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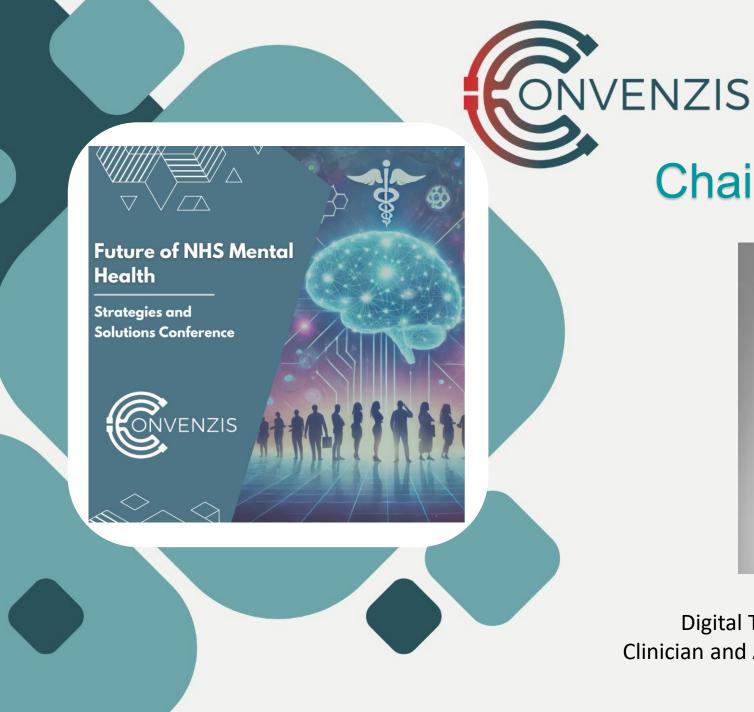


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Chair Opening Address



Digital Transformation Consultant at BrandMii Clinician and Author of the AI Leverage: Building Purpose, Resilience and Success



Future of NHS Mental Health

Strategies and Solutions Conference



Fireside Interview



Mr John Snowden Deputy Clinical Lead - Mental Health Chelsea and Westminster Hospital NHS Foundation Trust



Mr Paul Morris Clinical Lead - Mental Health Chelsea and Westminster Hospital NHS Foundation Trust



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Future of NHS Mental Health

Strategies and Solutions Conference







Dale Coleman Transforming Care Operations Manager NHS Midlands and Lancashire Commissioning Support Unit (MLCSU)



Mr Paul Morris Clinical Lead - Mental Health Chelsea and Westminster Hospital NHS Foundation Trust



Mr John Snowden Deputy Clinical Lead - Mental Health Chelsea and Westminster Hospital NHS Foundation Trust



James Porter Director of Campaigns and Major Programmes, SRO for the Best For You Programme, CW+



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Future of NHS Mental Health

Strategies and Solutions Conference

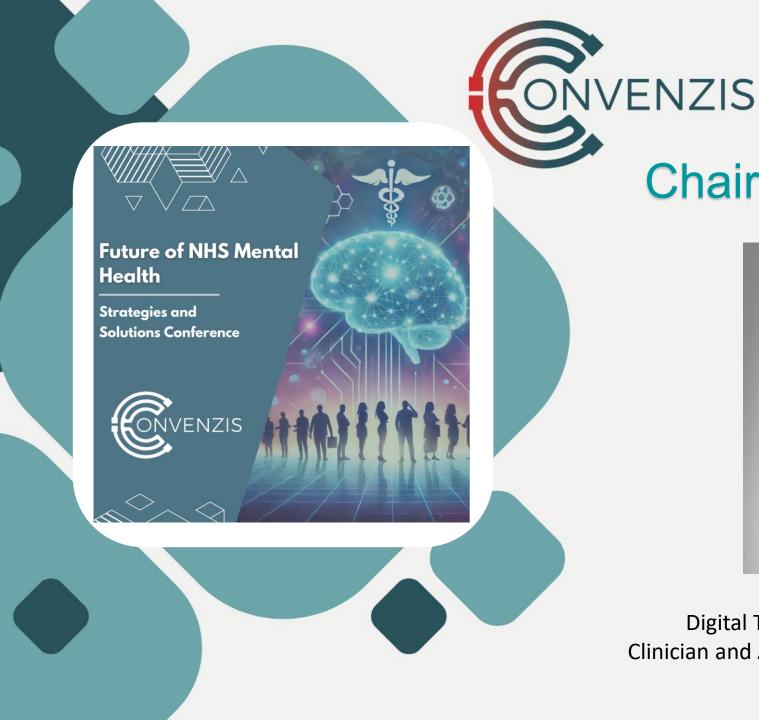


Refreshments & Networking



Please scan the QR Code on the screen below to register your interest for our accredited training courses.





Chair Morning Reflection



Digital Transformation Consultant at BrandMii Clinician and Author of the AI Leverage: Building Purpose, Resilience and Success



Keynote Presentation



Prof Mohammed Al-Uzri He/Him Consultant Psychiatrist & Mental Health Lead for NHS LLR ICB Leicestershire Partnership NHS Trust



Assertive Community MH Treatment:

the national context and local implications

Prof Mohammed Al-Uzri



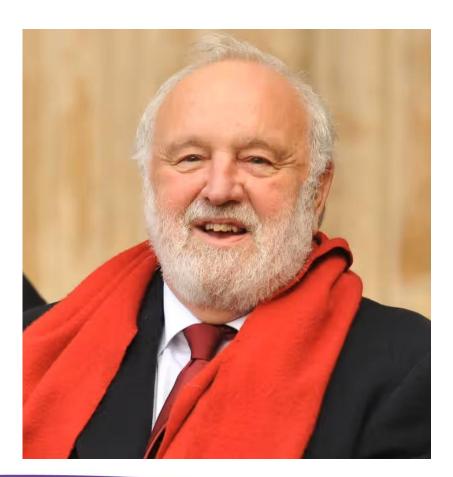
www.leicspart.nhs.uk

Clonus 1992

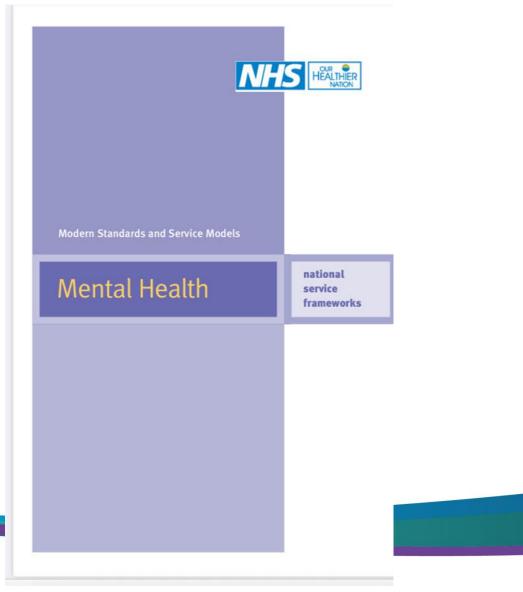




"Care in the community has failed"









3. CRISIS RESOLUTION/HOME TREATMITEAMS

3.1 Who is the Service for?

Commonly adults (16 to 65 years old) with severe mental illness (e.g. schizophre depressive disorders, severe depressive disorder) with an acute psychiatric cris severity that, without the involvement of a crisis resolution/home treatur hospitalisation would be necessary. (NB) In every locality there should be fl decide to treat those who fall outside this age group where appropriate. 4.1

This service is not usually appropriate for individuals with:

- Mild anxiety disorders
- · Primary diagnosis of alcohol or other substance misuse
- Brain damage or other organic disorders including dementia
- Learning disabilities
- Exclusive diagnosis of personality disorder
- Recent history of self harm but not suffering from a psychotic illness or sever depressive illness
- Crisis related solely to relationship issues

5. EARLY INTERVENTION IN PSYCHOSI ³.

5.1 Who is the service for?

- People aged between 14 and 35 with a first presentation of psychotic sympto-
- People aged 14 to 35 during the first three years of psychotic illness

5.2 What is the service intended to achieve?

Psychosis is a debilitating illness with far-reaching implications for the individua his/her family. It can affect all aspects of life – education and employment, relat and social functioning, physical and mental wellbeing. Without support and ade psychosis can place a heavy burden on carers, family and society at large.

The mean age of onset of psychotic symptoms is 22 with the vast majority of fit occurring between the ages of 14 and 35. The onset of this disease is therefore ϵ a critical period in a person's development.

6. PRIMARY CARE MENTAL HEALTH

6.1 A vision for the future

For primary care mental health, improving partnerships between health, social and voluntary sector provision will help to ensure faster access to effective treatment for people with common mental disorders, faster access for people in crisis, effective care for those with stable, severe mental illness and services closer to people's homes. In addition, better training and education for existing staff, new ways of working and new staff will also be needed.

integrity trust

ASSERTIVE OUTREACH

Who is the service for?

Adults aged between 18 and approximately 65 with the following:

- 1. A severe and persistent mental disorder (e.g. schizophrenia, major affective disorders) associated with a high level of disability
- A history of high use of inpatient or intensive home based care (for example, more than two admissions or more than 6 months inpatient care in the past two years)
 Difficulty in maintaining lasting and consenting contact with services
- 4. Multiple, complex needs including a number of the following:
 - History of violence or persistent offending
 - Significant risk of persistent self-harm or neglect
 - Poor response to previous treatment
 - Dual diagnosis of substance misuse and serious mental illness
 - Detained under Mental Health Act (1983) on at least one occasion in the past 2 yrs
 - Unstable accommodation or homelessness



Crisis and acute mental health services

Mental Health Secure

NHS Talking Therapies, for anxiety and depression

The NHS Talking Therapies, for anxiety and depression programme (formerly known as Improving Access to Psychological Therapies, IAPT) was developed to improve the delivery of, and access to, evidence-based, NICE recommended, psychological therapies for depression and anxiety disorders within the NHS.

From small beginnings in 2008, the programme has steadily grown so that nearly 1.2 million people were able to access services in 2021/22. This expansion was the result of training and deploying thousands of new psychological therapists and practitioners, as well as providing additional training modules for existing therapists. Taken together The Five Year Forward View for Mental Health and The NHS Long Term Plan commit the NHS to further expand the NHS Talking Therapies, for anxiety and depression programme so that 1.9 million people per year will be able to access services by the of 2023/4.



Care Programme NHS Talking Therapies, for anxiety and depression Digital

Digital Long term conditions and medically unexplained symptoms

Assertive Community Treatment-USA (Stein & Test 1980)

Assertive Outreach is a way of delivering treatment for people with severe mental illness in the community who are difficult to engage

The treatment has to be of proven worth and not provided by the existing services

Purpose

Maintain regular and frequent contact in order to
Monitor the clinical condition in order to
Provide effective treatment and rehabilitation



Key Element of AO

- Engagement in assertive manner
- Most interventions in community settings (Regular home visit)
- Extended hours & Time-unlimited service
- Psychiatrist integrated
- Multidisciplinary team (Nurses, Social Workers, OT, Psychologists, support workers, ...etc)

Assertive Outreach in Mental Health: A Manual for Practitioners 2002 by <u>Tom Burns</u> & <u>Mike Firn</u>



Key Element of AO

- One team responsible for core services(integrated care)
- Primary goal: improve patient functioning
- Small case load (1:12)
- Daily handovers & Wéekly reviews
- Key worker in a team approach
- Individually tailored treatment and care plan

Assertive Outreach in Mental Health: A Manual for Practitioners 2002 by <u>Tom Burns</u> & <u>Mike Firn</u>



Patients who benefit from AO

- Patient with psychotic illness + Comorbidity
- Fluctuating mental state/ social functioning
- Poor engagement with services
- Poor compliance with treatment
- High use of inpatient care
- Severe consequences of relapse



who is it (AO) for?

- Patients lost to follow up
- Revolving door patients



The Sick role: Capacity vs Insight

- The person is not responsible for assuming the sick role.
- The sick person is exempted from carrying out some or all of normal social duties (e.g. work, family).
- The sick person must try and get well the sick role is only a temporary phase.
- In order to get well, the sick person needs to seek and submit to appropriate medical care.

