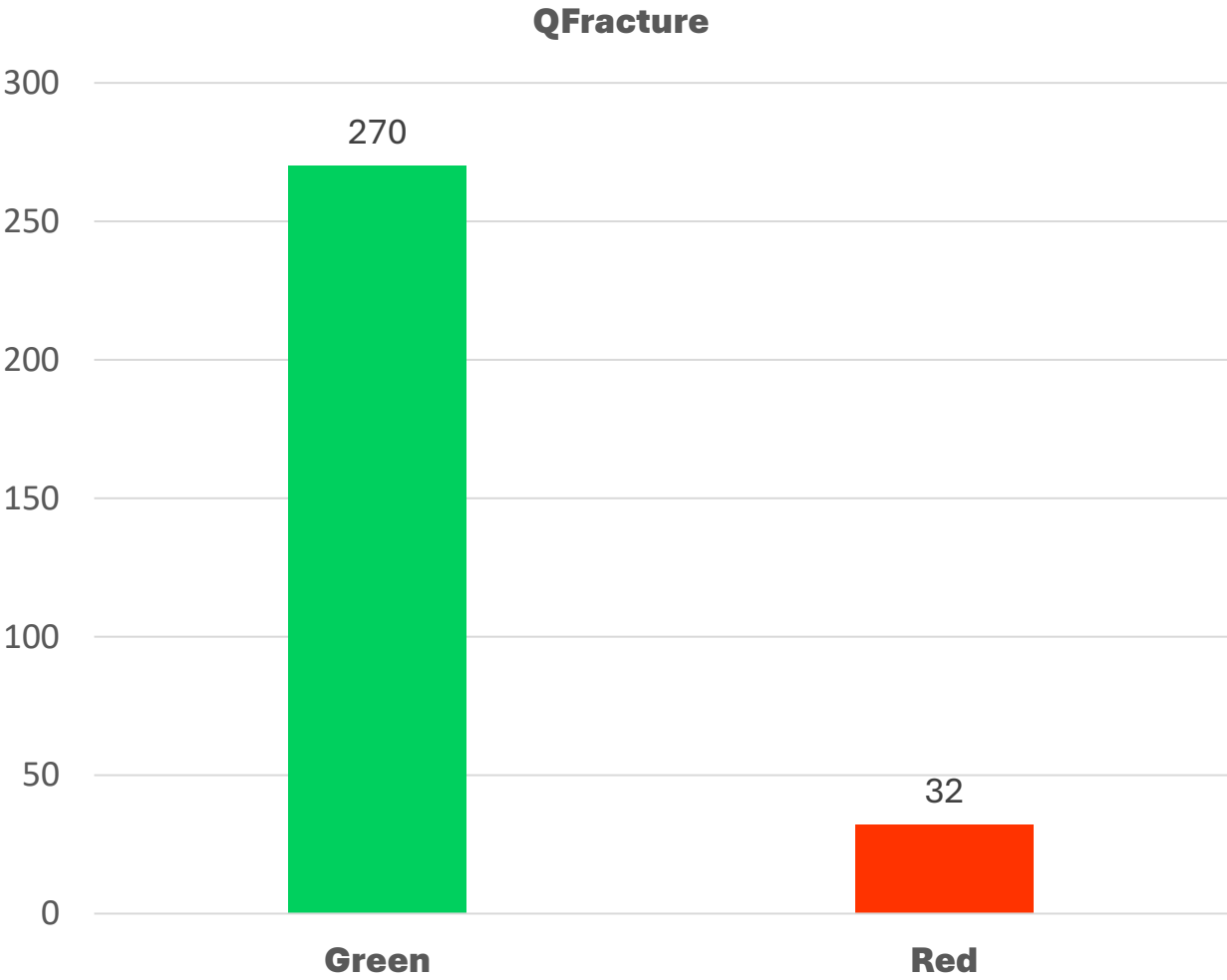
- BMI
 - Recorded for 435
 - 126 (29%) healthy weight
 - 16 (4%) underweight
 - 117 (27%) overweight
 - 176 (40%) obese
- Diet advice (n=414, 90%)



QRisk Score



QFracture Score



Psychotropic Medications

Category	N	%
Antipsychotics	342	74
Antidepressants	255	55
Anxiolytics	74	16
Antiepileptics/Mood stabilisers	180	39
Stimulant medications	22	5
Lithium	8	2

