Aesop: A framework for developing and researching arts in health programmes

Daisy Fancourt\textsuperscript{a,b,*} and Tim Joss\textsuperscript{c}

\textsuperscript{a}Royal College of Music, Centre for Performance Science, Prince Consort Road, London SW7 2BS, UK; \textsuperscript{b}Chelsea and Westminster Health Charity, Chelsea and Westminster Hospital NHS Foundation Trust, 4 Verney House, 1b Hollywood Road, London, SW10 9HS, UK; \textsuperscript{c}The Rayne Foundation, 100 George Street, London W1U 8NU, UK

(Received 5 May 2014; accepted 13 May 2014)

The field of arts in health is currently undergoing a burgeoning in activity. However, there remains a problem surrounding research into this field. Arts in health research can be confusing and is frequently misunderstood by those working in the arts and in health, artists, reviewers, researchers and funders. Aesop 1 is a framework specially devised to tackle these problems. It synthesises existing arts research methodologies, health research methodologies, health policy documents and reporting guidelines in order to guide projects right from the initial idea for an arts intervention, through the development and design of a research project, its delivery and its dissemination. This article outlines the rationale behind the framework and explains how it should be used, with the aim of facilitating the running of arts and health research projects and increasing their rigour and acceptance within both the arts and health communities.

Keywords: methods; action research; experimental design; art forms; health issues

Introduction

The field of arts in health research is currently undergoing a burgeoning in activity. There are increasing numbers of research reports being published in journals ranging from the arts to medicine, nursing, rehabilitation, psychology, the arts therapies, neuroscience, biology and technology. There are a growing number of international conferences on the topic, including the yearly Global Alliance for Arts and Health conference, which began in 1989, the recent International Conference for Culture, Health and Wellbeing in England, June 2013, the International Arts and Health Conference in Australia, November 2013, and the International Association for Music and Medicine Conference in Canada, June 2014. And the contribution of the arts to health is now even being recognised by some governments, including the endorsing of the National Arts and Health Policy Framework by the Federal, State and Territory Ministers in Australia; the work of the US National Endowment for the Arts which is working with federal agencies and providing funding for arts projects and research; the involvement of the Finnish government departments for Health & Social Care and Education & Culture in creating projects to support the health of older adults through the arts, and the creation of the All Party Parliamentary Group on Arts and Health in the UK.

However, there remains a problem surrounding research in this field. Arts in health research can be confusing and is frequently misunderstood by those working in the arts and in health, artists, reviewers, researchers and funders. For example, for researchers, there seems to be a constant friction between selecting methods that fit the stringent
requirements of health research and methods that adequately capture the true essence and impact of the art involved; a tension that more often ends in compromise than collaboration. For artists, scientific jargon can form a barrier to being able to develop robust, publishable research studies. And for funders, arts in health can fall between the humanities and sciences, with aims and methodologies that may be unfamiliar to the other.

The crux of this problem lies with the fact that there is currently no reference point for arts in health research; no standard for the development, design, delivery and dissemination of such research projects. At the same time, creating a specific arts and health research protocol risks branding arts in health research as “exceptionalism” and alienating people from both the arts fields and health fields.

Consequently, in June 2013, an international working group formed of leading artists, arts researchers, health researchers, policy-makers and funders was convened to discuss this issue with the aim of finding a way of bringing arts and health research more into the research mainstream. This working group recognised that arts-in-health research is not a case apart from other research projects either in the arts or health fields; it is not an exception to the guidelines and frameworks that already exist. However, at the same time, its position straddling two disciplines means that pre-existing frameworks often do not provide adequate guidance for arts-in-health researchers, particularly where researchers may come from one or other field rather than having an equal schooling in both. So over the ensuing six months, a new framework was devised that aimed to bring together all the relevant methods, protocols and guidelines for both arts research and health research and map out a clear and simple path that allow arts-in-health researchers to design projects that fit the requirements and expectations of both fields: Aesop 1: a framework for developing and researching arts in health programmes.

