Integrated Care System
Nottingham & Nottinghamshire

POPULATION HEALTH MANAGEMENT

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PURPOSE OF THIS PRESENTATION?

- To describe population health management and its importance to the system
- To provide a brief overview of our local PHM methodology
- To understand the next proposed steps
- To reflect some of the challenges

Our vision, aims and Population Health Management (PHM) approach

In light of the challenges we face as a health and care system we have set an ambitious vision, adopted the triple aim framework and embraced a Population Health Management (PHM) approach

Our Vision

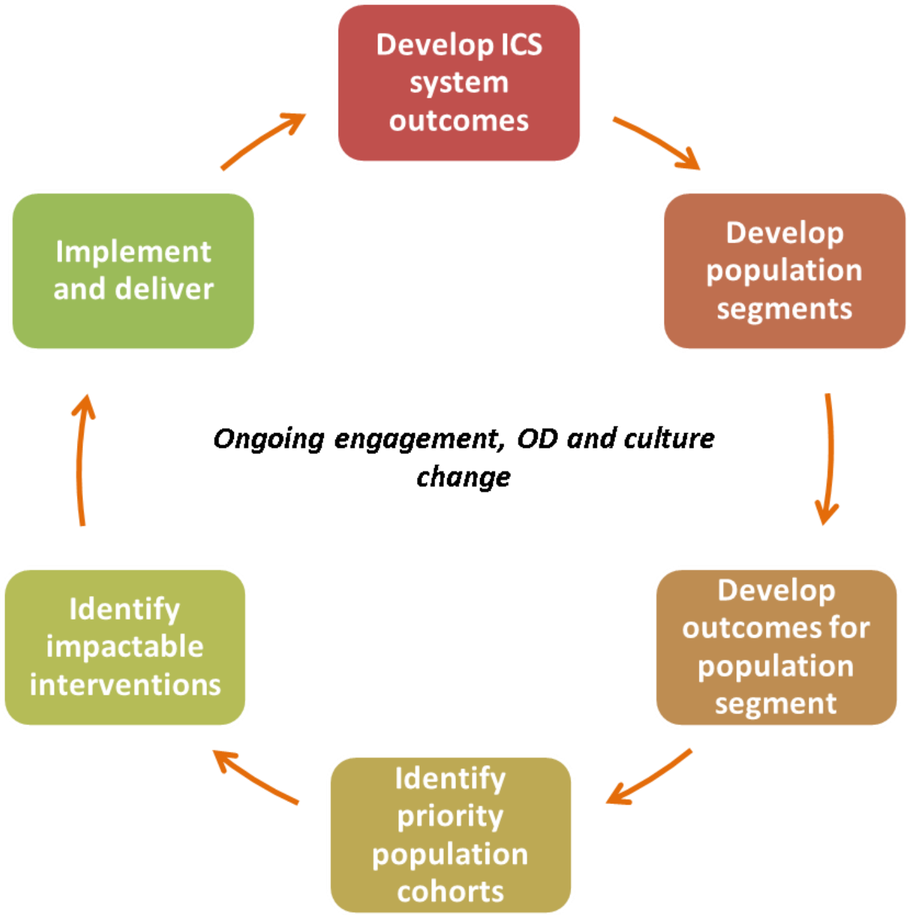
Across Nottinghamshire, we seek to both increase the duration of people's lives and to improve those additional years, allowing people to live longer, happier, healthier and more independently into their old age

Our Triple Aim

To help us address the challenges we face and optimise the performance of our health and care system, we have adopted the triple aim framework - the guiding principles for a truly integrated health and care system:

- Improving the health and wellbeing of our population
- Improving the overall quality of care and life our service users and carers are able to have and receive
- Improving the effective utilisation of our resources

Our Population Health Management (PHM) Approach



WHAT IS POPULATION HEALTH MANAGEMENT?

Population Health Management, is the approach in which data is used to understand the needs of the population, enabling focus and resources to be tailored to areas where the impact can have maximum impact”

SEGMENT AND STRATIFICATION

Modeling to identify local "at risk cohorts"

TARGETTED IMPACTABLE INTERVENTIONS

Targeting interventions to achieve maximum benefit

INTEGRATE HEALTH AND CARE

Improve care and support for people with ongoing health conditions

REDUCE UNWARRANTED VARIATION

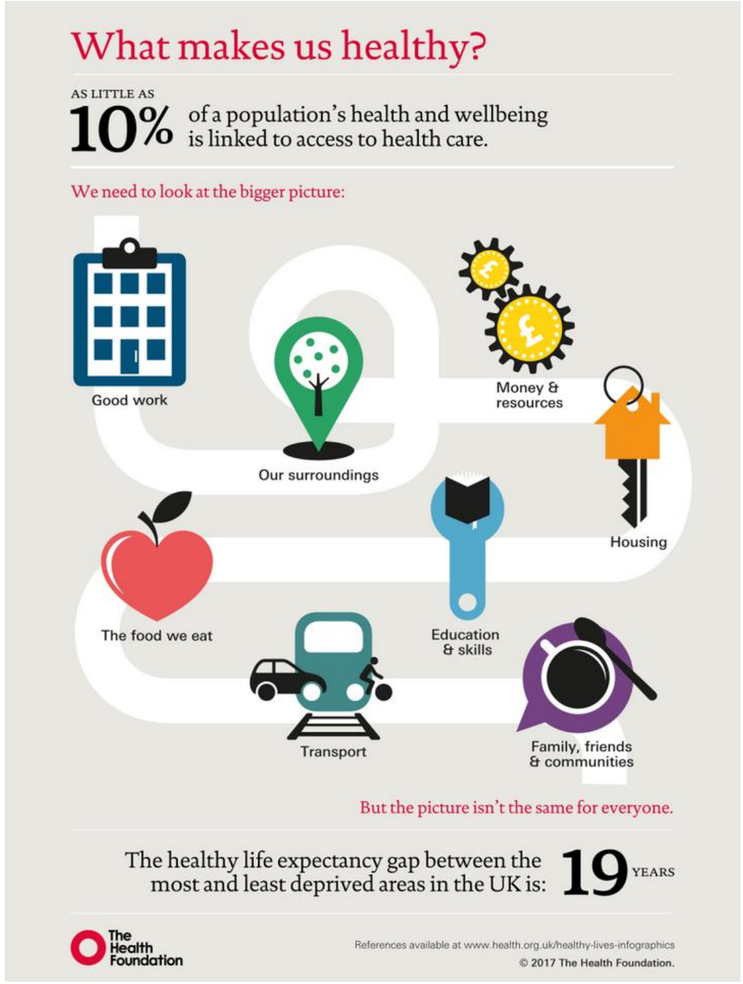
Identify variations in outcomes/health inequalities

PHM LOOKS BEYOND THE HEALTH SYSTEM TO CONSIDER WIDER DETERMINANTS OF HEALTH

Population health management improves **population health** (the **health** of an entire **population**) by data-driven planning and delivery of proactive care to achieve maximum impact. Andi Orlowski NW London.

