

WELCOME TO

NHS Population Health Conference North





8th June 2023 - 8:00am - 2:30pm - Manchester

Conference hosted by Convenzis Group Limited





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Medicines & Healthcare products Regulatory Agency





Chairs Opening Address



Dr Maslah Amin

National Clinical Advisor & Associate Director – **NHS England**





SPEAKING NOW



Bevleigh Evans

Assistant Director of Population Health Aneurin Bevan University Health Board

I will be discussing...

"The Art of the Possible – My Personal Population Health Management Journey"







ART OF THE POSSIBLE – MY POPULATION HEALTH MANAGEMENT JOURNEY

BEVLEIGH EVANS

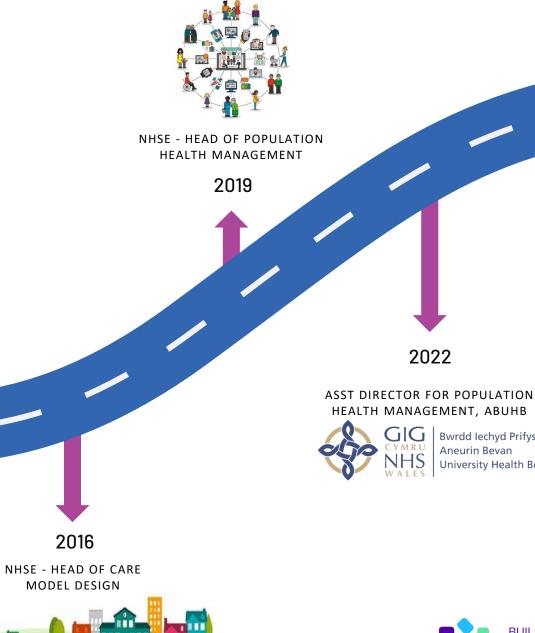
ASSISTANT DIRECTOR FOR POPULATION HEALTH MANAGEMENT, ANEURIN BEVAN UNIVERSITY HEALTH BOARD



MY JOURNEY...

TRUST







Bwrdd Iechyd Prifysgol Aneurin Bevan

University Health Board

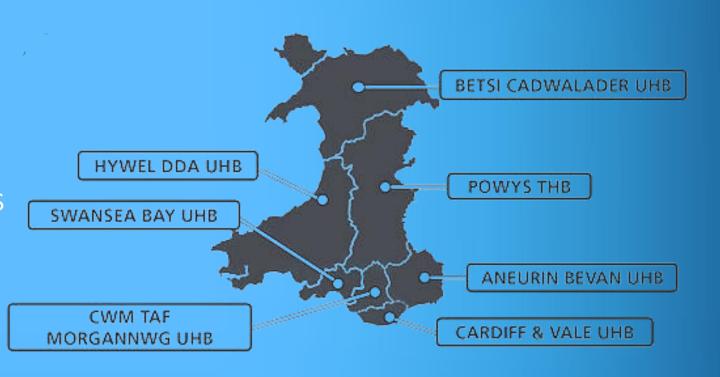




THE NHS IN WALES



- 7 HEALTH BOARDS, NO INDIVIDUAL PROVIDER ORGANISATIONS
- DPH FULL MEMBER OF BOARD
- ENCOMPASSES PUBLIC HEALTH TEAM (OCTOBER 2022)
- POPULATION HEALTH ORGANISATIONS
- PUBLIC SERVICE BOARDS
- FUTURE GENERATIONS ACT







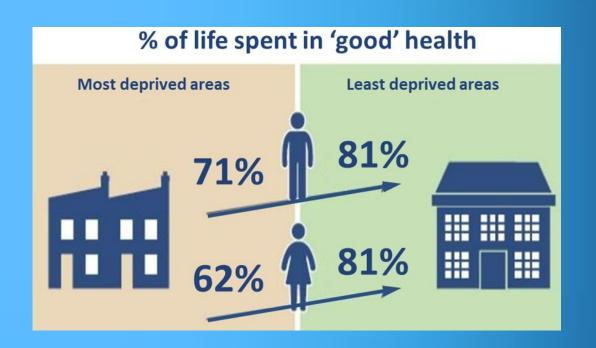






WHAT DOES IT MEAN?













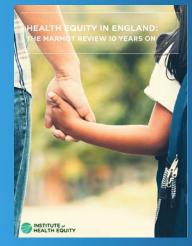


MARMOT PRINCIPLES

- Give every child the best start in life
- Enable all children, young people and adults to maximise their capabilities and have control over their lives
- Create fair employment and good work for all
- Ensure healthy standard of living for all

- Create and develop healthy and sustainable places and communities
- Strengthen the role and impact of ill health prevention
- Tackle discrimination, racism and their outcomes
- Pursue environmental sustainability and health equity together

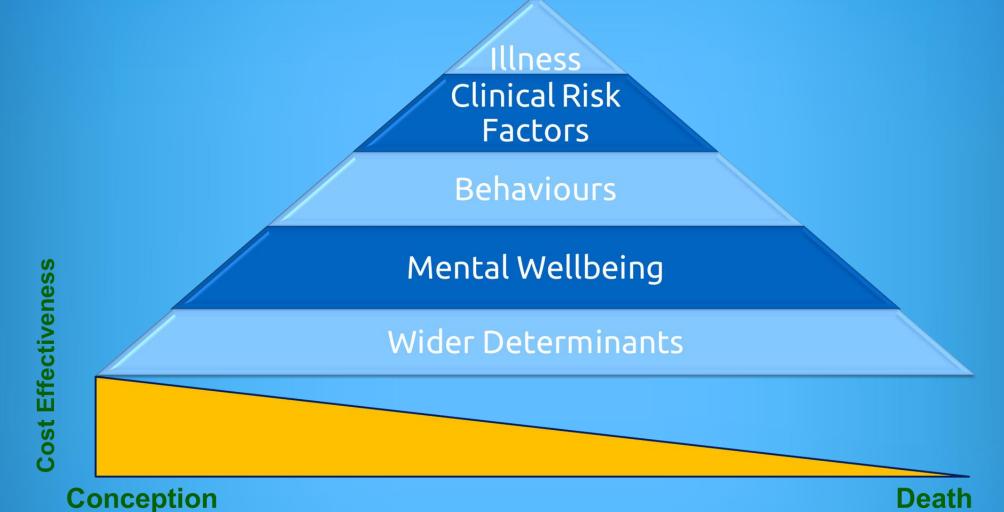














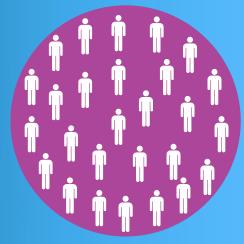
@bevleighevans



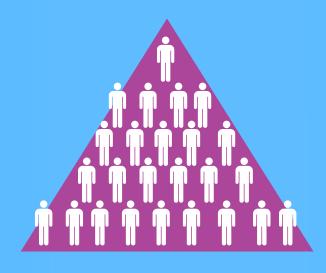
Public Health

Population Health

Population Health Management

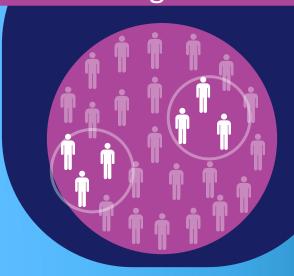


Is the science and art of preventing disease, prolonging life and promoting health and wellbeing, through the organised efforts of society



Improves the health of an entire population.

