
User guide

Economic modelling tool
for commissioners

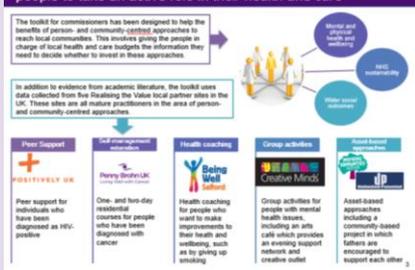
Purpose of this document within package of resources

Impact and cost: summary of the economic modelling tool for commissioners

The programme has shown the benefits of empowering people to take an active role in their health and care

The toolkit for commissioners has been designed to help the benefits of person- and community-centred approaches to reach local commissioners. This involves giving the people in charge of local health and care budgets the information they need to decide whether to invest in these approaches.

In addition to evidence from academic literature, the toolkit uses data collected from five Realising the Value local partner sites in the UK. These sites are all mature practitioners in the area of person- and community-centred approaches.



- Peer support**: Peer support for individuals who have been diagnosed as HIV positive.
- One- and two-day residential courses**: One- and two-day residential courses for people who have been diagnosed with cancer.
- Health coaching**: Health coaching for people who want to make improvements to their health and wellbeing, such as by giving up smoking.
- Group activities**: Group activities for people with mental health issues, including an arts club which provides an evening support network and creative outlet.
- Asset-based approaches**: Asset-based approaches including a community-based project in which fathers are encouraged to support each other.

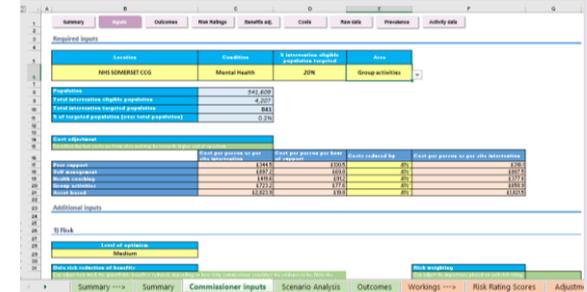
Gives a full introduction to the tool for commissioners, explains how it fits into the context of the Realising the Value programme, and sets out some findings from the tool

User Guide: Economic modelling tool for commissioners



Gives a brief introduction to the tool and explains how commissioners can use it

Downloadable Tool



Location	Population	% Alternative rights payments funded	Area
HSX SOMERSET CCG	Mental health	50%	Group activities

Scenario	Cost per person per year	Cost per person per hour	Quality adjusted by	Cost per person per year (base case)
Base scenario	1,145	1,000	90%	1,035
Peer support	1,145	1,000	90%	1,035
One- and two-day residential courses	1,145	1,000	90%	1,035
Health coaching	1,145	1,000	90%	1,035
Group activities	1,145	1,000	90%	1,035
Asset-based	1,145	1,000	90%	1,035

Enables the exploration of different scenarios for commissioning person- and community-centred approaches for health and wellbeing

Realising the Value resources

All of this is underpinned by the wider suite of [Realising the Value](#) programme resources.

Realising the Value

Over the last 18 months, the Realising the Value consortium has brought together the perspectives of people with lived experience, the voluntary, community and social enterprise (VCSE) sector, practitioners, academics, commissioners, providers and policymakers to consolidate what is known about person- and community-centred approaches for health and wellbeing and make recommendations on how they can have maximum impact. The Realising the Value programme has also developed practical resources to support implementation of these approaches at the frontline. Full details of the resources produced by the Realising the Value programme can be found on the programme [website](#).

Person- and community-centred (P&CC) approaches for health and wellbeing

These encompass a very broad range of practice, ranging from support that complements and enhances clinical care for people with long-term conditions (such as peer support) to everyday community activities that enable people to improve their health and wellbeing (such as a local football team or gardening club). Many of these activities can be enjoyed and engaged in by all citizens, whether or not they have health conditions.

Local partner sites

Five local partner sites supplemented data used in the assessment tool, each broadly covering one type of P&CC approach: 1) Positively UK (peer support); 2) Penny Brohn UK (self-management); 3) Being Well Salford (health coaching); 4) Creative Minds (group activities to promote health and wellbeing); and 5) Unlimited Potential with Inspiring Communities Together (asset-based approaches in a health and wellbeing context)

What is the purpose of this tool?

1

Purpose

What is the purpose of this tool?

2

Setup

How has the tool been set up?

3

User guide

How do I get started?

4

Additional
features

How can I further tailor the results to my local population?

5

Next steps

What next?