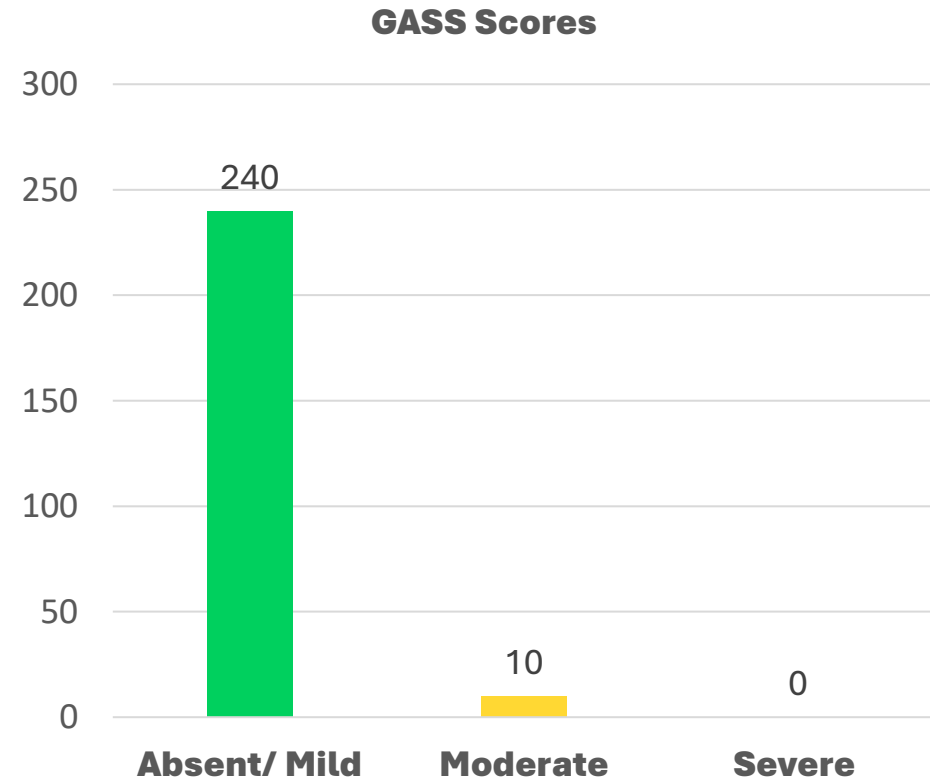
Psychotropic Medication Monitoring

The Glasgow Antipsychotic Side-Effect Scale (GASS) scores were recorded for 250 patients. When interpreting the GASS, the scores indicate as follows:

- 0-21 absent/mild side effects
- 22-42 moderate side effects
- 43-63 severe side effects