Population health management vs previous approaches

- Public Health has looked at promoting, protecting and prolonging healthy life through coordinated programmes (normally offered to the whole population)
- Population health management focuses on:
  - Key outcomes for identified groups or segments (age, morbidity, ethnicity, gender, deprivation)
  - Healthy population as much as those who are sick
  - Resource planning that includes the wider determinants of health
  - Risk management approach promoting well-being, preventing ill health



OUR APPROACH TO PHM AS A PLANNING ROCESS

- Adapted from the national PHM flat pack
- Based on the 3I's (Infrastructure to succeed)
- Principles of Bridges to Health

1 Develop ICS System Outcomes

Establish top level segments, goals and priority areas e.g diabetes.

2 Develop metrics and measures

Establish the local goals e.g. Reduce amputation rates, number of people developing diabetes

3 Develop population segments

Establish needs in priority areas e.g. Chinese & Asian diets, Pre-diabetes, Deprivation & obesity

4 Identify priority cohorts

Establish the set of interventions that can meet those goals
Establish the micro-segments they are effective for e.g. Metformin for T2 diabetes with eGFR > 30
Establish the potential impact (mental/physical health, empowerment, cost, etc) of interventions

5 Identify Impactable Interventions

Establish how to implement and measure the impact of chosen intervention
Segmented KPIs (age, gender, ethnic, language, deprivation, healthy vs LTC)
Include service user experience,

6 Implementation

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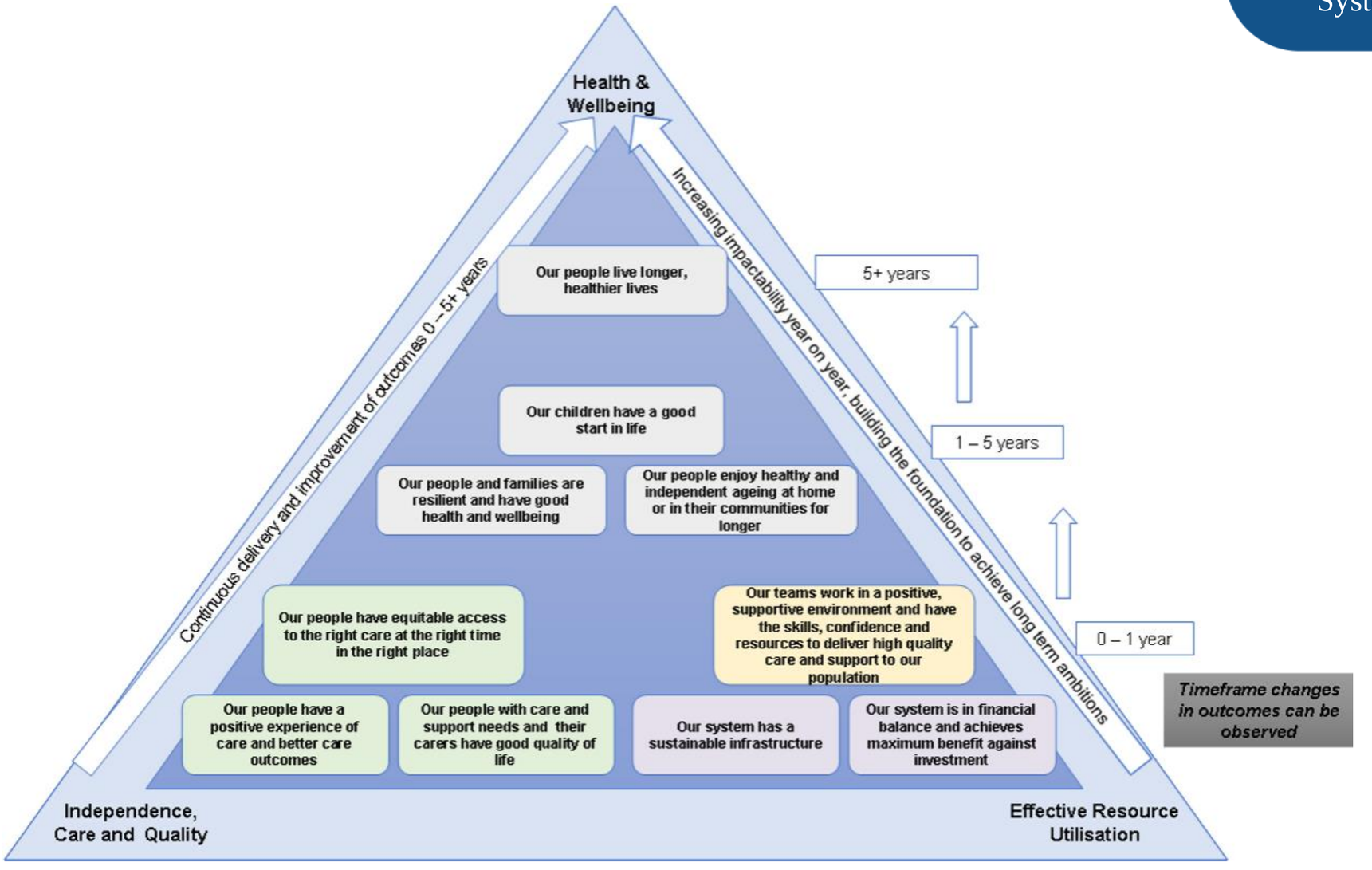
Develop ICS System Outcomes 1



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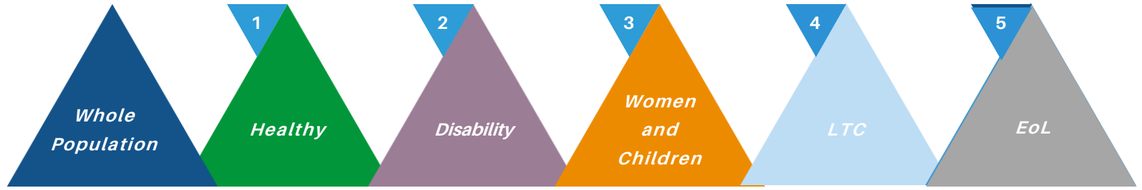
Develop ICS System Outcomes 1

ICS OUTCOMES

- Reduction in premature mortality
- Reduction in infant mortality
- Increase in life expectancy
- Increase in healthy life expectancy
- Increase in life expectancy at birth in lower deprivation quintiles
- Reduction in potential years of life lost
- Increase in school readiness
- Increase the number of people who have the support to self care and self manage and improve their health and wellbeing
- Reduction in smoking prevalence at time of delivery
- Narrow the gap in the onset of multiple morbidities between the poorest and wealthiest sections of the population
- Reduction in illness and disease prevalence
- Increase in early identification and early diagnosis

