New care models

The local evaluation of the new care models vanguards: our expectations and offer of support for 2017/18

Our values:
clinical engagement, patient involvement, local ownership, national support

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Key messages in this document

1. Evaluation remains at the heart of the new care models programme mission to test new ways of delivering care, learn from these and spread this learning around the NHS.
2. Supporting vanguards to undertake local evaluations is a fundamental part of our overall evaluation approach. We will continue to support local evaluation of the vanguards subject to high quality work continuing locally (including full submission of local metrics data and sharing of full evaluation reports), and vanguards meeting their conditions for transformation funding.
3. In 2016/17 the central team, working alongside evaluation leads in each vanguard, put in place firm foundations for high quality local evaluations to take place. There are 35 such studies up and running. High quality, innovative analysis is being undertaken centrally, and an embryonic community of practice has developed. Thank you for your work in 2016/17 and the first part of this year.
4. This document sets out our offer of support as well as a refreshed set of expectations associated with the local evaluation funding. In 2017/18, we expect the local studies to deliver high quality, robust finding. All studies should continue to use the common evaluation questions agreed last year, alongside locally set questions.
5. Our observations of studies to date suggest that more work is needed on evaluating the way that resource use has changed locally. We have clarified our expectations on this. Greater depth of evaluation of patients' and residents' experience is also necessary.
6. We would also like vanguards to put their evaluation findings into the public domain so that they can be used elsewhere. We would like this to happen within the year 2017/18.
7. We will continue to deploy our central analytical resource to develop products which complement the work being undertaken locally. This includes ensuring vanguards are among the first recipients of the Improvement Analytics Unit. We will also share a programme of learning and impact studies looking at key cross cutting themes in the new care models such as risk stratification.

The local evaluation of the new care models vanguards: our expectations and offer of support for 2017/18

This document sets out our expectations from vanguard local evaluations, and our offer of support. It describes progress to date in the local evaluations. It is authored by the central NHS England evaluation team and is designed to be read by vanguards' local evaluation leads and the evaluation teams that have been appointed.

The document may also be of interest to those with an interest in transforming their healthcare systems locally looking at how to evaluate these transformations. As well as setting our expectations, the document is designed to be a compendium of the work done to date, most of which is on the central evaluation Kahootz page. Links are embedded throughout. If you have trouble accessing them, please let us know.

For any questions about this document, or the wider new care models evaluation approach, please contact the Operational Research and Evaluation Unit (england.oret@nhs.net).

What happened in 2016/17?

Learning and evaluation has been central to the new care models programme since its inception early in 2015. They are fundamental aspects of one of the programme's central aims to test new care and business models, learn from these and spread the learning and models to other parts of the NHS. The programme has provided funding for evaluation. NHS England's Operation Research and Evaluation Unit has led on this area on behalf of the programme.

Support has been provided so that evaluation projects can be designed, commissioned and undertaken by each vanguard. Funding for local evaluation puts learning at the heart of the local transformation programmes. Conducting local evaluations is also consistent with the vanguard aims to establish whole population health models, based on a detailed understanding of the needs of the local population, and which seek to improve outcomes (which need to be measured) for patients.

We launched the local evaluation component of our evaluation strategy at the Oval cricket ground in February 2016. We made a commitment to support each vanguard with up to £200,000 per year for local evaluation, with money allocated based on the size of the overall transformation funding amount, and distributed on a quarterly basis.

Alongside this funding, we:

- Produced a local evaluation guidance document which set out our expectations for the work.
- Produced a common tender specification to ensure that the studies each had similar elements but encouraged vanguards to redraft this document to fit their needs.
- Held regular one-to-one calls with the vanguard local evaluation leads in which we provided support on how to commission evaluations and research and

analytical services more generally, on methods (e.g. how robust does an evaluation need to be for validity) and shared knowledge about what the other vanguards were doing.
- Set up an embryonic community of practice around evaluation, including hosting an event for all evaluation leads and local evaluators.
- Talked through our evolving approach with each vanguard's evaluation lead on a monthly call. Local evaluators started to join those calls as they were appointed.