(Parsons, T. The Social System. 1951. Glencoe, IL: The Free Press)



When & How long AO?

- First 15 years of illness
- 5-6 years with AO
- 2-3 years for AO to show effect

Assertive Outreach in Mental Health: A Manual for Practitioners 2002 by <u>Tom Burns</u> & <u>Mike Firn</u>



Outcomes

- Reduce Hospitalisation
- Social Stability
- Treatment (Engagement)
- Symptoms control
- Quality of Life
- Employment
- Costs



Outcomes

- USA vs. EUROPE/UK
- Model Fidelity
- Which Components of AO?



AO Teams in UK

- 263 AO teams at its peak
- About 20,000 patients would need AO
- Statutory vs. Voluntary services
- Urban vs. Rural
- Integrated vs. Stand alone
- Extended hours vs. 24/7



AO research - UK

THE LANCET

his journal Journals Publish Clinical Global health Multimedia Events About

ARTICLES · Volume 353, Issue 9171, P2185-2189, June 26, 1999



Intensive versus standard case management for severe psychotic illness: a randomised trial

Prof Tom Burns, FRCPsych A ⊠ · Prof Francis Creed b · Tom Fahy, MD c · Prof Simon Thompson, DSc d · Prof Peter Tyrer, FRCPsych e · Ian White, for the UK 700 Group

No specific measure would predict outcome

Financial pressures leading to reduction in AO teams or integration to CMHT

Cite this article as: BMJ, doi:10.1136/bmj.38773.518322.7C (published 16 March 2006) Research

The REACT study: randomised evaluation of assertive community treatment in north London

Helen Killaspy, Paul Bebbington, Robert Blizard, Sonia Johnson, Fiona Nolan, Stephen Pilling, Michael King

Abstract

Objective To compare outcomes of care from assertive community treatment teams with care by community mental health teams for people with serious mental illnesses. Design Non-blind randomised controlled trial. Setting Two inner London boroughs. Participants 251 men and women under the care of adult secondary mental health services with recent high use of inpatient care and difficulties engaging with community services.

Interventions Treatment from assertive community treatment team (127 participants) or continuation of care from community mental health team (124 participants). Main outcome measures Primary outcome was inpatient bed use 18 months after randomisation. Secondary outcomes included symptoms, social function, client satisfaction, and engagement with services.

Results No significant differences were found in inpatient bed use (median difference 1, 95% confidence interval – 16 to 38) or in clinical or social outcomes for the two treatment groups. Clients who received care from the assertive community treatment team seemed better engaged (adapted homeless engagement acceptance schedule: difference in means 1.1, 1.0 to 1.9, and those who agreed to be interviewed were more satisfied with services (adapted client satisfaction questionnaire: difference in means 7.14, 0.9 to 13.4).

Conclusions Community mental health teams are able to support people with serious mental illnesses as effectively as assertive community treatment teams, but assertive community treatment may be better at engaging clients and may lead to greater satisfaction with services. treatment reduces the costs of care by decreasing frequency and length of admissions¹⁴. Other positive outcomes include increased engagement with services, more stability in accommodation, and improved satisfaction for patients and their carers.³ It has been difficult to appraise the efficacy of assertive community treatment in England and other European countries with similar service systems. This was because the models of intensive forms of community care investigated were not based closely on such treatment and did not focus on participants who were difficult to engage.³¹ Also, comparison groups in these UK studies were more community based than those in US trials.¹⁶ The Cochrane review concluded that there was a case for a further

randomised trial of assertive community treatment in the United

Kingdom³ The equivocal evidence has not prevented the Department of Health encouraging the implementation of assertive community treatment as a tertiary model of care. By 2004, 263 such teams existed in England.¹⁰ ¹⁴ As two teams were being established within our service, we compared the clinical outcomes and cost effectiveness of assertive community treatment with standard treatment from a community mental health team for clients identified as difficult to engage and who were high users of inpatient care. We hypothesised that assertive community treatment delivered by specialised teams operating with a high degree of fidelity to the model would lead to fever days of inpatient care than standard case management provided by community mental health teams. The results of the cost effectiveness analysis are the topic of a separate paper.

Methods



Evaluation of three assertive outreach teams

Rob Macpherson,¹ Praveen Thyarappa,² Genevieve Riley,³ Hannah Steer,⁴ Mike Blackburn,⁵ Chris Foy³

The Psychiatrist (2013), 37, 228-231, doi: 10.1192/pb.bp.112.040147

¹Lexham Lodge, Cheltenham; ²Park House, Stroud; ³Gloucestershire Hospitals NHS Foundation Trust, Gloucester; ⁴Burleigh House, Gloucester; ⁵136 Stroud Rd, Gloucester

Correspondence to Rob Macpherson (rob.macpherson@glospart.nhs.uk)

First received 14 Jun 2012, final revision 18 Dec 2012, accepted 9 Jan 2013 **Aims and method** To evaluate outcomes for service users during their first year of treatment in three English assertive outreach teams. Changes in health and social functioning, engagement with services, service use and need (rated by staff and service users) were evaluated.

Results In 49 service users we found a significant increase in mean staff-rated met needs up to 6 months of treatment. There were no significant changes in ratings of engagement or Health of the Nation Outcome Scales (HoNOS) scores at 6 and 12 months. Unmet needs rated by service users and staff showed a non-significant trend for improvement across a range of individual health and social domains. Duration of hospital admission reduced significantly between the 12 months before the evaluation and the 12 months of the evaluation. Formal and informal admission and levels of contact with crisis teams reduced over the study period.

Clinical implications Although these results offer some support to the assertive outreach approach, further research in larger samples is needed to identify which changes in health and social functioning are associated with transfer to assertive outreach teams.

Declaration of interest None.



Soc Psychiatry Psychiatr Epidemiol (2012) 47:313-322 DOI 10.1007/s00127-010-0338-4

ORIGINAL PAPER

- Under AO the
proportion of time
spent in hospital
following admission
decreased

- Only 3/1,096 patients went missing in 9 months

Predicting outcome of assertive outreach across England

T. S. Brugha · N. Taub · J. Smith · Z. Morgan · T. Hill · H. Meltzer · C. Wright · T. Burns · S. Priebe · J. Evans · T. Fryers

Received: 16 August 2010/Accepted: 21 December 2010/Published online: 1 February 2011 © Springer-Verlag 2011

Abstract

Background Assertive community treatment for the severely mentally ill is being implemented increasingly internationally. It is unclear whether recommended characteristics of assertive outreach (AO) teams influence care and outcomes. We hypothesised that recommended characteristics of AO teams such as joint health and social care management would predict reduced hospitalisation in the first year of an AO client programme and related outcomes throughout England.

Methods A two-stage design was used: a stratified sample of 100 of the 186 'stand-alone' AO teams in England and a systematic sample of clients from each team with stratification for black and ethnic minority patients. Team characteristics, treatment and outcomes were collected from teams. Analyses took account of patients' histories, clustering and ethnic minority over-sampling.

Results Under AO the proportion of time spent in hospital following admission decreased. Only 3/1,096 patients went missing in 9 months. Although patient' histories significantly predicted outcomes almost no team characteristics predicted re-admission or other patient outcomes after 1 and 3 years. Ethnic minority clients were more likely to be on compulsory orders only on jointly managed teams (P = 0.030). Multidisciplinary teams and teams not working out of hours significantly predicted that patients received psychological interventions, but only 17% of sampled patients received such treatments.

Conclusions Characteristics of AO teams do not explain long-term patient outcomes. Since recommended team characteristics are not effective new models of care should be developed and the process of care tested. Managing teams to implement evidence-based psychological interventions might improve outcomes.

Keywords Community · Treatment · Process of care · Multidisciplinary



AO research

"ACT appears to make more impact on bed use where a team approach is properly implemented, and where there is a high baseline level of bed use."

Sonia Johnson , Epidemiologia e Psichiatria Sociale March 2008

Outreach teams



Community mental health teams should include an outreach service that provides intensive support to patients who are difficult to engage or who may lose contact with traditional services. This might be patients

who don't regularly take their prescribed medication or who are missing their appointments.

Our evidence

Implementation of an assertive outreach policy was associated with lower suicide rates among patients who were non-adherent with medication or who had missed their last appointment with services, and with lower suicide rates overall in implementing Trusts.

In our study of clinicians' views of good quality practice in mental healthcare, clinicians emphasised dedicated outreach services that provide intensive support to enhance patient engagement.

National Inquiry to Suicide and Homicide in Mental Health



Calocane 2022

Independent investigation into the care and treatment provided to VC





Local Implications

- All ICB's to review its care provision for this group of patients
- Action plan to be presented in Public ICB's meeting
- Brought back focus on AO teams and debate of Integrated teams Vs Stand alone
- Use of CTO
- No extra funding for 25-26

Guidance to ICBs on intensive and assertive community mental health care



NHS

England





Publication reference: PRN01456_ii

Classification: Official

Conclusion

- Small number of patients need AO approach with risk of tragic consequences if needs not met
- AO teams can vary but there are evidence of providing good outcomes with high-fidelity teams
- Not clear which element of AO predict outcome but probably the sum of its components
- More focus on AO in the 10 yr Health plan



Thank you

Questions?





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Keynote Presentation



Director of North Central London (NCL) Vanguard Services for Violence Reduction North London Foundation Trust



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Interview Session



Debs Teale Independent Consultant & Facilitator The Debs Effect

Debs Teale

From pills to paintbrushes.



