Aesop 1 tracks projects right from the initial idea for an arts intervention, through the development and design of a research project, its delivery and its dissemination. This article outlines the basis for the framework and how it can be used to maximum effect (see Figure 2 for the complete framework).

**Methodological Basis**

The methodological basis for the Aesop 1 framework is a synthesis of existing arts research methodologies, health research methodologies, health policy documents and reporting guidelines. The overall concept and main stages of the framework are adapted from the Medical Research Council’s (MRC) guidelines for “Developing and evaluating complex interventions” (Craig et al., 2008; Medical Research Council, 2000). Arts-in-health interventions are by definition complex medical interventions. Furthermore, the MRC guidelines recognise the difficulty of standardising the design and delivery of the interventions, [the need for] sensitivity to features of the local context, the organisational and logistical difficulty of applying experimental methods to service or policy change, and the length and complexity of the causal chains linking intervention with outcome.

As such they reflect many of the important considerations in arts-in-health research. Crucially, the MRC guidance also recognises the need to help research funders to “understand the constraints on evaluation design and recognise appropriate methodological choices” (Craig et al., 2008, p. 6); echoing another objective of the Aesop 1 framework.

However, the MRC guidelines do not provide any bespoke advice or guidance on social or arts-based interventions, making them sometimes hard to apply in practice.
Consequently, the Aesop 1 framework combines the MRC guidelines with a number of other concepts and frameworks that can offer more support to arts-in-health interventions. A key example of this is the Participatory Action Research method (Baum, MacDougall, & Smith, 2006). This follows very similar paths to the MRC guidance but with a particular focus on experiential learning and participatory activities, which lends itself strongly to arts interventions. It also incorporates the concept of “reflection” (denoted by the “R” arrows in the diagram), whereby researchers can take stock of the research and make alterations or amendments to the research design at important stages in the process. This echoes the importance of reflective practice in the social sciences, arts and humanities, and increasingly in research carried out by health professionals.

The Aesop 1 framework also creates space for a number of other epistemologies including ethnography, grounded theory, phenomenology and discourse analysis. These have been synthesised into the framework and form some of the categories and scales to encourage researchers to consider their relevance to a project. An effort has been made to

| 1. Developing an arts intervention |
|-----------------------------------|
| a. Type of art                     |
| b. Target group                   |
| c. Description of intervention    |
| d. Piloting and feasibility       |

Reflection

2. Developing a research study

| a. Identify the research problem |
| b. Identify the evidence base    |
| c. Develop the theory           |
| d. Model the anticipated results|
| i. Health and wellbeing outcomes|
| ii. Social outcomes             |
| iii. Financial outcomes         |
| iv. Artistic outcomes           |

Reflection

3. Designing a research study

| a. Design                       |
| b. Techniques                  |
| i. Qualitative                 |
| ii. Quantitative               |
| c. Cost-effectiveness          |
| d. The study team              |
| e. Process evaluation          |
| f. Patient and public involvement|

Reflection

4. Running the research study

Reflection

5. Reporting the research study

| i. Health and wellbeing outcomes|
| ii. Social outcomes             |
| iii. Financial outcomes         |
| iv. Artistic outcomes           |

Reflection

6. Implementation

| a. Attribution of impact       |
| b. Dissemination               |
| c. Result                      |

Figure 1. (Continued).
represent paradigms including post-positivism, social constructivism, advocacy and participatory views, and pragmatism, all of which are felt to be important to arts and health research.

A final consideration is the Nesta “Standards of Evidence for Impact Investing” (Puttick & Ludlow, 2012). This framework provides scales for the assessment of the impact and social benefit of interventions to maximise their value. Its ethos is to use evaluation to inform the development of interventions and increase the capacity for the delivery of the intervention, tying it in directly with the aims of the Aesop 1 framework and the spirit of arts-in-health interventions.