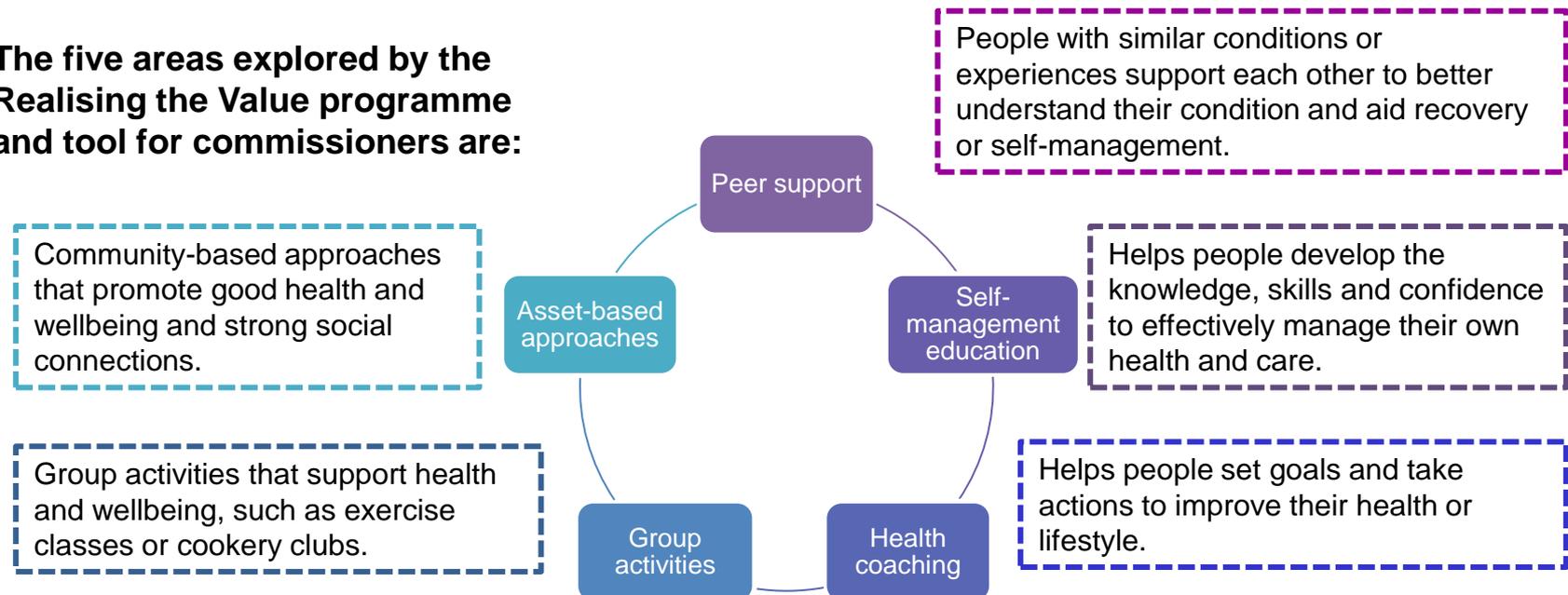
The economic modelling tool for commissioners

As part of Realising the Value, PPL has developed an economic modelling tool for commissioners. The tool consists of an economic model in the form of an Excel spreadsheet, and a user guide which explains how to use the model.

The economic modelling tool has been designed to:

- Help commissioners (the intended users of the tool) evaluate the potential impact of investing in person- and community-centred (P&CC) approaches for health and wellbeing in their local area;
- Give people the opportunity to access and benefit from these approaches in their local area; and
- Facilitate the incorporation of P&CC approaches into commissioning plans, such as Sustainability and Transformation (STP) plans.

The five areas explored by the Realising the Value programme and tool for commissioners are:



How has the tool been set up?

1

Purpose

What is the purpose of this tool?

2

Setup

How has the tool been set up?

3

User guide

How do I get started?

4

Additional
features

How can I further tailor the results to my local population?

5

Next steps

What next?

The model estimates the potential impact of commissioning P&CC approaches

The model estimates the potential impact of commissioning person- and community-centred approaches for health and wellbeing by combining two elements: data which is programmed into the model and variables the commissioner can alter (e.g. their local area and how strong they think the evidence is).