It is about improving the physical and mental health outcomes and wellbeing of people, whilst reducing health inequalities within and across the population. It includes action to reduce the occurrence of ill-health, including addressing wider determinants of health, delivering social justice and working with communities



Improves population health by data driven planning and delivery of proactive care to achieve maximum impact for the health and wellbeing of the population working from a single dataset to provide one version of the truth to deliver proportionate universalism.







PRINCIPLES OF POPULATION HEALTH MANAGEMENT

Not performance Management	The data is good enough	Start small, think big	80% culture, 20% data
GPs are data controllers we need to be able to give assurances this is about improving the health and wellbeing of their populations.	There will be issues with data quality, the only way to expose this and start to remedy it, is by using the data.	Using an improvement cycle to demonstrate the art of the possible, the golden thread from systems to person. Initial cohorts may be small to create the conditions for success.	At it's heart population health management is about a different way of working, continually using an improvement cycle. Hearts and minds have to be won with data at the core "know your numbers".



BUILDING A FAIRER GWENT TEG I BAWB

THE '5C' MODEL OF POPULATION HEALTH MANAGEMENT IMPROVEMENT CYCLE









OUR DATA MODEL

GOLD- SILVER, BRONZE AND FIRE, POLICE AND THIRD SECTOR DATA

Legal purpose must improve the health and wellbeing of the local population

SILVER- BRONZE AND SOCIAL CARE DATA, OTHER LOCAL AUTHORITY DATASETS AND PRISON DATA

BRONZE – ALL HEALTH BOARD DATA INCLUDING PRIMARY CARE







POPULATION HEALTH MANAGEMENT COHORTS



COHORTS

FUTURE RISK COHORTS







PCC WORKSHOPS: STARTING THE CONVERSATION ON THE ART OF THE POSSIBLE..









STARTING THE CONVERSATION ON THE ART OF THE POSSIBLE..

YOUR INVITATION: AN INTRODUCTION TO POPULATION HEALTH AND POPULATION HEALTH MANAGEMENT

What will the workshop cover? This 2-hour online interactive workshop explores how population health approaches can improve health outcomes and reduce health inequalities

With an increasing emphasis on population health and addressing the wider determinates o health, this online workshop explores what population health means and what population health management approaches to health and wellbeing are. The workshop explores how population health management approaches can help design more personalised and sustainable health and care services that make effective use of public resources.

There will be time in this workshop and space for participants to consider how these approaches can be put into practice.

Who is the workshop aimed at?

This interactive workshop is suitable for: practice teams and NCN leaders and managers clinical community teams, IWN leads, Practice Managers, Community Connectors and voluntary, Community Nursing, CRT Medics, and community organisations.

The training will cover:

- What is population health and population health management?
- How population health approaches can improve health outcomes and reduce health inequalities
- How population health management approaches can support the design and transformation of services.

DATE:

WEDNESDAY MAY 3RD

TIME: 1300-1500

LOCATION: BLAENAU GWENT

СІСК ТО ВООК



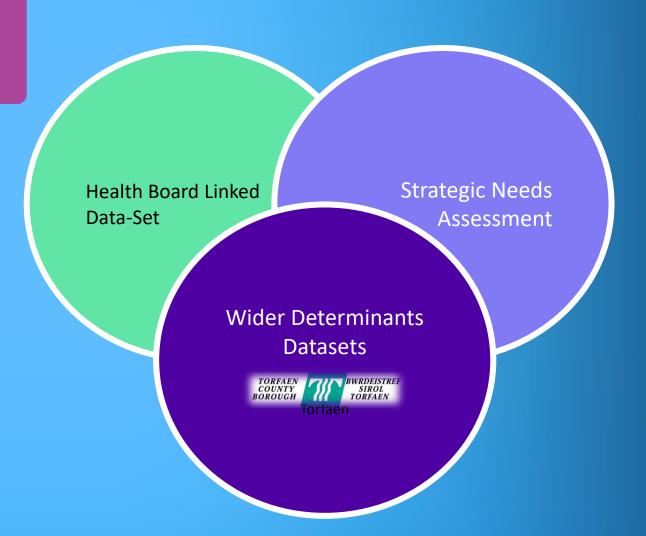




BUILDING BLOCKS OF INSIGHTS











START WITH WHY - ABUHB HYPOTHESIS FOR POPULATION HEALTH MANAGEMENT TEST AND LEARN



HYPOTHESIS FOR PROJECT

Support business as usual with data ledapproach with pro-active-person centred care at the core. NCN recovery plan we have a focus on the current backlog of people with Long Term Conditions (LTC).

Support for achieving a healthy weight will assist people manage their multiple long term conditions successfully



















LEARNING OBJECTIVES

- What is Population Health Management (PHM)?
- Start with the Why?
- · What is the Programme journey?
- · Expectation of individuals
- Introduce the framework

Based on the data & discovery work undertaken, we will refine the cohort (filtering further) in order to get to a manageable number of patients upon which the Managed Practices can act.

In this ALS we will use Logic Model methodology to design a new care model for the selected cohort.

Logic Model thinking will focus on:

Inputs Outputs Outcomes Impacts In this ALS we will consider implementation of the activities agreed as part of ALS3.

This **ALS** focuses on the practical issues of implementation. This is the 'doing' of PHM.

This ALS is concerned with monitoring and evaluation.

Work here will help us understand whether the intervention has delivered the outcomes intended.

Share and sustain. A celebration event.











PROGRAMME TIMELINE

Discover & Design – Data Group Meeting 1

Monday 22nd May

Discover & Design – Data Group Meeting 2

Thursday 8th June

-

Meet and Greet – What is PHM? – ALS 1

Tuesday 20th June



Implementation – ALS 4

Monday 10th July

Logic Model- ALS 3

Monday 3rd July



Refining the Cohort – ALS 2

Tuesday 27th June

Implementation Checkpoint 1

TBC

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Implementation Checkpoint 2

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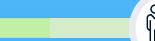
TBC

Evaluation – ALS 5

W/C 4th Sep

Share & Sustain – Celebration Event ALS 6

W/C 23rd Oct





We have outlined an initial cohort of people with multimorbidity experiencing mental health challenges because we feel they will benefit from a different integrated set of interventions

BUILDING A FAIRER GWENT TEG I BAWB

EXAMPLE COHORT

Our cohort selection criteria

- 1. Overweight
- 2. Risk of becoming obese
- 3. Multiple physical LTCs (+/- polypharmacy)
- 4. Mental health LTC (SMI, Depression or Anxiety)
- 5. ? smoking
- 6. ? social factors such as off work due to ill health (Med 3)
- 7. Excluding those 18+
- 8. Other exclusions?

