



Health  
Economics  
Unit



Midlands and Lancashire  
Commissioning Support Unit

# The critical role of finance leadership in addressing health inequalities

- The role of health, wellbeing and the wider determinants of health and the risks over medicalisation of PHM
- The challenges of system working and creating a common language for change
- The critical role of finance in PHM and fixing inequalities

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# What do we mean by Population Health Management?

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A local system that:

- integrates primary care, secondary care and community health services with public health, social care and Third Sector organisations
- manages a **defined budget** on behalf of a **defined geographical population**

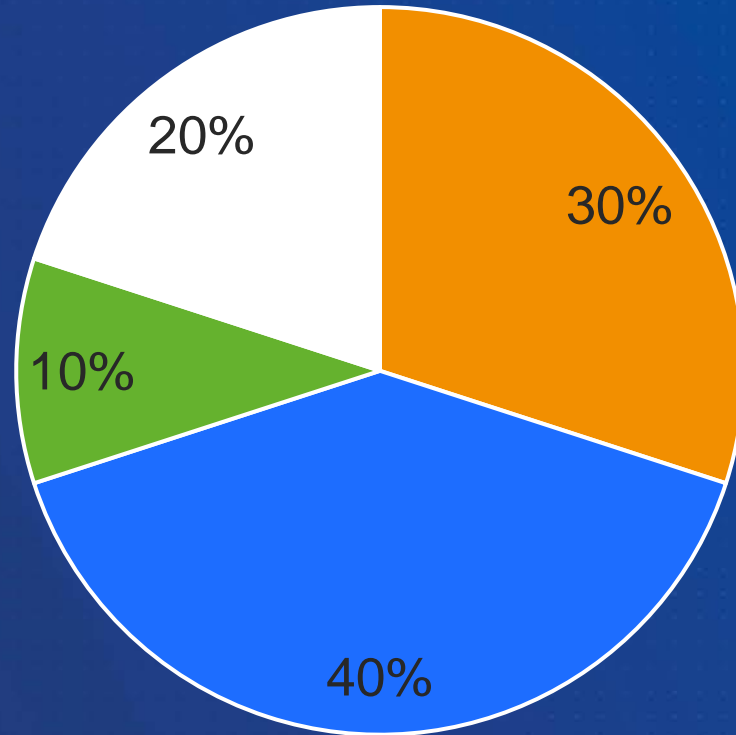
...uses evidence and person-level analysis to:

- **understand** the health needs and wellbeing of its population and **identify opportunities** to improve the quality, efficiency and equity of the care being provided
- inform the **planning and investment** in a range of coordinated, evidence-based, cost-effective health, care and social interventions
- **monitor and evaluate** interventions to learn what works for whom, where and why

...in order to:

- **reduce health inequalities**
- achieve the **triple aim** of healthcare (higher quality care, better patient experience, lower per capita cost)
- improve the **long-term health and wellbeing** of the people it serves.

