Framework for the evaluation of training and education programmes for cancer in primary care

Sian Kitchen, Workforce Transformation Lead, HEE South London

Introduction

Background

The NHS across London is working to improve cancer services and access to services– from the patient experience of care; survivorship and quality of life. We also aim to reduce inequalities in the care received by different people. For primary care, there is a focus on earlier diagnosis of cancers and comprehensive support for those living with and beyond cancer.

Transforming Cancer Services Team for London (TCST) commissioned a training needs analysis of the primary workforce relating to early diagnosis (ED) and living with and beyond cancer (LWBC). The survey revealed that there were gaps in knowledge and confidence in sections of the primary care in these areas. Programmes of work are underway in London to address these issues, including training provided via London's three cancer networks, provision of training and support by Cancer Research UK and Macmillan, and work alongside Health England on development of PLTs for cancer via our Training Hubs (Community Education Provider Networks – CEPNs).

Good evaluation of training and educational initiatives for cancer care in primary care is essential to understand the contribution of education to improvements in care, to continuously improve the training provided to best effect and to identify where there are gaps or barriers to addressing key issues in cancer care.

A requirement for a suitable and robust evaluation framework for cancer training programmes in primary care has been identified. This framework is designed to support evaluation of all training initiatives for primary care in London, so that TCST and others can understand their effect and to identify and share best practice in cancer training based on learning and behavioural outcomes.

How to use this document

This document is in the form a framework to support high quality and consistent evaluation of training and educational interventions in primary care to support early diagnosis of and living with and beyond cancer. It should be read in conjunction with the Evaluation Practice Toolkit, developed by Kings College London in partnership with HEE. The toolkit provides an introduction to evaluation and a decision aid to support development of your evaluation strategy, including learning aims and objectives.

The accompanying Annexes to this guide provide example surveys, questions and templates that you can use and adapt to develop your evaluation plan and activities.

Evaluation Planning for Cancer Training

To understand the impact of training initiatives on priorities around early diagnosis and living with and beyond cancer, each training programme needs to have clarity on a key set of learning outcomes to be delivered by the training session. Support in understanding and developing aims and objectives and learning outcomes for training initiatives can be found in the Kings College London Evaluation Toolkit (page 8 of the toolkit and associated aims and objectives form).

Learning outcomes should relate directly to

1. key priorities identified by TCST in ED or LWBC
2. learning needs identified in the training needs analysis undertaken by Kingston University; and/or
3. learning outcomes associated with activities to improve key cancer patient survey responses for care that takes place outside of hospital

It is essential that evaluation of training initiatives be planned ahead of delivery of the training and planned in accordance with identified priorities.

The TCST Primary and Community Care Education Group (PGGEC) has previously identified that the Kirkpatrick Model of Evaluation can provide a suitable model to develop appropriate evaluation plans for the training programmes outlined. This framework provides a consistent approach to the application of this across all ED and LWBC training programmes commissioned or delivered for primary care in London. An overview of the Kirkpatrick Model is presented in the figure below.

Evaluation of training and education programmes can focus on one or more of the levels given in the Kirkpatrick Model. TCST will work to establish if training initiatives are contributing to changes such as the cancer patient survey results and responses training needs analyses, as part of a longitudinal evaluation of Level 4 (impact). These may also be the result of many factors and it is not possible to assess impact at this level from individual educational interventions. **This framework therefore seeks to focus on the outcomes of individual training and education programmes and initiatives in terms of Level 1 (reaction), Level 2 (learning) and level 3 (behaviour).**

Course evaluations can also be used to make changes or improvements to training programmes being provided (further information using evaluation to make changes and improvements can be found on page 47 of the evaluation practice toolkit).

Level 1 – Reaction / Engagement

For the training and education initiatives discussed, level 1 (reaction / engagement) can be achieved by simple means such as attendance rates and simple feedback. In order to understand engagement with training initiatives, it is useful to collect some basic data on the demographics of those attending training (eg CCG area, profession/role, level of experience). This can help to identify those who do necessarily participate in educational initiatives and inform strategies to engage with a wide range of clinicians and non-clinicians. Examples of some general questions and demographic data that can be collected are presented at **Annex 1**.