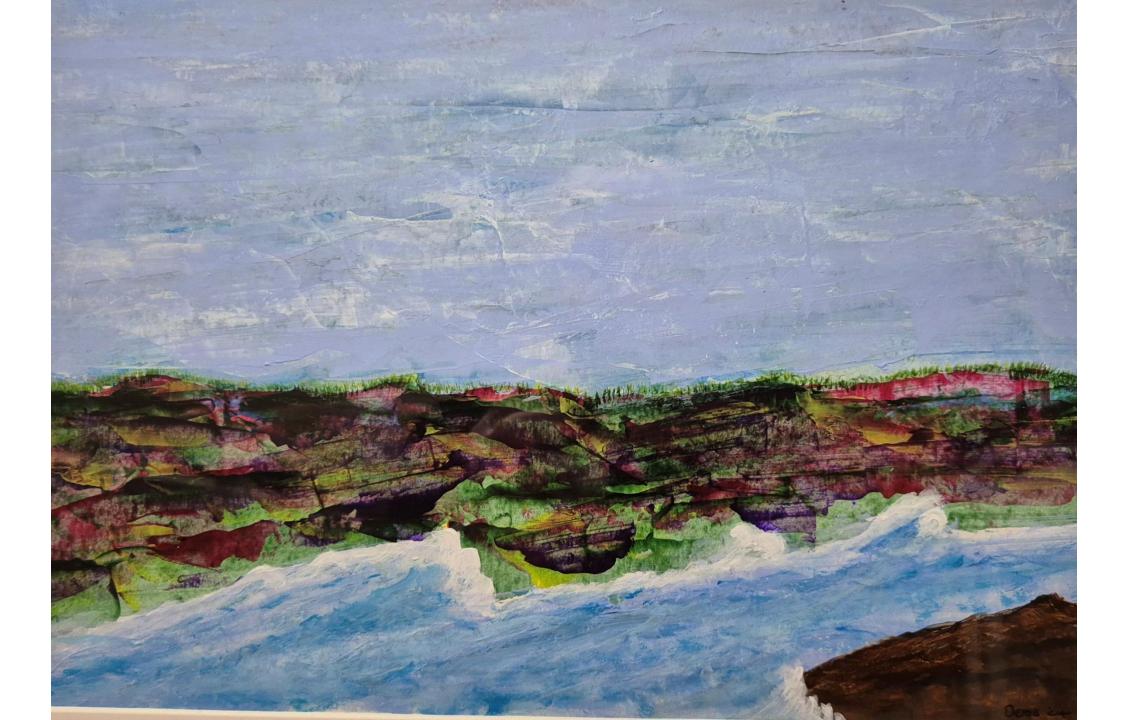
















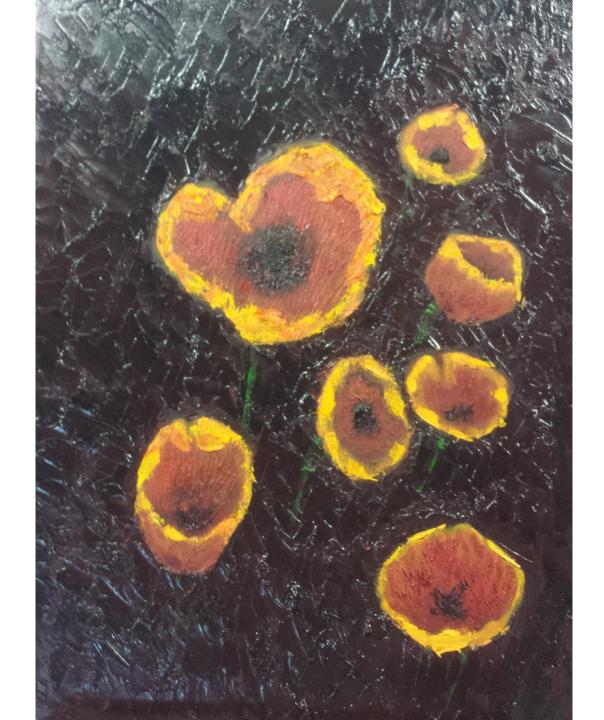




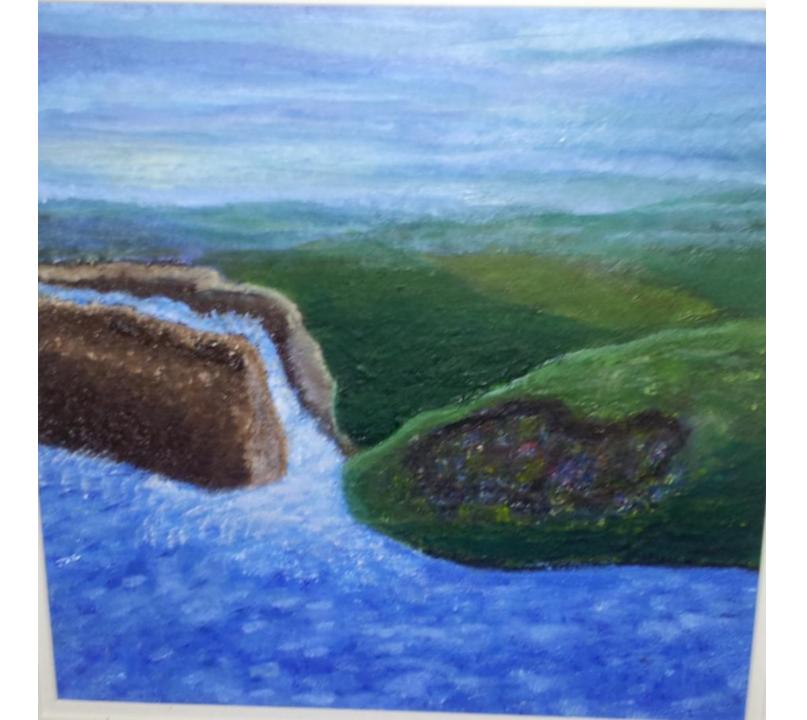


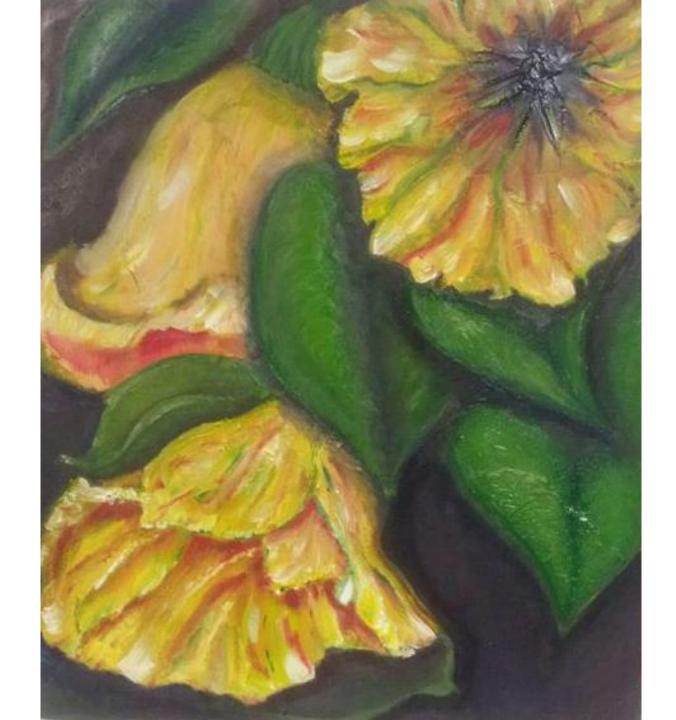






















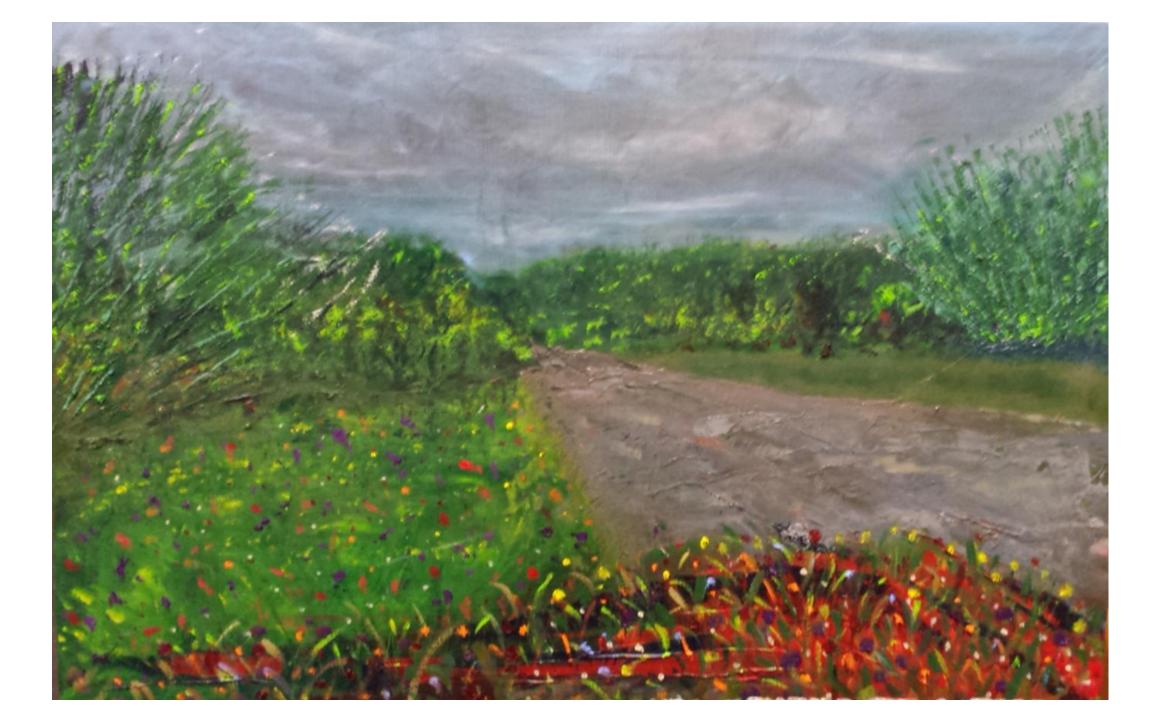
















Yorkshire Woman of Achievement (shortlist - courage)



Buckingham Palace



KingCharles



I wanted to say thank you to you Debbie. Your courageous story has changed my practice as a GP. I used to think art was an augmentation to our medical guideline based tables & psychological therapies. You have proven otherwise. I need to listen more to "what matters to you"

Feedback



Great news from the team here at Creative Minds, Debs from our team has been shortlisted for Yorkshire Women of Achievement award for COURAGE. Here's why she won our Excellence2016 award:

♦ Share

 \bigcirc

10 Apr 2017 at 15:40 · 🕄

Debs Taylor

Creative Minds peer project support worker

Representing support services

Debs has rejuvenated herself and made the huge leap from a long term recipient of services who was on medication for 21 years, to a passionate member of staff who now works in the Creative Minds team with a mission to influence others.

In the face of many challenges, including poor self-esteem and self-confidence, Dels has blossomed and transformed her life. She now speaks out about her experiences in forums, meetings and large conferences where she receives standing ovations. Debs is warm and caring and transfers these qualities into her work, taking time to make people feel understood.

 \triangleleft



2 comments

Inspirational,

compassionate,

brave

@lizharrisFCPara so
proud of this provide my
legacy #mentalhealth
@YorksAmbulance
@The_Debs_Effect
supported by @irvingad82
to evaluate it x

Liz Harris @lizharrisFCPara

3.101. Ambulance staff will be trained and equipy people in a crisis. Ambulance services form a major pa mental health emergency. For example, South Western Trust reports that at least 10-15% of all calls are related new mental health transport vehicles to reduce inappro by police to A&E. We will also introduce mental health to improve triage and response to mental health calls, a competency of ambulance staff through an education a pilot in the Yorkshire Ambulance Service NHS Trust show were usually conveyed to A&E, but only 18% when tria #NHSLongTermP lan #Ambulance staff to be train...



such a burden. When my mother, the only person I could rely on, passed away, I actually took an overdose.

"I was sent to see a psychologist and, while in the waiting room, I came across a leaflet for an art class. I decided to give it a go and from that day my life changed for the better. When I started to paint, I felt a sense of purpose and a reason for living. I've only ever known mental illness and my mind felt like a constant racetrack. But art allowed my brain to stop and focus on the painting to the exclusion of all else. Gradually I learnt to control my illness rather than it control me and, a year later, I was able to come off all medication and have since sold over 150 paintings.

"I now work in mental health to raise awareness of the importance of social interventions and I support the College of Medicine's new manifesto, which is called Hope for the Future."

Publications

Woman who was told by doctors she would never work again reveals how art changed her life

Debs Teale champions social prescribing after an art class transformed her mental health - and ultimately changed her life. Laura Reid speaks to her.



My story

Pearson BTEC National BTEC National BTEC National BTEC National Book 2

Extended Certi

Cara Flanagan • I Jock McGinty • D Advisor: Mark Walsh

x x

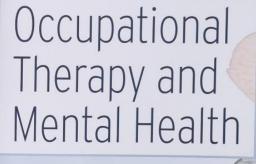
PROF. ARUN NADARASA AWARD WINNING AUTHOR GET YOUR

www.PharmacyMovement.com

Wendy Bryant Jon Fieldhouse



CREEK'S



SIXTH EDITION

Jon Fieldhouse Nicola Plastow

The Kings Fund>



Talks and appearances





In this issue

ENTERTAINMENT SOAPS LIFESTYLE VIDEO

- > Cuts will cost £1bn extra in the long term
- > Brian McCloskey on polonium and the Olympics
- > How art rescued Debs Taylor from medication

September 2015

SPORT

BBC

NEWS

Public Health Today

B



Peace, dignity and equality on a healthy planet METRO

NEWS... BUT NOT AS YOU KNOW IT

BC

PLATFORM SHOPPING MORE ¥

RADIO

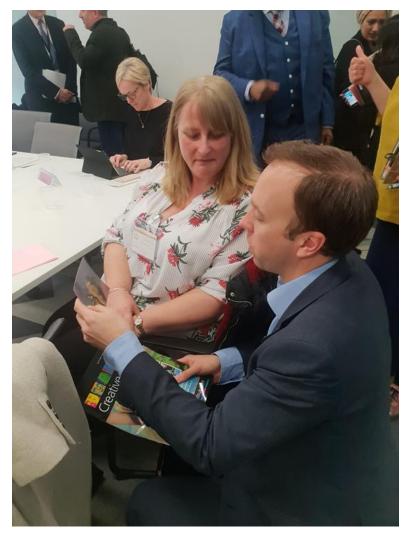
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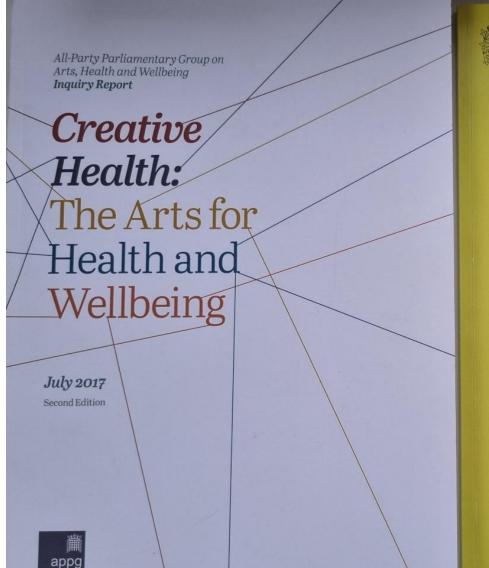
HSJ award with Creative Minds



Matt Hancock (Round table event/social prescribing)



Research and creativity



London South Bank University School of Health and Social Care

THE ASSET-BASED HEALTH INQUIRY

HOW BEST TO DEVELOP SOCIAL PRESCRIBING?