A number of other methods and guidelines have also been incorporated into the Aesop 1 framework, and the design is also such that it can be used alongside other frameworks, methods and techniques as a way of enhancing the understanding and application of intervention design, research methods and project reporting and implementation.

Framework Stages

Overall the framework is split into six stages (Figure 1). Moving clockwise from the top:

1. Stage 1 denotes the arts intervention itself, whether it is being developed or implemented.
2. Stages 2 and 3 denote the development and design of the research study to investigate the effects of the arts intervention.
3. Stage 4 denotes the running of the research study.
4. Stages 5 denotes the analysis and dissemination of findings from the study. Following this, it is hoped that studies will result in the implementation of arts projects in healthcare (stage 6) and/or that, based on findings, future studies will then be designed and carried out (stages 2 and 3).
Each stage in the process involves a number of categories on a scale of 1–5, moving from “less comprehensive” to “more comprehensive”. Importantly, this should not be taken to mean that all studies are aiming to achieve a “5”, nor that they are underperforming if they only achieve a “1”. Indeed, it may not be appropriate or the intention for studies to attain the higher levels, and may not be of relevance to the parties involved or funders. Rather, this scale sets out the full spectrum of possibilities so that researchers have a clear awareness of the options available and can make an informed decision of where to situate themselves; how in-depth they want a research project to be and what impact they hope the study will have. These scales can also help research projects to plan how research projects will develop in the future a chart a trajectory from a small-scale pilot research project to a large multi-site trial. Overall, the aim is that increasing rigour and higher scores on the scales should lead to increasing acceptance of results from both the arts and health research communities (Figure 2).

1. Developing an arts intervention

| a) Type of art | Is the intervention: |
|---------------|---------------------|
|              | Static              |
|              | Live performance    |
|              | Participatory        |

| b) Target group |
|-----------------|
| Health condition(s) involved: |

| Number of participants anticipated: |

| Organisations involved (both arts and health): |

| c) Description of intervention |
|--------------------------------|
| Please provide a short description of the arts intervention: |

| d) Piloting and feasibility |
|-----------------------------|
| 1   | 2   | 3   | 4   | 5   |
|-----------------------------|
| Feasibility of the arts intervention itself is being/has been assessed based on expert opinion and information from previous studies. |
| The arts intervention is being devised in response to patient/public need. A basic informal consultation is being/has been carried out, involving one or more of the following: service users, staff, health organisations, arts organisations. |
| A formal consultation process into the need for the arts intervention is being/has been carried out e.g. involving an identification of healthcare priorities, research into the psychological/physical needs and experience of service users, an assessment of the needs and views of staff/service users, and a review of similar arts interventions in arts/health settings is undertaken. |
| In addition to the full formal consultation process, a pilot session(s) of the arts intervention is being/has been undertaken to assess logistics, costings, group sizes and to gain some basic feedback. OR The arts intervention is already running successfully. |
| A full pilot project with preliminary evaluation or previous small research project assessing the intervention is being/has been undertaken to assess fully the strengths and inner workings of the project. |