Level 2 – Learning

Learning from individual training / education initiatives should be assessed against a set of key learning outcomes established at the stage of the development of training programmes. Programmes should focus on a small set of key learning objectives which match to TCST or other stakeholder priorities. Evaluation of the training can measure self-reported changes in learning across these outcomes. In addition to assessing specific learning, the self-efficacy survey can also address changes in confidence in managing specific areas of care.

This should be undertaken by means of a pre-programme self-efficacy survey based on the key learning outcomes identified, which is repeated immediately following the training, and again after three months to test if learning has been sustained. An example self-efficacy survey is presented at **Annex 2**. This can provide qualitative data as to the level of learning occurring across one training programme or collectively across a number of training initiatives in London.

Level 3 – Behaviour

Intended or actual changes in behaviour of clinicians and other members of the primary care workforce following the training programme or intervention should be assessed as part of evaluation. This will be in the form of a survey (following the self-efficacy learning survey) immediately following a training intervention which asks what the clinician or other member of the workforce will intend to change or do differently as a result of the training. For example:

- a practice nurse might undertake to use established prompts/conversation starters on the emotional consequences of cancer in routine consolations with patients LWBC, if this is something they have not done previously.
- a practice manager might undertake to establish a safety netting system within their practice for patients referred on an urgent suspected cancer referral pathway

An example of a qualitative survey of behaviour change following training is presented at **Annex 3**. This should be followed up after 3 and ideally 6 months with surveys that ask what, if anything, has changed in the behaviour or activities of the individual or practice following training. In addition, where change has occurred questions can be asked to understand the main drivers for this, or where intended changes haven't been implemented what the barriers are to this.

This will build a qualitative picture of behaviour change (hopefully leading to impacts on patient care) following individual training initiatives – though causality may be hard to define, this will indicate the contribution of such training to any such changes. Across London, this will build an overview of changes in practice across primary care (or if changes do not occur to understand the barriers so solutions to these can be put in place) and provide an opportunity to share good practice if an initiative has been particularly successful.

Practicalities

Surveys can be completed on paper or via an electronic survey tool. These should be collated in a consistent format across London if possible and evaluation reports shared within PCCEG to allow a London-wide overview to be developed.

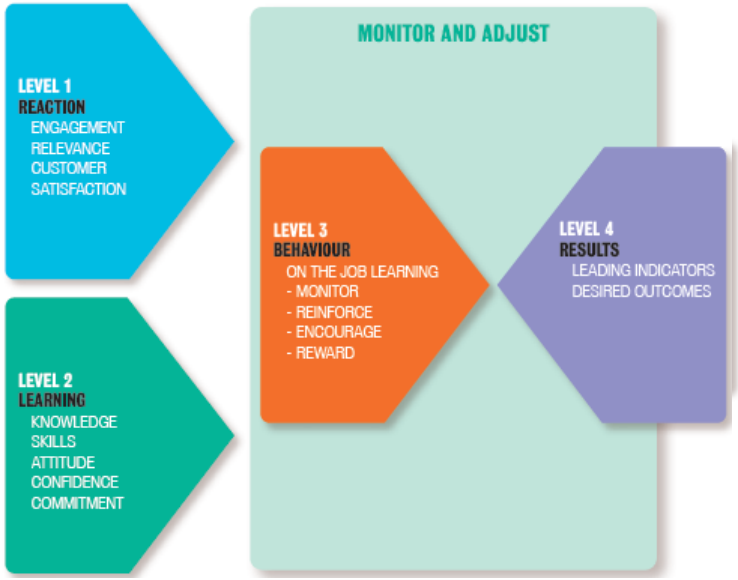
Other than collecting some basis demographic data, responses should remain anonymous. Reports collated by PCCEG will be aggregated before any publication.

An Overview of Kirkpatrick's Model of Evaluation

(Source: Simpson et al, An Evaluation Practice Toolkit, Kings College London, 2017)

Kirkpatrick's Model

The Kirkpatrick model, originally designed for evaluating industrial and commercial training programmes, can provide another way of thinking about outcomes from a project. Healthcare and education are more complex and adaptive systems than the industrial contexts for which the model was initially designed. However, it has been partially adapted – and widely adopted – in medical education.