It's to support people with a range of emotional, physical and mental health needs to better access support, largely in the community, to improve their lives."



Trustee

Debbie Teale

Trustee

Debbie Teale is a Consultant and Facilitator using her lived experience to empower people and inspire change.

Debs is an advocate of creativity in health following her own remarkable journey. Having been in the mental health system for most of her life it took an art class to totally transform her life. She now advocates creativity as an additional service to improve wellbeing and offering hope and aspiration. She has completed a MSc in mental health recovery and social Inclusion. She is also a member of the Social Prescribing Network and Social Prescribing Academy.

Debs often does talks on her journey and this has taken her to the NHS Expo and as far as the WHO in Helsinki. She has a passion to promote everyone having a voice and a choice in their own care, something she felt she lacked in her own journey. Debs believes everyone has something to bring to the table, even if it is just themselves.







Awards







Thank you for listening

WWW.TheDebsEffect.co.uk

x. @The_Debs_Effect
LinkedIn. Debs Teale (MSc)

Email. Debs@TheDebsEffect.co.uk

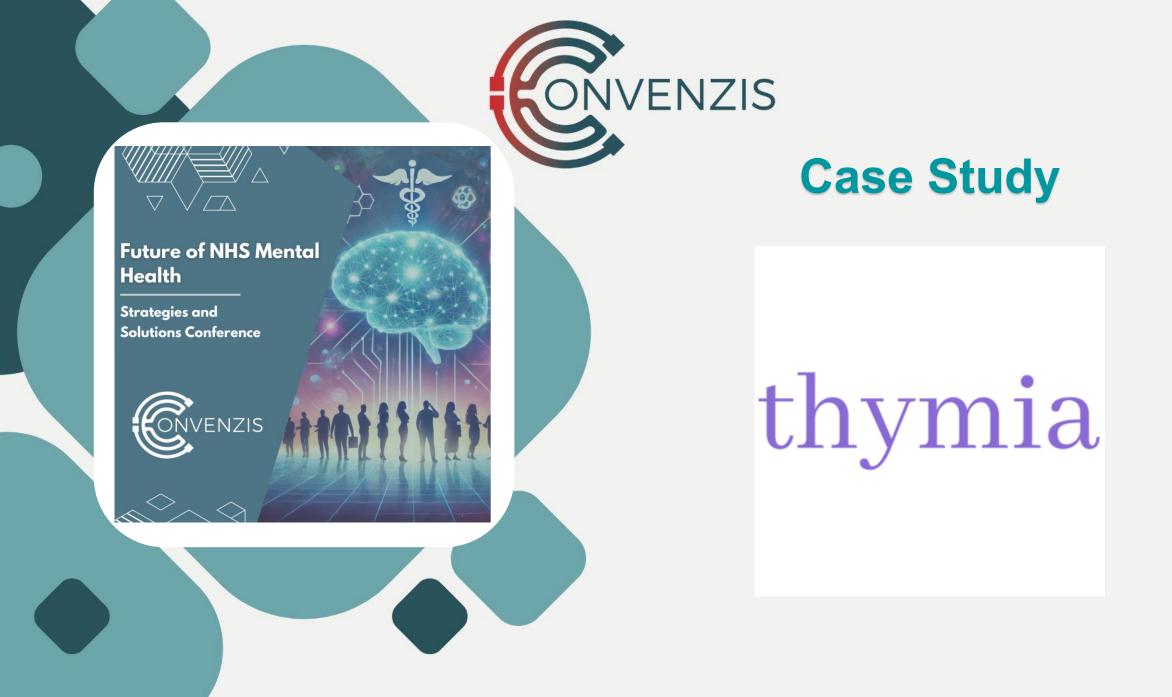


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Case Study



Stefano Goria CTO & Co-Founder thymia



thymia

Beyond the Voice AI Hype: Clinical-Grade Speech Biomarkers Transforming Mental Health Triage and Care

5th Future of NHS Mental Health: Strategies and Solutions Conference

London, 9th July 2025

Dr Stefano Goria, CTO & Co-founder, thymia

Critical Bottlenecks

- Staff shortages meet surging demand mental health consume 33% of GP appointments, with multi-morbidity patients (16%) creating disproportionate resource strain.
- Poor triage efficiency 1 in 5 appointments address social rather than medical needs, while 40% of A&E visits could be handled at GP level.
- Appointment access deteriorating mental health waits stretch to 12+ months, ADHD assessments even longer. Patient satisfaction with booking dropped from 81% to 50% since 2012.
- Reactive care model limited remote monitoring and patient selfmanagement leads to costly preventable emergencies and deterioration.



Current Digital "Solutions" - Do They Help or Hinder?

The Chatbot Paradox: Automated Self-Referral

The Promise:

- 24/7 access to mental health services
- Reduced administrative burden
- Standardized data collection
- Immediate response to crisis

The Reality:

- May actually increase waiting lists
 by creating more referrals without
 increasing capacity
- Basic chatbots lack clinical sophistication for mental health triage
- Risk of inappropriate referrals routing low-risk patients to highintensity services
- False sense of action without
 addressing underlying resource
 constraints

Are we automating the wrong part of the problem?

The NHS 10-Year Plan's Digital Mental Health Strategy - A Critical Gap

The Plan's Mental Health Digital Promises

NHS App Self-Referral for Mental Health:

- Self-referral for talking
 therapies without GP
 appointment
- Al-driven virtual support as first port of call
- 24/7 mental health support through digital "front doors"
- "Built by trusted clinicians" but what does this actually mean?

The Current Reality: Amplifying Outdated Methods

- Automated PHQ-9 and GAD-7
 delivery digitizing 1960s
 questionnaires
- Binary decision trees based
 on symptom checklists
- Amplifying existing biases of self-report measures
- Higher false positive rates in certain demographics
- Missing cultural and
 linguistic nuances in mental
 health presentation

The Fatal Flaw: Missing Clinical Intelligence

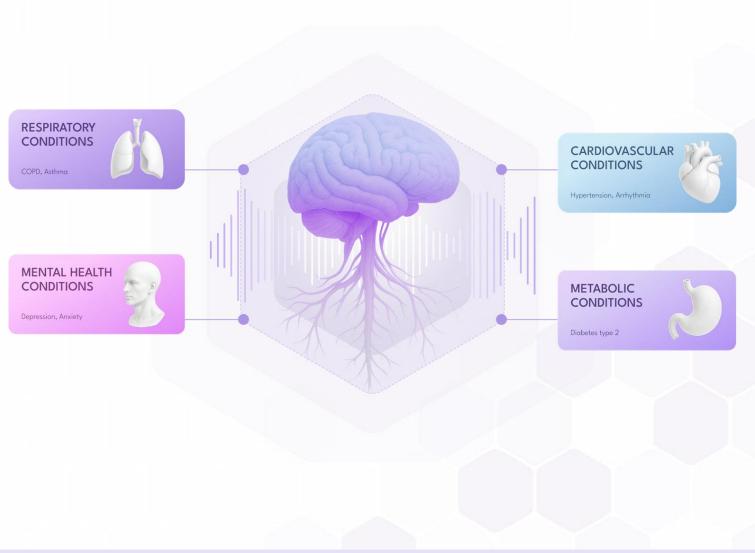
What Clinicians Have That Current Solutions Lack:

- Intuitive assessment of patient
 mental and physical state
- Non-verbal cues tone, speech patterns, behavioral observations
- Contextual understanding of symptoms within patient's life situation
- **Dynamic assessment** that adapts based on real-time patient presentation

How Do We Scale Clinical Intelligence?

Voice biomarkers are objective, measurable indicators of health and mental state extracted from speech patterns:

- Acoustic features: Pitch variation, speech rate, pauses, vocal tremor
- Linguistic patterns: Word choice, sentence structure, semantic content
- Temporal dynamics: Response timing, speech rhythm, prosody changes



What Voice Biomarkers Can Detect

	Summary Profile Instruments	Reports 3		
. Clinicians	Mantal ha			
🐏 Patients	Mental health report Created: 13/12/24 Created from: PHQ-9, GAD-7, Read aloud activity			
	Depression	Depression probability	Anxiety	Anxiety probability
	Latest PHQ-9: 20 HIGH	75%	Latest GAD-7: 9 LOW	29%
	Outputs		Outputs	
	Loss of interest/pleasure *	42%	Anxiety/autonomic arousal®	8%
	Depressed mood *	48%	Difficulty controlling worry •	33%
	Sleep changes *	69%	Excessive & generalised worry *	28%
	Fatigue *	76%	Difficulty relaxing	53%
	Appetite changes •	36%	Psychomotor agitation *	23%
0	Worthlessness/guilt *	51%	Affective dysregulation *	10%
💈 Dan Skinner 🗸	Concentration difficulties *	72%	Anticipatory anxiety *	48%

Mental Health Conditions:

- Major depression and severity levels
- Generalized anxiety disorder
- Fatigue and stress levels
- Cognitive symptoms (attention, memory impairment)
- Sleep difficulties, mood changes, anhedonia

Physical Health Conditions:

- Diabetes type 2 indicators
- Respiratory health (COPD, asthma)
- Hypertension markers
- Early signs of cognitive decline

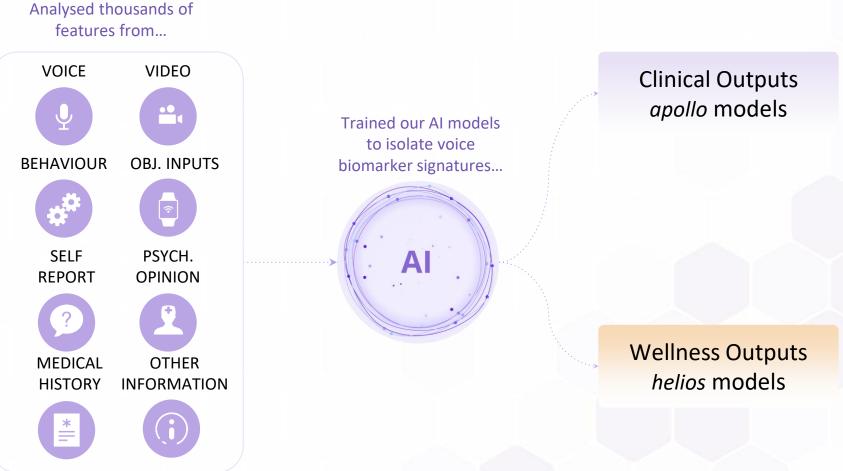
thymia's biomarkers: how did we build the tech?

Proprietary AI models built in-house based on our world-leading expertise - combining multiple data inputs from **50,000+ individuals** over years - **largest & most diverse dataset of its kind** \rightarrow isolating voice biomarker signatures for more serious mental health conditions + earlier mental wellness indicators.

