

Whole Systems Integrated Care

Modelling Overview

November 2013



MODEL OVERVIEW

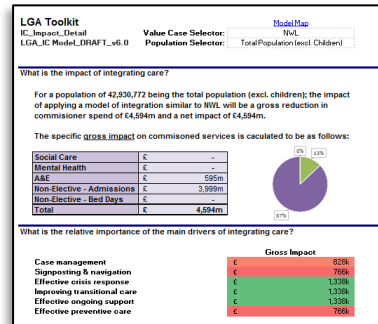


The purpose of the model is to help commissioners understand the financial benefits of implementing integrated care

- The model consists of two linked tools – a **value case calculator** and a **benefits map**. Each tool addresses a specific commissioning question:

Which tool should I use?

What are the financial benefits of Integrated Care?



Value case 'calculator'

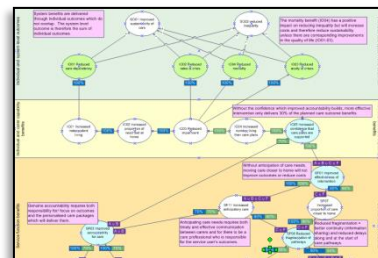
What will the tool tell me?

- Financial benefits** of integrated care across the local health economy.
- The relative** contribution to total financial benefit of different elements of integrated care.

What can I use that information for?

- Prioritise** the elements of Integrated Care that deliver the biggest benefits.
- Contribute** to robust, properly costed integrated care business cases.
- Communicate** the financial value of integrated care in a way that is easy to understand.

What needs to happen to achieve the benefits?



Benefits map

- Which interventions** are needed to deliver agreed financial and non-financial benefits;
- How these interventions needed to deliver integrated care **relate to each other**; and
- The proportion of the benefit** attributable to each intervention.

- Check** the extent to which existing services deliver the intended benefits.
- Identify** potential areas of overlap duplication.
- Address** gaps in support and provision.

The model is specifically designed to be used by commissioners of health and social care services

Who developed the model?

Design group consisting of representatives from...

Local Government Association

NHS England

Association of Directors of Adult Social Services

Public Health England

Department of Health

What process was followed?

Structured programme involving Monitor and representative LAs...

Co-design with LGA and National Collaborative

Review by Steering Group and others

Unit testing with selected sites

Wider Testing v ia WebEx

Feedback & iteration

Who will the model be used by?

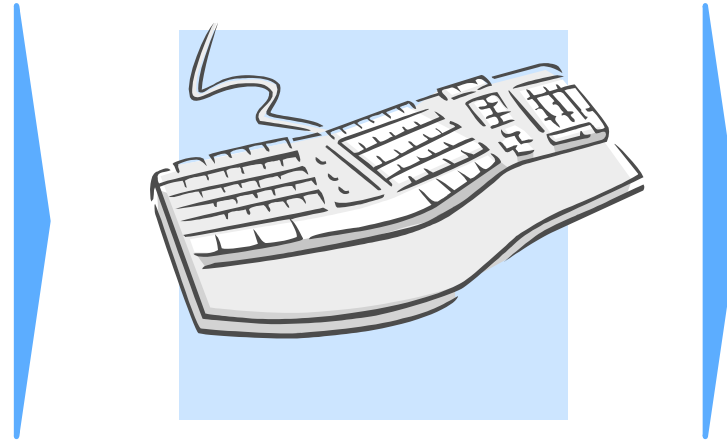
Local commissioners of health and social care services including...

Health & Wellbeing Boards

CCGs

Local Authorities

The value case calculator works by applying results achieved elsewhere to a commissioner's local circumstances



“If we achieved the same results as Torbay, we could potentially save...”