Thoughts on the wider determinants

- Deprivation
- Ethnicity?

What is already happening in this area

- All Wales Diabetes Prevention Programme
- Slimming World on Referral
- Exercise of Referral



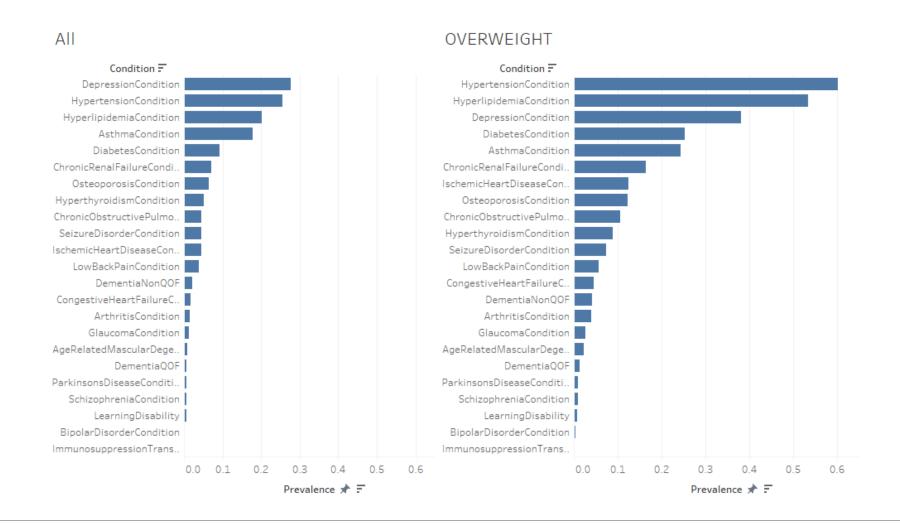
Whole Population at a Glance





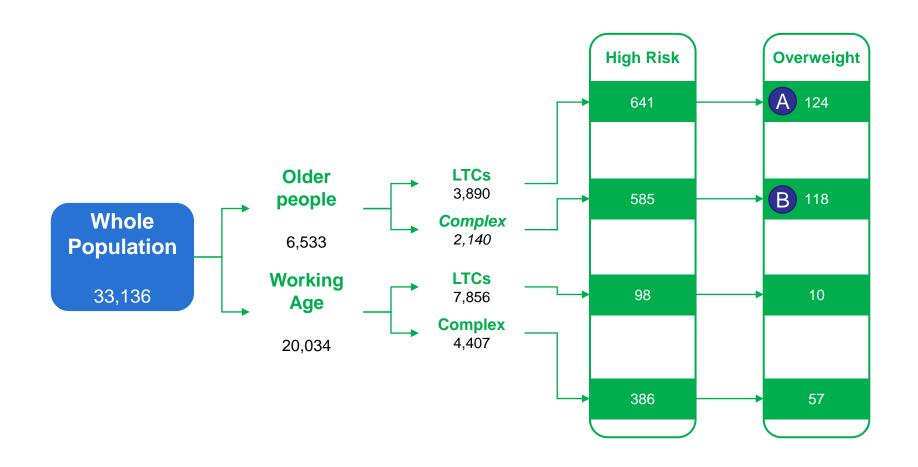


Disease burden for whole population vs. overweight sub-population





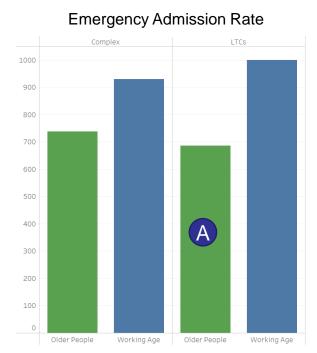
Combining features to create custom cohorts

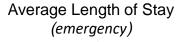


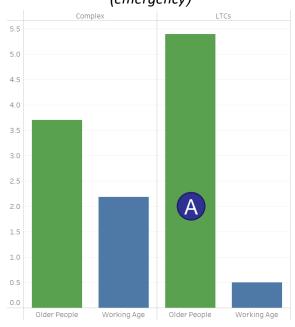




Illustrative Challenges for each of our custom cohorts







GP Appointments



Custom cohort 'A' (124 people)

Description

Older people (65+) with single or multiple long term conditions who are overweight and high risk of future hospitalisation

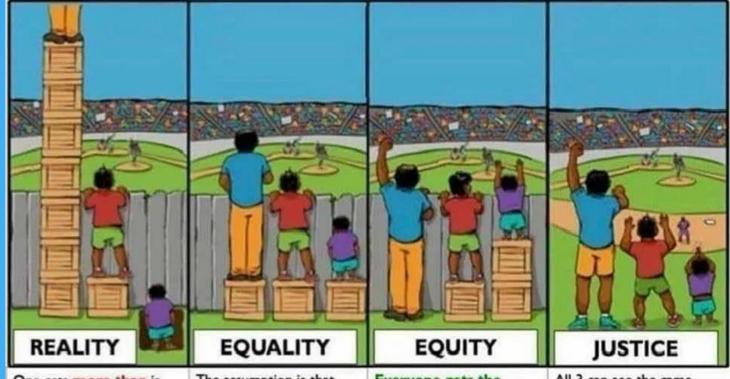
Challenges

Whilst this cohort don't have the highest rate of emergency admissions amongst our different custom cohorts they do have the greatest length of stay in hospital and they have the highest volume of GP appointments. Does this represent an opportunity for a more integrated approach?









One gets more than is needed, while the other gets less than is needed. Thus, a huge disparity is created.

The assumption is that everyone benefits from the same supports. This is considered to be equal treatment.

Everyone gets the support they need, which produces equity. All 3 can see the game without supports or accommodations because the cause(s) of the inequity was addressed. The systemic barrier has been removed.









THANK YOU

BEVLEIGH EVANS

ASSISTANT DIRECTOR FOR POPULATION HEALTH MANAGEMENT, ANEUIN BEVAN UNIVERSITY HEALTH BOARD







PANEL DEBATE

"Leadership and Management Panel Debate"



Jane Johnson

Head of PHM & Executive Director
Surrey Heartlands ICS & AphA



Prof. Edward Kunonga

Director of Population Health
Management & Public Health
Consultant – North England Care
System Support (NECS)



David Howell

Joint Director for Strategic Business
Intelligence & Analytics
Surrey Heartlands ICS



Alis Rasul

Project Lead

Birmingham Community Healthcare





Q&A PANEL



Bevleigh Evans

Assistant Director of Population Health Aneurin Bevan University Health Board





Morning Break, Networking & Refreshments

WiFi Name: CMCC Members Password: Chamber_Members





Chairs Morning Reflection



Dr Maslah Amin

National Clinical Advisor & Associate Director – **NHS England**





UP NEXT...





HOW APPS CAN HELP PROTECT AND CONNECT YOUR CITIZENS WITH THEIR COMMUNITIES AND PARTNERS.

