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:

**What are the financial benefits of Integrated Care?**

- **Value case ‘calculator’**

**What needs to happen to achieve the benefits?**

- **Benefits map**

**Which tool should I use?**

**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.

- **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 via 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.

Integrated Care value case: Torbay
We did: xxx
The impact was: xxx

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.

“If we achieved the same results as Torbay, we could potentially save…”
The benefits map uses published research on integrated care to link service interventions with benefits in a way that is quantifiable.

Collect published research on the impact of Integrated Care service interventions

Aggregator 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

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
meta-analysis of published research into the impact of Integrated Care on health outcomes.
Douglas, B. and Scrivener, Q.
2011
The value case calculator summarises the impact that implementing a particular model of integrated care may have on your local area.

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

---

### What is the impact of integrating care?

For a population of 42,933,772 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:

<table>
<thead>
<tr>
<th>Service</th>
<th>Activity Costs</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Care</td>
<td>£</td>
<td>-</td>
</tr>
<tr>
<td>Mental Health</td>
<td>£</td>
<td>-</td>
</tr>
<tr>
<td>A&amp;E</td>
<td>£ 595m</td>
<td></td>
</tr>
<tr>
<td>Non-Elective - Admissions</td>
<td>£ 3,999m</td>
<td></td>
</tr>
<tr>
<td>Non-Elective - Bed Days</td>
<td>£</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>£ 4,594m</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Case Management</th>
<th>Gross Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case management</td>
<td>£ 828k</td>
</tr>
<tr>
<td>Signposting &amp; navigation</td>
<td>£ 765k</td>
</tr>
<tr>
<td>Effective crisis response</td>
<td>£ 1,333k</td>
</tr>
<tr>
<td>Improving transitional care</td>
<td>£ 1,333k</td>
</tr>
<tr>
<td>Effective ongoing support</td>
<td>£ 1,333k</td>
</tr>
<tr>
<td>Effective preventive care</td>
<td>£ 765k</td>
</tr>
</tbody>
</table>

### Reduced rates of crisis

<table>
<thead>
<tr>
<th>Service</th>
<th>Activity</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Care #Weeks</td>
<td>0%</td>
<td>£</td>
</tr>
<tr>
<td>Mental Health #Admissions</td>
<td>0%</td>
<td>£</td>
</tr>
<tr>
<td>A&amp;E #Attendance</td>
<td>30%</td>
<td>£ 4,387,307</td>
</tr>
<tr>
<td>Non-Elective - Admissions</td>
<td>#Admissions</td>
<td>15%</td>
</tr>
<tr>
<td>Non-Elective - Bed Days</td>
<td>#Days</td>
<td>0%</td>
</tr>
</tbody>
</table>
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

---

Copyright ©2013 Integrating Care & the Local Government Association
The main benefit for HWB members is a better insight into which Integrated Care services should be commissioned and why

<table>
<thead>
<tr>
<th>BENEFITS</th>
<th>For commissioners…</th>
<th>For providers</th>
<th>For service-users…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commissioning Decisions</td>
<td>• Clear understanding of which services need to be in place to deliver Integrated Care benefits</td>
<td><strong>More clarity from commissioners</strong></td>
<td><strong>Improved clinical outcomes</strong></td>
</tr>
<tr>
<td>Specifying services</td>
<td>• Input into the content of service specifications, such that benefits realisation is more likely</td>
<td>• Clear articulation of what outcomes they are expected to deliver</td>
<td>• Integrated Care services in place that are more likely to deliver clinical benefits</td>
</tr>
<tr>
<td>Financial benefits</td>
<td>• Understanding the financial impact of Integrated Care interventions</td>
<td>• Specific set of Provider Outcomes (Professional Carer Capability benefits) incorporated into the benefits map</td>
<td><strong>Greater transparency</strong></td>
</tr>
<tr>
<td></td>
<td>• Prioritising possible interventions on the basis of anticipated financial benefits</td>
<td>• 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).</td>
<td>• Clear rationale for why services are being commissioned or re-specified, and how this benefits service-users</td>
</tr>
</tbody>
</table>
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:

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

Please select a value case:

The Outcome 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 based on findings from available evidence and sensible assumptions where appropriate

End of sheet

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

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 your locality

To override the value case outcomes and input your own value select this check box (Refer to detailed instructions in model)
How to use the model: Input local investment costs

Input any investment in services related to integrating services

<table>
<thead>
<tr>
<th>Service</th>
<th>Source</th>
<th>Units</th>
<th>FY 12/13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Care</td>
<td>£000</td>
<td>£0</td>
<td></td>
</tr>
<tr>
<td>Community</td>
<td>£000</td>
<td>£0</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>£000</td>
<td>£0</td>
<td></td>
</tr>
</tbody>
</table>

Note: These screen shots are subject to change following cosmetic changes being implemented by Ben Hickman of the LGA
Local Override: Health & Care Activity

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.

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

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

Note: These screen shoots are subject to change following cosmetic changes being implemented by Ben Hickman of the LGA.
### Local Override: Health & Care Unit Costs

#### LGA Toolkit

<table>
<thead>
<tr>
<th>Costs per unit of Activity</th>
<th>Source</th>
<th>Units</th>
<th>Older People</th>
<th>Other Adults</th>
<th>FY 12/13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Care Home</td>
<td>/\</td>
<td>£</td>
<td>£522</td>
<td>£866</td>
<td>£1,389</td>
</tr>
<tr>
<td>Nursing Home</td>
<td>/\</td>
<td>£</td>
<td>£519</td>
<td>£1,153</td>
<td>£1,672</td>
</tr>
<tr>
<td>Domiciliary Care</td>
<td>/\</td>
<td>£</td>
<td>£177</td>
<td>£15,762</td>
<td>£15,939</td>
</tr>
<tr>
<td>Others</td>
<td>/\</td>
<td>£</td>
<td>£4,958</td>
<td>£13,347</td>
<td>£18,305</td>
</tr>
<tr>
<td>Mental Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MH Inpatient</td>
<td>/\</td>
<td>£</td>
<td></td>
<td></td>
<td>£108,245</td>
</tr>
<tr>
<td>A&amp;E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A&amp;E Attendance</td>
<td>/\</td>
<td>£</td>
<td></td>
<td></td>
<td>£112</td>
</tr>
<tr>
<td>Non-Elective – Admissions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-elective Admission</td>
<td>/\</td>
<td>£</td>
<td></td>
<td></td>
<td>£2,052</td>
</tr>
<tr>
<td>Non-Elective – Bed Days</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>£549</td>
</tr>
<tr>
<td>End of sheet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

LGA Toolkit

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

<table>
<thead>
<tr>
<th>Service Users</th>
<th>Units</th>
<th>FY 12/13</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Very High Top 5%</td>
</tr>
<tr>
<td>Elderly (&gt; 65)</td>
<td>[a]</td>
<td>280,806</td>
</tr>
<tr>
<td>Adult (25 – 64)</td>
<td>[a]</td>
<td>1,402,228</td>
</tr>
<tr>
<td>Young Adult (17 – 24)</td>
<td>[a]</td>
<td>452,825</td>
</tr>
</tbody>
</table>

End of sheet

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

Copyright ©2013 Integrating Care & the Local Government Association
For more detailed instructions please refer to the model

LGA Toolkit
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 calculated impacts).

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 Younger (18-24).
- 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 achieved is not counted.
- 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.
4. Select the population the service model applies to in the Population Selector.
5. Enter the % impact on each service for each outcome of integrated care.
6. Refer to the Assumptions for further information.

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

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