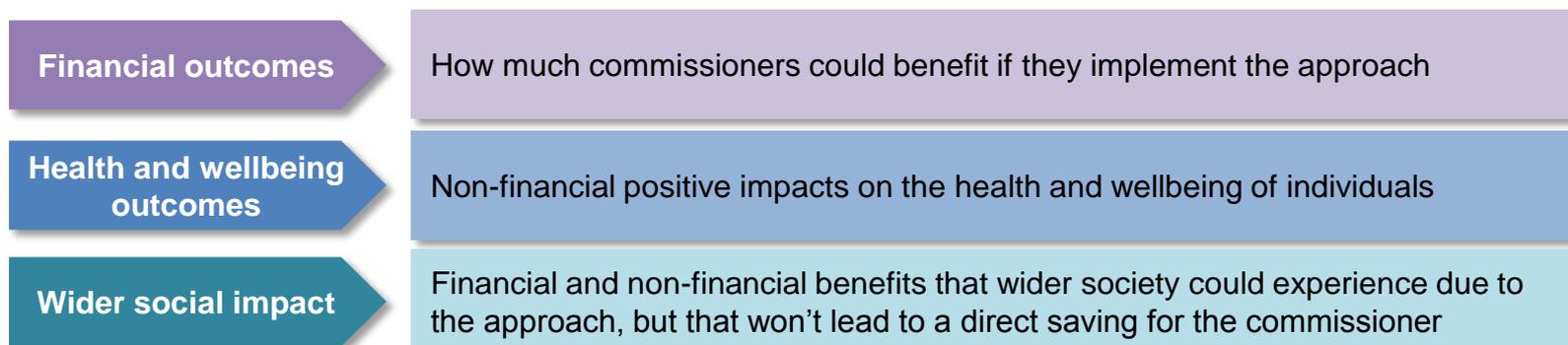


- Population size in each location in England
- How many people have certain conditions in each location
- Evidence for the person- and community-centred approaches
- How much it might cost to offer those approaches
- Data about how much the health/care systems and wider society could benefit by offering those approaches

- The user can select their local area from a drop-down list
- The user can adjust various parts of the model to suit their needs (e.g. approach and condition)

- The model shows how much the health/care systems and wider society could benefit by offering person- and community-centred approaches for specific conditions in specific locations

The model calculates impact across three key areas:



How do I get started?

1

Purpose

What is the purpose of this tool?

2

Setup

How has the tool been set up?

3

User guide

How do I get started?

4

Additional
features

How can I further tailor the results to my local population?

5

Next steps

What next?

The economic model has been designed to be easy to use, with a minimal amount of required input

**1. Select your
CCG**

**2. Select
scenarios to
review**

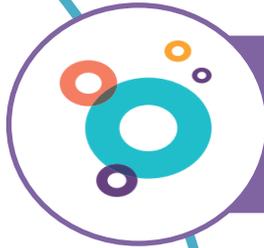
(e.g. commissioning
peer support for people
with mental health
issues)

**3. Review
outputs**

(e.g. costs, benefits,
financial savings)

**4. Use outputs to
inform
commissioning
and planning**

Optional background reading will help you to generate useful and accurate outputs from the tool



Read the final Realising the Value [final report](#), [‘Impact and Cost: Summary of the economic modelling tool for commissioners’](#) and this User Guide

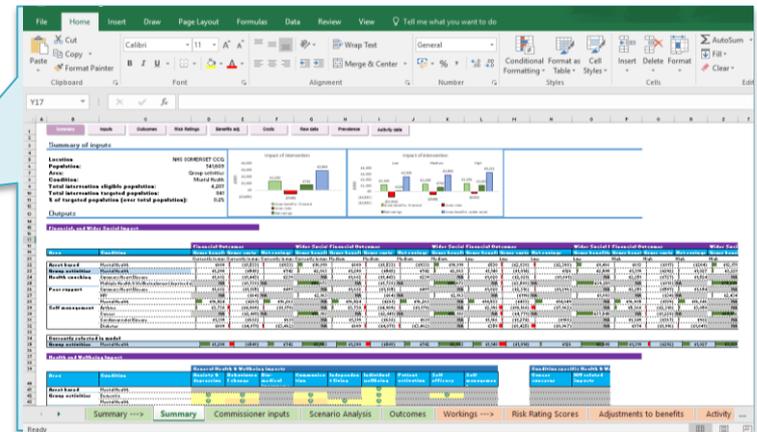
If you have limited time then please prioritise the ‘Impact and Cost’ report and the User Guide. The ‘Impact and Cost’ report explains important caveats about the data and how it can be used.