Chris Elkin
Head of Healthcare



Hello my name is Chris

- 20+ years within the digital media industry
- 10 years NHS experience
 - Producing online mandatory learning content/ systems
 - Learning passport and nurse re-validation apps
 - Trust website & intranet management
 - Digital communications and engagement
- Particular interest in the User Experience (UX)
 - · "Making it easy..."
 - · "Don't make me think"





"A leading provider of patient support apps to the NHS..."

Chris Elkin
Head of Healthcare



A Selection of Our NHS Clients





































"Improving the Patient Experience"



Improving the Patient Experience

Providing key, local information, in a quick, easy, timely and targeted fashion





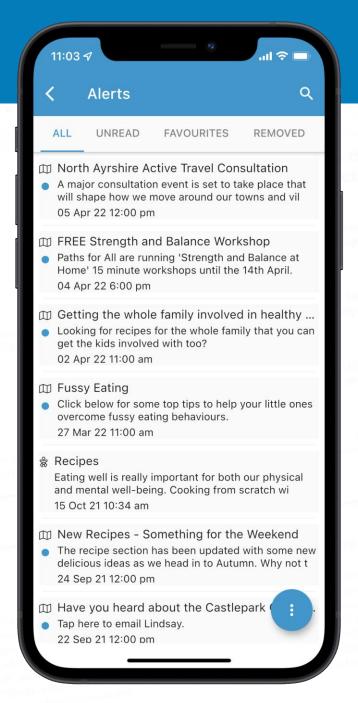




NHS Ayrshire & Arran

Healthy Weight App







Chesterfield Royal Hospital NHS Foundation Trust

The Macmillan Information and Support Centre App







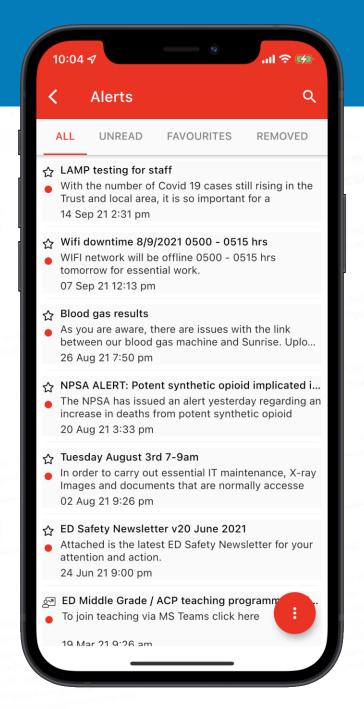
"Increasing Information Efficiency"



Dudley Group NHS Foundation Trust

ED Team App







"Connecting Communities"

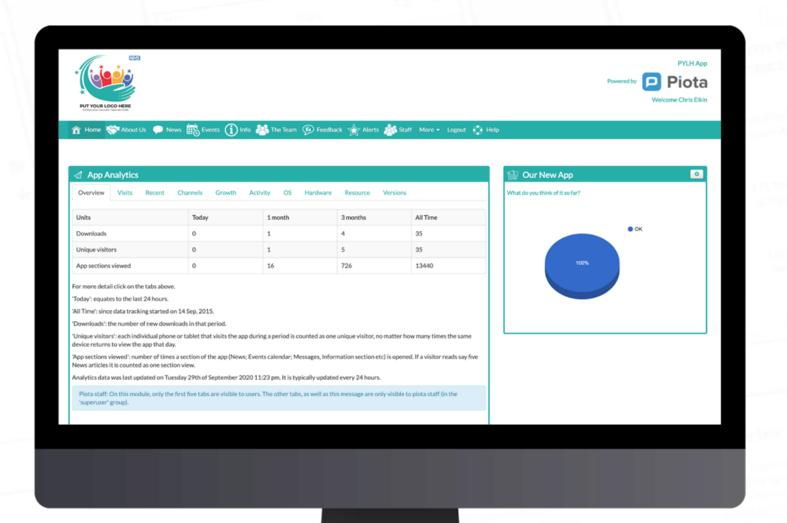






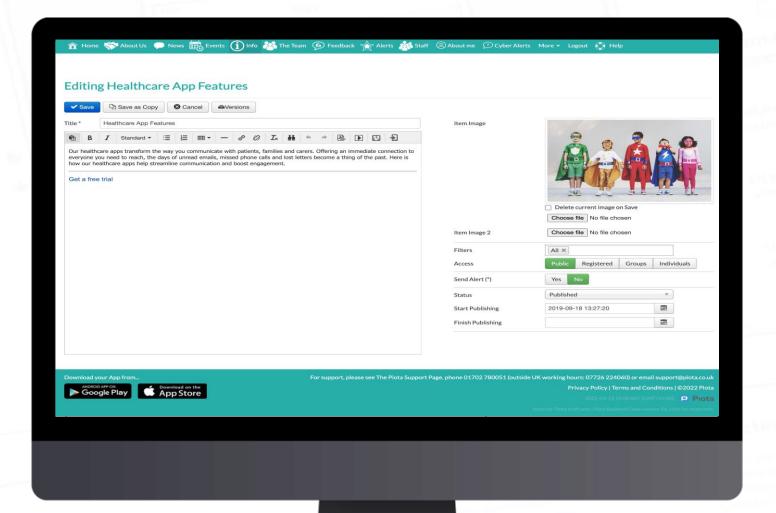
The Piota App Platform













Information





Healthcare App Features

Our healthcare apps transform the way you communicate with patients, families and carers. Offering an immediate connection to everyone you need to reach, the days of unread emails, missed phone calls and lost letters become a thing of the past. Here is how our healthcare apps help streamline communication and boost engagement.

Get a free trial

18 Sep 19 12:27 pm





Typical App Process

Initial Enquiry Teams / Google Hangouts

> Produce Free Trial, Deliver Initial Training Submit Proposal

Demonstrate Trial App Staff, Colleagues, Patients etc.