Develop metrics and measures 2



	ICS Ambition	ICS Outcome	Measure	Whole Population	Healthy	Disability	Women and Children	LTC	EoL
Health and Wellbeing	Our population will live long healthier lives	Increase in life expectancy	Life expectancy at birth male/female	✓	✓	✓	✓	✓	
		Increase in healthy life expectancy	Healthy life expectancy at birth male/female	✓	✓	✓	✓	✓	
		Increase in life expectancy at birth in lower deprivation quintiles	Inequality in life expectancy	✓	✓	✓	✓	✓	✓
	Our people and families are resilient and have good health and wellbeing	Reduction in illness and disease prevelance	Smoking prevalence adults		✓	✓		✓	
			Co-morbidity rate					✓	
		Narrow the gap in the onset of multiple morbidities between the poorest and wealthiest section of the population	Smoking prevalence adults		✓	✓		✓	
			% of adults classified as overweight or obese		✓	✓		✓	
			Admission episodes from alcohol related conditions					✓	

Develop metrics and measures 2

PHM - Common aims…

Monitor and reduce care gaps

Distinguish performance by ethnicity, language, deprivation

Adopt common scales so improvement can be adopted across all providers

Skill our workforce up to understand, identify, KPIs, impactability, etc.

ICS Ambition	ICS Outcome	Macro (ICS) Measures	Meso (ICP) Diabetes Measures	Micro (PCN/GP) Personalised Measure
Delivering integrated care across full spectrum of services to the population		Delivering integrated care for a particular care group of people with the same disease or condition		Delivering integrated care for individual service users and their carer through care co-ordination, care planning
Our population will live long healthier lives	Increase in life expectancy	Life expectancy at birth male/female		
	Increase in healthy life expectancy	Healthy life expectancy at birth male/female		
	Increase in life expectancy at birth in lower deprivation quintiles	Inequality in life expectancy	Reduction in major and minor amputations associated with diabetes	
Our people and families are resilient and have good health and wellbeing	Reduction in illness and disease prevalence	Co-morbidity rate	Reduction in visual loss from Type 2 diabetes	
			Reduction in number of people who develop Type 2 diabetes	
	Narrow the gap in the onset of multiple morbidities between the poorest and wealthiest section of the population	Smoking prevalence adults		
		% of adults classified as overweight or obese	Reduction in percentage of adults classified as obese or overweight	
		Admission episodes from alcohol related conditions		

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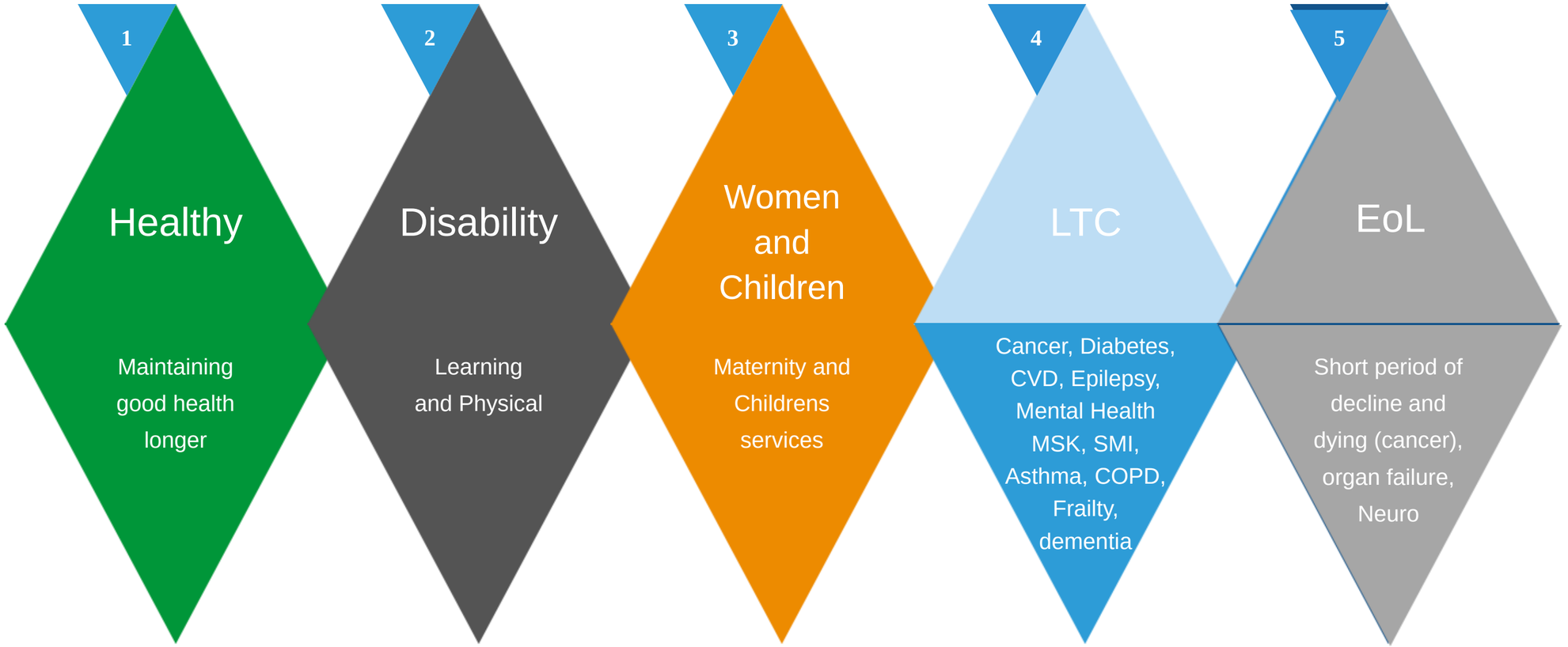
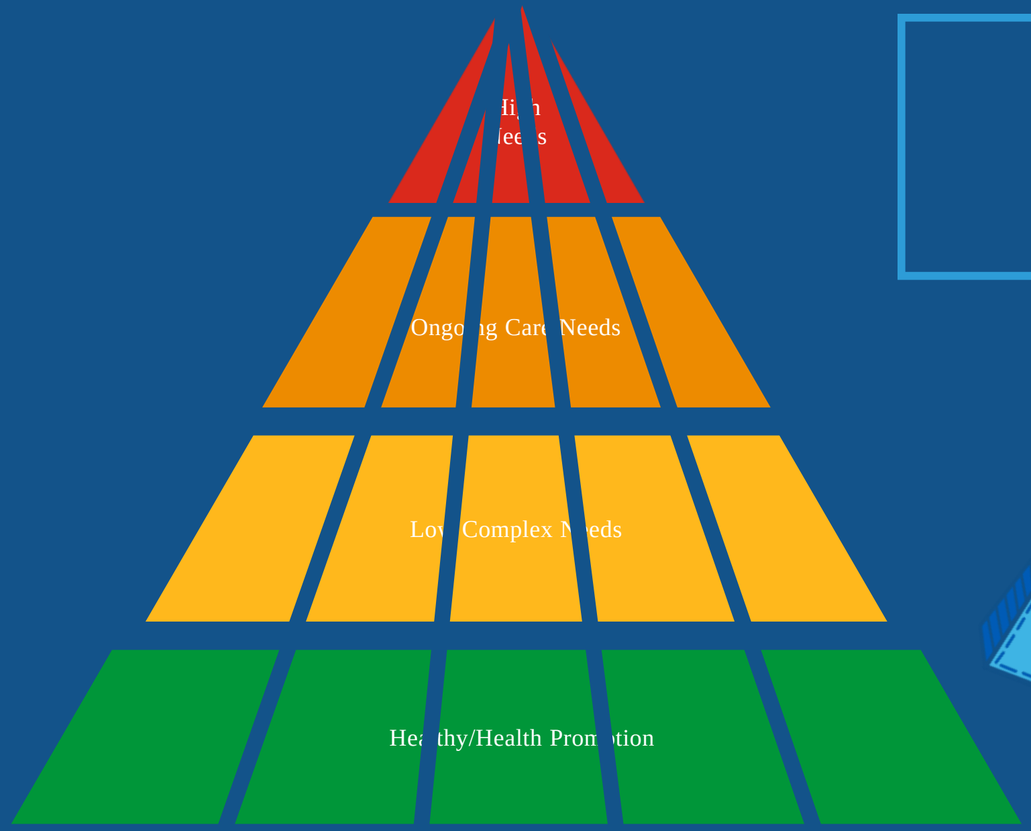
SEGMENTATION