# Modifiable health determinants that effect your health outcomes

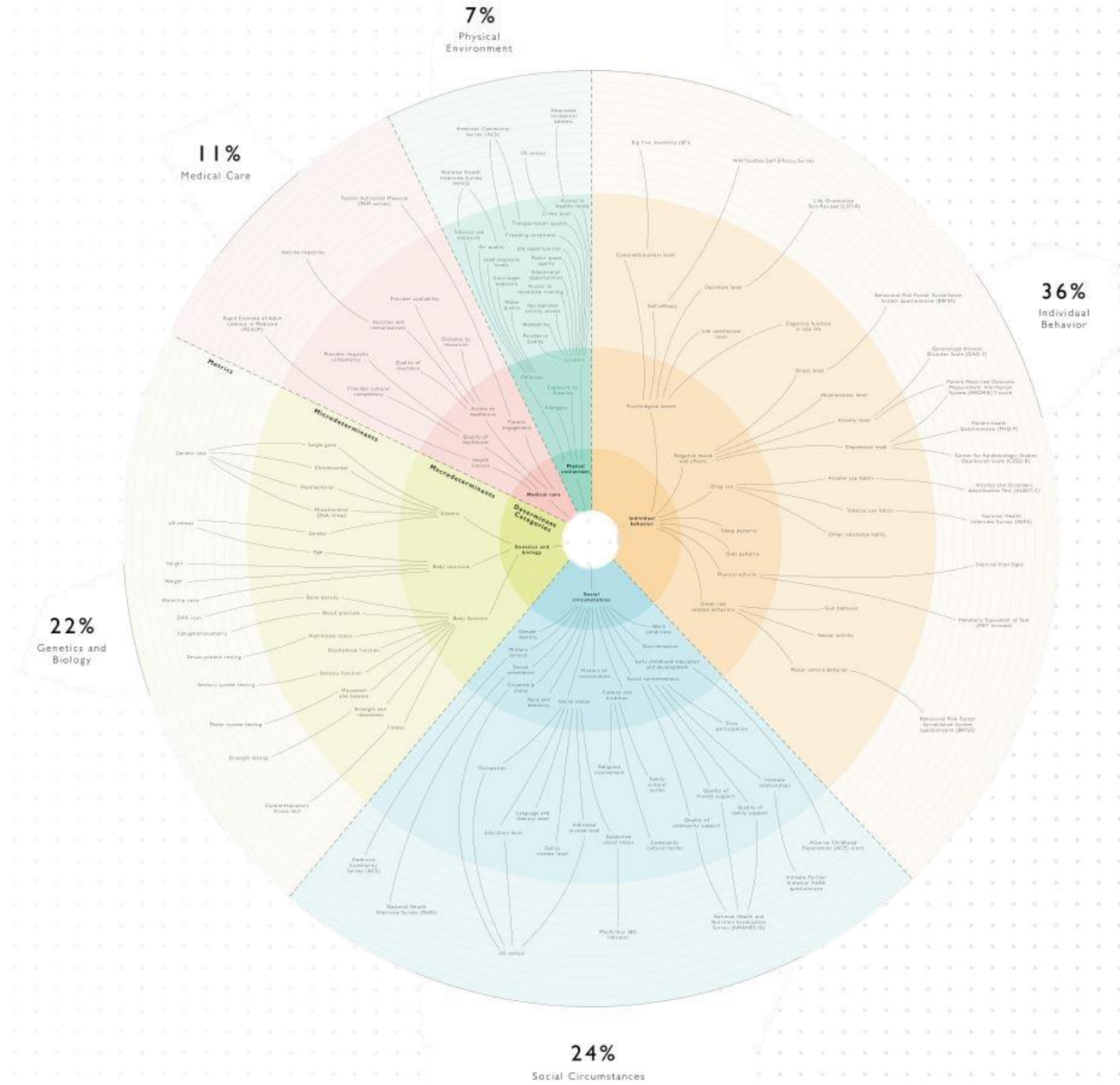


health behaviors

social and economic factors

physical environment

clinical care



# Wider determinants

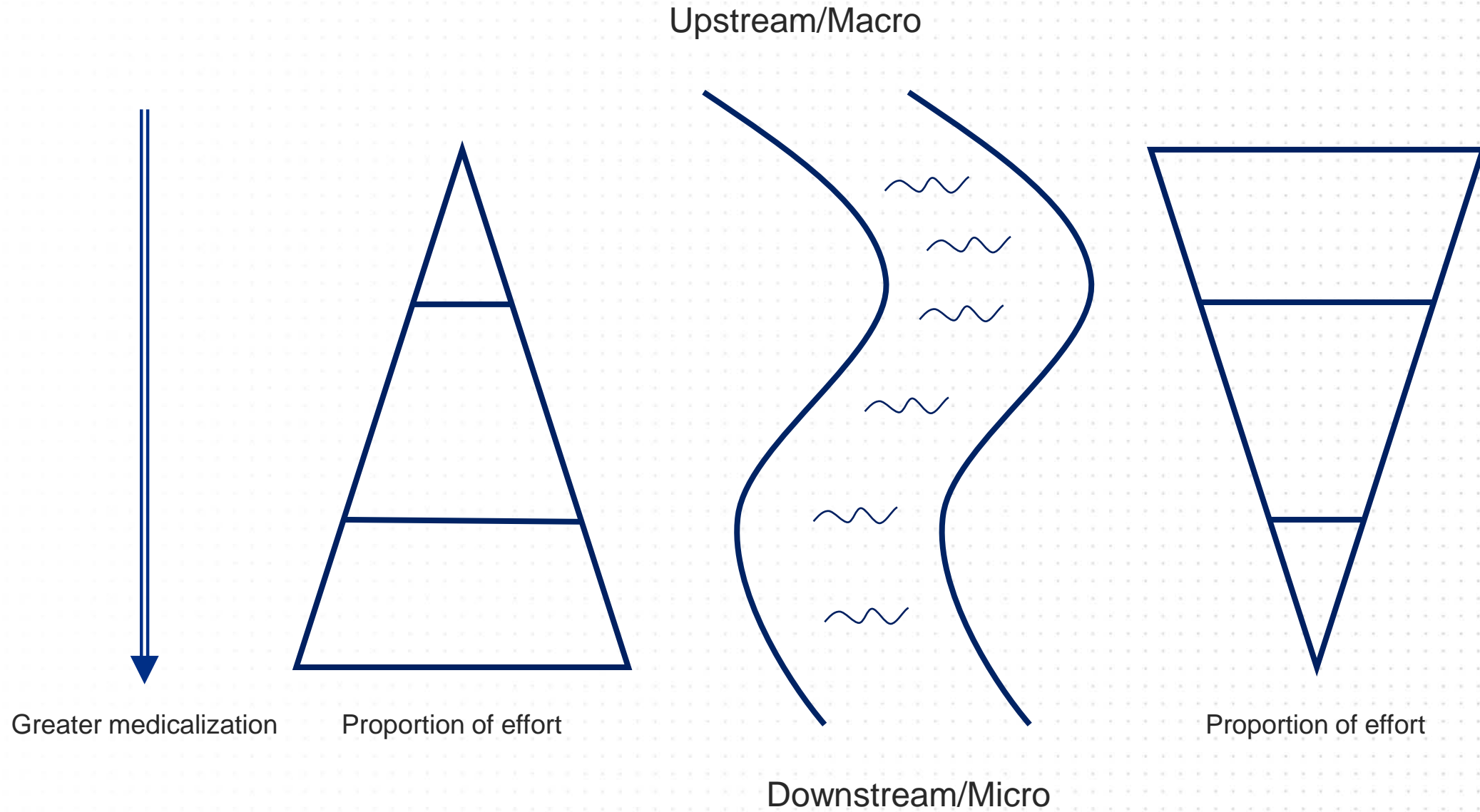
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- 1 in 5 dwellings doesn't meet decent standards in England
- 1 in 5 people live in poverty in the UK
- Children in deprived areas are 9 times less likely to have access to green space and places to play
- By the age of 30 those with the highest levels of education are expected to live 4 years longer than those with the lowest education

# Life expectancy

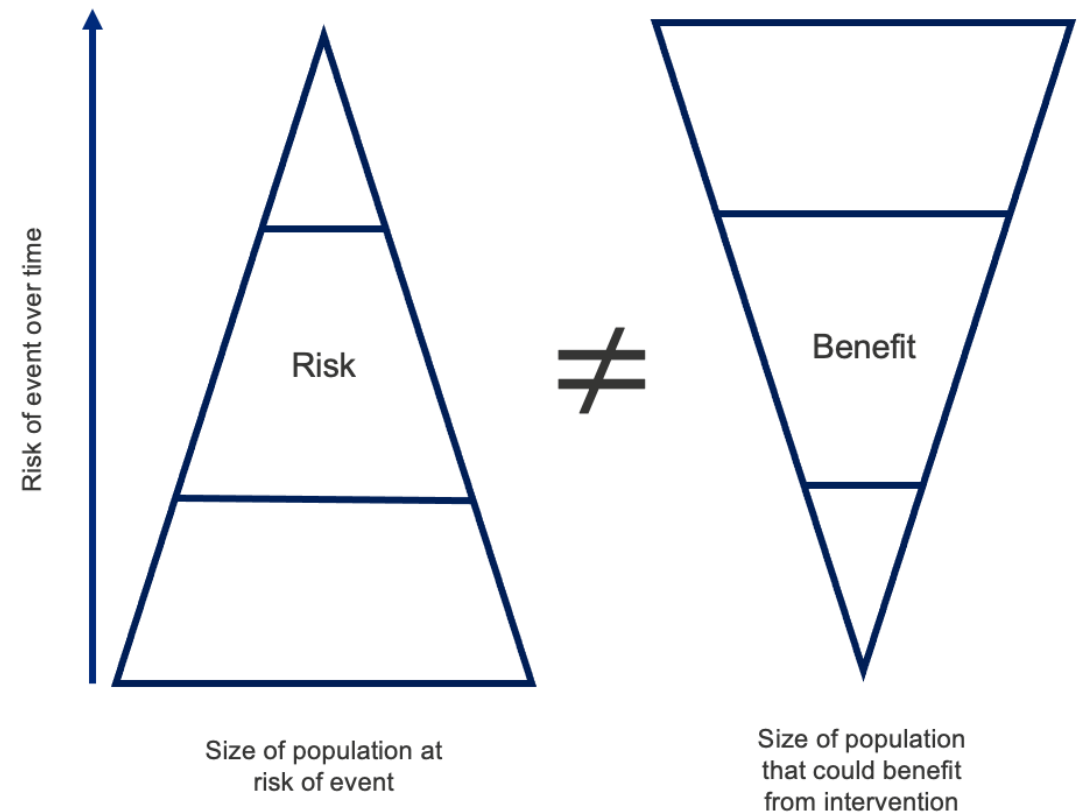
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- Men
  - Disease free life expectancy
    - ~55 (highest deprivation) to ~70 (least deprivation)
  - Life expectancy
    - ~74 (highest deprivation) to ~84 (least deprivation)
- Women
  - Disease free life expectancy
    - ~55 (highest deprivation) to ~72 (least deprivation)
  - Life expectancy
    - ~78 (highest deprivation) to ~86 (least deprivation)