Range GASS score = 0 – 33

Average GASS score = 6.4



Blood Tests



Function 2

Results

Lifestyle and Psychoeducation



Actively using recreational drugs: n = 3, 1%



Actively smoking: n = 42, 9%



Actively exercising: n = 57, 12%



Lifestyle and Psychoeducation

Dysphagia and Constipation

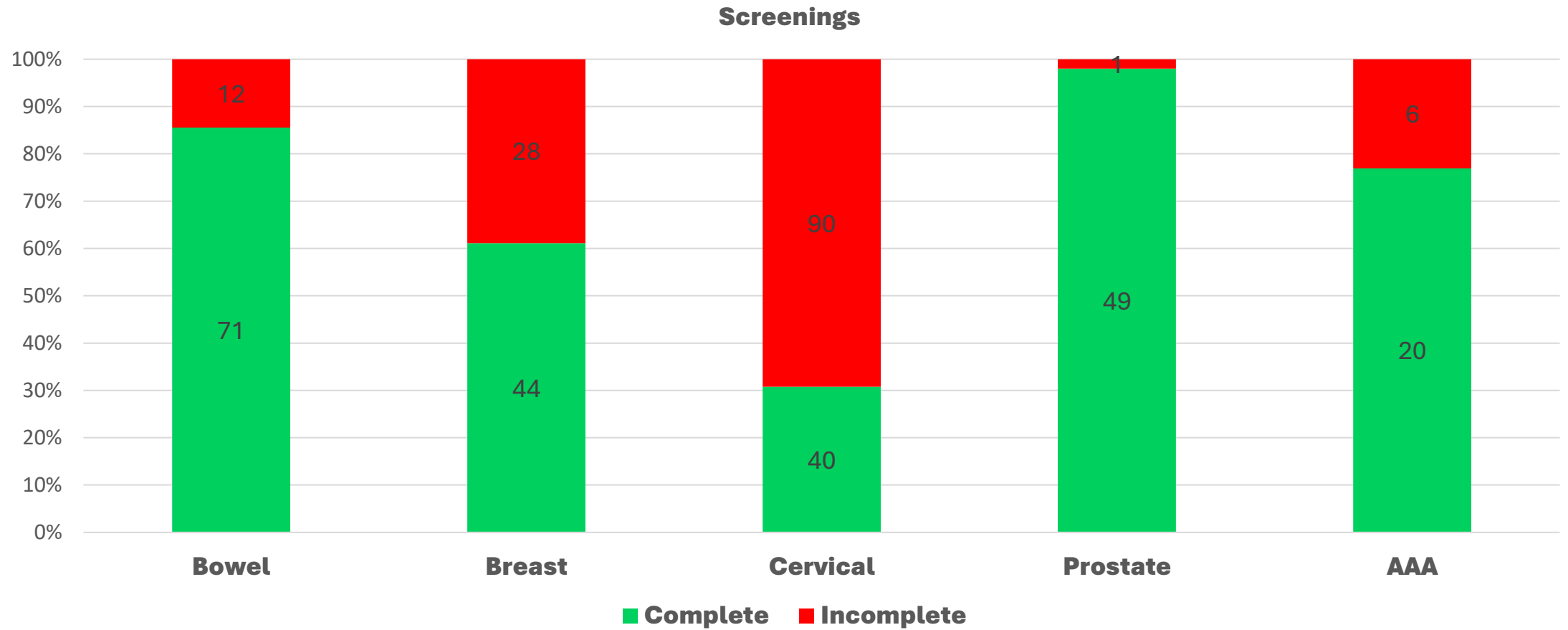
Dysphagia and swallowing issues:

- 68 patients (15%) were recorded to have dysphagia and swallowing issues
- 53 (78%) are recorded to have dysphagia support

Constipation

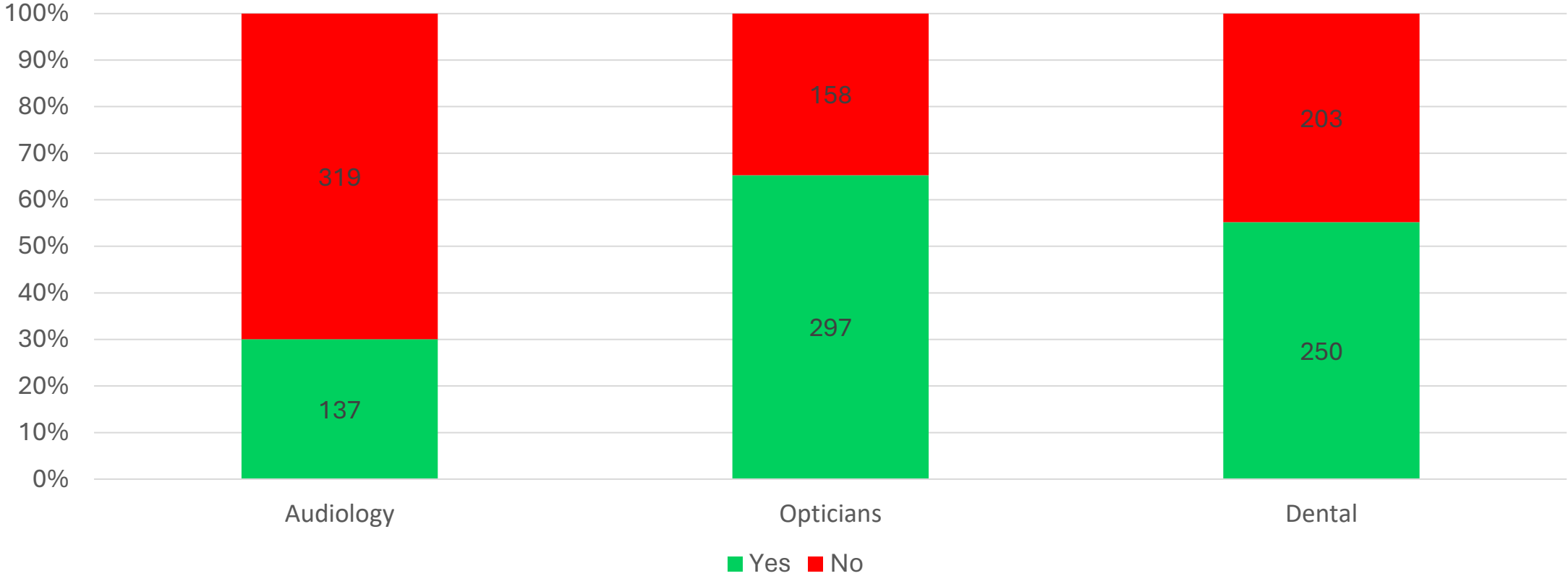
- 49 patients (11%) are recorded as having constipation
- To manage the constipation:
 - 23 patients are having lifestyle/ medication support
 - 7 are managed by medication
 - 3 are having psychoeducation