Gather information about your local area to determine whether P&CC approaches have already been implemented



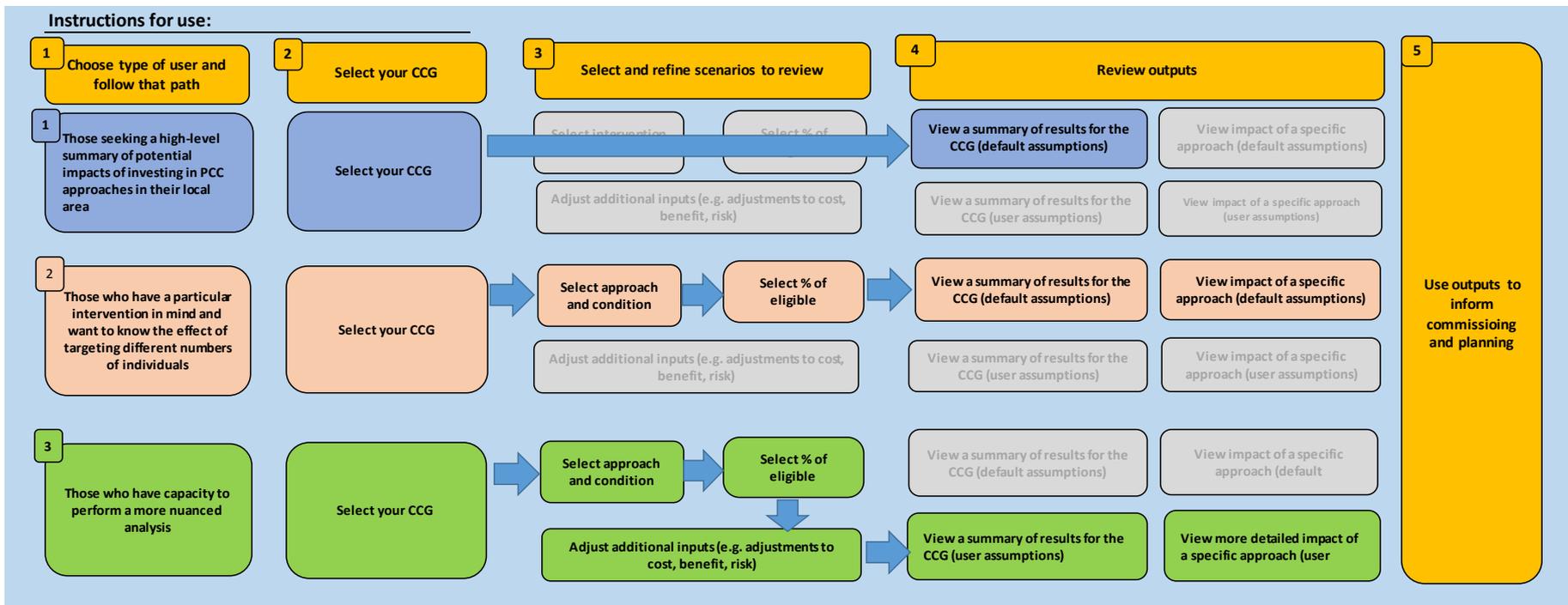
Download the Excel tool from the Nesta website



Start at the 'Introduction and Instructions' tab to select your type of user, and then follow that path

Type of user

- 1 Those seeking a high-level summary of potential impacts of investing in P&CC approaches in their local area
- 2 Those who have a particular approach in mind and want to know the effect of targeting different numbers of individuals
- 3 Those who have capacity to perform a more nuanced analysis and adjust the model's default assumptions based on local knowledge



On the commissioner inputs tab you can select the areas that interest you

Summary

Inputs

Outcomes

Raw data

Return to introduction/
instructions

Summary

Inputs

Outcomes

Raw data

Location	Condition	% approach eligible population targeted	Intervention
NHS SOMERSET CCG	Coronary Heart Disease	15%	Peer support

Population	541,609
Total approach eligible population	21,232
Total approach targeted population	3,185
% of targeted population (over total population)	0.59%

To the left are the required inputs:

- Location
- Condition
- Type of P&CC approach

These are the minimum inputs for the tool to be able to work.

Any cell which is coloured yellow can be changed. There are drop down menus for the required inputs (see below).