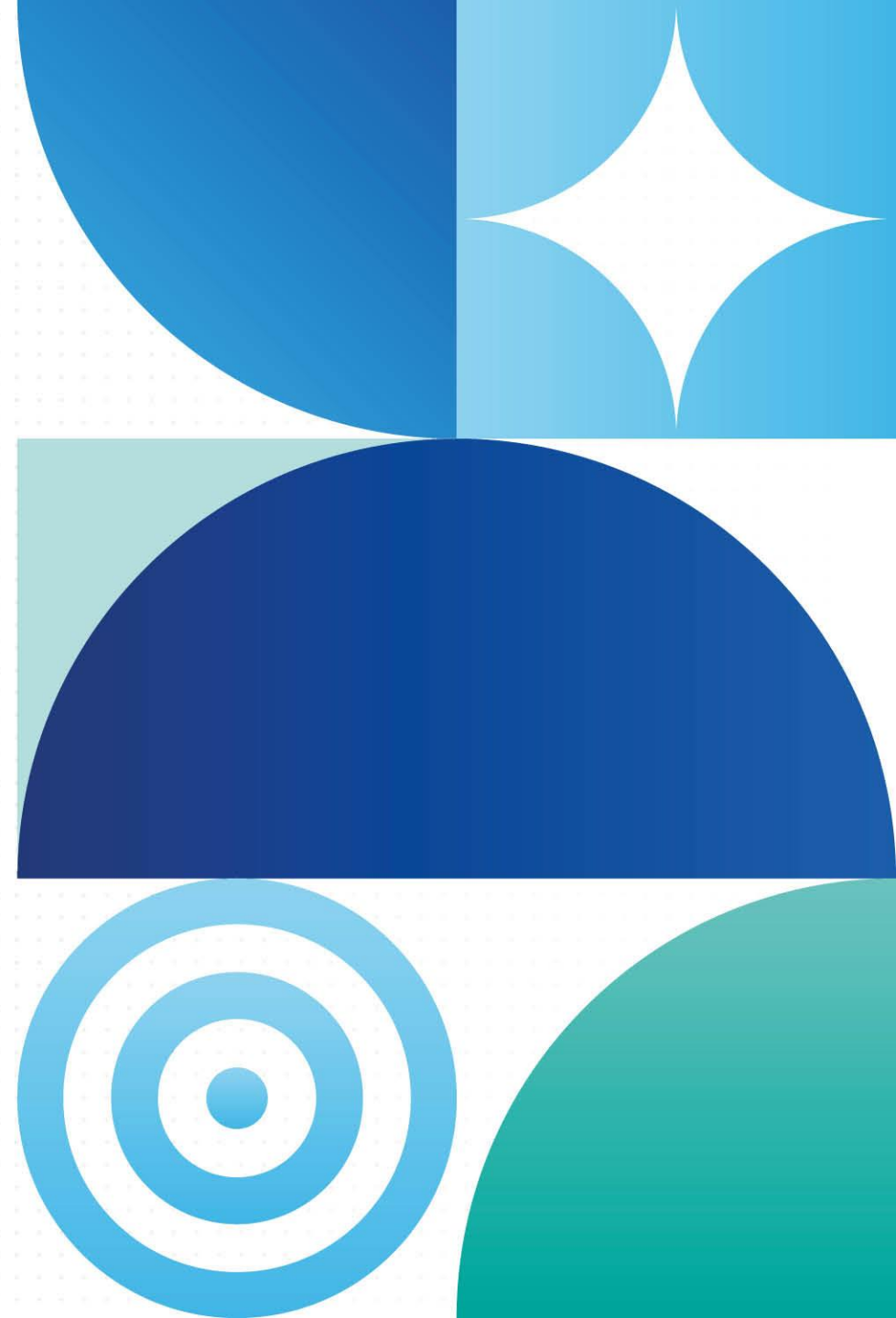
It is key to the success of risk stratification to ensure that “**high-risk individuals**” are not conflated with “**those most likely to benefit**” as there is evidence indicating that these can be highly separated groups

[Orlowski et al. 2021].

