#4 INDICATOR NAME: "The average cost of new Interventions (during & for up to 3 months after)"*

(*there are two possible versions of this indicator that have been explored with different local authorities. The first is more accurate, the second is probably easier to calculate)

RATIONALE

This indicator measures the average total cost (for **new people only**) of support provided over a period of time both during the conversations and for 3 months follow-up after the conversations end. It doesn't include staff costs but does include temporary and one-off support provided in C1 and C2. The spend in C1 and C2 does add up, so the point of the measure is to test that if Conversation 1 and 2 work well, the higher costs associated (especially with C2) are still lower than the previous way of working when averaged *per intervention*.

It measures the average cost of supporting every new person who requests support.

In the previous way of working it may have been that more interventions led to long term support via a Care Act assessment, the equivalent of Conversation 3. Although hopefully far fewer conversation 3s take place now and fewer people get Care Act eligible support, to what extent are the cost benefits of this offset by the higher spending in C1 and C2 ?

Follow-up: X must be large enough any Care Act eligible support has been put in place and the initial costs of that support can be captured from the system.

ASSUMPTION: a small increase in costs at Conversations 1&2 should reduce the overall intervention cost per person

VERSION A – Accurate but more complex

NUMERATOR

The total non-staffing costs of all interventions completed in the period, during all Conversation steps (e.g. credit card spend in Conversation 1, short term services arranged in Conversation 2, Care Act eligible support arranged following Conversation 3) for all people who were New at the beginning of the intervention, followed up for X months after the end of each intervention, i.e. when the final conversation step is completed. For example, for an intervention progressing to Conversation 3, the Care Act eligibility of the person is recorded and the step is signed off/finalised on the system, ending the intervention.

DENOMINATOR

The count of all interventions for new people completed in the period.

WORKED EXAMPLE

Focussing on one innovation site that ran for 12 weeks, a follow-up period ("X") was also set at 12 weeks. The innovation site completed 300 interventions for new people during the 12 weeks. To allow 12 weeks of follow-up after each intervention, the results cannot be calculated until more than 24 weeks have passed since the innovation site started (i.e. 3 months after the last intervention concluded).

Repeat interventions (a second or subsequent conversation starting up not connected to the original conversation) for people during the innovation period are included.

To take one person as an example, Mr H had two interventions during the three-month period. The first was at Conversation 1 only and there was £75 of credit card spend associated. The total cost of that intervention was £75 (staffing costs are ignored).

The second intervention (still during the 12 week innovation period) had no spend in C1 but went to Conversation 2 and involved short term services for 4 weeks at a total cost of £1000. Following this a Conversation 3 resulted in Care Act eligible support. After this was signed off, the 12-week follow-up included £200/week of support which started at the beginning of week 2. This continued until the start of week 10, when care increased to £300/week, until the end of week 12 when the follow-up ends.

The costs are worked out as;

£1000 + £200x8 + £300x3 = £3500 for this intervention.

So far we have two interventions (on the same person) adding up to;

£75 + £3500 = £3575 (average cost per intervention = £1787.50

These would then be added to the costs of all the other interventions for new people during the initial 12 weeks and during the 12-week follow-up.

The average cost of all these interventions is then taken, to give the *average cost of intervention*. To fully interpret this result, it should be compared against a baseline.

DATA QUALITY

Obviously, long term care arrangements may continue for much longer than 12 weeks or end quickly. The aim of setting "X" at 12 weeks is not to capture the entire costs of care over someone's lifetime but instead to give an idea of how much expenditure is involved and how this compares to a fair comparison group. The measure is something like the "initial cost of intervention" associated with all new people. The measure isn't intended to give a precise measurement of cost-avoidance, though it gives a clearer idea of whether any cost avoidance may actually be taking place. Any subsequent interventions (when the person is "known") and subsequent changes to their care package can be picked up in the measures on known people, to follow in this document.

If the previous way of working used for the comparison group involved long delays in people receiving support following a Care Act assessment then a 12-week follow-up window may be too short to pick up any initial costs of that long term care, which might make the average costs per intervention look low in the comparison group and much higher in the 3Cs group (that is working more quickly to put in what's needed).

Choosing a suitable follow-up period is therefore very important and may in prevent this measure being used if "X" needs to be longer than a few months. If X is too large, costs not necessarily associated with the initial intervention will start to be captured, e.g. in response to a carer breakdown or if the person has a fall. It would be better if these costs were captured in the measures for known people rather than this one.

Care must be taken in determining whether someone should be counted as "new" or "known". We are only interested in interventions for new people.

VERSION B – Less Accurate but more straightforward

We can use the 'Conversion Rate' (Measure #2 in this document) to estimate possible cost avoidance if we combine it with;
- The number of requests for support in the period
- The average cost of long-term care in the period

CALCULATION METHOD GIVEN IN WORKED EXAMPLE

This example uses a full year of data although shorter periods can be used.
Last year there were 1000 calls (requests) through our front door team and our conversion rate was 30% - i.e. 300 people received Care Act eligible support.

This year there were 1500 calls (requests) – the team has been so much busier!
The conversion has dropped though to 15% (so 225 people going on to get long term care)
The average cost of support per week this year is £300 per person, so our total spend (taken as 6 months of funding, as some people would receive most of a full year, some people very much less)
The spend is estimated as;
£300 x 225 x 26 = £1.755m
Cost avoidance is based on if those 1500 new people who showed up this year had still been subject to a 30% conversion rate (the pre-3Cs rate).
If we hadn't implemented 3Cs presumably nothing would have changed and we would still be operating with a 30% conversion rate – 0.3 x 1500 = 450 people
£300 x 450 x 26 = £3.51m (in today's money)*

So, our estimated cost avoidance for a full year is 3.51-1.7565 =   £1.75m

N.B. don't use last year's average costs - you want to include inflationary uplifts, changes in the market etc. to give a truer like for like result

DATA QUALITY

There are some crude assumptions and limitations in this calculation that we need to be aware of and comfortable with:
1. This option doesn't take account of the costs incurred in C1 or C2
2. It assumes the team was working with people with similar needs in the comparison period and during innovation
3. It does not account for deaths or other reasons why services might end early

It uses a crude 6 months of funding for everyone. Whilst some people go on to receive services for many years, other people might end their services after a week. The assumption is that the calculation will roughly balance by assuming an average of 6 months' support. You could tweak this if you have local evidence of a typical service duration relating more specifically to the innovation site.

Although this approach only gives a rough estimate of cost-avoidance, it is drawn from real data directly linked to the 3 Conversations and should reassure managers that the approach is financially sustainable. For the best results, this approach should use current average costs as using inflationary uplifts, changes in the market etc. will give a better like for like result.

Care must be taken in determining whether someone should be counted as "new" or "known". We are only interested in interventions for new people in this measure.