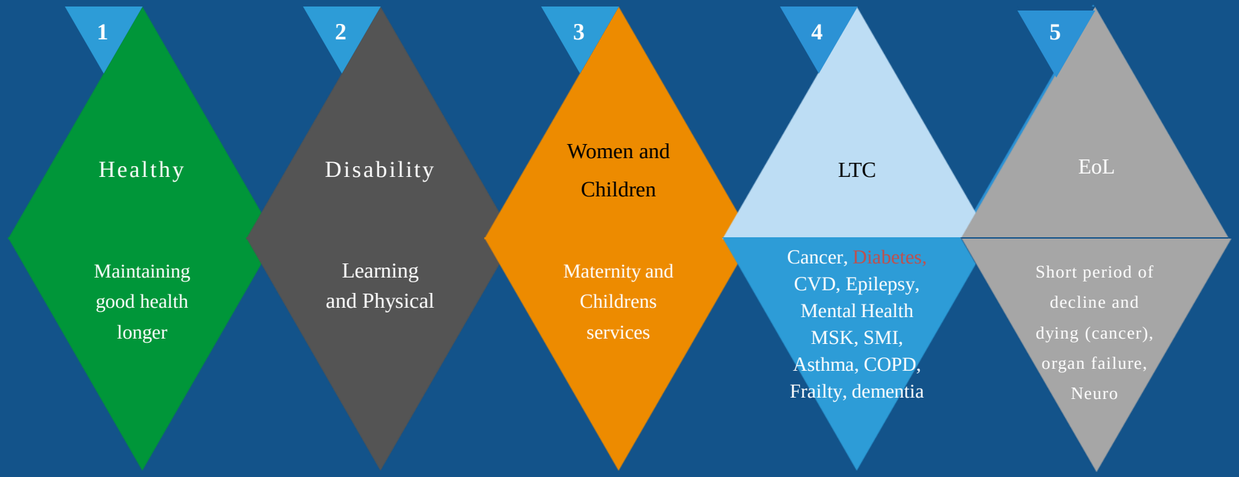
Cross cutting segments - Our population will rarely remain static. The movement between segments can be explored via regression analysis technique to enable the system to identify whether specific characteristics can act as a predictor of increasing risk. This enables the system to target where it needs to respond/shift resources.

STRATIFICATION



Align population based on age, gender and categories of socio-economic status (segment)

- Type 2 Diabetes
- Diabetes with complications (blind, amputation, renal failure)
- Poorly controlled diabetes
- Stable well controlled diabetes
- Pre- diabetes
- Obesity
- Healthy
- Prevent clients, patients moving up a level of need



Stratification is primarily used for prioritising work

Care gap, care opportunity analysis

Develop Population Segments 3

- Diagnosed with T2 Diabetes
- BMI > 30
- No energy/strength to perform activities; Shopping, cleaning, driving, walking..
- Not achieving optimal glucose control/remission
- Undertakes fasting for cultural or religious beliefs
- 1 or more health or care condition
- Mental health,
- Renal Disease , CKD, frail etc

- Not achieving 2 or more optimal

Blood pressure > Cholesterol, HBa1c

- Smoker /social substance misuse
- Drinks >14 units of alcohol in a week daily
- Pregnant/History of gestational diabetes
- Not up to date/partially up to date with imms and vacs/screenings

- Diagnosed with T2 Diabetes
- BMI 25 – 29.9+
- HbA1c>48
- Limited energy/strength to perform activities;
- Shopping, cleaning, driving, walking..
- Not achieving optimal glucose control/remission and or using insulin or other technologies
- Undertakes fasting for cultural or religious beliefs
- 1 or more health or care condition (Mental health,
- Renal Disease , CKD etc)

- Not achieving 1 optimal
- Blood pressure, Cholesterol, HBa1c,% Patients with GFR >30
- Eye Care/Optical screenings
- Smoker /social substance misuse
- Drinks >14 units of alcohol within short period of time/Daily
- Pregnant/History of gestational diabetes
- Not up to date/partially up to date with imms and vacs and screenings

- BMI 25 – 29.9+
- Limited energy/strength to perform activities;
- Shopping, cleaning, driving, walking..
- Family history of T1 or T2 diabetes
- Ethnicity South Asian, African and African Caribbean.

1 or more health or care condition (Mental health, Renal Disease , CKD etc), High Blood pressure, Cholesterol)

- Smoker /social substance misuse
- Drinks >14 units of alcohol in a week regularly
- Pregnant/History of gestational diabetes

- BMI of 18.5 – 25.9
- Active (good energy and strength to perform general physical activities. Shopping, cleaning, driving, walking..
- Drinks <14 units of alcohol on a weekly basis.
- No known health conditions
- Non smoker, does not use harmful substances (drugs

Identify priority cohorts

4

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ANALYSE THE DATA

What is it telling us…?
Where do we need to focus?
Where are our differences?
Where are our similarities?
How can we work collectively?
Where do we need to work differently?
What do we need to do differently?
Where are our heat spots!