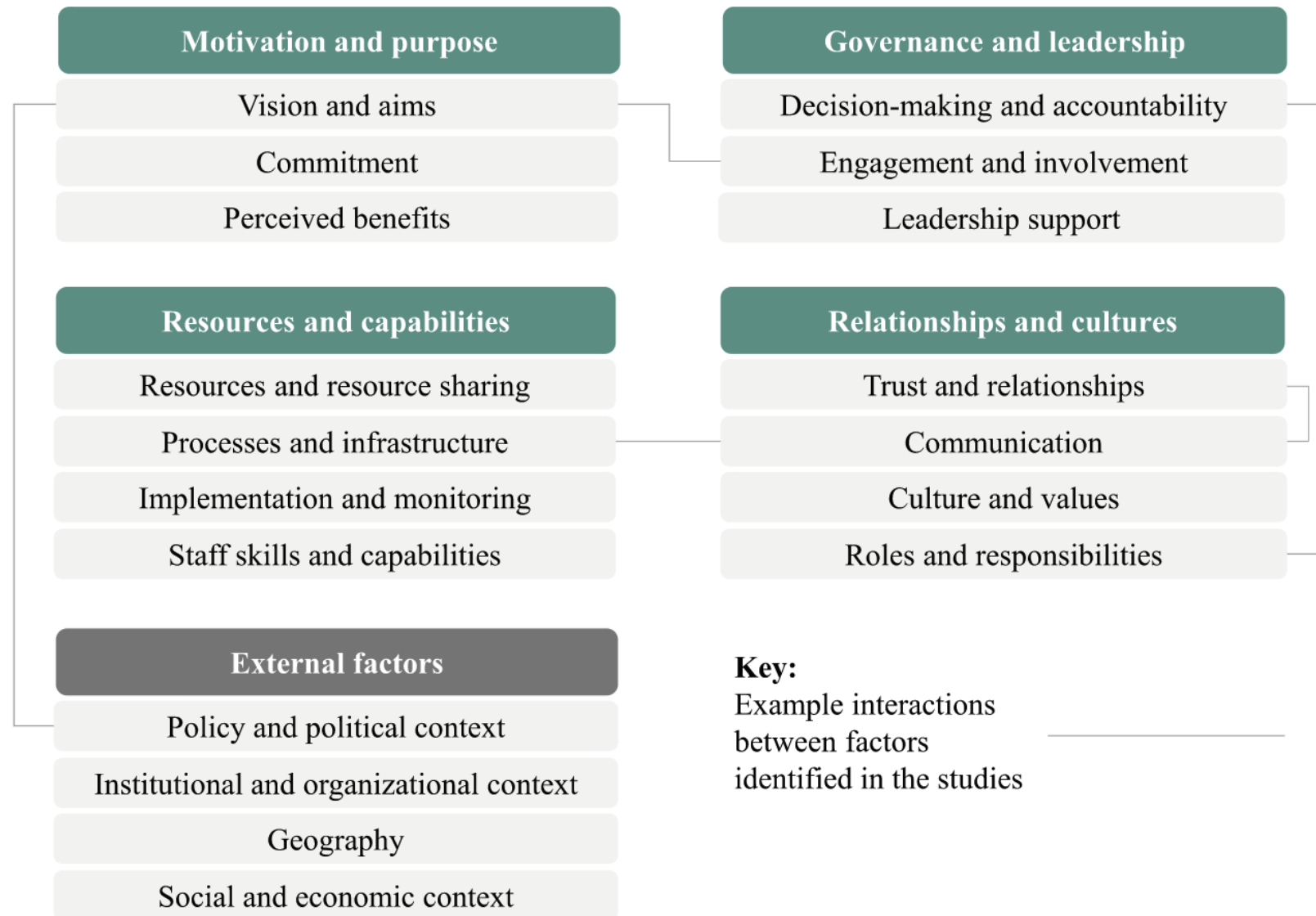


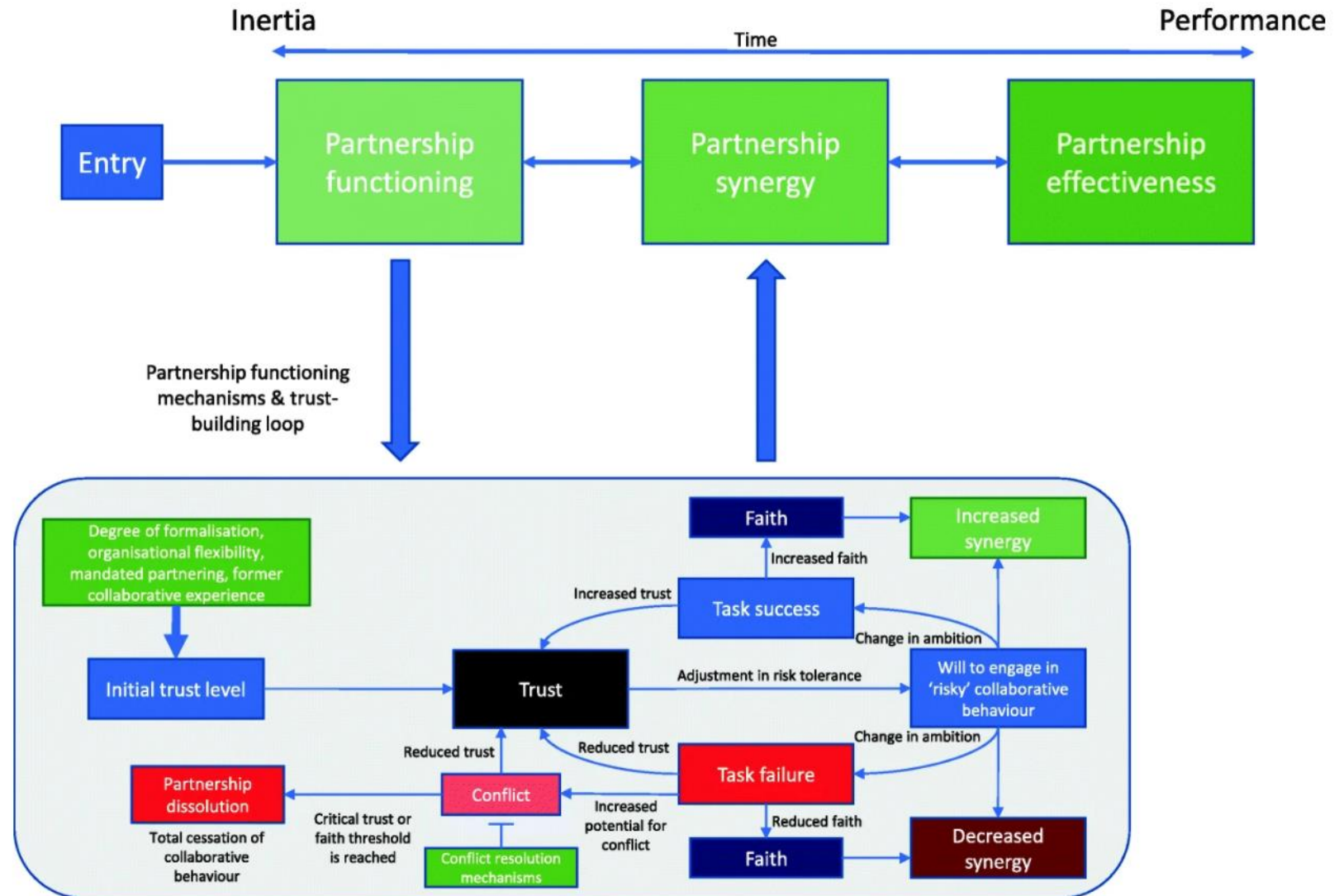


# Delivering on the promise of systems



There is little convincing evidence to suggest that collaboration between local health care and non-health care organisations improves health outcomes





Programme theory—depiction of main mechanisms and outcomes at play

Meanwhile in the real  
world...

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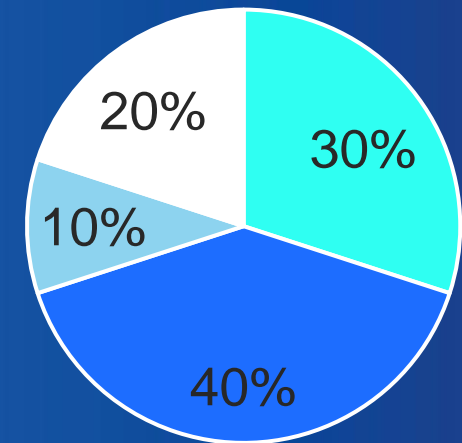
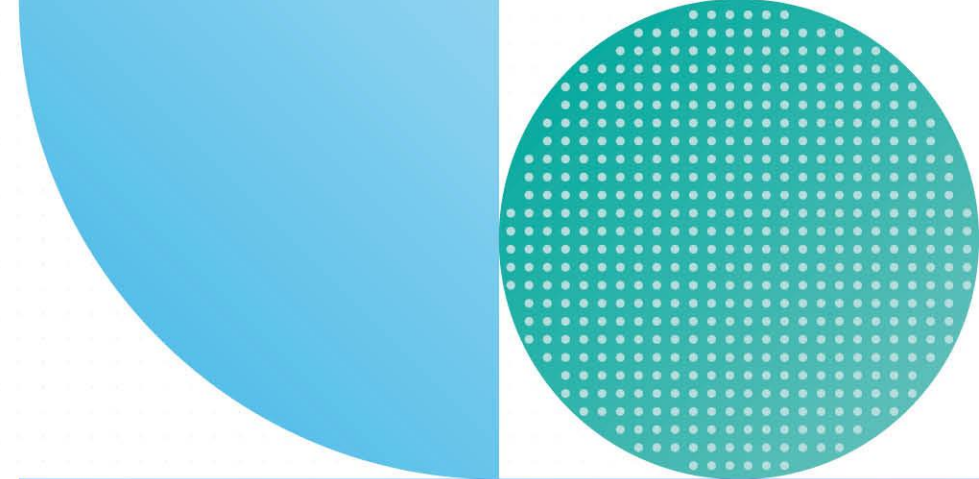
# Improving social and economic factors: Wakefield

## Reducing homelessness

Wakefield have been working as a partnership to prevent eviction and potential homelessness

Mental health navigators take referrals from Wakefield District Housing Debt Team, housing officers and community safety officers on problems like hoarding, poor tenancy management and anti-social behaviour.

The team engaged with over 150 clients and the wellbeing caseworkers carried out over 400 interactions yielding a social return of £1.1 million.



- health behaviors
- social and economic factors
- physical environment
- clinical care

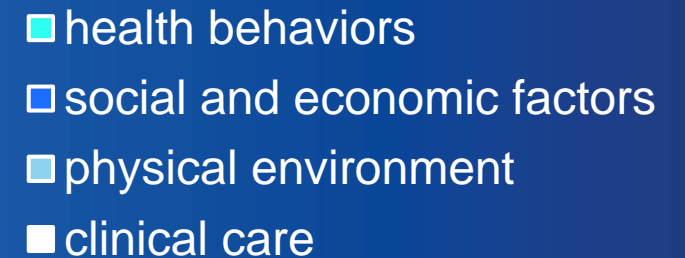
# Improving the physical environment: London

## Traffic calming measures for public health benefit

Guy's and St Thomas' charity paid £250k to install traffic calming measures for public health benefits including tackling air pollution and obesity in Lambeth and Southwark

The Low Traffic Neighbourhoods will be focused in the areas of highest deprivation in the area

The aim is to reduce traffic and improve access for cyclists and pedestrians - including widening pavements, adding seating and roadside markings to encourage walking and cycling and removing parking spaces.



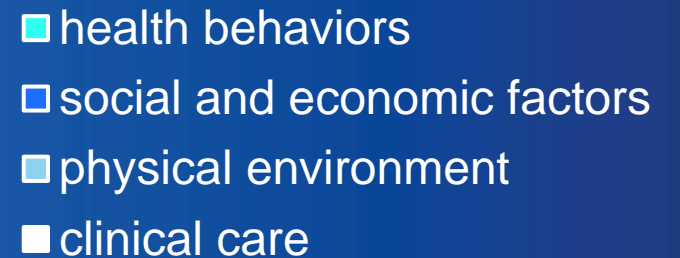
# Improving the physical environment: North East

## Improving homes in Sunderland and Scotland

Gentoo and Sunderland CCG provided energy efficient boilers, double glazing and insulation on 'prescription'

A&E attendances reduced by 30%. Emergency admissions reduced by 25%. GP appointments reduced by 60%

Patients suffering from respiratory diseases that are exacerbated by the cold, such as COPD, were referred onto the scheme and received improvements totalling on average £5,000 per property.