Figure 2. (Continued)
2. Developing a research study

| a) Identify the research problem |
|----------------------------------|
| **Please provide a short summary of the problem that this research study aims to address** |
| b) Identify the evidence base |
|-------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Ideas for the research project have been formed based on apparent need and expert opinion. | Research in this area may not have been carried out before or may not be suitable. So instead, a review of some similar research projects has been undertaken or a detailed explanation of rationale is provided. | A review of some relevant previous studies selected by the researchers has been undertaken to show how research in this area has been of benefit before, and a potential gap or research question has been identified for this study. | A systematic review has been undertaken and detailed conclusions formed about the current evidence base. The research study proposed then forms the next logical step in developing this evidence base. | A systematic review has been conducted and a meta-analysis of results is undertaken. NB this may not be appropriate for some studies. |
| c) Develop the theory |
|-------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| No use of theory. | Some reference to theoretical underpinnings but no application. | Reference to theoretical underpinnings leading to their application in selected parts of the research study. | A clear theoretical grounding leading to detailed application of theory within the research study. | A clear theoretical grounding which is used as a springboard for the exploration and development of a new theory. |
| d) Model the anticipated results |
| Health and wellbeing outcomes |
|--------------------------------|
| **Depth/length** |
|-------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| The study will examine wellbeing in a broad way looking for general rather than specific trends with no consideration for how long effects last. | The study will look at the concept of wellbeing in more specific terms, perhaps through multiple techniques (e.g. observation or scales). | The study will focus on a specific component of health and wellbeing through multiple tests possibly including a quantitative measurement (e.g. a sample or scan) and may consider how long effects will last. | The study will look at multiple health markers or look in great detail at one health marker and length of alteration will be considered. | The study will look comprehensively at the health and wellbeing of participants, assessing multiple health markers through a wide variety of methods. The study will also examine whether effects are long-lasting. |
| **Breadth/reach** |
|-------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| The study is anticipated to find clear impacts for the majority of target participants, perhaps with some benefits for other people involved (e.g. artists or healthcare workers). | The study is anticipated to find clear impacts for the majority of target participants, perhaps with some benefits for other people involved (e.g. artists or healthcare workers). | The study is anticipated to find significant impacts for multiple sets of individuals (including target participants, healthcare workers and artists), making a distinct difference to their experience/care. | The study is anticipated to find impacts extending to collective groups perhaps beyond those actually involved in the arts intervention (e.g. families, carers, arts organisations and healthcare settings.) | The study is anticipated to find impacts extending to communities, reaching large numbers of people as a result of the project (e.g. the wider health system, arts system and with possible policy implications.) |
| Social outcomes |
|--------------------------------|
| **Depth/length** |
|-------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| The study will examine social impacts in a broad way looking for general rather than specific trends with no consideration for how long effects last. | The study will examine social impacts in more detail using more specific categories and terms. | The study will examine one or more specific social impact with indications this could have effects extending beyond the end of the project. | The study will look at multiple markers of social impact with consideration for how long alteration could last. | The study will look comprehensively at social impact through a wide variety of methods. The study will also examine whether effects are long-lasting. |
| **Breadth/reach** |
|-------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| The study is anticipated to find some social impacts for the core group of target participants. However, it is unknown how the majority will react to the intervention. | The study is anticipated to find clear social impacts for target participants. Some impacts are anticipated for other people involved (e.g. artists/health workers). | The study is anticipated to find significant impacts for multiple sets of individuals (including target participants, healthcare workers and artists) making a distinct difference to their experience/care. | The study is anticipated to find social impacts extending to collective groups (e.g. families, carers, arts organisations and healthcare settings.) | The study is anticipated to find social impacts extending to communities, reaching large numbers of people as a result of the project (e.g. the wider health system, arts system and with policy implications.) |

Figure 2. (Continued)
### Financial outcomes

|   | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| The study will not consider financial outcomes. | The study will catalogue the resources needed to run the intervention and outline the business model, but will not consider the impact of this on the wider health service. | The study will look at the financial impact of the project for the health service, focusing on immediate or short-term effects only. | The study will look at the long-term financial impact of the project for the health service. | The study will look at the financial impact of the project for the health service and other outside areas, such as local authorities or welfare. |

### Artistic outcomes

|   | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| The research study will not examine artistic outcomes, or artistic outcomes are not applicable. | Participants are anticipated to enjoy the artistic process or learn basic artistic skills, but learning and artistic development will not be a major part of the project. | Participants are anticipated to expand their knowledge or experience of an art form with possible impacts on the artists/arts leaders involved too. | Participants are anticipated to demonstrate significant individual progress as a result of the arts intervention and artists/arts leaders are anticipated to develop their own perception or involvement with the art form. | Participants are anticipated to learn the artistic skills necessary to lead their own projects in the future and arts leaders are anticipated to expand their way of working with the art form. |