We also undertook a range of analytical activities centrally. We aimed for these activities to add value to the local studies, fill in any gaps and cut across the key themes. Most prominently we have:

- Developed a quarterly impact dashboard which tracks the data on emergency hospital admissions, and total hospital beddays for each vanguard's unique footprint. We set the dashboard up to allow easy comparison between the time series charts of each vanguard and the rest of their respective care models, and the rest of the country. We agreed on these common metrics after extensive discussions with the vanguards throughout 15/16.
- Worked on developing synthetic comparator regions for each vanguard allowing a more robust comparison between the progress of the vanguard and what would have happened had the transformation activity not taken place.
- Commenced a major analytical project with the Health Foundation – the Improvement Analytics Unit (IAU). The IAU aims to develop an NHS capability to conduct highly robust impact analyses of national healthcare transformation projects on a rapid cycle. The approach has been trialled twice to date: with Principia MCP and Northumberland PACS; results are available.
- Developed a database of all vanguards' local metrics allowing this varied and large set of data to be more easily searched and organised. The local metrics data is based on vanguards' own assessments about the direction of travel for each metric and the quality of the data which populates it.
- Started to synthesise the range of data we have collected for each vanguard.
- Started work on a programme of learning and impact studies – short mixed methods analyses examining key vanguard interventions across several sites. The first of these – on risk stratification – is complete. We are committed to developing at least seven more of these along with associated products in order that colleagues in the NHS can operationalise the findings from the studies.

Before setting expectations for 2017/18, the progress vanguards have made in relation to local evaluation is worth describing in some detail.

- There are now 35 separate vanguard evaluation studies up and running, along with a regional study covering vanguards in the north east of England.
- We have received reports and findings in other forms from almost all of them.
- There are over 20 organisations / partnerships involved in these studies including some of the most prominent universities working in this field, several of the commissioning support units, a handful of academic health science

networks and a few specialist consultancies. A range of innovative partnerships drawing together the best attributes of these groups has developed.

- Multispeciality Community Provider (MCP), Primary and Acute Care System (PACS) and Enhanced Healthcare in Care Homes (EHCH) vanguards and their evaluators have now submitted three quarters' worth of local metrics data against around 500 metrics in total. Acute Care Collaborative (ACC) vanguards are working with their account managers and the central evaluation team to define a set of relevant local and national metrics.
- Kahootz, our online collaboration platform, is now our main means of communicating with the vanguards and evaluation leads. At the time of writing, there are 165 members of the evaluation workspace, providing the opportunity for the emerging to community of practice in this area to communicate directly with one another and share findings as they are produced.
- Local evaluation findings are starting to influence local strategies (such as the STPs), and inform decisions about sustainability of services.

All of the hard work undertaken to establish evaluations at the local levels is starting to deliver results. We have seen some good examples of reports, local metrics data quality improve and several vanguards have invited us to local presentations of their findings. However more work needs to be done both centrally and in the local studies.

Our priorities for 2017/18 are evolving as we learn more about the programme and the care models. The section which follows sets out our expectations for the next year in more detail. These are not new requirements; they are mostly developments of the expectations established in the 2016/17 document. However they may require a change of emphasis locally. As such, please continue to discuss your evolving approaches with us, and the other vanguards.

What are our priorities for 2017/18?

Our support for local evaluations will continue into 2017/18. It is a key year for the studies. As programme activities mature and evolve, we expect there to be more for evaluators to study. And as vanguards move to become business as usual, including through the STPs and new structures such as Accountable Care Systems and Organisations, evaluation findings should inform these developments.

As such, we will continue to provide financial and other support for the local evaluations throughout 2017/18, dependent on vanguards continuing to receive their central transformation funding. We have informed vanguards of allocations for 2017/18 in writing. We will ask soon for details on how you plan to spend this allocation. As outlined in the funding letter, funding will be distributed on a quarterly basis, dependent on quality evaluation work continuing. This includes quarterly submission of full local metrics data returns, and vanguards sharing high quality local evaluation reports with us. It is also subject to the vanguard meeting its conditions for transformation funding.