# Multi-Criteria Decision Analysis (MCDA)

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- MCDA is a decision-making tool that helps individuals or organizations evaluate multiple criteria when making complex decisions.
- It involves the use of mathematical models and techniques to weigh and compare various alternatives against each other based on different criteria.
- MCDA is widely used in various fields such as business, engineering, environmental management, and healthcare.

# A programme to embed allocative value in NHS decision making

The Health Economics Unit are leading a development programme on allocative efficiency across systems in the Midlands.

Using COPD as an exemplar pathway, HEU will run the STAR process with:

- Birmingham and Solihull ICS
- Coventry Place
- Northamptonshire ICS
- Nottinghamshire ICS
- Gloucester ICS

Through the Midlands Decision Support Network, the HEU will run a training programme on allocative value and the STAR method.



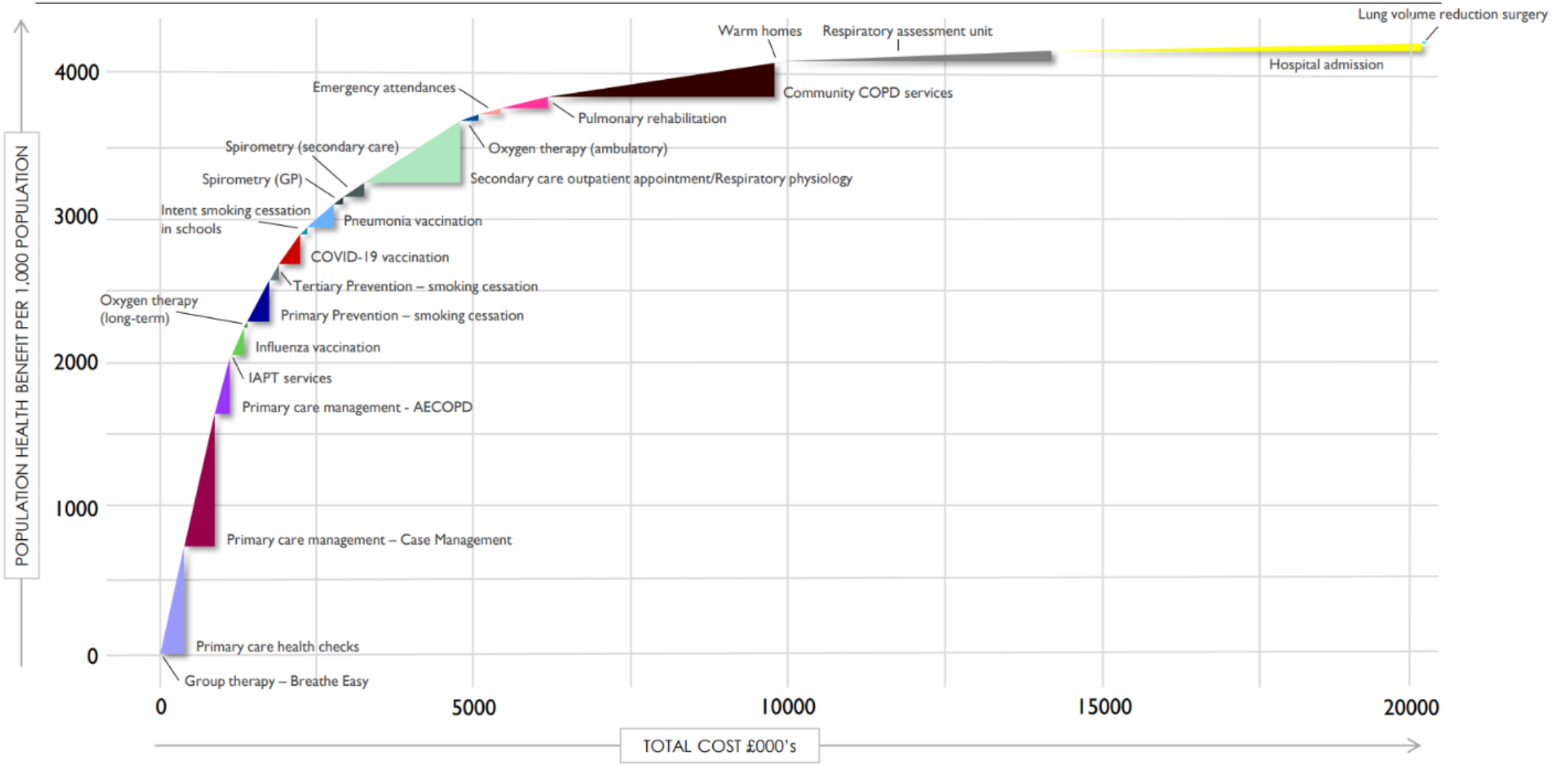
# Process

The project aimed to understand how to increase allocative efficiency of the COPD pathway in Nottinghamshire. It was facilitated through the following process:



[More details on the project process are on page 12](#)

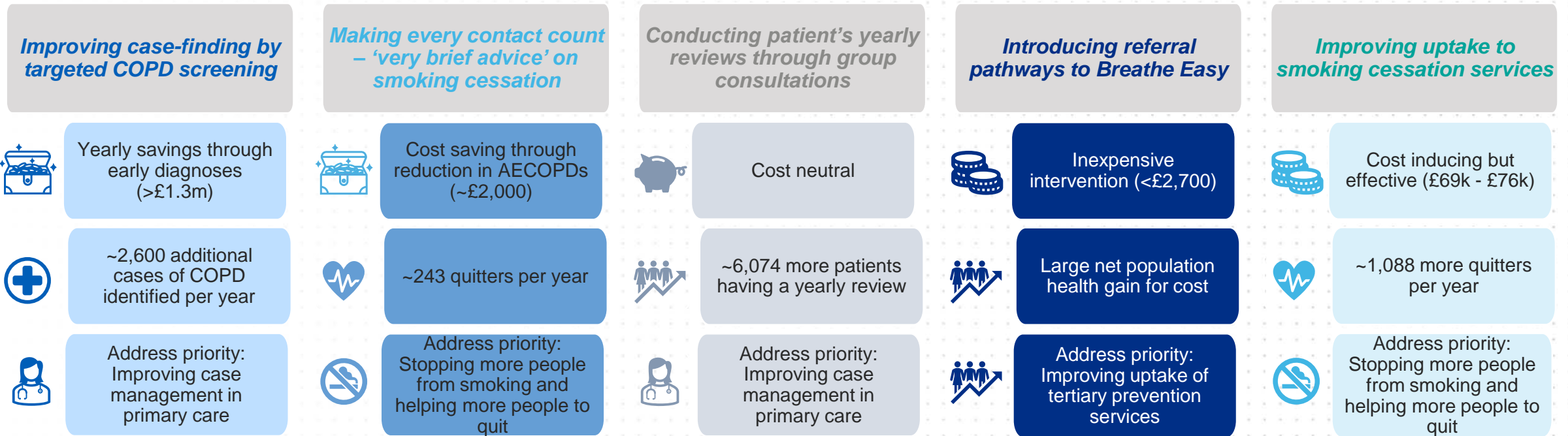
# VALUE OF COPD CARE PATHWAY IN NOTTINGHAMSHIRE



	PRIMARY PREVENTION	SECONDARY PREVENTION	CASE MANAGEMENT	TERTIARY PREVENTION	MANAGEMENT OF AECOPD
% of total spend	4.1%	7.1%	27.7%	6.8%	54.2%
% of pop health gain	25.7%	16.9%	37.9%	7.1%	12.3%

# Recommendations

The following pathway improvements have been modelled and are recommended for implementation as they are likely to lead to the most health generation per pound spent.