> Get Agreement from organisation. Raise a PO/ Invoice

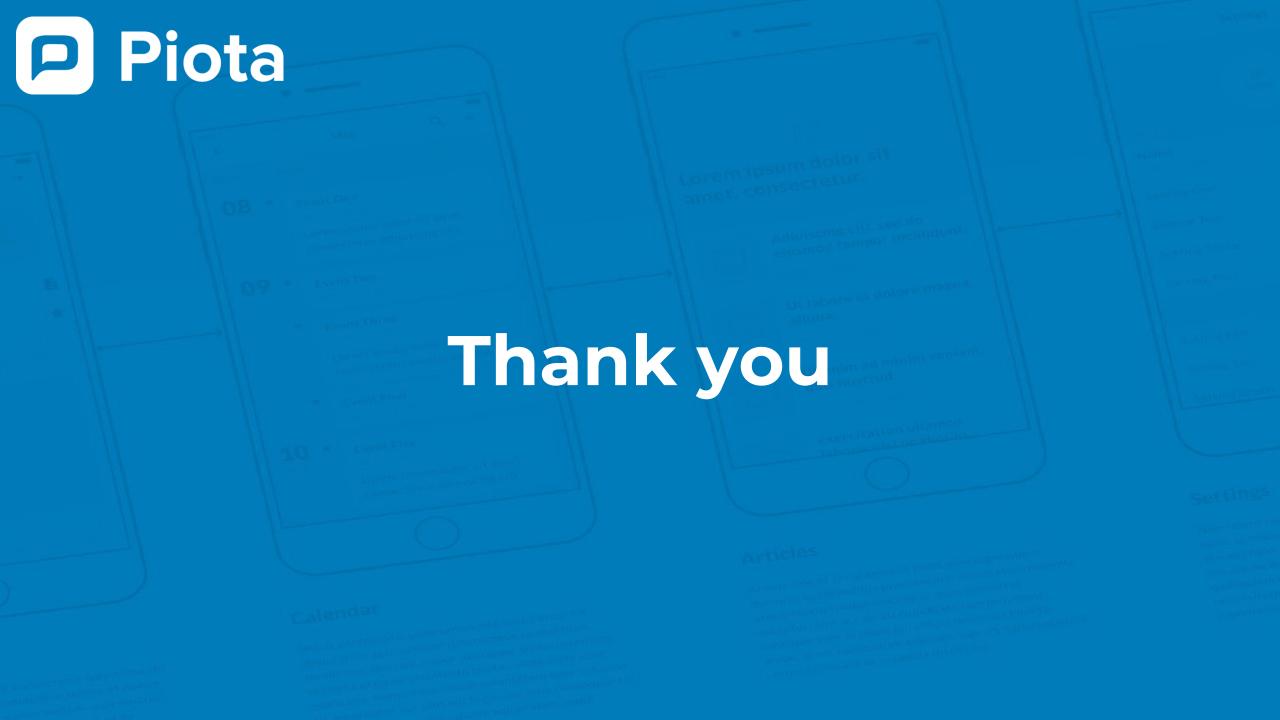
> > Project Kick off

Communication App within hours of our initial request. The app has provided us with a quick and easy platform ensuring our Care Home managers and staff are kept up-to date with current local policy and procedural updates, an absolute must in this fast moving, transient world we now find ourselves in. Thanks again Piota for your ongoing support - it has been absolutely fantastic, the responsiveness has been second to none.

Yvonne Higgins Deputy Chief Nurse, Wolverhampton CCG



Questions





Population Health Conference North



UP NEXT...





Population Health Conference North



SPEAKING NOW



Hannah McCarthy
Chief Behavioural Scientist
BetterPoints Ltd

I will be discussing...

"Using Data to Identify Barriers,
Motivate Change and Adapt Digital
Interventions in Response to
Evolving Behaviours"













Using Data to Motivate Change

Hannah McCarthy Chief Behavioural Scientist, BetterPoints Ltd















- Behaviour change company 10 years old
- Award winning technology and programmes
- Underpinned by behavioural science
- Combined with communications
- Motivates and rewards positive lifestyle choices
- Measures and evaluates outcomes
- Continuous improvement
- Case studies here















Segmentation and data

Hounslow case study

- London Borough of Hounslow Public Health team Commissioned BetterPoints in July 2021
- 12-month programme
- 1000 participants
- Programme was extended for two years in July 2022

















The Want To But Can't group was identified from previous market profiling and segmentation work by the London Borough of Hounslow and London Sport





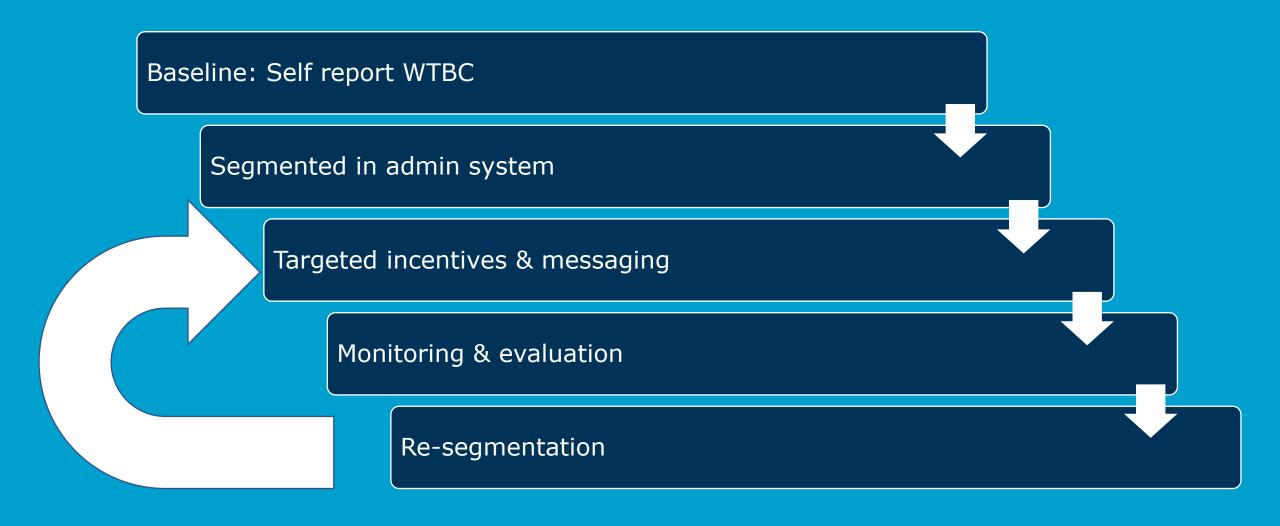








Segmentation currently a hybrid manual-digital cycle







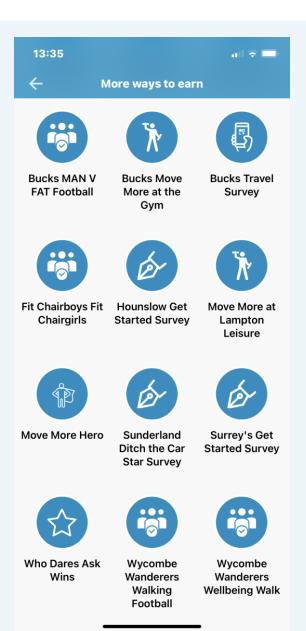


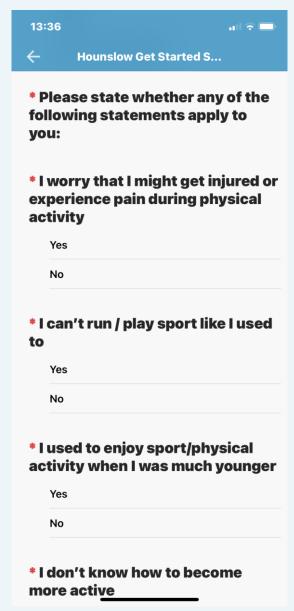






Questions to identify "Want to but can'ts" (WTBC's)





















Segmenting the data & targeting rewards

- Participants who answered 'yes' to any of the questions were added to the Want To But Can't group
- Offered boosted rewards and extra messaging to encourage them to reach 150 minutes of activity per week
- This exercise was repeated once a month to segment new users

















research. Psychology of sport and exercise, 2019: p118-129

Monitoring Outcomes behaviour change

- Outcomes: weekly minutes of tracked physical activity
- Identified those who had achieved 150 minutes plus of physical activity per week in 6 of the last 9 weeks* (n=362)out of 1098 or 33%)
- Moved these participants into a maintenance group