3. Designing a research study

#### a) Design

|   | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Pre-experimental design – a study that assesses an individual or single group of participants. No measures will be taken at the start of the project, but participants will be assessed at the end. No controls will be used. | Pre-experimental design – a study that compares participants before and after the project, but does not include controls. OR A project that includes a control but only takes measurements at the project end. OR The effect of the project on a single group is being studied longitudinally. | Quasi-experimental design – involves pre- and post-testing and includes a control group but will generally not be randomised nor involve follow-up. | True experimental design – the study will be controlled and randomised. | True experimental study including some additional element such as blinding, a comparison activity, a comparison to a medical intervention or some form of follow-up after the intervention finishes. |

#### b) Techniques

**Qualitative**

|   | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| No qualitative study undertaken. | A survey or use of other qualitative media such as photographs or artworks created during the project, quotations and individual reports. No coding or analysis of findings involved. | Techniques may include observation, focus groups and semi-structured interviews as well as media such as film and diary entries. There is a clear focus or research question that is being probed but limited in-depth analysis of findings. | A range of multiple qualitative methods are used and emphasis is placed on interpretation of these results e.g. through coding, recursive abstraction or mechanical techniques. | A possible conceptual model is devised for how the arts are having an effect on patients and is explored through this project using multiple qualitative techniques with thorough analysis. The validity of the methods will also be scrutinised e.g. through interview corroboration and consideration of variables. |

**Quantitative**

|   | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| No quantitative study undertaken. | A survey or numerical questionnaire that assesses the numbers of participants involved and their personal reactions to a project (in numerical terms), but does not involve statistical testing. This type of study might be expressed in simple figures and percentages. | A survey, scale or numerical questionnaire that is taken pre- and post-project to allow results to be compared, or that can be compared to a control group or some other baseline scores (where appropriate), seeking to confirm hypotheses and quantify variation. | A study that involves pre- and post-measures using statistical testing, such as psychology scales OR measurements of vital signs (such as blood pressure or heart rate) and factors in important variables. | A study that involves multiple statistical tests such as psychology scales in conjunction with other measurements such as vital signs or blood/saliva samples or scans attempting to test for all relevant variables. |

Figure 2. (Continued).
D. Fancourt and T. Joss

### 4. Running the research study

|   | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| A number of conflicting factors have occurred which mean the research project has had to take a different turn and is not able to test the research question as originally intended. As such, results may not match up to the original predictions. | The research has been carried out to completion. However some variables or external events are anticipated to have significantly affected results. | The research has been successfully carried out although some minor variables or external events may have affected results. These are described alongside findings. | The research has been successfully carried out and, although additional variables or unexpected events are noted, they are all believed to have been factored into the testing of results so that their influence is minimised or removed. | A full ethnographic study of the process will take place. This will probably be thoroughly embedded in the project from the start. |

### Cost effectiveness

|   | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| No consideration of cost will be undertaken | The cost of the project will be assessed and cost-per-heads calculated, potential funding sources identified and a case created for the financial sustainability of the project. | A study of the cost-effectiveness of the project for the healthcare service will be undertaken. | A study of the cost-utility of the project for the health service (including measures such as quality of adjusted life years) will be undertaken. | An economic evaluation of the project from a societal perspective, such as the cost for society (including the health service, welfare and employers) will be undertaken. OR A full cost-benefit analysis converting impacts into monetary values will be undertaken. |

### The study team

|   | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| The study team consists of just arts OR health practitioners/researchers/experts. No significant effort is made to involve people from other quarters in the study. | The study team consists of arts OR health experts, but advice or consultation is sought from other quarters e.g. artists offering opinions on the arts intervention, or health experts/researchers reviewing the study design. | The study team consists of arts OR health experts, but advisers from other quarters are closely involved in important stages of/decisions in the study and monitor the progress of the project. | The study team contains a mixture of arts and health experts, but there may still be a bias towards arts or health in terms of numbers in the team, or time invested. | The study team involves a combination of both arts and health experts who are fully involved in all stages of the study. |