Although not necessarily directing evaluators to consider the contexts and processes of an educational project, it may be valuable when we talk about outcomes or when we ask questions such as *Does X work?* Kirkpatrick's model helps us to consider what we might mean by outcome or work. The model describes four levels of outcome which can be measured as a result of an project. These are:

1. **Reactions:** How do people engage with the project? How relevant do they think it is? How satisfied are they with it?
2. **Learning:** What knowledge or skills have they learned from the project? Have there been changes in attitude, confidence or commitment as a result of the project?
3. **Behaviour:** What changes in behaviour have occurred as a result of the project?
4. **Results:** What impacts does the project have on the wider world? In healthcare we often talk about patient outcomes (improved patient safety, better prescribing) and organisational outcomes (better staff retention, reduction in critical incident reports).

This allows decisions to be made about the degree to which an project has been successful.

Outcomes are often considered in healthcare in terms of Kirkpatrick's model of evaluation. While the four levels represent outcomes which are increasingly ambitious from a training programme, it is not necessary to see them as mutually exclusive or hierarchical. All levels have value.

What is required is to consider which levels are most appropriate given the objectives of your project and which are feasible to be evaluated. It may be appropriate to focus on engagement (Level 1) as an outcome if the target group for a project have historically been poorly engaged with healthcare or education and that improving this is an objective of the project. This can be relatively more straightforward to demonstrate. However, it is always challenging to demonstrate changes to outcomes for patients or healthcare organisations (Level 4) from training projects.

With increasing use of electronic records, novel techniques may exist to support higher level outcomes to be evaluated. However, using Kirkpatrick's model to direct attention towards measuring changes in learning (Level 2) and behaviour (Level 3), where possible, is an important part of making evaluation more effective.

Annexes – examples of surveys and questions for evaluation of cancer training in primary care

ANNEX 1 – EXAMPLE SIMPLE FEEDBACK QUESTIONS AND DEMOGRAPHIC DATA (LEVEL 1)

Level 1 feedback can provide useful information on the response to and engagement with training and educational programmes. This is particularly important where you are trying to reach wide range of the workforce or those that may be difficult to encourage to participate in training programmes. Example questions to test engagement are given below. Level 1 surveys should not be used in isolation as they provide only very limited information to assess the effectiveness of a training programme. If used as part of course evaluation, surveys should also include Level 2 evaluation (see Annex 2) to assess if identified learning objectives have been met, and ideally Level 3 evaluation (see Annex 3) to assess potential changes in practice as a result.

About you

Which CCG area do you work in?	

What is your healthcare profession?	

If you work for a GP practice, is your practice a training practice?					
Yes		No		Not applicable	

If your place of work is not a GP practice, what type of organisation do you work for?	

What is your level of experience in healthcare?					
Registrar		Up to 1 year		1-5 years	
5-10 years		10-15 years		15 years +	

When did you last attend training on cancer care in primary care?					
Less than 1 year ago		Up to 3 years ago		Up to 5 years ago	
Over 5 years ago		Over 8 years ago		Never	

Course feedback

1. The content of this training was practical and useful to my current role				
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

2. The content of this training matched the stated objectives				
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

3. I was well engaged during the session				
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

4. The facilitator demonstrated a good knowledge and understanding of the course content and material				
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

5. The facilitator used a good variety of instructional methods				
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

6. I had opportunities to discuss issues of interest to me with other participants				
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

7. Overall satisfaction with the training?				
Highly dissatisfied	Dissatisfied	Neutral	Satisfied	Highly satisfied
1	2	3	4	5

If you have any other comments you would like to make on the training you attended, please provide these in the box below

ANNEX 2 – EXAMPLE SELF-EFFICACY SURVEY FOR LIVING WITH AND BEYOND CANCER (LEVEL 2)

NOTES: This model survey can be adapted for other training. However, key learning outcomes must be identified at the time of planning the training. It is important that each question addresses only one specific area of learning / attitude.

The survey should be repeated immediately following the training and after three months to understand changes in learning / confidence as a result of the training.