Group	Description	Treatment
Group 1	Inactive at baseline plus 'Want to but can't'	Daily bonus for completing 23 mins per day of PA.
Group 2	All users inactive at baseline	Extra Messaging no boosted rewards
Group 3	All users fairly active at baseline	Extra Messaging no boosted rewards.
Maintenance group	Met criteria of 150 mins of PA in 6 of the last 9 weeks	Offered shopping vouchers prize draw



Next Steps:





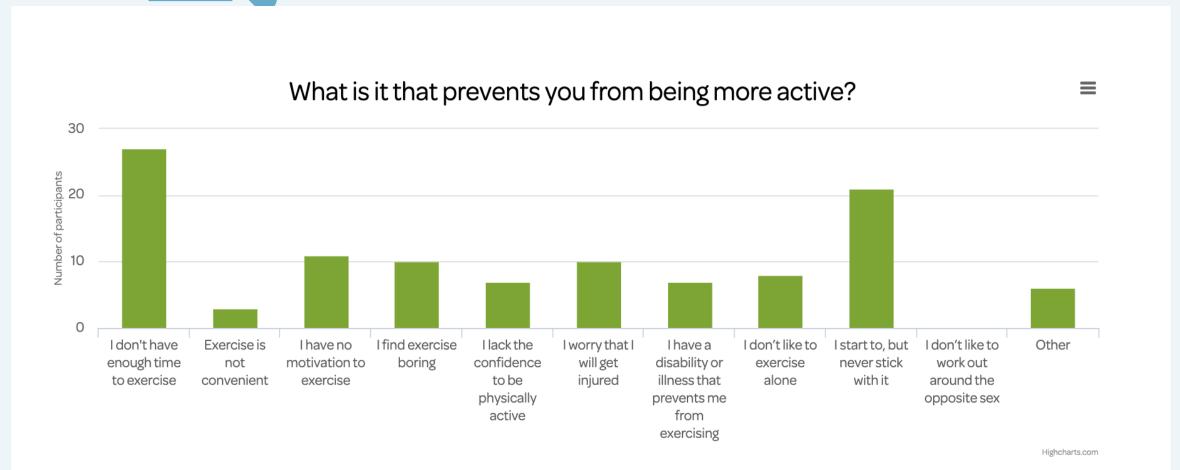








Identify barriers among the 2/3rd WTBC group who did not achieve 150 minutes

















Annar

Being active with BetterPoints app has helped me tremendously with managing my weight gain and knee pain due to arthritis. I am now back down to my target weight of 80kg again.

> My mood has really improved, and I sleep so much better.

I have donated my

and I love the competitions and challenges.





Tamar

Using the BetterPoints app means I'm walking more.

Being outdoors helps me with my anxiety and general well-being...

...despite having issues with my feet I'm getting stronger and walking better.

Tamar gives points to Hounslow Community FoodBox and uses them for free swimming at Lampton Leisure centres.





























Sneddon

Before I joined BetterPoints I was not motivated to walk or cycle. It motivates me to do more so I can earn more and achieve the set targets.

What I love about this app is that it pushes you to do more with little challenges.

Every time I see people winning from just walking, running or cycling it is very inspiring.











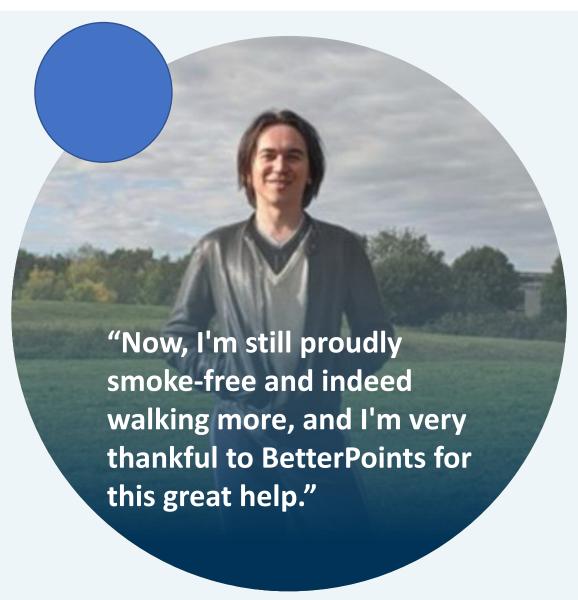


Sam

I found out about the BetterPoints Stop Smoking rewards on a poster after having my first Stop Smoking session.

I was delighted to see that not only could I receive points for attending Stop Smoking sessions, but also by walking more.

All of this together has helped motivate me even more, not only to finally quit smoking, but also to keep active too.

















Hannah McCarthy

Chief Behavioural Scientist, BetterPoints Ltd

hannah.mccarthy@betterpoints.uk

07487 680514

www.betterpoints.ltd







SPEAKING NOW



David Sgorbati

Chief Analyst

Health Economics Unit

I will be discussing...

"Tackling Health Inequalities – The Rising STAR. Using Allocative Efficiency to Tackle Inequalities"







Population Health Management Evidence VS Biases

⊠ da

david.sgorbati@nhs.net



https://healtheconomicsunit.nhs.uk/

Hello, My Name Is David

I work at the Health Economics Unit

- NHS internal consultancy team
- Part of Midlands and Lancashire CSU
- Data scientists, data engineers, and health economists
- Work with NHS, academia, and commercial sector

I'm David

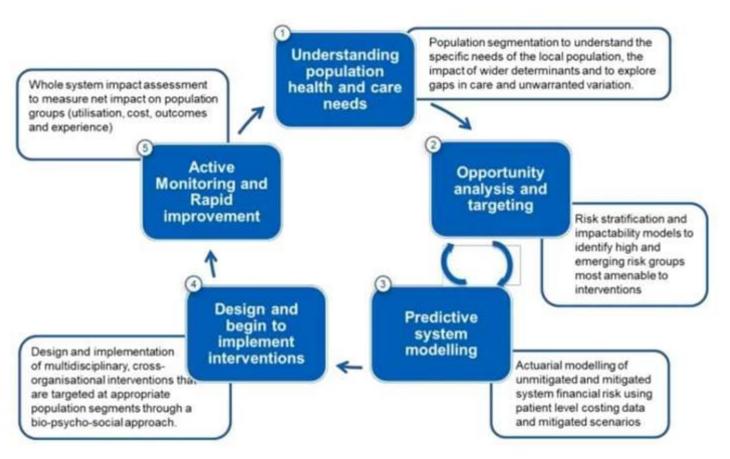
- I'm a computer scientist
- Start-up and NHS experience
- I love my job





PHM can be illustrated as an ongoing cycle of intelligence-led care design

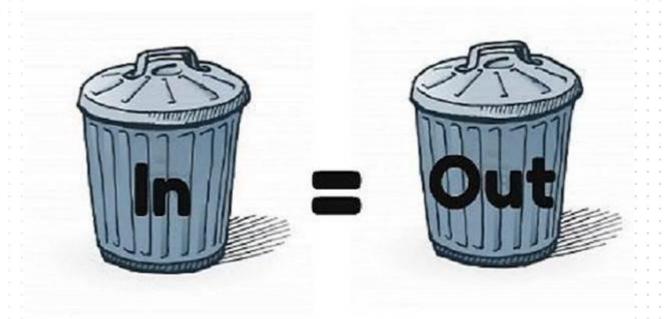




- Population Health Management should, as much as possible, intelligence-driven
- Much of how we deliver is driven by the relationships we have
- One of our key objectives is always to reduce health inequalities
- But does it reliably work?