**Input ‘value cases’
quantifying impact of
Integrated Care initiatives
that have already been
delivered**

Input local commissioning data:

- Activity
- Population by risk and cohort
- Funds to be invested on integration of services

**Apply impact described
in value cases to local
circumstances in order
to identify potential
financial benefits**

The benefits map uses published research on integrated care to link service interventions with benefits in a way that is quantifiable

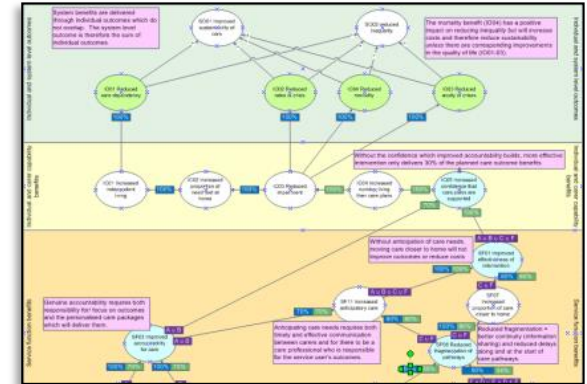
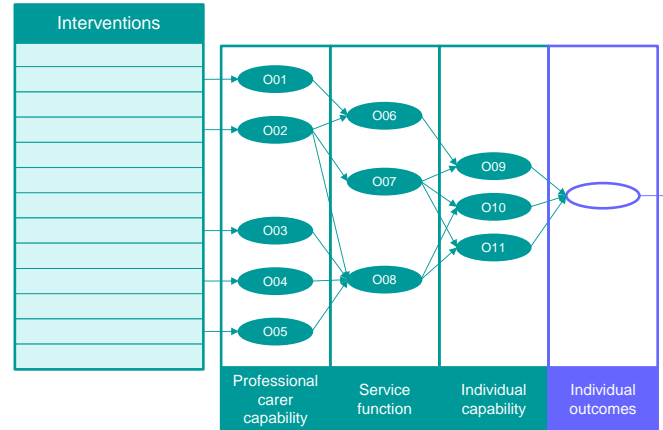
BMJ

Meta-analysis of published research into the impact of Integrated Care on health outcomes.

Douglas, B. and Scrivener, Q. 2011

Abstract:

This report sets out the results of a
 This report sets out the results of a
 This report sets out the results of a



Collect published research on the impact of Integrated Care service interventions

Aggregate research findings into logic model:

- Link specific interventions with specific benefits
- Quantify linkages on a 'dis-benefits' basis (i.e. If you are unable to do X, you will lose Y% of your intended benefit)
- Input, review and iteration by senior advisors and national partners

Use benefits map to identify and prioritise interventions needed to deliver integrated care:

- Benefits from existing services
- Gaps in existing provision
- Duplication in existing provision
- Investment priorities

The value case calculator summarises the impact that implementing a particular model of integrated care may have on your local area

What is the impact of integrating care?

For a population of 42,930,772 being the total population (excl. children); the impact of applying a model of integration similar to NWL will be a gross reduction in commissioner spend of £4,594m and a net impact of £4,594m.

The specific gross impact on commissioned services is calculated to be as follows:

Social Care	£	-
Mental Health	£	-
A&E	£	595m
Non-Elective - Admissions	£	3,999m
Non-Elective - Bed Days	£	-
Total	£	4,594m



What is the relative importance of the main drivers of integrating care?

Case management
Signposting & navigation
Effective crisis response
Improving transitional care
Effective ongoing support
Effective preventive care

	£	Gross Impact
Case management	£	828k
Signposting & navigation	£	766k
Effective crisis response	£	1,338k
Improving transitional care	£	1,338k
Effective ongoing support	£	1,338k
Effective preventive care	£	766k

There are two key outputs from the value case calculator:

Integrated Care Impact Overview

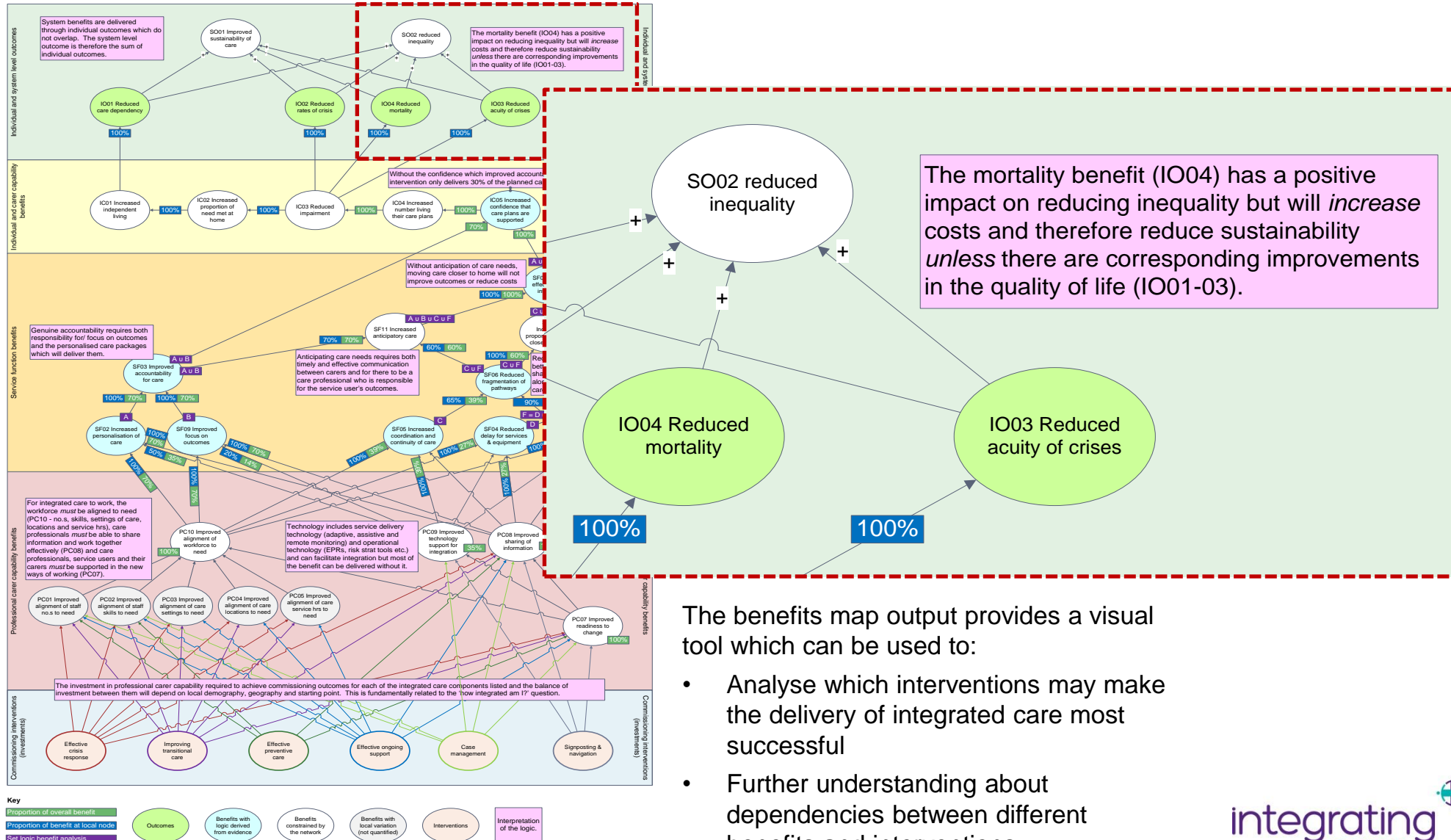
- Summarises the key impact calculated by the model
- Illustrates the relative importance of the main drivers of integrated care using a colour coding system

Integrated Care Impact Detail

- As above, with specific financial breakdown by type of saving

Activity Units	FY 12/13										
	NWL	Activity	Cost	High		Med/Low		Total			
				Activity	Cost	Activity	Cost	Activity	Cost		
Reduced rates of crisis											
Social Care	#Weeks	0%	-	£	-	-	£	-	-	£	-
Mental Health	# Admissions	0%	-	£	-	-	£	-	-	£	-
A&E	# Attendances	30%	4,387,307	£	491,378k	660,739	£	74,003k	264,296	£	29,601k
Non-Elective - Admissions	# Admissions	15%	1,609,486	£	3,302,666k	242,393	£	497,389k	96,957	£	198,956k
Non-Elective - Bed Days	# Days	0%	-	£	-	-	£	-	-	£	-
Total				£	3,794,045k		£	571,392k		£	228,557k
										£	4,593,994k

The benefits map visually links the value in individual outcomes from the evidence base to the interventions which will deliver them



The mortality benefit (IO04) has a positive impact on reducing inequality but will *increase* costs and therefore reduce sustainability *unless* there are corresponding improvements in the quality of life (IO01-03).