### Process evaluation

|   | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| An overview of the process involved in the project will be given to help guide future groups who may want to repeat the project. | Open interviews and feedback forms will be used to understand how participants found the process, along with fuller details about what the project entailed. | The process of the project will be fully documented and case studies of participants are used along with other relevant documents such as participant diaries. | Focus groups, forums and in-depth interviews will be undertaken, programme records and correspondence catalogued and details on every aspect of the project from participants to location to the intervention to the economic and cultural backgrounds will be given. | A full ethnographic study of the process will take place. This will probably be thoroughly embedded in the project from the start. |

### Patient and public involvement

|   | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| No involvement of patients or public beyond participation in the intervention. | Limited patient or public involvement in one part of the study (e.g. setting research priorities or helping to publicise results). | Patients and public are involved in multiple stages of the research study. | Patients and public are involved in all stages of the project, but perhaps in an advisory capacity rather than as active partners. | Patients and public are systematically involved as active partners in every stage of the research project and their views have a direct impact on the study. |

---

Figure 2. (Continued).
5. Reporting the research study

Health and wellbeing outcomes

| Depth/length | 1 | 2 | 3 | 4 | 5 |
|--------------|---|---|---|---|---|
| The study has not found significant changes in comparison to baseline or controls or has found negative changes in health or wellbeing. Results may nevertheless indicate that significant changes could be found in future studies. | | | | | The study has found significant changes in wellbeing in a broad sense, although it remains unknown how long these last. |
| The study has found significant changes in wellbeing in a broad sense, although it remains unknown how long these last. | | | The study has found significant changes in wellbeing and health markers and there are preliminary indications that this may extend beyond the end of the sessions. | | |
| The study has found significant changes in multiple markers of health and wellbeing and there is data suggesting that these changes will have an effect beyond the end of the study. | | | | The study has found significant changes in wellbeing and health markers and there are preliminary indications that this may extend beyond the end of the sessions. | The study has found significant changes in multiple markers of health and wellbeing and there is data suggesting that these changes will have an effect beyond the end of the study. |

Social outcomes

| Depth/length | 1 | 2 | 3 | 4 | 5 |
|--------------|---|---|---|---|---|
| The study has found no significant social changes in comparison to baseline or controls, or has found negative changes. Results may nevertheless indicate that significant changes could be found in future studies. | | | | | | The study has found benefits extending to collective groups (e.g. families, carers, arts organisations and healthcare settings). |
| The study has found significant social changes in a broad sense, although it remains unknown how long these last. | | | The study has found significant changes in social markers and there are preliminary indications that this may extend beyond the end of the sessions. | | |
| The study has found changes in multiple markers of social changes and there is data showing that these changes have an effect beyond the end of the study. | | | | The study has found benefits extending to collective groups (e.g. families, carers, arts organisations and healthcare settings). | The study has found benefits extending to collective groups (e.g. families, carers, arts organisations and healthcare settings). |

Breadth/reach

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| The study has found no significant social changes in comparison to baseline or controls, or has found negative changes in comparison to baseline or controls for core participants or others involved in the study. Results may nevertheless indicate that significant changes could be found in future studies. | | | | The study has found benefits extending to collective groups (e.g. families, carers, arts organisations and healthcare settings). |
| The study has found significant benefits for target participants, perhaps including other people involved (e.g. artists or healthcare workers). | | | The study has found significant benefits for multiple sets of individuals (including target participants, healthcare workers and artists) making a distinct difference to their experience/care. | | The study has found benefits extending to collective groups (e.g. families, carers, arts organisations and healthcare settings). |
| The study has found benefits extending to communities, reaching large numbers of people as a result of the project (e.g. the wider health system, arts system and with policy implications.). | | | | The study has found benefits extending to communities, reaching large numbers of people as a result of the project (e.g. the wider health system, arts system and with policy implications.). |