The Rubbish

- The old saying goes "rubbish in, rubbish out" (or "garbage in, garbage out")
- We know data quality is essential for our calculations to be helpful
- We also know data quality is an aspect of digital and analytics we are still trying to iron out across health and social care
- Most of us have probably seen this in practice!

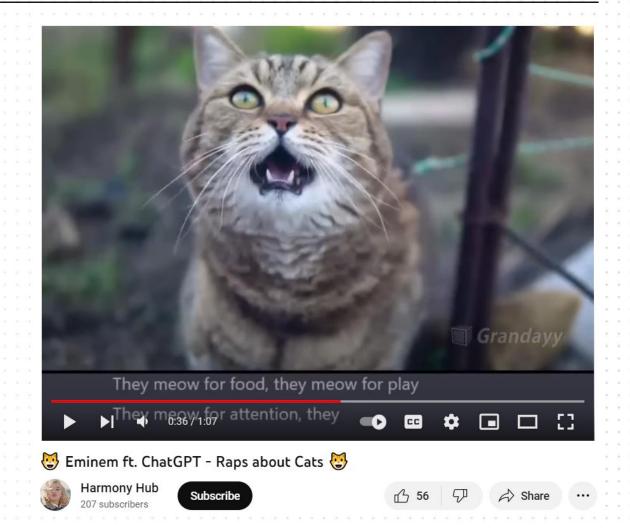




Eminem Is Still a Better Rapper than ChatGPT

- Poor data will produce poor results
- Insufficiently sophisticated algorithms will miss key aspects of the problem we are trying to solve

When we are writing rap songs, that's OK

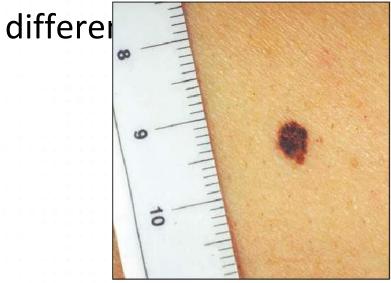


Advanced Analytics + Rubbish = Danger!

In some applications, the cost of failure is much higher

• Training models is not only about the rubbish, it's also about the balance in our dataset and the datails which may be trivial but make a buge

in our dataset and the details which may be trivial but make a huge





(a) Clark nevus

(b) Melanoma in situ

(c) Melanoma 0.76-1.5 mm

Our Biases and Data Gaps Feed Our Machines

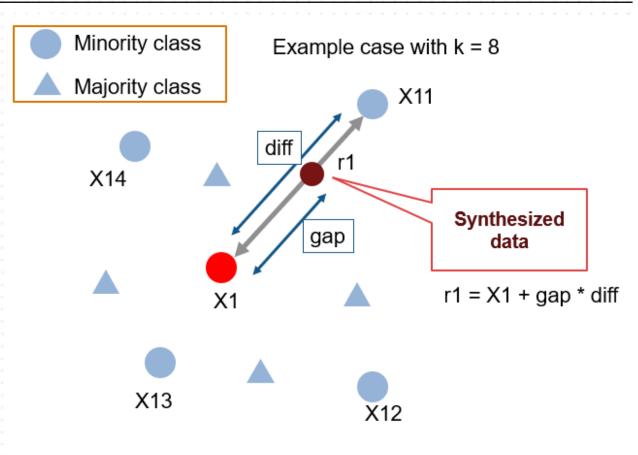
- Some groups in our population tend to have worse health outcomes than others
- Those are groups we usually interact with the least
- Those are also groups we tend to have least data for
- Training our models on biased data...

"The availability of good medical care tends to vary inversely with the need for it in the population served."

Inverse Care Law

How Can We Work with This?

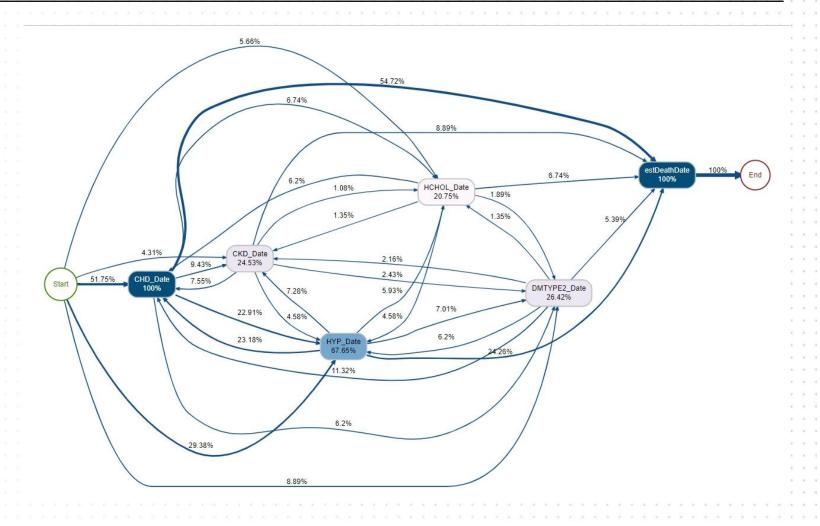
- There are many techniques which can help us solve this problem
- We can't underestimate the importance of having a great data scientist by your side!
- Some examples include oversampling, synthetic augmentation and hyperparameter tuning
- For more specific questions about our population, other techniques such as matched cohort studies can help



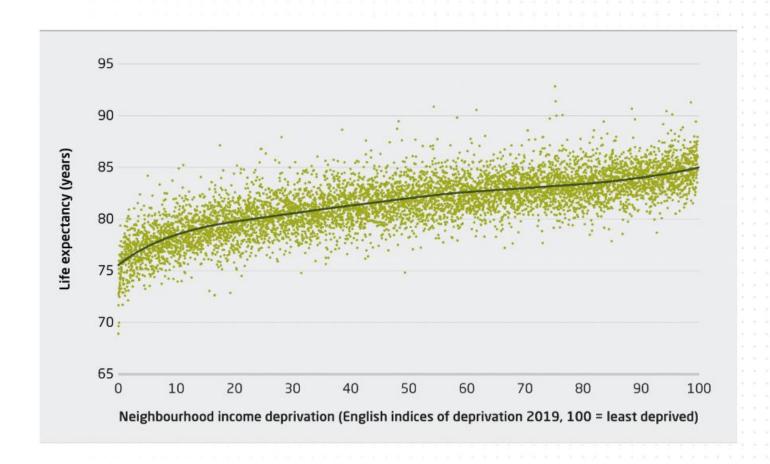
Weight: w1 ∝ #(majority)/#(minority) ∝ # of synthesized data to generate

Inequalities in CVD Pathways

- Deprivation and ethnicity are correlated to health outcomes
- Anecdotal evidence suggests there are differences in pathways based on ethnicity and deprivation
- A matched cohort study will soon be published to show our results
- The evidence is stark, but the data challenges were a huge part of our learning



Inequalities in CVD Pathways



- A PHM approach is key to tackling health inequalities
- But we need to be careful, each technique we use has the potential to make the situation worse
- Data and algorithms can be biased too!