3 Main “dimensions”:

1. Demographics and Risk Factors
2. Clinical Information
3. Socio-economic Characteristics

Demographics and Risk Factors

Demographics and Risk Factors																	
% Diagnosed Type 2	Compared to ICS	Age 15-24 only	Compared to ICS	Age 25-64 only	Compared to ICS	Males	Compared to ICS	Diabetes Family History	Compared to ICS	Recorded Overweight or Obese	Compared to ICS	BMI Not Recorded	Compared to ICS	Current Smoker	Compared to ICS	Alcohol Misuse	Compared to ICS
7.6%	Higher	0.1%	Similar	42%	Similar	56%	Similar	34%	Similar	86%	Similar	0.1%	Lower	15%	Similar	5%	Similar
7.5%	Higher	0.2%	Similar	43%	Similar	55%	Similar	30%	Similar	85%	Similar	0.2%	Similar	15%	Similar	4%	Lower
7.4%	Higher	0.1%	Similar	42%	Similar	56%	Similar	37%	Higher	87%	Higher	0.3%	Similar	15%	Similar	7%	Higher
6.7%	Higher	0.3%	Similar	43%	Similar	54%	Similar	26%	Lower	88%	Higher	0.5%	Similar	16%	Higher	4%	Lower
6.1%	Similar	0.1%	Similar	36%	Lower	58%	Similar	28%	Lower	85%	Similar	0.5%	Similar	13%	Similar	7%	Higher
7.5%	Higher	0.2%	Similar	39%	Lower	56%	Similar	31%	Similar	87%	Higher	0.2%	Lower	14%	Similar	6%	Similar
7.1%	Higher	0.2%	Similar	40%	Lower	56%	Similar	31%	Similar	86%	Higher	0.3%	Lower	15%	Similar	6%	Similar
7.0%	Higher	0.2%	Similar	46%	Higher	53%	Lower	30%	Similar	86%	Similar	0.8%	Higher	19%	Higher	4%	Lower
7.2%	Higher	0.4%	Similar	54%	Higher	55%	Similar	33%	Similar	84%	Similar	1.0%	Higher	18%	Higher	5%	Lower
4.8%	Lower	0.9%	Higher	60%	Higher	52%	Lower	34%	Similar	82%	Lower	1.0%	Higher	18%	Higher	1%	Lower
6.0%	Similar	0.1%	Similar	50%	Higher	55%	Similar	42%	Higher	84%	Similar	0.7%	Similar	16%	Similar	4%	Lower
5.7%	Lower	0.3%	Similar	55%	Higher	55%	Similar	32%	Similar	84%	Similar	1.1%	Higher	19%	Higher	3%	Lower
6.0%	Similar	0.2%	Similar	45%	Similar	56%	Similar	34%	Similar	82%	Lower	0.3%	Similar	12%	Lower	3%	Lower
7.5%	Higher	0.1%	Similar	49%	Higher	52%	Lower	32%	Similar	85%	Similar	0.4%	Similar	16%	Higher	6%	Similar
0.2%	Lower	10.0%	Higher	61%	Higher	65%	Similar	46%	Higher	82%	Similar	0.9%	Similar	10%	Similar	1%	Lower
5.4%	Lower	0.4%	Higher	52%	Higher	54%	Lower	34%	Higher	84%	Similar	0.8%	Higher	17%	Higher	4%	Lower
6.9%	Higher	0.1%	Similar	41%	Similar	54%	Similar	28%	Lower	86%	Similar	0.2%	Similar	13%	Similar	7%	Similar
6.4%	Similar	0.1%	Similar	37%	Lower	56%	Similar	30%	Similar	83%	Similar	0.3%	Similar	9%	Lower	9%	Higher
6.2%	Similar	0.0%	Similar	34%	Lower	58%	Similar	22%	Lower	83%	Similar	0.1%	Lower	10%	Lower	5%	Similar
5.5%	Lower	0.1%	Similar	46%	Similar	57%	Similar	26%	Lower	85%	Similar	0.2%	Similar	12%	Similar	10%	Higher
7.3%	Higher	0.1%	Similar	37%	Lower	57%	Similar	43%	Higher	86%	Similar	0.4%	Similar	12%	Lower	9%	Higher
5.8%	Similar	0.0%	Lower	40%	Lower	56%	Similar	30%	Lower	82%	Lower	0.3%	Similar	12%	Lower	7%	Similar
6.6%	Higher	0.3%	Similar	41%	Similar	58%	Similar	30%	Similar	83%	Similar	0.4%	Similar	13%	Similar	5%	Similar
4.5%	Lower	0.2%	Similar	38%	Lower	58%	Similar	33%	Similar	80%	Lower	0.4%	Similar	9%	Lower	8%	Higher
5.6%	Lower	0.1%	Similar	32%	Lower	60%	Higher	41%	Higher	84%	Similar	0.1%	Similar	11%	Lower	14%	Higher
5.1%	Lower	0.1%	Similar	31%	Lower	57%	Similar	26%	Lower	84%	Similar	0.2%	Similar	9%	Lower	12%	Higher
5.9%	Lower	0.1%	Lower	37%	Lower	57%	Higher	31%	Similar	84%	Lower	0.3%	Lower	11%	Lower	9%	Higher
6.1%		**0.2%**		**43%**		**56%**		**32%**		**85%**		**0.4%**				**6%**	