50,000+ clinical trial & clinical study participants



One-off & longitudinal data



thymia: a team of scientists, trusted by NHS, pharma and Fortune's 500 companies



In-house built proprietary AI models



52,000+ individuals in data set Expanding to 100,000 within 2025



~750,000 activities completed



~2MM data samples



280+ relevant peer-reviewed publications by the team (full list here)



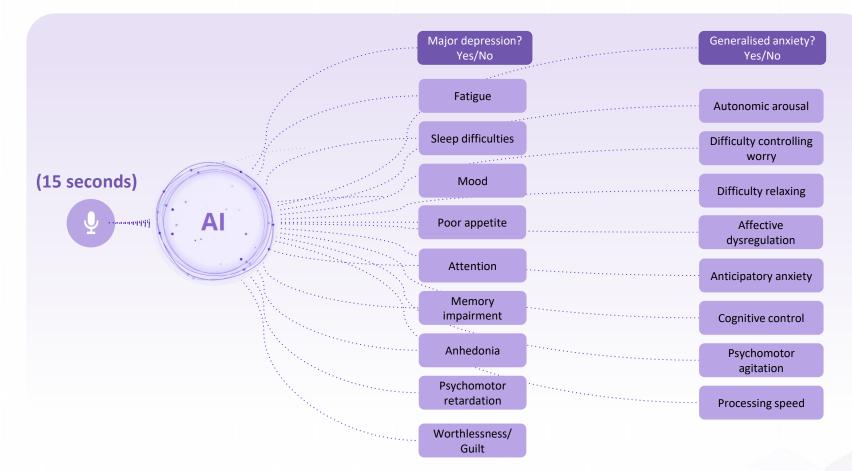
patent filed, 7 patents identified

- Our clinical models have an AUC of 0.8+, with 0.93+ for severe major depression* & 0.99 for COPD** *tested on 3rd party clinical ANDROIDS dataset; **tested on 3rd party clinical ICBHI dataset
- Our wellness models are more accurate than any wearable device
- Trusted by the NHS and global pharmaceutical, research and industry partners



Apollo: QMS Certified, registering for UKCA Class1, on our path to Class2

Our commercial models use just **15 seconds of speech**, gathered via any smart device, to drive effective assessments and interventions. Our modular approach allows partners to select precise input/output combinations for maximum impact.



Clinical Mental Health Outputs (apollo models)

Now expanding to physical health: diabetes type2, respiratory health (COPD, asthma, allergies), hypertension

On our way to UKCA registration as medical device

- Fully GDPR & (P)HIPAA compliant, with local servers deployed globally
- ISO 13485 (QMS) "Demonstrating our ability to provide safe medical devices and services that consistently meet customer demands and applicable regulatory requirements"
- ISO 27001 Cybersecurity Certified
- NHS Toolkit and Cyber Essentials security certifications
- We anonymise all data possible
- Officially approved & recognised as an NHS and UK Government software vendor (GCloud13)
- Used as a clinical decision support tool in Canada and the US.



Easy to integrate

We now deploy our speech technology via our own voice AI agents; integrate directly into health platforms via API or widget; and also offer our own web apps. So you can support & engage your users no matter your user flow.

Voice Al Agent

Our voice AI agents engage in natural conversation with your users at meaningful flow points (patient intake, triage, between appointment monitoring etc).

ttps://api.thymia.ai

YYYY-MM-DDTHH:MM:SS+HH:MM<offset>

curl -v -H 'x-api-key: your_key_here' \
https://api.thymia.ai/v1/account

API

Pass us a voice recording securely via API; we anonymise data and pass scores back to you

Easy to use API integration documentation, fully customisable user journey



Web App

Bespoke landing page & customised signposting on results page for clinical and wellness use.

Users create a unique account; full clinician portal for clinical users. Retention & long term engagement via proprietary health content & reminders

Voice AI Agents powered by Speech Biomarkers

Our regulated Voice AI Agents turn waiting time into screening time.

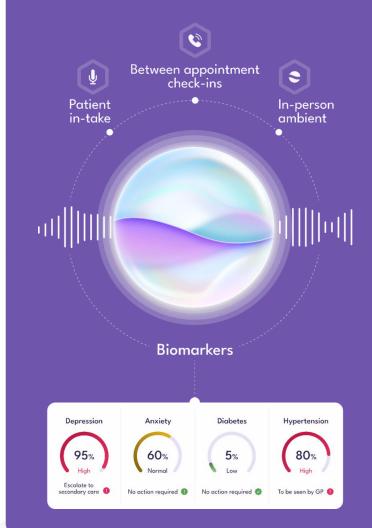
Equipped with medical grade voice biomarkers, they put patients on the right path, first time.

With our agents, you can:

- Efficiently triage prioritise high risk cases, push low risk to low cost PCN interventions
- Effectively **monitor** those on waiting lists and between appointments for changes
- **Focus** clinician time where it has most impact
- Cut costs
- But also track clinician burnout, stress and fatigue

Clinical Voice Al

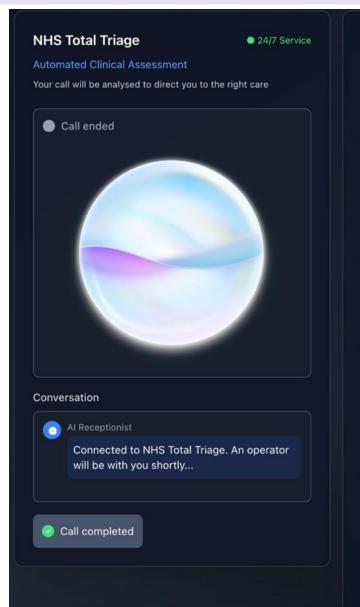
Voice AI agents equipped with regulated speech biomarkers to efficiently triage mental and physical health, and automatically monitor between appointments



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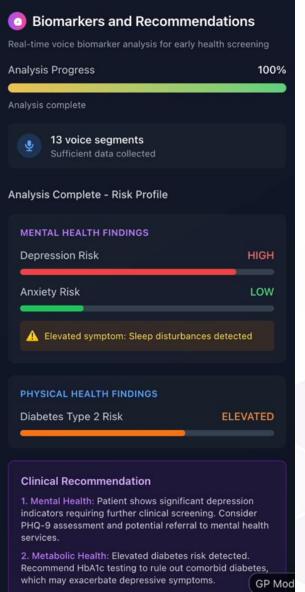
Demo: a Total Triage example

https://youtu.be/ZJZiPb-5K2M



Patient Assessment Form					
7/8 fields collected					
-					
Call	Classification				
0	Call Type				
	medical_help				
	Details: discussing mood				
Eme	ergency Screening				
0	Emergency Status				
	No emergency symptoms				
Syn	nptoms				
	Primary Symptom				
	low mood				
	Details: challenging sleep, difficulty falling asleep, lack of motivation				
Dur	ation & Progression				
0	Duration				
	months				
	Onset: gradual				
	Progression: getting_worse				
Contact Details					

Full Nan



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Patient in-take; in-between appointments; during appointments



Scenario 1: Primary Care Mental Health Referral

Patient Call to GP Practice:

- Al Agent: "Hello Sarah, I understand you'd like to speak with someone about how you're feeling. Can you tell me what's been concerning you?"
- **Patient:** Natural conversation about symptoms, duration, impact
- **Real-time Analysis:** Speech biomarkers updating during conversation
- Output:
 - Depression score: 7.2/10 (Moderate-Severe)
 - Anxiety score: 8.1/10 (Severe)
 - Risk level: "High priority clinical review within 24 hours"
 - Structured referral ready for EPR integration



Scenario 2: IAPT Waiting List Management

Monthly (Weekly?) Check-in Call:

- Al Agent: "Hi John, this is your monthly wellness check. How have you been feeling since we last spoke?"
- Analysis: Mood deterioration
 detected through voice
 patterns
- Action: Automatic escalation to clinical team for priority review
- Result: Early intervention prevents crisis, optimizes resource allocation



In-Person GP Appointment (with patient consent):

- **Setting:** Apollo ambient device quietly monitoring consultation
- **GP:** "How have you been feeling since your last visit, Maria?"
- Patient: Natural conversation

.

- Real-time Insights & Support:
 - Speech patterns indicating worsening depression
 - Cognitive processing speed: Reduced by 30% compared to previous visit
 - Objective data supports clinical impression
- Result: Enhanced clinical decision-making

 with objective voice biomarker data supporting

 subjective assessment

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Partner with thymia for Voice-First Mental Health

Why Act Now?

Perfect Storm of Opportunity:

- 1. £3.4bn digital transformation funding available in 2025/26
- 2. **Mental health access crisis** demands immediate innovation
- Apollo technology ready registering for UKCA Class 1, Class 2 in progress
- 4. **NHS digital infrastructure** being standardized for integration

Partnership Opportunities

For ICB Decision Makers:

- **Pilot Apollo** across primary care networks in your region
- Address waiting time crisis with
 objective triage
- **Demonstrate ROI** through reduced administrative burden

For NHS Trust Leaders:

- Integrate Apollo into existing mental health pathways
- Enhance clinical decision-making
 with objective biomarker data
- Scale proven technology across
 your organization

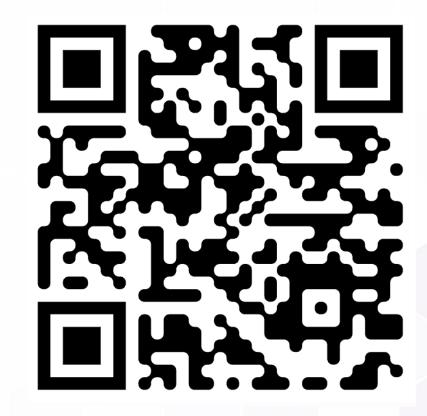
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Thank you!

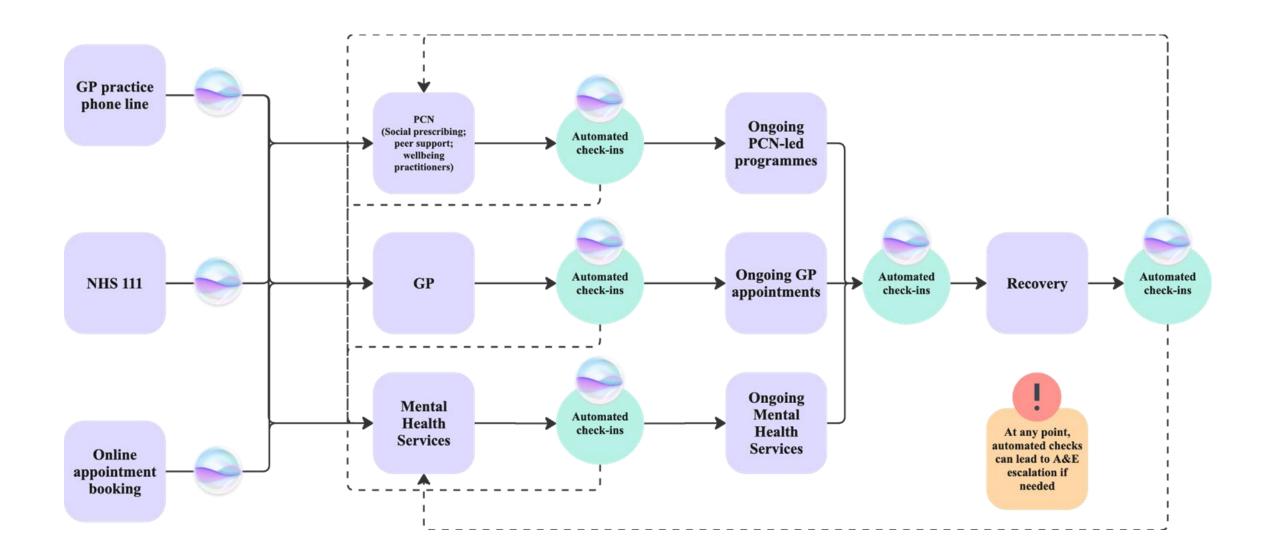
Stefano Goria, CTO & co-founder, <u>stefano@thymia.ai</u> Emilia Molimpakis, CEO & co-founder <u>emilia@thymia.ai</u>

- Schedule a personalized demo of Apollo in your clinical context
- **Discuss pilot implementation** for your organization

<u>thymia.ai</u>



A - simplified - clinical pathway



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A constellation of Voice AI Agents supercharged by speech biomarkers

- 1. Al-powered triage at care entry point and between appointments
- 2. Paired with **effective social prescribing,** this automation can create significant:

Operational efficiencies:

- Fewer GP appointments (up to 50% reduction¹)
- Reduced GP workload
- Reduced waiting times
- Reduced A&E visits (up to 66% reduction^{1,2})
- Improved care navigation & patient experience (navigated to the right place first time)³

Clinical outcomes:

- Improved symptoms and wellbeing through selfempowerment
- Reduced hospital admissions
- Better disease management



Total Triage Agent



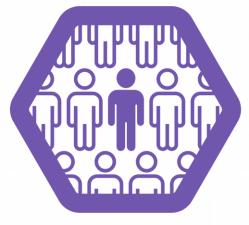


Nurse Check In



Self-care journalling

Our technology: unmatched accuracy through hyper-personalisation



Cross-sectional models

First interaction: Clinical-grade accuracy from first use by **comparing users against their peer group** - **other** individuals in our dataset with the same age, gender, language, accent, ethnicity, cultural background and more.