5	Location	Condition	% intervention eligible population targeted	Area
6	NHS SOMERSET CCG	Mental Health	20%	Group activities
	<ul style="list-style-type: none"> NHS SOMERSET CCG NHS SOUTH GLOUCESTERSHIRE CCG NHS KERNOW CCG NHS NORTHERN, EASTERN AND WESTERN DEVON CCG NHS SOUTH DEVON AND TORBAY CCG NHS ASHFORD CCG NHS CANTERBURY AND COASTAL CCG NHS DARTFORD, GRAVESHAM AND SWANLEY CCG 	<ul style="list-style-type: none"> Asthma Cancer Diabetes Dementia Depression Mental Health HIV Multiple Health & Wellbeing Issues (deprived areas) 		

Once you have adjusted the required inputs, you can see a summary of benefits

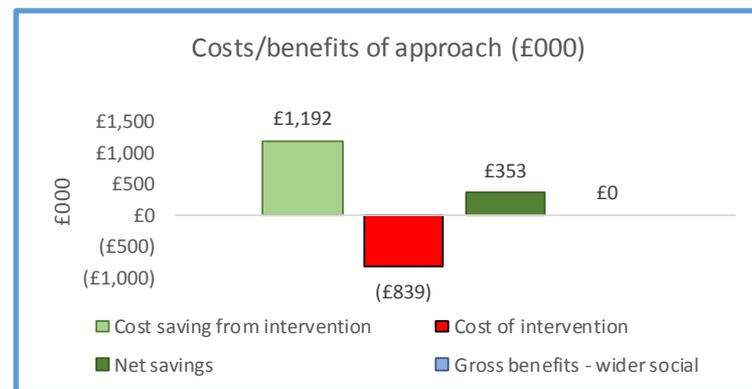
Return to introduction/ instructions | Summary | Inputs | Outcomes | Raw data | Run Scenario

Outcomes

Jump to: Financial Outcomes | Wider Social Impact Outcomes | Health and Wellbeing Outcomes

Summary of Outcomes for:

Location: NHS SOMERSET CCG
Population: 541,609
Approach: Peer support
Condition: Coronary Heart Disease
Total approach eligible population: 21,232
Total approach targeted population: 3,185
% of targeted population (over total p 0.6%



- The image above shows a summary of inputs alongside a summary of the impact of the approach.
- The summary charts show gross financial benefits, gross wider social benefits and gross costs.
- The net saving shown is calculated by subtracting gross costs from gross financial benefits, and does not take into account the potential wider social benefits.
- The benefits are based on low-, medium- and high-impact scenarios (medium-impact is the default setting in the model).
- Commissioners can select one of these scenarios, or they can adjust the settings to their custom requirements.
- There is also a custom setting where commissioners can adjust benefits to their own requirements.

The tool gives a summary of estimated financial and wider social impact benefits

The table below shows how financial and wider social benefits are presented in the summary tab

- The table below shows estimated gross benefits and costs based on a medium-impact scenario. In the model, you can also see estimates for low-, high- or custom-impact scenarios.
- Your selected area and condition will be highlighted in the model.
- The longer the green shading, the greater the gross benefits are estimated to be.
- The longer the red shading, the greater the gross costs are estimated to be.
- NA means the model does not contain evidence for benefits in that scenario (but there may be benefits in reality).

All values in £000	Financial Outcomes			Wider Social Impact outcomes
	Cost saving from approach	Cost of approach	Net savings	Gross benefits
	Medium estimates £000	Medium estimates £000	Medium estimates £000	Medium estimates £000
Asset based	£140	(£639)	(£499)	£18,568
Group activities	Not available	(£609)	Not available	£3,441
Health coaching	£1,192	(£1,533)	(£341)	Not available
Peer support	Not available	(£460)	Not available	£15,887
	£1,192	(£839)	£353	Not available
Self management	Not available	(£81)	Not available	£2,028
	£4,419	(£65)	£4,354	Not available
	£5,259	(£1,666)	£3,593	Not available
	Not available	(£831)	Not available	£57,467
	£999	(£149)	£850	Not available
	£871	(£1,381)	(£511)	Not available

Health and wellbeing benefits are also presented in the summary tab

Below shows how health and wellbeing benefits are presented in the summary tab

- The table shows where there is qualitative or anecdotal evidence for health and wellbeing impacts that cannot currently be quantified or monetised.
- Where there is no evidence recorded, that does not necessarily mean the approach would not have an impact in that area.
- Condition-specific health and wellbeing impacts are shown in a separate table in the model.

Area	Condition	Anxiety & depression	Behavioural change	Bio-medical improvements	Communication	Independent living	Individual wellbeing	Patient activation	Self efficacy	Self management
Asset based	Mental Health						✓			
Group activities	Dementia	✓	✓		✓		✓		✓	
	Mental Health	✓	✓		✓	✓	✓			
Health coaching	Cardiovascular Disease						✓			
	Coronary Heart Disease		✓							
	Diabetes			✓						
	Multiple Health & Wellbeing Issues (deprived areas)		✓				✓		✓	✓
Peer support	Cardiovascular Disease		✓						✓	✓
	Coronary Heart Disease		✓				✓			
	Diabetes			✓						
	HIV	✓	✓		✓		✓	✓	✓	✓
	Mental Health		✓				✓	✓		
Self management	Asthma									
	Cancer		✓				✓	✓		✓
	Cardiovascular Disease			✓						
	Diabetes	✓	✓	✓						
	Mental Health	✓	✓							

Key	
	Data risk measures - green rating
	Data risk measures - yellow rating
	Data risk measures - amber rating
	Qualitative evidence from sites
	Health and wellbeing impact not assessed

The key shows that health and wellbeing impact are rated from green to pink in relation to the robustness of the evidence. More information about risk ratings will be included in the 'additional features' section of this guide.