In return for our support we have some important requirements.

Continue to conduct local evaluations based on the main requirements and broad principles set out in the original local evaluation guidance

The local evaluation guidance document prescribed what we expected to see in the local evaluations. This included our guidance on the methodological approaches that should be used, the level of robustness that should be adopted, and the spirit of learning and collaboration which we expected to see.

The central evaluation questions set out in the document, and which all local evaluations are based on, remain mandatory. We expect all studies to address these core questions in their studies. We also expect the studies to look at locally-relevant questions as well.

As a reminder, the core questions are:

- What is the context (e.g. history, culture, relationships, health inequalities, local and national policies, national legislation) in each vanguard into which new care models have been implemented?
- What key changes have the vanguards made and who is being affected by them? How have these changes been implemented?
- What is the change in activity, resource use and cost for the specific interventions that encompass the new care models programme locally?
- How are vanguards performing against their expectations and how can the care model be improved?
- What impact are the vanguards having on patient outcomes and experience, the health of the local population and the way in which resources are used in the local health system?
- Which components of the care model are really making a difference?
- What are the 'active ingredients' of a care model? Which aspects, if replicated elsewhere, can be expected to give similar results and what contextual factors are prerequisites for success?
- What are the unintended costs and consequences (positive or negative) associated with the new models of care on the local health economy and beyond?

Some of these questions are likely to grow in importance as time passes. Evaluations are naturally likely to examine some questions more than others in the second year. This includes questions related to economic evaluation, unexpected outcomes (such as on health inequalities), and the sustainability of funded activities. As a general guide, we expect evaluations to draw summative conclusions across programmes, where possible, in this year's outputs.

We will:

- Provide funding on a quarterly basis based on continued high quality local evaluation work, and continued central transformation funding being provided.

Put time and resource into co-designing a study for 17/18 building on the findings from work completed to date.

While continuing to be based on the principles agreed in 16/17, we encourage all vanguards to consider refreshing their approach in 17/18. This might be based on learning from last year and could include developing your in-house evaluation and analytical capability or considering whether additional or new skillsets or approaches would be useful. Please work with us to decide how you wish to take your evaluation forward.

We will:

- Continue to advise vanguards on methods and commissioning through one-to-one calls or linking vanguards up to other sources of help (such as colleagues in other areas).

Continue to work collaboratively

To maximise the value of the central investment made in local evaluations, we would like vanguards and their evaluators to continue to work in a collaborative manner. Please share reports with us as they are produced. Subject to confirmation from central IG advisers, we will share final versions of these on Kahootz, unless expressly told otherwise.

Other ways in which we see collaboration working include:

- Sharing findings on specific topics (such as evaluations of similar interventions in different vanguards);
- Sharing learning about different methodologies;
- Co-hosting symposia;
- Co-producing papers/ publications.

We will:

- Invest resources to make the Kahootz space as useful as possible
- Organise another event for all vanguards and evaluators
- Facilitate virtual working groups on key topics.
- Share all vanguards' reports and local metrics data returns on Kahootz as we receive them.

Address the gap in economic evaluation by describing and quantifying changes in resource use.

The Five Year Forward View Next Steps sets out that there is a need to demonstrate how to use existing resources differently to deliver better outcomes. Local data collection on resource use will be central to answering whether this has been achieved in the vanguards. However the most obvious gap in the local evaluations we have seen to date relates to the way resources are being used differently. This means that evaluations may be able to demonstrate positive impact but with no information on the additional resources involved and whether the changes are worth making

Very few, if any, of the reports we have seen to date adequately address the evaluation question which asks for a description of the change in resource use locally. This is partly due to the relatively early stage of many of the evaluations. It is also because this work can be challenging. It is particularly challenging to develop robust economic evaluation plans across large complex programmes, or where vanguard funding has not been used on discrete and identifiably 'new' activity. Building analysis plans from the service / project level may be the most sensible approach. We are also aware that we need to provide some greater clarity over our expectations. The methodological note in the annex to this paper sets out this guidance which we would like vanguards to adhere to. It presents an ambitious set of goals which may not be achievable in all circumstances. But it sets out a logical set of steps for robust analysis in this area.