Clinical Characteristics

Clinical Characteristics																	
Hyper-tension Register	Compared to ICS	CHD Register	Compared to ICS	High Cholesterol	Compared to ICS	CKD Register	Compared to ICS	Heart Failure Register	Compared to ICS	Stroke/TIA Register	Compared to ICS	Offered Structured Education	Compared to ICS	All 3 Treatment Targets Achieved	Compared to ICS
62%	Similar	18%	Similar	8%	Similar	18%	Higher	7%	Higher	9%	Similar	46%	Lower	36%	Similar
57%	Similar	18%	Similar	6%	Lower	21%	Higher	5%	Similar	9%	Similar	34%	Lower	36%	Similar
62%	Higher	19%	Similar	8%	Similar	19%	Higher	4%	Lower	7%	Lower	28%	Lower	28%	Lower
57%	Lower	20%	Higher	7%	Similar	12%	Lower	5%	Similar	7%	Similar	45%	Lower	31%	Lower
62%	Higher	19%	Similar	9%	Similar	21%	Higher	6%	Higher	9%	Similar	28%	Lower	35%	Similar
60%	Similar	21%	Higher	8%	Similar	24%	Higher	6%	Similar	10%	Higher	39%	Lower	34%	Similar
60%	Similar	19%	Higher	8%	Similar	19%	Higher	6%	Similar	8%	Similar	36%	Lower	33%	Lower
60%	Similar	18%	Similar	7%	Similar	11%	Lower	6%	Similar	7%	Similar	58%	Higher	36%	Similar
58%	Similar	17%	Similar	8%	Similar	13%	Lower	6%	Similar	8%	Similar	62%	Higher	29%	Lower
55%	Lower	16%	Similar	9%	Similar	7%	Lower	4%	Lower	7%	Lower	59%	Higher	26%	Lower
56%	Lower	16%	Similar	8%	Similar	10%	Lower	4%	Lower	8%	Similar	69%	Higher	35%	Similar
55%	Lower	15%	Lower	8%	Similar	8%	Lower	5%	Similar	7%	Similar	55%	Higher	31%	Lower
58%	Similar	18%	Similar	9%	Similar	9%	Lower	4%	Lower	8%	Similar	69%	Higher	32%	Lower
63%	Higher	17%	Similar	7%	Similar	15%	Similar	6%	Similar	8%	Similar	58%	Higher	32%	Lower
46%	Lower	6%	Lower	15%	Higher	0%	Lower	0%	Lower	5%	Similar	67%	Higher	34%	Similar
58%	Lower	17%	Lower	8%	Similar	10%	Lower	5%	Similar	8%	Lower	61%	Higher	32%	Lower
59%	Similar	15%	Lower	7%	Similar	18%	Higher	4%	Lower	9%	Similar	57%	Higher	39%	Higher
60%	Similar	17%	Similar	7%	Similar	21%	Higher	4%	Lower	10%	Similar	44%	Lower	41%	Higher
63%	Higher	17%	Similar	7%	Similar	20%	Higher	6%	Similar	8%	Similar	46%	Lower	40%	Higher
60%	Similar	15%	Lower	8%	Similar	18%	Similar	5%	Similar	9%	Similar	61%	Higher	30%	Lower
59%	Similar	17%	Similar	9%	Similar	18%	Higher	8%	Higher	9%	Similar	61%	Higher	43%	Higher
60%	Similar	17%	Similar	7%	Similar	9%	Lower	6%	Similar	9%	Similar	68%	Higher	45%	Higher
59%	Similar	16%	Similar	9%	Similar	10%	Lower	6%	Similar	8%	Similar	61%	Higher	35%	Similar
61%	Similar	19%	Similar	7%	Similar	17%	Similar	6%	Similar	10%	Similar	57%	Higher	41%	Higher
62%	Similar	19%	Similar	8%	Similar	20%	Higher	6%	Similar	9%	Similar	45%	Lower	45%	Higher
61%	Similar	16%	Similar	9%	Similar	20%	Higher	6%	Similar	8%	Similar	60%	Higher	39%	Higher
60%	Similar	17%	Similar	8%	Similar	17%	Higher	6%	Similar	9%	Similar	56%	Higher	40%	Higher
60%		**18%**		**8%**		**16%**		**6%**		**8%**		**50%**		**35%**	

Ethnic and Socio-economic Characteristics

Social Characteristics													
		Patients Living in Top 20% Most Deprived Neighbourhoods											
Recorded BME	Compared to ICS	Income Deprivation	Compared to ICS	Employment Deprivation	Compared to ICS	Adult Skills & Training Deprivation	Compared to ICS	Crime Deprivation	Compared to ICS	Outdoor Living Environment Deprivation	Compared to ICS	Health & Disability Deprivation	Compared to ICS
3%	Lower	35%	Higher	45%	Higher	56%	Higher	24%	Higher	1%	Lower	54%	Higher
3%	Lower	24%	Lower	31%	Lower	40%	Higher	17%	Similar	1%	Lower	32%	Lower
3%	Lower	25%	Lower	54%	Higher	59%	Higher	16%	Lower	2%	Lower	52%	Higher
4%	Lower	34%	Higher	54%	Higher	60%	Higher	30%	Higher	5%	Lower	59%	Higher
3%	Lower	17%	Lower	15%	Lower	16%	Lower	9%	Lower	9%	Lower	12%	Lower
2%	Lower	15%	Lower	38%	Higher	43%	Higher	5%	Lower	0%	Lower	26%	Lower
3%	Lower	24%	Lower	39%	Higher	45%	Higher	16%	Lower	3%	Lower	38%	Higher
15%	Similar	65%	Higher	65%	Higher	63%	Higher	36%	Higher	56%	Higher	60%	Higher
28%	Higher	67%	Higher	63%	Higher	66%	Higher	49%	Higher	89%	Higher	71%	Higher
66%	Higher	54%	Higher	48%	Higher	53%	Higher	58%	Higher	96%	Higher	59%	Higher
29%	Higher	53%	Higher	44%	Higher	32%	Lower	29%	Higher	79%	Higher	52%	Higher
37%	Higher	55%	Higher	56%	Higher	46%	Higher	29%	Higher	83%	Higher	62%	Higher
34%	Higher	26%	Lower	29%	Lower	28%	Lower	9%	Lower	79%	Higher	36%	Similar
21%	Higher	61%	Higher	62%	Higher	78%	Higher	26%	Higher	48%	Higher	73%	Higher
45%	Higher	15%	Lower	18%	Lower	15%	Lower	17%	Similar	63%	Higher	35%	Similar
32%	Higher	56%	Higher	54%	Higher	53%	Higher	35%	Higher	77%	Higher	60%	Higher
4%	Lower	21%	Lower	33%	Similar	21%	Lower	21%	Higher	0%	Lower	25%	Lower
5%	Lower	4%	Lower	8%	Lower	17%	Lower	0%	Lower	2%	Lower	4%	Lower
9%	Lower	9%	Lower	16%	Lower	15%	Lower	2%	Lower	14%	Lower	9%	Lower
6%	Lower	9%	Lower	18%	Lower	11%	Lower	1%	Lower	5%	Lower	5%	Lower
2%	Lower	21%	Lower	29%	Lower	31%	Lower	15%	Lower	0%	Lower	27%	Lower
14%	Similar	7%	Lower	8%	Lower	5%	Lower	1%	Lower	16%	Lower	2%	Lower
6%	Lower	11%	Lower	9%	Lower	8%	Lower	8%	Lower	13%	Lower	6%	Lower
22%	Higher	1%	Lower	1%	Lower	1%	Lower	1%	Lower	6%	Lower	2%	Lower
2%	Lower	0%	Lower	0%	Lower	4%	Lower	0%	Lower	1%	Lower	0%	Lower
3%	Lower	1%	Lower	5%	Lower	5%	Lower	1%	Lower	3%	Lower	1%	Lower
7%	Lower	9%	Lower	13%	Lower	12%	Lower	5%	Lower	6%	Lower	9%	Lower
13%		**29%**		**35%**		**36%**		**18%**		**27%**		**35%**	