The outcomes tab shows more detailed evidence than the summary tab

In the outcomes tab you can see detailed information about the financial, wider social, and health and wellbeing impacts which are summarised in the summary tab.

Outcomes

Jump to: [Financial Outcomes](#) [Health and Wellbeing Outcomes](#) [Wider Social Impact Outcomes](#)

Area	Condition	Impact type	Indicator	% Change
Asset based	Mental Health	Service cost reduction	Decrease in service usage (MH services)	-40%
Group activities	Mental Health	Service cost reduction	% of people that reported a reduction in use of primary	-62%
Health coaching	Coronary Heart Disease	Outpatient appointments	Number of CHD appointments	-21%
			Total outpatient appointments	-3%
Peer support	Coronary Heart Disease	Outpatient appointments	Number of CHD appointments	-21%
			Total outpatient appointments	-3%
Self management	Asthma	Bed days reduction	Inpatient hospital bed days reduction	-48%
			Total reduction in bed days (per patient, across 390 pa	-100%
		Inpatient admissions (NEL)	Number of rehospitalisations	-42%
			% experienced an A&E visit a year	-5%
		A&E attendances	1 or more asthma episodes a year requiring an ED or u	-22%
			Mean A&E visits in past 3 months	-38%
			Weighted A&E mean attendances per patient per year	-25%
			Weighted A&E mean attendances per per patient per y	-75%
Bed days reduction	Bed days per subject admitted (reduction)	-67%		
	Inpatient admissions (EL)	mean hospitalisations in past 3 months	-67%	
	mean hospitalisations per patient per year NS	-89%		
	Inpatient admissions (NEL)	numer of urgent health care visits per year	-32%	

Summary ---> | Summary | Commissioner inputs | Scenario Analysis | **Outcomes** | Workings ---> | Risk Rating Scores | Adjustments to benefit

As you can see above, the outcomes tab includes details such as the impact type, indicator used in the study to measure benefits, and the percentage change that was recorded on average in the study. You can scroll to other information such as costs per person and how robust the evidence is believed to be.

How can I further tailor the results to my local population

1

Purpose

What is the purpose of this tool?

2

Setup

How has the tool been set up?

3

User guide

How do I get started?

4

Additional
features

How can I further tailor the results to my local population?

5

Next steps

What next?

In addition to the inputs, you can adjust benefits based on your knowledge and appetite for risk

Required inputs for the model to produce outputs				
Focus of investigation	CCG/LA	Condition	Area (e.g. peer support)	% eligible pop. targeted
	Input	Input	Input	Input

Additional inputs – the model has default assumptions but you can adjust these if you wish			
	Input	Description	Default assumption
Risk	Data risk reduction	Can adjust how much the quantifiable benefit is reduced, depending on how risky they think the evidence is	No reduction
	Adjustment		
Risk	Risk weighting	Can adjust the importance placed on specific risk ratings (e.g. 20% to sample size and 0% to UK-based)	All equally weighted
	Adjustment		
Adjustments to benefits	Deadweight	Reduction to reflect benefits that would have accrued irrespective of the approach	20%
	Adjustment		
	Diminishing returns profile	As more people are targeted by an approach, the less effective it will be (severe cases usually targeted first)	Low/Medium/High
	Adjustment		
Adjustments to benefits	Baseline capacity	Reduction of benefits to reflect existing levels of interventions	Low/Medium/High
	Adjustment		
Cost	Cost efficiency, activity	Commissioner can adjust if they think they can provide the service cheaper than the presumed cost, or provide more//less activity per person (e.g. number of sessions)	Based on evidence from sites
	Adjustment		
Cost	Economies of scale	Reduction to reflect economies of scale of costs as approach targets more people	Low/Medium/High
	Adjustment		

Instructions for changing these more detailed assumptions are found in the 'Introduction and instructions' tab

You can look at the workings behind the model to inform more detailed adjustments

In the risk ratings, benefits adjustments, and costs tabs you can find out the rationale and workings behind the risk ratings and reductions to benefits. If you want to customise the impact settings beyond low, medium and high, you may wish to look at these workings. You can adjust the settings in the yellow cells. Some examples are shown below.