Longitudinal, hyper-personalised models

Hyper-personalisation: with repeated use (3 recordings), we build a unique, **personalised model adaptation per user**, adapting to their unique way of speaking and behaving. We are the only company able to offer this level of personalisation.

Wellness: The best commercial fatigue & stress assessment in the world



- Our wellness models offer the best commercially available fatigue and stress assessment in the world
- More accurate and robust than any commercial wearable device, incl. Google Fitbit, Oura, Garmin, Apple watch and more.
- Cutting edge technology and novel mathematical modelling techniques guarantee robustness against biases (age, gender, language, accent, cultural background, ethnicity...)

Wellness use cases

Our wellness models are trusted and loved by...



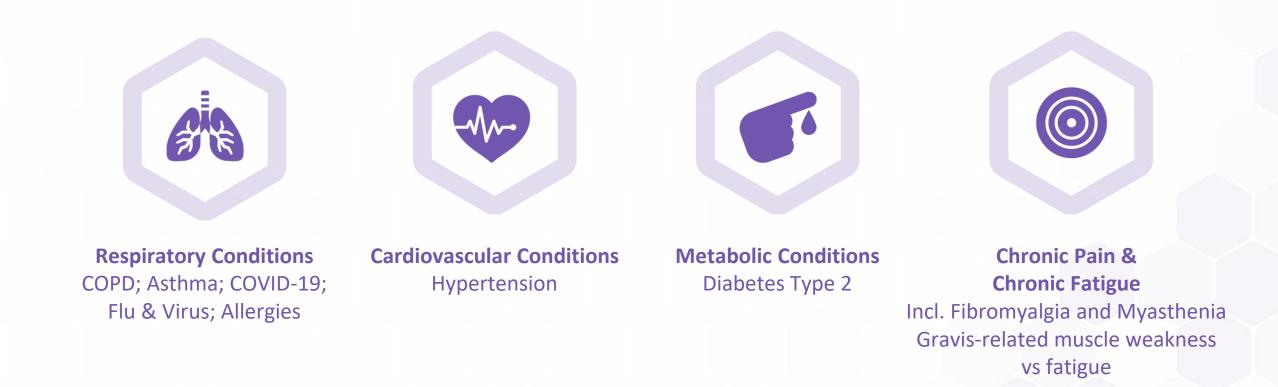
- 1. By **first responders** across Canada and the USA, including police officers, firefighters, ambulance drivers and paramedics as a way to check in on their wellbeing throughout the day and after emergencies. First responders are then encouraged to engage with their peers to discuss their experiences in a safe environment.
- 2. By **employees** in companies as a mental health benefit; employees check in on their mental wellbeing daily and can discuss their scores with a partnering therapist (we produce anonymised group averages for the employer to have a sense of how their workforce is doing).
- 3. By **university students** around the world to check in on their wellbeing around holidays and exams.
- 4. By **drivers** to help monitor drowsiness and stress in order to help predict and prevent accidents (embedded within vehicles).



- 5. By **patients with physical health issues** on medication that may have an impact on their fatigue and tiredness (we have worked with Myasthenia Gravis patients for instance).
- 6. By **elderly patients** who have been discharged from hospital but require round the clock remote monitoring at home.
- By the general public who want to get a better understanding of their wellbeing and engage in offerings in their community (e.g. NHS social prescribing).

Physical Health Breakthroughs

Voice is an incredibly powerful carrier of health signal and is tied fundamentally to the **nervous system**. We continue to push the boundaries of our models and have broken the barrier into physical health; within the next 6 months we are targeting voice biomarkers that will create a comprehensive risk profile for:



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Publications & literature

The thymia team collectively have published over **280 relevant papers** and been **cited in over 12,000 others**. See our <u>Google Scholar group</u>. Below are a few indicative papers:

- 1. <u>Goria, S., Polle, R., Fara, S., & Cummins, N. (2024). Revealing Confounding Biases: A Novel Benchmarking Approach for Aggregate-Level Performance Metrics in Health Assessments. In Proc.</u> Interspeech 2024 (pp. 1440-1444).
- 2. Norbury, A., Georgescu, A. L., Molimpakis, E., Goria, S., & Cummins, N. (2024). Predicting different dimensions of fatigue from speech data: a longitudinal study in shift workers. medRxiv, 2024-06.
- 3. <u>Georgescu, A., Cummins, N., Molimpakis, E., Giacomazzi, E., Rodrigues Marczyk, J., Goria S. (in press) Screening for Depression and Anxiety Using a Non-Verbal Working Memory Task in a Sample of Elderly Brazilians: A Preliminary Analysis of the Transferability of AI Models. JMIR Formative Research. 29/10/2024:55856 (forthcoming/in press) DOI: 10.2196/55856</u>
- 4. Falcioni, G., Georgescu, A., Molimpakis, E., Gottlieb, L., Kuhn, T., & Goria, S. (2023). Path Signature Representation of Patient-Clinician Interactions as a Predictor for Neuropsychological Tests Outcomes in Children: A Proof of Concept. arXiv preprint arXiv:2312.11512.
- 5. Fara, S., Hickey, O., Georgescu, A., Goria, S., Molimpakis, E., & Cummins, N. (2023). Bayesian Networks for the robust and unbiased prediction of depression and its symptoms utilizing speech and multimodal data. In Proc. INTERSPEECH 2023 (pp. 1728-1732). ISCA-INST SPEECH COMMUNICATION ASSOC.
- Fara, Hickey, Georgescu, Goria, Molimpakis & Cummins (2022) Utilising Bayesian Networks to combine multimodal data and expert opinion for the robust prediction of depression and its symptoms. arXiv preprint arXiv:2211.04924.
- 7. Fara, Goria, Molimpakis & Cummins (2022) Speech and the n-Back task as a lens into depression. How combining both may allow us to isolate different core symptoms of depression. Interspeech 2022. arXiv:2204.00088
- 8. de Angel V, Adeleye F, Zhang Y, Cummins N, Munir S, Lewis S, Laporta Puyal E, Matcham F, Sun S, Folarin AA, Ranjan Y, Conde P, Rashid Z, Dobson R, Hotopf M (2023) The Feasibility of Implementing Remote Measurement Technologies in Psychological Treatment for Depression: Mixed Methods Study on Engagement. JMIR Ment Health 2023;10:e42866. doi: 10.2196/42866. PMID: 36692937
- Cummins, N., Dineley, J., Conde, P., Matcham, F., Siddi, S., Lamers, F., ... & Hotopf, M. (2022). Multilingual markers of depression in remotely collected speech samples. DOI: https://doi.org/10.21203/rs.3.rs-2183980/v1
- 10. Olah, J., Diederen, K., Gibbs-Dean, T., Kempton, M. J., Dobson, R., Spencer, T., & **Cummins, N**. (2022). Online Speech Assessment of the Psychotic Spectrum: Exploring the relationship between overlapping acoustic markers of Schizotypy, Depression and Anxiety. DOI: https://doi.org/10.21203/rs.3.rs-2255985/v1
- 11. Campbell, E. L., Dineley, J., Conde, P., Matcham, F., Lamers, F., Siddi, S., ... & Cummins, N. (2022). Detecting the severity of major depressive disorder from speech: A novel hard-training methodology. arXiv preprint arXiv:2206.01542

thymia recognition

Named "One of the..."

- World's Top Digital Health Companies 2024 (*Newsweek, 2024*)
- Top 10 Uses of AI in healthcare piece (*Healthcare digital, 2023*)
- Top 10 Promising early-stage startups pioneering mental health advancements in Europe (EU Startups, 2023)
- Top 15 Mental Health startups (Business Insider, 2023)
- Top 10 Mental Wellbeing companies to know during mental health awareness week (*Techround, 2023*)
- 2022 and 2023 Most Promising Early-Stage Digital Ventures (Galen Growth | Insights you can trust, 2022/2023)

Featured in 400+ news pieces across print, radio, podcasts, TV shows and TED talks, including:

THE TIMES BBC The Telegraph Forbes Sky NEWS LE FIGARO The Washington Post **\sifted/** 🗳 **iNews The SINDEPENDENT**

Ethical, reliable, explainable AI by design

 Since inception, thymia has strictly adhered to the AI Ethics and Safety Guidelines set out by the Alan Turing Institute (Leslie, 2019).

 We follow Security by Design and Privacy by Design principles.

 Our approach to AI model generation is to prioritise: reliability, explainability, ethics, inclusivity, privacy preservation, and maintaining responsibility throughout.



We are world-leading experts in combining different data streams to identify novel health biomarkers. We are now expanding the training data for our models to include:

- Other data from smartphones, incl. GPS tracking
- Data from commercial **wearable devices**, incl. fitness trackers
- Data from clinical wearable devices (ECGs, EEGs), bloodwork, urine samples
- Data from social and financial apps (anonymised)