	GP Patients not diagnosed with Diabetes – At a glance!
MN	1) 51% of population without diabetes are overweight or obese 2) 19% smoke 3) 13% on hypertension register 4) 10% high cholesterol 5) 3% on CKD Register
City	1) 39% of population without diabetes are overweight or obese 2) 20% smoke 3) 9% on hypertension register 4) 7% high cholesterol 5) 1% on CKD Register
SN	1) 48% of population without diabetes are overweight or obese 2) 14% smoke 3) 13% on hypertension register 4) 12% high cholesterol 5) 3% on CKD Register

Identify priority cohorts 4

	GP Patients diagnosed with Type 2 Diabetes – At a glance!
MN	1) 7.1% of population aged 15+ diagnosed with T2 diabetes; 31% family history of diabetes 2) 36% offered Structured Education Programme 3) 33% achieving all 3 treatment targets (HbA1c, Hypertension, Cholesterol) 4) 15% smoke; 86% overweight or obese; 19% on CKD register 5) 24% live in areas of high 'income deprivation'; 39% in areas of high 'employment deprivation'; 45% in areas of high 'adult skills deprivation'
City	1) 5.4% of population aged 15+ diagnosed with T2 diabetes; 34% family history of diabetes 2) 61% offered Structured Education Programme 3) 32% achieving all 3 treatment targets (HbA1c, Hypertension, Cholesterol) 4) 17% smoke; 84% overweight or obese; 10% on CKD register 5) 56% live in areas of high 'income deprivation'; 54% in areas of high 'employment deprivation'; 53% in areas of high 'adult skills deprivation'
SN	1) 5.9% of population aged 15+ diagnosed with T2 diabetes; 31% family history of diabetes 2) 56% offered Structured Education Programme 3) 40% achieving all 3 treatment targets (HbA1c, Hypertension, Cholesterol) 4) 11% smoke; 84% overweight or obese; 17% on CKD register 5) 9% live in areas of high 'income deprivation'; 13% in areas of high 'employment deprivation'; 12% in areas of high 'adult skills deprivation'

IMPACTABLE INTERVENTIONS

Causal Modelling!

PEOPLE ARE DIFFERENT

One approach will not suit everyone…

POPULATIONS HAVE DIFFERENT NEEDS

Different outcomes, require different interventions

COSTS VARY

20% of the population could be costing 80% spend?

MAXIMISE IMPACT

Quality, cost, resources, activity

MAXIMISE RESOURCES

Enables more focus on area of need/prioritisation

WE NEED TO WORK COLLECTIVELY TO HAVE A BETTER IMPACT

Health influences only 10% of an individuals wellness, therefore how “impactful” is a health only model?

FINDING INTERVENTIONS THE PHM WAY

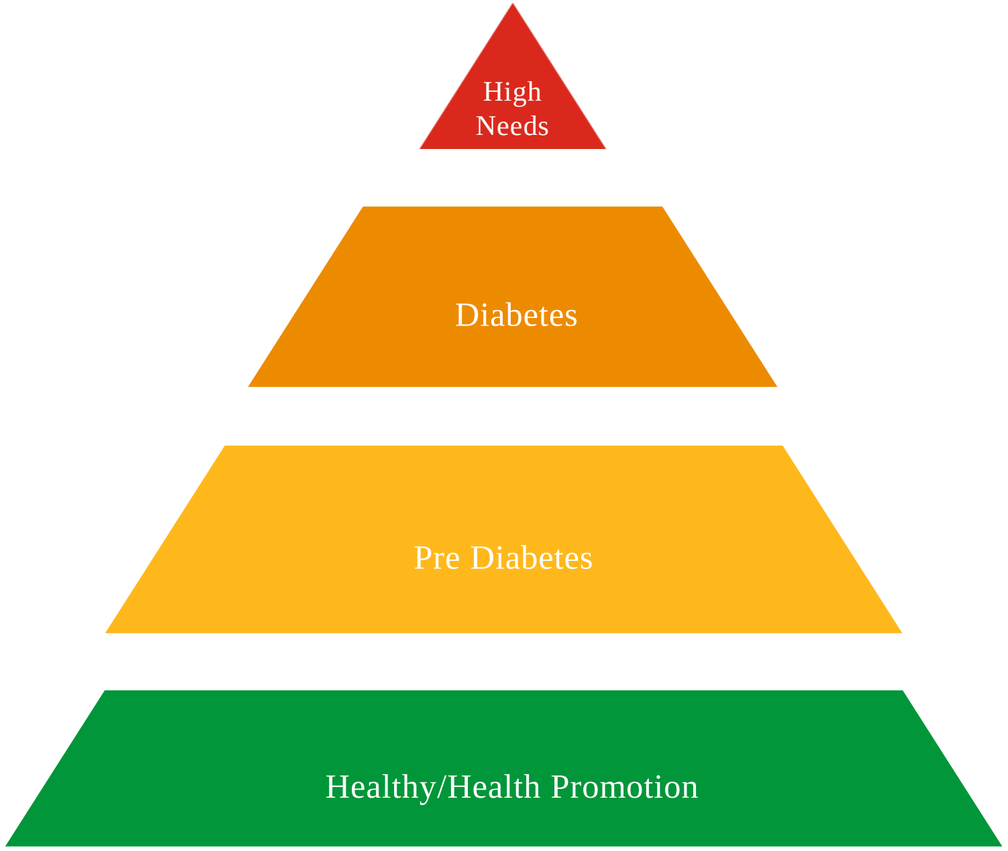
Identify Impactable Interventions **5**

- We know the outcomes we want to influence
- Search the literature for interventions that have a proven impact on the desired outcomes, **in similar populations**
- Based on the literature, model what impact these interventions might have on our population using current system outcomes vs what outcomes could look like in the future
- This will give us a menu of interventions that will make up a multi-agency, integrated model of care for diabetes

For the interventions we look into we will consider:

- **Non-medically focused interventions** (those outside of interventions already in NICE guidance/similar recommended pathways)
- **Medical interventions including** those outlined in NICE
- **Interventions acting over different timescales** (short-medium-long)
- **Interventions targeting the different layers of the diabetes risk triangle** (without diabetes, pre diabetes, with diabetes, ongoing care needing disease management, highest need) including age, gender and wider social/economic determinants

Identify Impactable Interventions 5/6



From the short list of interventions that have an impact, work with ICP's and PCN's to select the right intervention, tweaking the model to ensure it is right for the local system/population