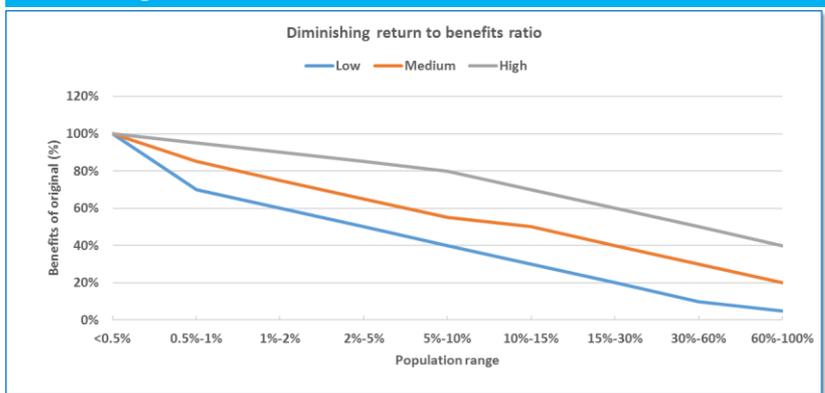
Risk Rating rationale

	UK based study?	Sample size/confidence intervals	Study type and methodology robustness	Year
A	-	Small (165 or less)	SROI evaluation and/or evaluation reports which has not been used before	More than 15 years ago (2000 or earlier)
Y	Non UK	Medium (between 166 and 383)	SROI evaluation and/or evaluation reports which has been used before	4- 15 years ago (2001 - 2013)
G	UK	Large (384 or more)	Randomised Controlled Trial or Case Control study and has been used before	Last 3 years (2014 onwards)

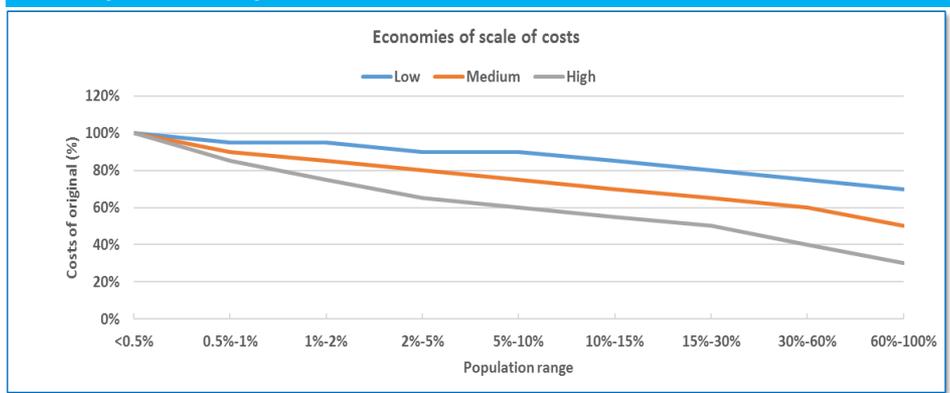
Scenarios

	Medium	Low	High
A	40%	60%	30%
Y	25%	30%	20%
G	10%	15%	2%

Diminishing returns to benefits



Economy of scale adjustment



You may wish to look at the data underlying the tool's estimates

The raw data tab shows which studies were used as evidence in the tool. You can find out information such as who the targeted population was, where the study was conducted and in what year. If you research the study and author you may find more specific information online.