We will :

- Be far more focused on this question in our discussions with you and feedback on methods and reports.
- Share a note detailing our minimum expectations on the economic analysis we expect.
- Conduct central analysis on the resourcing which has gone into vanguards. This will include our analysts coming out to selected vanguards to understand in more depth the way that resourcing has changed as a result of the transformations happening locally. We will share findings from this analysis.
- Draw on the knowledge of experts in this area already involved in the local evaluations and share this back to the vanguards.
- Draw on the expertise of the team appointed by the Department of Health to undertake the independent programme evaluation. This team includes very senior health economics resource.

Renew and strengthen the focus on capturing and evaluating patient and residents' experience.

Capturing patients' and care home residents' views of the transformed services that the vanguard is leading is fundamental to the local evaluations. It is a key part of evaluating progress against a number of outcomes (including patients' self-reported wellbeing, their levels of activation, and their experience of services). It may also be one of the most obvious and early impacts that vanguard activities have on local people.

As with the economic component of the evaluations so far, we have concerns about the depth to which this has been done across many of the studies. We will soon be undertaking an audit of the various approaches which vanguards have adopted so that we can better understand some of the barriers to high quality work in this area. We will showcase the good examples we have to date.

We will:

- Produce a statement on what we consider to be the minimum requirements in this area.
- Highlight particularly good examples that we receive so as to raise the expectations of what is possible.
- Draw on the knowledge of experts in this area already involved in the local evaluations and share this back to the vanguards.
- Continue to look at national data sources / collections that could augment local work.
- Draw on the expertise of the team appointed by the Department of Health to undertake the independent programme evaluation. This team includes very senior academics in this area of study.

Continue to submit quarterly local metrics data

MCP, PACS and EHCH vanguards' local metrics data returns are developing into an invaluable resource for the overall evaluation. Our work to develop a similar dataset for ACCs is also progressing.

The value of this dataset lies in the fact that it includes a much broader range of metrics than we are able to analyse centrally. The metrics are set by vanguards themselves meaning that, in theory, they should more closely reflect the transformation being delivered locally. They should be based on your logic models and we strongly encourage the vanguards to refresh these, if this has not happened already. The baselines and targets are also set by the vanguards meaning that they should reflect a local assessment of what is feasible in the time available.

In 2017/18 we ask that vanguards continue to submit data against these metrics using the coding framework we have agreed. There are many metrics which do not have data reported against them at present. We would like these to be highlighted so that we do not continue to expect data against metrics that are not going to be reported on. Please therefore ensure that submissions reflect new metrics that are added, or metrics that are removed. Now that we are in the second year, please ensure that you submit data on all of your chosen metrics.

We will:

- Seek to share the data returns we receive as well as a database which brings all of these together, subject to confirmation from IG colleagues.
- Conduct analysis on this dataset which will inform our central understanding of impact.

Enhance your focus on dissemination.

We expect more resource in 2017/18 to be expended on sharing your findings with colleagues in your local areas. Vanguards should publish findings on their organisations' websites or in peer reviewed journals, if this is appropriate. Vanguard local evaluations should be completed, with findings shared within 2017/18.

We have attended numerous excellent presentations / symposia where vanguards have shared findings. We encourage those that haven't done so yet to plan similar events. We are happy to attend and support in whatever way we can.

We will:

- Try to provide central representation at all dissemination events (if invited). We are happy to present national data at these events if this is helpful.

Engage with the independent evaluators

We are excited to announce the commencement of the major independent evaluation of the new care models programme. A team led by the University of Manchester has been appointed by the Department of Health's Policy Research Programme to conduct a four year study of the new care models programme.