Intervention	Owner
Dietary advice and bariatric surgery Hypertension management *Antiplatelet therapy (see nice guidance) ***Self-monitoring of blood glucose Drug treatment (as per NICE recommendations) Other: Reducing homelessness, knife crime, modern slavery	ICP/ PCN
Smoking cessation, Signposting, Support groups, Structured education program (with a focus on pregnancy and SMI), Coping skills training , group role-plays diabetes management in social settings; feedback from peers and coach; problem-solving skills training, Internet-based self-management , immusistion program, anticipating personal barriers to self-management; training in coping and problem-solving skills; social networking forum, self management, technology support, website forums. Cultural awareness and support.	ICP/ PCN
Lifestyle, smoking interventions including diet, Effective weight-loss programs, Physical activity, cultural appropriateness, Diet Nutrition counselling, Lifestyle management, Behavioural family systems therapy for pre-diabetes /diabetes, training in family communication, problem solving, conflict resolution, cognitive restructuring, social media, technology support.	ICP/ PCN
Population-wide interventions (empowerment, encouraging healthy behaviours), Advertising on cigarette packs Tax on sugar containing foods, Education on sexual health Improving welfare smoking interventions, Supporting behaviour change, maintaining a healthy weight, benefits of continued physical activity, cultural appropriateness, open spaces, Multisystemic therapy in children's healthcare, (e.g., home, community, school) and tailored to individual and family needs; incorporate case management as needed	ICS

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INFRASTRUCTURE TO SUCCEED?

Infrastructure

What are the basic building blocks that must be in place?

- **Organisational Factors** - defined population, shared leadership & decision making structure
- **Digitalised care providers and common health and care record**
- **Integrated data architecture** and single version of the truth
- **Information Governance** that ensures data is shared safely, securely and legally

Intelligence

Opportunities to improve care quality, efficiency and equity

- **Supporting capabilities** such as advanced analytical tools and software and system wide multi-disciplinary analytical teams, supplemented by specialist skills
- **Analyses** - to understand health and wellbeing needs of the population, opportunities to improve care, and manage risk
- **Interpretation** of evidence to identify targeted, high impact interventions

Interventions

Care models focusing on proactive interventions to prevent illness, reduce the risk of hospitalisation and address inequalities

- **Care model design** - delivery of integrated personalised care and interventions tailored to population needs
- **Community well-being** - asset based approach, social prescribing and social value projects
- **Workforce development** - upskilling teams, realigning and creating new roles

OUR APPROACH TO PHM AS A PLANNING ROCESS

1. Develop ICS System Outcomes
2. Develop metrics and measures
3. Develop population segments
4. Identify priority cohorts
5. Identify Impactable Interventions
6. Implementation

- Adapted from the national PHM flat pack
- Based on the 3I's (Infrastructure to succeed)
- Principles of Bridges to Health

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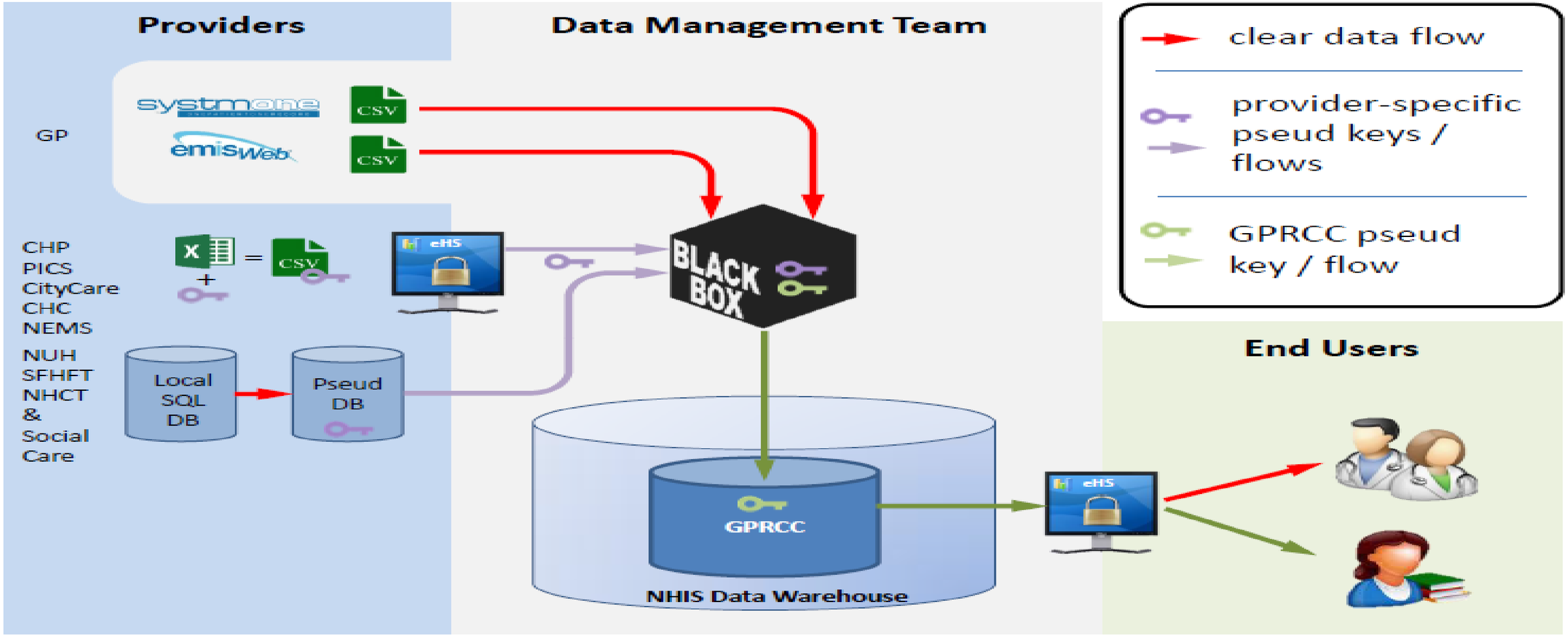
INFRASTRUCTURE TO SUCCEED

GP Repository for Clinical Care & eHealthscope



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CHALLENGES WITHIN PHM

- Financial Prioritisation - How do we deliver savings today while delivering better health tomorrow?
  How do we ensure that data is used to influence care where it is needed most?
- Clinical prioritisation - Prioritise as a system e.g. treat COPD or renal failure
  Ensure we understand the impactability of the proposed interventions?
  Ensure that the prevention agenda is embraced
- One version of the data truth - How do we ensure our data is up to date and meaningful (JSNA etc)
  Support our own data processes (DAIT strategy) make not buy!
  Recognise other data but not get swayed by it!
- Scaling up - How do we ensure this methodology and principle is owned and ‘scaled up’ throughout the system?
- Resources - Limited resources to rollout at pace transformation/business intelligence/governance/public health