The benefits map output provides a visual tool which can be used to:

- Analyse which interventions may make the delivery of integrated care most successful
- Further understanding about dependencies between different benefits and interventions

The main benefit for HWB members is a better insight into which Integrated Care services should be commissioned and why

BENEFITS

For commissioners...

Commissioning Decisions

- Clear understanding of which services need to be in place to deliver Integrated Care benefits

Specifying services

- Input into the content of service specifications, such that benefits realisation is more likely

Financial benefits

- Understanding the financial impact of Integrated Care interventions
- Prioritising possible interventions on the basis of anticipated financial benefits

For providers

More clarity from commissioners

- Clear articulation of what outcomes they are expected to deliver
- Specific set of Provider Outcomes (Professional Carer Capability benefits) incorporated into the benefits map

Operating model design

- Better understanding of how to design a service that will deliver the intended outcomes (what providers need to do, who they need to work with, how performance should be measured).

For service-users...

Improved clinical outcomes

- Integrated Care services in place that are more likely to deliver clinical benefits

Greater transparency

- Clear rationale for why services are being commissioned or re-specified, and how this benefits service-users

The model is based on current activity and costs and is therefore unable to project future benefits

When using the model, the following caveats should be considered:

- The model is a year of care activity and cost model – it does not attempt to project future benefits
- The model excludes children
- This model should be used in conjunction with the named Value Cases
- The output should be treated as an indication or guide to determine the localised impact of different models of integration
- The relative importance of the main drivers of integrated care is based on findings from available evidence and sensible assumptions where appropriate (these assumptions have been documented and are included in the model)
- It is anticipated that the minimum dataset to produce valid results will be 50,000 – 100,000 population
- The model will indicate where investment needs to be and will not calculate the absolute benefits which will need to be determined by each local authority

QUICK USER GUIDE



How to use the model: Select your locality and value case to apply

PLEASE SELECT YOUR LOCALITY:

England

The Outcome model will pre-populate with the best available estimates for your local area. We are providing these as a starting point for convenience and recommend they are replaced with more accurate local data. The default setting shows data for all England.

PLEASE SELECT A VALUE CASE:

NWL

The Outcomes Model provides an illustration of the impact of a similar service model to the Value Case in question within your locality.

Alternatively, you can use the Outcomes Model to assess the impact of a proposed service model. To activate this option please check the tick box below:

Enable Custom Service Model

PLEASE NOTE:

- This model should be used in conjunction with the named Value Cases
- The output should be treated as an indication or guide to determine the localised impact of different models of integration.
- The benefits map is based on findings from available evidence and sensible assumptions where appropriate

End of sheet

Cover

NOTE: The model is a year of care activity and cost model – it does not attempt to project future benefits

Select your locality or “England” to pre-populate the model with relevant data

Select the value case whose outcomes you would like to apply to the your locality

To override the value case outcomes and input your own value select this check box (*Refer to detailed instructions in model*)

- worksheet/tab selected

Note: These screen shoots are subject to change following cosmetic changes being implemented by Ben Hickman of the LGA

How to use the model: Input local investment costs

LGA Toolkit [Model Map](#)
Cover
LGA_IC Model_DRAFT_v8 0

What does this worksheet do?

- The worksheet is an input sheet which captures any investment in services which have enabled intergration of services
- This worksheet should be populated manually with your local data
- For more detailed instructions please refer to Model User Instructions

Investment in Services	Source	Units	FY 12/13
Primary Care	10	£'000	£0
Community	10	£'000	£0
Others	10	£'000	£0

End of sheet

Navigation: User Inputs >> | Activity_Inputs | Population_Inputs | **Investment_Inputs** (+)

Input any investment in services related to integrating services

Note: These screen shoots are subject to change following cosmetic changes being implemented by Ben Hickman of the LGA

Local Override: Health & Care Activity

LGA Toolkit

[Model Map](#)

Cover
LGA_IC Model_DRAFT_v8 0

What does this worksheet do?