The local evaluations will be one of the key sources of data for the study. The evaluation team will also be undertaking primary research and producing in depth vanguard case studies from 2018 onwards. We ask that you support this work and seek to highlight the complementarities between the independent study and the local studies.

We will:

- Ensure that the requirements of the vanguards and their evaluators are minimised.
- Share the learning from this study as it is produced.

Continue to engage with, and use our central products

There are four main deliverables for the central NCM evaluation team in 2017/18:

- An early synthesis of the evidence emerging from local and national sources. We will share all reports and local metrics data that we receive on Kahootz. We will work to synthesise what we are seeing in the local work with what we are finding in our national analysis and share it with you as this is produced
- Learning and impact studies. We will produce at least eight thematic studies of vanguard interventions seeking to extract the maximum learning from the transformation projects to share with the rest of the NHS.
- Improvement Analytics Unit reports. We will continue to produce these robust analytical reports throughout the new care models programme. The intention is for the IAU to continue beyond the programme offering a robust analytical service to NHS transformation projects.
- A national learning report which will be shared with the programme and more widely, as required. We will produce a summary of findings to date drawing on all parts of the evaluation strategy.

We are also capturing the learning on many of the analytical techniques we have used and developed in this programme. This includes logic models, robust use of counterfactuals, and some of the measures and metrics which have been established by the vanguards for evaluation.

We hope that you set high ambitions for the local evaluations. As the vanguards' activities start to become business as usual, or are spread to new geographies, we hope that the evaluation and sophisticated analysis is embedded into the new whole population health systems that emerge and that ongoing formative evaluation becomes a standard part of local healthcare decisions.

Annex 1: Expectations for economic evaluation

Introduction

In April 2016 we issued guidance to vanguards detailing the questions we required each local evaluation to address. In order to ensure that we accounted for the resources going into the vanguard transformations, we set the following question:

What is the change in resource use and cost for the specific interventions that encompass the new care models programme locally?

From our initial review of vanguards' local evaluation reports received to date, this question has generally been poorly addressed. At the Community of Practice day in February 2017, vanguards and vanguard evaluators suggested that this was due to a lack of clarity from the centre about what the expectations were in this area.

This short paper sets out in more detail our expectations from the centre drawing on a worked example. We have kept this note relatively light as we still expect vanguard evaluators to bring their expertise to this question and adapt the relevant economic evaluation methodologies to the local vanguard's context.

Headline requirements

In approaching the economic components of the vanguard evaluations, our high level requests are:

- For the evaluations to describe, in rich quantitative and qualitative detail, how resources have been deployed differently due to the transformation programme.
- That the inputs to the transformation programme are accounted for to the same level of depth as the outputs and outcome analysis (which, to date, dominate the reports we have seen).
- For the evaluations to be based on key central government guidance such as the green book and magenta book.

More detailed requirements

All local evaluation should attempt to answer the following questions:

1. **What resources have been assigned to the transformation initiative in question?**

   Our main requirement is to account for the resources that have gone into the vanguard interventions in question. Key steps to take are:

   - Set out whether the vanguard activities are replacements / amendments of an existing service (i.e. the intervention is being introduced to replace an existing service) or additional (i.e. they have been introduced alongside the existing intervention).

- Ensure that all additional resources are outlined. This may include new staff. If so, include the level they work at, the WTE attached to that post and the annual cost of the post. Please consider whether these are brand new posts; have existing posts been backfilled or is this a rearrangement of teams. Are these permanent posts? Where has the additional money come from? Please make funding arrangements explicit.
- Make the assumptions you are making explicit throughout. Draw on qualitative insights of the teams delivering the service in question, in order to refine these assumptions.
- Differentiation between fixed and variable costs will provide useful insight as to the replicability of the intervention elsewhere.
- Focus on the key areas that are perceived to be driving the change in the vanguard. This will help you to prioritise your analysis. The vanguard theory of change should set this out, but will be supported by qualitative insights you should collect.