Financial outcomes

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| The study has not considered financial outcomes or has found financial losses from the project. | | | | The study has demonstrated the positive long-term financial impact of the project for the health service. |
| The study has demonstrated a sustainable use of resources and a reliable business model to run the arts intervention but has not considered the impact of this on the wider health service. | | | The study has demonstrated the positive financial impact of the project for the health service. | | | The study has demonstrated the positive financial impact of the project for the health service and other outside areas, such as local authorities and welfare. |

Figure 2. (Continued).
Assessing Research Strength

Building on the scales used throughout the framework, it may also be beneficial to find the “score” for how comprehensive in its investigation a research project is overall (Figure 3). As with the scales, this is not to say that lower scoring research is inferior in status. Rather, such studies will demonstrate that the research questions being investigated are still in the early stages of being explored. However, it is hoped that this framework will allow researchers to position their study as a whole in a broad context of spectrums of design and research style and allow similar studies to be related to one another. As more studies are undertaken and published, it will hopefully be possible for the depth of the research question to be probed and more in-depth studies carried out.

In order to calculate the research strength score, the framework ends with a “framework summary” document. This allows researchers to circle the scores from each of the sliding scales within the framework, calculate their score per section and then mark this on the diagram to give a visual representation of their research strength.

| Artistic outcomes | 1 | 2 | 3 | 4 | 5 |
|-------------------|---|---|---|---|---|
| The research study is not examining artistic outcomes, or artistic outcomes are not applicable. | | | | | |
| Participants have enjoyed the artistic process or learnt basic artistic skills, but learning and artistic development have not been a major part of the project. | | | | | |
| Participants have expanded their knowledge or experience of an art form with possible impacts on the artists/arts leaders involved too. | | | | | |
| Participants have demonstrated significant individual progress as a result of the arts intervention and artists/arts leaders have developed their own perception or involvement with the art form. | | | | | |
| Participants now possess the artistic skills to lead their own projects in the future and arts leaders have significantly expanded their way of working with the art form. | | | | | |

| 6. Implementation |
|-------------------|---|---|---|---|---|
| a) Attribution of impact | 1 | 2 | 3 | 4 | 5 |
| The study does not provide sufficient data to demonstrate impact. | | | | | |
| The study demonstrates data showing some impact but it does not yet evidence direct causality or involve sufficiently large sample sizes to make results reliable. | | | | | |
| The study begins to isolate the impact of the arts intervention through robust methods and sufficiently large samples. | | | | | |
| The study is able to demonstrate why and how the arts intervention is having impact. It is robust and validates the nature of the impact along with documented standardisations of delivery and process. | | | | | |
| The study involves a thorough isolation and analysis of variables and provides a comprehensive explanation as to how the intervention is achieving its effect. | | | | | |
| b) Dissemination | 1 | 2 | 3 | 4 | 5 |
| Basic or restricted dissemination of results is attempted. | | | | | |
| Some dissemination of results and publicity about the project is undertaken but it is informal and predominantly local. | | | | | |
| Good reports of results take place across arts and health sectors, across both academic and public arenas, with some national reach. | | | | | |
| Full reporting takes place through academic streams (adhering to the ‘CONSORT’ reporting guidelines on good practice) and public streams (perhaps with multimedia links or public performances) with national reach. | | | | | |
| The project dissemination has a distinct strategy with a goal of engaging public and professionals, promoting learning and possibly offering training/capacity-building at national and international level. | | | | | |
| c) Result | 1 | 2 | 3 | 4 | 5 |
| Implementation is not possible or not appropriate at this stage. | | | | | |
| The project demonstrates how findings could be translated into routine practice or policy, although no steps are currently being taken. | | | | | |
| The project is being commissioned again for the same groups of participants. | | | | | |
| The project is being commissioned and spread to more centres, perhaps being adopted regionally or through one particular health programme. | | | | | |
| The project is being rolled out nationally, with potential to take it international in the future. | | | | | |