Please complete these questions indicating your level of knowledge, understanding or experience of the following areas of cancer care and your current practice.

1. I know what the top five concerns experienced by those living with and beyond cancer										
0	1	2	3	4	5	6	7	8	9	10
Low level of knowledge										High level of knowledge

2. I understand the physical impact of cancer treatment on patients										
0	1	2	3	4	5	6	7	8	9	10
Low level of confidence										High level of confidence

3. I understand the psychological impact of cancer treatment on patients										
0	1	2	3	4	5	6	7	8	9	10
Low level of knowledge										High level of knowledge

4. I have knowledge of the common co-morbidities for those living with and beyond cancer										
0	1	2	3	4	5	6	7	8	9	10
Low level of confidence										High level of confidence

5. I have knowledge of common emotional issues experienced by those living with and beyond cancer										
0	1	2	3	4	5	6	7	8	9	10
Low level of knowledge										High level of knowledge

6. I have knowledge of common social issues associated with living with and beyond cancer										
0	1	2	3	4	5	6	7	8	9	10
Low level of knowledge										High level of knowledge

7. I know what conversation starters can be used for people LWBC in relation to physical symptoms										
0	1	2	3	4	5	6	7	8	9	10
Low level of confidence										High level of confidence

8. I know what conversation starters can be used for people LWBC in relation to emotional symptoms										
0	1	2	3	4	5	6	7	8	9	10
Low level of knowledge										High level of knowledge

9. I know what the 4-point model to support those with a cancer diagnosis is										
0	1	2	3	4	5	6	7	8	9	10
Low level of confidence										High level of confidence

10. I know what the trigger points are in the 4-point model to support those with a cancer diagnosis										
0	1	2	3	4	5	6	7	8	9	10
Low level of knowledge										High level of knowledge

11. I am confident in discussing the physical consequences of cancer with patients as part of routine consultations										
0	1	2	3	4	5	6	7	8	9	10
Low level of confidence										High level of confidence

12. I am confident in discussing the emotional consequences of cancer with patients as part of routine consultations										
0	1	2	3	4	5	6	7	8	9	10
Low level of knowledge										High level of knowledge

13. I am confident in discussing the social consequences of cancer with patients as part of routine consultations										
0	1	2	3	4	5	6	7	8	9	10
Low level of confidence										High level of confidence

14. I understand what is involved in undertaking a cancer care review										
0	1	2	3	4	5	6	7	8	9	10
Low level of confidence										High level of confidence

15. I am confident to undertake a cancer care review with a patient										
0	1	2	3	4	5	6	7	8	9	10
Low level of confidence										High level of confidence

ANNEX 3 – EXAMPLE QUALITATIVE SURVEY OF CHANGES TO PRACTICE OF THOSE UNDERTAKING CANCER TRAINING IN PRIMARY CARE (LEVEL 3)

NOTES: This model survey can be adapted for other training. However, key desired changes to practice must be identified at the time of planning the training and addressed as part of the training programme. The survey should be repeated immediately following the training and after three and six months to understand changes behaviour / care of patients and the reasons for these, or barriers to implementation of intended changes.

1. What are the three key pieces of learning you will take from the programme into practice
1.
2.
3.

2. What change will you now make in your practice as a result of the training programme?

Have you previously undertaken stratified follow up of patients living with and beyond cancer	Yes	No
If not, please explain why?		
Following training are you now likely to undertake stratified follow up of patients living with and beyond cancer	Yes	No
Please give a reason for your response:		

Have you previously undertaken applied the 4-point model of support for patients living with and beyond cancer	Yes	No
If not, please explain why?		

Following training are you now likely to apply the 4-point model of support for patients living with and beyond cancer	Yes	No
Please give a reason for your response:		

Have you previously undertaken cancer care reviews for patients	Yes	No
If not, please explain why?		
Following training are you now likely to undertake cancer care reviews for patients	Yes	No
Please give a reason for your response:		

Have you previously referred a patient LWBC to AHP cancer rehab services for review	Yes	No
If not, please explain why?		
Following training are you now likely to refer patients LWBC to AHP cancer rehab services for review	Yes	No
Please give a reason for your response:		