The table below illustrates the resources put into a set of integrated care teams set up as a key part of one of the PACS vanguards. The information was provided to the evaluator by the vanguard team. The evaluator noted that the staffing detailed in the table is additional capacity funded through the vanguard. The evaluator also sets out key assumptions underpinning the table. These are that each staff member works 42 weeks / year (after leave, sickness, training etc) and 37.5 hours / week. If existing healthcare services are still required to deliver the service, these should be accounted for.

Staff	Band	WTE	Annual cost	Hours available for patient care
Integrated Team Leader	7	6.0	£269,700	0
Community matron	7	3.8	£173,323	4,788
Neuro Community Matron	7	0.0	£0	0
Specialist nurse COPD	7	4.0	£182,227	5,040
COPD Nurse	6	0	£0	0
Specialist nurse diabetes	7	5.0	£228,057	6,300
DN Practice Teacher	7	0.0	£0	0
Specialist nurse HF	7	3.0	£136,834	3,780
Specialist nurse	6	2.8	£106,950	3,528
District nurse	6	0.0	£0	0
Staff nurse	5	0.0	£0	0
Physiotherapist	6	4.8	£178,803	5,985
Occupational therapist	6	6.0	£225,856	7,560
HCSW band 4	4		£0	0
HCSW band 3	3	14.1	£370,443	17,741
HCSW band 2	2		£0	0
Self-care advisor	1	2	£38,480	2,205
Social worker	7	8.0	£350,672	8,820
Mental Health Practitioner	7	8.0	£359,600	8,820
Team co-ordinator	3	6.0	£135,051	0
Admin support	2		£0	0
Total WTE		73.4	£2,755,997	67,727

2. **How are these resources deployed differently compared to what happened before the start of the transformation project?**

   In order to understand how things are different in the vanguard it is important to compare the data captured through the investigations in question 1 to what was happening before. In most vanguards, there will be no clear cut before and after assessment to be made. However it will be possible to identify a point at which the additional transformation funding and support came online, thereby accelerating any changes already underway.

   To do this well, we recommend talking to the clinicians, healthcare professionals and managers delivering the service. They will help you understand how they are operating differently in the new system. Surveying / interviewing these staff will help the evaluator to build a detailed understanding of what the staff are doing now that they weren't before. Seek out management information / data from clinical systems which can be used to support these views.

   Another rule of thumb to guide this process would be to seek to understand how the same group of patients would have been cared for prior to the transformation programme. Would the patients now supported by these teams have been cared for primarily in general practice? Or by district nurses?

3. **How is service transformation affecting the productivity of care for a specific patient group?**

Productivity is increased if the same activity can be achieved at a lower cost, or more activity (or higher quality care) can be achieved at the same cost, lower cost or an acceptable higher cost (with or without savings in the longer term).

Local evaluations should include an assessment of whether activity (for example, number of patients supported) has changed after the transformation, and how this has changed average cost per activity.

To do this, the evaluation should present data on measures like:

- How many patients have been cared for by the service?
- How many separate care interventions have been delivered (for example, face to face appointments, home visits, or finished episodes of care)?

From this it would be possible to calculate a cost per patient and compare this with an estimated cost per patient before the change in service delivery, across different teams delivering care, for patients with different conditions, or in different health care settings (primary care, community care, secondary care).

The example below, which follows on from the previous section, presents data on staff inputs that make up a local integrated care team (right hand table) and shows the working assumptions based on staff experience about the length of time for each patient visit, the percentage of visits which are attended by two members of staff, and the percentage of time that staff are delivering direct care (left hand table), This calculation provides an estimated cost per episode of care (cost per patient) and cost per home visit. This type of data would allow comparisons with other teams or with alternative options for caring for the same group of patients such as a GP home visit or GP surgery appointment.