Figure 2. Aesop 1 framework.
### Framework summary

**Title of research study:** ______________________  **Date:** ______________________

*Please circle the score that applies to each stage of the framework:*

#### 1. Developing an arts intervention

| a. Type of art |  |  |  |  |  |
|----------------|---|---|---|---|---|
| b. Target group |  |  |  |  |  |
| c. Description of intervention |  |  |  |  |  |
| d. Piloting and feasibility | 1 | 2 | 3 | 4 | 5 |

**SECTION 1 SCORE** [total score] _______

#### 2. Developing a research study

| a. Identify the research problem |  |  |  |  |  |
| b. Identify the evidence base | 1 | 2 | 3 | 4 | 5 |
| c. Develop the theory | 1 | 2 | 3 | 4 | 5 |
| d. Model the anticipated results | 1 | 2 | 3 | 4 | 5 |
| i. Health and wellbeing outcomes – Depth/length | 1 | 2 | 3 | 4 | 5 |
| ii. Social outcomes – Depth/length | 1 | 2 | 3 | 4 | 5 |
| iii. Social outcomes – Breadth/reach | 1 | 2 | 3 | 4 | 5 |
| iv. Financial outcomes | 1 | 2 | 3 | 4 | 5 |
| v. Artistic outcomes | 1 | 2 | 3 | 4 | 5 |

**SECTION 2 SCORE** [total score ÷ 8] ________

#### 3. Designing a research study

| a. Design | 1 | 2 | 3 | 4 | 5 |
| b. Techniques | 1 | 2 | 3 | 4 | 5 |
| i. Qualitative | 1 | 2 | 3 | 4 | 5 |
| ii. Quantitative | 1 | 2 | 3 | 4 | 5 |
| c. Cost-effectiveness | 1 | 2 | 3 | 4 | 5 |
| d. The study team | 1 | 2 | 3 | 4 | 5 |
| e. Process evaluation | 1 | 2 | 3 | 4 | 5 |
| f. Patient and public involvement | 1 | 2 | 3 | 4 | 5 |

**SECTION 3 SCORE** [total score ÷ 7] ________

#### 4. Running the research study

| 1 | 2 | 3 | 4 | 5 |

**SECTION 4 SCORE** [total score] ________

---

Figure 3.  *(Continued)*
Acknowledgements
The development of this framework has been assisted by the following people: Bobby Baker, Mike Birtwistle, Josephine Burns, Paul Camic, Meroe Candy, Paul Cann, Stephen Clift, Nikki Crane, Geoffrey, Peter Davidson, Adrian Davis, Norma Daykin, Nils Fietje, Alex Fleetwood, Lynn Froggett, Maria Goddard, Dido Green, Susan Hallam, Lynne Kennedy, Sir Nicholas Kenyon, Martin Knapp, Ian Lewis, Toby Lowe, Fergus Lyon, Dame Sally Macintyre, Martin Marshall, Wayne McGregor, Andrew Miles, Polly Moseley, Jeremy Myerson, Kate Oakley, Vivienne Parry, Chika Robertson, Jenny Secker, Helen Shearn, Stewart Wallis, Andy Watson, Evelyn Welch, Mike White, Jane Willis, Paul Woodgate and Sally Zlotowitz.

Funding
This work was supported by the Wellcome Trust under the Grant 102190/Z/13/Z and the LankellyChase Foundation under the Grant 9348/12420.

Conflict of interest
All authors declare no conflicts of interest.
References

Baum, F., MacDougall, C., & Smith, D. (2006). Participatory action research. *Journal of Epidemiology and Community Health, 60*, 854–857.

Craig, P., Dieppe, P., Macintyre, S., Michie, S., Nazareth, I., & Petticrew, M. (2008). Developing and evaluating complex interventions: The new medical research council guidance. *BMJ, 337*, a1655.

Medical Research Council. (2000). *A framework for the development and evaluation of RCTs for complex interventions to improve health*. London: MRC.

Puttick, R., & Ludlow, J. (2012). *Standards of evidence for impact investing*. London: NESTA.