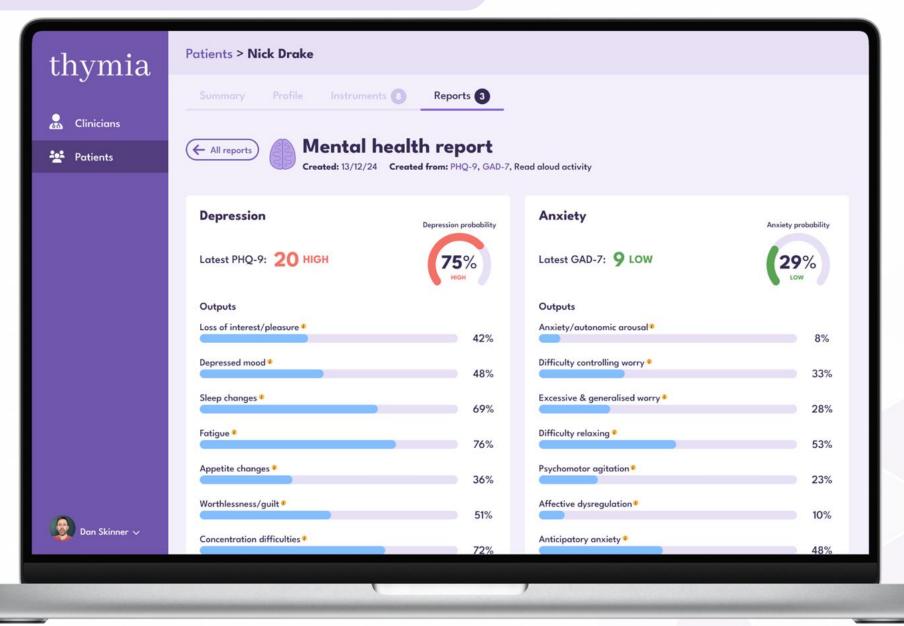


View of clinician portal app

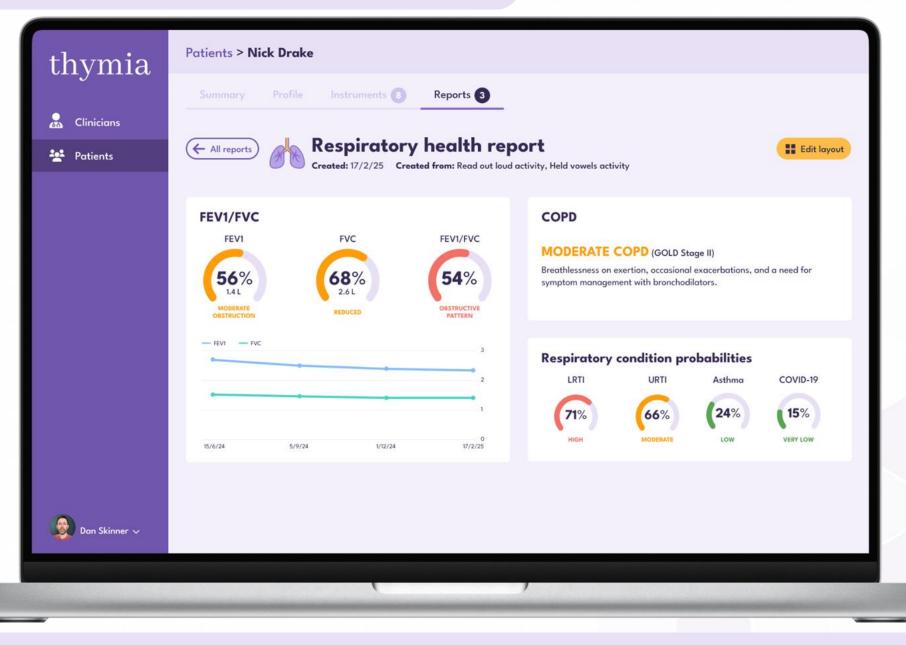
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 Clinicians Patients 	Search Filters = Sort 1				
	Instrument type	Status	Reports	Assigned	Completed
	Read out loud	COMPLETED	() / (9/2/25	11/2/25
	- Held vowels	COMPLETED	0 ch 0	2/2/25	9/2/25
	Connect wearables	COMPLETED	⊘ ≙0	1/2/25	4/2/25
	PHQ-9	COMPLETED	Ono	30/1/25	2/2/25
	GAD-7	COMPLETED	OAO	30/1/25	2/2/25
	HRQOL	COMPLETED	() / ()	22/1/25	23/2/25
	MRC Dyspnoea Scale	COMPLETED	0 m 0	22/1/25	23/2/25
	SGRQ	COMPLETED	() ()	22/1/25	23/2/25
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View of clinician portal app



View of clinician portal app



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Lunch & Networking



Please scan the QR Code on the screen below to register your interest for our accredited training courses.





Chair Afternoon Reflection



Digital Transformation Consultant at BrandMii Clinician and Author of the AI Leverage: Building Purpose, Resilience and Success



Keynote Presentation



Louise Whittaker Advanced Paramedic Mental Health Yorkshire Ambulance Service NHS Trust





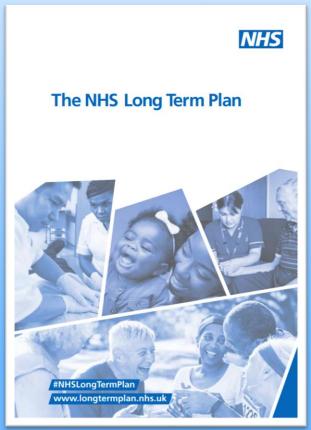
Mental Health Vehicles Working in the Ambulance Service



Background

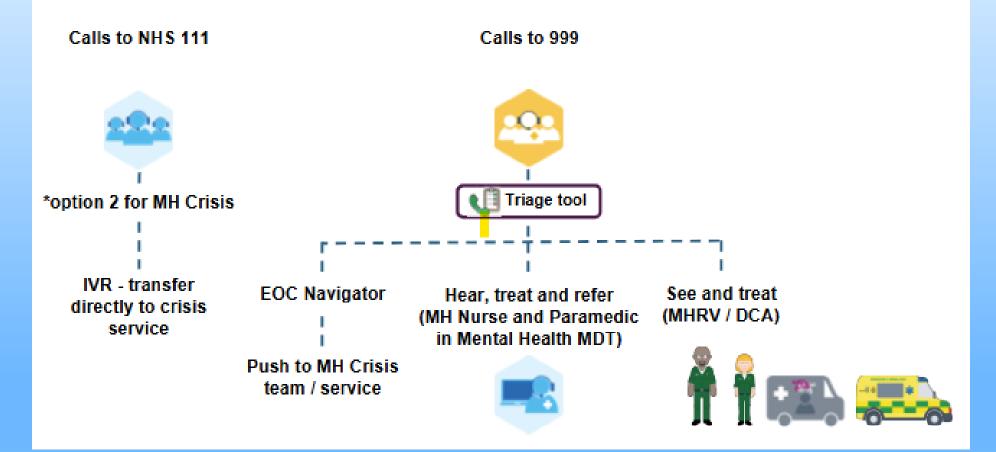
- World-class, 24/7 crisis care for all age groups
- Increased budget £2.3 billion over 5 years
- Community-based care via primary care networks
- Better education for ambulance staff MHLDA
- Mental health professionals in ambulance control rooms, integrated urgent care and face-to-face
- Ambulance Mental Health Response Vehicles across England and Wales
- SPA 111
- Liaison psychiatry 24/7 in acute hospitals by 2024
- Improved care for common mental health problems, moderate to severe problems, pre-natal and perinatal care and CYP.





The YAS Model





Case Study

George is 44 years old. He lives in an upstairs flat. He used to have depot haloperidol deconate injections but disengaged with the community team 6/12 ago

Today he has asked the community team for help as he is having suicidal thoughts and feels he is 'getting sick again', he has been signposted to his GP who then suggests 999.

He speaks to 999, and a category 3 ambulance is the outcome (up to 2 hours).

George is T2DM, has used alcohol, diagnosed with schizophrenia and avoidant personality disorder, and suicide has been attempted once before







The route to specialist practice







- Works across the four pillars
- Engaged, expert and enthusiastic
- Develops care for our patients
- Improves education and support for our people
- Evidence based
- Part of the clinical leadership team.





Mental Health Response Vehicles and the Specialist Paramedics Mental Health





 Attending patients in acute mental health crisis De-escalation, using grounding techniques, trauma informed and person-centred care Helping patients feel safe again and creating safety plans Holistic approach, treating the whole person 	 Use patient group directives – minor illness Using a QI approach, treating mental health crisis where needed and assessing risk Enhancing & improving understanding of the legal framework, working with partners better Involved in research & evidence-based practice Wound care and closure
 Leadership – part of team investment days Clinical Supervision – talking to staff, helping them improve care, navigating pathways Active involvement in pathway development Academic pathway – PG Dip SHU Apprenticeship – placements with system partners and third sector organisations 9 teams working to improve care locally 	 9 MHRVs trust wide 27 PMHs in post eMHRVs – we've created a working group to learn from experience Support by APMH, APUC and Spec Lead Nurse Work in EOC within the Mental Health Hub multi disciplinary team

Performance

Between 1 July 2024 and 30 June 2025 we saw 7845 patients.

Of these 6258 fell within the NHSE dataset for mental health dispositions.

Around 2700 fell within Category 2 – these patients are the most acutely unwell mental health presentations needing an immediate response, 43% of their mental health workload.

416 patients with mental health needs were under 18 – representing around 7%.

495 were over 65 - 90 were over the age of 85.

Our see treat and refer rate was 70.42% for mental health presentations.







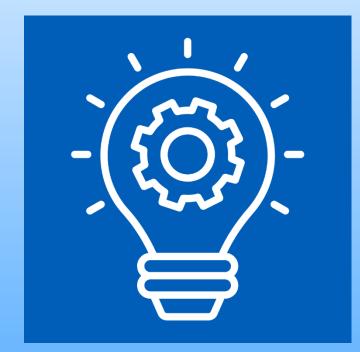


YAS receives at least 60,000 mental health calls per year.

The future

- Clinicians working at an enhanced practice level across YAS
- Integrated with system partners place-based partnerships and pathways, neighbourhood model
- Part of the solution to health inequality community led - focus on access, quality and experience of care, prioritising health inclusion for hard to reach groups
- Innovative and empowered
- Using digital technology for better, safer solutions
- Quality improvement embedded and evidence based.
- Three shifts Hospital to Community, Analogue to Digital, Treatment to Prevention





System Working





No-one works in isolation and we work within a complex system We do so at a time when demand is increasing for mental health care, but resources are stretched

We want our patients to access care from the right people at the right time

Our people work through placements in safe spaces, police control rooms, with urgent care colleagues, crisis practitioners and social prescribers In Academic Year 2 we'll be seeking mental health trust and acute trust placements to widen their experience and improve efficiency and effectiveness

We aim to embed rotational working to improve patient care and partnership working

Case Study

George let us into his flat, there were smalls paths through his personal belongings, he could no longer get into his bedroom and slept on his sofa.

He struggled with eye contact and whispered throughout.

He said his suicidal thoughts were 'kind of religious' – he was clean and reasonably well dressed but we thought he only ate cereal having looked around his kitchen.

He had audible hallucinations and had not left his flat for more than a year.

Plan....

We successfully engaged with George and encouraged his trust. We made a successful referral to the crisis team for a visit within 4 hours. We also referred him to his GP for diabetic care and to social care for a range of community support.

We made him feel safe and we helped him access care from the right people.







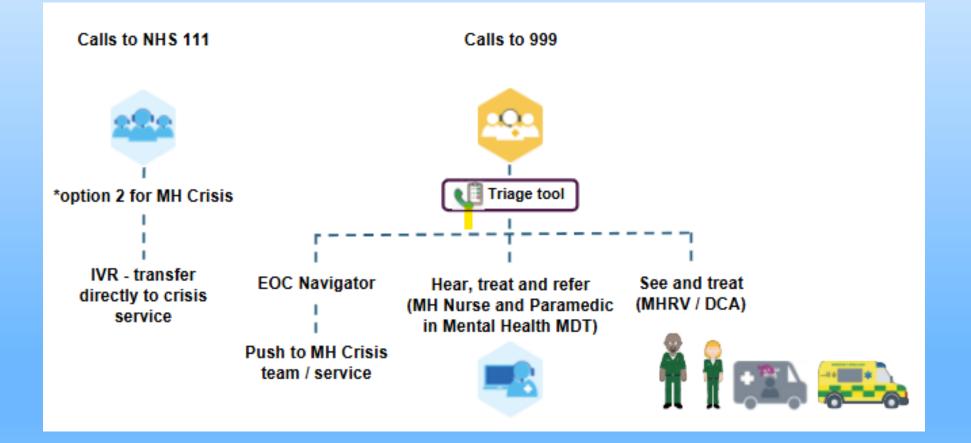
The YAS Model













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Strategies and Solutions Conference





Keynote Presentation



Kate Forbes Clinical Project Manager, Mental Health South Central and West Commissioning Support Unit (SCW): Mental Health and Care Pathways Portfolio



Lydia Williams Mental Health Project Manager South Central and West Commissioning Support Unit (SCW): Mental Health and Care Pathways Portfolio



Romy McCutcheon Geospatial Analyst South Central and West Commissioning Support Unit









Designing System-Wide Mental Health Transformation: A CSU perspective

South Central and West Commissioning Support Unit Mental Health and Care Pathways Portfolio

Kate Forbes, Clinical Project Manager, Mental Health Lydia Williams, Mental health Project Manager Romy McCutcheon, Geospatial Analyst

The Project Ask



To gain a comprehensive understanding of **risk factors** and **early interventions** for the CYP population in 2 local authorities with a focus on:

Eating difficulties

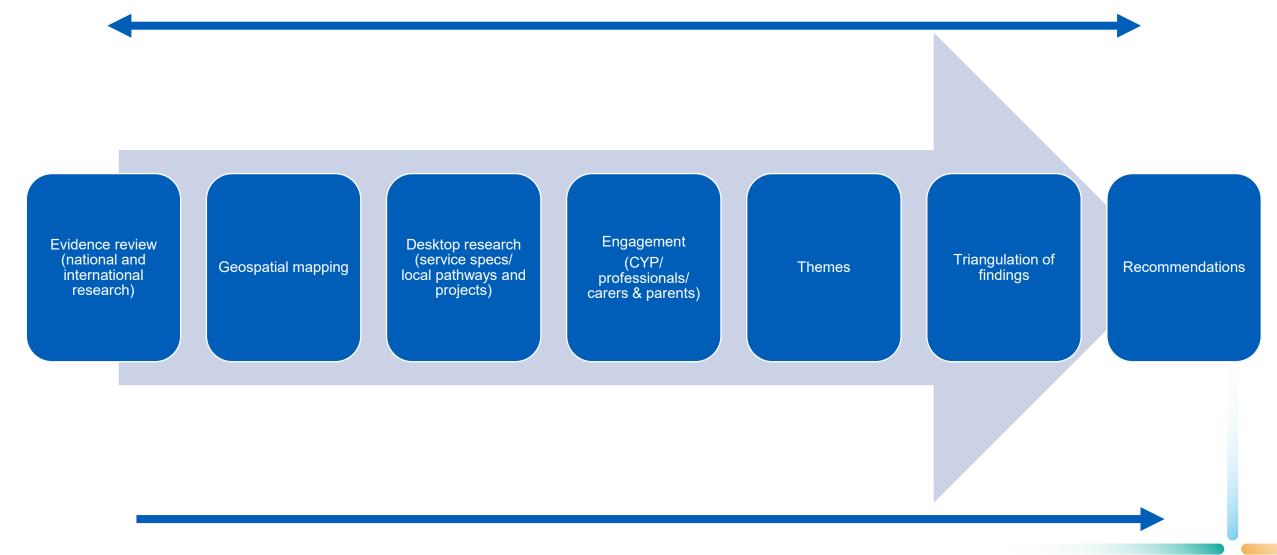
oLow level mental health

oSelf-harm

The aim was to provide evidence-based recommendations to inform current and future commissioning

Project Methodology







Engagement

Engagement



Cohort	Method of Engagement	Detail
Professional	Face to face discovery conversations	Held at their place of work in a private room
	Online discovery conversations	Held via Teams
СҮР	Face to face focus groups	Hosted at youth forums and schools. CYP up to the age of 18 (or 24 with SEND).
	Online anonymous survey held on Join the Conversation	CYP between the ages of 13 and 18 able to participate
Parents and Carers	Online anonymous survey held on Join the Conversation	Parents/carers of CYP up to the age of 18 able to participate

Questions centred around:

- Risk factors
- What support is available/ what do CYP do to remain mentally well
- What support could be made available in the local area to better support CYP

What makes it difficult to maintain your mental wellbeing and/or make it difficult for you to engage with school/college, relationships or hobbies?

What do you do to maintain, support or improve your mental wellbeing?

If you were able to access any group/ activity which could support your mental wellbeing, what would it be and why?



Example themes identified: risk factors

Identified through engagement with professionals, CYP & parents/carers

School & peer relationships	Managing emotions, mental health & self care	Family issues	Access to mental health support
Social media and technology	Culture	Safety, crime, violence & external factors	Neurodiversity

Example themes identified: What do CYP engage in **MIS** to protect, maintain and improve their MH

Identified through engagement with CYP & parents/carers

Games & entertainment	Structured activities	Creative outlets	Socialising with friends & family
Self care, enjoying food & drinks	Keeping active, enjoying nature & travelling	Work, volunteering, education & planning ahead	Accessing support from professionals



Example themes identified: do early interventions support local populations & seldom heard groups

Identified through engagement with professionals

High demand VS limited resource & funding	Transport issues	Cultural barriers	Referral processes
Self coordination and access	School avoidance/ homeschooling	Eating difficulties	Self harm

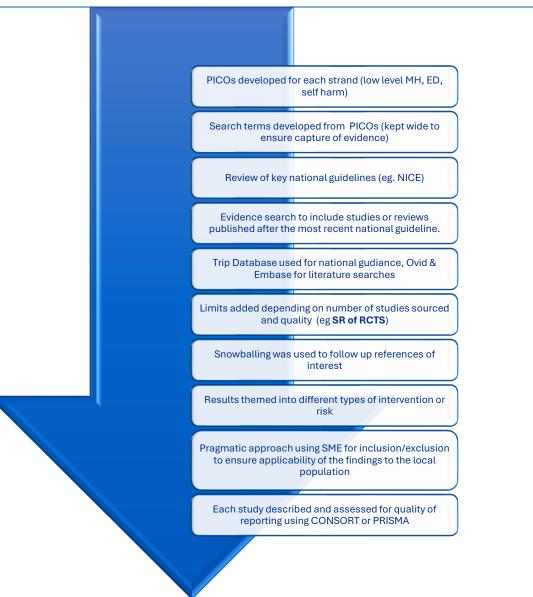


Clinical Effectiveness

Clinical Effectiveness



- Rapid evidence review to identify research on risk factors and early interventions
- Each 'pillar' had a separate PICO and ER
- Based on 'best practice' for systematic literature searching
- Literature evaluated for quality



ER: Interventions for prevention of Self Harm



- Universal Prevention (UP): universal programmes target entire populations, irrespective of individual risk levels.
- Selective Prevention (SP): targets 'at risk population.'
- Indicated Prevention (IP): targets high risk individuals showing early signs (typically undertaken in clinical settings).



ER: Digital Interventions



- Findings were mixed for the effectiveness of digital offers for low level mental health difficulties in CYP with concerns about sustained usage, IG issues and ongoing efficacy.
- Despite the mixed results, in some instances the use of digital interventions for those with low level mental health difficulties may be helpful (eg. those waiting for F2F treatment may benefit from provision).
- Recommend a set of wrap around principles the digital offer, considering national guidance, evidence of effectiveness of individual offers, and IG.
- Recommended that digital offer is provided alongside/ as an adjunct to CAMHS to ensure management of clinical risk, and appropriateness of the tool.

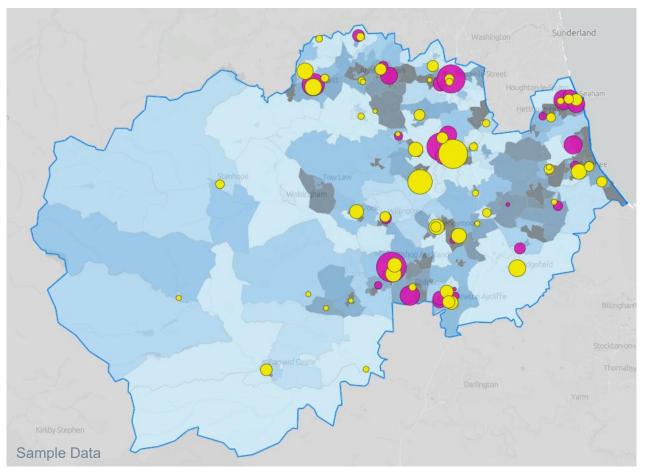


Geospatial Analysis

Geospatial Analysis



Visualisation of Location-Based Data



Interactive Mapping Tool highlighting:

- Service Coverage
- Service Access (travel analysis)
- Mental Health Prevalence in Children and Young People
- Population Analytics
 - Breakdown of age groups
 - Gender
 - Ethnicity

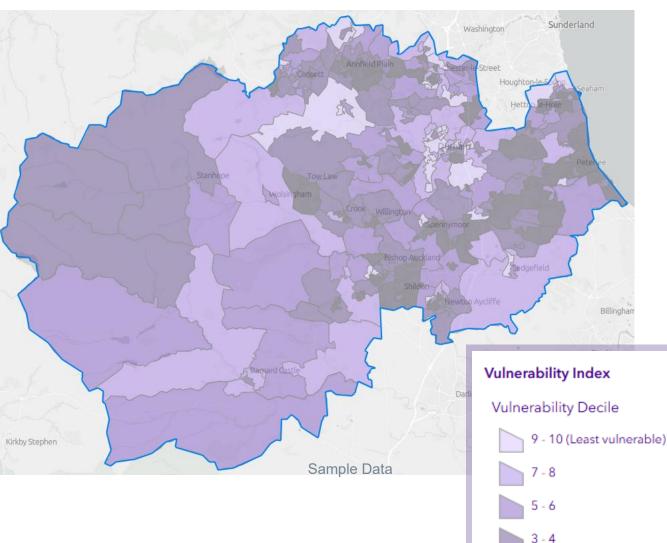
Actionable Insights from GIS Analysis



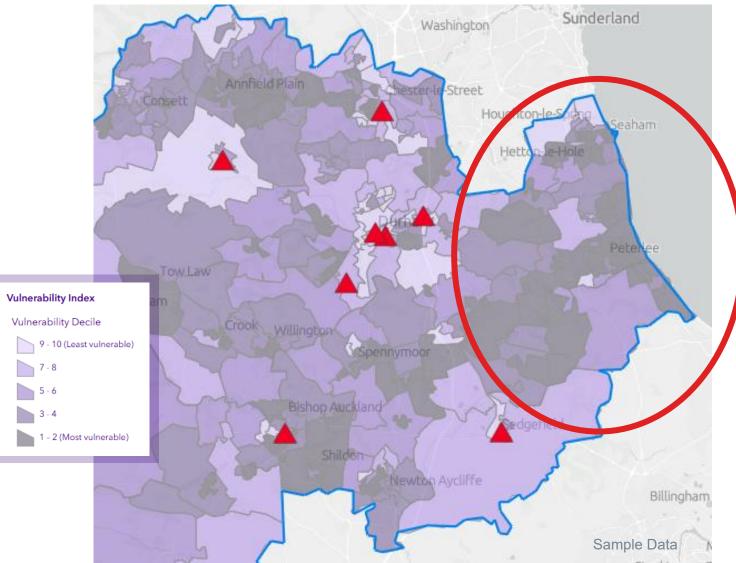
2 (Most vulnerable)

Vulnerability Index based on the following risk factors:

- Accessibility to services
- Deprivation
- Ethnic minorities
- English language barriers
- Crime rate



Benefits of Geospatial Mapping



NHS

- Unlocks spatial patterns
- Visualise clusters of prevalence
- Variation in access to MH services
- Enhanced understanding of the population insights and potential risk factors
- Enables data driven decision making
- Reduce inequalities



Findings & Recommendations

Triangulation of Findings



ER shows that access to green Engagement space is showed CYP in beneficial to one LA fearful of CYP with low knife crime level mental when using health difficulties public transport, and parents do not have access to cars Geospatial mapping can identify crime hotspots / areas of deprivation and current facilities

Example recommendation

Organisations should consider barriers around location; offering services outside of central locations as well as addressing transport barriers to improve accessibility. This could involve having **'satellite' sessions** in residential areas or providing **free transport** to sessions in city centres. Support for CYP and families should be offered in different ways for example within their home environment or virtually, as travelling can act as a barrier to accessing help.

= Evidence based targeted recommendations

Project Outputs





Background and context

In the UK, the mental health of children and young people (CYP) has become a significant concern.

Recent data shows that around one in five children and young people aged 8 to 25 had a probable mental disorder in 2023. This includes a notable increase in eating disorders, particularly among 17 to 19-year-olds. The rate among 17 to 19-year-olds increased from 10.1% in 2017 to 17.7% in 2020. This figure has continued to grow, reaching 25.7% in 2022.

Factors contributing to this rise include the pressures of modern life, such as academic stress, social media, and the impact of the COVID-19 pandemic. 413,000 people were in contact with children and young people's mental health services as of April 2023, up from 389,000 a year earlier. This number has increased steadily in recent years: there were 219,000 people in contact with children and young people's services pre-pandemic in April 2019 (Mental health services monthly statistics, NHS Digital, 2023).

CYP mental health covers a spectrum from mild emotional disturbances to clinically diagnosable conditions like anxiety, depression, eating disorders, and self-harm, with impacts on school attendance, academic performance, and peer socialisation (<u>NSPCC, 2024</u>). This not only affects CYP but has a profound impact on family dynamics and work commitments. Schools and social services play a critical role in supporting CYP.





Any questions?

Thank you!

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Panel Discussion



Strategies and Solutions Conference





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Future of NHS Mental Health

Strategies and Solutions Conference



Food, Drinks & Networking