Cancer and AAA Screenings



Allied Health Checks

Allied Health Professional Checks



Discussion



Summary – Sociodemographics

The sociodemographic, and psychiatric characteristics highlight that the clinic is catering to a highly heterogenous patient group in terms of:

- Sex
- Age
- Psychiatric diagnoses – e.g. high proportion with autism
- Physical diagnoses – wide range of conditions reported in the population

The most common physical health comorbidities were:

- Epilepsy – highly researched and recognised (e.g. Shankar et al)
- Hypothyroidism (under researched, less recognised, next presentation)
- Asthma (highlighted as a concern in LEDER)
- Hypertension (somewhat researched)
- Diabetes (focus of third presentation, Prof Taggart)

Summary – Function 1: Psychotropic medication side effects and cardiometabolic/cardiovascular risks monitoring

BMI – 67% of the sample were overweight/obese – lifestyle advice was provided. Obesity management is challenging in this population – further work may need to focus on this group.

Tests highlighted a number of cases with previously unidentified unmet need.

- QRisk – cardiovascular health, affected by obesity levels
- QFracture – osteoporosis risk – affected by factors such as psychotropic medication, lifestyle, etc. Further focus needed on this group

High proportions of the population were on psychotropic medication

- This is unsurprising given the outpatient psychiatric nature of the sample.
- Side effect monitoring was in place using the GASS, and none reported severe

Summary – Function 2: Comprehensive health assessment including lifestyle factors and specific health issues

- Constipation was present for approximately 10% - concern raised in LEDER
- Dysphagia – concern for 15%, and a number of these patients had not been seen by an SLT.
- Lifestyle – The population was largely sedentary, however positively rates of smoking and drug use was low. Attention to those identified with health needs is important.
- Cancer and AAA screening – best uptake for screening was prostate cancer, work is needed to improve uptake of other cancer and AAA screenings, and to assess barriers in this area.
- Allied health professional checks – highest uptake for opticians, followed by dentist, lowest uptake for audiology – work needed to improve these/address barriers.

Drawbacks

1) Study utilises retrospective case note data which limited some of the analysis.

Future developments could include a linked IT system for the clinic with computerised case notes.

2) The database was incomplete regarding ethnicity data which is of interest to ensure equality.

According to LEDER in 2022,

“People from all ethnic minority groups died at a younger age in comparison to people of white ethnicity, when adjusting for sex, region of England, deprivation, place of death, and type of accommodation.”



Conclusions



Conclusions



The clinic was an attempt to **address significant health barriers** experienced by this population



It has offered a **considerable number of tests, screenings, health advice, signposting and referrals** to a very hard to reach client group



Findings highlighted that these **tests uncovered unmet needs** in a number of cases



Further work will build on this by **focusing on areas of testing that were uptaken less by patients**



Future research should **focus on the areas of need highlighted by this project**: e.g. hypothyroidism, diabetes, asthma, hypertension, cancer screening, osteoporosis, etc

Thank you for listening

**Contact
information**



@EPatteril



Elizabeth Patteril



**elizabeth.patteril
@nhs.net**