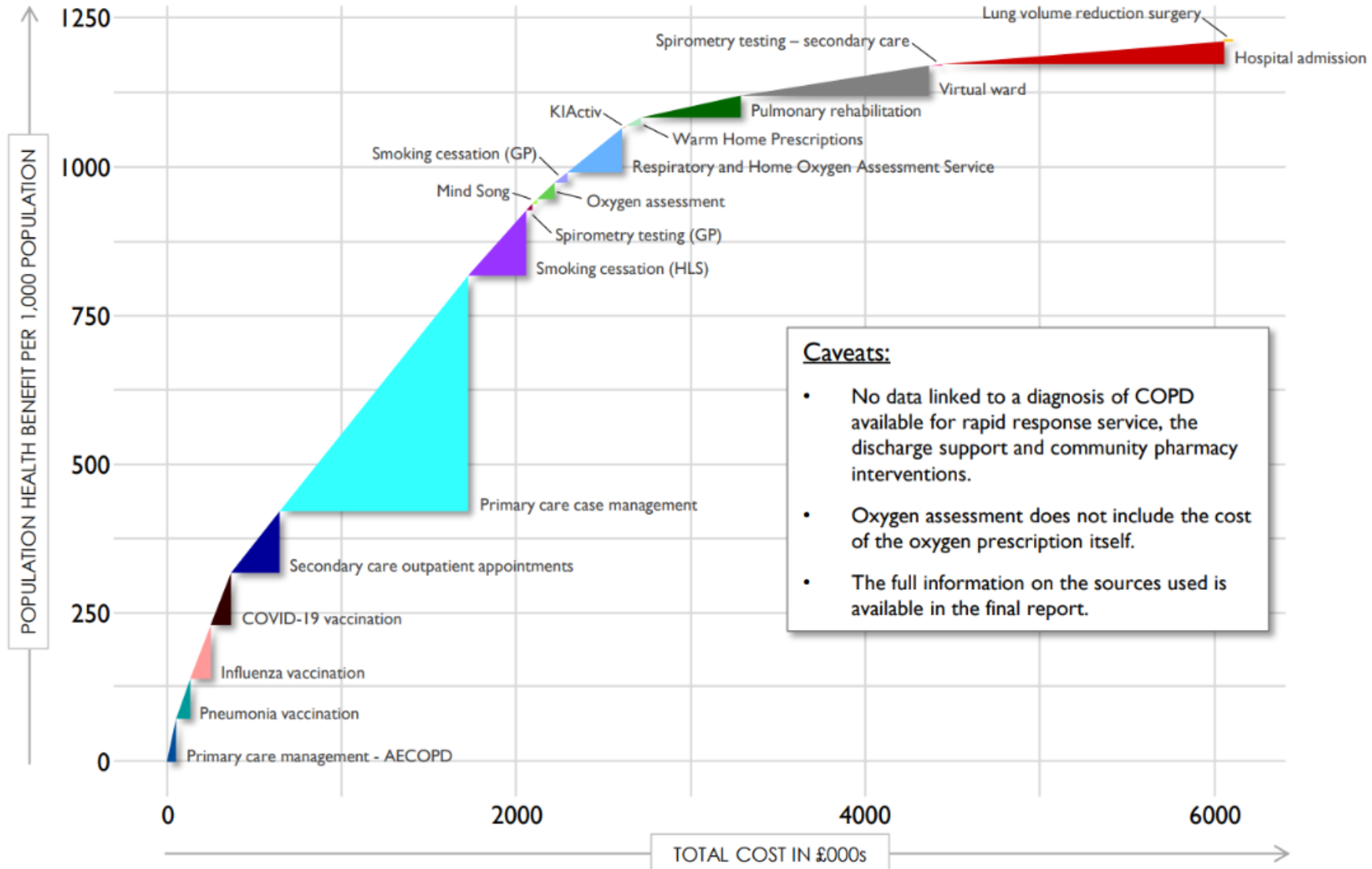
If implemented, these interventions are expected to result in £408k-872k increase on costs and a 34.24 percentage point increase to population health (best case scenario).

# Process

The project aimed to understand how to increase allocative efficiency of the COPD pathway in Gloucestershire. It was facilitated through the following process:



# VALUE OF COPD CARE PATHWAY IN GLOUCESTERSHIRE



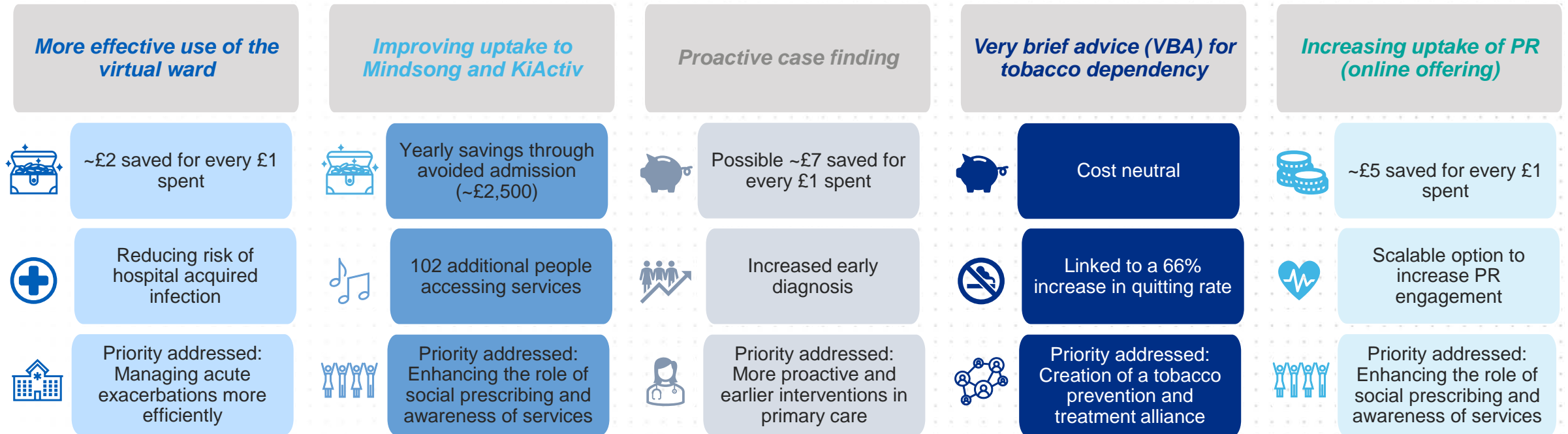
**Caveats:**

- No data linked to a diagnosis of COPD available for rapid response service, the discharge support and community pharmacy interventions.
- Oxygen assessment does not include the cost of the oxygen prescription itself.
- The full information on the sources used is available in the final report.

	PRIMARY PREVENTION	SECONDARY PREVENTION/DIAGNOSIS	STABLE MANAGEMENT	TERTIARY PREVENTION	MANAGEMENT OF ACUTE EXACERBATIONS
% of total spend	6.7%	8.3%	27.4%	12.4%	45.2%
% of pop health gain	10.5%	22.6%	47.4%	6%	13.5%

# Recommendations

The following pathway improvements have been modelled and are recommended for implementation as they are likely to lead to the most health generation per pound spent.



If implemented, these pathway improvements are expected to be cost saving. They are estimated to save £1.04m net per year and lead to a 12.4% percentage point increase to population health.