- The worksheet is an input sheet which captures all activity and cost data for the local authority
- This worksheet can be either pre-populated with publically available data for your locality or manually with your local data
- For more detailed instructions please refer to Model User Instructions

Total Activity	Source	Units	Older People	Other Adults	FY 12/13
Social Care					
Care Home	<i>Ex</i>	#Weeks	6,791,142	362,774	7,153,916
Nurse Home	<i>Ex</i>	#Weeks	2,869,362	2,437,714	5,307,076
Domiciliary Care	<i>Ex</i>	#Weeks	224,745	71,555	296,300
Others	<i>Ex</i>	#Weeks	146,390	133,795	280,185
Mental Health					
MH Inpatient	<i>Ex</i>	# Admissions			108,245
A&E					
A&E Attendance	<i>Ex</i>	# Attendances			17,168,824
Non-Elective - Admissions					
Non-elective Admission	<i>Ex</i>	# Admissions			7,258,580
Non-Elective - Bed Days					
Non-elective Bed Days	<i>Ex</i>	# Days			36,833,507

Pre-populated figures can be over ridden, with Social Care split into Older People and Other Adults

Pre-populated figures can be over ridden

Local Override: Health & Care Unit Costs

LGA Toolkit [ModelMap](#)
 Cover
 LGA_IC Model_DRAFT_v8 0

Costs per unit of Activity	Source	Units	Older People	Other Adults	FY 12/13
Social Care					
Care Home	/x/	€	£522	£866	£1,389
Nursing Home	/x/	€	£519	£1,153	£1,672
Domiciliary Care	/x/	€	£177	£15,762	£15,939
Others	/x/	€	£4,958	£13,347	£18,305
Mental Health					
MH Inpatient	/x/	€			£108,245
A&E					
A&E Attendance	/x/	€			£112
Non-Elective - Admissions					
Non-elective Admission	/x/	€			£2,052
Non-Elective - Bed Days					
Non-elective Bed Days	/x/	€			£649

End of sheet

User Inputs >> **Activity Inputs** Population_Inputs Investment_Inputs +

Pre-populated figures can be overridden, with Social Care split into Older People and Other Adults

Pre-populated figures can be overridden

Note: These screen shoots are subject to change following cosmetic changes being implemented by Ben Hickman of the LGA

Local Override: Population

LGA Toolkit

[Model Map](#)

Cover
LGA_IC Model_DRAFT_v8 0

What does this worksheet do?

- The worksheet is an input sheet which captures the total population/services users of the local authority excl. children
- This worksheet can be pre-populated either with publically available data for your locality or manually with your local data
- For more detailed instructions please refer to Model User Instructions

	Source	Units	FY 12/13		
			Very High Top 5%	High 10% - 15%	Med/Low 75% - 80%
Service Users					
Elderly (> 65)	<i>13</i>		280,806	702,015	4,633,301
Adult (25 - 64)	<i>13</i>		1,402,228	3,505,569	23,136,758
Young Adult (17 - 24)	<i>13</i>		452,825	1,132,064	7,471,619

Figures are prepopulated from ONS and can be over ridden here

End of sheet

Note: These screen shoots are subject to change following cosmetic changes being implemented by Ben Hickman of the LGA

For more detailed instructions please refer to the model

LGA Toolkit

[Model Map](#)

Cover

LGA_IC Model_DRAFT_v8.0_FOR GUIDE

What does this model do?

1. Calculates potential impacts of integration, as defined by the Value Cases, for a given local health and care economy
2. Allows for customisation based on local assumptions in effect a local Value Case
3. Identifies the relative importance of the investment areas or main drivers in integrated care (i.e. in order to achieve the value)

Assumptions & Scope

- This model is a year of care activity and cost model
- This model can be used at a local authority level or at a national level
- The model excludes children. Therefore, the population in scope for the model is Elderly (> 65), Adults (25 - 64) and Young (0 - 24)
- The Benefits Map is currently populated at a national level
- The Benefits Map assumes that 100% of the benefit integrated care is available. Therefore, any benefit which has already been met is not included in the model
- The model excludes elective acute activity and primary care

General Instructions

- All **User Inputs** are for the year FY12/13. They are currently populated with national/local data
- All **User Inputs** should be all activity and costs for the population in scope

Instructions - How to input local model of integration?

1. Go to worksheet **Cover**
2. Enable the tick box **Enable Custom Service Model**
3. Go to worksheet **Impact_Local**
3. Select the population the service model applies to in the **Population Selector**
4. Enter the % impact on each service for each outcome of integrated care
5. Refer to the **Assumptions >>** for further information

For more detailed instructions and assumptions please refer to the “Model User Instructions” tab in the model