Staff	Hours available for direct patient care
Integrated Team Leader	0
Community matron	4,788
Neuro Community Matron	0
Specialist nurse COPD	5,040
COPD Nurse	0
Specialist nurse diabetes	6,300
DN Practice Teacher	0
Specialist nurse HF	3,780
Specialist nurse continence	3,528
District nurse	0
Staff nurse	0
Physiotherapist	5,985
Occupational therapist	7,560
HCSW band 4	0
HCSW band 3	17,741
HCSW band 2	0
Self-care advisor	2,205
Social worker	8,820
Mental Health Practitioner	8,820
Ward co-ordinator	0
Admin support	0
Total	67,727

Patient parameters	Expected
Face to face time assessment visit (mins)	150
% assessment visits double handed	7%
Average face to face time care visit (mins)	30
% care visits double handed	30%
Average care visits per patient	7

Staff parameters	
Weeks worked (after leave, sickness, training etc)	42
Hours per week	37.5
% time direct patient care	70%

Patient caseload per year	9,374
Cost per patient	£328
Patient visits per year	74,991
Cost per visit	£41.03

With the patient parameters set above the evaluator estimates a caseload of around 9,000 patients per year. This figure broadly coincides with the figure calculated assuming a capacity of 44 patients per team and an average length of stay on caseload of 14 days.

4. Consider questions of cost-effectiveness (including impact of activity on outputs and outcomes).

The evaluation should seek to consider the cost-effectiveness of the interventions in question. The outcomes of interest will vary and could include health outcomes, but across vanguards they are more likely to include intermediate outcomes such as hospital activity for target patient groups. Key measures of this include emergency admissions and emergency beddays. At this stage, the evaluation is likely to be working on the assumption that lower hospitalisation is a good thing in itself rather than make the direct link to health outcomes or health service savings. This is acceptable as long as these assumptions (and any other assumptions that do not have any evidence to support them) are stated. The assumptions can be tested more fully in a number of ways, including through triangulation with other data sources, exploring different scenarios by changing key assumptions in the analysis using sensitivity analysis (see paragraph below), or the analysis of linked datasets.

The analysis presented below, which follows on from the previous section, shows an analysis that assumes that local integrated care teams avoid one hospital admission and three emergency bed days per patient. This is a strong assumption, and can be changed in the spreadsheet (bottom line of the right hand table) to explore the impact on total cost savings if avoided hospital activity were assumed to be lower or higher. A "break even" sensitivity analysis would show how many emergency admissions and bed days would need to be avoided in order for the teams to be cost neutral (£0 savings to the health system) for the NHS.

Assuming that, for each patient on the LICT team caseload, there is on average 1 admission avoided and 3 emergency bed days avoided, this amounts to about 27,000 emergency bed days avoided. This assumption can and should be debated. A more robust set of inputs would be based on a forensic data analysis joining acute and community data sets. The displacing effect on UEC channels by the LICT intervention is described in this table:

Total recurring staff cost	£2,755,997
Total recurring non staff cost	£321,156
Total Cost	£3,077,153
Annual caseload	9,374

Channel shift - Avoided activity elsewhere per patient covered	Min	Max	Expected
Emergency bed days	0.00	15.00	3.00
ED attends	0.00	15.00	0.50
Ambulance - see and convey to ED	0.00	15.00	0.45
Intermediate care bed days	0.00	15.00	0.12

Channel	Total activity displaced by the intervention	Commissioner view on saving from displaced activity	System cost saving from displaced activity
Emergency bed days	28,122	£13,260,817	£6,481,812
ED attends	4,687	£722,682	£203,610
Ambulance - see and convey to ED	4,218	£742,681	£81,727
Intermediate care bed days	1,125	£168,731	£23,393
Total		£14,894,911	£6,790,542

This is a very significant number of bed days. It amounts to approximately 75 beds which is about 3 wards. This is a potential cashable saving of up to £6.7m in terms of bed days alone for a recurring investment of c.£3m. The major drivers for this calculation are: clinical utilisation (and caseload) together with the effectiveness on the emergency bed days occupied. **These parameters should be scrutinised more closely.**

Please note: the analysis used here is for illustrative purposes. The findings and assumptions are not endorsed by the central team. However the theoretical approach is an example of good practice.