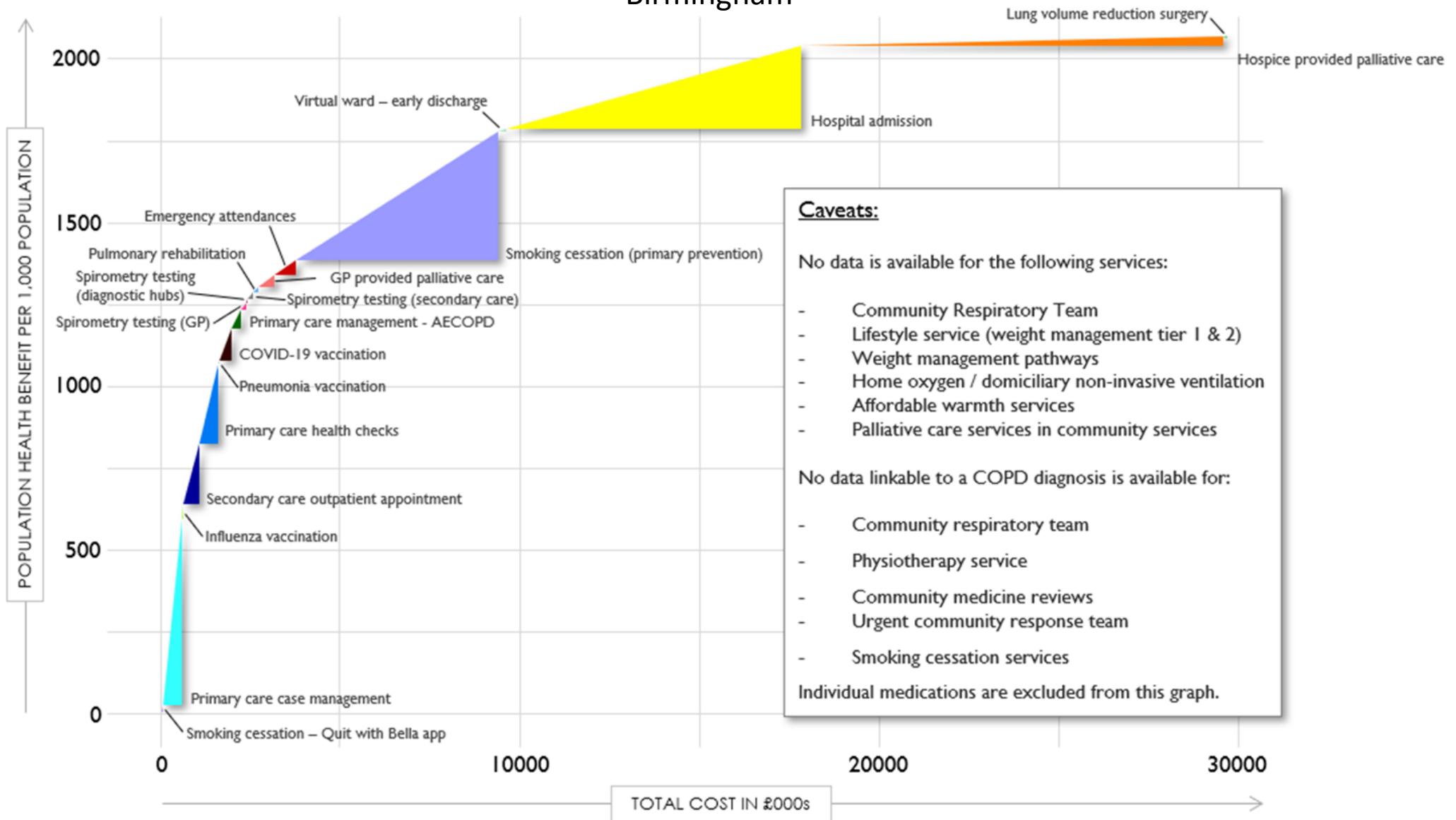


# Process

The project aimed to understand how to increase allocative efficiency of the COPD pathway in Birmingham and Solihull. It was facilitated through the following process:



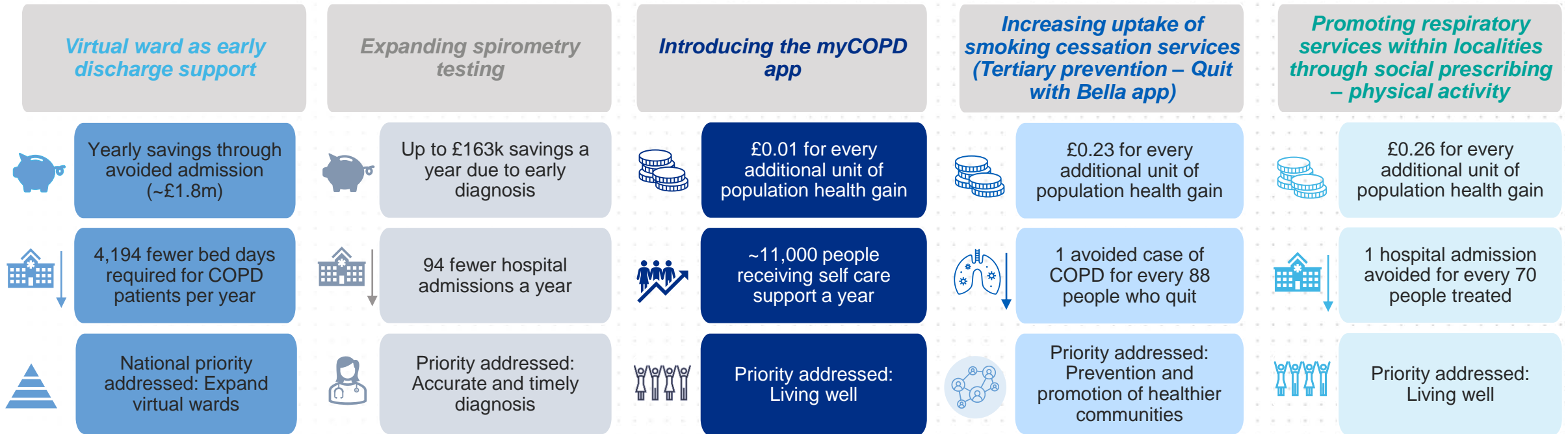
# Birmingham



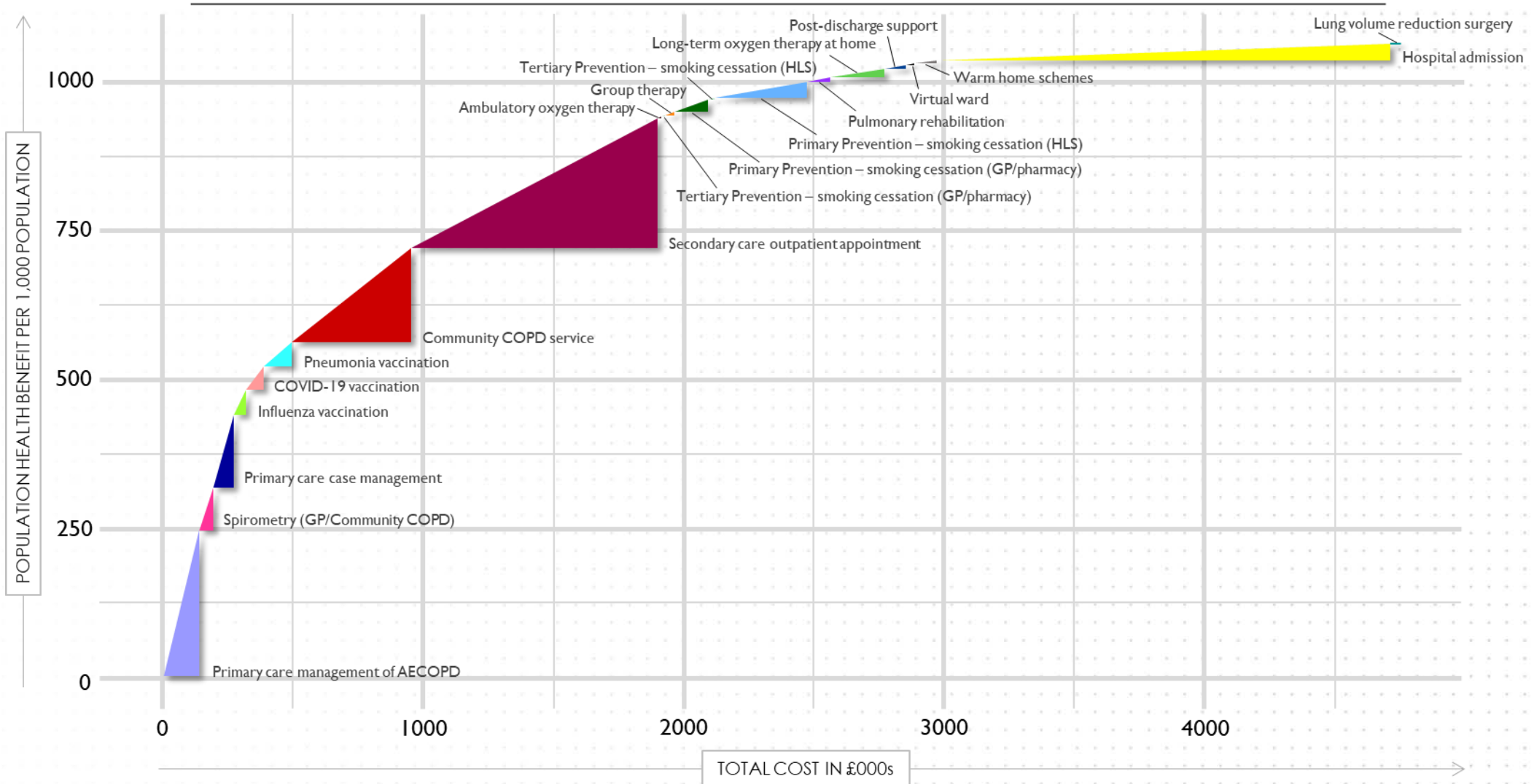
	PRIMARY PREVENTION	SECONDARY PREVENTION/DIAGNOSIS	CASE MANAGEMENT	TERTIARY PREVENTION	MANAGEMENT OF EXACERBATIONS	PALLIATIVE CARE
% of total spend	20.9%	2.5%	3.32%	0.8%	31.5%	41%
% of pop health gain	30.5%	11.2%	36.5%	0.9%	17.9%	3.02%

# Recommendations

The following pathway improvements have been modelled and are recommended for implementation as they are likely to lead to the most health generation per pound spent.



If implemented, these pathway improvements are expected to be cost saving. They are estimated to save ~£1.8m net per year and lead to a 52.46% percentage point increase to population health.



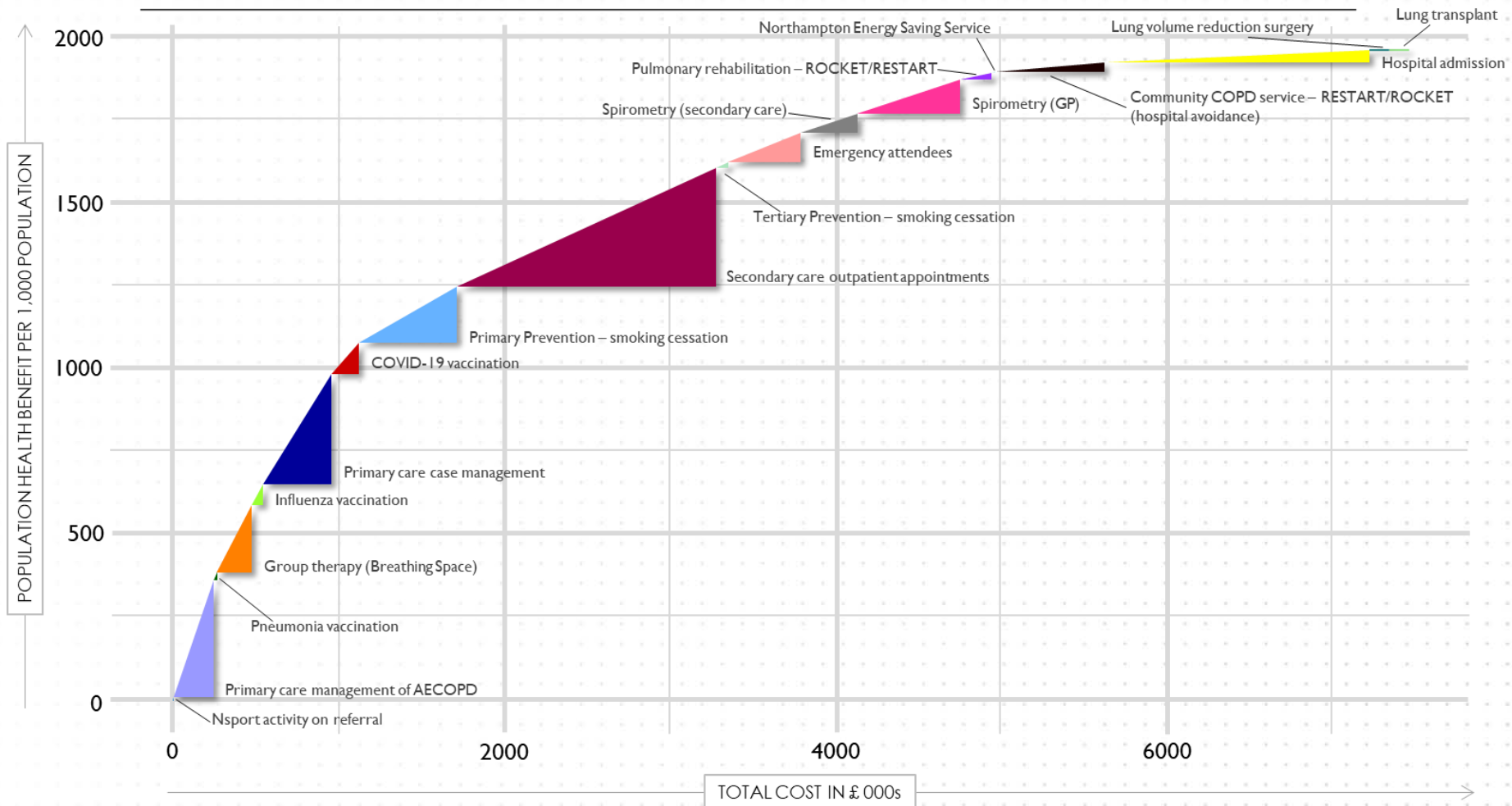
	PRIMARY PREVENTION	SECONDARY PREVENTION	CASE MANAGEMENT	TERTIARY PREVENTION	MANAGEMENT OF AECOPD
% of total spend	10.3%	5.5%	11.3%	30.8%	42%
% of pop health gain	5%	17.9%	26.3%	24.1%	26.6%

# Recommendations for Coventry

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- As a result of this project, it is recommended that the respiratory programme prioritises the following pathway improvements:
  - Expansion of the virtual ward.
  - Joint clinics in primary care with the current establishment of Respiratory Nurse Specialists.
  - Targeting spirometry testing and improving diagnosis
  - An education package for people with COPD.
  - Education in schools against smoking and vaping.
- The estimated savings from the virtual ward, £553,523.40 per year, could save enough to cover most of the additional cost of these improvements if the resource could be freed up

VALUE OF COPD CARE PATHWAY IN NORTHAMPTONSHIRE



	PRIMARY PREVENTION	SECONDARY PREVENTION	CASE MANAGEMENT	TERTIARY PREVENTION	MANAGEMENT OF AECOPD
% of total spend	7.9%	16%	14.4%	31%	30.7%
% of pop health gain	8.7%	17.2%	18.5%	31.1%	24.6%



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# Questions

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<https://healtheconomicsunit.nhs.uk/>