I Hope You Enjoyed This Session







SPEAKING NOW



Dr Zahid Chauhan OBE, FRCGP

Councillor **Deputy Mayor Oldham Council**

I will be discussing...

"Transforming Ideas into Policy Change"

POPULATION HEALTH AND EFFECTIVE CHANGE MANAGEMENT

"Postcode should never determine the quality and longevity of life and we need to do much more to improve provision in poorer neighbourhoods and reduce the stresses, strains and influences that blight peoples' health there."

Dr Zahid Chauhan OBE, FRCGP













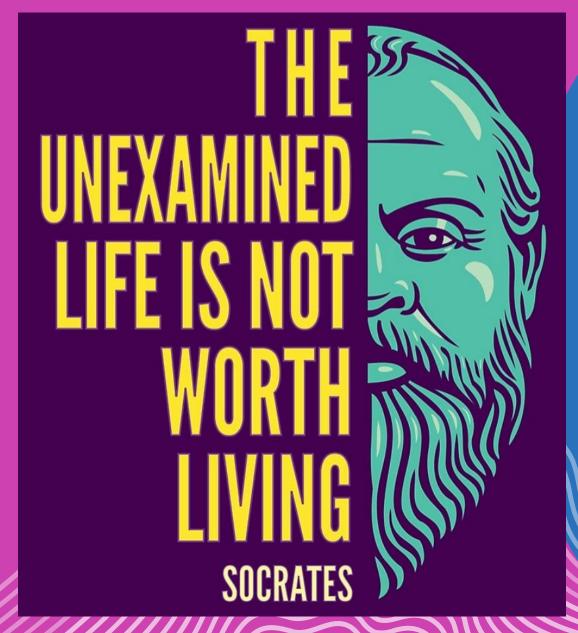








88



The NHS crisis continues to see hospitals at breaking point and GP surgeries busier than ever before.

We need to think what will happen in 10 years to our residents...

Who smoke? Who are overweight? Who are living longer due to advances?

While the health and social care system is on its knees.



Health inequalities is everybody's business so it is crucial that everyone in society plays their part.

Improving population health relies on leadership not just in health and care.

Collaboration between partners across health, care services, public health, and the voluntary sector can overcome competing objectives and separate funding flows to help address health inequalities for our communities.

The impact of poverty, low health literacy, homelessness, unemployment, lack of social support and other factors making it harder for people to seek support, understand and engage with their care, navigate the various services that can help meet their needs, take preventive action early, and live life as healthily as possible for as long as possible.



CABINET MEMBER FOR HEALTH AND SOCIAL CARE IN OLDHAM 2018-2022

- Launch of the ground-breaking Oldham Health Check. the initiative aims to build on the existing free national NHS Health Checks, which see GPs inviting people aged 40-74 without a pre-existing condition for checks to identify their risk of developing a heart or circulation problem in the next decade, plus tailored advice and management plans.
- Mental Health Better Mental health access for Oldham residents.
- Carers prescriptions.
- COVID vaccination engagement.
- Wrote to PM calling to deploy more resource's into Primary Care due to the current energy and health crisis.



HOMELESS FRIENDLY



- Range of complex issues behind why everyone from rough sleepers to sofa surfers don't present themselves at a general practice - inaccessibility to services, total disengagement with the state, chaotic lives, a fear of discovery and a mistrust of authority.
- As a GP and passionate campaigner against health inequalities, I find it abhorrent that anyone in our society should be refused medical care, especially when that person comes from one of the most unsupported groups who need it the most – people experiencing Homelessness. This crosses a barrier and calls for all of us in health and social care to address what is clearly unjust.
- Set up charity Homeless Friendly to make access to services easier for people who are homeless started with healthcare and has since



- People who are homeless are still treated unfairly when it comes to healthcare but as a Leader trying to campaign on this vulnerable groups behalf.
- Oldham borough became first in the UK and thought to be the world to vaccinate people who are homeless. Clinics held at locations known to vulnerable communities to help break barriers. This shifted the debate nationally and achieved an eventual change in policy.
- Hygiene Kits for people who are homeless over 1,000 across GM.
- Most recently new initiative Warm Kits 100 kits distributed in December.
- Food bank for surgeries scheme /- /7 food banks set up.
- Asylum seekers in Oldham healthcare offer
- Annual flu and COVID clinics running multiple sessions in Oldham.
- Stakeholder with NICE contributed to guideline on 'integrated health and social care for people experiencing homelessness.























POPULATION HEALTH IS EVERYONES BUSINESS

96





Q&A PANEL



Hannah McCarthy
Chief Behavioural Scientist

BetterPoints Ltd



David Sgorbati
Chief Analyst
Health Economics Unit



Dr Zahid Chauhan OBE

Councillor **Deputy Mayor Oldham Council**





Networking and Lunch





Chairs Afternoon Address



Dr Maslah Amin

National Clinical Advisor & Associate
Director – **NHS England**





PANEL DEBATE

"Leadership and Management Panel Debate"



David Sgorbati

Chief Analyst

Health Economics Unit



Miss Rachel McIlroy CSta

Senior Programme Lead

NHS England



Vicki Kong

Havering Clinical Lead for

Population Health Management

NHS North East London



Alis Rasul

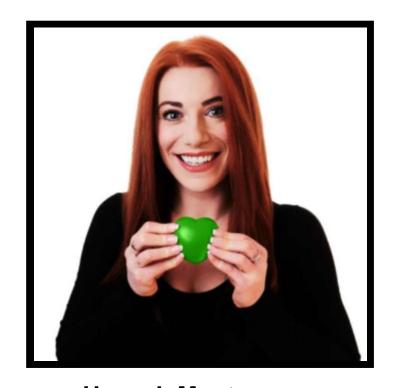
Project Lead

Birmingham Community Healthcare





SPEAKING NOW



Hannah Montgomery

Founder - Marketing and Social Care Lead **Grace Cares**

I will be discussing...

"Transforming Ideas into Policy Change"

https://prezi.com/view/6qPTcDCFjSvrTuhzqrWp/



THANKS FOR ATTENDING



NHS Population Health Conference North



REGISTER FOR OUR UPCOMING CONFERENCES HERE!





NHS Outpatient Conference North



Drinks Reception,
Networking and End of Day