Data table			Intervention Impact		Source				
Area	Condition	Impact type	Author	In Review	Sub population	Age group	Population	Location	
7	Peer support	Coronary Heart Disease	Outpatient appointments	Coull et al (2004)	NA	Ischaemic Heart Disease	>60	inpatients and outpatients over 60 with IHD	UK
10	Peer support	Coronary Heart Disease	Outpatient appointments	Coull et al (2004)	NA	Ischaemic Heart Disease	>60	inpatients and outpatients over 60 with IHD	UK
14	Peer support	Mental Health	Inpatient admissions (NEL)	Sledge et al.,2011(36)	Chinman (2014)			_> 18 yr with major mental illness & hospitalized 3 or more x in the USA	USA
15	Peer support	Mental Health	Bed days reduction	Sledge et al.,2011(36)	Chinman (2014)			_> 18 yr with major mental illness & hospitalized 3 or more x in the USA	USA
21	Peer support	Mental Health	Bed days reduction	Forchuk (2005)	Repper et al (2011)			people with chronic mental illness suitable for discharge	Canada
49	Self management	Asthma	A&E attendances	Brasler 2006	10. Ahmad et al			Children with Ashtma	USA
52	Self management	Asthma	A&E attendances	vJoseph, C.L., 2007	10. Ahmad et al			Children with Ashtma	USA
53	Self management	Asthma	Inpatient admissions (EL)	vJoseph, C.L., 2007	10. Ahmad et al			Children with Ashtma	USA
54	Self management	Asthma	Inpatient admissions (NEL)	Ciutto, 2005	10. Ahmad et al			Children with Ashtma	Canada
55	Self management	Asthma	A&E attendances	Ciutto, 2005	10. Ahmad et al			Children with Ashtma	Canada
57	Self management	Asthma	A&E attendances	Alexander 1988	09. Guevara et al			Children with moderate-severe asthma from low income family	
58	Self management	Asthma	Inpatient admissions (EL)						
60	Self management	Asthma	Bed days reduction	Hughes 1991	09. Guevara et al			Children and adolescents with moderate-severe asthma	Canada
61	Self management	Asthma	A&E attendances	Hughes 1991	09. Guevara et al			Children and adolescents with moderate-severe asthma	Canada
65	Self management	Diabetes	A&E attendances	10:Balamurugan et al(2006 02.	Boren et al			adults with diabetes	USA
66	Self management	Diabetes	Inpatient admissions (NEL)	10:Balamurugan et al(2006 02.	Boren et al			adults with diabetes	USA
67	Self management	Diabetes	GP appointments	10:Balamurugan et al(2006 02.	Boren et al			adults with diabetes	USA
68	Self management	Diabetes	GP appointments	10:Balamurugan et al(2006 02.	Boren et al			adults with diabetes	USA
69	Self management	Diabetes	A&E attendances	11. Berg and Wadhwa(2002 02.	Boren et al			adults with diabetes	USA
70	Self management	Diabetes	Inpatient admissions (NEL)	11. Berg and Wadhwa(2002 02.	Boren et al			adults with diabetes	USA

In the prevalence tab you can find out which data were used to estimate your population size and condition prevalence. If you have access to more recent data or would rather use a different source, you can input that data yourself.

	O	P	Q	R	S	T	U	V	W	X
10			Population size	Cardiovascular Group						
11	CCG Name	Concatenate	2014-15 List Siz	Atrial Fibrillation	Coronary Heart Disease	Cardiovascular disease	Heart Failure	Hypertension	Peripheral Arterial Disease	Stroke
12	NHS EAST RIDING	NHS EAST RIDING CCG	315,725	6,724	14,447	2,047	2,630	50,989	2,311	6,434
13	NHS HAMBLETON	NHS HAMBLETON, P	152,061	3,396	6,021	1,110	1,271	23,024	1,087	3,456

What next?

1

Purpose

What is the purpose of this tool?

2

Setup

How has the tool been set up?

3

User guide

How do I get started?

4

Additional
features

How can I really tailor the results to my local population?

5

Next steps

What next?

As more people commission P&CC approaches, the evidence base can be enhanced

Person-and community-centred approaches for health and wellbeing are a new and innovative area of research and practice. This means that the evidence base is currently less mature than it is for other, more traditional disciplines.

However, the evidence base is growing. There is good evidence that the approaches do improve people’s wellbeing and can benefit the health and care systems in the short and long term. The Realising the Value programme offers an exciting opportunity to expand the evidence further and allow us to better understand the positive and negative impacts of implementing these approaches in the UK.

It will be easier to collate emerging evidence in the future if commissioners and providers evaluate the approaches in a consistent way, measuring similar outcomes.

We recommend measuring:

-  Cost per person (per session and overall approach)
-  Health and wellbeing outcomes, plus associated savings where possible
-  Financial savings to the system, over one year and a longer period, and which systems benefited
-  Any wider social impacts (participants might report that they gained employment following the approach, for example)
-  Any negative impacts from the approaches (such as increase in GP appointments or increased stress among peer supporters)

Specific outcomes to consider measuring include:

Financial Impacts	Health and Wellbeing Impacts
Non-elective admissions, in-patient admissions	Self-efficacy, patient activation, QALY gain
Service usage, appointments	Specific health measures (e.g. blood glucose level)
Rehospitalisations, A&E visits, bed days	Smoking, BMI, exercise, depression, wellbeing score
Wider Social Impacts	
Social connectedness, confidence	School and work attendance, parent engagement
Employment, volunteering	Alcohol and drug use